

58.04	-1.35	-4.57	87	86.53	9	178.95	90.17	51	15.96	31.6	31.6	75
87.32	+9.03	-3.72	114	13.19	6	432.16	12.08	72	58.71	150.09	30.32	71
73.54	+14.28											
52.09	-11.32											
01.76	+9.45											
15.68	+8.35											
58.92	+6.29											
02.18	-13.84											



2022 Georgia AG FORECAST

STRATEGIC INSIGHTS FOR GEORGIA'S #1 INDUSTRY



College of Agricultural &
Environmental Sciences
UNIVERSITY OF GEORGIA

Welcome to the 2022 Georgia Ag Forecast.

We are pleased to host you for this critical opportunity to hear from our outstanding agricultural economists at the University of Georgia. They have developed a comprehensive overview to help the various sectors of our industry navigate the year ahead. We all need sound information to make sound business decisions. Through the efforts of the economists who assembled this report, we hope this information provides you with the fundamentals to help guide your decisions and your business for the coming year and beyond.

As your land-grant university, we at the University of Georgia pledge to conduct cutting-edge research on critical and emerging issues that are important to you. From this research we aim to provide the best information and education available to producers and constituents to equip you with knowledge and decision-making tools for your business.

The Georgia Ag Forecast helps to ensure that we have a strong, profitable and sustainable agricultural industry for our great state.

Sincerely,



Nick Place
Dean and Director
University of Georgia College of Agricultural and Environmental Sciences

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**Jeffrey M. Humphreys, Director of the Selig Center for Economic Growth
Terry College of Business, University of Georgia**

The 2022 economic forecast for Georgia is positive — the pattern of slightly faster economic recovery for Georgia than for the United States will continue. Last year, I predicted that Georgia’s economic recovery would occur in three distinct phases: an initial “bounce” in economic activity due to the lifting of “stay-at-home” restrictions and business re-openings followed by a period of “choppy” economic growth that would persist until contagion fears abated due to widespread vaccination and the development of natural immunity, and capped by a period of steadier above-average economic growth. The “bounce” and “choppy” phases of the economic recovery are over. In 2022, I predict above-average economic growth. Georgia’s Gross Domestic Product (GDP) will grow by 4.3%, exceeding the state’s long-term average rate of GDP growth of 2.3%. The pace of Georgia’s GDP growth will be slower than in 2021, but it will be much less erratic — steadier — than we’ve seen since the recovery began. In 2021, Georgia and U.S. GDP fully recovered. Before the end of 2022, Georgia’s job count will surpass its pre-pandemic peak. At that time, Georgia’s economy can be considered fully healed in terms of jobs. In contrast, the U.S. job count is unlikely to surpass its pre-pandemic peak until the second quarter of 2023.

One big difference between the forecast for 2022 and what transpired over the last couple years is that the private sector will be the main strength of the economy. Spending by consumers, investment spending by businesses, and the housing market will be the main economic drivers. In addition, we will enter 2022 with an abundance of unfilled jobs. That’s quite a change from 2020 and 2021 when the federal government was the main, and at times only, economic driver. In 2022, federal fiscal stimulus will wind down rapidly. The Federal Reserve’s monetary policy stance will shift from providing stimulus in 2021, to neutral in 2022, and to restrictive late in 2022.

Although the economic forecast for Georgia is positive, there are several headwinds and downside risks. I am mostly concerned about supply-side problems, ranging from shortages of raw materials and intermediate goods to shortages of finished goods and workers. Supply constraints and transportation bottlenecks slowed economic growth in 2021 and will do so again 2022. Most of the demand for goods and workers that goes unmet is simply delayed, which raises the prospects for growth once supply-chain problems are resolved. The main risk to the economy from supply constraints is that inflation will run hotter for longer than expected. We’ve already seen some of that. The Federal Reserve’s likely response to higher-than-expected inflation would be to increase interest

rates, potentially much faster than market participants currently expect. A quick, aggressive pivot from easy money to tight money could trigger a recession because the economy is not well positioned to absorb substantially higher interest rates. Stock prices are inflated and corporate leverage is at historic highs. A large increase in interest rates could trigger a recession through either a stock market correction or a corporate debt crisis.

Another risk to the economy is that the pandemic is not over. The expectation is that each succeeding wave of cases will do less damage to the economy, but mutations of the virus that are more deadly could develop. Nonetheless, I believe the risk that COVID-19 will trigger another recession is very low.

Although downside risks dominate the headlines, there are many upside possibilities that could cause Georgia’s economy to grow significantly faster than I predict. For example, consumers may spend more of their massive accumulation of savings than expected. If contagion concerns dissipate rapidly, spending for high-contact services such as travel and dining out may increase considerably. In addition, households will spend more if products become more readily available. Another upside possibility is that the labor force could grow much faster than expected, especially if recent retirees and people who stopped working during the pandemic to care for family members

2022 Georgia AG FORECAST Takeaways

- In 2022, Georgia will fully recover from the COVID-19 recession.
- Supply constraints are the main recession risk and the strongest economic headwind.
- Spending by consumers, investment spending by businesses and the housing market will be the main economic drivers.
- Georgia’s economic recovery will outpace the U.S. economic recovery.
- Economic development projects will provide a solid push to Georgia’s economy.
- The private sector will be the main strength of the 2022 economy.

reenter the labor force in larger numbers. Another upside possibility is that our forecast for Georgia assumes that foreign immigration will remain at very low levels, but that could change. For example, entry could be eased across the board or eased for specific groups, such as refugees from Afghanistan. Another upside possibility is that Georgia's economic development project announcements could be even stronger than expected. Overall, the upside and downside risks to our 2022 forecast for Georgia are evenly balanced. Since the main headwinds are more likely to slow growth rather than trigger a recession, we judge the risk of a recession beginning in 2022 to be low — about 20%.

Let's look at the forecast in detail. Georgia's GDP will increase by 4.3% in 2022 — that's below the 5.8% gain estimated for 2021, but it compares very well to the 2.5% decline reported for 2020. It's also well above the long-term rate of Georgia's GDP growth of 2.3%. Georgia's 2022 GDP growth of 4.3% will be 0.3 percentage points higher than the 4.0% rate estimated for U.S. GDP.

Georgia's labor market will improve, too. The number of jobs will rise by 3.2% in 2021, which exceeds the 2.7% gain estimated for the U.S. Georgia's unemployment rate for 2022 will be below pre-pandemic levels. It will average 3.2%, or about 0.9 percentage points lower than the 4.1% rate estimated for the nation in 2022. Georgia's low unemployment rate implies fast growth in workers' salaries.

The prospects for personal income growth are good, but growth will slow sharply. In 2022, Georgia's nominal (not adjusted for inflation) personal income will grow by 1.9% and U.S. personal income will grow by 0.6%. Our modest expectations for personal income growth reflect the wind down of the massive federal stimulus programs that provided large transfer payments to individuals in 2020-2021. The combination of rapid job growth and the state's very low unemployment rate will cause compensation to grow strongly in 2022, which will help to offset the drop in stimulus funds going to households.

In 2022, the main drivers of the national and state economic recovery will be consumer spending, the housing

market, and businesses' spending for equipment and software. There's also a lot of unmet demand for workers that bodes well for job growth. Full recovery of the economy will arrive sooner in Georgia than in the U.S. In Georgia, there's relatively less economic debris to clean up. In addition, many of the factors that caused Georgia to outperform the U.S. economy prior to the pandemic are reasserting themselves. Some of the reasons why Georgia's economic recovery will outpace the U.S. include (1) the build out of projects in Georgia's economic development pipeline; (2) competitive state-level economic development incentives that will help refill our economic development pipeline; (3) more leverage than most states from the housing boom; (4) more leverage than most states from higher vehicle sales; and (5) our population will grow faster than the nation's due to in-migration from other states.

The consumer will be the main strength of the 2022 economy. Consumers' inflation-adjusted spending will increase at an above-trend rate of 4.5% — quite an accomplishment given the large drop in federal stimulus and assistance

GEORGIA BASELINE FORECAST, 2021-2022

Georgia	2017	2018	2019	2020	2021	2022
Gross Domestic Product, Billions of dollars	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, Billions of dollars	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	3.9	3.2

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, 11/08/2021.

UNITED STATES BASELINE FORECAST, 2021-2022						
Georgia	2017	2018	2019	2020	2021	2022
Gross Domestic Product, (Billions of 2012 dollars)	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 (millions)	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, (Billions of 2012 dollars)	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	-2.7
Personal Income, Billions of dollars	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
Civilian Unemployment Rate (percent)	4.4	3.9	3.7	8.1	5.5	4.1
CPI-U, Annual Percent change	2.1	2.4	1.8	1.2	4.6	4.2

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, 11/08/2021.

transfers to households. Job growth and increases in compensation will power consumer spending, but the 4.5% increase in spending will be possible only because I expect a large drop in the personal savings rate as well as spending some of the excess savings that accumulated during the pandemic. The personal savings rate will drop to about 6% in 2022 from 12% in 2021 and 16% in 2020. For the nation, the drop in the savings rate amounts to about \$1 trillion in extra spending. As of mid-2021, U.S. households had accumulated about \$2.5 trillion, or 12% of GDP, in excess savings. Most of that will not be spent in 2022, but enough will be spent to ensure above average growth in consumer spending.

Unlike 2020 and 2021, consumers spending for services will increase faster than spending for goods in 2022. This reversal is helped by easy comparisons to low prior-year bases, as well as the satisfaction of some deferred demand for services not purchased during the pandemic. Another reason spending on services will increase

faster than spending on goods is that consumers can't buy goods that are not available. For example, vehicle sales will increase by about 8% in 2022, but the gain would be much stronger if not for shortages of popular models. Even though we expect a good rebound in services sales, there is a strong possibility that the pandemic caused a structural shift in consumers' spending patterns that favors goods over services. High-contact industries that provide discretionary services — such as tourism, live entertainment, and restaurants — will eventually recover, but these industries will not claim the percentage of GDP that they did prior to the pandemic, at least in the short or mid-term.

Investment spending by businesses for equipment, software and structures will be the second economic driver in 2022. The pandemic accelerated several technology-centric trends including remote work, online shopping, mobile banking, telemedicine, and video conferencing. These developments will boost business spending for

equipment and intellectual property and will probably make this spending less cyclical than in the past. The accelerated adoption of many existing technologies, growth of end markets, shortages of workers, and competitive pressures will cause business spending for equipment and intellectual property to increase by about 6%. This increase would be even greater if not for shortages of computer chips and other inputs used to manufacture new equipment.

Georgia's businesses will spend more to build structures in 2022. Prospects are very good for spending to build data centers, communications infrastructure, and research and development facilities. Even though competition from online retailers decreases the need to build new stores, it increases the need to build warehouses and distribution centers. There will be considerable interest in repurposing retail space in good locations, especially near places that benefited from heavy in-migration of teleworkers and retirees. Industrial

development will be focused on locations with logistical advantages. Less positively, the pandemic accelerated the trend towards remote work, which reduces office headcounts and the overall demand for commercial office space. One legacy of the pandemic is likely to be less utilization of commercial office space per dollar of GDP.



In 2022, home sales and homebuilding will be a major driver of Georgia's economic recovery. Housing market conditions are very good due to job growth and other cyclical factors. Demand that was not satisfied in 2020-2021 due to home shortages will support higher sales in 2022. It's likely that the pandemic caused a structural shift that favors owner-occupied housing over rental housing and low-density housing over high-density housing. Telework at scale, distance education, more caregiving at home, and more recreation and entertainment at home make the house more valuable to many people. Put it all together and people are willing to pay more for a single-family home than prior to the pandemic. In addition, low yields on other types of assets means investors will be active in residential real estate markets. I expect the number of single-family home starts for

new construction will increase by 8% and new multi-unit homebuilding will increase by 22%.

As of mid-2021, Georgia's existing home prices were 15% higher than prior to the COVID-19 recession. The degree of home price recovery varies widely within the state, however. In 2022, home price appreciation will continue,

but home prices will rise more slowly. I expect a 4% increase in home prices. Prices will continue to rise because demand will be strong and supplies will be tight. The main reason home price appreciation will slow is that houses have become much less affordable. Housing affordability dropped by about 7% in 2021. A second reason is that mortgage rates will be higher in 2022 than in 2021.

In the wake of the pandemic, job growth across Georgia's industries will be different than it was before the crisis. In 2022, industries hit hardest by the COVID-19 pandemic will initially post the fastest growth, but the high percentage gains reflect rebounds off very depressed levels as well as improving economic fundamentals. Examples include bars, restaurants, hospitality, tourism, live entertainment, air transportation,

high-contact personal services, and the sharing economy. In contrast, logistics, distribution, warehousing, professional and business services, the information industry, and financial technology (FinTech) recovered quickly. These same industries will post solid job growth in 2022. In addition, positive job growth will occur in manufacturing, financial activities, transportation, and utilities, but full recovery may take a couple years. Manufacturers would grow even faster if not for supply chain problems. Due to the strong housing market, homebuilders will be hiring. Retailing is fully recovered and will add jobs in 2022. State and local governments will add back some jobs lost to the pandemic recession. None of the major sectors of Georgia's economy will lose jobs in 2022.

In 2022, economic development success will strongly support Georgia's economic recovery. The state landed more economic development projects in fiscal year 2021 than in fiscal year 2020. On a year-over-year basis, new investments increased by 46%, which is very impressive given that Georgia landed more projects in FY 2020 than in FY 2019. This continuing success reflects many factors that make Georgia a great state in which to do business, as well as an extremely competitive team of economic development professionals who produced outstanding results under very challenging economic circumstances. I am not surprised that, in 2021, the nation's site selection professionals ranked Georgia as the "Top State for Doing Business" for the eighth straight year. Georgia scores especially well in terms of cost of doing business, cooperative and responsive state government, competitive labor market, workforce development programs, and available real estate.

The outlook for manufacturing is positive. The main driver of growth in manufacturing production will be high demand for manufactured goods. Due to factory shutdowns in 2020 and shortages of critical inputs in 2021, there's a need to produce more to restock stores and warehouses. Georgia saw many manufacturing economic

development projects announced in 2020-2021 and those projects — as well as many announced in previous years — will contribute to the increase in industrial production in 2022.

The build out of headquarters projects will be an important force powering Georgia's current and future economic growth. Several headquarters projects were announced in 2021. In addition, projects announced in prior years will spur growth as they build out and become more fully integrated into the business fabric of the state.

Information technology (IT), FinTech, and cybersecurity will strongly support Georgia's economic recovery. IT, FinTech, and cybersecurity companies received a boost from the COVID-19 crisis because contagion fears pushed people to adopt new mobile technologies, including mobile banking and touchless payment systems. Most consumers are pleased with such services and will never return to their pre-crisis ways of banking and shopping. FinTech companies locate in Georgia because the large cluster of existing companies ensures deep pools of experienced workers with the special skills the industry requires.

The digital transformation of many industries, ranging from health care to education to mobile banking, was an existing trend dramatically accelerated by the pandemic. The speed of this widespread digital transformation increases the risks of cyberattacks, which put Georgia's cybersecurity industry onto a higher growth trajectory.

Due to the continued recovery of U.S. and global GDP, the prospects for Georgia's large transportation and logistics industry are very good. There are many logistics and distribution projects in Georgia's economic development pipeline. This industry will benefit from Georgia's expanding role as a regional and national logistics and distribution center, as well as the accelerated shift from physical retail to online retail.

Demographic forces are another factor behind Georgia's economic recovery. In 2022, Georgia's population will grow at a pace that exceeds the national average — 0.8% in Georgia versus 0.5% for the U.S. Domestic net migration will be higher in 2022 than in 2020-2021, but lower than in 2019. Georgia is a very attractive destination for top- and mid-career

movers as well as retirees. The bottom line is that population growth will be a more powerful driver of Georgia's GDP in 2022, but weaker than it was in the years preceding the pandemic. That's mostly because jobs will be plentiful in most of the states that historically send many people looking for work to Georgia.

In closing, by late 2022, Georgia's economy will fully recover from the COVID-19 recession. The main drivers of growth will be consumer spending, investment spending by businesses and the housing market. The risk of recession is low, but shortages of workers and supply constraints will be economic headwinds that will slow growth in 2022. Georgia's economy will remain on its above-average growth trajectory.

**Amanda R. Smith, Public Service Associate,
Department of Agricultural and Applied Economics, University of Georgia**

Early 2021 saw a period of optimism in the U.S. agricultural sector. The world began to recover from the pandemic-caused economic downturn and China continued to fulfill commitments of the Phase One Trade Deal with purchases of U.S. agricultural exports. Prices for corn, soybeans and cotton began to climb and competition for acres commenced. The peanut industry had another reason to be optimistic — the 2020 crop was higher quality than the previous year and domestic demand for peanuts and peanut products was expected to reach record highs. Furthermore, carryover fell below one million tons for the first time in four years and forward contracts ranged \$450 to \$550 per ton on limited quantities.

Even though forward contracts on peanuts were higher than previous years, Georgia farmers turned to crops that enabled them to maintain a good crop rotation and potentially offer a higher net return. As a result, planted peanut acres in Georgia declined 6.8% to a total 755,000 acres, still the fourth highest number of acres planted since

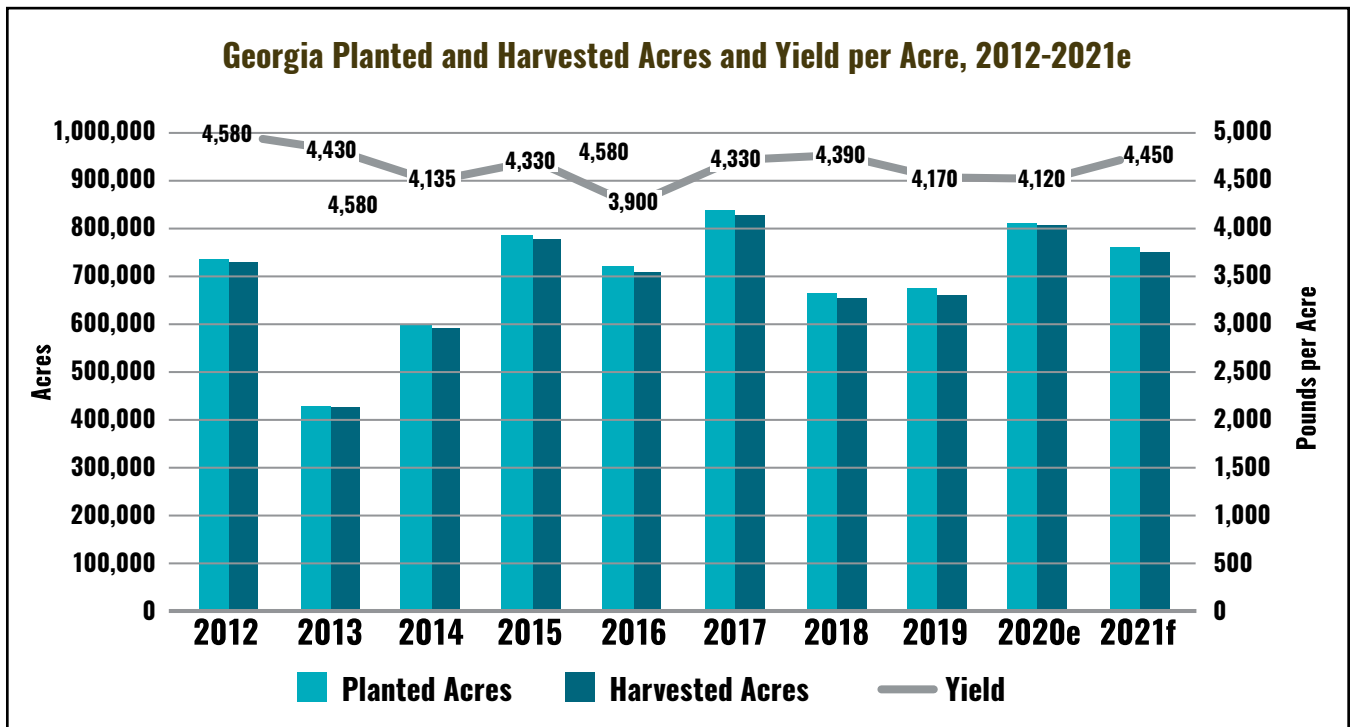
1991. U.S. planted-peanut acres were also down to 1.59 million acres, a reduction of 4.6% from 2020.

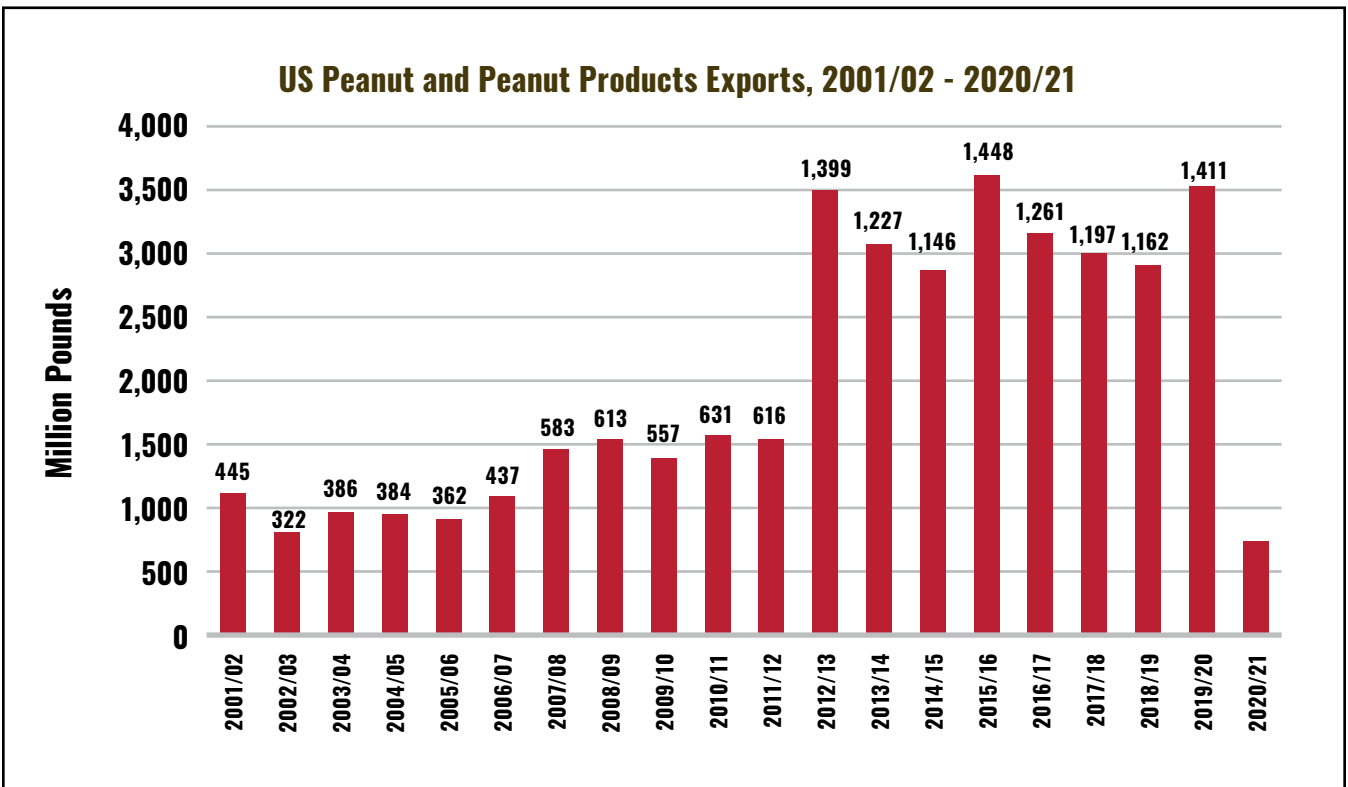
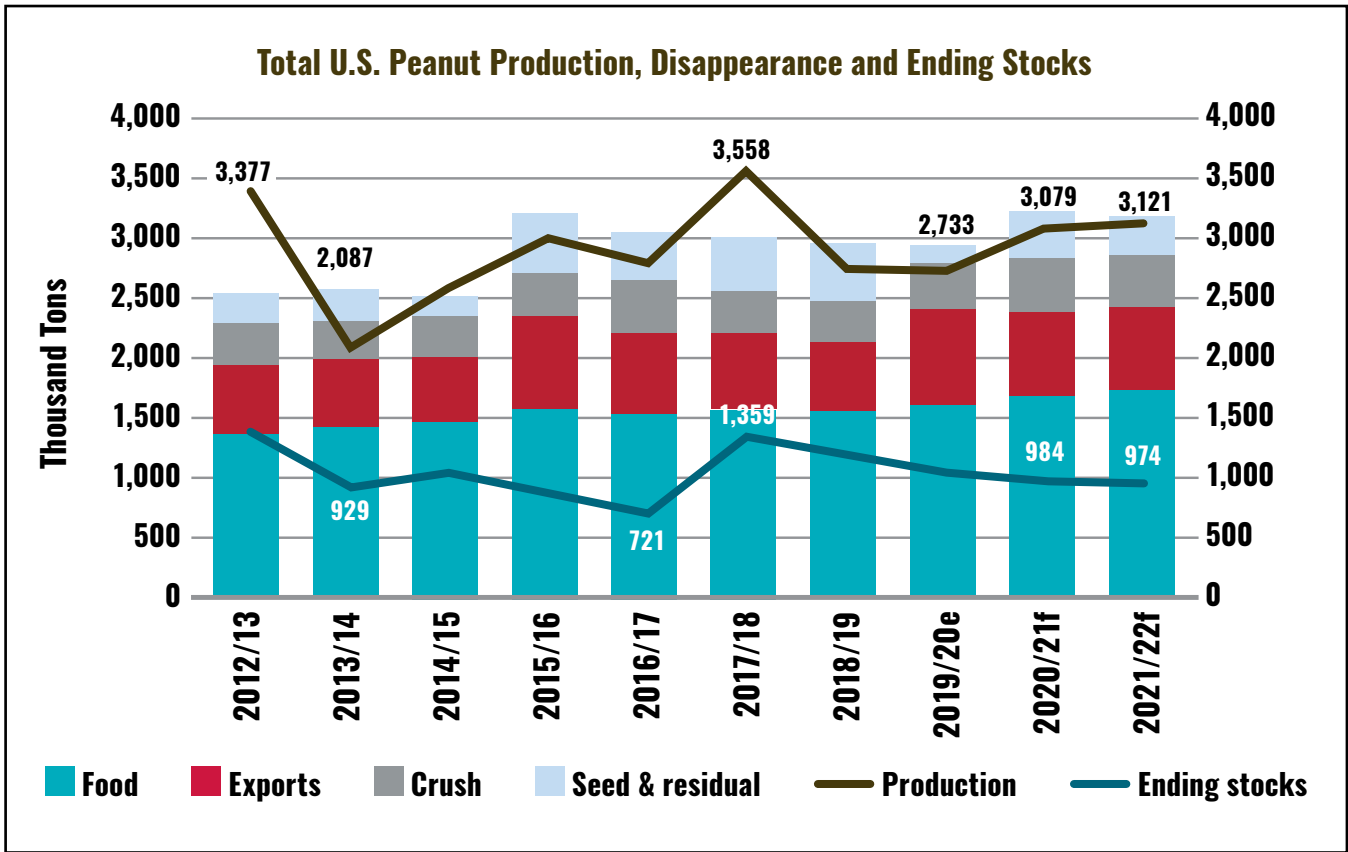
Timely rains and good weather led to high quality and high yielding crops. The U.S. Department of Agriculture (USDA) National Agricultural Statistics Service forecasted 2021 yields at 4,135 pounds per acre for the U.S. and 4,450 pounds per acre for Georgia, up 8% from 2020. If realized, this would be the second-highest average Georgia and U.S. yields on record. Furthermore, peanut farmers are expected to make the third-highest U.S. peanut production on record at 3.19 million farmer stock tons. As determined by the USDA Federal State Inspection Service, quality of the 2021 crop also looks good with 99.5% of the crop grading Segment 1, the highest-quality segment.

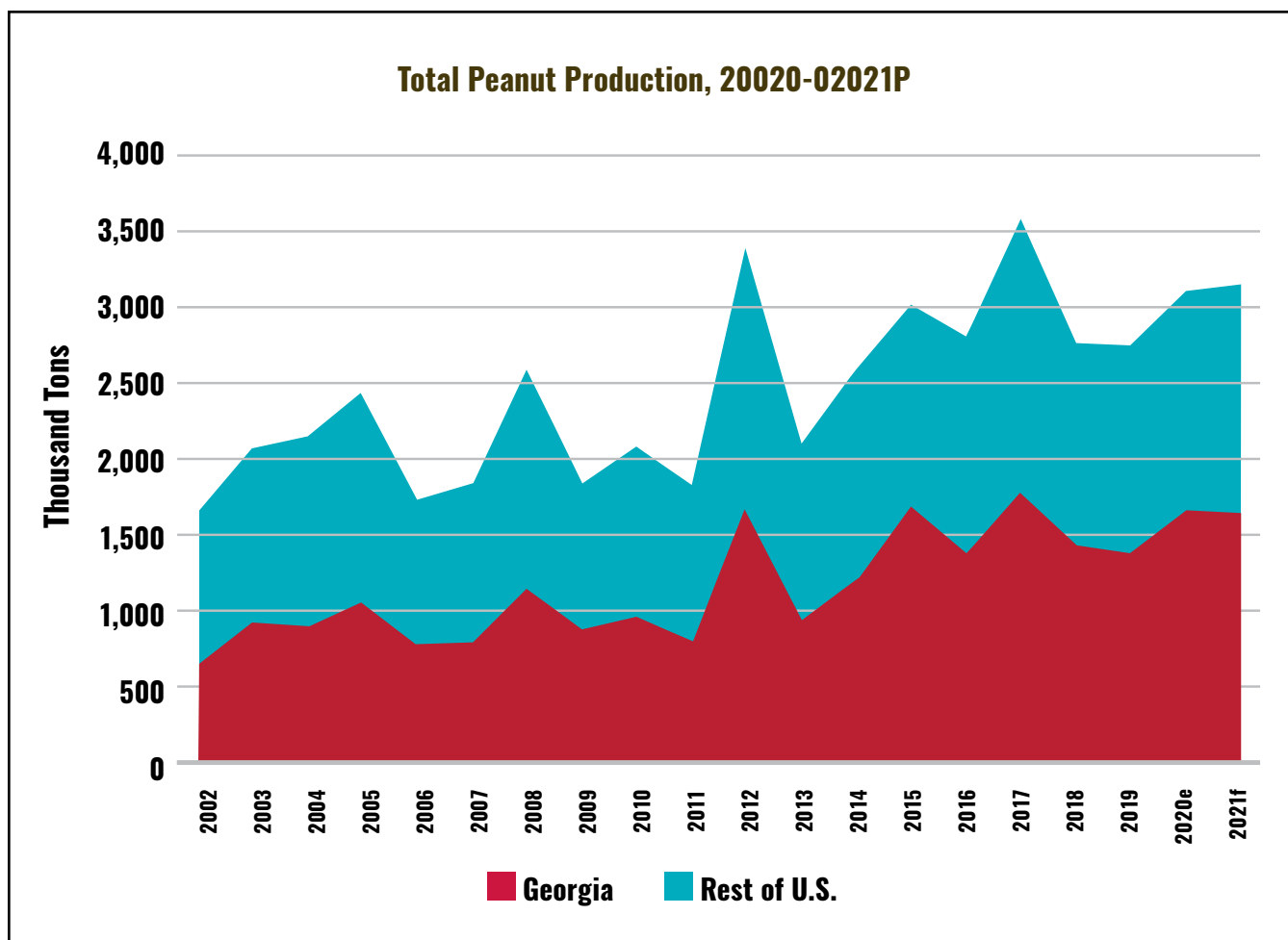
Demand for edible peanuts remained high after reaching a record 7.9 pounds per capita in 2021. Consumers continue to choose edible peanut products. Consumption trends showed an increase in peanuts used in candy (up 9.5%) followed by snack peanuts

(up 5.0%) and peanut butter (up 2.7%) during 2021. For the 2021-22 crop, food use is forecast just 1% higher at 1.695 million tons. Exports are projected down 8% to 650,000 tons. Crush is expected to be similar to 2020-21 at 437,500 tons. These all combine to an expected total peanut disappearance of 3.1 million tons for the 2021-22 marketing year, potentially the third highest on record.

Looking ahead to 2022, carryover is expected to be over 1 million tons of quality peanuts and the competition for acres among other crops is also expected down. Historically high fertilizer prices may push farmers into planting peanuts which don't require nitrogen. Given all these factors, it is not unreasonable to expect similar to slightly lower-priced forward contracts than 2021. A season average price of \$420-\$450 per ton is a sensible planning expectation for Georgia growers in 2022. This will likely mean that planted peanut acres will be stable to potentially higher, enabling farmers to stick to their crop rotation.







**2022 Georgia
AG FORECAST**
Takeaways

- U.S. and Georgia peanut farmers planted fewer peanuts during 2021, but abundant yields may lead to the third-highest U.S. production on record.
- Georgia forward contract prices are expected down with a season average price of \$440 per ton. Peanut acres will be stable to up.
- Peanut disappearance in 2021-22 is projected to remain near the record high seen during the 2020-21 marketing year at almost 3.2 million tons, supported by increases in food use.

Sources:

USDA Economic Research Service, Oil Crops Data: Yearbook Tables, March 26, 2021.
 USDA Foreign Agricultural Service Production, Supply & Distribution Online, Accessed November 17, 2021.
 USDA Federal State Inspection Service, National Peanut Tonnage Report Online, Accessed November 17, 2021.
 USDA National Agricultural Statistics Service, Peanut Stocks & Processing Report, released August 27, 2021.
 USDA National Agricultural Statistics Service Quick Stats Database Online, Accessed November 17, 2021.

Yangxuan Liu, Assistant Professor, Department of Agricultural and Applied Economics, University of Georgia

The 2021 cotton harvest combined both good yields and good prices, which is rare for cotton producers. Since the COVID-19 pandemic unfolded, cotton markets have been on an upward trajectory, with a recovery of futures prices from the low of \$0.50 per pound in April 2020 to a high of \$1.22 per pound in November 2021. This recovery of cotton prices is contributed to the global economic recovery, leading to a recovery of global cotton demand. In addition, the inflation pressure, increasing prices for synthetic fiber, and speculation purchases in cotton futures also contributed to rising cotton prices. Looking ahead to 2022, producers need to be aware of increased price risks for cotton and inputs. Factors influencing 2022 cotton prices and profitability include subsequent waves of COVID-19, global economic growth and inflation, the global trade situation, and rising input prices.

Cotton Supply and Demand

Cotton products are discretionary items and thus cotton consumption follows the trend of the global economy. According to the Organization for Economic Cooperation and Development (OECD), after a sharp decline of 3.1% in the global economy in 2020, global gross domestic product (GDP) rose 5.9% in 2021 and is projected to continue rising by 4.9% in 2022. The economic recovery creates the foundation for price recovery for cotton. Globally, 2021 cotton production is projected at 121.8 million bales, 9.6 million bales greater than 2020 (Figure 1). World cotton-mill use is projected slightly higher than production at 124.1 million bales, 3.2 million bales above last season and the second-largest on record.

U.S. cotton production was forecasted at 18.2 million bales for the 2021-22 marketing year, slightly over the U.S. cotton demand – 15.5 million bales of exports and 2.5 million bales of domestic-mill use. The U.S. ending stocks-to-use ratio is forecast at 18.9 percent for the 2021-22 marketing year, slightly above last season but below each of the previous three years.



Trade Uncertainty

Another reason for the strong recovery of cotton prices is attributed to strong export demand, partially driven by the Phase One purchase by China in 2020 and 2021 (Figure 2). However, China's purchase obligation under the Phase One Trade Deal only lasts until the end of 2021. There is uncertainty for future years of cotton purchase by China.

Georgia Outlook

In Georgia, planted acres declined to 1.17 million acres in 2021, 20,000 acres below 2020 and down from 1.4 million acres in 2019. Even with reduced planted acres, weather conditions for 2021 favored cotton production in Georgia, with an estimated 2.3 million bales of cotton produced in 2021. The average cotton yield in Georgia is 952 pounds per acre, which is the fourth largest on record.

Rising in Price Risks

Historically, cotton prices tend to follow the stock market, with a rise in cotton prices when the stock market rises and a decline in cotton prices when the stock market drops. However, since September 2021, the stock market has been on a roller coaster ride with ups and downs. This roller coaster ride of the stock market created uncertainties for investors concerning the next price drop of the stock market. Some investors pulled their money out of the stock market, seeking the next opportunity for a short-term gain.

Under these circumstances, other markets, such as the cotton futures market, experienced an inflow of speculative money, pushing prices higher. This flow of money into cotton markets has pushed prices to levels that exceed those indicated by supply and demand fundamentals in October and November 2021, creating a potential marketing opportunity for cotton producers. However, the flow of money in and out of cotton markets can also make prices unpredictable and volatile, thus making it difficult for producers to predict the direction of cotton prices. In addition, farm inputs were up sharply in 2021, which makes planning for the 2022 crop year more important than ever to ensure that risks are managed.

Summary

As this is being written, futures prices for the 2022 crop are currently around 90 cents per pound. The optimistic likely price for 2022 is .90 cents to \$1 per pound or better. The pessimistic likely price for 2021 is .70 to .80 cents per pound. For planning and budgeting projections, a price of .80 to .90 cents per pound is suggested for 2022.

Figure 1: World Cotton Supply and Demand

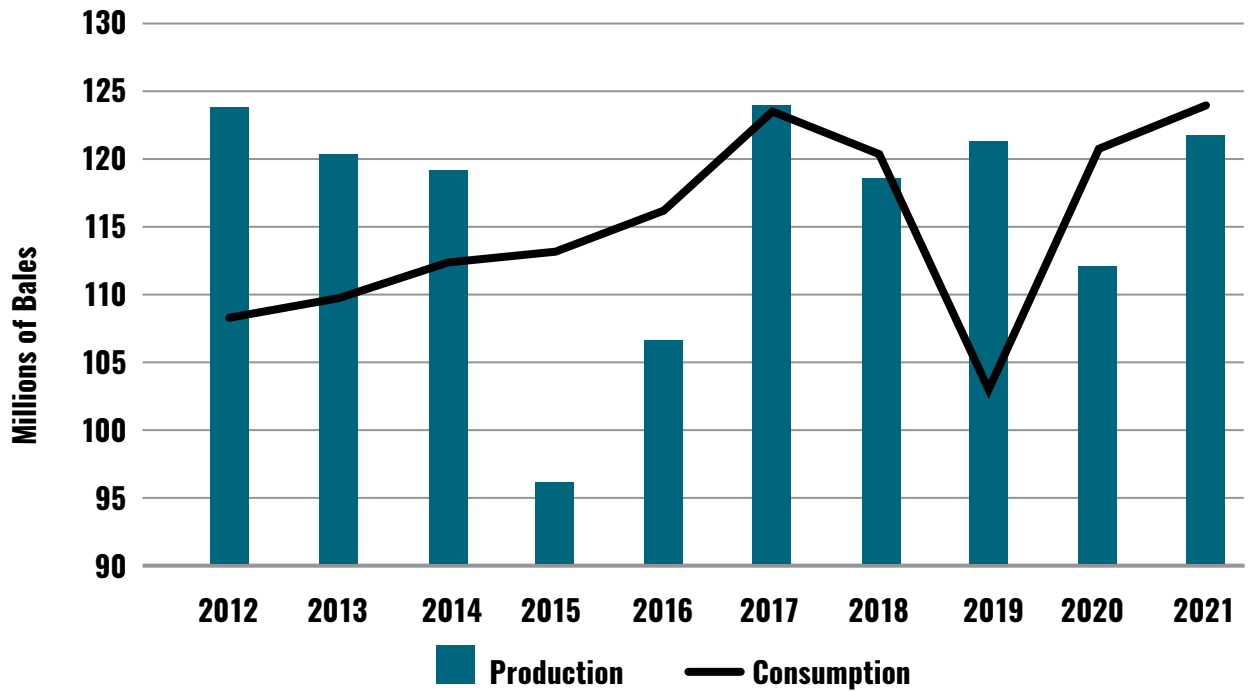
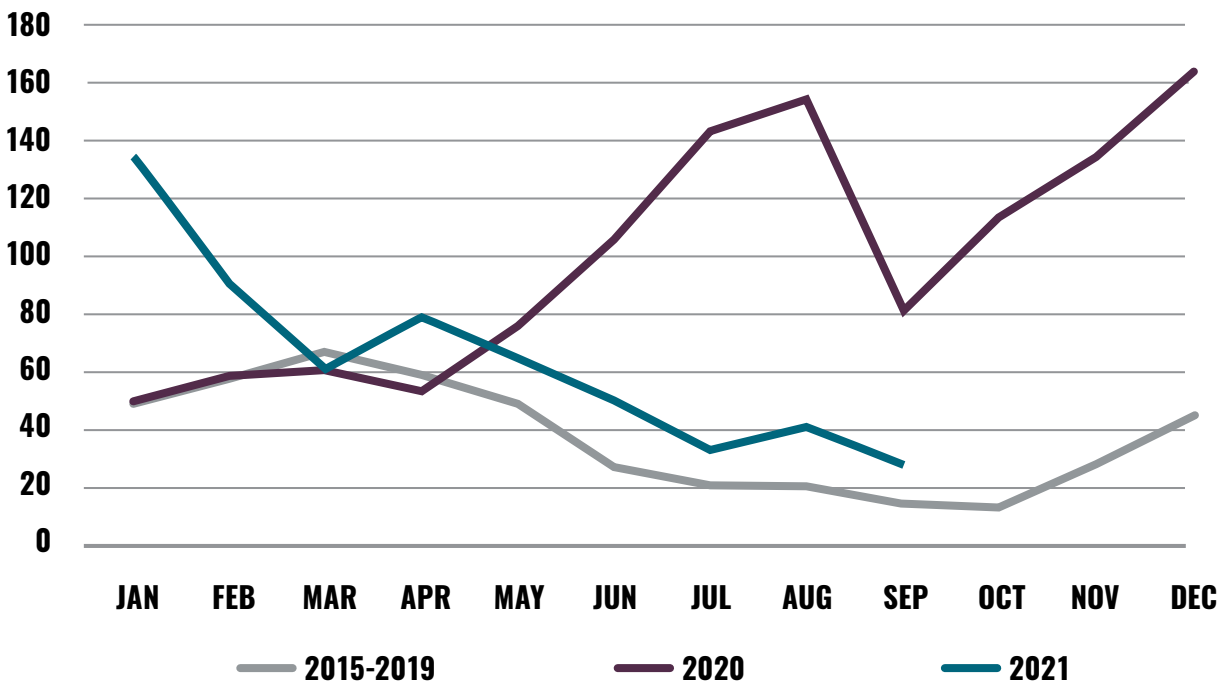


Figure 2: U.S. Cotton Export to China, includes cotton and cotton linters



Data Source: USDA FAS

**Esendugue Greg Fonsah, Professor,
REI Coordinator and Agribusiness Extension Economist, Fruits, Vegetables and Pecans
Department of Agricultural and Applied Economics, University of Georgia**

Abstract

Producers Price Index (PPI) for fruit and tree nuts started off strong in January 2021 and quickly took a nosedive by March, but quickly recovered. Overall, the PPI was much better in 2021 compared to 2020 and it is expected to remain strong in 2022. Despite domestic production, large quantities of fresh blueberries were imported from Chile, Peru and Mexico to meet high domestic demand. Georgia pecans continue to dominate the fruit and tree nuts industry, while the peach industry is expected to make a comeback in 2022. Georgia’s strawberry industry was showing signs of growth in 2021 and will continue to do so in 2022, especially with favorable prices.

Fruits and Tree Nuts

PPI for fruit and tree nuts was relatively better in 2021 compared to the 2020 crop season. The PPI for fruit and tree nuts started strong, over 150 (1982=100) in February 2021, took a nose dive in March 2021, and increased by 1.8% in June 2021. By August 2021, the PPI dropped to 139.8 (1982=100), equivalent to 0.43% from July 2021 and a 1.4% decrease compared to the same time in the 2020 crop season.

Peaches

Despite the COVID-19 pandemic, unfavorable weather, and fluctuating peach production from the three major producing states — California, South Carolina and Georgia — there was a 13% increase in 2021 compared to 2020. The reason for this huge increase in peach production was due to bumper crops in the three major producing states. California freestone peach production increased by 23%, while South Carolina and Georgia’s production increased by 10% and 8% respectively. U.S 2021 peach production was the highest recorded since 2017 (Fig 1). On the other hand, Georgia peach production reached its peak in 2019, generating \$71.78 million in farm gate value and ranks third in the fruit and tree nuts category. The Georgia 8% production increase in 2021 crop season is expected to increase peach farm gate value above the 2019 record high. Despite the record-high fresh peach

production from three major producing states, California clingstone peaches for processing decreased by 3% while the California canning peach also decreased by 9% in 2021 compared with the 2020 crop season. This decrease in production triggered the reported 4% increase in the 2021 base price agreement of \$518 per ton for California cling peaches according to the USDA, NASS report.

Pecans

The U.S. pecan production increased by 13.35% in the 2020-21 crop period with 152.68 million pounds compared to the 2019-20 crop period when only 134.70 million pounds were reported. The total increase in production contributed to suppressing the price, which decreased to \$1.43 per pound compared to \$1.84 per pound in the 2019-20 crop season. The decrease in price may have contributed to the increase in 2020-21 per capita consumption to 0.60 pounds compared to 0.54 pounds in 2019-20. The U.S. imported more pecans in the 2020-21 crop season (137.97 million pounds shelled basis), compared to 115.06 million pounds exported in the same time period. However, import demand dropped by 10.27% in the 2020-21 crop season, while export increased by 19.02%. Pecan still ranks No. 1 in Georgia fruit and tree nuts farm gate value, generating 42.4%, or \$263.36 million, in 2019.

Strawberries

Georgia’s strawberry industry has been fast growing with a record-high farm gate value of \$15.82 million in 2014. For the past half a decade, Georgia strawberry farm gate value took a nosedive and only recovered in the 2021 crop season, generating \$10.57 million. It is expected that 2022 will be more lucrative for the industry.



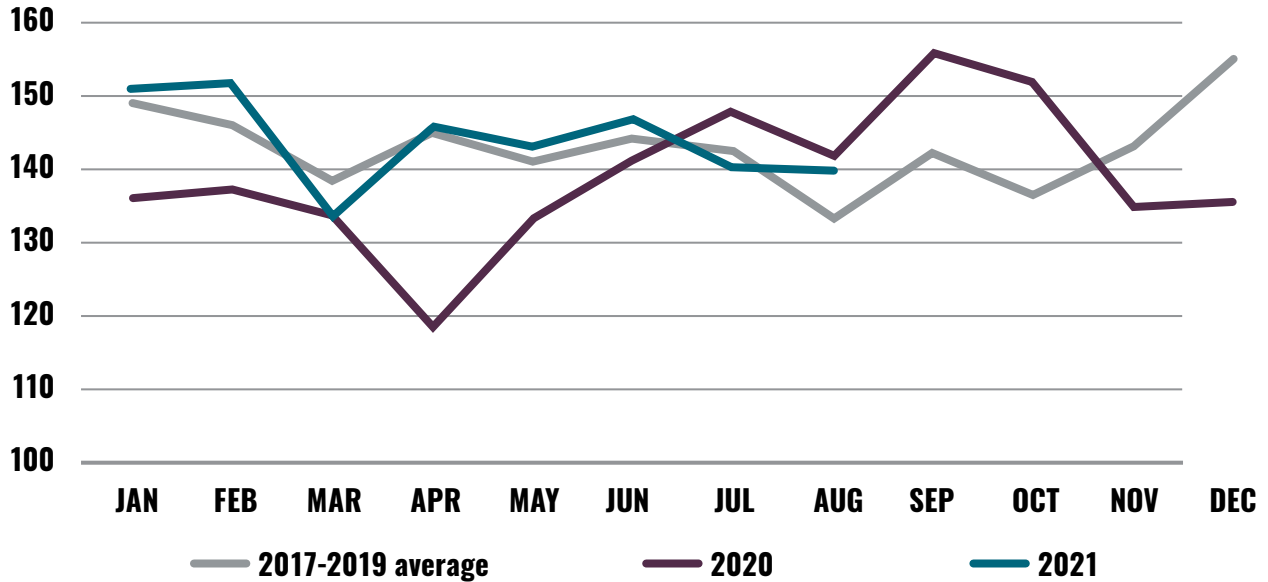
Blueberries

Georgia blueberries rank No. 2 in farm gate value, generating 35.5%, equivalent to \$220.44 million in the 2019 fruit and tree nuts category. According to the North American Blueberry Council (NABC), U.S. blueberry production was 627 million pounds in the 2020 crop season, which was 6% less than the 2019 season, and out of which 54% were sold fresh and the rest sold as frozen and/or processed. Despite domestic blueberry production, an additional 482 million pounds were imported from major countries like Chile, Peru and Mexico. On the other hand, the U.S. exported only 59 million pounds in 2020, which was 26% lower than 2019.

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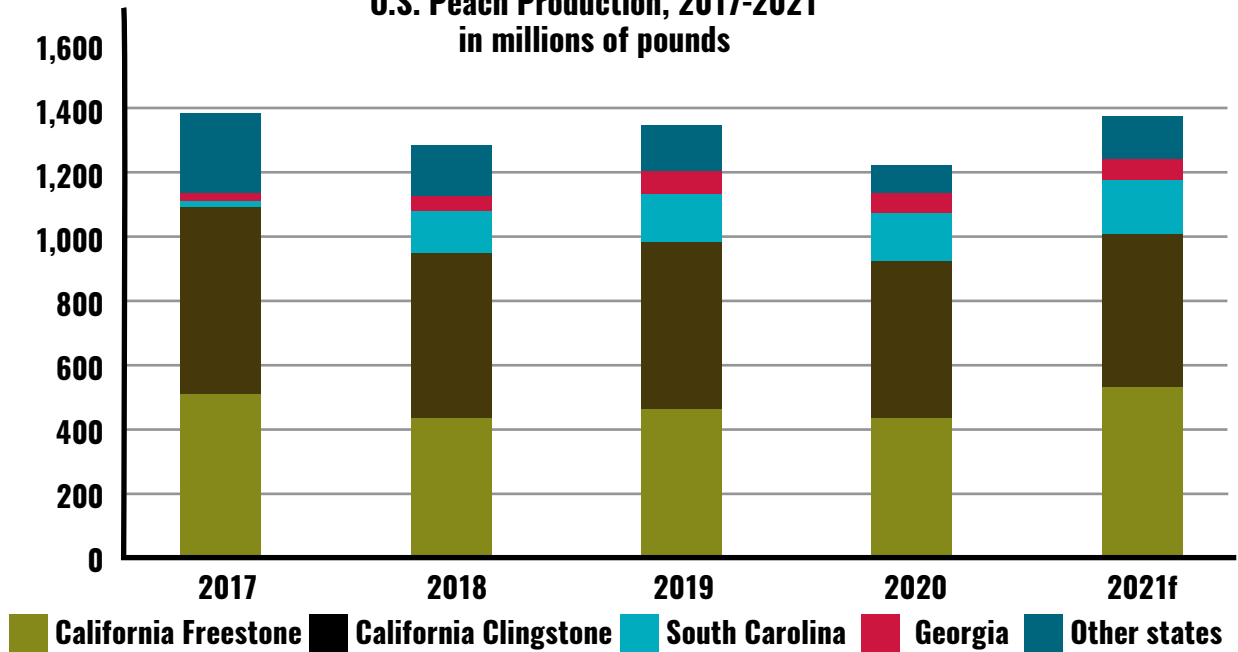
- **There was an increase in peach prices in June 2021 over 2020 but decreased in July 2021 as more peaches penetrated the market. This condition is expected to remain the same in 2022.**
- **In 2022, blueberry imports from Chile, Peru and Mexico will continue to increase as domestic production is not enough to satisfy high domestic demand.**
- **Georgia pecans will continue to dominate the fruit and tree nut industry in the 2022 crop year and prices are expected to improve.**

Producers Price Index (PPI) for fruit and tree nuts
100 Baseline = 1982 levels



Source: U.S. Department of Labor, Bureau of Labor Statistics.
Fruit and Tree Nuts Outlook: September (2021), FTS-373, USDA, Economic Research Service

U.S. Peach Production, 2017-2021
in millions of pounds



f= forecast

Source: USDA, NASS (2021), Noncitrus Fruit and Nuts 2020 Summary and Crop Production (August issue)

**Endugue Greg Fonsah, Professor and Agribusiness Extension Economist,
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Abstract

Total harvested areas for vegetables and pulses have been downward trending since 2017 and made a 4.4 percent increase in 2020. Despite the uncertainties created by the COVID-19 pandemic, these crops are expected to make another comeback in the 2022 crop season. Vegetable and pulse utilized production experienced an insignificant increase of 0.1% in 2020 compared to 2019, but a more favorable increase is expected in 2022. The 4.4% increase in area harvested put a dent in the crop value with a 2.2% decrease in 2020 compared to 2019. The decrease in unit price must have triggered the 2.7% increase in per-capita consumption in 2020. With an expected increase in total area harvested and production, per-capita availability is expected to increase in 2022.

Vegetables and Pulses

Report from the United States Department of Agriculture, Economic Research Service (USDA/ERS) and the National Agricultural Statistics Service (NASS) shows that vegetable and pulses harvested area experience 4.4% increase in 2020 compared to 2019. The USDA/ERS definition of vegetables and pulses include fresh and processed vegetables, potatoes, dry beans, peas and lentils, and mushrooms. Total fresh and processed vegetables harvested acreage decreased 1.3% from the 2019 to the 2020 crop season. The 4.4% increase in total vegetable and pulse category was due to 10.8% and 13.3% increases in dry beans and mushrooms, respectively (Table 1).

Vegetable and pulse utilized production was 1,203 million hundredweight (cwt) in 2020, a slight 0.1% increase from 2019. In this category, fresh vegetables production decreased by 2.4%. At the same time, the total crop value decreased by 2.2% as it generated \$19.55 billion in 2020 compared to \$19.98 billion in 2019. The overall fresh vegetable value for 2020 was \$11.06 billion, compared to \$11.62 billion in 2019, a decrease of 4.8% (Table 1).

Total unit value for vegetables and pulses was \$16.25/cwt in 2020 compared to \$16.62/cwt, a decrease of 2.2%. Fresh vegetables unit value was \$31.25/cwt in 2020 compared to \$32.06/cwt in 2019, a 2.5% decrease.



Total import value for vegetables and pulses was \$15.62 billion in 2020 compared to \$13.88 billion in 2019, an increase of 12.5%. The total import increase of 12.5% was a result of the large increase in all vegetable and pulse categories (i.e., processing, potatoes, dry bean, peas, lentils and mushrooms) respectively. On the other hand, total export was \$6.83 billion in 2020 compared to \$7.18 billion in 2019, a decrease of 4.8%. It is worth mentioning that the huge decrease in export was as

a result of COVID-19 disruptions. The good news is total vegetable and pulse per-capita consumption increased by 2.7% in 2020 and despite the COVID-19 pandemic as an average American ate 390.1 pounds of vegetables in 2020 compared to 379.8 pounds in 2019.

Beside the dry beans, peas and lentils per-capita consumption that decreased by 7.1%, all other vegetables and pulses categories increased (Table 1).

In 2020, fresh vegetable production value decreased by 11% from 2019. Onion value was down by 16.5% in 2018 and 14.5% in 2020. Bell pepper and cabbage experienced 11.2% and 18.2% decreases in 2020, respectively. On the other hand, tomatoes and sweet corn experienced increases production value of 2.2% and 18.5% respectively in 2020. These production values are expected to continually fluctuate in 2022 (Fig 2).

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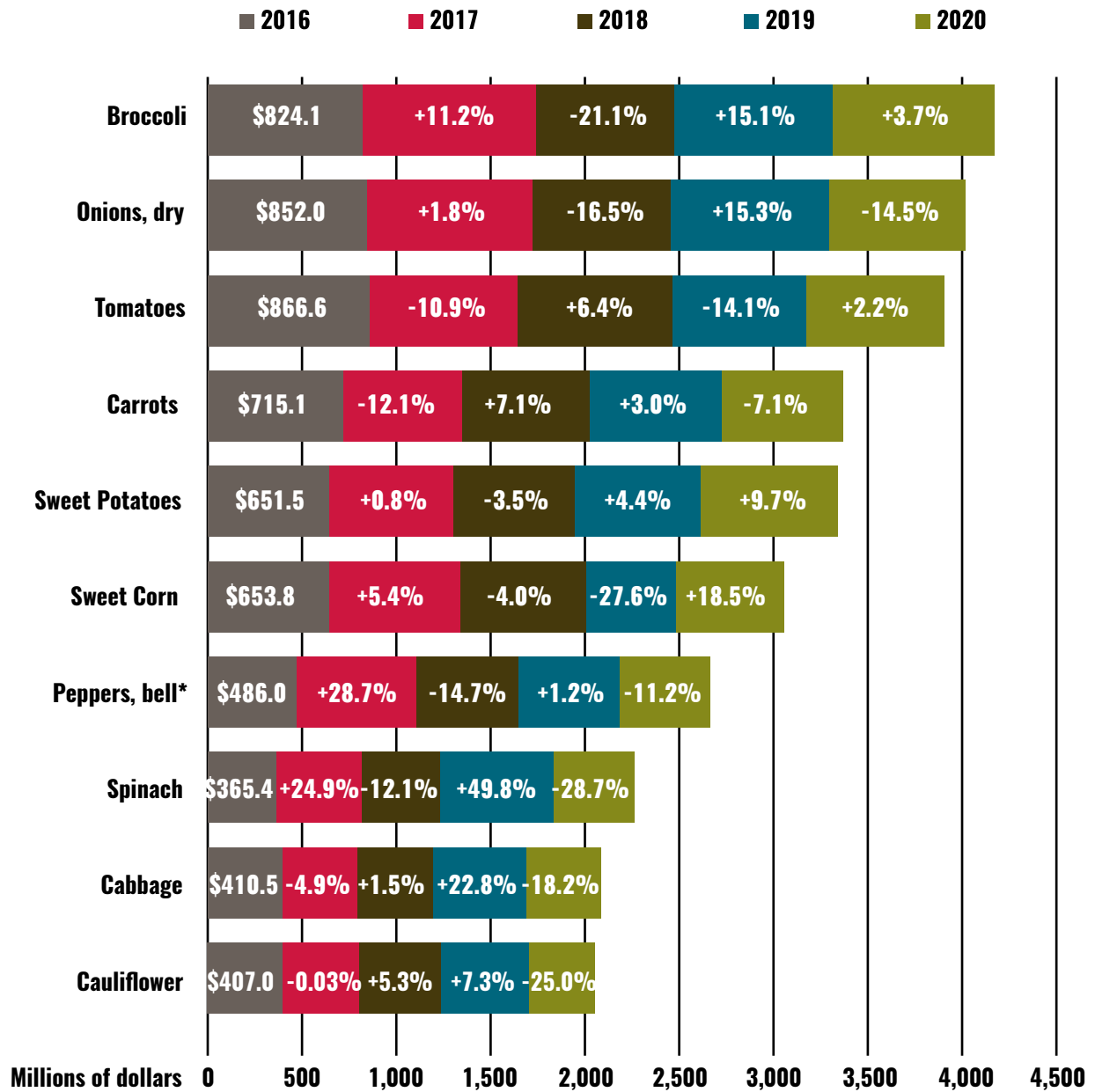
- **Although total vegetable and pulse harvested area increased by 4.4% in 2020, compared to 2019, fresh and processed vegetable decreased by 1.3%. This situation is expected to improve in 2022.**
- **Unit value for fresh vegetables decreased by 2.5% while total unit value of all vegetables and pulses also decreased by 2.2%. Both total vegetables and pulses and fresh vegetable values are expected to be strong in the 2022 crop season.**
- **Total imports of vegetable and pulses increased by 15.5% in 2020 compared to 2019 while total export decreased by 4.8%. This gap between import and export will continue to increase in 2022.**

Table 1: U.S. Vegetable and Pulse Industry Trend, 2017-2020

Item	Unit	2017	2018	2019	2020	Percent change 2019-20 ⁶
Area harvested						
Vegetables, fresh & processing ⁴	1,000 acres	2,572	2,390	2,357	2,326	-1.3
Potatoes	1,000 acres	1,045	1,045	937	914	-2.5
Dry beans, peas and lentils	1,000 acres	4,096	4,096	3,099	3,433	10.8
Mushrooms ²	1,000 acres	33	163	27	31	13.3
Total	1,000 acres	7,746	7,694	6,420	6,705	4.4
Production						
Vegetables, fresh	Million cwt	382	336	362	354	-2.4
Vegetables, processing ⁴	Million cwt	373	333	352	361	2.5
Potatoes	Million cwt	451	451	424	414	-2.4
Dry beans, peas and lentils	Million cwt	58	58	55	65	20.1
Mushrooms ²	Million cwt	9	45	8	8	-1.8
Total	Million cwt	1,273	1,223	1,202	1,203	0.1
Crop value						
Vegetables, fresh	\$ Millions	12,441	10,695	11,618	11,058	-4.8
Vegetables, processing ⁴	\$ Millions	2,227	2,175	1,938	2,008	3.6
Potatoes	\$ Millions	4,135	4,006	4,217	3,911	-7.3
Dry beans, peas and lentils	\$ Millions	1,343	1,263	1,087	1,415	30.1
Mushrooms ²	\$ Millions	1,226	1,135	1,115	1,153	3.5
Total	\$ Millions	21,372	19,274	19,975	19,545	-2.2
Unit value						
Vegetables, fresh	\$/cwt	32.60	29.34	32.06	31.25	-2.5
Vegetables, processing ⁴	\$/cwt	5.97	5.52	5.51	5.56	1.1
Potatoes	\$/cwt	9.17	8.90	9.94	9.44	-5.0
Dry beans, peas and lentils	\$/cwt	23.16	20.17	19.93	21.61	8.4
Mushrooms ²	\$/cwt	131.37	130.57	134.02	141.27	5.4
Total	\$/cwt	16.79	15.06	16.62	16.25	-2.2
Imports						
Vegetables, fresh	\$ Millions	7,508	7,950	8,514	9,527	11.9
Vegetables, processing ⁴	\$ Millions	3,007	3,216	3,164	3,559	12.5
Potatoes	\$ Millions	1,367	1,511	1,530	1,734	13.4
Dry beans, peas and lentils	\$ Millions	275	275	237	315	33.0
Mushrooms ²	\$ Millions	355	1,403	435	480	10.2
Total	\$ Millions	12,511	13,355	13,881	15,615	12.5
Exports						
Vegetables, fresh	\$ Millions	2,272	2,312	2,393	2,300	-3.9
Vegetables, processing ⁴	\$ Millions	2,325	2,236	2,195	2,035	-7.3
Potatoes	\$ Millions	1,814	1,787	1,925	1,674	-13.0
Dry beans, peas and lentils	\$ Millions	841	535	622	783	16.1
Mushrooms ²	\$ Millions	41	47	44	42	-4.3
Total	\$ Millions	7,293	6,917	7,178	6,833	-4.8
Per capita availability						
Vegetables, fresh	Pounds	157.2	149.6	142.0	147.0	3.5
Vegetables, processing ⁴	Pounds	107.5	117.5	111.1	116.9	5.3
Potatoes	Pounds	117.8	117.6	112.6	112.8	0.2
Dry beans, peas and lentils	Pounds	11.5	13.2	10.4	9.6	-7.1
Mushrooms ²	Pounds	4.0	3.9	3.8	3.7	3.7
Total	Pounds	397.9	401.9	379.8	390.1	2.7

Sources: Vegetable and Pulses Outlook, VGS-364, April 17, 2020, USDA/ERS.

Fig. 2: Fresh Production Value and Percentage Change of U.S. Selected Vegetables, 2016-2020



Source: USDA, Economic Research Service Calculations Using USDA, National Agricultural Statistics Service data.

**Tommye Shepherd, Public Service Associate,
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Corn and soybean prices are projected to begin a descent towards lower, long-run average levels in 2022 as the global economy continues its recovery from the 2020 COVID-19 pandemic. As two of the “big four” U.S. row crops, along with wheat and cotton; corn and soybeans are major inputs to the livestock industry, as well as major consumers of energy by way of intensive fertilizer usage. These factors point towards a shift in acreage from corn to soybeans and a decline in prices for both commodities during the current crop year.

According to U.S. Department of Agriculture’s Annual Baseline Early Release Projections, released in November, U.S. corn acreage is projected to decline by 1.3 million acres, from 93.3 million in 2021 to 92 million in 2022. A small amount of this decline, approximately 300,000 acres, is projected to shift into soybeans, as plantings increase from 87.2 million acres in 2021 to 87.5 million in 2022. The shift in acreage from corn to soybeans will be driven largely by the spillover effects of high fertilizer prices from 2021 into 2022. Corn production is far more fertilizer intensive than soybeans, with fertilizer costs accounting for approximately 40% of total corn production costs. Higher fertilizer costs have in turn been driven by markedly higher energy costs, especially the cost of natural gas, which is a major component of fertilizer production. USDA projects that fertilizer costs, which averaged about \$100 per acre for corn production in 2021, will move closer to \$200 per acre in 2022, while per-acre fertilizer costs for soybeans will rise from approximately \$46 per acre in 2021 to around \$92 per acre in 2022. In addition to the cost-induced shift in acreage, higher fertilizer prices could also lead to reduced application rates in both crops, resulting in lower yields than are currently predicted.

USDA estimates call for a record yield of 15.1 billion bushels of corn in 2021, based on a national average yield of 177 bushels per acre, despite drought conditions which prevailed in North and South

Dakota and Minnesota throughout much of the growing season. Soybeans were also forecast to produce a record yield of 4.5 billion bushels at an average rate of 51.2 bushels per acre, which would best the 4.45 billion bushel crop of 2021 and 4.43 billion bushel crop of 2018. There is, of course, still ample time for changes in the expected corn/soybean/fertilizer dynamic to alter planting intentions between now and spring planting time. Inflation-induced price increases for farm chemicals, fuel, labor and other inputs will also impact bottom line profitability in 2022 so that, even with net farm income likely to be below that of the prior two years, both corn and soybeans should remain profitable.

Despite projections of lower prices and a shift in acreage from corn to soybeans, USDA still predicts that corn will be the more profitable crop in 2022 based on variable costs. Actual profitability will, of course, depend on each individual producer’s total cost situation, including fixed costs such as principal and interest payments. Current USDA estimates put corn prices at \$4.80 per bushel in 2022, down 65 cents from the 2021 high of \$5.45/bu. Current USDA soybean price estimates for 2022 stand at \$10.50/bu, down \$1.60/bu from 2021. Early forecasts for record soybean crops in Brazil and Argentina, which would place additional downward pressure on the price of U.S. soybeans, are becoming increasingly questionable in light of concerns of developing drought conditions in those countries.

Chicago Mercantile Exchange (CME) futures prices for Fall 2022 soybeans, which hovered around \$12.50/bu in late 2021, had topped \$13.50/bu by early 2022 as the market began to express concern about the size of the South American crop. The expectation of favorable Fall 2022 prices and uncertainty about the South American crop and input costs should encourage producers to look at using risk management tools to lock in a profit at current price levels. Corn futures prices on the CME hovered around \$5.80/bu in early 2022, also suggesting the opportunity for producers to manage price risk by locking in favorable profit margins.

From a global trade perspective, demand for U.S. corn and soybean exports should remain strong going into 2022. The top three destination countries for U.S. corn and soybean exports — Canada, Mexico and China — are all projected to realize strong economic growth as their economies continue to recover from the pandemic. Canada and Mexico’s economies are projected to grow by 4.6% and 2.9% respectively over prior-year levels. China’s economy is forecast to lead the trio with year-over-year economic growth of 5.8%. Although soybeans have typically been the major U.S. export to China, corn exports surged during the latter part of 2021. This trade momentum may be expected to carry over into 2022 as U.S. trade representatives prod China to comply with the terms of the U.S.-China Trade Agreement signed in January 2020.

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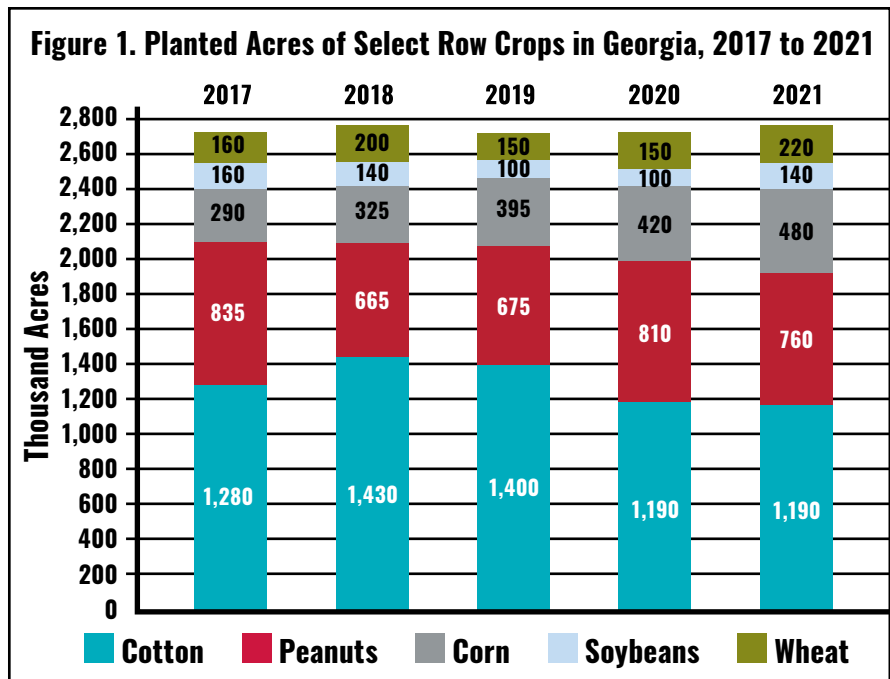
- **Corn acreage will decrease slightly and soybean acreage will increase slightly in 2022**
- **Corn prices will decline by about 11% and soybean prices by about 15% from 2021 levels**
- **Both corn and soybeans will remain profitable for most producers but net income will decline**

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Prices for commodities are still up for the major row crops grown in Georgia after the prior year saw near-record export levels for several agricultural commodities as China came close to fulfilling its purchases through the Phase One Trade deal and the world continues to recover from the COVID-19 pandemic. Input prices are also up across the board; led by fertilizer and fuel. Fertilizers are up 89% to 200% above last year's prices. Nitrogen has hit record highs. Farm diesel is up 70% to almost \$3 per gallon and LP gas is up 85% to \$1.80 per gallon. Given inflationary pressure, supply chain challenges, and geopolitical and trade issues, prices are expected to hold firm until mid-2022. Producers were able to capitalize on higher commodity prices for the 2021 crop, but margins will be tighter in the upcoming growing season. Producers need to thoroughly evaluate expected prices, yields and costs before determining what to plant in 2022.

Planting decisions are based on expected price, input costs, historical and projected yield, crop rotation, availability of credit, and weather expectations. Figure 1 shows planted acres for select row crops in Georgia from 2017 through 2021. Producers' planting decisions in 2021 resulted in a nearly acre-for-acre shift from cotton and peanuts into corn. For the fourth year in a row, Georgia producers decreased cotton acres. They planted 20,000 fewer acres, bringing the state total to 1.17 million acres of cotton. They also planted 50,000 fewer peanut acres to total 760,000 acres. Georgia producers planted 60,000 acres more corn to total 480,000 acres, the highest number of planted corn acres since 2013. Soybean and wheat acres were also up in 2021. Planted wheat acres, at 220,000 total acres, were the highest Georgia has seen since 2014.

Table 1 shows preliminary estimates of how net returns are likely to compare for Georgia row crops in 2022. Both non-irrigated and irrigated expected prices, yields, income, costs and net returns are shown for comparison. These are estimates of relative net returns based on current market conditions and



expectations prior to planting. Expected income does not include potential payments received from government programs, such as crop insurance or other agricultural policy programs. Expected yields and variable costs are based on the 2022 UGA enterprise budgets for corn, cotton, grain sorghum, peanuts, soybeans, and wheat. These budgets and the 2022 Crop Comparison Tool can be accessed online at <http://agecon.uga.edu/extension/budgets/> or by contacting your local county Extension agent.

Budget estimates should be used as a guideline or starting point for individual operations whose yields and local prices for inputs will vary. Producers are encouraged to utilize the budgets by entering their own numbers to determine which crop enterprise will provide the highest net return to their operation.

Breakeven price and yield are included in Table 1 for producers to consider when making pricing decisions. The breakeven price is the price a producer must receive to cover their variable costs, or operating expenses, at the expected yield (third column in each table). The breakeven yield is the yield needed to cover variable

costs given the expected price. The expected price for Georgia's major row crops is found in the second column of each table. Expected prices are estimates based upon current harvest time futures prices and adjusted for expected basis and market conditions, except for peanuts. The expected peanut price is a weighted average price based on contract expectations on limited quantities and anticipated harvest price. Producers should consider forward pricing a portion of their production at prices that have the highest probability of profit. The breakeven prices and yields shown do not include returns to land (land rent) and management (payment to the producer). A producer should also account for these costs when marketing their crop.

Relative net returns for non-irrigated production appear to favor peanuts and cotton. Producers may also consider double cropping some non-irrigated acres with wheat prior to planting cotton or soybeans. Irrigated production appears to favor peanuts and cotton over soybeans and corn. Peanut acres are likely to increase. Cotton and corn acres are likely stable. Soybean acres may increase if it is part of a producer's crop rotation.

Table 1. Estimated Per Acre Net Return Above Variable Cost, Breakeven Price and Yield

Non-irrigated Production							
	Expected Price¹	Expected Yield per Acre	Income per Acre	Variable Costs per Acre²	Net Return per Acre³	Breakeven Price³	Breakeven Yield per Acre
Corn	\$6.00/bu	85 bu	\$510	\$445	\$65	\$5.24/bu	74 bu
Cotton	\$0.90/lb	750 lb	\$675	\$615	\$60	\$0.82/lb	683 lbs
Grain Sorghum	\$5.75/bu	65 bu	\$374	\$320	\$54	\$4.92/bu	56 bu
Peanuts	\$440/ton	1.70 ton	\$748	\$638	\$110	\$375/ton	1.45 ton
Soybeans	\$11.50/bu	30 bu	\$345	\$295	\$50	\$9.83/bu	26 bu
Conventional Wheat	\$7.00/bu	55 bu	\$385	\$330	\$55	\$6.00/bu	47 bu
Intensively Managed Wheat	\$7.00/bu	75 bu	\$525	\$460	\$65	\$6.13/bu	47 bu
Irrigated Production							
	Expected Price¹	Expected Yield per Acre	Income per Acre	Variable Costs per Acre²	Net Return per Acre²	Breakeven Price²	Breakeven Yield per Acre¹
Corn	\$5.50/bu	200 bu	\$1,200	\$910	\$290	\$4.55/bu	152 bu
Cotton	\$0.85/lb	1,200 lb	\$1,080	\$730	\$350	\$0.61/lb	811 lbs
Grain Sorghum	\$5.00/bu	100 bu	\$575	\$480	\$95	\$4.80/bu	83 bu
Peanuts	\$440/ton	2.35 ton	\$1,034	\$724	\$310	\$308/ton	1.65 ton
Soybeans	\$11.50/bu	60 bu	\$645	\$350	\$340	\$5.83/bu	30 bu

1. Prices are harvest time futures adjusted for basis (except peanuts) and based on market conditions as of January 2022 and expectations for spring 2022. Peanut price is weighted average based on contract expectations on limited quantities and anticipated harvest price. All prices may be subject to change as market conditions change.

2. Income per acre does not include government payments from PLC, ARC, STAX or other crop insurance programs.

3. Excludes land rent, fixed costs, and any custom harvesting, storage, hauling, etc., if necessary. Due to volatility in the inputs market, variable costs could change ±10%.

Source: Data based on the 2022 UGA Enterprise Budgets for Corn, Cotton, Grain Sorghum, Peanuts, Soybeans and Wheat

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- The end of 2021 saw higher commodity prices, but costs for inputs were also higher. The steepest increase in prices was in fertilizers and fuels, while increases in chemicals, labor, land rents, machinery, and repairs were expected.
- Margins will be tighter in 2022, so producers should use risk management tools to estimate their cost of production and breakeven prices and yields.
- Georgia may anticipate slight changes in planted acres, but remain close to typical crop rotation. Cotton acres are likely stable to down slightly, peanut acres are likely to increase, corn acres may remain stable, soybeans and wheat acres may be stable to up slightly.

**Tommy Shepherd, Public Service Associate,
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The 2020 COVID-19 pandemic will long be remembered for dealing a devastating blow to the U.S. economy. The agriculture industry was hit especially hard, with livestock markets arguably suffering the worst of the trauma. While 2021 witnessed the beginning of a slow and painful recovery, there are finally reasons for optimism among cattle producers.

It seems that economists have been predicting improving cattle prices for several years. When, for one reason or another, that prediction fails to materialize, those expectations are pushed a bit farther into the future, always remaining just out of reach. In 2019, 2020 was forecast to bring much needed relief to cattlemen in the form of a higher prices for livestock. That is until the COVID-19 pandemic hit in late March, sending cattle markets into a tailspin. In a similar fashion, 2021 was supposed to bring improving prices until drought conditions in the western U.S., rising feed prices, and processing plant bottlenecks began to unfold.

2021 began with a rising number of slaughter-ready cattle facing slaughter plant capacities that were somewhat diminished due to aftershock effects of pandemic-induced shutdowns and slowdowns. If economics has taught us anything, it is the cruel lesson of what

happens to the price of agricultural commodities when supply exceeds demand. In this case, the rising supply of fed cattle was largely a ripple effect from the million or so fed cattle that backed up on feed lots during 2020 at the height of the pandemic. As feed lots struggled to move fed cattle to slaughter plants in 2020, many feeder cattle had to be held back on pasture longer due to the shortage of feed lot space. This created a glut of feeder cattle moving to feed lots late in 2020, thus creating something of a “mini-backlog” during much of 2021 which served to postpone any significant price recovery.

Drought conditions throughout much of the western U.S. in 2021 only made the situation worse by necessitating the need to move cattle off of rapidly deteriorating pastures. Even though Georgia received ample rainfall during the year, local cattle prices remained depressed due to the fact that essentially all cattle are part of an interconnected national market where prices across the country are impacted by what happens in the west. During the latter part of 2021, feedlots still had no shortage of incoming guests to choose from and were in a good position to discount animals coming off of poor pasture conditions, especially in light of prevailing high feed prices. This perfect storm of high fed cattle inventories,

drought conditions and high feed prices once again pushed forecasts for improving cattle prices a bit farther into the future. There is, however, good reason for longer term optimism beginning in 2022.

The last three consecutive National Agricultural Statistics Service (NASS) Cattle Inventory Reports have consistently pointed to signs of a declining U.S. cattle inventory for the first time since the current cattle cycle began its expansion phase in 2014. While total cow slaughter in 2021 was up 4% over the prior year, beef cow slaughter was up nearly 10% and heifer slaughter was up 8%. This latter figure implies that significantly fewer heifers were being retained for breeding purposes. The 2021 calf crop was also reported down 1%, which is the third consecutive year of declining calf numbers and a signal of tightening cattle supplies going forward that may be expected to last for at least three to four years. Lighter carcass weights and smaller cattle numbers suggest that the U.S. beef supply will contract by as much as 2% during 2022.

Consumer demand for beef, which has strengthened for the past several years, held up well throughout the pandemic due in part to the fact that beef lends itself well to at-home meal preparation when restaurants, school lunchrooms, and other food service outlets are closed. Demand should remain strong in 2022 as the economy continues to recover, although a continued shortage of processing plant labor, higher costs for packaging materials, and increasing fuel and trucking costs will all factor into higher beef prices in the supermarket and may lead consumers to switch to lower cost alternatives.

The demand for U.S. beef exports remains strong. In addition to record beef exports to long standing customers including Canada, Mexico, Japan and South Korea, China emerged as the third-largest export destination for U.S. beef in 2021. U.S. exports to China in 2021 increased nearly 15-fold over 2020 levels as the country struggled to fill the void



left by its own pork industry, which has been decimated by the effects of Asian Swine Fever since 2018. Although U.S. beef exports are projected to decline fractionally in 2022 as a result of higher prices, they are generally expected to remain strong as it supplies a world attempting to return to normal after the 2020 pandemic.

Cattle cycles tend to average about ten years, with some ending sooner while others last a bit longer depending on extraneous conditions such as weather, feed prices, global trade situations, and of course, pandemics. The current cattle cycle was off to a strong start in 2014 with commercial beef production growing at around 4% annually through 2017. The liquidation phase of this cycle, which began in early 2020 is anticipated to run through 2025 or 2026, depending on how the global economic recovery plays out. This implies that beef supplies should continue to tighten during a time when both domestic and international demand for U.S. beef remain strong. Feed prices

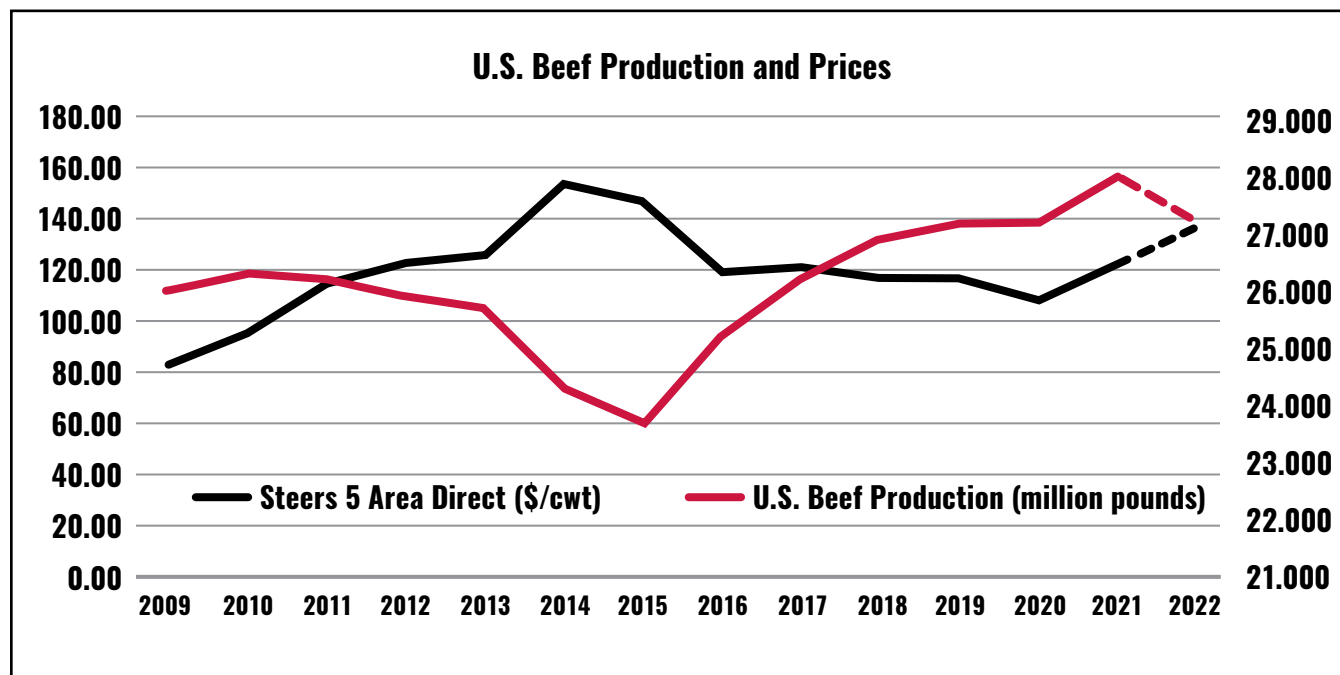
are also likely to moderate in the coming crop year as corn producers respond to higher prices by planting additional acreage which should, in turn, provide an extra incentive for feed lots to fill empty pens from a dwindling supply of feeder stock.

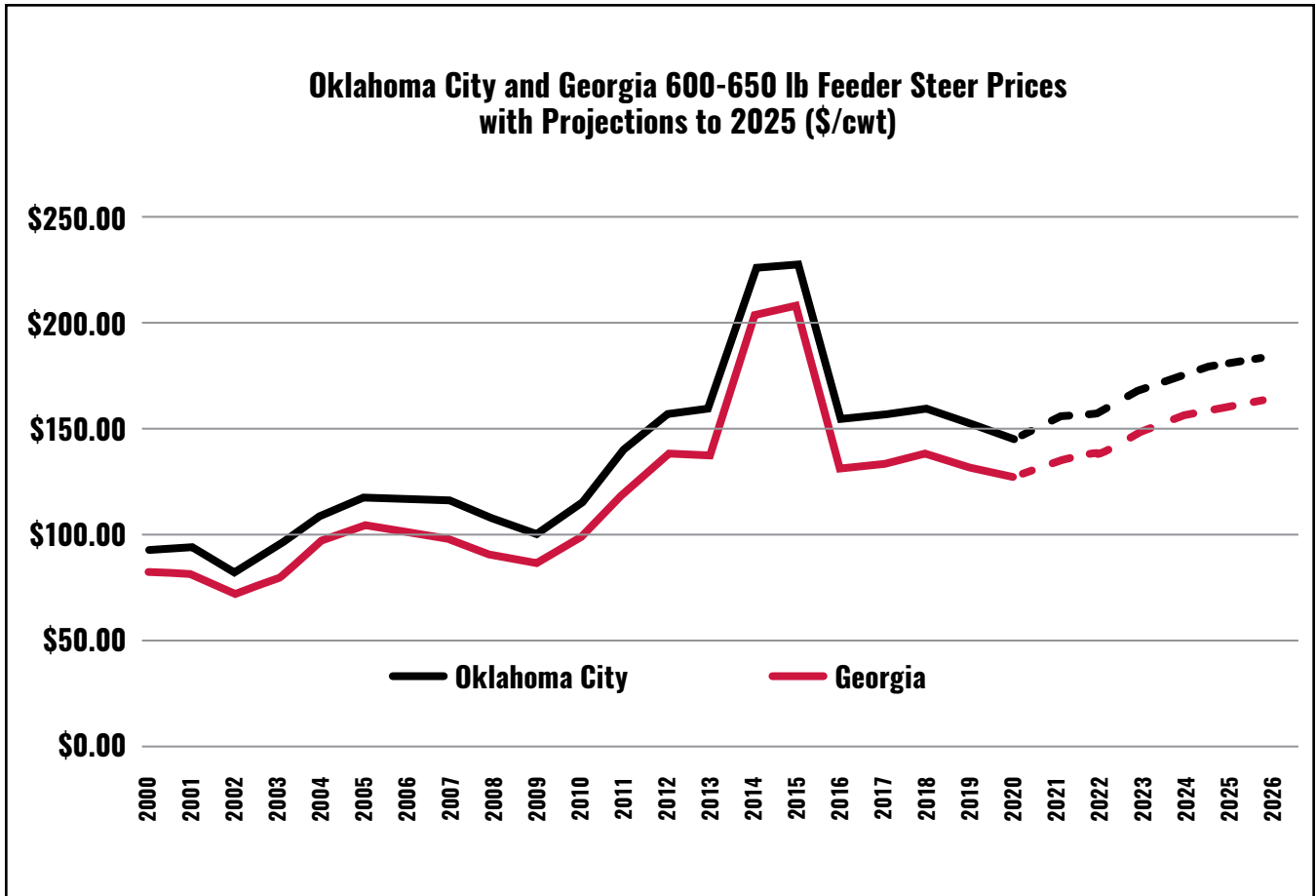
USDA projects fed cattle prices to average about \$137/cwt for 2022, compared to about \$122/cwt in 2021 and only \$108/cwt for 2020. This would translate into a

U.S. average price of about \$190/cwt for 400-500 lb. calves and \$160/cwt for 750-800 lb. steers. This would imply Georgia prices of around \$185/cwt for 400-500 lb. calves and \$155/cwt for 750-800 lb. steers. While the case of supply exceeding demand may indeed be a cruel lesson in economics for producers, the longer term prospect of demand exceeding supply should be sweet music to cattlemen's ears.

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AG FORECAST**
Takeaways

- Beef cow numbers will continue to decline as the current herd liquidation continues.
- Beef cow and calf prices will improve at all levels of the production chain.
- Feed prices will moderate as corn and soybean prices decline.





**Tommy Shepherd, Public Service Associate,
Center for Agribusiness and Economic Development, University of Georgia**

Over the course of the past year, the pork industry has rebounded significantly from the pandemic-induced collapse of 2020. At the national level, farm prices for barrows and gilts in 2021 rose by nearly 60% and grocery store prices for pork products soared as the “shortage economy” moved into full swing. Both domestic and export demand for U.S. pork have remained strong, thus far, in the face of higher prices. Plant closures and slowdowns in processing-plant line speeds reduced production capacity temporarily at the height of the pandemic, resulting in a reduced supply of fresh pork moving into the market and a drawdown of cold storage stocks that continued to place upward pressure on pork prices throughout 2021.



The pandemic and ensuing rebound followed on the heels of a multiyear expansion in the U.S. pork industry, which has seen growth in both hog production and processing-plant capacity. This rapid expansion is seen as a response to growing domestic demand, as well as export demand from major U.S. trading partners including Mexico, Canada, Japan and China. Exports to China, in particular, have grown significantly in spite of relatively high pork prices as a result of the Asian Swine Fever (ASF) epidemic that has decimated that country’s swine herd over the past few years.

The U.S. Department of Agriculture projects that pork production will contract slightly in 2022 and that prices for barrows and gilts will decline by about 10% to around \$60 per hundred pounds (cwt), down from about \$67/cwt in 2021. The will translate into a

reduction in the National Base Hog Cost (51-52% lean) of roughly \$10/cwt or about ten cents per pound. In a situation similar to the cattle cycle, the pork industry reached the peak of a hog cycle in 2020, signaling the likelihood that hog numbers may decline through 2025 or 2026. This is supported by the fact that the breeding herd is smaller than it was a year ago. The most recent survey of producers’ intentions shows that pork producers intended to reduce farrowings in late 2021 and early 2022 by about 4%, which will reduce pork production by about 1% in 2022 compared to more robust growth in the range of 3% to 4% in recent years. The high feed costs of 2021 will moderate somewhat in 2022 as corn and soybean prices move lower (see Corn and Soybean Outlook section). Prices of other inputs to production such as energy and labor, however, are likely to move higher along with the general level of inflation, offsetting at least part of the gains realized from lower feed costs.

Export sales, which are typically 25% to 35% of total production, are projected to increase in 2022 as world markets continue their slow recovery from the effects of the COVID-19 induced economic slowdown. China is projected to import more U.S. pork in 2022 as it continues to struggle in its efforts to rebuild its domestic swine herd. Other long standing U.S. pork customers, including Mexico and South Korea, are also projected to import more U.S. pork in 2022, raising projections for total U.S. pork exports by 3% over 2021 levels.

Growers have good reason to be optimistic about 2022. Global demand for pork is likely to regain strength in 2022, as consumers in the both the U.S. and abroad seek to return to normal after two years of enduring shutdowns and lockdowns. Hog prices may decline fractionally, but should remain at a level sufficient to support grower’s profitability. The impact of inflation on non-feed input costs should be offset by lower feed costs. Producers may be cautious about expanding production in uncertain economic times, which will prevent runaway production growth from expanding supplies so quickly as to put downward pressure in prices. Producers will, however, still face risk in terms of uncertain consumer demand and rising non-feed input costs in the coming year. Concerns about broad-based inflation in the general economy certainly have the potential to dampen consumer optimism and rising food prices have the potential to curb demand for pork products and induce consumers to switch to lower-cost protein alternatives. China is also reportedly making progress in rebuilding its swine herd, which may reduce the demand for imports of U.S. pork at the same time that it increases the demand for U.S. feed grains and whey products. This raises an important long-term question for an industry that has expanded, in part, to meet the demands of Asian countries like China, Vietnam, Hong Kong and others whose swine industries have been hit hard by ASF. Namely, when their domestic swine production finally does recover from ASF, where will U.S. producers find a home for their excess capacity? Fortunately for U.S. producers, they may be able to avoid having to address this question for at least a few more years.

**2022 Georgia
AG FORECAST**
Takeaways

- **Pork production and prices are expected to decline slightly in 2022.**
- **Feed prices will moderate in 2022, but non-feed production costs may rise due to inflation.**
- **Export demand will remain strong for the immediate future.**

Todd E. Southerland, Senior Vice President, Food and Agribusiness Industry Manager, Truist Bank

Overview

The broiler industry has always been characterized by seasonal production fluctuations, but the past two years have brought unprecedented volatility in monthly production figures due to labor and supply chain challenges. Shortages that were occurring during the beginning of the pandemic due to product displacement have evolved into labor-driven capacity constraints that will limit availability in 2022 and result in continuing high prices for most chicken products. Consumers will continue to experience higher retail prices as elevated commodity costs will continue to drive downstream sectors until global safety stocks and domestic inventories are adequately replenished.



Poultry Outlook

Production: We expect 2021 broiler production to be relatively flat to the prior year, but this reflects a very slow start to the campaign as characterized in an accompanying chart. As shown in Figure 1, while live weights have been consistently ahead of the prior year, slaughter counts and ready-to-cook (RTC) production have been highly volatile throughout the year. This reflects severe labor shortages being experienced amongst most integrators, which are having to reallocate daily pools of labor based upon attendance/training and adjust production plans accordingly, which creates imbalance in certain markets. When combined with sharply higher wage rates and an inflationary feed-grain environment, this is having the effect of not only increasing overall production costs but severely limiting downstream production capabilities that might otherwise create additional margin opportunities.

As many government-sponsored assistance programs lapsed over the summer, labor conditions improved and the pace of production in the second half of the year projects more optimism for production expansion heading into 2022. In Figure 2, current broiler hatchery data confirms a seasonal downtick in chick placements, which should reverse course in early December as integrators plan for increased production by early March. Unfortunately, if labor conditions do not improve there may be some limitation on production expansion, but there should be no concern about the availability of birds.

Export markets have materially improved over the last year, but shipment volumes remain below historical norms. With

production figures flattening, much of the excess meat has easily cleared through domestic channels, which has helped avoid any significant supply overhangs. This situation warrants monitoring as the slowdowns at most major U.S. ports has been well-chronicled and could impact 2022 trade activity.

Prices: With the production uncertainties and resulting imbalances in certain supply channels, traditional rules of commodity pricing don't necessarily apply because these products aren't readily available. As a result, market prices have generally been favorable for producers, if not highly volatile and at times irrational, and consumer prices have responded in kind as retailers seek to protect their margins. Nonetheless, profitability for broiler integrators has been challenging in 2021 due to the severe cost pressures described above. Heightened commodity prices, specifically corn and soybeans, will continue to pressure production costs. Less visibly, but equally compelling, processors are foregoing additional margin opportunities where labor and transportation shortages have imposed artificial limits on further production capacity. A meaningful portion of this bottleneck is being created by the industry's long-established preference for large (8.5+ pound) birds. A significant challenge is occurring at the intersection of higher live weights and a surging quick-service/convenience channel that requires labor-intensive portioning for larger front halves. The continued rationing of labor will have an impact on pricing in 2022, which are expected to be similarly volatile given global uncertainties.

2022 Georgia AG FORECAST Takeaways

- **Broiler production for 2021 is forecast slightly ahead of the prior year, with a modest increase driven by higher live weights, but materially offset by slaughter reductions where labor shortages have persisted.**
- **Higher input costs, principally labor and feed grains, are creating significant cost pressures for integrated broiler companies, thus absorbing a significant share of the added revenues being generated by higher market prices.**
- **Leading indicators suggest moderate production increases in 2022, but this will be heavily dependent upon continuing improvements in overall labor availability.**

Figure 1: Broiler Production Indicators

YoY Change in Broiler Production Indicators (2021 v 2020)

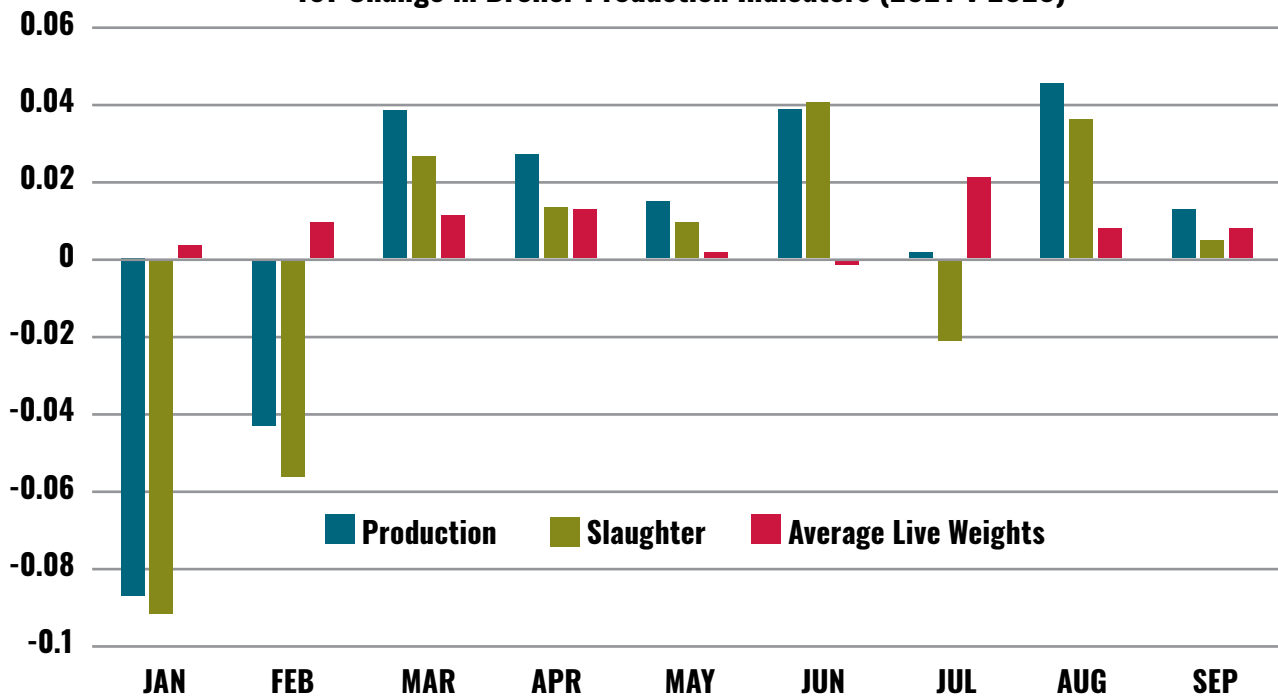
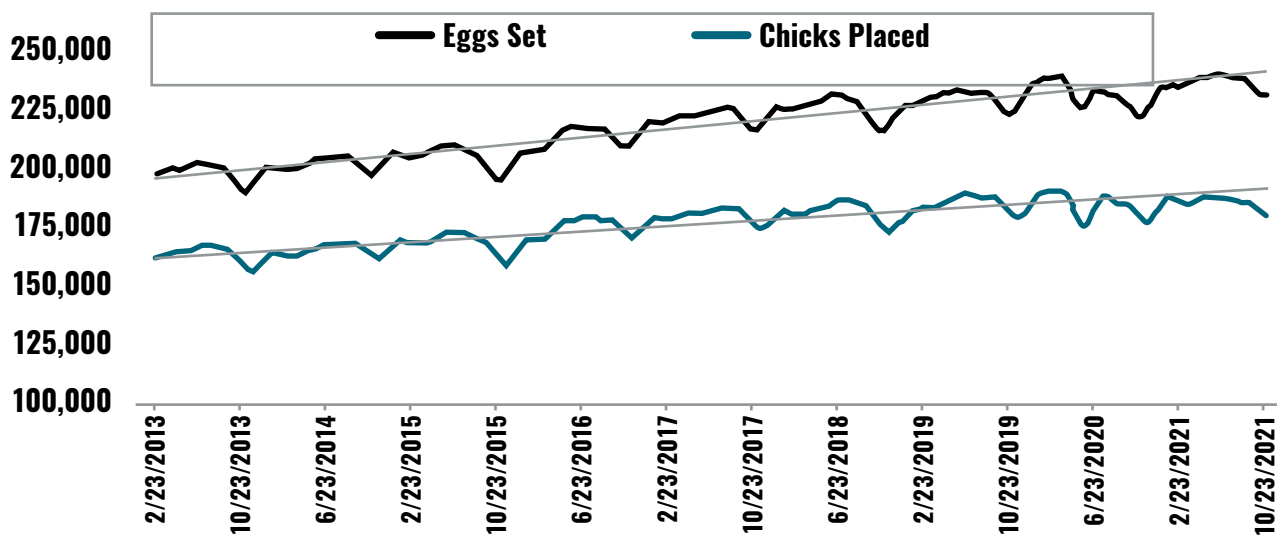


Figure 2: Broiler Hatchery Data

Leading Indicators of Broiler Supplies



Sources: (1) USDA, National Agricultural Statistics Service, "Livestock Slaughter" and "Poultry Slaughter." Report, date run: 10/26/2021; (2) National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA) Weekly Broiler Hatchery Publication

**Tommie Shepherd, Public Service Associate,
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Milk production has long been regarded as one of the wildest rollercoaster rides in agriculture, but the series of events kicked off by the COVID-19 pandemic took it to new heights. For decades, milk production has been quick to expand in response to high prices, but much slower to contract when those prices take a downward turn. Dairy cow numbers, which had expanded in response to favorable prices just prior to the pandemic, declined rapidly in the spring of 2020 as processors and dairy cooperatives instituted plans designed to curb milk production in response to the food-service crisis. Dairy cow numbers peaked in March 2020 as the pandemic and accompanying price uncertainty hit. By June 2020, cow numbers had already declined by 36,000 head. Over the next 12 months, dairy cow numbers surged by nearly 150,000 head, the most rapid increase in decades, on the hopes of economic recovery tied to vaccinations and a return to some semblance of economic “normalcy.” By the end of 2021, the rollercoaster had completed its cycle, with cow numbers falling by 81,000 head from its previous peak. This marked one of the most rapid expansions in recent history, followed by one of the most rapid contractions.

Needless to say, volatility and uncertainty are not beneficial for producers. The U.S. All-Milk Price — the average price for milk going into both fluid and manufacturing uses — managed to reach \$18.24 in 2020 in spite of the pandemic. A substantial part of that price was achieved, however, with the help of the federal government’s “Food Box” program, which supported milk

prices by purchasing an estimated 1.5% of total U.S. milk production in the form of manufactured dairy products. The All-Milk price clawed its way up by only 20 cents, to \$18.45, in 2021 despite declining cow numbers and slowing milk production during the second half of the year. Feed costs in 2021 were up by an average of 30% over year-earlier levels due to drought conditions across much of the U.S. and a strong export demand for corn and soybeans. On the bright side, domestic demand for dairy products has remained strong throughout the pandemic, with cheese consumption up 7% in 2021 and butter consumption up 1%. Export demand for U.S. dairy products such as milk powder and whey was also strong in 2021 as the global economy continued on its slow path towards recovery. High beef prices were also a plus for dairy producers looking to downsize their herds during the great dairy cow sell-off.

The outlook for milk production and prices going into 2022 may best be described as cautiously optimistic. Dairy cow numbers are projected to remain flat or contract slightly in response to the stagnant milk prices of the past two years. This leaves increases in per-cow productivity as the sole driver of

production growth, which is likely to be no more than 1% to 1.5%. Feed prices are expected to moderate in 2022, although they will still be relatively high by historical standards. Lower feed prices may, unfortunately, also be partially offset by inflation driven increases in non-feed input costs. Strong export markets for U.S. dairy products such as milk powder and whey, which have played a crucial role in supporting domestic milk prices in recent years, are projected to maintain demand momentum in 2022 as the global economy continues its recovery. All these factors taken together point towards slower milk production growth and improving prices in 2022, even though price improvements are forecast to be modest at best. The U.S. Department of Agriculture currently projects an annual average U.S. All Milk price of \$19.20/cwt in 2022; a 5% improvement over the \$18.45 average for 2021. It should be cautioned however that in dairy, as in other industries characterized by highly inelastic supply and demand curves, small changes in either production or demand can lead to rather sizeable price swings.

The All-Milk price represents the weighted average of the price received by farmers for milk going into all use classes defined under the Federal Milk Marketing Order program. Georgia dairy farmers typically receive a Mailbox Milk Price (Federal Marketing Order minimum price less any authorized cooperative deductions) that is about \$3.00 higher than the USDA All-Milk Price, suggesting that in 2022 they could reasonably expect an average Mailbox price of about \$22/cwt.

**2022 Georgia
AG FORECAST**
Takeaways

- **U.S. milk production will grow at a slower pace in 2022 than in 2021**
- **Feed costs will moderate as corn and soybean prices decline**
- **Milk prices will improve modestly but not by more than 5%**

Jennifer A. Berry, Apicultural Research Professional and Lab Manager,
University of Georgia Honey Bee Program

Georgia's 2021 honey season production across the state was, once again, well below average. Colony loss was equal to slightly higher than experienced in the U.S. overall. Georgia's commercial and backyard beekeepers had certain challenges not experienced in prior years.

The 2021 annual breakdown of Georgia's honey yields, pricing and other issues facing beekeepers in the state:

Gallberry honey is usually one of Georgia's most abundant honey crops, but 2021 yields were about the same as 2020 — well below average. Some regions in South Georgia produced little to no gallberry in 2021. Weather was partly to blame for the below-average yields, but habitat deterioration where gallberry thrives is becoming more of an issue each year. Due to its light color, slow rate of crystallization and pleasant flavor, it is still a great honey for packing and a favorite among consumers. Wholesale pricing for a barrel in 2021 was roughly \$2.35/pound, which has remained the same for several years.

Wildflower nectar flows in the north were above average. Commercial beekeepers were pleased to have colonies produce more honey than usual, however the opposite was true in the south where yields were far below average. Wholesale wildflower honey price for 2021 was higher than 2020, averaging \$2.75/pound.

Yields of tupelo honey were once again extremely poor for 2021. Rain at the wrong time contributed to the lower

yields along with a decrease in trees due to habitat destruction. Wholesale prices for tupelo honey averaged around \$4.50-\$6.00 per pound.



Sourwood flows in North Georgia were nonexistent, thereby producing no honey. Sourwood can be unpredictable, usually there is some honey produced, but not in 2021. Beekeepers were surprised to find no sourwood honey in the supers once the blooms disappeared since, by all counts, weather conditions seemed to be perfect for an excellent flow. If sourwood honey was available, it would run about \$6.00/pound.

Reports of colony failure were the same as last year, with commercial operations experiencing a 20 to 30% loss. Some backyard beekeepers continue to show extreme losses as high as 80%. The number one reason honey-bee colonies die is due to an ectoparasitic mite, Varroa destructor. This is not only an issue in Georgia, but worldwide. If mite populations were not treated aggressively, colonies died. Backyard beekeepers sometimes don't have the knowledge or expertise to deal with such a formidable pest, which is why this sector is seeing higher losses. Even commercial beekeepers who have been

keeping bees for decades are having difficulty dealing with this parasite.

Due to minimal to nonexistent nectar flows in most areas, starvation is on the rise in Georgia. If beekeepers have not been feeding, or plan not to feed, colonies will surely starve. Pure cane sugar is recommended as a food source and can be fed to colonies in a 1:1 sugar-to-water solution.

Another issue facing beekeepers is the lack of certain beekeeping supplies. For instance, one could find glass jars for bottling honey, but no lids to contain them. Glass jars in bulk could be purchased, but no cardboard boxes to hold them. Disruptions in supply chains and labor shortages have been the culprit behind these issues.

Interest in both commercial and backyard beekeeping is still on the rise. To date, there are 48 local clubs and one state association in Georgia. Both local and state associations are returning to in-person meetings, which is also contributing to an increase in beekeeping. Prices in 2022 for a three-pound package of bees and a queen are averaging around \$100 to \$130 per package. Nucleus colonies, complete with bees, brood, honey, pollen and a queen, are ranging from \$175 to \$250 depending on location, and when the bees will be ready for sale.

2022 Georgia AG FORECAST Takeaways

- There are four different types of honey produced in Georgia: sourwood, tupelo, gallberry and wildflower. Honey production overall for 2021 was below average for the state, however honey yields of northern wildflower were above average.
- Colony losses for commercial operations remains at 20 to 30%, and backyard beekeepers, in some cases, experience losses greater than 80%.
- Varroa destructor (parasitic mites) remain the leading cause of colony loss in Georgia and nationally.
- Difficulties remain for purchasing certain beekeeping items due to the disruption in supply chains and labor shortages.

Tyler Reeves and Amanda Lang, Forisk Consulting
Joe Parsons, Director of the Harley Langdale Jr. Center for Forest Business,
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The U.S. economic outlook for 2022 is generally positive when compared to 2021. However, despite improvement among many measures of economic productivity, recent spikes in inflation dampen growth. Real Gross Domestic Product (GDP) increased at a 2.0% annualized rate in Q3 2021, moderating from higher growth rates in Q1 and Q2.^{1,2} Seasonally-adjusted GDP growth for 2021 is forecast to be 4.9%, rising considerably from 2020's -2.3% GDP drop.³ The labor market continues to improve, with 1.8 million jobs added in Q3 and the unemployment rate falling to 5.1%.⁴ Despite these improvements, supply-chain bottlenecks remain persistent, resulting in rising inflation levels and limited availability of select goods.^{5,6} The Consumer Price Index (CPI) rose again in October, up 6.2% year-over-year, marking the highest annual gain in more than three decades.⁷ While inflation may moderate as supply chains loosen, it may remain high longer than policymakers initially expected. This is reflected in the Federal Open Market Committee's recent announcement they will be tapering net asset purchases by \$15 billion per month in November and December.⁸

One of the bright spots of 2021 has been the marked rebound in the housing market. Through September, actual housing starts totaled approximately 1.2 million, up 20% from the same value in 2020. Further, housing starts are forecast to reach 1.57 million starts for 2021, up 13.9% from 2020 actuals.¹ The components of underlying housing demand — based on demographics, household growth, second home ownership, and net replacement level of existing housing stock — are expected to remain favorable moving forward. Housing start levels are forecast to remain above the long-term trend of 1.5 million starts per year for 2021-2022. Years of underbuilding, particularly in single-family homes, has led to a current estimated housing shortage of 3.8 million units.⁹

Commodity Prices

Commodity prices have mixed results and vary by end product. Softwood lumber prices reached record levels in May, but have since moderated. However, prices remain elevated compared to pre-pandemic levels. The Random Lengths Southern Pine Composite price closed Q3 2021 at \$444 per thousand board foot (mbf). This represents a \$439 (-50%) year-over-year decrease from close of Q3 2020. Additionally, the Random Lengths Framing Lumber composite closed Q3 2021 at a price of \$432 per mbf, a \$515 (-54%) year-over-year decrease.¹⁰

Prices for virgin fiber pulp products rose considerably in comparison to 2020 levels. Prices for recycled pulp products began to rise at the end of 2020 and continued to increase as of mid-Q4 2021. Northern bleached softwood kraft closed September 2021 at \$1,340 per ton, a 60% year-over-year increase. Bleached hardwood kraft closed at \$1,140 per ton, a 68% year-over-year increase. Lastly, old-corrugated container (OCC) prices rose \$123 from September 2020, a 181% year-over-year increase.¹⁰ Paper and paperboard production rose 2.4% compared to levels from last year.¹¹

As of Q3 2021, TimberMart-South reported an average Southern Pine sawtimber price of \$26.24 per ton. This marks the fourth consecutive quarter of increasing pine sawtimber prices and brings the South-wide average to within \$0.10 of a 10-year high. Average prices rose \$3.74 (+16.6%) since Q3 2020. Pine pulpwood reported an average South-wide stumpage price of \$10.09, a \$1.98

increase from \$8.11 in Q3 of 2020.¹⁰ Wet weather conditions and trucking conditions recently pushed prices higher across the South. Prior to this, pine sawtimber prices had been largely flat for the past decade as the region continues to work through an inventory supply overhang. For up-to-date prices, check with your local forestry consultant or TimberMart-South.¹²



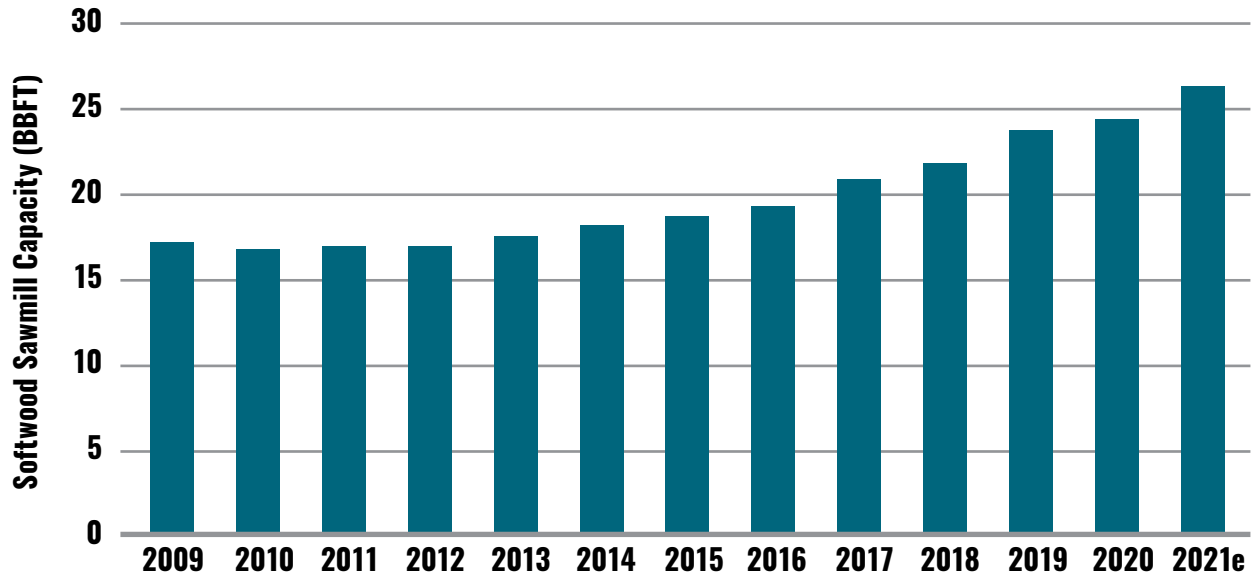
U.S. South Capacity Changes

The U.S. South continues to gain market share of softwood lumber production in North America. The reasons for this include relatively low prices for pine sawtimber, ample timber supplies, an existing and reliable infrastructure for moving wood to mills, and reduced timber supplies in Western Canada due to the mountain pine beetle (although this region has increased logging capacity).¹³ Southern lumber capacity is currently 25.4 billion board feet (BBFT) and expects to exceed 26 BBFT in 2022.¹⁴ The U.S. South also continues to lead North America in sawmill investments, with more than \$2.9 billion in project announcements from 2021-2024 that expect to add more than five BBFT of capacity.¹

2022 Georgia AG FORECAST Takeaways

- **Timber prices have increased in the U.S. South.**
- **U.S. South softwood lumber market share is increasing along with production capacity. Plentiful timber supplies and capital expenditures are positives.**
- **U.S. South wood-using pulping capacity is relatively flat, while some mills are increasing recycling capacity.**

Figure 1: U.S. South Softwood Lumber Capacity¹⁴

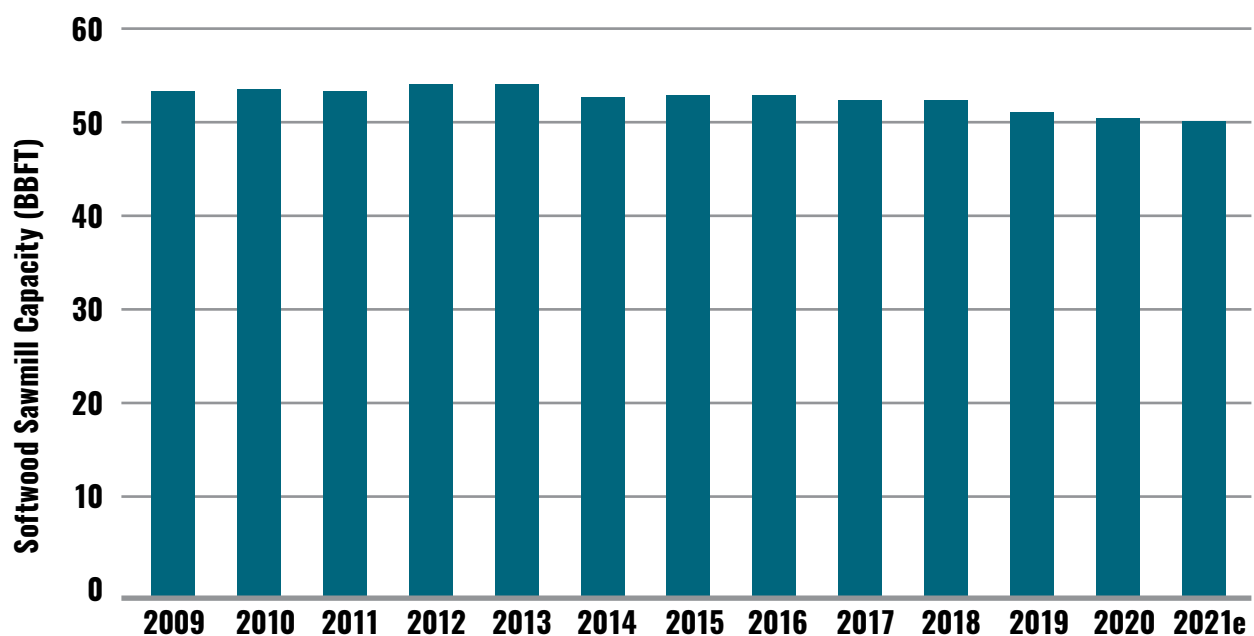


Wood-using pulping capacity is poised to decline in 2021-2022. Part of this decline is fueled by facilities switching to larger proportions of recycled fiber content for pulp production. This includes investing in facilities

that will utilize recycled fiber instead of wood.¹⁵ Investment continues to flow into Southern facilities, with more than \$2.9 billion in investment planned between 2021 and 2024, not including mill acquisitions.

Consequently, the forecast for pulping capacity in the South is relatively flat compared to that of North America as a whole. The effects of increased investment are expected to be concentrated to local wood markets.

Figure 2: U.S. South Pulping Capacity¹⁴



Notes

a Virgin pulp products do not contain any recycled material and come directly from the pulp of trees or other plant materials.

b Historically, “pulpwood” is a common name for small-sized logs that have been used primarily in pulp production but more recently have also been used for OSB and bioenergy production, particularly wood pellets.

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The green industry — the production, distribution, retailing and services associated with ornamental plants; landscape and garden supplies; and nursery, greenhouse and sod growers — is highly dependent on the overall national and local economies. Coming off strong 2020 demand and sales, many firms increased supply in anticipation of strong demand in 2021. Georgia green industry market demand and sales was again strong in 2021 for many green industry firms given low interest rates, a strong housing market in many areas, and consumer focus on improving landscaping.

Forecasting the 2022 season is extremely complex given the number of unknowns in the economy. Economic indicators provide an idea of what 2022 will bring, however there are mixed signals in the marketplace. Interest rates are still low, which is fueling a strong housing market and increased home renovations. This includes housing starts, which are trending upward in Georgia, however housing starts are extremely geographically specific, implying that green industry firms may experience different levels of demand from contractors in 2022. The overall economy is an indicator of green industry growth. The 2021 U.S. gross domestic

product (GDP) and Georgia Gross State Product (GSP) growth rates were around 3.3% and 3.9%, respectively. In 2022 the projected GDP and Georgia GSP are projected to increase by 4.7% and 5.1%, respectively (US Government Spending, 2021). However, inflation fears, supply chain issues, and the perceptions of a weaker economic outlook may fuel reduced green industry expenditures.

Perhaps the biggest driver of green industry product demand is the weather. National Weather Service projections for the winter of 2021-22 indicate drier, warmer temperatures for Georgia. During the main growing and purchasing seasons (spring and summer), the industry should expect above average temperatures across Georgia.

Final forecasts for 2022 should take all of the above information into consideration. Most likely there will be similar economic growth in 2022 compared to 2021. Given the uncertainty in the economy, less likelihood of broad quarantine measures, and many consumers having made big purchases in 2020 and 2021, demand for green industry products will most likely not exceed 2021 levels. Firms should also see consumers moving back to pre-pandemic purchasing habits if the pandemic is brought under control.

**2022 Georgia
AG FORECAST**
Takeaways

- **2021 was a good year for many green industry firms, with many firms seeing increased profits.**
- **There are many unknowns going into 2022 that will impact green industry sales, including inflation fears, low to rising interest rates, and the continuance of a strong housing market in Georgia.**
- **Green industry sales in Georgia are projected to be similar to 2021 levels.**

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Georgia agritourism is a segment of the state’s broader tourism industry. Agritourism brings visitors to local farms and attractions while also introducing tourists to Georgia’s rural communities. It is a form of niche tourism that enhances the overall experiences for potential visitors, which in turn can increase expenditures as well as overall length of stay within the state. Consequently, the economic success of Georgia agritourism and the larger tourism industry are inextricably linked.

COVID-19 Impact on Georgia Tourism

Georgia’s tourism industry in 2020 was severely impacted by the COVID-19 pandemic. For the years leading up to 2020, the state tourism industry witnessed year-over-year growth and 2019 was the highest-grossing year for Georgia accommodation taxes, state hotel-motel fees, tourism related employment, and overall domestic-visitor expenditures. However, the pandemic severely impacted the tourism economy and, more specifically, hotel occupancies, accommodation tax revenue collections, and accommodation and foodservice employment. The economic consequences impacted both rural and urban locations within Georgia.

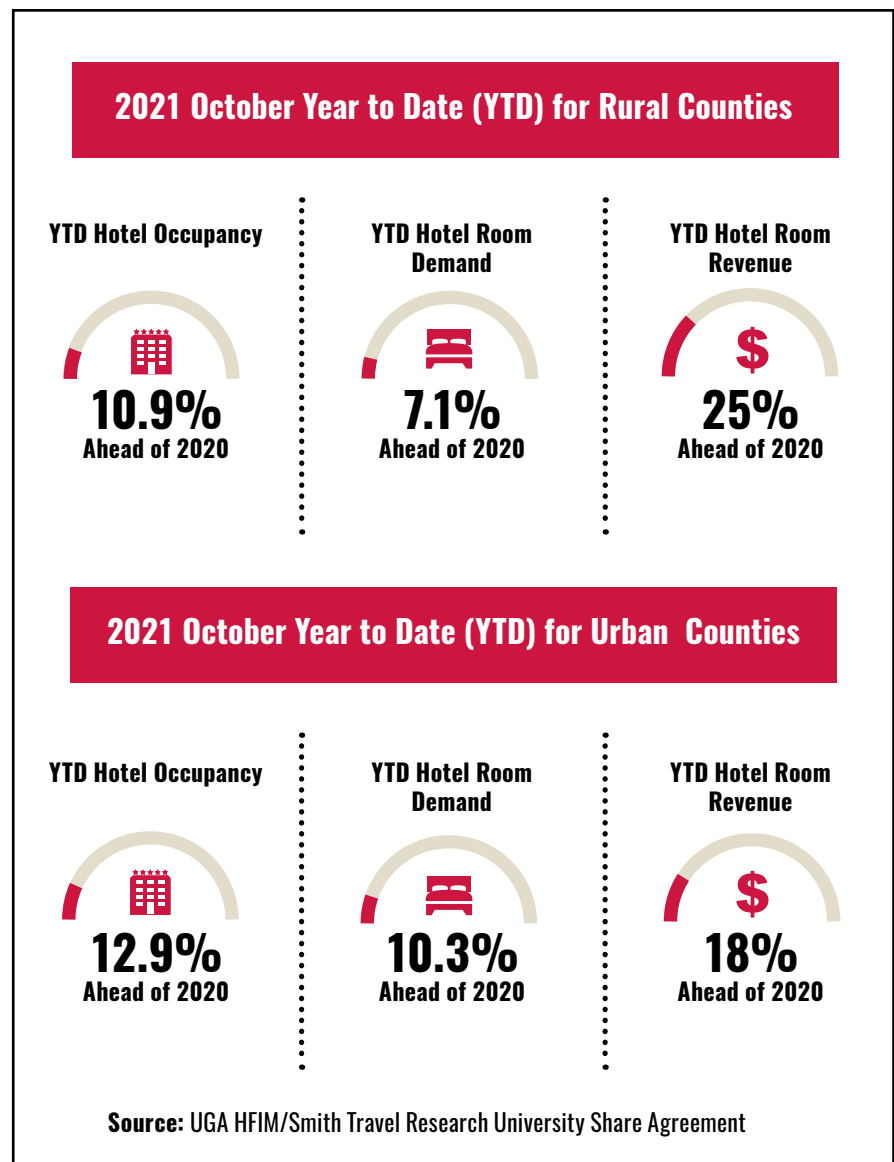
When comparing 2019 to 2020, state annual occupancies decreased from 65% in 2019 to 47.6% in 2020. Overall, Georgia room demand decreased 26.8% from 44.9 million rooms in 2019 to 32.9 million rooms 2020. Georgia hotel revenues decreased 41.3% over the same period. Georgia Department of Revenue Annual Statistical reports showed an 18.7% decrease in state accommodation taxes from the 2019 record year. Accommodation and foodservice employment also showed a 12.4% decrease from more than 533,900 jobs to approximately 467,300.

The Pandemic’s Impact on Rural and Agritourism Tourism

Georgia is a very diversified tourism state, offering visitors experiences that range from coastal landscapes to mountain destinations and from rural retreats to urban getaways. Consequently, the

state’s tourism economy will impact rural and urban communities differently. For our analyses we categorized Georgia’s 159 counties as either rural or urban. Eighty-six (86) Georgia counties can be categorized as rural, while 73 counties are aligned to one of 15 Georgia metropolitan statistical areas (MSAs) or state adjacent MSAs (i.e., Chattanooga, Tennessee, Jacksonville, Florida, etc.) and were categorized as urban. For 2020, Georgia’s rural community hotel occupancy decreased 8% from 56.8% in

2019 to 48.8% in 2020. Georgia rural total annual room demand decreased 14% from 3.2 million rooms in 2019 to 2.8 million in 2020. Rural total hotel room revenue decreased 21.1% from \$284 million in 2019 to \$224 million in 2020, and hotel-motel tax revenue collections for rural counties decreased 16% from \$31.8 million in 2019 to \$26.6 million in 2020. Accommodation and foodservice employment for rural communities decreased 6.4% from 67,100 jobs in 2019 to 62,800 in 2020.



Georgia's urban hotel occupancy decreased 18.9% points from 66.6% in 2019 to 47.7% in 2020. Georgia urban total annual room demand decreased 28.4% from 39.4 million rooms in 2019 to 28.2 million in 2020. Urban total hotel room revenue decreased 43.4% from \$4.3 billion in 2019 to \$2.4 billion in 2020, and hotel-motel tax revenue collections for urban counties decreased 34% from \$270.1 million in 2019 to \$179.1 million in 2020. Accommodation and foodservice employment for urban communities decreased 11.4% from 421,000 jobs in 2019 to 373,000 in 2020.

Current and Future State of Georgia Tourism and Rural and Agritourism

For 2021, the statewide 12-month moving averages for hotel indicators started sluggishly with a 28% occupancy decrease from 64.8% in January 2020 to 46.6% in January 2021. As the year progressed the 12-month moving average hotel occupancies improved significantly, whereas in May 2021 hotel occupancies were at an 8.3% decrease from May 2020 and room demand reflected only a 6.1% decrease. For July 2021 through October 2021, Georgia hotel occupancy has steadily increased when compared to the same months in 2020. As of October 2021, the 12-month moving average for hotel occupancy showed a 16.9% occupancy increase, a 21.2% room demand increase, and a 33.7% room revenue increase

over 2020. As of October, year-to-date (YTD), Georgia hotel occupancies showed a 25.8% improvement, a 31.1% room demand increase, and a 52.6% room revenue increase from 2020. Hotel trend data is supported by the positive trends in the 12-month moving average for accommodations and foodservice employment. Since April 2021 employment has steadily increased each month, whereas in October 2021 the sector employment was at 90% of pre-pandemic levels in October 2019 employment and exceeded October 2020 levels.

For rural communities, October year-to-date (YTD) hotel occupancies increased 10.9% points from 48.8% in 2020 to 59.7% in 2021. YTD total room demand is 3 million, which is 7.1% ahead of 2020 demand and has already surpassed all rural room demand for 2020 (2.8 million). Hotel room revenues in rural communities are also 25% ahead of 2020 hotel room revenues. Similar to 2021 room demand, as of October 2021 YTD all hotel room revenue has exceeded the 2020 hotel revenue for all of 2020. For Georgia's urban counties over the same time period, hotel occupancies increased 12.9% points from 47.7% to 60.6%. Urban room demand is 10.3% ahead of 2020 whereas the 31.1 million room demand already exceeds the total 2020 room demand of 28.2 million rooms and room revenues are 18% ahead of 2020.

While the pandemic severely impacted the state's tourism economy, the effect on rural communities differed when compared to urban counties. While both rural and urban counties saw a decrease in hotel occupancy, hotel demand, hotel revenue, and accommodation and foodservice employment, COVID-19 impact on rural tourism indicators was less when compared to impacts on urban counties. The lessened impact in rural communities reflected a visitor-experience shift from Georgia's urban destinations to more rural and nature-based experiences. Currently, both rural and urban communities are recovering at double-digit percentage rates for hotel occupancy and hotel revenue. The current 12-month moving average for both statewide hotel demand and accommodation and foodservices employment have been steadily improving since spring 2021 and the recovery is anticipated into 2022.

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