Georgia Economic 2017 Outlook

The University of Georgia
Terry College of Business
Selig Center for Economic Growth

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C O N T E N T S

The National Outlook

Our national economic forecast indicates that the recovery will be sustained. The 2.5 percent rate of 2017 GDP growth will be higher than last year's 1.7 percent, but below the 2.9 percent average of the last 50 years. Five reasons why U.S. GDP growth will be higher in 2017 are: more spending by consumers, an upturn in business spending for equipment and structures, an upturn in industrial production, a rise in inventory accumulation, and a smaller drag from net exports.

The U.S. is well positioned for another year of modest economic growth courtesy of extensive restructuring of the private sector, including the cleanup of the financial sector, deleveraging by consumers, low interest rates, and a favorable balance of supply and demand for residential and nonresidential properties. Household balances sheets are in very good shape. Corporate balance sheets are not quite as strong, but appear to be quite manageable due to low interest rates. State and local governments are positioned to contribute to growth because they have adjusted their spending and staffing to reflect their ability to generate revenue.

With the year-over-year rate of 2017 U.S. GDP growth predicted at a below-average rate, the economy is be vulnerable to economic shocks and/or policy mistakes. The main risks to growth are (1) financial panics and/or massive shifts in asset prices—one potential trigger would be unexpectedly large increases in interest rates, (2) a sharp slowdown in global economic growth, and (3) mistakes in U.S. fiscal or monetary policies.

Risks to the outlook have increased. The probability of recession beginning sometime in 2017 is 35 percent, which is higher than the 25 percent recession probability estimated at this time last year. The higher risk of recession in 2017 mainly reflects concerns about inflated asset prices (e.g., equities and bonds). Consumer spending is sensitive to equity prices. As always, energy prices are a wild card.

In 2017, consumer spending, gross private domestic investment, and industrial production will contribute to GDP growth. Also, the inventory swing will be a slightly positive factor. Government spending will be a neutral factor because modest contributions by state and local government to growth will be largely offset by a decreased contribution by the federal government. Also, the Federal Reserve's monetary policy stance will become less simulative as it slowly raises short-term policy interest rates—the federal funds rate will reach 1.5 percent in December 2017. The inflation-adjusted federal fund rate therefore will still be less than zero (but hardly restrictive).

Net exports will subtract from growth, but the subtraction will be smaller than in 2016. Sub-par productivity growth is another factor that will curb GDP and personal income growth. Lackluster growth is due to low levels of business investment, more regulations at every level of government, challenging demographics, and mediocre gains in educational achievement. Also, the new Fair Labor Standards Act regulations will lower productivity significantly.

Consumer Spending

Consumers' inflation-adjusted 3 percent contribution to GDP growth will be positive, but only slightly larger than in 2016. Continuing (but slower) job creation will bring the economy to full employment, prompting faster wage and salary growth. Reinforced by accelerated wage and salary growth and low interest rates, the job gains will bolster household balance sheets. Improved labor and housing market conditions will give consumers the confidence to spend, but stock market turmoil could negatively impact consumers' confidence in the economic situation. Growth of disposable personal income will give consumers the wherewithal to spend. Credit will become more available to households, lowering one barrier to consumer spending. Consumers will be more willing to take on credit card and auto loan debts, but will remain reluctant to assume more home equity debt.

A depressed household savings rate also reflected consumers' largess. The household savings rate fell to the lowest levels experienced since the Great Depression. Essentially, households opted to boost current spending by extracting more and more wealth from their homes—this, of course, was facilitated by lax credit standards.

As households shifted their priorities from spending to savings, the savings rate has risen from its cyclical trough of only 2.2 percent in the third quarter of 2005 to 5.2 percent in 2016. Due to both the strong labor market and high levels of consumer confidence, the savings rate will decline in 2017. Thus, changes in the savings rate will be a tailwind instead of a headwind. But, over the long term, many households will find that level of savings will not be adequate to maintain current living standards in retirement, especially if returns on financial assets remain below historical norms.

The restoration of the discipline of saving represents an overdue return to normalcy that has helped households unwind imbalances that developed in their balance sheets. For example, the household financial obligation ratio was over 280 basis points lower in 2016 than it was in late 2007. In fact, the 2016 household financial obligation ratio is lower than the levels that prevailed in the early 1990s. The lower financial obligation—or debt service ratio—not only frees up spending and inspires confidence, but it also allows people to more easily service their debt.

Similarly, outstanding mortgage debt has fallen from 107 percent of disposable personal income in 2007 to 74 percent in 2016. Prior to the housing boom, the ratio of outstanding mortgage debt to disposable personal income was about 80 percent. The bottom line is that households' balance sheets are in very good shape.

This protracted period of household deleveraging was painful, but it was also necessary. The statistics show that deleveraging is well advanced. One concern is that extreme volatility in the financial markets may prompt jittery consumers to push up the household savings rate very sharply in 2017, which could precipitate a recession. Fortunately, that is not the most likely scenario.

In 2017, turmoil in the U.S. stock market may lower consumer confidence and/or reduce financial equity wealth, but real estate wealth should continue to increase modestly. Real estate wealth tends to have a larger influence on overall consumer spending than equity-based wealth. Changes in equity-based wealth have a significant influence on spending for luxury items and on spending by retirees, however.

At this juncture, job creation—and the income growth that accompanies it—is absolutely vital to the outlook for both consumer spending and the overall economy. The forecast anticipates that job growth will be adequate to support 2.5 percent GDP growth, but inadequate to raise the rate of growth to its long-term average of 2.9 percent. Growth in the number of jobs, the number of hours worked per job, and compensation will support this income growth. As employment expands in construction, health care, manufacturing, and professional and business services, the proportion of high paying jobs created will rise. Low productivity growth will prevent wages from rising very rapidly, however. Also, the labor force participation rate will rise slightly.

Consumer spending is likely to broaden slightly in 2017, with spending for durable goods increasing slightly faster than spending for nondurable goods and services. Among durables, outlays for new and used cars will increase very rapidly. Auto lenders are expected to extend more credit to subprime borrowers. Outlays for information processing equipment will grow strongly. Improving housing market conditions will power sales of furniture and durable household equipment. Due to higher oil prices as well as increased use, spending on nondurables such as gasoline and other energy goods will rise briskly. Demographic factors will underpin increased spending on pharmaceuticals and other medical products. Due to lower prices, spending on clothing and footwear will not increase. Among services, spending on vehicle leasing and natural gas will increase the fastest. Providers of health care, food services, and accommodations will see above average growth in spending. In contrast, consumers' outlays for telecommunications, financial services, and recreation services will grow relatively slowly.

Labor Markets

The U.S. economy recently posted the longest string of consecutive monthly jobs gains in the history of the nation. Job growth will continue. On an annual average basis total nonfarm employment will increase by 1.5 percent in 2017, which is slightly less than the 1.7 percent gain estimated for 2016. Courtesy of the upcycle in housing, job growth will be very broadly based. Companies will hire as domestic demand for goods and services expands. Venture capital – which fuels job creation – will be more available. The rate of job destruction in the private sector will be quite low. Thus, 2.5 percent GDP growth will generate 1.5 percent job growth. Also, GDP growth will outpace productivity growth in 2017, which will push firms to hire additional staff as end markets expand. The pace of job growth will decelerate slightly, however, due to expected below average top-line growth, the tighter labor market, and weak demand for American exports. More positively, a larger share of the new jobs will be full-time rather than part-time. Assuming that the labor force participation increases only slightly, net job creation will reduce the unemployment rate from 4.8 percent to 4.6 percent on an annual average basis, which is full employment.

With the unemployment rate below 5 percent, the buyer's market for workers has become a seller's market. Indeed, it's already difficult to hire workers that have very specialized training or educational requirements. As the labor market attains, or surpasses, full employment, wage growth will accelerate, but low productivity growth will prevent wages from rising too rapidly. Wages and benefits will rise by about 3 percent. Health insurance costs will be the primary force behind benefit cost increases. Unit labor costs will rise about 2.5 percent. One implication of the slow growth of unit labor costs is that the Federal Reserve does not need to raise short-term policy interest rates aggressively.

Although net hiring will expand, several factors will limit the gains. First, below- average GDP growth limits the impetus to hire. Second, a slight pickup in productivity will slow job growth. Third, the strong dollar will limit sales of U.S. exports. Fourth, the outsourcing of American jobs to developing countries will continue to spread from blue-collar occupations in manufacturing to white-collar occupations in high tech and service industries. Fifth, the federal government will downsize its workforces permanently. Finally, some of the new jobs that businesses will need to create will not match the skill sets of the unemployed. Fortunately, structural unemployment stemming from labor force immobility will diminish as housing markets improve. But structural unemployment due to the skills mismatch is unlikely to diminish and probably will worsen.

In the coming year, professional and business services will post the fastest rate of employment growth. Construction companies will see the second fastest rate of job growth. Education, health services, and leisure will see solid employment gains. The housing recovery will boost hiring in home services industries. Retail, wholesale trade, and state and local government will see limited, but positive employment growth. Providers of financial activities are not expected to gain or lose significant numbers of jobs. The federal government and utilities are the only major sectors expected to shed jobs.

U.S. manufacturers will expand their workforce in 2017, more than offsetting the jobs cut in 2016. Gains in manufacturing employment reflect higher commodity prices as well as cyclical factors such as growing demand for durable goods. Durable goods manufacturing subsectors with the best prospects include wood products, furniture, and computer and electronic products. Limited, but positive job growth is expected for producers of non-metallic mineral products and fabricated metal products. In contrast, producers of primary metals, machinery, and transportation equipment will cut jobs. Manufacturers of nondurable goods also will add to their workforces, but at a very modest rate. Among nondurables subsectors, food, plastics, and rubber products will account for most of the job growth. Jobs will be lost in the textiles, apparel, paper, and chemicals industries.

UNITED STATES BASELINE FORECAST 2016-2017

United States	2012	2013	2014	2015	2016	2017
Gross Domestic Product, Bil. of 2009$	15,354.6	15,612.2	15,962.3	16.397.2	16,676.0	17,092.9
Percent change	2.2	1.7	2.4	2.6	1.7	2.5
Nonfarm Employment (Mil.)	134.2	136.4	139.0	141.9	144.3	146.4
Percent change	1.7	1.6	1.9	2.1	1.7	1.5
Personal Income, Bil. of 2009$	13,102.5	13,079.4	13,452.2	13,990.4	14,239.6	14,407.3
Percent change	3.1	-0.2	2.9	4.0	1.8	1.2
Personal Income, Bil. of $	13,904.5	14,064.5	14,683.1	15,324.1	15,768.5	16,257.3
Percent change	5.1	1.2	4.4	4.4	2.9	3.1
Civilian Unemployment Rate (%)	8.1	7.4	6.2	5.3	4.8	4.6
CPI-U, Ann. % Chg.	2.1	1.5	1.6	0.1	1.2	2.2

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2016.

Because the economies of EU and Japan have performed poorly, manufacturers who want, or need, to locate in developed economies increasingly will opt for locations in the U.S. The U.S. ranks very high in manufacturing competitiveness in terms of talent-based innovation, high labor productivity, the legal system, property rights, physical infrastructure, and low-cost shale gas. Tightening of China's labor markets and low U.S. energy prices are helping to shrink the cost advantage of manufacturing in China, but overall progress will be very slow because gains will be significantly offset by rising regulatory and health care costs in the US as well as the strength of the dollar.

Housing

Housing will continue to be a strong tailwind for GDP growth. In 2017, the number of single-family home starts for new construction will increase by about 15 percent to 950,000 units. Existing home prices will continue to rise, but at a much more moderate rate – about 3 percent in 2017. Any remaining pockets of home price depreciation are spotty, reflected local imbalances rather than overall macroeconomic conditions. In most markets, home price appreciation therefore will continue to bolster the psyche of the consumer, households' net worth, and homeowners' ability to spend.

As the record of home price appreciation lengthens, potential homebuyers who have been waiting on the sidelines will increasingly opt to become homeowners. Rising rents will strongly reinforce this trend. In 2017, the share of homes sold to people who live in them will rise and the share sold to investors will decline.

Going forward, the performance of the housing market will depend primarily on the performance of the labor market, with changes in mortgage rates, and credit conditions playing secondary and tertiary roles. Employment and personal income growth are expected, which will give a more people the money and the confidence to buy homes, ensuring the sustainability of the housing market's recovery.

Mortgage rates will remain a tremendous bargain, but rates will move slightly higher in 2017. The rise will not be large enough to stop—or reverse – the housing recovery, but it will be a headwind. Home mortgages should be somewhat easier to obtain, however. Credit conditions will ease as home values and macroeconomic conditions improve. Despite some additional easing of credit conditions, credit will remain tight for riskier home loans. Although lending standards for new home construction and new residential developments will get a bit easier, credit lines and money to builders will still be somewhat scarce, restricting the supply of newly built homes. Supply constraints, such as the scarcity of developed lots and a shortage of skilled construction tradespeople, will slow recovery of the housing market. Fortunately financing for lot development should be more available in 2017 than in recent years.

Despite recent home price gains, many households still owe more on their mortgages than their homes are worth, which limits the availability of financing, especially for those with lower credit scores. Plus, many more homeowners are in near negative equity situations. These households will not be able to absorb the transactions costs involved in selling their homes, make a significant down payment, or qualify for a new mortgage. These homeowners are stuck in their current homes, unable to trade up or trade down. Another development that will restrain housing activity for many years is that many homeowners have locked in extraordinary low mortgage rates that they will be reluctant to give up.

The strong dollar and weak foreign economies will reduce the number of foreign investors who are looking to buy residential properties in the U.S. Foreign buyers have played a major role in the recovery of housing markets in the urban core of many large MSAs, especially for luxury apartments. On the positive side, several developed foreign economies are implementing substantial new taxes on foreign real estate buyers, which will encourage foreign buyers to focus more intently on American real estate markets.

A potentially powerful demand side support for homebuilding is the rebound in the rate of household formation, which had been quite depressed. Job growth will be the key to unlocking the pent-up demand for housing that built up as young adults opted to stay a home a bit longer. Moreover, improving job prospects will partially reverse the recent surge in college enrollment and might also slow the rate at which student loan debt is piling up. Indeed, record breaking levels of student loan debt is one reason why young adults have delayed moving out on their own, getting married, having children, and buying a starter house.

Nonresidential Construction

Although slightly higher interest rates constitute a headwind, spending for new nonresidential construction will increase in 2017, continuing the up cycle that began in the second quarter of 2013. Credit conditions will ease for those looking to build nonresidential structures, but will remain tight in markets with high vacancy rates.

Employment and population growth will generate gains in net occupancy. In many markets, tenants will no longer have the upper hand in lease negotiations. There will be some negative trends: For example, there will be very little spending on energy-related construction. Also, the strong dollar has dampened foreign investors' interest in U.S. real estate. These counter trends imply that the current up cycle in the nonresidential real estate will gain additional traction, but will lack vigor.

Office and retail vacancy rates will remain elevated, but will improve. Demand for new office space will increase the most in markets that benefit from growth of high technology and health care industries. Retail construction will continue to be limited by abundant supplies of existing space as well as online competition, but pockets of new retail development will appear in the most desirable locations. Industrial development will benefit from an upturn in industrial production, with new development focused on locations with logistical advantages.

Spending for public funded buildings will increase, reversing the downtrend of recent years. The primary headwind for public construction has been the property bust which led to downward adjustments in assessed property values. Typically, such adjustments lag movements in market prices by several years. Property tax bases have finally responding to the upturn in real estate prices. So, governments' property tax baes are becoming more supportive of revenue collections and in turn public construction.

Business Spending

Due to higher commodity prices, slightly faster growth in end markets, renewed growth in corporate profits, business spending for equipment will be about 4 percent larger in 2017 than in 2016. Nonresidential fixed investment will become a tailwind rather than a headwind to GDP growth. The need to improve productivity, good cash flows, and access to somewhat more expensive credit will support spending. With the economy at, or beyond, full employment, accelerated wage growth will incentivize businesses to substitute capital for labor, which bodes well for producers of durable equipment and software.

Due to both top-line growth and better access to credit, investment spending by small businesses should grow more rapidly in 2017 than in 2016. Home price appreciation is adding to home equity, which is a major source of collateral for many small business loans.

By historical standards, businesses' capital spending has been very weak, so there is a need to increase spending on nonresidential fixed investment despite low levels of capacity utilization. That's because the capital stock is getting quite old. Investments have been delayed for so long that replacement needs should raise capital spending in 2017. It helps that lending standards will not tighten. Plus, for many companies, cash flows will be adequate relative to the amount of funds they need for investment, lessening the impact of lingering credit constraints or slightly higher interest rates.

In 2017, below average levels of capacity utilization will be a headwind for business spending for equipment and software. The U.S. economy is far from the point where strong GDP growth generates more GDP growth because inadequate capacity begins to encourage more capital spending. But if excess capacity is in the wrong place, wrong industry, or too old, then the push to GDP growth could be larger than expected. The rate of capacity utilization in all industries was 74.9 percent in mid-2016, which is up considerably from 66.9 percent in mid-2009, but less than in 2015. Still, the long-run (1972-2015) average rate of capacity utilization for all industries in the U.S. is 80 percent.

Capacity utilization varies dramatically by industry. In mid-2016, capacity utilization for industries producing goods at the finished stage was 75 percent, which is 2 percent below its long-run average and will not spur capacity additions. Even worse, due to the collapse in energy and commodity prices, capacity utilization for industries producing crude products was only 74.8 percent, a rate 11.5 percent below its long-run average. Capacity utilization for goods at the primary and semi-finished stages of production was only 74.9 percent, or 5.7 percent below its long-run average.

Corporate Profits

The pace of GDP growth will accelerate modestly in 2017, which implies modest growth in domestically generated corporate profits. But remember that even though after-tax corporate profits declined in 2016, they are still at very high levels. Tight labor markets are expected to push up wage and benefit costs in 2017. Plus, the new Fair Labor Standard Act regulations will push up unit labor costs and reduce productivity. Businesses therefore should expect low single-digit percentage gains in profits in 2017. Expense management and more broad-based growth in demand for goods and services will be the primary factors supporting profit growth. Financing should still be easy to obtain, although slightly more expensive.

The housing market upturn will be a primary factor contributing to the broadening of the base of profit growth by boosting profits for many home-related industries. Growth in spending for business equipment bodes well for profits earned by technology-oriented companies. Higher oil and commodity prices will raise the profits of energy and commodity producing companies as well as businesses that cater to their needs. Productivity growth is likely to be slightly stronger in 2017 than it was in 2016, but still weak from a historical perspective.

On the negative side, businesses' pricing power is not expected to firm significantly. The strong dollar will limit profit growth based on overseas earnings. Finally, it's important to recognize that financial institutions' profit margins will be constrained by the flat yield curve. The slow expansion of foreign GDP – especially the lackluster performance of the EU – will limit sales prospects for many export-oriented companies.

International Trade

Both real exports and imports are expected to grow faster than U.S. GDP, reflecting the ongoing globalization of input and product markets. Imports will rise faster than exports, and the 2017 trade gap will be larger than in 2016. Hence, net exports will be a negative factor in terms of GDP. The main obstacles to faster U.S. export growth remain the same: the strong U.S. dollar and global economic weakness. One reason why imports will grow in 2017 will be faster growth of domestic consumer spending, which implies faster growth of imports of finished goods as well as more outbound U.S. tourists.

In 2017, U.S. export growth will be broad based, and growth will be faster in emerging-market economies than in developed economies. Increases are expected for all of the major categories of goods and services. Exports of services will grow faster than exports of goods. Among goods, export growth will be fastest for vehicles and parts and industrial materials and supplies. Export growth will be slowest for consumer goods. Capital goods, foods, and beverages will see moderate gains. It should be noted that the broad-based quality of US export growth reduces the chances that export growth will stall.

Slight U.S. dollar depreciation will begin late in 2017, but that will not help exports too much because the dollar's value will still be quite high. The 2017 current account deficit will equal about 2.7 percent of GDP, which is about the same as in 2016.

Inflation

Consumer price inflation will increase by 2.2 percent in 2017, compared to only 1.2 percent in 2016. That's slightly higher than the range that the Federal Reserve appears to be targeting, which will encourage them to increase policy interest rates in 2017. Higher commodity prices, higher housing prices (and rents) and higher medical prices will drive the increase.

Almost all the usual drivers of inflation will be more intense. For example, the pace of 2017 GDP growth will be 0.8 percent higher than in 2016. Consumer spending will grow slightly faster than in 2016. Oil and many other commodity prices have moved above their recent lows. The national unemployment rate is below 5 percent. The Census Bureau's most recent report on income and poverty documented the largest year-to-year gain in median household income in many years. Of course, there's still excess capacity in a large number of economic sectors, illustrated by the below-average rate of capacity utilization.

The strong dollar will keep inflation at bay, but the dollar probably will begin to weaken in the latter part of 2017. As long as the Federal Reserve does not keep rates too low for too long, the risk of stagflation remains very low. The evidence, however, increasingly suggests that the Federal Reserve needs to become much more aggressive about hiking policy interest rates.

Although the labor market is at full employment, it's unlikely that inflation will be a major problem in 2017. Labor market conditions will continue to improve, but not fast enough to support ignite rapidly accelerating inflation. Indeed, employment will grow more slowly in 2017 than in 2016. The bottom line is that the employment situation has improved to the point where labor market conditions will support higher inflation. Thus, the Federal Reserve needs to tighten monetary policy and raise policy interest rates to prevent inflation from getting too much traction.

The precise timing and magnitude of the future rate increases by the Federal Reserve will depend on both the magnitude and perceived durability of the expansion. Based on the 2017 forecast of sustained modest GDP growth, the Federal Reserve will increase short-term policy interest slowly in 2017. The upper bound of the federal funds rate will be 1.5 percent at the end of 2017 and 2.5 percent at the end of 2018. Those rate increases will not be high enough to prevent inflation from exceeding its 2 percent target, however.

Crude Oil Markets

Absent additional significant supply interruptions or additional price premiums due to increased political tensions, it is unlikely that oil prices will go much higher than $55 per barrel, or slightly above the approximate breakeven price for U.S. shale oil production. Prices over $50 will force U.S. shale oil and other marginal producers to ramp up production. Before Saudi Arabia, Iran, and Iraq decided to defend their market share by flooding the market, oil prices were about $100 per barrel.

Because oil markets are so volatile, a significant supply interruption would cause oil to trade significantly higher. There is no shortage of potential negative supply shocks, ranging from the Nigeria Delta Defenders, to the economic crisis in Venezuela, to ISIS, to hurricanes in the Gulf of Mexico. This forecast is predicated upon a slight acceleration in the modest pace of global economic growth and no major disruptions in the supply of crude or refined products. ❖

The Georgia Outlook

Georgia's economy will continue to expand in 2017. The pace of GDP and personal income growth will accelerate, but the pace of job growth will slow. Because Georgia's economy is inextricably linked to the national economy, the risk of another recession is 35 percent, up from only 25 percent last year. The primary risks likely to trigger a new recession are massive shifts in asset prices (e.g., equities and/or bonds), mistakes in fiscal and/or monetary policies, a much sharper than expected slowdown in China, or a widespread financial panic due to turmoil in the credit markets.

The 2017 forecast calls for Georgia's inflation-adjusted GDP to increase by 3.2 percent, which is higher than the 2.6 percent growth estimated for 2016. Georgia's GDP growth rate will be 0.7 percent higher than the 2.5 percent rate estimated for U.S. GDP. It will also be above the 2.9 percent long-term average rate of U.S. GDP growth. The positive differentials reflect (1) many major projects already in Georgia's economic development pipeline, (2) more leverage from the housing recovery, (3) more supportive demographic forces, (4) continuing expansion of Georgia's manufacturing industries even as U.S. manufacturing experienced a mild recession, and (5) more small business startups and expansions.

The state's nominal personal income will grow by 5 percent, which is higher than the 4.1 percent gain estimated for 2016. It also exceeds the 3.1 percent gain expected for U.S. personal income. Georgia's nonfarm employment will rise by 2.1, which exceeds the 1.5 percent gain estimated for the U.S. It's smaller, however, than the 2.8 percent, 2.9 percent, and 2.7 percent job gains Georgia posted for 2014, 2015, or 2016, respectively.

The main headwinds in 2017 will be (1) the strong dollar, (2) weak foreign economies, (3) higher oil prices, (4) cuts in federal spending, and (3) less monetary stimulus.

Georgia's unemployment rate for 2017 will average 4.8 percent, or about 0.5 percent lower than the 5.3 percent rate estimated for 2016. The unemployment rate will drop less in 2017 than in recent years because of the slowdown in job growth as well as increases in labor force participation.

Job growth will be very well balanced, with gains in both goods producing and services providing industries. The fastest job growth will occur in construction, followed by professional and business services, and leisure and hospitality. Solid, but below-average job growth is expected for education and health services, trade, transportation and utilities, financial activities, manufacturing, and other services. Positive, but very slow job growth is projected for government and information. Local governments rather than federal or state government will account for most of the increase in government employment.

Prospects for Services

The 2017 forecast indicates that all Georgia's major categories of services-related businesses will expand, with the broader base of growth reflecting the upturn in housing markets, growing demand for information and high technology services, and competitive economic development incentives.

In 2017, headquarters jobs will be an important force powering Georgia's economic growth. Hartsfield-Jackson International Airport and Georgia's ideal geographic location makes the state a good hub from which to serve operations in the Americas. Access to talent and the strength of the business community also are important drivers of headquarters locations in the Atlanta MSA. According to FEMA, Georgia has a very low risk for business disruption due to natural disasters, which is an important consideration for headquarters locations. Projects announced in 2015-2016 that brought, or will soon bring, job gains at headquarters operations include Mercedes-Benz USA, Honeywell (division headquarters), Jindal Films (national headquarters), Merchant e-Solutions, VIX Verify, Sage (North American headquarters), magicJack for Business, mLevel, Comcast (regional headquarters), Wells Lighting, CSM Bakery Solutions, Courion, and Osmose Utilities Services. Also, Global Ministries, the philanthropic arm of the United Methodist Church, recently moved its headquarters from New York to Atlanta, creating 168 jobs.

Transactions processing, data processing, cyber security, and development of software and mobile apps will power Georgia's economic growth. IT companies that announced major projects in 2015-16, include GE Digital, Honeywell, NCR, VIX Global Solutions, ADP, Keysight Technologies, VIX Verify, Merchant e-Solutions, Applied Systems, Courion, Sage, and Stefanini. Fintech is becoming a major cluster in the Atlanta MSA. Fiserv, a provider of financial services and technology solutions, will add 500 jobs over the next five years, bringing its total employment to about 2,500 workers.

Healthcare IT is an industry that promises to create thousands of high-paying jobs in Georgia over the next decade. For example, in 2016, Kaiser Permanente announced that it will create 800 jobs in the Atlanta MSA, which are in addition to the 900 jobs announced in 2015 that would be created at its new IT facility in midtown Atlanta. In 2016, Anthem, Inc. announced 450 new health-IT jobs in Columbus. Azalea Health, a health IT company that focuses on rural providers, will add 200 jobs at its Atlanta headquarters over the next several years.

The outlook for Georgia's healthcare providers is good, but not exuberant. Uncertainties regarding the ACA as well as Georgia's nonparticipation in the expanded Medicare program cloud the outlook for the industry, especially rural hospitals. Nonetheless, this sector will be one of the better performers in 2017. The large numbers of baby boomers are reaching the age where the incidence of heart attacks, strokes, cancer, and other care-intensive problems begin to climb.

Services businesses that either lower costs or provide necessities should do well. Georgia's staffing and temp agencies should do very well because the modest pace of economic growth encourages many firms to remain flexible and responsive to changing economic conditions. Recent and continuing increases in spending for new equipment and software will underpin higher demand for computer services for businesses. Due to Georgia's good business climate and available workforce customer, high-tech support services providers such as Voxpro increasingly will favor sites in Georgia.

Cyclical increases in economic activity combined with Georgia's strong transportation and logistics infrastructure will ensure job growth in the logistics and distribution industry. Announcements over the last few of years include: HD Supply, Polymer Logistics, Total Quality Logistics, and United Arab Shipping Company. Georgia will benefit from many new logistical/distribution centers for both online and regular retailers, including Home Chef, Variety Wholesalers, Amazon, Dollar General, thredUP, Ollie's, Badcock, and Walmart.

The growth of advanced manufacturing will create opportunities for firms that provide very specialized services such as the West Penn Testing Group. The faster pace of economic growth will bring relief to many consulting firms, and larger government budgets will provide gains for firms with many public-sector clients.

Generous incentives and the attainment of critical mass will ensure that Georgia's film industry contributes to economic growth in 2017. Georgia's film industry ranks third in TV and movie production, behind only California and New York. Its economic impact has been estimated at about $7 billion.

Improving economic conditions – especially the upcycle in real estate – and improving demographic trends will help Georgia's financial institutions. Bank profits rose substantially, and rising asset values favor banks' top- and bottom-line growth. The prospects for deposit growth are excellent. Slightly wider net interest margins in combination with higher demand for most types of loans will support Georgia banks' profits, but the high and rising compliance costs of re-regulations and less mortgage refinancing will challenge the bottom line. Traditional banks and credit unions will see more competition from large retailers, venture capital funds, microfinance, and other nonbanks that often are less heavily regulated.

For five straight years, the leisure and hospitality industry has outperformed Georgia's overall economy and will continue to do so in 2017. The lodging industry's gains will be broad based across both limited service properties that cater primarily to tourists and full-service properties that are popular with business travelers. Lodging demand will rise significantly from already elevated levels. Because the lodging market is not overbuilt, the benefits to the industry from higher demand will be significant.

Due to the industry's impressive performance, most in-state lodging markets will see new development, but the number of new hotel rooms being completed will not outpace demand growth. The favorable overall balance of supply and demand will prompt further increases in average daily room rates, thereby adding to the industry's overall profits. Off-peak rates will not increase significantly, but peak room rates at better properties will set all-time record highs. On top of higher demand for rooms, increased utilization of many hotel services will bolster revenue per available room.

There are still some headwinds and downside risks for the lodging industry, however. There will be more pressure on wages and salaries than in recent years, which will exert pressure on net margins. The call for a $15 national minimum wage is a threat. The $5 statewide hotel/motel fee that went into effect in 2015 is also a negative factor. The shared economy is a potential disruptor for the traditional lodging industry, especially if such providers do not pay hotel/motel taxes and/or the new $5 statewide hotel/motel fee.

Prospects for Manufacturing

Georgia's manufacturing industry avoided recession because there have been many major economic development project announcements by manufacturers, bolstering growth in aircraft (e.g., Gulfstream), automobile (e.g., Sentury Tire, Kia and its growing roster of in-state suppliers), flooring (e.g., Mohawk Industries, Engineered Floors, Beaulieu International Group, Surya), building materials (e.g., Sparta Industries, EdenCrete, and Caesarstone among others), food processing (e.g., Tyson Foods, Castellini Group, National Beef, Trident Seafoods), and chemicals (e.g., Southern Ionics). It also helped that Georgia's manufacturing industry is not geared towards oil or natural gas production, and therefore was helped rather than hurt by the drop in oil and gas prices. Going forward, Georgia will see substantial increases in advanced manufacturing activity and employment. Recent project announcements include Sentury Tire, Jindal Films, Aspen Aerogels, MI Metals, Alcon, Suniva, Eastman Kodak, Topper Print Company, Dasan Machineries, Aalto Scientific, and Gerresheimer. Sentury Tire will establish an advanced tire manufacturing and R&D center in LaGrange that will employ over 1,000. This move illustrates Georgia's growing economic ties with China and validates the establishment of the state's two strategic economic development offices in China.

Cyclical economic recovery, more effective economic development policies, low domestic natural gas prices, rising wages and production costs in China and other overseas locations are some of the factors behind recent and expected increases in Georgia's manufacturing activity. Concerns about product quality and management of the risks associated with increasingly complex and time-sensitive supply chains also make manufacturing in Georgia more attractive than manufacturing overseas. Additional factors that will help Georgia attract manufacturers include a superior transportation, logistics, and distribution infrastructure, low costs of doing business relative to other highly developed economies, a favorable tax structure, highly ranked colleges and universities, Quick Start, and very competitive economic development incentives.

Manufacturers' contribution to Georgia's GDP will rise in 2017, but the incoming employment data imply that manufacturing jobs are not coming back too quickly. The state added an estimated 8,300 jobs in 2016, and is expected to add another 5,900 jobs this year. That will sustain the cyclical recovery in manufacturing employment, but at that pace it will take three decades to replace the manufacturing jobs that Georgia lost. In terms of factory jobs, the talk of a manufacturing renaissance in Georgia is probably overdone, but the sector's output is growing much faster than its employment. Also, many of the jobs that were once done inside the factory are now outsourced to service providers, which therefore are not counted as manufacturing jobs, but are nonetheless jobs that would not otherwise exist in Georgia. The multiplier effects of factory jobs are typically much higher than jobs in most non-manufacturing industries. Many of Georgia's manufacturing industries also provide relatively high paying jobs partially because many low-paying ones have been offshored or replaced by technological advances and machines. Another factor that contributes to the importance of Georgia's manufacturing base is that research and development jobs often locate near clusters of related manufacturers, especially in highly technical and innovative advanced manufacturing industries that boast the highest wages and the best potential for long-term growth.

To become a state where manufacturing activity truly concentrates Georgia must develop a better educated, more highly skilled, and more productive manufacturing workforce that can use the newest technologies; and become a more fertile ground for developing and quickly adopting innovative productivity-enhancing technologies. In developed economies, the manufacturers that thrive will be extremely capital intensive, not very labor intensive, and very productive. The minimum skill requirements for factory workers therefore will rise rapidly as manufacturers utilize much more sophisticated manufacturing technologies. The Georgia BioScience Training Center, which supports training for Baxalta's new facility, is a good example of providing much needed skills to Georgia's workers while simultaneously incentivizing life sciences companies. Similarly, the Georgia Tech Research Institute and Georgia Tech's Manufacturing Institute promote the growth of Georgia's advanced manufacturing and technology industries.

Restructuring

The main reason why Georgia was hit harder than the nation by the recession—and underperformed during the first years of the recov-

GEORGIA'S BASELINE FORECAST, 2016-2017

Georgia	2012	2013	2014	2015	2016	2017
Real Gross Domestic Product, Bil of 2009$	414.0	420.6	431.1	442.4	453.9	468.4
Percent change	1.4	1.6	2.5	2.6	2.6	3.2
Nonfarm Employment (thousands)	3,954.0	4,032.7	4,145.2	4,267.3	4,383.1	4,477.0
Percent change	1.4	2.0	2.8	2.9	2.7	2.1
Personal Income, Bil of $	369.5	375.8	393.6	414.3	431.3	452.8
Percent change	2.9	1.7	4.7	5.3	4.1	5.0
Housing Permits, Total	24,350	36,174	39,423	45,549	55,914	66,552
Percent change	31.7	48.6	9.0	15.5	22.8	19.0
Unemployment Rate (percent)	9.2	8.2	7.1	5.9	5.3	4.8

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2016.

ery—was the state's heavy dependence on real estate development and homebuilding as well as closely allied industries such as building materials manufacturing and real estate financing. Not enough of Georgia's economic growth was based on educating its own people, innovation, courting emerging high-tech industries, and promoting the growth of in-state capital markets. The financial crisis and the bursting of the housing bubble abruptly ended the inflows of people and businesses and precipitated a large and painful restructuring of Georgia's economy.

As the direct and indirect effects of restructuring and the real estate bubble faded, Georgia's sub-par pace of economic recovery caught up and soon outpaced that of the nation. The 2016 estimates show that Georgia's job count rose by 2.7 percent compared to 1.5 percent for the U.S., for a positive differential of 1.2 percent. For the fifth straight year, Georgia's economy will add jobs faster than the national economy. Specifically, the 2017 projections show 2.1 percent job growth for Georgia versus 1.5 percent for the U.S., or a positive differential of 0.6 percent.

Of the three levels of government, Georgia's state government has made the most progress adjusting its spending and staffing to reflect available revenue. The biggest remaining challenge for state government is uncertainty regarding federal funding for mandated programs such Medicaid. Pension liabilities and retiree health care costs also pose major challenges. Local governments will struggle with reductions in federal and state funding; pension liabilities; and retiree health care costs, too. Due to the recovery of the property markets, most local governments have fully reconciled their ability to generate revenue with their spending and staffing levels. That's mostly because local governments are extremely dependent on property taxes for revenue. Real estate prices have fully recovered in many markets, so the headwind to Georgia's economy from restructuring local government has shifted to a tailwind.

A new era of federal fiscal austerity will continue. The restructuring of our federal government is a headwind for Georgia's economy that will remain strong. Data for 2015 indicates that federal jobs account for 2.3 percent of Georgia's jobs, which is above the 1.9 percent U.S. average. Georgia's above-average exposure to federal layoffs is due to the presence of many large military bases. Department of Defense jobs account for one out of every 105 jobs in Georgia versus one out of every 275 nationally. Location quotients, which measure the relative importance of an industry to GDP, puts the federal government's military impact in Georgia at nearly twice the national average. Several regions of the state host large military bases and are quite dependent on federal defense spending, and thus are vulnerable to the next round of BRAC.

Federal Reserve Policy

Federal Reserve actions to increase short-term policy interest rates will be a slightly stronger head-

GEORGIA'S DOMESTIC PRODUCT, 2006-2017
(millions of dollars)

			Percentage Change from Previous Year	
Year	Current $	Constant (2009) $	Current $	Constant (2009) $
2006	393,920	420,491	4.6	1.6
2007	411,730	427,885	4.5	1.8
2008	410,779	419,529	-0.2	-2.0
2009	402,728	402,728	-2.0	-4.0
2010	407,999	403,740	1.3	0.3
2011	418,917	408,155	2.7	1.1
2012	434,978	414,023	3.8	1.4
2013	450,934	420,595	3.7	1.6
2014	471,879	431,094	4.6	2.5
2015	495,727	442,374	5.1	2.6
2016	514,069	453,876	3.7	2.6
2017	540,286	468,400	5.1	3.2

Source: Data through 2015 obtained from the Bureau of Economic Analysis, U.S. Department of Commerce. Data for 2015-2017 are from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (October 2016).

wind for Georgia than for the nation as a whole. The shift in policy from an extremely accommodative to a less accommodative stance will create slightly more economic drag in Georgia than in many other states because Georgians carry relatively more debt and have relatively less savings. Also, interest-sensitive economic sectors (e.g. real estate development, home building, nonresidential construction, building materials manufacturing, and forestry) have a greater impact on Georgia's overall growth than on the nation's growth.

Economic Development

The state is viewed as a place where there's a good working relationship between government and other major players. These factors plus Georgia's major transportation and logistical advantages, a competitive tax climate, and the nation's top workforce training program Quick Start helped to refill Georgia's economic development pipeline. For the third straight year, site consultants ranked Georgia the top state in which to do business.

Because it often takes many years to fully build out the typical economic development project, many of the projects announced over the last five years will continue to provide a substantial tailwind to Georgia's economic growth in 2017 and beyond. Examples of such projects include Baxalta's new facility that will add 1,500 biotechnology jobs; Home Chef's decision to open a new facility in DeKalb County that will create over 1,200 jobs; GM's IT-innovation center in Roswell that will bring 1,000 high-tech jobs, Honeywell's software development and headquarters that will create over 800 jobs, multiple floor covering manufacturers have announced expansion plans that will bring over 3,000 jobs to Dalton, Caterpillar's new facility that adds 1,400 jobs in the Athens area, and Ernst & Young's new global IT center in Alpharetta with 400 new high-tech jobs, and Mercedes-Benz USA's relocated headquarters in Atlanta (with at least 800 jobs).

Another reason Georgia will do well in 2017 is that U.S. automobile manufacturing is increasingly concentrated in the Southeast. When it comes to both distribution and consumer markets, Georgia is in the sweet spot in the middle of the Southern Auto Corridor with proximity to major assembly plants, major suppliers, interstates, ports, and rail. Georgia's major projects have included Kia's assembly plant in West Georgia and Mercedes' corporate headquarters in Atlanta. The new Volkswagen assembly plant just across the state line in Chattanooga and the recent announcement that Volvo will build an assembly plant in Charleston make Georgia an even more attractive place to site automobile parts suppliers. For example, Voestalpine Automotive Body Parts will expand its operations in Bartow County adding 150 jobs. Constellium, a manufacturer of aluminum products for the automotive and

NEW RESIDENTIAL BUILDING UNITS AUTHORIZED FOR GEORGIA, 2006-2017

Year	Total New Residential	Percent Change from Previous Period	New Single-Unit Residential	Percent Change from Previous Period	New Multi-Unit Residential	Percent Change from Previous Period
2006	104,200	-4.7	86,106	-8.9	18,094	21.7
2007	73,165	-29.8	55,210	-35.9	17,955	-0.8
2008	35,368	-51.7	24,879	-54.9	10,489	-41.6
2009	18,228	-48.5	14,674	-41.0	3,554	-66.1
2010	17,265	-5.3	14,779	0.7	2,486	-30.1
2011	18,493	7.1	13,817	-6.5	4,676	88.1
2012	24,350	31.7	17,297	25.2	7,053	50.8
2013	36,174	48.6	24,810	43.4	11,364	61.1
2014	39,423	9.0	27,503	10.9	11,920	4.9
2015	45,549	15.5	32,621	18.6	12,928	8.5
2016	55,914	22.8	38,591	18.3	17,324	34.0
2017	66,552	19.0	47,930	24.2	16,623	7.5

Source: Data through 2015 obtained from the Construction Statistics Division, Bureau of the Census. Values forecast for 2016-2017 are from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (October 2016).

other industries, is establishing operations in Barrow County, creating over 150 jobs. NIFCO KTW is locating its U.S. operations in Toccoa, creating 200 jobs.

Due to cost, logistics, and tax advantages, Georgia is very competitive with other states when it comes to landing economic development projects. Many companies move to Georgia to cut costs. The elimination of sales and use taxes on energy used in manufacturing is a major draw. Also, in 2016, business inventories became fully exempt from the state property tax and 85 percent of counties already have level one Freeport exemptions. These changes in tax policy will boost Georgia's economy in 2017.

Housing Recovery

Housing and real estate development will be a powerful driver of Georgia's economy in 2017, helping the state's economy to outperform the nation's economy. The number of single-family home starts for new construction will increase by 24 percent. New multi-unit homebuilding will rise by 18 percent. Georgia gets a four for one from the housing recovery because homebuilders and realtors benefit directly, and demand increases nationally for goods produced by Georgia's large floor covering, building materials, and forestry industries. In addition, our large transportation and logistics industry benefits from higher levels of activity in construction, which is transportation intensive. Finally, recent and continuing increases in U.S. home prices will make it even easier for companies and people to relocate to Georgia.

Georgia's housing market is responding to a more favorable balance of supply and demand. Increased demand for housing will come mostly from job growth. Those new jobs, and slightly bigger paychecks—plus appreciating home values—will give more people the wherewithal, and the confidence, to buy homes. As of mid-2016, the average price of an existing single-family home in Georgia exceeded the pre-recession peak value by 4 percent. (U.S. home prices exceed its pre-recession peak value by 3 percent.) For the state and nation as a whole, the home price recovery is complete, but those gains do not take inflation into account. Also, rent affordability is at an all-time low. Meanwhile, mortgage rates remain a tremendous bargain from a historical perspective, but mortgage rates are above their recent historic lows and will continue to move higher as the Federal Reserve gradually reverses its easing policies.

Supplies of new homes are still constrained by years of underbuilding. Plus, there's a scarcity of listings of existing homes, and it's especially acute for lower-priced homes. That's partially because so many of Georgians are still underwater on their mortgages and are therefore unlikely to put their homes up for sale. It's especially troubling that the negative equity is extremely concentrated in the starter home segment of the market; and that hurts the trade-up market.

Existing single-family home prices will rise by 4 percent in Georgia in 2017. Lower priced homes will appreciate the fastest because the lowest tier has the most ground to make up and remains the farthest from full price recovery. But it also reflects investors' interest in purchasing inexpensive single-family homes to use as rentals. In contrast, price appreciation for upper tier homes is dependent on the trade-up market, which is still not functioning normally.

As potential homebuyers see a record of price appreciation, more will opt to become homeowners. Rapidly rising rents will reinforce this trend. But, as home prices rise and the number of distressed properties shrinks, home sales to investors will drop sharply. Sustaining the recovery of the housing market through 2017 means that trade-up buyers and first-time buyers must become more active.

Demographics are another factor behind Georgia's improving economic performance. Due to job growth and the housing recovery, geographic mobility turned up in 2014. As net domestic and net international migration increased, Georgia's population began to grow more quickly. Recent corporate relocations and expansions brought more people to Georgia, and the state's population will grow at a pace that exceeds the national average in 2017 – 1.4 percent for Georgia versus 0.8 percent for the U.S.

Small Business Expansion

The lack of new business formation is one underappreciated reason why Georgia's job recovery initially lagged the nation's job recovery. It is new companies that typically create almost all net new jobs. Business formation requires cash. The typical entrepreneur often obtains the funds needed to start, or expand, their business by borrowing, using their home as collateral. That's been a problem for Georgia's entrepreneurs because (1) home price depreciation was much more intense here than it was nationally and (2) Georgia led the nation in bank failures. Federal Housing Finance Agency data show that the peak-to-trough home price decline was 28 percent in Georgia compared to 21 percent nationally. Consequently, much of the home equity that people traditionally use to start a business evaporated.

Meanwhile, Georgia's relatively high number of bank failures restricted relationship-based lending to small businesses and entrepreneurs, especially outside the core of the Atlanta area. The good news is that Georgia's home prices are up about 45 percent (as of mid-2016) from their lowest point, so home equity will be much more available to finance new business startups and small business expansion. Also, business people have had enough time to establish new relationships with surviving (or new) bankers. Small business expansion therefore will contribute more to Georgia's economic growth in 2017 than in recent years.

Educational Achievement

To fully leverage its new economic development policies, Georgia needs to emphasize educational achievement much more. Success in recruiting new business and industry and retaining existing industry increasingly will be determined by the availability of labor that is qualified to utilize the latest advanced technologies. Policies that increase the supply of skilled labor will stimulate labor demand as the additional supply of skilled workers attracts employers with skilled jobs. Offering customized training will be a very effective way to recruit new industry and ensure that existing businesses expand in Georgia.

The challenge is immense: Georgia trails many other states when it comes to educating its children. According to the National Center for Education Statistics, Georgia's eighth graders rank 40 among the states in math, 34 in reading, and 28 in science. Ultimately, in a flat world, a failure to educate our children lowers Georgia's relative standard of living. After rising for decades, per capita person income in Georgia peaked at 95 percent of the U.S. average in 1999. Since then we've seen an almost continuous slide of per capita income in Georgia relative to the nation. The data for 2015 show per capita person income in Georgia at only 85 percent of the national average, a level last seen in 1982.

Prospects for Selected MSAs

■ Atlanta ■

A revival of population growth and the housing recovery will strongly underpin Atlanta's ongoing economic recovery. A high concentration of college-educated workers, business partners, high-tech companies, and research universities will continue to attract high technology companies in life sciences, software development, R&D, IT, professional and business services, and advanced manufacturing. Life sciences companies are attracted by the presence of the CDC and nonprofits such as the national headquarters of the American Cancer Society. New high tech industries (e.g., healthcare IT, Fintech, cyber security, and mobile apps) are growing rapidly in Atlanta. The information industry also is highly concentrated in the Atlanta MSA.

The innovation district that's developed around Tech Square has achieved the critical mass needed to attract high-tech companies to Midtown Atlanta. For example, GE will establish its first digital operations center in Midtown, which will create 250 jobs. Keysight Technologies will expand its presence by opening an operation in Midtown, creating over 200 software and engineering jobs. Kaiser Permanente will establish an IT campus in Midtown that will create 900 jobs. NCR is building a new global headquarters campus in Midtown near Tech Square, which will also include a research, innovation, and design-thinking lab. NCR will create over 1,800 jobs in its Midtown expansion. Honeywell will build its Home and Business Technology headquarters in Midtown. Also, many startup companies are located near Tech Square.

Compared to other large metropolitan areas with strong links to global markets the costs of living and doing business in the Atlanta MSA are low. Companies and nonprofit organizations looking to lower costs will continue to relocate to Atlanta. And, despite the limit that traffic congestion places on accessible workers, many companies are attracted to Atlanta due to the large and diverse pool of available talent. Also, the high concentration of colleges and universities ensures an abundant supply of experienced faculty, newly minted college graduates, and student interns.

On an annual average basis, the 29-county Atlanta MSA will add 55,700 jobs in 2017, a year-over-year increase of 2.1 percent. Atlanta therefore will account for 59 percent of the state's net job growth. Atlanta's high concentration of service producing industries, IT companies, distribution companies, institutions of higher education, health care providers, life sciences companies and headquarters operations will keep the job machine in forward gear. Atlanta's outsized information industry will benefit from expanding film and television production as well as surging demand for more sophisticated wireless services and high-volume mobile data applications.

Major improvements at Hartsfield-Jackson International Airport bode well for Atlanta's growth, especially the new international terminal. The airport is the world's busiest for passenger traffic and is the number one high-tech airport in the nation, and thus makes the Atlanta area an ideal location for corporate headquarters due to its large number of direct domestic and international flights.

Production sites near Hartsfield-Jackson International Airport and/or near cold storage facilities appeal to manufacturers of perishable biomedical products (e.g., plasma-based pharmaceuticals) that require cold storage and cold shipping. Lightweight, highly perishable, or time-sensitive products are well suited to air transportation, and therefore many high-tech production companies consider the extensive air cargo facilities at Hartsfield-Jackson to be essential to their operations.

Due to its large meetings and convention industry, Atlanta is the seventh most-visited city in the U.S. It's also a popular destination for international visitors. New attractions such as Porsche's Customer and Driver Experience Center, the College Football Hall of Fame, and the Delta Air Line's Flight Museum add to Atlanta's appeal to travelers.

One major plus for Atlanta in this new era of federal fiscal austerity is that the metro area is not very dependent on federal jobs. Only 3 percent of the Atlanta's area's nonfarm earnings come from federal employment versus 5.8 percent for the state as a whole. Atlanta is not the home of a major military base. Only 0.3 percent of nonfarm earnings come from military jobs versus 2.2 percent for the state. State and local government accounts for only 9 percent of earnings in metro Atlanta versus 11.7 percent for the state. So, public restructuring will be less problematic for Atlanta's growth than for growth elsewhere in Georgia.

■ Albany ■

On an annual average basis, the 2017 forecast indicates that the Albany area (including Baker, Dougherty, Lee, Terrell, and Worth counties) will see 1.5 percent job growth, which will build on the 2.3 percent gain estimated for 2016. After more than a decade of year-to-year job losses – or little change in overall employment – two consecutive years of significant job growth marks a major improvement in local economic conditions.

Thrush Aircraft received a loan from the OneGeorgia Equity Loan Fund in 2016 to expand its production line, creating up to 100 new jobs. In 2016, the Department of the Navy and Georgia Power broke ground on a large-scale solar field at the MCLB-Albany that can power up to 5,000 homes. Because Albany is a small MSA, the actions for the better or for the worse by one major company could determine the area's actual economic performance in 2017, however.

One economic stabilizer for Albany is that much of the area's manufacturing base is geared towards basic consumer staples, which people continue to buy whether or not the economy is expanding. Miller Brewing, Proctor and Gamble, Tara Foods, Mars Chocolate North America are good examples. Even as U.S. manufacturing experienced recession, Albany has held onto all of its major manufacturers.

As economic conditions continue to improve, Albany will capitalize on its assets, including a low cost of living and doing business, an excellent telecommunications infrastructure, good highway access, a newly merged University System of Georgia institution, an excellent technical college, a low cost of living, and a reputation as a good place to live and raise a family. The area's economy is slowly rebuilding itself by moving away from traditional manufacturing and government towards health care and higher education. From Fall 2011 to Fall 2015, combined enrollment of Albany State University and Darton College rose from 10,486 students to 11,028 students, or 5.2 percent. The new terminal at the Southwest Georgia Regional Airport also bodes well for the regional economy.

As consumer spending grows, Albany will benefit from its role as a regional retail-wholesale distribution center and from spillover from Florida. The area's traditional role as a major retail hub for Southwest Georgia will face more competition from electronic commerce, but e-commerce company WebstaurantStore announced that will build a new distribution and fulfillment center in Dougherty County, creating 150 jobs.

Albany will continue to fare well in its traditional role as a support center for agriculture. Of course, dependence on agriculture does expose the regional economy to the ups and downs of commodity markets as well as shifts in federal farm policies.

Redevelopment along the Flint River adds to Albany's charm, and adds to the area's potential to benefit from tourism and retiree-based development. The Rails to Trails project and the new airport terminal also should help tourism. The MSA's increasing role as a regional center for healthcare weighs strongly in its favor, but the growth of both industries has been limited by the area's sub-par population growth as well as Georgia's nonparticipation in the expansion of Medicaid.

Albany is vulnerable to the restructuring of government, however, because it is very dependent on federal jobs – 9.7 percent of the Albany area's nonfarm earnings come from federal employment versus 5.8 percent for the state. State and local government accounts for 16.8 percent of earnings versus 11.7 percent for the state. Public restructuring therefore will be more problematic for Albany's growth than for Georgia's growth.

Another problem is that the area's population and labor force have been declining for many years. Also, compared to the Georgia average, Albany has relatively fewer people between the ages of 25 to 49, typically the most productive years, professionally. On the plus side, it appears that Albany's population and labor force finally stabilized in 2016, thus providing a firmer foundation for retail and other household-dependent industries.

Home prices here are recovering much more slowly than at either the state or national levels. As of mid-2016, Albany's home prices were still 13 percent below their peak levels whereas Georgia's home prices were 4 percent higher than their pre-recession peak. In terms of new single-family home construction, the housing recovery will be sustained through 2017.

■ Athens ■

Athens' economy is much less cyclical than either the national or state economy because it's heavily tilted towards higher education and healthcare. Consequently, Athens does not get overheated during the good times and does not tank badly during the bad times. This relative economic stability reduces the risks for businesses and residents in Clarke, Madison, Oconee, and Oglethorpe counties.

In 2017, employment in Athens will increase by 2.5 percent – about 2,400 jobs. Athens will benefit from several area-specific several factors: Voxpro will create over 500 technical support jobs at a new Center of Excellence that will be built in Athens. The clinical healthcare industry will continue to grow. Athens Regional Medical Center has six nationally ranked specialties, the highest number earned by any Georgia hospital outside of Atlanta or Savannah. Athens will benefit from its role as the regional medical service center for northeast Georgia, one that's reinforced by the establishment of a medical school campus at UGA in partnership with Augusta University. State and local governments' budgets are likely to expand in 2017, which bodes well for Athens short-term economic prospects. Caterpillar also will continue to support the local economy.

The establishment of UGA's College of Engineering contributes directly to the region's growth through its operating budget, its personnel budget, and student spending. Also, the College of Engineering contributes in terms of advancing the area's economic development by attracting high tech companies and venture capital.

Because domestic economic conditions remain favorable, Athens will benefit from recent and planned activities by many of its existing employers. High-tech employment is expanding the Athens MSA. A cluster of biotechnology industries with links to UGA is gradually developing critical mass, boosting prospects for additional growth of the life-sciences employment in Athens.

More exhibit space at the Classic Center is allowing Athens to attract larger conventions and trade shows. With state and local government budgets in fairly good shape, the Classic Center should host more government meetings and will see more attendees from governments at all types of general meetings and conventions. Georgians also are expected to spend more on travel in 2017, so the leisure and hospitality industry will grow relative to the overall size of Athens' economy.

One challenge to growth stems from the development of competing retail hubs elsewhere in Northeast Georgia (e.g., the Mall of Georgia and Sugarloaf Mills) as well as the growing share of retail dollars that is spent online. Athens' role as a major regional hub for retail shopping has been declining for many years and will remain under assault in 2017. The development of the Epps Bridge Center helped to improve the area's appeal as a place to shop, however.

One immediate concern for Athens is that the information, financial activities, and professional and business services industries are undersized relative to the overall size of the area's economy. That will limit the impetus to the region's overall growth from these industries. The information industry has been shrinking relative to the overall size of Athens' economy.

A long-term concern is that Athens is extremely dependent on state government jobs. In 2017, that's a plus, but it does make the area vulnerable to future efforts to downsize state government. In contrast, Athens' shares of federal and local government jobs are significantly below the state average. The MSA has almost no dependence on military spending, and that's critically important to the long-term outlook. Of course, Athens will not be immune to the effects of tighter federal spending. For example, tight federal budgets could restrict the amount of federal grant money that UGA is able to attract in the future.

Home prices have almost recovered, with single-family home prices only 2 percent below their pre-recession peak. In terms of new construction, prospects are good for Athens' homebuilders in 2017.

■ Augusta ■

In 2017, Augusta's employment will increase by 1.8 percent, or 4,200 jobs. Health care and education are major positives for the local economy. The metropolitan area will continue to benefit from the construction of two nuclear power plants at Plant Vogtle. Augusta is a center for telecommunications services and call centers, including telemarketing and reservations. The Georgia Medical Authority will use the expertise available at Augusta University to establish Augusta as a center for the rapidly growing life sciences industry. (The Augusta MSA includes Burke, Columbia, Lincoln, McDuffie, and Richmond counties in Georgia and Aiken and Edgefield counties in South Carolina.)

The strong recent performance and good outlook for Augusta's economy reflects the eventual build out of four major economic development projects: EdenCrete, Textron Specialized Vehicles, ADP, and Unisys. In 2016, EdenCrete—makers of carbon nanotubes-enriched concrete—announced that it would establish its global manufacturing headquarters in Augusta, creating over 250 jobs. Textron Specialized Vehicles expanded its presence with a new manufacturing facility that will require about 400 additional workers. ADP's Augusta Solutions Center (providing cloud-based human capital management to businesses) announced that it will expand, creating 450 jobs in Augusta over the next few years. Unisys, an IT company, announced that it would create up to 700 jobs (over five years) at a new service center in Richmond County. Less positively, the closure of Fibrant, a chemical company, will cost the Augusta area 500 to 600 jobs.

Fort Gordon has grown dramatically in recent years and adds substantially to the area's supply of well-trained, skilled workers. The relocation of the U.S. Army Cyber Command to Fort Gordon directly created about 700 military and civilian jobs, and also makes Augusta a place where military contractors will congregate. The fort's presence makes Augusta's economy somewhat vulnerable to future cuts in defense spending, however.

Although Augusta's undersized information and financial activities industries spared the region from the restructuring that has plagued these sectors, it also may limit opportunities for renewed growth in those industries in 2017.

Although the decline in home prices was smaller than experienced by either the state or the nation, Augusta's home prices have been slower to recover. As of mid-2016, Augusta's home prices were still about 8 percent below their peak level. In terms of new construction, the upturn in single-family homebuilding has gained traction.

■ Brunswick ■

In 2017, Brunswick's employment will rise by 3.0 percent, or 1,300 jobs. The number of jobs created therefore will be similar to the gains realized in 2015-16 (1,200 jobs and 1,400 jobs, respectively). The leisure and hospitality industry, the Port of Brunswick, the housing recovery, and the in-migration of more new full-time and part-time residents will power economic expansion in 2017. Although the housing bubble pummeled the metro area, it was not very exposed to the restructuring of the information, manufacturing, or the financial activities industries. The Brunswick MSA includes Brantley, Glynn, and McIntosh counties.

A very high proportion of government jobs makes Brunswick vulnerable to the restructuring of government. Government accounts for 33.4 percent of the area's nonfarm earnings compared to 17.5 percent for the state and 16.9 percent for the nation, because the metro area is especially dependent on local government jobs. It is not overly dependent on either federal or state government jobs. Indeed, local government jobs account for 19.1 percent of the area's nonfarm earnings, which is more than twice the 8.2 percent reported for the state as a whole. It's also the highest reported for any Georgia MSA. Barring unprecedented population and income growth, restructuring by local government is likely to be a headwind for Brunswick's economy.

Recent major renovations and expansions at Sea Island, Jekyll Island, and Gulfstream contribute to the area's improving economic performance and its good prospects for 2017. Sea Island generates an employment impact of 6,254 jobs for Glynn County, which account for 13.5 percent of all the jobs in Glynn County, or almost one job in seven. Incremental expansions by existing firms in leisure and hospitality, retailing, construction, and health services industries also are expected in 2017. The Port of Brunswick should do well, benefitting the area's logistics and distribution industries. Because Brunswick is a small MSA, the actions for the better, or for the worse, by one major company can determine the area's actual economic performance, however.

As was the case in many vacation and second home communities, the housing bust was especially severe in Brunswick. Plus, ill-timed changes in national flood insurance policies worsened the home price declines and muted home price recovery, especially for older homes located in flood zones. The wealth losses associated with the sharp drop in real estate prices reverberated throughout the local economy, delaying recovery for many consumer-based businesses. Single-family home prices peaked in the fourth quarter of 2007 and did not bottom until the second quarter of 2012.

From peak to trough, existing single family home prices declined by 31 percent in the Brunswick MSA, which was steeper than the declines suffered at the state and national levels. Existing home prices are recovering, but as of mid-2016, home prices in the Brunswick MSA were still 16 percent below their peak level--the worst decline reported for any Georgia MSA. Positive expectations for the region's housing market reflect renewed population growth, including an influx of retirees and part-time residents. In terms of new construction, the prospects for homebuilding look good.

■ Columbus ■

This MSA (which encompasses Chattahoochee, Harris, Marion, and Muscogee counties in Georgia and Russell County, Alabama) derives a larger than average share of economic activity from three industries: financial activities, government, and leisure and hospitality. The Columbus MSA's regional economy is extremely dependent on financial activities, which, given improving conditions is a good sign for 2017.

On an annual average basis, nonagricultural employment as reported by the Bureau of Labor Statistics will increase by 0.8 percent in 2017, or by about 1,000 jobs. Those employment statistics do not include fluctuations in the number of soldiers at Fort Benning, however. As a part of the U.S. Department of Defense's plans to reduce the Army by 40,000 soldiers by September 30, 2017, the military plans to cut about 2,800 jobs—and an undisclosed number of civilian jobs—at Fort Benning. In federal fiscal year 2017, the training load at Fort Benning also is expected to decline slightly.

The area's economy is very dependent on government spending – mainly due to the presence of Fort Benning. The restructuring of the federal government sector therefore constitutes a major headwind for the Columbus MSA. Federal fiscal austerity significantly diminishes the near term prospects for regional economic growth and also makes the overall business environment riskier.

In 2016, Anthem announced an expansion of its existing customer care center in Columbus that will create 450 new jobs by the end of 2017. Convergys will locate a customer call center in the building that was vacated by Road America, creating 450 jobs. After taking into account the 200 jobs Road America moved to Florida, the net gain at the call center will be 250 jobs. In 2016, Char-Broil began construction on its new global headquarters in Columbus, which will house 145 employees. Pratt & Whitney announced that it will invest $65 million to enable the Columbus Engine Center to perform maintenance on Pratt & Whitney's turbofan engines. Eastman Kodak announced that it would expand and develop cutting-edge printing plates at its factory, which will employ 240 workers.

Courtesy of a long list of attractions as well as Fort Benning, the regional economy gets a relatively large annual economic boost from the hospitality and leisure industry. This industry's concentration is not expected to vary too much over time. Expectations for the hospitality industry are positive.

The home price decline was not too tough on Columbus, but the home price recovery has been weak. As of mid-2016, single-family home prices in the Columbus MSA were still 13 percent below their peak level. Lackluster short-term expectations reflect announced cuts at Fort Benning, which will prompt a population decline over the next several years as defense spending winds down. Single-family homebuilding will remain in recession through 2017.

■ Macon ■

On an annual average basis, Macon's total employment will rise by 1.8 percent in 2017, or by 1,900 jobs. First Quality Packaging Solutions, which makes innovative plastic packaging, will create 115 new jobs when it brings its new manufacturing facility here. Kumho Tire opened its first North American manufacturing plant in Macon, employing about 450 people. Guard Buildings LLC will open a modular shelter manufacturing facility, which initially will create 25 jobs. Also, GEICO recently expanded its operations in Macon.

Macon's economy will benefit from its focus on transportation and logistics, financial activities, higher education, healthcare, and professional and business services. The MSA (which includes Bibb, Crawford, Jones, Monroe, and Twiggs counties) is not overly exposed to the restructuring of the government sector; and is not overly dependent on manufacturing.

Macon's role as a regional retail trade center will expand in 2017. Its central location makes the area a good place to host statewide meetings or conventions, but the region has yet to fully develop this advantage. Nonetheless, the hospitality industry will be a positive force for growth. One potential long-term problem for Macon is that the number of young adults and middle-aged adults is declining.

Located strategically at the intersection of I-75 and I-16, Macon has two railroad lines and a good airport that is used by local residents as well as others from throughout South Georgia. The MSA also is a remote bedroom community for the southern portion of the Atlanta MSA, so Atlanta's relatively strong economic recovery will benefit Macon, too. As Atlanta becomes more congested, sites in Macon will become very attractive to both private businesses and state government operations. The city's expansive historic district, places of special interest and revitalization efforts have turned Macon into an even more attractive hub for business.

Home prices have been very slow to recover, however. As of mid-2016, home prices were still 11 percent below their peak level. But outlook for homebuilders is positive for 2017.

■ Savannah ■

In 2017, Savannah's employment will rise by 3.5 percent, or 6,300 jobs—similar to the gains realized in the past three years. The area's multifaceted personality: that of a major tourist destination, an aerospace manufacturing center, an extraordinarily successful deep water port, and a regional hub for health and educational services underpins Savannah's continuing success.

In 2016, Dorel Home Furnishings announced that it would establish its East Coast distribution center in Bryan County, creating 100 jobs. Convergys announced its new call center in Savannah that will create up to 450 jobs. In 2018, Floor and Décor will open a 1.4 million square foot distribution center; and Bram, an Israeli-based company, will open its first U.S. manufacturing and distribution facility in Savannah, creating 60 jobs.

In the past two years, Bryan County landed several economic development projects that will continue to support economic growth, including Caesarstone's expansion, West Penn Testing Group's decision to locate in the Interstate Centre industrial park, and Daniel Defense's expansion. Savannah also will benefit from the expansion of the film industry.

Savannah's growth prospects are among the best in the nation. Savannah's unique ambiance and transportation infrastructure make it both an attractive place to live and work. Visitors are drawn to the thriving historic district, and waterfront developments. Hotel development has been and will continue to be very strong in 2017. Retirees will continue to be an important forces powering and diversifying the region's economic development, but the Savannah area will benefit from the fact that its population is increasing for all age groups. Gulfstream Aerospace also is a very powerful driver of the metro area's economy, providing thousands of high-quality jobs.

Thanks to its ports in Savannah and Brunswick, Georgia is the nation's seventh largest importing state and eleventh largest exporting state. Port operations support manufacturing and foster growth of Savannah's logistic, distribution, and warehousing industries. In the Savannah MSA alone, the port supports almost 36,000 jobs.

Tourism and convention business will continue to be one of the fastest growing sectors of Savannah's economy, reflecting substantial investments in the area's infrastructure, including a large number of new hotels as well as the Savannah International Trade and Convention Center on Hutchinson Island.

The housing bust was severe, but the area's housing recovery is strong. As of mid-2016, single-family home prices in the Savannah MSA were only 6 percent below their peak level. The outlook for homebuilders is positive for 2017.

■ Valdosta ■

In 2017, Valdosta's employment will increase by 1.6 percent, or 900 jobs. Moody Air Force Base, Valdosta State University, natural resources, and leisure and hospitality are economic pillars. Valdosta is not overly depending on either manufacturing or construction, but is extremely dependent on government. Due to its economic structure, Valdosta's economy is less cyclical than either the state or national economy.

Continued growth in consumer spending will ensure that Valdosta benefits from its traditional role as a retail hub for extreme Southwest Georgia. But, like traditional retailers everywhere, Valdosta's retailers will face more competition from e-commerce, which will limit the push to retail job growth from increases in consumers' spending.

Because Valdosta is a small MSA (comprised of Brooks, Echols, Lanier, and Lowndes counties), the actions for the better or worse by one major company can determine the area's actual economic performance, which makes the overall business environment riskier. There have not been any major economic development projects announced in recent years, but in late 2015, Nature Nate's announced an expansion of its honey processing operations in Valdosta, creating up to 15 jobs over the next three years.

Valdosta will continue to benefit from its location on I-75 as a convenient place for tourists bound for Orlando or Tampa to stay overnight. The 2017 outlook for hospitality and tourism is excellent, which bodes well for Valdosta's economy. Rising markets for most goods implies that the outlook for the area's distribution industry is positive.

Government earnings account for 36 percent of the Valdosta MSA's nonfarm earnings, which is more than double the 17 percent share reported for both the state and the nation. That's partially due to the presence of Moody Air Force Base, which is Valdosta's largest employer.

The restructuring of the government sector therefore is a potential headwind. The Air Force has talked about retiring the A-10 plane, which is based at Moody, but a recent GAO report suggests that the Air Force has yet to find a cost effective substitute for the various types of missions performed by the A-10. Nonetheless, the potential retirement of the A-10 must be acknowledged as a serious, potential, threat to the local economy.

In addition to a high dependence on federal military spending, Valdosta is extremely dependent on state and local government spending. Government earnings account for 22 percent of the area's nonfarm earnings, compared to only 11 percent for the state and 13 percent for the nation. Fiscal austerity, at any level of government, will be tough on Valdosta. Meanwhile, Valdosta State University raises the area's educational attainment, and as it does, the MSA should see more growth of its relatively undeveloped technology and high-value added services industries.

In the Valdosta MSA, home prices have been very slow to recover, and as of mid-2016, were still 11 percent below their peak level. In terms of new construction, the outlook for homebuilders is good, but not exuberant. ❖

GEORGIA'S BASELINE EMPLOYMENT FORECAST, 2016-2017

Georgia	2012	2013	2014	2015	2016	2017
Nonfarm Employment[1]	3,,954.0	4,032.7	4,145.2	4,267.3	4,383.1	4,477.0
Total Private	3,268.3	3,351.1	3,467.1	3,588.2	3,698.4	3,788.3
Goods Producing	504.5	512.1	533.3	554.9	574.4	591.0
Mining and Logging	8.6	8.9	9.0	9.1	8.9	8.9
Construction	141.5	145.9	156.8	166.5	177.8	188.7
Manufacturing	354.4	357.3	367.6	379.3	387.6	393.5
Services Providing	3,449.5	3,520.6	3,611.9	3,712.5	3,808.7	3,886.0
Trade, Trans., Utilities	838.1	850.4	877.4	905.4	930.8	947.5
Information	96.4	98.7	104.1	106.1	104.4	104.9
Financial Activities	226.6	229.0	231.3	235.3	239.5	242.9
Professional and Business Services	560.5	586.4	616.2	641.5	671.0	698.5
Education and Health Services	495.3	510.0	523.1	539.4	549.6	559.0
Leisure and Hospitality	393.8	411.4	428.1	449.4	470.1	483.7
Other Services	153.1	153.2	153.6	156.3	158.6	160.7
Government	685.8	681.6	678.2	679.2	684.6	688.7
Percent Change						
Nonfarm Employment	1.4	2.0	2.8	2.9	2.7	2.1
Total Private	1.7	2.5	3.5	3.5	3.1	2.4
Goods Producing	-0.2	1.5	4.1	4.1	3.5	2.9
Mining and Logging	-4.4	3.5	1.1	1.1	-2.2	0.0
Construction	-3.0	3.1	7.5	6.2	6.8	6.1
Manufacturing	1.1	0.8	2.9	3.2	2.2	1.5
Services Providing	1.6	2.1	2.6	2.8	2.6	2.0
Trade, Trans., Utilities	1.4	1.5	3.2	3.2	2.8	1.8
Information	2.0	2.4	5.5	1.9	-1.6	0.5
Financial Activities	1.5	1.1	1.0	1.7	1.8	1.4
Professional and Business Services	3.1	4.6	5.1	4.1	4.6	4.1
Education and Health Services	2.2	3.0	2.6	3.1	1.9	1.7
Leisure and Hospitality	3.2	4.5	4.1	5.0	4.6	2.9
Other Services	-0.3	0.1	0.3	1.8	1.5	1.3
Government	-0.2	-0.6	-0.5	0.1	0.8	0.6

[1]Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2016.

BASELINE EMPLOYMENT FORECAST FOR GEORGIA'S METROPOLITAN AREAS, 2016-2017

Metro Area	2012	2013	2014	2015	2016	2017
Nonfarm Employment[1]	3,954.0	4,032.7	4,145.2	4,267.3	4,383.1	4,477.0
Albany	61.0	61.0	61.1	61.2	62.6	63.5
Athens	87.2	88.2	89.1	91.2	95.0	97.4
Atlanta	2,353.6	2,413.5	2,502.5	2,584.9	2,654.7	2,710.4
Augusta	217.5	219.7	223.6	227.9	231.1	235.3
Brunswick	40.6	40.8	40.8	42.0	43.4	44.7
Columbus	120.4	121.5	121.9	121.6	122.1	123.1
Dalton	63.6	63.6	66.1	67.7	68.7	70.2
Gainesville	75.0	77.3	79.8	83.8	87.2	90.2
Hinesville-Ft. Stewart	20.0	19.6	19.6	19.7	19.7	19.9
Macon	98.1	98.5	100.7	102.1	104.3	106.2
Rome	38.6	38.8	39.7	40.1	40.7	41.3
Savannah	155.9	159.9	165.1	171.6	178.6	184.9
Valdosta	53.5	53.5	54.2	55.2	56.2	57.1
Warner Robins	71.2	70.6	70.2	70.4	71.2	72.0
Percent Change						
Albany	-0.0	0.0	0.2	0.2	2.3	1.5
Athens	1.4	1.1	1.0	2.4	4.2	2.5
Atlanta	1.8	2.5	3.7	3.3	2.7	2.1
Augusta	0.3	1.0	1.8	1.9	1.4	1.8
Brunswick	1.5	0.5	0.0	2.9	3.4	3.0
Columbus	0.8	0.9	0.3	-0.2	0.4	0.8
Dalton	-3.2	0.0	3.9	2.4	1.5	2.1
Gainesville	2.6	3.1	3.2	5.0	4.1	3.4
Hinesville-Ft. Stewart	-1.0	-2.0	0.0	0.5	0.0	1.0
Macon	1.2	0.4	2.2	1.4	2.2	1.8
Rome	0.8	0.5	2.3	1.0	1.5	1.5
Savannah	2.3	2.6	3.3	3.9	4.1	3.5
Valdosta	1.5	0.0	1.3	1.8	1.8	1.6
Warner Robins	0.0	-0.8	-0.6	0.3	1.1	1.1

[1]Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2016.

Mortgage rates will not stop the housing recovery.

Georgia's housing market conditions will continue to improve in 201, with increases in demand due primarily to the improving labor market. The forecasted above-average job growth will give more Georgians the confidence and the wherewithal to buy homes, ensuring that the current upturn in housing markets is sustained. Mortgage rates will be higher than in 2012-2016, but will remain very low from an historical perspective. Couple this with still affordable mortgage rates and growth in demand for housing should be enough to sustain recovery in homebuilding as well as renovation and repair activity. First-time homebuyers are expected to account for a slightly larger proportion of home sales, reversing the prolonged slump in market share accounted for by first-time homebuyers.

Housing sales will not be too robust, however, because supplies of new homes will still be constrained by years of underbuilding. There's a scarcity of listings of existing homes, too, partly because 8.9 percent of Georgia's homeowners with mortgages are underwater on their mortgages and therefore unlikely to put their homes on the market at current prices. An additional 2.7 percent of homeowners are in near negative equity. In addition, many homeowners with substantial equity are still not willing to accept today's market prices.

In 2017, home price appreciation will exceed both its long-term trend rate of growth and the rate of overall consumer price inflation, but it will be lower than it was in 2016. Lean inventories will discourage some people from listing their homes because they fear that it will be difficult to find a new one.

Although home prices and mortgage rates will rise, single-family homes will remain very affordable. Plus, rents will rise much faster than either home prices or inflation, which will lure people to buy a home rather than rent.

Despite rising rents and good affordability, many people will continue to delay purchasing a home due to their lack of confidence in the economic situation, a desire for labor market mobility, doubts regarding the future direction of home prices, tight and/or damaged credit, high levels of student loan debt, and negative—or near negative—equity in their current homes. Moreover, many homeowners have locked in extraordinary low mortgage rates that they may be reluctant to give up.

Home Prices

Our forecast expects the upturn in home prices to continue, but prices will appreciate more slowly in 2017 than in previous years. On average, Georgia's existing home prices have fully recovered. With prices gradually reaching levels high enough to prompt more homeowners to put their homes on the market, there's considerable pent up demand to sell, but too many homes are not getting listed because prices are still below many homeowners' reservation price. Nonetheless, listings of existing homes will lengthen as home prices continue to rise, which will moderate further price gains.

Of course, many homeowners who would like to sell and have significant equity in their homes recognize that they may not qualify for a new mortgage under today's more strict lending guidelines. They will stay put, perhaps for quite some time.

Sector Summary

Direction: large increase
Performance: above average

Home price appreciation will continue as Georgia's job growth becomes much more entrenched, mortgage defaults abate, credit is more widely available, and appraised values more accurately reflect actual market values. One concern, however, is that an unusually large percentage of recent home sales in the Atlanta market were cash sales, suggesting that investors have played an outsized role in the recovery of the housing market. Bargains and growing demand for rental homes attracted investors whose interest in the housing market has been a positive factor, but sustaining Georgia's single-family housing recovery requires trade-up buyers and first-time home buyers to become even more active. Fundamentals such as job growth, income growth, and household formation therefore will be the primary drivers of housing activity in 2017.

In 2017, distressed sales will not be a problem. According to Core Logic, the number of foreclosures has dropped very sharply in Georgia with foreclosure inventory accounting for only 0.6 percent of the housing stock in mid-2016, which was below the national average of 1.1 percent. At this point, serious delinquencies only account for 3 percent of Georgia's housing stock, which is about the same as estimated for the country as a whole. One reason why the number of distressed properties diminished more rapidly here than in many other states is that Georgia is a non-judicial foreclosure state, which allows for faster resolution. A second factor is that investors were keen to purchase distressed properties in the Atlanta MSA.

Demographic Forces

Demographic trends constitute a powerful set of demand-side drivers that are providing increasing stimulus to Georgia's housing industry. In 2017, we expect the state's total population to grow at a pace that exceeds the national average —1.5 percent for Georgia versus 0.8 percent for the U.S.

Slightly more jobs and slightly bigger paychecks will raise the rate of household formation, which fell very sharply during the recession. Household formation is the most important demographic driver of housing demand. The long, severe recession and the jobless recovery forced many people to delay moving out on their own, caused others to move in with family or friends, reduced domestic migration, and caused fewer foreign immigrants to move to Georgia. Another factor is that stricter enforcement of U.S. immigration laws also decreased the number illegal aliens living in the state.

Sustaining growth of Georgia's housing markets implies healthy levels of net domestic migration, which will rise to about 33,000 persons in 2017. The slowdown in foreign immigration was also dramatic: international net migration will be about 25,000 in the coming year.

Georgia is well positioned to attract retirees in much greater numbers, however. Housing markets in areas of the state that appeal to them will be the primary beneficiary of this particular demographic trend.

Good potential for retiree migration is partly a reflection of the basic fact that baby boomers are reaching retirement age in huge numbers. In 2017, Georgia's population of persons 65 and older will increase almost three times faster than Georgia's total population. Because many retirees choose to live in Georgia's mountains or on the coast, these areas have seen high demand for retirement homes. Georgia's military bases help the state attract retired military personnel, too. Older Georgians will continue to be a mainstay in the housing market. A large proportion of the elderly own their homes, and have built up substantial equity and have relatively stable sources of income, making this part of the market less sensitive to extreme fluctuations in economic conditions, mortgage rates, and lending standards. Although older homeowners now absorb only a small percentage of the market, the fact that they are living longer and have more financial resources certainly will create a major impact.

Negative Forces

Although mortgage rates will still be a tremendous bargain from an historical perspective, they will rise above their recent historic lows. The expectation is that the Federal Reserve will raise rates very gradually. If so, the move will not be large enough to stop – or reverse – Georgia's housing recovery, but it will be a headwind.

The combination of the mortgage industry's stricter lending standards, more pervasive federal regulations, and still difficult appraisals will limit the housing sector's recovery in 2017. Many people will have to wait a little longer to accumulate a larger down payment—difficult to do when rents are skyrocketing— or settle for a less expensive home. Dodd-Frank will not restrict loans to high-credit households, but it does make the process of getting the loan more difficult; and first-time homebuyers may be even more discouraged.

High levels of student loan debt will continue to restrict lending, especially to millennials. The combination of high student loan debt and rapidly rising rents will keep many millennials from making the transition from renter to homeowner, slowing the housing recovery.

As discussed previously, the decline in home prices is largely responsible for almost one out of every eleven Georgians with mortgages still owing more on their homes than their homes are worth. When you add in those who are in near negative equity, more than one out of nine of the potential buyers are stuck in their homes. This lack of mobility will limit the vigor of the housing recovery for many years. Especially worrisome is that much of the negative equity is concentrated in the low priced, or starter home segment of the market. That's a problem because it restricts the supply of homes available to first-time homebuyers, and it also prevents owners of starter home from trading up to middle-tier or upper tier homes.

A developing shortage of skilled construction trades people is another factor that's beginning to slow the housing recovery. Because the housing recession was very deep and very long, many experienced tradespeople went into different occupations. Also, stricter enforcement of immigration laws reduced the supply of construction labor, especially in states like Georgia with large populations of recent immigrants. The net effect will be to limit growth in new home construction and to compress builders' margins. Another factor that's beginning to slow new home construction is a shortage of developed lots. Money has simply not been available to develop new single-family home sites. Also, small builders are still finding access to capital to be limited. Fortunately, financing for lot development and small builders should be more available in 2017 than in recent years.

Renovation and Repairs

Spending on home renovations and repairs appears to be closely tracking overall activity in both the nation's and Georgia's housing market. Although remodelers benefit from rising home prices—due to increases in home equity—remodelers should remain cautious. In many neighborhoods, home prices are far from having recovered, which will limit cash-back refinancing of home mortgages. Historically, cash-back refinancing has been a major source of funds for home improvement projects. Also, low appraisals will limit the availability of financing for large projects such as room additions or whole house remodeling.

Employment growth will give people both the confidence and the means to spend more on home improvement projects, however. In Georgia, remodeling firms can count on retirees to spend more on aging-in place remodeling projects, reflecting baby boomers' planning for the future, living with older parents, the onset of age-related disabilities, and retirees' inability to sell their current homes on acceptable terms. According to the AARP, 89 percent of persons 50 or older would like to remain in their homes for the foreseeable future.

Nonresidential Construction

The upturn in nonresidential construction will gather momentum in 2017. Credit conditions will continue to loosen for those looking to build, but will remain a headwind for markets with high vacancy rates. Nonetheless, Georgia's above-average employment and population growth as well as many announced corporate relocations and expansions will generate gains in net occupancy. Office vacancy rates remain somewhat elevated, but should improve due to limited deliveries of new space and less sublease space coming onto the market. Tenants will not have the upper hand in lease negotiations to the extent that they did before, however.

In many local areas, spending for public-funded buildings will increase, reversing the downtrend of recent years. Local governments' property tax bases gradually are becoming more supportive of revenue collections and in turn public construction. Also, in some areas, heady population growth will provide an easy justification for higher construction outlays by local governments, and this is especially true for school construction.

Overall spending for new office construction will increase in 2017, even though one out of every six offices in the Atlanta metropolitan area is vacant. In downtown Atlanta, nearly one of four offices is vacant. Given investors' aversion to risk, the high vacancy rate will be a barrier to new development in 2017.

Georgia's above-average job growth will continue, which will lead to an increase in net office occupancy in 2017. Overall rents for office space are likely to rise, but the gains will be stronger for prime space in high-demand markets. Net absorption of vacant office space will occur. The strong U.S. dollar means that foreign investors will be less keen to invest in American real estate, but some definitely will focus on international gateway markets like Atlanta that have relatively good prospects and vigorous links to global supply chains. These trends imply that the current down cycle in the nonresidential real estate is over, but that the up cycle is not too vigorous.

High vacancy rates are the main reason to be circumspect regarding the immediate outlook for new office development. Real estate investors will be very discriminating in their risk taking, which does not favor new speculative office development projects, especially in markets saddled with high vacancy rates. Pre-leasing will become essential in obtaining financing for new projects. More positively, office rents in Atlanta are a bargain and will remain so. While that's a big problem for the owners of office buildings, it represents a good opportunity for the state to aggressively recruit new businesses to Atlanta.

Because the warehousing, distribution, and manufacturing have been outperforming the overall economy, the situation in Georgia's industrial property market is much better than that of the office market. Demand for new industrial space will rise in 2017; and in turn, rents will rise significantly. Georgia has landed a number of large economic development projects that will require large amounts of build-to-suit space. Plus, speculative construction is back and will increase in 2017.

The industrial properties with the best prospects are in warehouse and distribution facilities that are positioned to take advantage of Georgia's growing role as a major distribution and logistics center. The superb performance of Georgia's ports eventually will ensure healthy demand for warehouse and distribution space in Savannah, Macon, and Atlanta, and other areas with high port dependence. Due to high (but declining) vacancy rates and the ongoing restructuring of retailing that favors e-commerce over physical retail, there will be some construction of new retail space in 2017. Spending for the renovation of existing retail space will rise more significantly, however, thanks to a variety of specialized small-format grocery stores.

Spending to expand online distribution channels and supply chains rather than spending on bricks-and-mortar retail stores will be a top priority for many electronic- and multi-channel retailers. Indeed, adding supply chain capacity with the ultimate goal of providing next-day—or same-day—delivery will be a major focus in 2017. The upshot of these considerations is that outlays for new retail stores or new shopping centers will increase only marginally, remaining at or near cyclical lows. Even in areas of the state that experienced substantial population growth, there is very little immediate need for substantial new retail development. ❖

In the coming year, industrial production will increase more slowly than GDP.

Higher production of lumber and wood products will be mainly due to the cyclical recovery of the nation's housing markets. The overall increase in demand for lumber and wood products will be large, growing faster than either U.S. or state GDP. In contrast, demand for pallets and crates will closely track the growth of overall economic activity, with usage for domestic shipments growing faster than use for international trade related shipments. More activity in private nonresidential construction will also add to demand, too.

In 2017, international developments will provide only limited support to this industry because timberland producers in western states rather than eastern states will be the primary beneficiaries of expanded exports to Asia. Also, Chinese demand is expected to soften due to overbuilding. Nonetheless, the global economy will grow slightly faster in 2017 than it did in 2016, which implies higher overall international demand for lumber and wood products. Global demand for US lumber and wood products will not grow too quickly in 2017, however. Restraints on demand growth include weak economic growth in the European Union, slower economic growth – and overbuilding – in China, increased supplies of Russian wood, and the high value of the dollar with respect to our major currency trading partners.

Georgia's lumber and wood products industry stands to gain from the mountain pine beetle epidemic that is plaguing Canada and threatens forests in the U.S. intermountain west. This negative supply shock will play out over the next decade and will tend to keep lumber and wood product prices higher than might otherwise be the case. As the allowable cut in Canada shrinks, capacity additions initially are most likely to take place along the West Coast, but eventually capacity additions will occur in Georgia and other southeastern states.

Georgia's forestry industry does face some long-term challenges. First, forest and paper companies' recent divestiture of large tracts of Georgia's timberland diminishes the industry's prospects for growth. Second, the lumber and wood products industry ultimately will face steeper competition from foreign producers in Latin America and China.

Paper and Pulp

In 2017, support for paper and pulp prices will come primarily from the expansion of GDP, but pulp and paper production will decline. Producers' profit margins also will decline. The best prospects are for producers of converted paper products such as paperboard containers, but limiting factors include outsourcing and more import competition. The worst prospects are for producers of newsprint.

The supply of wood chips and wood fiber waste from the production of lumber for the construction industry will increase, reflecting recovery of the nation's housing industry. That extra supply will restrain increases in pulp prices. The closing of many less efficient paper mills in the Southeast will restrain growth in the regional demand for market pulp, while helping to support paper prices.

The long-term trend is unfavorable for this industry. Due to demand growth, the prospects are better for coated papers than they are for newsprint and uncoated paper.

Sector Summary

Direction: modest increase
Performance: below average

But limited growth in employment in professional and other office-based occupations will add very little to demand growth for office paper. Also, competition from plastics for packaging and greater use of electronic media will hurt prices for paper.

Furniture

Furniture sales to households are poised to grow faster than GDP in 2017. Higher turnover of existing homes, more new home sales, more home renovations, and home price appreciation are noteworthy positives for demand for furniture. Household mobility and household formation also will begin to recover from their recessionary lows; but an abundant supply of good used furniture will temper the industry's recovery. The outlook is less encouraging for sales of commercial and institutional furniture because businesses' spending for furniture will increase slowly.

With overall demand recovering, the perennial problem is that competition from overseas manufacturers continues to dampen furniture prices. Imports—especially inexpensive ready-to-assemble furniture—will take market share from domestic furniture manufacturers.

Equipment

Due to an improved outlook for sales, businesses' spending for capital equipment will be one of the forces that will contribute more to state and national GDP growth in 2017 than in 2016. Higher spending for manufacturing equipment reflects replacement needs as well as growth of markets for final products. In 2017, the main negative force will be the strength of the dollar, which not only makes capital equipment more expensive in foreign markets, but also discourages U.S. companies that export from spending aggressively for capital equipment.

Equipment producers will benefit from cyclical increases in demand. Also, capacity utilization in manufacturing as a whole will move closer to levels consistent with higher demand for industrial equipment and machine tools. Demand will increase because spending had been cut to levels that are too low to maintain, much less expand, the capital stock. Although tight credit could potentially limit some businesses' ability to buy more manufacturing equipment, many companies will have the means to do so.

Low short- and long-term interest rates bode well for manufacturing equipment sales. Continued easing of credit conditions will enhance the positive impact of low borrowing costs on demand for manufacturing equipment. The high value of the dollar will be a headwind for equipment exports, however.

Cars

Nationally, the forecast calls for unit sales of both new and used cars as well as SUVs and light trucks to consumers to rise. Automakers' bottom lines therefore will continue to improve. Larger gains in households' disposable personal income, more jobs, more confidence, better credit conditions, better fuel efficiency, low gas prices, and the aging vehicle fleet will be powerful drivers of automobile sales in 2017. The average light vehicle is 11.5 years old, which is an all-time record. The aging vehicle fleet partially reflects improved durability, but also suggests that there is still considerable pent up demand for new cars. Still, the strong dollar will be a countervailing force that encourages consumers to purchase imported cars even as it reduces sales of American cars in foreign markets.

Increased auto sales will help manufacturers of replacement parts for all the older cars still on the road. Auto parts and tire manufacturers also will benefit from an expected increase in the number of miles driven.

Manufacturers will focus on developing and selling fuel-efficient models in order to meet regulatory requirements. Recent volatility in fuel prices will ensure that consumers embrace smaller, lighter, more fuel-efficient cars, SUVs, and light trucks. Rising transportation costs and political pressures will encourage foreign manufacturers to invest more in U.S. production facilities and to buy automotive parts from American manufacturers. More foreign companies now have assembly plants in neighboring states in the Southeast, fostering growth of auto parts manufacturers in Georgia.

Aerospace

Although the short-term prospects for the aerospace industry are good, the high – and rising – debt-to-GDP ratios in the U.S. and many developed economies are headwinds for aerospace manufacturers. Sovereign debt problems in developed economies make both the medium- and long-term expectations for producers of aerospace products far less sanguine that they appeared to be a few years ago. Projected budget deficits may force the U.S. government to significantly scale back, or scrap, many major DOD weapons projects. Meanwhile, manufacturers will continue to work their way through the backlog of government orders that remains on their books. In the longer term, both China and Russia will focus on developing domestic aerospace manufacturing industries, which increasingly will compete with U.S. manufacturers.

On the positive side, manufacturers of civilian aircraft stand to gain from airlines' pressing need to update their fleets with more fuel efficient, quieter, and more productive aircraft. Indeed, replacement of existing aircraft to enhance productivity and lower costs rather than growth in the number of aircraft in operation will become the main driver of the industry's sales in developed economies. The early retirement of less fuel-efficient aircraft will reduce the life cycle of planes currently in use, which has negative implications for manufacturers that also provide maintenance and repair services. A second powerful tailwind for U.S. manufacturers of civilian aircraft will be the rapid growth in air travel throughout Asia, India, and the Middle East, but new competitors in Russia and China will carve out huge slices of these rapidly growing markets. Despite these new competitors, sales of U.S.-built aircraft to emerging nations will grow very strongly.

Before the recession, the demand for private aircraft had been very high, reflecting the value of executive time, increased flexibility, security advantages, the increasing need for corporate travel to airports not served by the big carriers, and the increased hassles involved in using commercial flights in the wake of 9/11. The 2017 outlook calls for renewed growth in demand for both personal and business aircraft. Even more important, the number of people who are wealthy enough to own, maintain, and operate private planes is on the rise.

Food Products

Accounting for about one fourth of Georgia's manufacturing GSP, food product manufacturing is the state's largest manufacturing industry. The demand for food products will grow at a moderate pace in 2017, and the industry is highly competitive. Consequently, firms will have limited flexibility in pricing and the industry's already thin profit margins probably will not widen. Indeed, agricultural commodity prices could exert additional pressure on food processors' margins. Another problem is that branded foods have lost market share to private labels, which are far less profitable for food processors.

Sales growth will come from population gains and the development of niche products with higher value-added margins. The U.S. population is expanding by 0.8 percent per year, so the industry cannot rely on population increases for dramatic growth. An increased proportion of households' after-tax incomes is going to food purchases, however.

Because of slow growth in food consumption and intense competition, food processors are dividing mass commodity markets into narrow segments. Product innovations are important drivers of sales in this intensely competitive industry. Specialized products recognize consumers' increased health consciousness, greater ethnic diversity, and the growing acceptance of foods from other cultures. Sales of natural and organic foods are likely to grow faster than sales of traditional foods.

Apparel and Textiles

Georgia's apparel manufacturing industry has suffered some major setbacks, and it will continue to contract as open world trade and cheaper foreign labor give a tremendous price advantage to many imported apparel items. Even as domestic demand increases, global competition will ensure that the domestic industry's sales and profit margins remain under severe pressure. Intense competition among retailers also will keep a lid on apparel prices. Apparel prices almost certainly will not keep pace with inflation. The result is that Georgia's apparel manufacturing sector will decline slowly in 2017.

Some apparel manufacturers operating in niches that are suited to automation will survive for a while, but even these companies will find it increasingly difficult to compete as more modern facilities are built in developing countries. Some high-end apparel manufacturers will survive based on their proximity to —or knowledge of —their customers and stellar reputation for quality, but such efforts ultimately will preserve only a very small fraction of Georgia's once plus-sized apparel industry. One positive development is that production of the high-quality niche apparel products generally requires more highly skilled workers, which implies that average wages in this shrinking industry will be increasing rather than decreasing. Another positive development is that profit margins are typically higher on high-quality apparel.

In 2017, Georgia's carpet industry will continue to benefit from increases in housing activity, more home renovations, and appreciating home values. Also, automobile sales will continue to rise. Nonresidential usage also will increase, reflecting both renovation activity and new construction. Productivity gains and innovation in terms of product development also will help Georgia's textile and carpet manufacturers survive. Nonetheless, as the plants become much less labor intensive, total employment in this industry will not grow nearly as fast as total sales.

Due to the cyclical factors already cited and the repeal of the state's sales tax on energy used in manufacturing, Calhoun-based Engineered Floors announced that it would invest over $450 million in two plants in Northwest Georgia, creating about 2,400 direct jobs. The new plants will use leading edge technologies, which will help to keep Georgia's carpet industry competitive. In addition, Shaw Industries also announced plans to build a new plant that will produce modular carpet tiles, creating about 500 jobs. Mohawk Industries announced the conversion of two of its existing plants (adding about 420 new jobs), and the expansion of its vinyl floor operations, which will add 200 jobs.

The long-term outlook for Georgia's carpet manufacturing is better than that for the apparel sector, but the industry's prospects are by no means sanguine. Competition from wood, tile, and laminate floor products will intensify, and this especially true for sales to institutional customers.

Pharmaceuticals

Favorable demographics and cost effectiveness enhance prospects for pharmaceutical and medical supply firms. Sales will expand relatively rapidly, but profit margins probably will narrow because sales of generic drugs will grow faster than sales of name brands. Pressures from the federal government and other large buyers to hold down prices also will intensify.

In 2017, domestic demand is expected to grow steadily. In addition, the industry continues to benefit from its new focus on marketing its products directly to the consumer. A number of new niche drugs—albeit fewer obvious blockbusters—in the development pipeline, better research and development techniques, faster FDA approval of new drugs, and the 1994 GATT agreement, which effectively extended the patent life of many drugs, favor the industry's long run prospects.

The industry will benefit from the aging of the population and the rising incidences of chronic diseases.

Globally, the population will age fastest in the more developed countries, where people are more able to afford to purchase high-priced prescription drugs. Additional funding for Medicare and Medicaid also will support higher sales of both generic and brand name pharmaceuticals. Nonetheless, the opportunity to sell generic equivalents of major drugs to consumers in emerging nations is enormous, but the competition will be intense. ❖

Transportation

This sector will grow faster than Georgia's overall economy.

More spending by consumers, increases in industrial production, the successful recruitment of manufacturers, Georgia's expanding role as a logistics and distribution center, and larger shipments via Georgia's ports mean that total statewide cargo volumes will outpace state and U.S. GDP growth in 2017. Industrial production's expansion will gain impetus from the continuing recovery of construction, which is one of the most transportation-intensive sectors of the economy. Georgia's manufacturing activity will upshift, providing yet another tailwind to transportation. The relocation and expansion of manufacturers contributes to the good outlook for industrial production and, in turn, freight. Within manufacturing, the drivers will include lumber and wood products, furniture, food, chemicals, construction materials, electronics, and household appliances.

After shrinking in 2016, carriers' profit margins will widen slightly, but will still be low relative to other industries – the result of intense competition within and between the transportation industry's subsectors. Low oil and fuel prices will continue to support providers of transportation services, but oil prices are expected to rise in 2017. Fuel surcharges should help to mitigate any oil/fuel price shock, however.

Although the freight recession is over, economic growth will not be exuberant. Simmering problems in the European Union, modest growth in many emerging markets, and an appreciated U.S. dollar (against major currencies) suggest that the foreign sector is not strong enough to support strong gains in American exports. Traffic growth therefore will have to come from within the U.S. or from imports. Bigger shipments of many durable goods, such as capital equipment, appliances, furniture, cars, and building materials are expected to drive demand for transportation. Shipments of most nondurable goods also will increase. Meanwhile, shipments of coal, textiles, paper, printed materials, tobacco, and agricultural equipment will decline. Rate competition will be slightly less intense, reflecting higher freight volumes as well as the lagged impacts of capacity reductions that occurred during the recession.

Truckers

Growth in truck freight coupled with a drivers shortage means tighter capacity, which implies slightly less intense competition for loads within in the trucking industry itself. But internal competition will still be very strong. Low fuel prices will help long-haul truckers compete with the railroads, which are much more fuel efficient than trucks. Short-haul truckers are not overly impacted by competition from the railroads, however. In general, trucking firms will be able to raise rates sufficiently to more than offset higher costs, and their pricing power should be strong enough to widen net margins slightly. Fuel surcharges will help guard against oil price volatility, but will not make truckers whole if oil prices surge – an unlikely prospect in 2017.

Trucking firms will continue to benefit from businesses' increased outsourcing of their transportation and logistics needs because complex supply chains will force a shift to just-in-time inventory systems and global supply networks. The increased proportion of inputs and products from overseas will focus the trucking industry's growth on port cities, especially those with large port-focused distribution centers,

Sector Summary

Direction: moderate increase
Performance: average

such as Savannah. The approval of the Savannah Harbor deepening project will ensure that the economic benefits to truckers operating in Georgia continue to expand.

Capacity reductions stemming from recent bankruptcies and volatile fuel prices—which squeezed truckers' profit margins—will help to shore up truckers' net margins, but this favorable development will be partially offset by the ongoing consolidation of retailing. Also, looser credit implies that more carriers will be able to add new trucks, but the driver shortage will limit fleet expansion. New emissions requirements will help to spur new truck purchases. Barriers to entry are quite low, which will prevent truckers' net margins from widening too much.

Demographics (the average age of truck drivers is over 55) and positive cyclical forces resulted in a shortage of drivers, so pressures to raise trucker's wages and benefits will increase. The industry may have to adjust to the reinstatement of new federal government's regulations that restricted the number of hours drivers can drive. Additional restrictions on driving hours will further reduce both the industry's competitiveness and its profitability.

Meanwhile, several factors will push trucking companies to get bigger. First, more outsourcing of products from overseas favors carriers that can manage distribution both domestically and globally. Second, large retailers often prefer to deal with select trucking firms that offer the broadest range of services. Third, large trucking companies can achieve economies of scale in distribution, especially when it comes to managing global supply chains. Fourth, in the wake of 9/11, shipping regulations are much more complex. Fifth, larger companies probably will find it easier to hire drivers than will smaller companies. Complex regulations, escalating operating costs, and high fuel prices will cause more private companies to disband their internal fleets in favor of full-service leasing and contracting with trucking firms for dedicated operations.

In the wake of new fuel emissions standards, new equipment costs have risen substantially, but credit will be more available in 2017 than in recent years. The newer trucks are much more fuel efficient, however, so even though the upfront costs are high, substantial long-term savings will prompt more upgrades to newer trucks. Meanwhile, high insurance costs and high deductibles constitute an ongoing problem, especially for firms that transport hazardous materials.

Volatile fuel prices are the biggest wild card in the forecast. Due to political instability in major oil-producing countries, fuel costs could become a factor in 2017, but the more likely scenario is that fuel costs rise moderately from the lows experienced in 2016. Going forward, the increased usage – and more timely imposition – of fuel surcharges will better shield margins from swings in diesel prices, but the long-term trend towards higher fuel prices does not bode well for the trucking industry's profitability because it undermines long-haul truckers' ability to compete with the railroads.

Railroads

Georgia's rail network is the largest in the Southeast, and most rail service is provided by Norfolk-Southern and CSX. Business conditions for railroads were difficult in 2016, but should improve in 2017. Demand growth will exceed capacity growth, so rates will rise. Growth in rail traffic that exceeds growth in GDP combined with modestly higher rates and recent cost cuts suggest that overall profits will increase. Margins also will benefit from significant improvements in productivity stemming from recent capital investments.

The success of Georgia's ports will be a big plus for Georgia's railroads. East Coast ports that are ready to service the bigger ships should see substantial increases in container traffic, which will benefit railroads and truckers. Georgia's railroads will benefit from this trend as soon as the Savannah harbor is deepened to accommodate the larger vessels that will soon call on East Coast ports.

In 2017, domestic inter-modal shipping of consumer goods, construction materials, and light industrial products will grow, and there also will be increased shipments of industrial and communications equipment. Also, railroads should not have any problem passing fuel costs onto shippers, since rail is an extremely fuel-efficient transportation mode. Railroads will be able to adjust rates sufficiently to increase or to maintain profit margins. Increased highway congestion also favors the railroads.

Although coal shipments to power plants are a major source of revenue, utilities are expected to use more natural gas and less coal in 2017, which poses a strong headwind for the railroads. The second headwind will be the strong dollar, which will limit U.S. exports, but boost imports.

Shipments of consumer goods and agricultural products, processed food, electrical equipment, and machinery will rise moderately. Chemical volume tends to rise in tandem with activity in manufacturing and housing, which should increase more rapidly in 2017 than in 2016. The outlook anticipates that shipments of building materials will continue to be on the upswing: Shipments of materials for use in residential construction and renovation will grow much faster that for use in either public works projects or in private-sector nonresidential construction.

Coal is the rail industry's largest source of shipments and a major contributor to its profits. Restrictions on carbon emissions and low natural gas prices will encourage utilities to become much less dependent on coal to generate electricity. Consequently, coal's contribution to the rail industry's total revenues and profits will diminish as electric utilities switch to generating technologies with smaller carbon footprints. Nonetheless, positive GDP growth may encourage electric utilities to use slightly more coal in 2017.

Airlines

Domestic air passenger travel will rise as more business activity, higher corporate profits, and higher disposable personal income underpin. Higher demand coupled with better control of capacity – in part due to recent mergers – will help improve profit margins. This forecast assumes that fuel costs rise only moderately in 2017. The strong value of the dollar does not bode well for international arrivals, but will encourage Americans to travel abroad. Atlanta will rank as the number one U.S. airport in arriving and departing passengers. In 2017, demand for airfreight will grow slightly faster than GDP.

Despite recent mergers, competition within the airline industry will limit pricing power, holding down ticket prices even when costs rise. Also, airlines trained their customers to be very price sensitive. In 2017, ticket prices are expected to rise slightly faster than costs, which will benefit net margins. Low cost airlines' market share will expand, however.

Airlines' security costs, debt service costs, and federal tax burdens will continue to rise. Fuel costs are expected to rise moderately, as higher oil prices remain a perennial threat to airlines' profitability. Another major problem is that the tax bite is expanding rapidly.

Revenues from special fees will continue to grow much faster than revenues from passenger tickets or air cargo operations. Significant sources of ancillary revenue growth include in-flight entertainment and wireless communications. Meanwhile, airlines will continue to close unprofitable routes, focusing more resources on profitable routes that connect to centralized hubs.

In the short-term, there is not much—beyond hedging—that the industry can do to control fuel costs, but replacing older planes with new more energy efficient aircraft is helping the industry to adjust to volatile fuel costs.

On a more optimistic note, the industry's domestic capacity will remain fairly tight, which suggests that their pricing power in the domestic market will be maintained. Airlines should be able to maintain very high domestic load factors, which, combined with ancillary revenue streams, will increase profitability in 2017.

Ports

Georgia's deep water ports industry will outperform its peers by tapping directly into the growth that is taking place overseas, by diversifying the services that call on Georgia's ports, and by taking market shares from other U.S. ports. The main headwind will be the strong dollar, which will be a problem for export shipments, but will spur imports.

The superb performance of Georgia's ports relative to other economic sectors reflects strong comparative advantages that allow them to expand their share of regional and national waterborne cargo traffic. These comparative advantages are the result of a series of strategic expansions over many years. For example, refrigerated exports of poultry and other foods recently increased substantially, reflecting strategic additions to port infrastructure and major investments by cold storage operators such as Nordic.

The Port of Savannah is the largest container facility in the nation and is the only single container facility on the East Coast with two on-terminal intermodal container transfer facilities. It is the fourth busiest U.S. container port and is the second busiest for the export of American goods by tonnage. Savannah's port handles over 10 percent of U.S. containerized exports; and the Port of Brunswick is the second busiest port in the country for transporting new cars.

Georgia's ports support over 370,000 full- and part-time jobs, which means that about one job out of twelve depends on them in some way. Ports' operations help to preserve Georgia's manufacturing base and foster growth of the state's massive logistics, distribution, warehousing, and agricultural industries. Deepening the Port of Savannah to 47 feet will preserve these port-dependent and port-related jobs.

The expanded Panama Canal means that shippers will move their largest and most economic-impact rich operations to ports that can accommodate super-cargo ships. According to the Panama Canal Authority, the Port of Savannah receives 30 percent of the loaded import containers destined for the East Coast via the Panama Canal. The bottom line is that deepening the harbor is not only essential to growth, but is also essential to retaining shippers who already use Georgia's ports. ❖

Utilities will see their sales grow slightly slower than the expanding economy.

Electricity costs will continue to rise, which will prompt additional rate increases, but despite the slightly higher price for power, usage in residential, commercial, and industrial markets will expand modestly. Georgia's residential rate of 11.5 cents per kilowatt-hour, commercial rate of 9.5 cents per kwh, and industrial rate of 5.2 cents per kwh are all below the national average, respectively. In 2017, commercial electricity use will benefit from rising demand due to more new business startups, more expansion of existing businesses, more relocations, and fewer closures of existing businesses. Electricity use in the industrial markets will also rise due to increases in manufacturing output. Overall electricity use will rise more slowly than output because the manufacturing sector—and, to a lesser extent, the commercial sector—increasingly will generate electricity on site. Improved energy efficiency also will limit gains in commercial and industrial electricity use.

Sales to residential customers will roughly track increases in household formation, but greater use of energy-efficient appliances and more energy efficient building codes suggest that the incremental push to electricity sales per newly formed household will decline. One very favorable and potentially powerful trend that will boost electricity sales and flatten loads in the residential markets will be the increased use of electricity for heating. One driver is an expected population boom in warmer parts of the state, such as Savannah and Brunswick, where heat pumps work extremely well.

As a whole, Georgia's electric utility industry is reasonably well positioned. The state's population growth will continue to grow much faster than that of the nation, providing a solid source of demand growth in both residential and commercial markets. Georgia's electric utility industry's operating costs also are relatively low. Despite these advantages, several concerns are obvious: substantial cost overruns and construction delays at Plant Vogtle's new units, uncertainty regarding deregulation, and creating incentives to invest to ensure the adequacy of the electricity supply and the grid. Also, because the fuel mix in Georgia is tilted towards coal (which accounts for 36 percent of Georgia's net electricity generation), moves by the federal government to limit the nation's carbon emissions are a major problem.

In 2017, it is expected that oil and natural gas prices will move only slightly higher, but energy prices are notoriously volatile. Coal prices should be relatively steady. Utilities will face higher maintenance and insurance costs and over time will spend dramatically more to meet new carbon-emission standards. Long-term interest rates also will rise slightly.

Although demand for power will rise modestly, Georgia's electric utilities are building two new nuclear facilities at Plant Vogtle. Utilities also will have to spend for transmission facilities that connect these large base-load plants to their major markets. Government regulations, industry restructuring, and a renewed emphasis on reliability also will contribute to the need to spend more on transmission. A rising demand for higher quality power also will prompt utilities to invest more resources in transmission and distribution systems. In the meantime, utilities can

Sector Summary

Direction: moderate increase
Performance: average

be expected to put slightly more emphasis on policies designed to encourage more efficient electricity use.

Distributed power generation is emerging as a potential disruptor for traditional electric utilities. Commercial and industrial users convert natural gas to electricity at the customer level, but this is only economically viable for large users. The plummeting costs associated with solar photovoltaic power generation, government programs to incentivize renewable energy technologies, and advances in meter and grid technologies increasingly make it economically viable for residential customers to generate their own power. If technology makes it economically viable for residential customers to store solar photovoltaic power or to convert natural gas to electricity, then residential customers will begin to disconnect from the grid in significant numbers. This is an especially serious threat to an industry that recovers its costs over multiple decades.

Natural Gas

In Georgia's deregulated market, competition among the marketing companies—that buy gas from suppliers in bulk and sell it to final users at unregulated prices—will be no less intense. Competition is forcing all marketers to charge almost the same price to similar types of customers. Marketing companies' profit margins will be small, and they face the risks of sudden swings in gas prices. Industrial and commercial customers who purchase large quantities of gas gained the most from deregulation, and those who use small amounts of gas probably did not reap any significant benefits.

Given a normal winter, the 2017 outlook calls for slightly higher consumption of natural gas, and supplies appear to be plentiful. Higher industrial production in the manufacturing sector of Georgia's economy, rising wholesale markets, and stronger consumer markets for many goods and services will support higher commercial and industrial gas sales. Also, electric utilities will use more gas for power generation at both their existing plants and the new gas-fired plants that are already in the development pipeline.

Residential gas use will rise slightly due to population growth, the rebound in housing activity, and the installation of more natural gas appliances and oversized bathtubs – that require oversized hot water heaters. As large industrial users share of total demand declines and electric utilities and residential users shares rise, the overall demand for natural gas will likely become less predictable. ❖

This industry will contribute to Georgia's economic growth in the coming year.

The information industry's shift from a persistent headwind into a tailwind is one reason why Georgia's economy is poised to outperform the U.S. economy again in 2017. Consumers' and businesses' purchases of high-volume mobile data services, innovative wireless services, and software will grow strongly.

Consumer demand for smart phones and tablets combined with business's growing desire for mobile and cloud computing will be among the information industry's primary drivers. Demand for machine-to-machine services also will grow rapidly, but its small base will limit this subsector's contribution to overall growth. There is considerable potential for equipment upgrades.

There is still some pent-up demand for premium cable packages, but specialty streaming video and niche satellite services will take market share from cable operators. Demand for fixed broadband access and pre-paid phones also will increase, but at a more moderate pace. Demand for software is booming due to mobile communications and increasing concerns about data security. For these reasons, spending on information services will grow much faster than state GDP in 2017.

The usage of smart phones, tablets, and other wireless devices has soared. As of mid-2016, employment in the state's wireless telecommunications subsector was up about 56 percent from late 2008. Wireless carriers will be hiring in 2017. In part, this reflects higher penetration of wireless technologies into new areas such as vehicular telematics, smart device communications, smart utility networks, and health care. It should be noted, however, that smart phones provide huge revenue boosts to wireless carriers, but this source of growth will wane in importance as the market fully saturates. Instead, revenue growth will come via higher charges to data intensive users.

Telecommunications

Advances in technology, overlapping networks, and regulatory changes have blurred the lines between providers of Web, phone, and television services. Convergence of previously separate communications industries has transformed many voice, video, and data services into pure commodities, which has brought more intense price competition. Although Georgia's telecommunications industries are innovative and more efficient they also have eliminated tens of thousands of what were once considered to be relatively secure jobs.

Sector Summary

Direction: small increase
Performance: worse than most

Telecommunications is a debt heavy industry. In 2017, companies will expand and upgrade their networks and service offerings, incurring additional debt. Interest rates will remain near recent historic lows, which is a major positive for this capital-intensive industry. Also, credit will be easier to obtain.

In 2017, households and businesses will allocate larger shares of their total outlays to telecommunications services, but industry-wide revenue gains will not come as easily as before because penetration rates for many of these services are already very high. Voice-generated revenue is likely to decline very sharply, offsetting some of the growth in data traffic. Demand for high-speed mobile broadband connections will continue to boom, driven by rapid growth in the number of smart phones, tablets, and laptops, which will boost data-generated revenue per customer.

Much of the growth in the residential market will be due to strictly personal uses such as mobile Internet access and interactive video services. But, as the labor market improves, rising numbers of telecommuters will create growth opportunities for telecom companies that provide homes with secure broadband access. Also, cloud computing will be an increasingly powerful driver of enterprise traffic.

Cell phones will continue to supplant wired services, especially now that phone numbers are portable and consumers can buy fairly inexpensive calling plans; and consequently, the number of wired access lines will decline sharply. Providers of traditional wired services will attempt to counter this trend by re-emphasizing the reliability of wired phones, but they will not be able to stop the decline. Meanwhile companies that offer both wired and wireless phones will emphasize services that bundle the two systems.

A huge (and very disruptive) challenge to both wired and wireless phone services is the rapidly improving quality and reliability of making calls via the Internet. Voice over Internet protocol (VoIP) allows callers to make free or very inexpensive calls to almost anywhere in the world. As the volume of these calls grows, it is curbing the prices charged for traditional voice calls.

The major drawback of VoIP is that service interruptions are slightly more likely, which limits usage for emergency situations or to monitor security systems. Some businesses also are concerned about security, privacy, and giving up the redundancy of separate voice and data networks. Nonetheless, businesses' increased use will be the main contributor to VoIP growth in 2017. Also, for many enterprises, VoIP can generate substantial cost savings with respect to call centers, offshore operations, and telecommuting.

Internet-ready mobile phones now give users web access when- and wherever they wish. Increasingly, consumers consider on-the-go Web access to be a necessity, so companies that develop and/or use smart applications that pack relevant information into small packages will prosper. The provision of video and data services also will bolster wireless providers' revenue growth. In theory, mobile money (payments via cell phone) is poised to make significant contributions to revenue growth, but the roll out is proceeding more slowly than many had anticipated.

Cable and Satellite TV

This industry's outlook reflects renewed growth in the number of Georgia's households, customers' increasing willingness to pay more to upgrade to higher speed Internet connections, increases in advertising outlays, and growth in the demand for an expanding array of new high-margin digital cable products and other optional services.

A declining number of cable TV subscribers and the proliferation of online and wireless video distribution will be major headwinds for cable providers, however. More positively, substantial improvement in labor market conditions and more bundling of services will help to curb subscriber churn rates.

In 2017, revenues from higher demand for broadband internet connections and premium services will more than offset the slight decline in demand for basic cable television. Top- and bottom-line growth therefore should be positive, but higher costs will prevent profit margins from widening too much. Also, price-based competition will intensify further and will be a persistent threat to net margins. The long-term outlook for cable providers is less optimistic due to the increased penetration of mobile broadband access and the proliferation of over-the-top offerings.

As broadband and network capacities become much more fully utilized, the need to invest more will increase significantly. Fortunately, cable and satellite TV providers will find that financing will remain very affordable and somewhat easier to obtain. Nonetheless, interest rates probably hit their lows for this business cycle. Meanwhile, competition between the various telecommunications subsectors will intensify and spectrum will remain in short supply.

More channels and more programming, plus the increasing content available on demand will be drivers of the industry's overall revenue growth. Cable and satellite TV providers also benefit from the increased quality and affordability of HDTVs. Advertising revenues will rise as markets for most goods and services expand. The perennial threat to advertising revenue remains the increasing popularity of devices that allow viewers to bypass commercials altogether.

Going forward, the greatest challenge to providers of cable and satellite television is explosive growth in the quality and quantity of online and mobile video content, a distribution channel that will prove to be extremely disruptive. Specialty streaming video and niche satellite services will take market share from cable operators. A second major headwind for cable and satellite television companies is the increasing cost of content, which is likely to squeeze margins even as cable providers raise rates.

The format war between 4G wireless technologies has been resolved in favor of Long-Term Evolution (LTE), which means that the rollout of 4G technologies will accelerate quickly. LTE is a game changer because it gives wireless phone providers the ability to offer Web access that matches the speed and capacity of cable modems. Since VoIP calls on 4G networks are identical to other types of data transmission, the build out of 4G networks will dramatically reverse the current pricing structure: charges for data transmission are destined to rise significant for high volume users while charges for voice calls will flatten or disappear completely.

Printing

Due primarily to competition from digital media, Georgia's printing industry will remain in secular decline, but due to cyclical factors the rate of decline probably will decelerate in 2017. Nonetheless, even sustained economic growth will not lessen these two challenges too much. Cyclical increases in commercial advertising will be a tailwind for Georgia's printing industry, but an increasing share of advertising dollars will be devoted to digital rather than printed media.

The more widespread use of electronic publishing will ensure that the printing industry's revenues will grow much more slowly than Georgia's GDP. Also, high quality machines suitable for small printing jobs will reduce organizations' economic incentive to outsource small runs. Productivity gains stemming from new technologies will lead to job losses in the state's printing industry. The printing industry also is characterized by overcapacity, which will cause margin compression, and many commercial printers will see total profits decline.

Growth in hiring in many businesses and professional occupations will help to increase demand for technical, scientific, business, and training publications, however. Higher spending on adult/technical education will add to demand for printed publications. Foreign demand for English language products also will rise. Also, printers can expect modest increases in domestic demand for books in foreign languages, particularly Spanish language books, periodicals, and newspapers.

Electronic publishing will continue to rapidly displace printed reports, magazines and newspapers, books, greeting cards, and calendars. The recently accelerated move to online banking will continue to decimate demand for printed checks. The popularity and quality of desktop publishing and higher quality photocopiers also reduce opportunities for commercial printers.

Rising levels of educational attainment and a growing population of college students should help the printing industry, but the duel problems facing the industry are that people increasingly opt to read electronic documents instead of printed ones and lack the leisure time to devote to reading. Retirees therefore are likely to become an even more important market for printed materials. Another problem for printers is that the closing of many bookstores has made it less convenient to purchase printed materials.

Although advertising spending will be on the upswing, the outlook is not good for newspapers and magazines. The industry is in long-term decline. Circulation of both newspapers and magazines is shrinking. Even worse, the value of the remaining circulation is also declining as advertising shifts from printed media to web-based media where customer interfaces can be more targeted and more interactive. Pay walls do contribute to revenues, but the majority of readers who are likely to pay for additional access have already signed up. Revenue growth from pay walls therefore will be very slow. In 2017, high prices for wood pulp exacerbate the situation facing newspapers and magazines.

As readership and pricing power decline, the newspaper and magazine industry will continue to consolidate and cut costs, further diminishing its relevance to many readers. For example, the use of syndicated material is growing rapidly because it cuts costs and allows newspaper to get the news out more quickly, but syndication also makes printed newspapers less differentiated from a plethora of web-based media outlets. Revenues from digital editions and digital advertising are unlikely to substantially offset revenues losses from print and print advertising. The best prospects are for small, local/regional newspapers that provide local content that is not replicated online. ❖

Loan growth and rising asset values favor top-line growth.

The Federal Reserve will raise short-term policy interest rates only slightly in 2017, slowly unwinding its unprecedented easing policies. Market forces, however, will push up long-term interest rates by about the same amount as the Federal Reserve pushes up short-term rates. Consequently, the flat yield curve between the 2-year note and the 10-year note will not steepen very much, which will make it difficult for banks to increase profits in 2017. The yield curve with respect to home mortgages will be steeper, which will help banks that originate mortgages.

Despite low, relatively stable net interest margins, higher demand for most types of loans will support some growth in banks' profits. Such support will be vital to achieving bottom-line growth. It will be needed to offset several unfavorable developments: fewer reserve releases; a dearth of mortgage refinancing; and possible losses in banks' bond portfolios should interest rates rise significantly faster than currently expected—an unlikely possibility. Compliance costs of re-regulation also will challenge the bottom line.

Although the 2017 yield curve will still be quite depressed, it will be slightly more favorable than in 2016. More positively, deposit growth should remain very strong due to uncertainty regarding economic growth, high stock market valuations, and poor federal fiscal and tax policies. Deposits probably will continue to migrate from smaller institutions to larger commercial banks and larger credit unions. Customers are attracted to larger banks because of their broad range of services over large geographic areas. Large banks and credit unions also are better positioned than smaller ones when it comes to absorbing the costs of complying with many new regulations.

Large will lead small banks when it comes to deploying the mobile-banking technologies younger customers increasingly desire. The surging use of smartphones and tablets make mobile banking a top priority, although managing the risks associated with these technologies is a challenge.

Loan growth will strengthen considerably as consumers seek more loans to purchase durable goods, such as cars. Financial institutions also will benefit significantly from the up cycle in residential real estate, declining mortgage default rates, and continuing home price appreciation. The use of home equity loans therefore is poised to increase. High levels of corporate profits and slightly more opportunities to boost earnings derived from mergers and acquisitions and IPOs also will sustain the recovery of the banking industry, and large banks will profit the most from these trends.

Sector Summary

Direction: moderate increase
Performance: average

Georgia's financial institutions in particular will benefit from much improved demographic trends – including Georgia's above-average population growth and household formation – because the in-flow of new residents increases the demand for banking services, props up asset prices, and encourages new business formation. In 2017, Georgia's rate of population growth will still be low relative to the rates prevailing before the recession, but it will be much higher than in 2007-2011. Also, household formation rates—which declined very sharply in the wake of the recession—will rise due to Georgia's strong labor market; improvements in the nation's housing markets; more in-migration from other states; and a resurgence of retiree-migration to Sunbelt states like Georgia. Another reason for optimism is that Georgia's financial institutions have virtually no direct exposure to oil and natural gas production.

The growth of customers' deposits will favor financial institutions' bottom lines. Deposit growth provides banks with their cheapest funds. The lingering effects of the housing recession, the stock market's high valuations, and a general understanding that interest rates are on a very gradual upswing make it very likely that many people will continue to look for safe places to park their increasing savings. The household savings rate will remain at about 5 percent in 2017. But, due to new regulations, the fees earned on these burgeoning deposit accounts have declined. Also, credit unions (which often have lower fees) will continue to take market share from banks.

Georgia's commercial banks will see more competition from large retailers, venture capital funds, microfinance, and other nonbanks that often are less heavily regulated than traditional banks or credit unions. Uneven regulation aside, many banks are vulnerable to tech savvy upstarts because they have been slow to fully utilize customer data or to embrace new technologies. Mobile banking will transform banking into a much more customer-focused business. The simultaneous commoditization and digitization of many traditional banking services could give early mover advantages to technology firms or retailers that invade markets currently served by banks.

As the Federal Reserve slowly raises short-term policy interest rates, the rates financial institutions pay depositors on CDs will increase. That will reinforce growth of the deposit base. Since deposits will be on the increase in 2017, banks will become slightly less dependent on more expensive sources of loanable funds, such as wholesale markets or sales of equities. Also, faster growth in loans to both households and businesses will increase the need for these costly funds. Competition among banks for the lowest risk loans will be keen, which could pressure margins on loans with the least amount of risk. Due primarily to demographic trends, the long-term prospects for deposit growth also are excellent, particularly as aging baby boomers gravitate towards safer and more liquid assets.

In Georgia, the quality of personal, corporate and business loans outstanding will be very good in 2017, but probably no better than in 2016. The proportion of non-current loans has declined and is below the U.S. average. One reason we will see growth in corporate and business loans is that Georgia has done well in terms of landing major new economic development projects across many capital-intensive manufacturing and services industries. A second reason to expect loan growth is that the positive outlook for sales for nearly every major industry.

Capacity utilization has nearly recovered to levels that stimulate investment in plant and equipment—a very good sign for commercial and industrial lending. Such spending has been so depressed that it has failed to maintain the capital stock, creating pent-up demand for capital equipment. Moreover, businesses need to spend more to improve productivity. As businesses' confidence in the economic situation improves, the demand for commercial and industrial loans will almost certainly rise.

After dropping in 2016, after-tax corporate profits are expected to rise slightly, encouraging more companies to act on their plans to expand or otherwise invest. Most corporations also have very good balance sheets. Approval of the Savannah Harbor deepening project gives Georgia's logistics, transportation, and distribution firms the confidence to expand operations, generating demand for loans. But 2017 export markets will be a negative factor when it comes to commercial lending due to the deleterious effects of a strong U.S. dollar on our ability to export.

Improvements in housing market conditions will help to mitigate further damage to banks still saddled with large concentrations of loans made during the boom to homebuilders or real estate developers. Indeed, housing markets have already improved enough to sharply limit bank failures.

Conditions in nonresidential real estate markets also have improved tremendously, but in too many places there's still an abundance of underutilized or vacant retail and office space. Banks' willingness to make new loans – and the quality of their old loans – therefore will continue to be adversely affected by vacant office and retail space. Many of Georgia's banks were very exposed to the recession in commercial real estate markets due to their increases in commercial real estate loan concentrations, especially construction and development loans. Plus, most short-term lending to businesses is secured by real estate. In 2017, financial institutions will be more willing to make new commercial loans secured by real estate – due to the fact that commercial real estate prices are recovering as vacancy rates continue to decline in most markets.

A major problem for financial institutions is re-regulation. For example, the Wall Street Reform and Consumer Protection Act created new regulators, extended regulations into new areas, provided new consumer/investor protections, and gave regulators new abilities to define firms that create systemic risk. These new regulations increase costs for firms providing financial services, which will come primarily at the expense of net margins. Higher capital reserves and more oversight decrease the money that banks can lend and raise compliance costs, respectively. The new capital requirement are intended to make the banking system safer, but they do not address several primary causes of the financial crisis: financial institutions' tendency to use of pro-cyclical loan to value ratios, the moral hazard of deposit insurance and the FDIC, and the pro-cyclical policies of Fannie Mae and Freddie Mac. Hence, the new regulations, which will reduce the efficiency and competitiveness of U.S.-based financial institutions, may do very little to actually prevent future financial crises.

For several years the Federal Reserve has worked hard to keep both long- and short-term interest rates close to historically low levels. Consequently, the yield curve has been very flat. Net margin compression pushed many banks to purchase a greater proportion of assets with longer maturities, which means that many banks have taken on credit risks that could come back to haunt their balance sheets—and their mark-to-market value—if long-term interest rates rise substantially. It's likely that interest rates will increase modestly, with yields on the 10-year note rising to about 2.25 percent in the fourth quarter of 2017, but higher short-term rates will prevent the yield curve from steepening. The net effect is that the yield curve will not change too much.

Stockbrokers

The short-term prospects for financial planners and stockbrokers call for revenues to rise faster than GDP, reflecting growth in disposable personal income, increased employment, a 5 percent savings rate, and the recent wealth gains realized by many wealthy individuals. Advisory fees will continue to benefit from increases in equity prices due to the increased value of assets under management.

The long-run forecast for the brokers is good, but not exuberant. That's partially because two major market reversals since 2000 did lasting damage to households' opinion of equities as an investment. Of course, people's view of real estate as an investment has darkened somewhat, which could tip the balance back towards stocks even as consumers become more comfortable with the overall state of the economy and their level of personal debt.

Increases in longevity, the increasing median age of the population, and concerns about the viability of Social Security and other public and private pensions favor stockbrokers and financial planners. People will take more responsibility for their own retirement incomes, and their growing investments will increase revenues derived from asset management and commissions. The relentless movement towards retirement plans based on defined contributions rather than defined benefits gives long-term support to the stock market and in turn financial planners and stockbrokers.

Major long-run challenges to financial planners as well as traditional stockbrokers will be more competition from banks, insurance companies, and online discount brokers that promote do-it-yourself financial planning, and alternative trading systems. The increasing use of alternative trading systems will cause the industry to become more focused on retail investors and less focused on institutional investors. The industry will become more dependent on fees charged based on the value of assets under management rather than commissions. This ongoing shift will help stabilize industry-wide revenues – and profits – because fees are earned whether or not stocks are traded.

Due to both consolidation and a slowdown in the pace of entry by new companies into the financial planning market, industry concentration is increasing. Economies of scale created by new technologies will encourage further consolidation of the financial planning industry. Meanwhile, heightened competition will compress net margins. Also, as consumers become more familiar with online and mobile banking they will be more prone to engage in the online or mobile trading of stocks and more apt to manage their own accounts.

Assuming that the financial markets and the overall economy continue to heal, the 2017 outlook for equities is flat to slightly positive, which implies that trading activity probably will neither rise nor fall significantly. Most companies will experience slightly higher profits in 2017, which should help support equity markets. Since current stock valuations are a bit on the high side, a great many stocks probably will be range bound in 2017. Nonetheless, GDP growth should push up the broad market indices by about 2 percent. Given the risks involved, that's not a very high rate of return, but at this juncture, stocks are probably a better place to be than bonds.

The Federal Reserve will raise short-term interest rates in 2017, with long-term market interest rates rising about as much as short-term rates. The increases in long-term interest rates will be due to increases in demand for loanable funds. Interest costs are not expected to erode companies' net earnings very dramatically, however. That lends stability to stock prices—even for debt heavy companies—at least in the short term.

On the negative side, the dollar's high value relative to many developed economies' currencies will discourage foreign investors from purchasing U.S. equities. Also, growing recognition that the US real estate market truly bottomed in 2012 and is in a sustainable recovery may cause a larger proportion of investors' to put more of their money into real estate, which could temper gains for other asset classes, including equities. Of course, extreme volatility in either the economy or stock prices could cause such funds to remain in safer, more liquid types of investments, such as cash or very short-term CDs. On the other hand, in the short-term, volatility can encourage investors to seek out professional financial advice, but there is little doubt that extended periods of volatility discourage participation in the stock market by small retail investors.

Insurance

Despite intense competition among insurers, solid demand growth will allow insurers to maintain, or improve, underwriting discipline, which will be essential to profitability given the low rates of return expected on low-risk types of financial assets. Barring major catastrophic events, property and casualty insurers are very likely to earn record levels of underwriting profits on personal lines. Overall demand for homeowners and automobile insurance will increase significantly. Except for auto insurance, insurance premiums will increase moderately. Automobile insurance premiums in Georgia will rise substantially due to more frequent and more severe collisions. Fatal automobile accidents are rising nearly three times faster in Georgia than in the nation as a whole. The increase in the frequency and severity of automobile insurance claims reflects more miles driven (due to job growth) as well as increased traffic congestion.

Insurers should not count on large gains in investment income to significantly reinforce their underwriting profits. Yields on relatively risk-free types of bonds will increase slightly but will still be extremely depressed from an historical perspective. Another factor depressing yields is that the average maturity of bonds held by insurers has declined significantly. Although rates on riskier categories of bonds are much higher than on treasuries and the prospects for real estate price appreciation are good, insurers profits will not benefit too much from such trends because they do hold too many risky assets in their investment portfolios. One implication of low yields on investments is that a combined ratio of 100 no longer generates risk appropriate ROEs.

In 2017, there will be an increase in households' demand for property and casualty insurance, with homeowners leading automobile insurance. Home prices are expected to rise more slowly, however, which will lead to more moderate increases in insured amounts. Also, the upturn in major home renovation and expansion activities will add to insured amounts. The proportion of households that are unable to make mortgage payments will be very low, so claim rates on home insurance policies will decline.

As the labor market recovers and consumers' net worth rises, people will spend more for high-priced durable goods, such as cars, which will increase demand for property insurance. The need to increase automobile insurance liability limits also will add to the demand.

As the economic recovery broadens, demand for commercial lines of insurance purchased by businesses will increase, too. The leaders will be workers compensation and liability. Nonetheless, intense competition among insurers will prevent premiums from rising very much for most commercial lines. The recent increases in prices paid for commercial properties and new office, hotel, retail, and industrial development are among the factors that will support premium increases and demand growth. A slightly more optimistic attitude towards spending for new equipment and facilities will boost demand growth for property insurance in 2017.

In the wake of the recession, jobs losses continued to decrease demand for life insurance and related products. Now, improved fundamentals on the demand side will result in better rate increases, but the increases will be greatest for those with the worst possible risks. Premium hikes (and higher underwriting profits) are expected, but low returns on managed assets (especially fixed income securities) will limit gains in overall profitability. Cost reductions also are possible for insurers, which could boost profits. The opportunities to cut costs mainly involve reducing distribution costs, which are especially high for companies with agency networks. The overall impact of these trends will result in modest profit growth in 2017.

Over time, the combination of longer life expectancies, later first marriages, fewer children, less household debt, and lower home ownership rates will tend to reduce the need for traditional life insurance, but there also are some positive developments. Longer life expectancies imply lower mortality rates which potentially can increase insurers' or re-insurers' profit margins on term life insurance, especially margins on existing policies that were sold when life expectancies were shorter. Also, the baby boomlet should stimulate demand for traditional life insurance policies. Meanwhile, the demand for retirement-oriented products should benefit from longer-life expectancies and less generous employer-paid pensions.

Annuities are the primary source of the industry's premiums, but low interest rates have restricted growth of this product. Nonetheless, decreases in the death rate make annuities more valuable. People are increasingly worried about outliving their assets in retirement, and this concern will spur the purchase of annuities and other investment-oriented products. Annuity sales also will benefit from a trend towards retiring at an older average age.

As people of all ages take more responsibility for their retirement planning, companies that provide financial planning and investment services will benefit. Life insurers therefore are expected to provide a broader array of financial services, and are especially likely to emphasize financial planning for retirement rather than income protection.

Residential Real Estate Firms

Increases in sales of new and existing single-family homes will boost commissions earned by Georgia's residential real estate brokerage firms. In addition, these firms will benefit from more active multi-unit housing markets. Additional easing of credit standards, slightly more confidence in real estate as an investment, appreciating home prices, and the stronger job market will be among the factors that will bolster recovery for residential real estate firms. Georgia's real estate industry also is well positioned to benefit from the retirement of the baby boomers – a strong demographic trend that is virtually locked in until approximately 2028.

Stiff competition will encourage the ongoing consolidation of this highly fragmented industry. Demanding clients expect realtors to provide more services and greater expertise, which realtors working at the larger firms can achieve quite efficiently. Global corporate activities should favor commercial real estate firms with international experience. The industry eventually will consist of a few large firms plus many small, highly specialized, relationship-based firms. ❖

Retailers will see top-line growth, and their margins will widen.

Retail sales in Georgia will rise by 5.5 percent in 2017, which will exceed the 4.5 percent gain expected for U.S. retail sales. Low-end and high-end retailers will fare better than mid-marketers. The bricks and mortar retailers with the best prospects include wireless stores, off-price luxury stores, discounters, drug stores, and a variety of specialized small-format grocery stores (e.g., organic, ethnic, or discount). The strongest malls will do very well, but non-competitive malls will see more vacant storefronts. The worst prospects are for retailers who face the most intense digital competition, including bookstores, video stores, shipping/postal stores, and stationery stores. Unionized grocery, office supply, and mid-priced apparel/department stores also will struggle in 2017.

Although inflation-adjusted retail sales have fully recovered from the recession, most shoppers continue to focus on value-priced formats. Meanwhile, a sizable minority of well-heeled shoppers will provide impetus to luxury retailers. In contrast, mid-market retailers' prospects remain weak. Retail bankruptcies and store closings therefore will continue.

In 2017, retail sales growth will be sustained by increases in the number of jobs, which will give more people the confidence and the wherewithal to spend more for retail goods. Due primarily to steady improvements in the labor market, the rate of U.S. disposable personal income growth will be 4.5 percent in nominal terms in 2017. Growth of disposable personal income implies growth of retail sales. The up-cycle in residential real estate markets will be a second major force powering retail sales growth, especially sales of home-related items.

There are still some headwinds, however. Traditional retailers will see some restraint in households' spending, reflecting, in part, the lagged effects of very heavy job losses in recent years. The labor force participation rate will remain depressed, and many people are still less well off than they were before the recession. Consequently, mid-market retailers will continue to muddle through the most subdued recovery in consumer spending since World War II.

Aside from improving labor markets, the most important development underpinning retail sales growth is that the much heralded and much delayed up cycle for housing that will continue in 2017. In almost all markets, home price depreciation has given way to home price appreciation, which is critical because there is a very strong correlation between housing wealth and retail sales. Indeed, stores selling home furnishings and building materials will post large percentage gains. Another favorable development for retailing will be continued modest increases in the number of tourists and business travelers, who boost the prospects for retailers located near major tourist attractions, convention centers, or clusters of hotels along major interstates.

Sector Summary

Direction: moderate increase
Performance: average

Georgia's above-average population growth--and retiree migration--remains a long-term plus for in-state retailer. Over time, retiree-based economic development will become one of the most important forces supporting retail sales growth. Also, Georgia's job market has improved to the point where the state is attracting job seekers from elsewhere.

The increasing number of college students will help retailers operating in Georgia's college towns, but on many campuses students will continue to spend frugally. Cutbacks in the Hope scholarship program, growing concerns about the level of student loan debt, and concerns about job prospects after graduation will continue this frugality.

In 2017, the combination of sales growth plus shoppers' recent move towards private label brands developed by retailers should lessen the pressure on retailers' net margins. Margins also will benefit from a slight shift away from basic products towards discretionary products – where margins are higher. Renegotiated rents also will add to many retailers' net margins. Intense competition among surviving retailers (especially online retailers) will keep the pressure on net profit margins, however. Promotional costs also will rise. The overall outcome of these opposing forces will be to widen retail margins slightly. Wider margins and moderately larger sales volumes will boost retailers' net profits.

Although liquidity has improved, many retailers (including those with high cash balances) will remain cautious about capital expenditures. Moderately higher sales volumes coupled with stiff competition (and some recent high-profile retail bankruptcies) often encourages restructuring, but there is still a lot of vacant, or under-utilized, good quality retail space in most of Georgia's retail markets. There is also a plethora of dated, low quality retail space in many areas, much of which needs to be demolished or converted to other uses. Plus, capital still will not be readily available to finance retail projects.

Spending to expand online distribution channels and supply chains rather than spending on actual stores will be a top priority for many online and multi-channel retailers. Indeed, adding supply chain capacity with the ultimate goal of providing next-day—or same-day—delivery will be a major focus in 2017. Next-day delivery would remove one of the main remaining advantages that regular retailers have over online retailers. The upshot of these considerations is that outlays for regular retail stores or shopping centers will remain at or near cyclical lows.

Three themes will dominate the restructuring that does take place. First, large retailers will gain at the expense of smaller ones. Second, discount and luxury retailers will gain market share at the expense of mid-price retailers. Third, online retailing – especially mobile e-commerce – will experience relatively rapid growth. The bottom line: super-centers and e-tailers will gain market share at the expense of traditional department stores, big-box stores, and mom-and-pop operations.

The Bricks

Georgia's large-regional malls, lifestyle centers, outlet or mix-use centers will continue to outperform many smaller malls, older neighborhood shopping centers, and isolated stores. Neighborhood and strip centers that focus on food or service providers will fare better than others, however. Some urban shopping districts will do very well, but many will see below-average sales growth. Small chains, independent specialty stores, and direct mail will remain an important part of the retail scene, but will claim a smaller share of total sales. Mom-and-pop stores are not expected to make a comeback as places where Americans shop on a daily basis, but there is a counter-trend that favors small shops that are conveniently located in pedestrian or tourist districts.

By focusing primarily on price, many types of discount stores and other value-oriented retailers will continue to prosper. In 2017, discounters' share of total retail sales will rise, but even discounters will face more competition from online shopping. Discount stores benefit as middle income shoppers continue to pinch pennies. Indeed, even well known luxury retailers are embracing outlet and other off-price retail concepts.

Walmart

The world's largest retailer (and Georgia's largest employer) will experience average gains in year-over-year sales in 2017, which will maintain—but not enlarge—the company's already dominant share of total retail sales. Walmart has been emphasizing its large super-centers as well as smaller neighborhood market stores that are often located in the inner suburbs of urban areas.

The fact that Walmart is now the nation's largest grocer validates both the super-center format as well as the concept of neighborhood market stores. The company's extraordinary success across a broad spectrum of retail categories stems from its tremendous operating efficiencies, which are passed onto consumers in the form of "everyday" low prices. The heavy economic burdens borne by consumers suggest that price alone will often be the deciding factor for many families—an imperative that strongly favors Walmart. In terms of generating future growth, the most important channel for Walmart will be online, which implies that it (and many other chain retailers) eventually will close underperforming stores.

Online Retailers

In 2017, online sales will grow much faster than overall retail sales, further expanding e-tailers share of overall retail sales to approximately 8.7 percent. Before the recession, e-commerce accounted for only 3.5 percent of total retail sales.

Research shows that most consumers who shop online are very satisfied in doing so, and encourage others to become e-shoppers. Of all retailing modes, e-tailers gain the most from rapid technological change and consumers' increased use of mobile devices and social media. Increasingly, the most profitable retailers will be the ones who fully integrate their online and in-store operations.

Many shoppers use multiple devices to shop, and smartphones share of sales is growing the fastest. Upper- and upper-middle income consumers currently account for a disproportionate percentage of online sales. That demographic base shielded electronic retailers from the full fury of the recession and ensured above-average growth during the recovery. Most shoppers go online to save both money and time, two of the imperatives that are shaping the future of retailing in general. Websites also are becoming more functional, especially for mobile customers. Online shopping allows people to avoid the crowds and the traffic, to shop 24/7 comfortably from the sidelines, and save gas.

The continued expansion of the number of products available online, competitive prices, and social commerce will help to fuel the growth of cyber shopping. Internet-based shopping will benefit from consumers' wishes for convenient shopping, especially as the speed of access increases. Shoppers also are becoming more comfortable with online payment systems. Delivery times for online orders will continue to shrink, and fulfillment will become a relatively minor deterrent to many electronic purchases. Indeed, Amazon is already pushing hard to expand its supply chain to provide profitable next-day delivery. Some retailers are experimenting with locker pick-up of orders in some locations, which provide secure and convenient delivery.

There are potential problems: online competition is intense—due partially to low barriers of entry, and thisl leads to margin compression. Also, a significant barrier to online sales continues to be shipping costs, which is the main reason why online shoppers kill a transaction. More e-tailers now offer standard free shipping to create a competitive advantage, but this practice thins profit margins. Meanwhile, online merchants must contend with customers' concerns about secure access and methods of payment, returning merchandise, spam e-mail, and post-purchase services. Large, established retailers, with name recognition and a store in nearly every large community, have been very successful at easing such concerns. Online retailers increasing will use chatbots (virtual assistants) to answer customers' questions. The recent loss of the online tax advantage will not hurt online sales too much because some transactions already included sales taxes and few customers indicate that sales tax was an important factor in their online purchase decisions. ❖

Services-related business activity will lead the economic recovery.

Although most services businesses will expand, some will stagnate, and a few are expected to decline. In general, businesses that provide pro-cyclical services (such as business services) or necessities (such as health care services) will continue to experience above-average revenue growth. Continued growth in government revenues will increase demand for many business services. Higher household incomes and the aging of the population will support demand for personal services, such as laundry, housecleaning, and commercial car washes. Consumer demand for home and landscape services will expand briskly, especially in markets where home values have fully recovered, but repair services will be less busy in the coming year.

Staffing Services

Georgia's staffing and temp agencies should do very well because the modest pace of economic growth encourages many firms to remain flexible and responsive to changing economic conditions. Demand for employment and staffing services tends to move in lockstep with GDP and tends to lead growth in permanent hires, so the forecast for continued growth of the state and national economies bodes well for the employment and staffing services industry. The state's low unemployment rate will restrain growth of the staffing industry in two ways, however. First, workers will be less willing to accept temporary positions, since permanent jobs may be more available. Second, the supply of suitable temporary workers will be more constrained that it was several years ago when the unemployment rate was higher.

One factor that will help staffing agencies is that employee turnover is expected to increase in 2017. That expectation is based on the assumption that the average worker's improved expectations for finding a job will continue to rise. Another plus is that many of Georgia's largest companies have been performing very well, and historically they tend to rely the most on staffing agencies to find both temporary and permanent employees. The abundance of corporate relocations and expansions announced by the Georgia Department of Economic Development also are good signs.

Staffing and temp agencies will find that some of the fastest growing niche markets include medical and technical staffing. Due to the strong dollar and problems in the European Union, the opportunities to provide staff to export-oriented companies, including those involved in logistics and distribution will improve modestly. Prospects for firms that specialize in clerical, light industrial, and financial services staffing also will not improve too much. Such divergent prospects validate the staffing industry's increased focus on occupations with higher levels of education and training.

Sector Summary

Direction: large increase
Performance: above average

Long term, firms that specialize in providing temporary or contingent workers will do well because companies depend on temporary workers to fill in for absent staff, to buffer cyclical shifts in business activity, and to meet predictable seasonal swings in demand. The heightened possibility of more frequent recessions therefore favors the staffing industry. The increased use of domestic outsourcing is an important factor behind the growing number of skilled workers who work on temporary assignments, even though the jobs may last for a year or more.

IT and Consulting Services

Companies that facilitate the outsourcing of computer services will experience the fastest growth. Moderate increases in businesses spending for new equipment and software will underpin higher demand for computer services to businesses in 2017. Providers will continue to move towards value-oriented billing and away from hourly billing.

Some of the factors that encourage companies and government to hire outside experts or outsource IT needs include: rapid technological change and increasingly sophisticated equipment that makes it difficult to manage without help; cloud computing; and increasingly vital cyber security. Conversely, two powerful counter trends will restrain demand: the increased outsourcing of IT services to providers located abroad; and the increasing ability of clients to do this themselves.

The outlook for consulting firms is positive, since business and governmental operations and decisions are increasingly complex and maintaining a range of in-house experts is expensive. The continuing economic expansion, growth in corporate profits, more expansions and relocations, and higher revenue collections by local and state government will bring prosperity to many consulting firms. Opportunities for domestic consulting will be better than opportunities for international consulting, but revenue from both will grow in 2017. One problem for consulting firms is that more clients are suing for malpractice when things go wrong.

Legal Services

In 2017, cyclical increases in demand for legal services will help lawyers and law firms. Law firms that provide services to businesses will benefit from increases in the number of business startups, expansions, and mergers and acquisitions. Larger firms will find the best opportunities in metropolitan Atlanta, but independent lawyers probably will fare best in rapidly expanding small or medium sized communities. National firms will continue to expand their presence in Atlanta, but at a moderating pace. The continuation of this recent trend reflects both the strength of the potential client base in Atlanta as well as ease of using Atlanta as a geographic hub from which to service clients located throughout the Southeast. The growth of Georgia's population of high income retirees will benefit lawyers who specialize in planning estates and drafting wills.

Looking beyond 2017, new laws and the increasing complexity of existing ones, particularly tax codes, will continue to generate business for law firms. Long-term demand also will increase because of growth in litigation of intellectual property, patent law, energy, health care, employee benefits, consumer safety, and environmental concerns. Increased access to legal services through prepaid legal service, prepaid legal assistance, and community legal service programs also contributes to this rise.

Long-term potential problems for the industry include political pressures to contain litigation costs, including constraints on the right to sue, caps on judgments, and more costly penalties for frivolous lawsuits. The offshore outsourcing of routine legal work as well as legal research will challenge the industry, particularly paralegals. The increasing use of do-it-yourself legal kits, mediation, and alternative dispute resolution methods will siphon away some legal business. Another trend that will limit future business opportunities for legal firms is the expansion of many corporations' in-house legal departments. Finally, non-lawyers will continue to invade the turf once held by the legal services industry, and this is especially likely in the provision of online legal services.

Health Care

The outlook for Georgia's health care providers is good, but not great. Although uncertainties regarding the ACA as well as Georgia's nonparticipation in the expanded Medicare program cloud the outlook, this sector will be one of the better performers in 2017. Hospitals' outpatient care facilities and specialty care centers will experience solid growth in demand, and in-patient care facilities will see moderately higher demand. Large hospitals that provide general care for a wide range of health problems will face increased competition from physician-owned specialty hospitals. Freestanding imaging, diagnostic, and imaging centers also will continue to usurp market share from traditional hospitals.

Some additional factors will limit access to employer-provided health insurance: (1) many of the jobs created will be in smaller firms that are less inclined to provide generous medical benefits; (2) employers will use temporary workers more; (3) some large companies may reduce medical benefits for their retirees; and (4) many employers will move towards high deductible health insurance plans, which will reduce demand for routine care.

Another problem is that collecting payments from patients with medical insurance is becoming more difficult as patients' insurance plans become increasingly varied and complex. Patients' higher co-payments, deductibles, and out-of-network treatments also tend to leave more bills unpaid. The increased flexibility of medical spending accounts as well as the introduction of health savings accounts that roll over unused funds should help to reduce collection problems slightly.

Positive long-term factors include more older and wealthier consumers who will spend more of their incomes on health care; medical advances that save and/or prolong life, creating demand for additional services; potential lawsuits that spur defensive medical practices; more need for rehabilitative services; and consumers' emphasis on superior care.

Negative long-term trends include employers shifting more of the cost of health care and health insurance to workers; new pharmaceutical treatments that reduce patients' need for some specialty services; and certainty that government's control of the nation's health care delivery system will increase. Also, as employer-provided insurance becomes less available and more expensive, and as the population ages, federal and state governments will be forced to assume responsibility for larger proportion of the nation's health care costs.

Childcare

The outlook for childcare firms is good, particularly for centers that expand their operations to offer complete round-the-clock care. As the economy generates new jobs, more parents will rely on childcare providers to care for their children. Also, parents who move from part-time jobs to full-time employment will be more likely to use childcare providers. Providers should be able to raise rates at a pace that covers cost increases, but probably will not enlarge net margins too much.

The industry will prosper because more children will be enrolled in professional daycare centers. This reflects high labor force participation rates for women as well as more single-parent and nontraditional households. The trend towards delayed child bearing in order to establish careers and incomes will help the childcare industry, and this trend will be particularly beneficial to the luxury end of the industry. Parents' increased desire to control what school-aged children do after school favors firms that specialize in after-school care. The industry will continue to benefit from tax credits for earned income and dependent care, and from some tax-exempt employer-provided daycare benefits. Changes in welfare laws, which encouraged unmarried mothers to seek work, also benefit the childcare industry.

The proportion of jobs that require employees to work outside of the traditional workweek will grow rapidly, and thus childcare centers that provide weekend care, extended hour care, and occasional overnight care will do well. In metro Atlanta, long and unpredictable commutes will favor centers that keep longer hours. Centers that provide care for mildly ill or recuperating children also will have an advantage over traditional daycare centers. The emergence of 24-7 and extended-hours daycare centers will restructure the industry, favoring larger firms over smaller firms and national or regional chains over informal care, or independent providers..

Educational Services

In Georgia, above-average population growth will increase demand for educational services. In the wake of the recession, weak government revenue collections—especially property tax collections—diminished the supply and/or quality of public education, thereby boosting demand for private educational services. Long-term trends are very favorable. Current and future jobs will require significant investment in higher education. Widespread dissatisfaction with public funded K-12 education will encourage the growth of private schools. Similarly, Georgia's extremely low SAT scores will spur demand for supplemental educational services. Just-in-time online learning will see explosive revenue growth. ❖

Hospitality

This sector will outperform the overall economy in 2017.

The gains will be broadly based across both limited service properties that cater primarily to tourists and full-service properties that are popular with business travelers. Lodging demand will rise significantly from already elevated levels; and because the lodging market is not oversupplied, the benefits to the industry from higher demand will be significant. Due to the industry's impressive performance, most in-state lodging markets will see new development, but the number of new hotel rooms being completed will not outpace demand growth. Revenue per available room therefore will grow at least twice as fast as GDP.

In 2017, the supply of new rooms will continue to lag increases in the demand for rooms, pushing up overall occupancy rates. Still, occupancy rates will rise more slowly in 2017 than in either 2015 or 2016--especially for older properties in less than prime locations. The favorable overall balance of supply and demand will prompt further increases in average daily room rates, thereby adding to the industry's overall profits. Off-peak rates will not increase significantly, but peak room rates at new properties will set all-time record highs.

On top of higher demand for rooms, increased utilization of many hotel services will bolster revenue per available room. As always, holding down operating expenses will be important to profit generation, but it will be more difficult to contain costs in 2017 than in 2016. Higher wages as well as other cost pressures will stymie the industry's efforts to hold down operating costs. Profit margins therefore will come under more pressure in 2017.

The lodging industry's overall revenues will outpace gains in bookings with revenues from rooms growing slightly faster than revenues from food and beverage operations. Demand for the highest quality and the most sophisticated accommodations will strengthen considerably compared to just a couple of years ago. Although more vacationers and business travelers are looking for exclusive or customized experiences, the price of those experiences remains an issue for most guests. Revenues from spas, wellness services, special interest packages, and other customized experiences probably will increase significantly, but revenues from telecommunications services and video on demand will continue to decline.

Sector Summary
Direction: moderate increase **Performance: average**

In 2017, spending for high-end lodging will increase. The luxury segment will benefit from increases in individual wealth, above average income growth for wealthy individuals, and increases in corporate travel budgets. Also, bad publicity related to corporate excesses has faded from public memory. Upscale properties will benefit from recent increases in the state's meeting and convention activity.

An increase in occupancy on the shoulders of major events will help the lodging industry. More family members and friends will accompany attendees to trade shows and conventions, which increases revenues generated from food, beverages, and spas. In 2017, meeting and convention travel is expected to grow slightly faster than leisure travel, which implies that demand for mid-priced or better properties will expand faster than demand for basic properties.

The prospects are good for mid-priced properties. People with job security and retirees will be likely to favor mid-priced or better hotels and motels. Many Georgians will continue to forego the traditional big vacation in favor of more frequent shorter trips to nearby destinations. The increased popularity of one-day or weekend trips should help in-state hotels and restaurants that are close to tourist attractions, and helps to distribute business across the calendar year. More travel by state and local government employees – who tend to stay at mid-priced properties – bolsters the prospects for the mid-industry segment.

Although the overall economy is expanding, there still are some headwinds and downside risks for the lodging industry. The hassle associated with flying will continue to discourage travel. Insurance and security costs will rise, and the greatest impact of these cost increases will be on luxury and upscale properties. Hotel property taxes also are expected to continue to rise. There will be more pressure on wages and salaries than in recent years, which will exert pressure on net margins. The call for a $15 national minimum wage is a threat. The $5 statewide hotel/motel fee that went into effect in 2015 also hurts. (The $5 fee is dedicated to transportation rather than tourism.) To some degree, process improvements – especially greater emphasis on online booking – will help to offset the cost pressures. Nonetheless, the end result is that total expenses will rise faster than total revenues, and the combination will cause overall profit margins to drop slightly in 2017.

The shared economy is a potential disruptor for the traditional lodging industry, especially if such providers do not pay hotel/motel taxes and/or the new $5 statewide hotel/motel fee. The promise of lower prices and the possibility of a more authentic experience attract travelers to platforms such as Airbnb, CouchSurfing, and HomeAway. Such platforms provide options in locations where the supply of traditional lodging is nonexistent, small, or inadequate to accommodate special/seasonal events. The risks to lodgers in terms of security, hygiene, and uncertainty are significant, and may prevent the hospitality-sharing economy from becoming more than a successful niche player in the lodging industry – similar to bed-and-breakfasts.

Business Travel

Most of the fundamental drivers of business travel are positive: corporate profits will increase; markets for many goods and services will advance; and there will be more new business formation, expansion, and relocation. Corporate staffing levels will rise. Due to these positive developments business' overall spending for travel will expand with the growth of the overall economy. But, technologies reduce the need to travel and cost containment policies are unlikely to loosen. Travel to attend general meeting and conventions in particular may not benefit very much from improving business conditions. In contrast, corporate outlays for revenue-generating travel that can be clearly linked to business development such as meeting with new or existing clients will rise substantially.

Since hosting or attending a major event in Atlanta remains relatively economical, the city should be well positioned to benefit from any increase in corporate outlays. Also, Atlanta's reputation as a place to conduct business efficiently rather than spend lavishly on superfluous attractions makes the city a politically correct place to host a meeting or convention. Of course, Atlanta has many attractions to promote – the Georgia Aquarium, an expanded World of Coca-Cola, and a civil rights museum. Atlanta's hospitality industry will benefit from the America's Mart, which is a magnet for business travelers and is the world's largest home, gift, area rug, and apparel wholesale trade complex.

Since Atlanta caters primarily to the business traveler, the region's hospitality industry is extremely sensitive to changes in corporate profits and sales. Corporate profits and sales will both increase in 2017, but gains in sales will be modest across a broad range of industries. Other factors that will impede businesses' spending for travel include the increasing use of technology to replace travel, more efficient purchasing of corporate travel products, more mandates for pre-trip approval and online booking, and the significant time that it takes for air travel now.

Leisure Travel

Vacation and leisure travel is largely discretionary, and is more cyclical than spending on business travel. Job growth will slow in 2017, but will remain high enough to spur households' spending for leisure travel. Personal income growth and consumer confidence will prompt more discretionary trips. The strong dollar will support more out-bound international travel, but will discourage in-bound international travel. The prospects for Georgia's leisure travel industry are enhanced by demographic shifts in the age composition of the population, population growth, and the fast-paced growth of the African-American travel market.

Favorable demographic trends and travelers' increasing desire for more interesting experiences have combined to make historic and cultural travel one of the fastest growing segments of the travel market. This is excellent news for Georgia. Atlanta is one of the nation's most popular destinations for historic/cultural travelers, but to reach its full potential Atlanta must connect its abundance of far-flung attractions together – either physically via visitor-friendly transportation (e.g., shuttles) and/or emotionally via more effective marketing. The payoff from connecting the city's cultural and historical attractions will be substantial. That's because historic/cultural travelers spend much more heavily than the average traveler, and their trips tend to be relatively long. Also, meeting and convention planners increasingly will select future sites based on their cultural and historical appeal. For example, Atlanta already is a "must see" cultural destination for African-Americans, and consequently is the nation's premier destination for African-American conventions.

U.S.-Bound International Travel

The prospects for in-bound international travel are good, but not great, because the strong dollar will make travel to Georgia expensive for vacationers from abroad. (Leisure travels account for about 83 percent of non-resident visits to the U.S.) Also, the United Kingdom's economy is soft and the UK sends the third largest number of visitors to the U.S., behind only Canada and Mexico. Slightly faster growth of the global economy will be a tailwind behind the growth of international tourist arrivals, however. Airlines' focus on overseas flights also should encourage more international travel to Atlanta, but long waits for visas, strict entry requirements, and lackluster prospects for the United Kingdom and the EU will be barriers to faster paced growth. Based on the number of non-resident arrivals, Atlanta is the eighth largest port of entry in the continental United States, and is behind only Miami and Orlando in the South. In 2017, international visits to Atlanta will grow faster than it will to the U.S. as a whole.

Restaurants

The restaurant industry will see the eighth-straight year of sales growth. Consumers' overall expenditures for restaurant fare will increase at about the same pace as state GDP. Fast-casual restaurants will do especially well. Bars and taverns will see very slow growth whereas cafeterias and buffets will see sales decline. In 2017, there will be more emphasis on home delivery. Food trucks and street food also will increase in popularity.

Supporting factors include population growth, employment growth, personal income growth, relatively low gas prices, busier households, more business activity, and more travel and tourism. Due to a lower unemployment rate, finding qualified and motivated employees will be a more difficult task for restaurants, however. Turnover, which has been relatively low, will increase. Over time, restaurants are becoming more dependent on older workers and less dependent on teenagers, which will push up labor costs while aiding retention. If adopted, a new $15 national minimum wage would fall heavily on the restaurant industry, perhaps ending the long-established custom of tipping. In addition to rising labor costs, rising rent—especially in prime locations—will squeeze operating margins. Restaurants also will spend more aggressively on technology and renovations in 2017.

A negative trend for some restaurants is that fewer people order cocktails (a very important profit center) with their meals. Also, due to low commodity prices, the differential cost between eating out versus buying groceries for at-home consumption will widen, favoring grocers over restaurants. In addition, grocers will devote more floor space to freshly prepared ready-to-eat foods that compete directly with restaurants for consumers' dollars. The shared economy is beginning to venture into the restaurant space, too. Services such as EatWith and Feastly that provide home-delivered meals are potential industry disruptors.

According to the National Restaurant Association, the hottest menu items include locally grown foods, natural and minimally processed foods, chef-driven causal concepts, housemade artisan foods, ancient grains, and ethnic cuisines. The most fashionable nonalcoholic beverages are housemade artisan soft drinks and gourmet lemonade. The hottest alcoholic beverages are craft/artisan spirits, locally produced beer/wine/spirits, and nontraditional liquors.

Fast food and inexpensive quick-casual restaurants are expected to do better than moderately priced and expensive full-service restaurants. Fast food restaurants are expected to partially recoup recent losses in market share to quick causal restaurants that emphasize freshly prepared gourmet items. Quick-service restaurants will face more competition from grocery stores, which now offer a wider selection of freshly prepared foods and often have cafes on their premises.

Supply problems will continue to challenge restaurants, because, for several years, the number of restaurants has grown faster than demand. Intense competition will cut into the industry's profits. Also, it is expected that restaurants will re-emphasize direct price competition over competition based on menu options and service, and this reversal will speed the erosion of profit margins. ❖

The forecast calls for moderate growth, so state and local governments' budgets should improve.

One in six employees in Georgia have jobs in local, state, or the federal government. Close to 30 percent of personal income arrives in the form of a government check, either as earnings, or as transfer payments. Thus the level of government funding directly impacts consumer spending and, in turn, Georgia's economic performance.

Government services are paid for by a mix of federal, state, and local taxes and fees. Unless the tax code changes, the level of overall economic activity largely dictates the levels of government funding, which in turn affects both the quality and the availability of government services. Strong population increases usually create more demand for government services, but also fill government coffers with more revenues. The growing number of businesses also add to the state's tax base, as do increases in the wages those businesses pay. Striking a balance between tax collections and the quantity and quality of services provided by state and local government is an important determinant of the quality of life and the ease of doing business in the state. With the forecast that Georgia's economy will continue to expand in 2017, revenue collections by state and local governments will grow, too.

Government Employment

Government employment is important for the economic health of Georgia residents. According to the most recent data available, government employment accounts for 15.6 percent of nonfarm, civilian jobs in Georgia, (2.3 percent federal, and 13.3 percent state and local), and earnings from government jobs contribute 17 percent of non-farm earnings in Georgia, which is slightly above the U.S. average of 16.6 percent. The federal government (military and civilian) accounts for 5.6 percent of Georgia's nonfarm earnings, which exceeds the U.S. average of 4.1 percent. State and local government account for 11.4 percent of Georgia's nonfarm earnings, lower than the 12.5 percent reported for the nation as a whole.

Historically, governments provided mid-level jobs to a large number of non-farm workers in Georgia, but the portion of government jobs in the economy shrank from 17.6 percent in 2010 to 15.7 in 2016, or by over 20,000 jobs. State and local governments together cut over 11,000 jobs.

Sector Summary
Direction: moderate increase **Performance: average**

The number of government jobs will increase in 2017, but by only 0.6 percent. Local governments will add the bulk of public sector jobs, while employment increases in state and federal government will remain subdued.

State Government

Individual income and sales taxes together comprise most of state revenue, with individual income taxes contributing over 45 percent, and sales taxes close to 24 percent. With continued, although slower statewide employment growth forecasted for 2017, individual income and sales tax collections should rise, especially in places where personal income and employment are expected to grow faster than the statewide average (e.g., the Athens, Gainesville, and coastal MSAs).

Following a nationwide trend, Georgia's population will grow at a much slower rate in the coming decade due to the aging of baby boomers, and lower birth rates. The slower population growth, and the changed age distribution of state residents will affect the primary sources of state revenues: personal income, and sales taxes. Although revenues from these sources will continue to rise, they will increase at a slower rate.

June 30, 2016 marked the closing of the first fiscal year under the transportation tax package enacted during the 2015 legislative session. Under the legislation, transportation revenue is now being raised from an excise tax on motor fuel, additional fees on hotel and motel stays, heavy duty trucks, and alternative fuel vehicles. These funds are dedicated to multiple road and bridge projects across the state. The new tax structure will provide more stability to this portion of the state budget in the coming years and, as the transportation projects get under way, will spur additional economic activity.

Transportation takes up only 7.2 percent of the 2017 state funds. Most of the state's 2017 spending will go toward education (53.2 percent), healthcare (21.7 percent), and safety (8.1 percent).

In 2017, new funds will work their way into important items in the state budget, such as recruitment and pay increases for Georgia state employees in corrections, state hospitals, as well as in educational institutions. Several new and ongoing initiatives in education, social services, and public safety will also receive new funds, as will construction projects at state colleges and universities.

Since 2009, the share of state government jobs has been shrinking. Although Georgia's economy is growing, much of the revenue growth will be devoted to funding existing state obligations in education, healthcare, and retirement benefits rather than to starting new programs. Rising expenses in these traditional areas of the budget therefore will curb the growth of state government, even though demand for new services that could be provided by state government will grow.

Local Governments

Although Georgia's local governments and school districts are affected by the condition of state and federal finances, they depend primarily on property taxes as a major source of revenue. In the wake of the recession, falling house prices created a challenge to local government finances, but home prices have been on the upswing for a number of years. In 2016, the statewide, purchase-only house price index finally surpassed the 2007 pre-recession home price peak. Georgia's home prices have climbed 41 percent since the market bottomed in 2011.

Rising property values should boost local government finances in the coming year, especially in Georgia's faster growing communities that register more home sales. Of Georgia's MSAs, Atlanta's existing home prices have fully recovered, and exceed the pre-recession peak for purchase-only transactions. Athens, Augusta, and Savanah recovered at least 90 percent of average house value from the pre-recession peak. Dalton and Gainesville, while further from that goal, saw some of the steepest house price increases since 2012. Also, the uptick in new residential construction activity across the state will expand the property tax base. As of mid-2016, the number of building permits was up in most of Georgia's metropolitan areas.

Most of Georgia's counties increased millage rates between 2010 and 2014, which helped to shore up budgets during the Great Recession. Higher millage rates combined with rising property values, should boost local government revenues in most of the state's metropolitan areas. Long term, the aging population will slow the increases in the collection of property taxes, however, since older residents typically spent less on housing, and don't move as often. This demographic trend will especially challenge the finances of counties that grant tax relief to the elderly.

Local governments receive revenues from a number of local option special purpose sales taxes. Despite early uncertainty, the transportation package enacted in 2015 leaves the existing local taxes unchanged until their expiration dates. Local sales taxes applied to gasoline sales will be calculated on gas price not exceeding $3 per gallon, however, leaving any gasoline priced above the cap, untaxed. As of July 2016, 46 Georgia counties had opted for local sales tax designed to raise transportation revenue. With the new legislation allowing governments flexibility to raise taxes for local transportation projects that number is likely to grow.

Local taxable sales revenues are rising in metropolitan counties in the northern part of the state, and also in Savannah, Brunswick, Augusta, and Macon. To a large degree, increased sales tax revenue tracks population growth, so slower population increase and an increased proportion of older residents will negatively affect local revenues raised from sales. In addition to slower population growth in non-metro counties, the sales tax revenue across the state is hampered by relatively low retail price inflation, including the price of gasoline. The prices of gas and other consumer goods are expected to increase slightly in 2017, which should put slightly more money in local governments' coffers.

Federal Government

Federal government operations largely account for the above-average share of government earnings in Georgia. More specifically, federal employment supplies 2.3 percent of nonfarm, civilian jobs in Georgia and 5.6 percent of total nonfarm earnings (civilian and military) compared to 1.9 percent of jobs and 4.1 percent of total nonfarm earnings at the national level. Locations with major military bases (e.g., Valdosta, Columbus, Warner Robins, and Hinesville) derive from 15 to 68 percent of their nonfarm earnings from federal government jobs, including both civilian and military.

Given the size of the federal employment in Georgia, the current state of federal finances is of particular interest, especially to cities that host military bases. With the budget caps in effect, personnel cuts have been announced to take effect by September 30, 2017.

Government transfer receipts, including retirement, Social Security, disability insurance, Medicare, Medicaid, unemployment insurance, food stamps, military medical insurance, and veterans' benefits, comprise over 17.6 percent of personal income in Georgia. That's slightly above the U.S. average of 17.3 percent. Despite the improving economy, the portion of state income contributed by government transfer receipts remains at elevated levels. In essence, the aging of the population assures that the sum of money paid out in transfer payments will continue to rise, which has implications for government finances at all levels. ❖

Technology

The technology sector will continue to be an important economic driver.

Employing over 180,000 workers in Georgia, the high tech sector consists of two distinct groups of industries: high tech services, and high tech manufacturing. High tech services, which include selected information, and professional services (software publishing, data processing, computer systems design, engineering, R&D, telecommunications, and internet services) account for over 80 percent of high tech jobs in the state. High tech manufacturing includes pharmaceuticals, computers, electronics, computer equipment, and aerospace products.

As a whole, the sector increased employment by 4.8 percent between 2014 and 2015, well above the statewide average job increase of 2.9 percent. All of the new jobs were added to the services part of the high tech sector, which expanded by 6 percent. Most of high tech manufacturing industries, with the exception of pharmaceuticals and aerospace products, lost jobs between 2014 and 2015, however. High tech manufacturing as a whole shrank by 0.2 percent, according to the most recent annual data available.

High Tech Services

For the most part, service branch of Georgia's high technology sector continues on a strong growth trajectory. The largest of the high tech services industries—computer system design, architectural and engineering services, and software publishing—increased their employment by an average of 7 percent, more than double the state average. Together, these industries employ over 121,000 people, and comprise the bulk of the high tech services jobs in the state.

Employment growth slowed in the information sector as a whole in the first few months of 2016, partly in response to the stock market turmoil and a massive strike by telecommunications workers. Although employment in telecommunications dropped in the first quarter of 2016, other information sectors (software publishers, data processing firms, and internet publishing) continued to hire. After the stock market reversed first quarter losses into record mid-year gains, some of the unease about the tech industry's rapid growth was removed, although many firms saw their valuations shrink.

In terms of the industry size relative to overall state employment, software publishing in Georgia ranks ninth in the country, and in terms of the numbers employed, fifth largest, following California, Washington, Massachusetts, and Texas. And these numbers include only private sector jobs. Software publishing is concentrated in the Atlanta area, with Fulton County among the top 13 U.S. counties in terms of the relative size of that industry, and eighth in terms of total employment. Georgia also exceeds the national average in the relative size of the computer system design industry, which is the largest of the tech industries in the state.

Software publishing and computer system design are expected to grow in 2017, as will internet publishing and data processing and hosting. The IT industries will benefit from increasing use of the internet by households and businesses. With the growth in business applications and consumer electronics that collect, analyze, and transmit

Sector Summary

Direction: large increase
Performance: better than most

data, data processing and hosting will enjoy increasing demand, although some consolidation and competition from other industry players also will be a factor.

Georgia's IT employers seem to anticipate higher employment levels for 2017, as indicated by the increased number of special skills visas for IT specialists (computer systems analysts, programmers, software developers, and computer system managers) requested in 2016. Several recent announcements of new company locations and expansions in Georgia, such as Anthem, GE Digital Operations Center, Keysight Technologies, Honeywell, NCR, VXI Global Solutions, and ADP are also an indication of industry growth.

In 2015 Georgia's software firms received a record influx of venture capital, second only to the investment in 2000, at the peak of the dot com boom. Venture capital funding in the first two quarters of 2016 dropped below the 2015 levels, but with the improving market conditions in the second half of the year, investment in software firms should accelerate. The amount of venture investment per deal also increased. Investment in Georgia's other IT services and biotechnology firms is also up, but capital is somewhat harder to get, with larger amounts going to fewer companies.

Venture capital-funded firms would be the ones most affected if market conditions suddenly took a turn for the worse. On the other hand, Georgia does not have an outsized number of technology startups, and the existing firms are well integrated with a broader economy, often with the growing health-IT sector.

Although it is much smaller than before the recession, Georgia still has one of the highest concentrations of workers employed by telecommunications resellers, and therefore is still vulnerable to industry-wide trends. The modernizing and expanding networks, and the rising number of network connections and consumers should assure this industry's growth long term growth, but the number of operators is likely to shrink due to the industry consolidation.

Architectural and engineering services tend to follow the overall economy, and with the increased economic growth in 2017, this sector should also grow. A relatively large portion of this industry in Georgia is owned by the federal government, and therefore is vulnerable to changes in federal spending patterns.

Georgia's scientific R&D sector has a relatively low share of the state's private sector jobs, but, coming out of the recession, this sector increased both its share of state GDP and its share of private industry output. At the same time, R&D business performance in the Atlanta-Athens-Sandy Springs metropolitan area ranked among the top 25 in the country. After gains in prior years, employment in Georgia's private business R&D sector faltered in 2015, however, even as a substantial number of R&D jobs were added by the federal government.

Biotechnology, providing close to a third of the private R&D jobs in the state, did better than the sector as a whole, with a steady employment climb over the last several quarters. The biotechnology industry is expected to grow in the coming years, with the continuing push for new technologies and discoveries. Venture capital investment in Georgia's biotech firms has been growing steadily since 2012, with 2015 bringing in a record amount of venture capital dollars. As in other high technology businesses, investors are expected to be more selective, putting more money into a smaller number of firms. Continued support and demand from federal government is important, and changes in R&D spending will have an impact.

High Tech Manufacturing

Automation is transforming both manufacturing and non-manufacturing sectors of the economy, and the U.S. is in the top five countries in the world in of adopting robotics into business. The levels of the transformation vary, however, as the adoption of robots is sometimes hindered by cost, and the lack of workers with specialized skills. Today, larger firms are more likely to adopt robotics, but as the cost drops, the adoption is likely to be more wide spread.

Global orders for industrial robots are climbing steeply worldwide. As more robotic systems are employed, they are likely to displace some jobs, and create other kinds of jobs, many of them falling into the high tech job category. The design, production, and maintenance of robots and software that drives them is a new frontier for Georgia's high tech industry. In fact, a pioneering Georgia firm (SoftWear) is bridging tradition and progress by creating robots for textile production; an innovation that may bring more textile manufacturing back to the state in coming years. Another Atlanta company, Dematic Corporation, installs robotic systems used in large warehousing operations.

Among high tech manufacturing industries, aerospace manufacturing plays more of a role in Georgia than in an average state. With the seventh largest number of employees in the country, aerospace manufacturing is an important segment of the state's economy, and these jobs constitute a larger share of the economy than in the U.S. on average. Although this industry is affected by government and military spending and its uncertainties, the rise in international tensions makes the funding for defense aeronautics more secure. The civilian aircraft building can also count on increased demand, stemming from aging fleet replacements, and new products development.

Pharmaceutical manufacturing in Georgia has been growing steadily post-recession, but the number of jobs is still below the pre-recession peak. Expanded healthcare coverage and favorable demographics should assure growth, however. Growth will be strongest in generics and weakest in brand name medicine manufacturing.

Computer, and communications equipment manufacturing are relatively small industries in Georgia, as is electronic instrument manufacturing (although it is an important part of Gwinnett County's economy). Employment in all of these manufacturing sectors shrank in the recent quarters. Price declines brought about by outsourcing and strong competition will continue to limit growth in the computer manufacturing industry, but communications equipment manufacturing, although subject to some of the same headwinds, will benefit from rising consumer demand and innovation. ❖

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Georgia's food and fiber industries contribute significantly to the state's economy.

The meat industry in Georgia makes up the majority of the state's production value, with poultry accounting for 47 percent of the total production value in 2015. The year 2016 saw a massive drop in cattle prices due to both supply and demand responses to the extremely high prices early in 2015.

Cow numbers rebounded nationwide as the drought in the western United States lifted. Total U.S. beef cow inventory increased 3.5 percent to 30.3 million head during 2015, with Georgia increasing its beef cow herd 5.4 percent during the year to 505,000 head. The number of beef heifers held as replacements in Georgia increased 16.6 percent during the year to 105,000 head. This response, coupled with significant downward pressure at the meat case, drove down calf prices and has pushed profits for cow-calf producers in the state into negative territory.

While prices are still above their long-term average, they are expected to remain stable into 2017. Rainfall will likely dictate production costs for cow-calf producers going into 2017, especially in north Georgia, which is in a relatively serious drought. If forage remains scarce, producers will likely see negative profits through 2017. One potential source of upward pressure on calf prices could be a continued decline in feed costs, which would increase demand for calves at the feedlot.

Pork and hog prices started out strong in 2016 but weakened dramatically over the summer. Strong prices during a time of increased production, coupled with lower feed costs, have given producers relatively strong margins until the summer. These conditions are expected to continue into 2017. Additionally, as beef and poultry production continues to increase, there will be some pricing pressure on pork at the meat case. This negative pressure on retail prices may weaken producer profits to some degree.

The U.S. poultry industry is the world's largest producer and second-largest exporter of poultry meat. Georgia produces more broiler chickens than any state in the nation. Annual broiler production in 2016 is expected to rise 2.4 percent over 2015 levels, and is projected to increase by a similar amount in 2017 as producers continue to respond moderately to lower input costs and favorable market conditions.

The 2017 annual broiler price per pound is forecast to be lower than in 2016, down an estimated 1.6 percent. This is after 2016 prices were down notably from 2015.

Sector Summary

Direction: large increase
Performance: better than most

However, there is good news for the poultry industry: Lower input prices will work in favor of the poultry industry going into 2017. Propane prices should be favorable, as recent declines in crude oil prices have resulted in lower domestic propane prices. This should continue into 2017. Feedstock prices are projected to be lower in 2017, helping to add to the industry's bottom line. Broiler exports are expected to increase over 2016's levels, relieving some of the production increase. As a result, 2017 broiler prices are forecast to remain close to 2015's yearly average.

Dairy

After some price weakness early in 2016, dairy prices have begun to strengthen and have moved back toward their long-term averages. Demand has been stronger for dairy products in domestic and export markets, with production of milk rising and prices of most major products increasing as well. In Georgia, milk cow inventory has increased 4.9 percent during 2015 to 85,000 head. This increase comes on the heels of a smaller increase the previous year.

Though soybean prices have remained relatively strong, grain prices have fallen dramatically enough that, on net, feed prices are down. Alfalfa hay prices are also down at the national level. Lower feed costs will contribute to strengthening profits into 2017 for larger dairies. Smaller dairies will likely struggle with relatively low milk prices. If drought conditions persist, profits for pasture-based dairies in north Georgia will likely be pressured.

Peanuts

Peanut production in Georgia has gone through some ups and downs in 2016. Planted acres in Georgia were down by 8.3 percent, compared to 2015. Throughout the U.S., the total acres planted increased 2.9 percent, driven largely by a 79 percent increase in plantings in Texas. Georgia still maintains the highest yield per acre compared to the rest of the U.S. and is expected to produce about 51 percent of the total U.S. crop. However, summer drought conditions in the Southeast and related pest issues are expected to significantly impact yields and total production by year's end. With about 45 percent of the crop not irrigated, expectations are that the state average yield will be below 4,000 pounds per acre for the first time since before 2011.

The good news is that domestic peanut consumption in the U.S. is continuing to show consistent growth to record levels. Peanut exports also continue to be strong, with record levels sent to China and Vietnam. That said, there is an unknown factor in U.S.-China export relations as the U.S. has recently filed a complaint with the World Trade Organization over China's "excessive government support" for wheat, corn and rice. How this may impact China's future demand for U.S. peanuts is unknown at this time.

Concerns in early 2016 focused on the lack of shelling capacity and warehouse space; however, a combination of revised stocks and a smaller harvest this year should alleviate storage issues. This could be good news for growers in 2017 as they make planting decisions among the different row crops. Peanuts are a rotational crop, with three years recommended between peanut crops on the same land. When other row crops are priced low, growers are tempted to shorten the rotation and plant additional peanuts. This is not always an advisable strategy, but with the current low prices on the major row crops and adequate peanut storage space, we may see an increase in planted acres next year.

Georgia's planted corn in 2016 increased by 21 percent over 2015 to 400,000 acres. This outpaces the national trend that increased planted acres by 7 percent. The yield per acre for 2016 is 175 bushels per acre, just above the national average of 174.4 bushels per acre. Total production is projected to be up by 27 percent in Georgia to 62.1 million bushels.

The price of corn, however, continues to be low, with national averages around $3.60 per bushel at midyear. Georgia prices in recent marketing years have averaged 12 percent higher than national prices, but there is little expected increase going into next year, so cost cutting might be needed.

The number of soybean acres planted in Georgia decreased by 18.5 percent in 2016 as compared to 2015. This was opposite the nationwide trend that saw a 1.3 percent increase. Georgia is well below the national average for yield at 39 bushels per acre as compared to 50.6 bushels per acre nationally. With a decrease in planted acres and lower yields, Georgia production of soybeans is projected to drop 27 percent in 2016.

Soybean prices have started to recover in 2016, with national average prices up to $10.20 per bushel by midyear. Georgia prices have averaged 2.8 percent higher than national prices in recent marketing years, but there is little expected increase in prices going into next year, so cost cutting might be needed.

Cotton

In 2016, Georgia's cotton producers planted 1.2 million acres, up 5.3 percent over the previous year. U.S. acreage came to 10.2 million acres planted, up 18.2 percent. Despite prices that were lower than desired, U.S. acreage increased due to less competitive prices of other crops when compared to 2015 and more favorable planting conditions in Texas, which reduced intended acres in 2015.

Cotton acreage in Georgia is influenced by peanut acres and vice versa. Corn also enters the equation, but to a lesser extent, and soybeans less so than corn. In 2016, cotton was up 60,000 acres and corn was up 70,000 acres. Peanuts were down 65,000 acres and soybeans were down 60,000 acres. Provisions of the 2014 farm bill favor increased peanut acres and planting peanuts assigned to Generic Base. Crop rotations, however, constrain the increase in peanut acres and thus favor cotton acreage remaining high.

In recent years, the buildup of stocks in China has dominated the global cotton situation. This year, 2016, China began a program of selling a portion of these stocks, known as "government reserve." The initial target was to sell 9.3 million bales by the end of August. Sales went much better than anticipated and fiber quality was apparently not an issue. As a result, sales were extended to the end of September and expected to be over 11 million bales. Another round of sales is expected in 2017.

China's stocks (all sources) are forecast to total 50.6 million bales at the end of the 2016-2017 marketing year. This compares to 60.2 million bales at the end of the 2015 crop year and 67.9 million bales at the end of the 2014 crop year. Although this large amount of stock has entered the supply chain, cotton prices have actually held at a fairly good level under the circumstances. World cotton production has declined and world cotton use or demand is starting to slowly show signs of improving or at least stabilizing. China's reserve sales may actually lead to more cotton use in China's textile mills.

For the 2015 crop, the marketing loan, through loan deficiency payments and loan gains, provided protection and support from cotton prices in the low 60s or less. For the 2016 crop, prices have ranged mostly between 60 to 70 cents per pound, but producers have had an opportunity at prices above 70 cents. The market also continues to provide a strong cash basis and premiums for good fiber quality.

World production increased 6 million bales, or 6.3 percent, in 2016, but declining stocks and signs of improving demand stabilized prices. Cotton prices for 2017 (December futures) are currently approximately 70 cents. Soybean prices for 2017 are higher than for the 2016 crop, and corn prices are less. The peanut price is likely to follow cotton and what is needed to attract sufficient acreage to meet demand. Cotton prices for 2017 are likely to range from 60 to 70 cents and acreage is expected to remain near 2016 levels or higher.

Vegetables

With a combined farm gate value of $1.8 billion, vegetables, fruits and tree nuts contribute significantly to Georgia's economy. Vegetables account for slightly over $1 billion, while fruit and tree nuts add an additional $772 million to the state's economy.

The Department of Agriculture Economic Research Service estimated the farm value of U.S. vegetables and pulses, including melons, to be projected at $22.8 billion in 2017, up from $22.5 billion in 2016, while acreage is expected to increase by 1.5 percent. Fresh market vegetables and pulses are all expected to increase in farm value in 2017, while the farm value of processing vegetables will remain flat. Fresh market farm value will still dominate, with 2017 sales projected to be $13 billion compared to processing vegetables' $2 billion.

During the first two quarters of 2016, fresh vegetable exports increased by 2 percent, equivalent to 1.9 billion pounds. According to the U.S. Census Bureau, this increase was triggered by sales of dry onions and cauliflowers, which contributed 19 percent to the total number of vegetables sold to foreign countries. Canada is still our largest destination for vegetables, absorbing 76 percent of our total sales volume. This trend is expected to continue in 2017. On the other hand, fresh market vegetable imports were up by 13 percent this year compared to the same period in 2015, leading to a negative vegetable trade balance as we imported more than we exported. This trend is also expected to continue as we have a comparative disadvantage in terms of weather conditions that do not give us the luxury to produce all of our vegetables year-round.

Per capita vegetable use was up to 381.2 pounds in 2016 compared to 373.9 pounds in 2015. This reflects an increase of 1.9 percent. This trend and the demand for vegetables is expected to continue increasing in 2017 and it is an indication that Americans are eating more vegetables. This will lead to continued vegetable production growth domestically as well as increased import growth. Furthermore, there was a 1 percent increase in the consumer price index for vegetables in 2016 compared to the same time period in 2015.

Fruits and Nuts

The U.S. Department of Agriculture-estimated farm value of fruits and tree nuts is projected to rise from $26.8 billion in 2016 to $27.5 billion in 2017. Fruit and tree nut acreage and farm value are expected to increase next year. Fruits, tree nuts and vegetables have a combined farm gate value of $1.77 billion in Georgia. Vegetables account for $1 billion, while fruits and tree nuts add an additional $772 million.

Peach production in the U.S. increased by 2 percent in 2016 due to the substantial increase in production in Georgia and South Carolina, two of the three peach-growing states in the U.S. Although California experienced the favorable pollination and sufficient chilling time that were expected to increase production, the state instead recorded a 15 percent decrease due to a hailstorm that occurred in May. Average retail prices of $2.21 per pound for various varieties of peaches were below the retail prices of 2015 ($2.47) due to the increase in production.

On the other hand, early season blueberry prices took a hit because the Florida and Georgia market windows coincided, quickly creating an increasing supply that flooded the Georgia-Florida short market window. Unpredictable bad weather conditions in eastern blueberry production regions of the U.S. also contributed to 15 percent decrease in production this year as compared to 2015.

Also due to bad weather, watermelon suffered from depressing yields and productivity in several watermelon-producing states, including Georgia, Florida, South Carolina, Arizona and California. Pecan (shelled basis) exports in 2016 fell by 15.8 percent to 61 million pounds, down from 73 million pounds in the same time period (October to September) of 2015.

The grower's price index for fruits and nuts was stronger in January 2016 compared to 2015 and 2014, respectively, and took a nosedive thereafter. The consumer price index stood strong in the first quarter of 2016 compared to 2015 and 2014, respectively.

Green Industry

The green industry—production, distribution, retailing and services associated with ornamental plants, landscape and garden supplies, as well as nursery, greenhouse and sod growers—is still recovering from the Great Recession of 2008. Market demand and sales in 2016 were good for many firms as the economy had modest growth and weather that cooperated throughout the spring. However, sales are still off for many green industry firms compared to pre-Recession levels, with the outlook of the industry tied to the overall economic outlook of Georgia and weather.

As noted by the U.S. Census Bureau, housing starts across the U.S. are trending upwards, with a projected 7 percent increase in quarter two of 2017 as compared to quarter two of 2016. The projected increase is constant across the myriad of indices available. This is a positive indicator for green industry sales in 2017 as most sales occur March to June each year.

Kiplinger projects a 2 percent U.S. gross domestic product (GDP) growth rate during 2017 with Georgia GDP expected to be around 2.7 percent in 2017. Furthering optimism for increased demand for green industry products is the U.S. Census Bureau's projected increases in U.S. consumer spending. The unemployment rate for Georgia is approximately 1 percent more than pre-Recession levels. These are positive indicators for the green industry as plants, sod and equipment demand are generally more susceptible to the economy as compared to other industries.

The presidential election will also play a role in 2017 economic growth, and in turn, green industry growth. The year after an election generally tempers stock market growth while legislative gridlock increases growth, according to ABC News. The impact on the green industry is directly tied to the economy, thereby, the election – president and U.S. Senate and House seats – will potentially dictate economic growth and discretionary spending available for green industry products.

Perhaps the biggest driver of green industry product demand is the weather. National Weather Service projections for early 2017 indicate normal temperatures and precipitation for most of Georgia. This implies that weather will most likely not be an issue for market demand of green industry products in 2017. However, the exact timing of rainfall and low temperatures from April to June will have a major impact on green industry sales.

Forestry Products

The forest products industry is a major contributor to Georgia's economy, with a total annual impact of $29 billion, and supports the second-most jobs across all industries. Georgia has 24 million acres of timberland available for commercial use, more than any other state in the nation. Ninety-one percent of this timberland is privately held. This past year, Weyerhaeuser purchased Plum Creek, previously the state's largest private landowner. Weyerhaeuser is now the largest private landowner in the U.S., with 13 million acres.

The forest products sector is closely tied to macroeconomic factors such as GDP, unemployment, housing starts and fuel prices. The unemployment rate has continued to decline, leading to an increase in consumer spending. Housing recovery in Georgia has lagged behind other states due to an oversupply of inventory coming out of the Recession. As vacancy rates decline, there should be an uptick in housing starts.

Home affordability remains a concern for millennials as home prices continue to outpace wage growth. An impending interest rate hike by the Federal Reserve will make it more difficult for first-time homebuyers to obtain a mortgage. Consequently, demand for multifamily housing will outweigh demand for single-family units. This is an important consideration for the forest products sector as multifamily homes use less lumber per unit than single-family homes.

Demand for pine grade timber in the South has increased since last summer despite a slight decline in demand in the second quarter due to softened housing starts. Housing starts are a strong driver of Georgia's economy and are especially tied to the production of Southern yellow pine lumber. U.S. housing starts in 2017 are projected to improve slightly, which should benefit lumber producers.

Pine pulpwood demand has increased since the beginning of 2016, but is slightly below demand levels from this time last year. The recent recovery in pulpwood demand is due to steady activity in traditional pulp and paper markets as well as improved consumption from oriented strand board facilities that generally trend with U.S. homebuilding activity.

The wood pellet market has also led to an increase in demand for pine pulpwood. Georgia wood pellet exports in 2015 were up 78 percent over 2014 numbers. Locally, the pellet market in Georgia will be affected by the United Kingdom's energy policy. The implications of the U.K.'s decision to leave the European Union remain uncertain. It is unclear whether this will be sustainable as we await the Brexit fallout. The proposed Hinkley Point nuclear power station will also influence U.K. demand for pellets. If plans for the proposed plant fall through, there should be an increase in demand for pellets sourced in Georgia as the U.K. looks for other sources to meet their increasing demand for energy.

In summary, the outlook for timber markets in the U.S. and, particularly, the South is positive with the potential to be driven higher by European demand for wood pellets and domestic housing construction in general. The forest products industry is well positioned to take advantage of increased demand when housing construction returns to its long-run average. ❖

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