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National economic outlook for 2002

Jeffrey M. Humphreys
P. George Benson

Despite the most aggressive monetary easing in two decades, the U.S. economy came to a virtual standstill in the first half of 2001. Then the terrorist attacks on September 11 tragically ending the longest and strongest expansion in the nation's history.

The 2002 outlook is not very encouraging. There will not be an immediate rebound in growth. Instead, the national economy will endure two additional quarters of outright recession. The recession will last about 12 months overall, and some sectors of the economy will be in recession far longer. For example, U.S. industrial output shrank for the twelfth consecutive month in September, and that is the longest uninterrupted decline since World War II.

Businesses, investors, and households are paying the price for losing their focus on costs and other fundamentals, which led to three major imbalances: excessive investment in production capacity, over staffing, and bubbles in the stock market. These structural excesses weakened the economy to the point where it was extremely vulnerable to any unexpected shock, such as the events on September 11. The main point is that, prior to September 11, the economy was just coasting—neither really growing nor shrinking—and the same plaguing structural problems will prevent an immediate rapid rebound.

It is difficult to know by how much the terrorist actions worsened the already fragile U.S. economic situation. Prior to the attacks on the World Trade Center and the Pentagon, the Selig Center for Economic Growth reported a 45 percent chance of a mild to moderate recession. Growth in spending by consumers and government was expected to barely offset decreased spending by business and industry. Manufacturing was already mired deeply in recession, but services and other consumer-dependent industries were still growing.

In the immediate aftermath of the terrorist attacks, consumers' confidence finally cracked and already dejected businesses curtailed spending even more. Global equity markets slumped, but did not panic. Businesses directly affected by the shutdown of the air transportation system announced massive layoffs. Other businesses that had been hesitating to fire employees began to fire them, further depressing consumers' confidence. As a result, the October unemployment rate jumped by the largest amount in more than 21 years—from 4.9 percent to 5.4 percent, or a one-month loss of 415,000 jobs. These negative reactions sealed the fate of the economy.

In a very profound way, September 11 not only ended the expansion, but also marked an end to the 20th century in a way that December 31, 1999 never did. Psychologically and operationally, the world has changed. Businesses not only are re-evaluating logistic chains and internal security, but also their strategic plans.

Thus the forecast for 2002 indicates that the shape of this economic cycle will resemble an elongated U; that is, a sharp slowdown in growth, giving way to a drawn-out bottoming—which includes a contraction of GDP—ultimately followed

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by a relatively sharp rebound in economic activity. Although the terrorist attacks have stolen the headlines, corporate cost cutting designed to eliminate significant structural excesses is the hallmark of this business cycle. Compared to layoffs stemming from either temporary inventory imbalances or from preemptive tightening of monetary policy, structural layoffs are much more enduring. Moreover, negative feedback from the deterioration of overseas economies (which lag the U.S. slowdown) will restrain domestic GDP growth. No region of the globe will avoid this recession. Also, supply shocks stemming from the increased costs of guarding against terrorism will retard growth.

Crunch Time

Businesses' cost cutting initially focused on trimming inventories, slashing investment spending, and firing production and contingent workers. Since September 11, however, businesses have been cutting even more deeply. Recognizing that the American consumer has flinched, and business conditions therefore will worsen before they will improve, operating costs are being pared ruthlessly. Managerial and professional positions now are at risk, as is compensation received by those who keep their jobs. In the months ahead, persistent rounds of layoffs, cuts in regular compensation, plus deep cuts in flexible compensation linked to performance and year-end bonuses will severely test consumers' resilience. Many households that have come to depend on profit sharing will be shocked by their smaller bonuses, and the resulting disappointment will squash consumers' willingness and ability to spend. This economic jolt—and the risk of an even deeper recession—will be at its worst early in 2002.

The bottoming that is underway will continue through the first half of 2002. Inflation-adjusted GDP will decline, dropping by 1 percent on an annual basis. (GDP decreases in the first and second quarters will be offset by increases in the third and fourth quarters, reducing the percentage drop in GDP for the year as a whole.) This reversal of fortunes is significant when compared to the 0.8 percent gain expected for 2001 and the 3.2 percent average rate of GDP growth over the last 20 years. Initially, in the second half of 2002, the gains may be small, but before long, growth will be impressive. Still, these high percentage gains will come off some very depressed bases; and thanks to the snapback off a deep bottom, the U.S. economy will enjoy above-trend growth in 2003.

The above-average growth will not last long, however. The larger proportion of resources that will be spent on defense, office and personal security, public health, cross-border activities, mail handling, insurance, IT security, logistics, and shipping means that will take more to produce goods and services than it did prior to September 11. Productivity growth therefore will be lower, and so, too will be the potential rate of economic growth.

Consumer Markets

Although businesses began to cut back on their spending on investment and inventories in the second quarter of 2000, consumers kept the nation's economy going. Indeed, consumers' spending accounted for a lopsided proportion of GDP growth, basically determining the economy's path. Even though consumers' confidence slipped, gains in income, expanding home equity, easy access to credit, declining interest rates, and low prices for manufactured goods propped up spending in 2001. In fact, Americans nearly spent more than they earned, and only saved a shrinking percentage of personal income.

Because consumers were already overburdened by large decreases in equity-based wealth, limited savings, heavy debt levels, and a barrage of high-profile layoffs, the terrorist attacks were the final straw. Pervasive economic gloom and the negative wealth effects of another stock market plummet depressed consumer spending, sealing the fate of the U.S. economy.

In 2002, households initially will be adjusting to layoffs, smaller performance bonuses, and a severely stressed labor

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P. George Benson
Dean

Jeffrey M. Humphreys
Director

Lorena M. Akioka
Editor

Beata D. Kochut
Research Coordinator

Ian Armit
Information Analyst

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Forecast Spotlight
March Update

The downturn is probably over; and unless there is a double-dip recession, the peak-to-trough decline in GDP will be only 0.3 percent.

Gauged by the drop in GDP or output, it looks like this recession will be one of the mildest and shortest in U.S. history, but gauged by job losses, this recession will be fairly typical both in degree and length.

Buoyed by motor vehicle purchases and a huge jump in federal spending, preliminary reports show that GDP actually increased by 1.4 percent in the fourth quarter of 2001.

"Zero-interest financing" and unusually deep holiday price discounts are the main reasons why GDP grew and why businesses' inventories are so low.

market. People will refrain from buying nonessentials as well as some big-ticket items—which will hurt the housing and automotive sectors. Nonetheless, personal income should grow slightly and housing prices will continue to rise slowly. Although consumers' confidence measures are not expected to register signs of extreme distress, a rising unemployment rate will keep people from becoming more optimistic about the current economy. By midyear, expectations about future economic conditions should increase slightly, which will help to support overall consumer spending, but this will not be enough to push the economy onto a higher growth path.

In 2002, disposable personal income will rise slightly faster than inflation, which will account for most of the projected rise in consumers' spending. Inflation-adjusted per capita disposable personal income will barely rise, however. Moreover, the anticipated growth rates are significantly lower than those posted in 2001. The number of jobs will contract by 1.2 percent, subtracting substantially from income growth. Wage and salary increases will boost income, but these increases will be much smaller than in recent years. The average number of hours worked per week will not rise from its already depressed level, and may fall further. Nonetheless, the slight increase in hourly compensation will provide some support to income growth. Finally, a drop in the effective personal tax rate will boost consumers' after-tax incomes, which will help to sustain consumers' spending.

Just before the recession started, the average household's debt payments consumed 14 percent of after-tax income, the highest it's been since 1987. The last time savings was this low was in 1933. Americans are saving only about one penny out of each dollar of after-tax income. Although high levels of household debt did not cause the recession, it will make it very difficult for the consumer to lead the recovery.

Home values are at a record levels, but prices of existing homes probably will not climb much higher in the coming year. Nonetheless, many homeowners have seen their housing investments increase in value, helping to offset recent losses in the stock market. Gains in the housing market are probably more important determinants of overall consumer spending than gains in the stock market, which benefit only about one half of households. Conversely, stock prices probably are more important for high-income households. Borrowing against the increasing worth of the family home has boosted consumer outlays, and attractive mortgage rates make tapping into this source of wealth more palatable. In 2002, people will be much more wary about using cash-out refinancing and home equity loans to buy consumer goods, however, and this wariness will limit the growth push from low interest rates.

In the coming year, consumers' spending for goods will increase at about the same rate as for services. Among goods, spending for nondurables will grow faster than spending for durables. Among services sectors, spending for telephony and recreation will expand the fastest, followed by spending for electricity and medical care. Spending for leasing services and natural gas will decline.

Labor Markets

In 2001, job losses initially were concentrated in manufacturing, labor supply services—which provides just-in-time workers to other businesses—and overseas operations of multinational corporations. The tech slump cost many college-educated workers their jobs; and a sudden dearth of venture capital challenged tech companies' ability to sustain or create new jobs. By the second quarter of 2001, corporations overcame their initial reluctance to fire people that they had recently worked so hard to recruit in the nation's very tight labor market. By mid-2001, job growth in services faded. After September 11, businesses that were still hesitating to fire employees began to announce layoffs. As civilian household employment shrank, the unemployment rate rose significantly.

In 2002, total civilian employment will decrease by 1.2 percent, or by about 1.6 million jobs, and the unemployment rate will jump substantially. This means that about 133,000 jobs per month will be lost. By the second quarter of 2002, most businesses will have shed redundant staff. On a net basis, hiring probably will resume in the third quarter, but since domestic and global demand for goods and services will grow very slowly, the pickup in job growth will be very gradual. Also, the limited supply of venture capital—which fuels job creation—will restrain employment growth. Nonetheless, net hiring will lessen the intense pressure that consumers felt as job losses mounted.

In the coming year, employment will rise slightly in the nation's services-producing industries. Forces behind this growth include increasing numbers of households, favorable demographic and social changes, consumers' dependence on household help and other personal services, and more outsourcing by businesses. The transportation, communications, and public utilities sector will see moderate declines in employment. Despite intense budgetary pressures, increased demand for services will add a small number of jobs in state and local government. Slightly more jobs will be available with the federal government. Manufacturing employment will continue its prolonged decline. Overall, manufacturing has been and will continue to be the weakest link in the nation's labor market.

Forecast Spotlight
March Update

The exact timing of the turn from recession to recovery is a very close call, but if we use the same standards to mark the beginning of the recovery that were used to date the beginning of recession—a turn in the direction of total employment—then the best bet is sometime in the first quarter of 2002.

Corporate Profits

The U.S. economy experienced a deep profits recession in 2001, and despite sharp cost reductions, it is hard to make a case for an immediate turnaround in corporate profits. Outright recession in the U.S., coupled with an extended period of economic weakness abroad, signifies that the contraction in earnings probably will persist into 2002. In this environment, it will be extremely difficult for American companies to increase spending or hiring very quickly. The business sector therefore will be hard pressed to jump-start a vigorous rebound in economic growth. Until the red ink stops flowing, many businesses will hold back even on replacement spending. But low interest rates, reduced labor costs, some steadying or strengthening of demand, and easy year-over-year comparisons should help profits to stabilize by midyear and begin to grow in the second half of 2002.

Shrinking profits and uncertainty about the business outlook will force companies to scrutinize spending, too. Outlays for new facilities will drop sharply in 2002. Businesses' spending for new investment will continue to decline, but the year-over-year percentage drops will gradually diminish. Also, stock prices probably will remain depressed until corporate profits begin to stabilize, but the risk of major additional price drops is relatively small.

Business Investment

Excessive investment by businesses is the primary imbalance that led to the economic slowdown. In 2001, the purging of IT excesses flattened entire sectors of the economy. Businesses slashed their inflation-adjusted spending on productivity-enhancing equipment and software, and in a dramatic reversal of fortunes, spending for

UNITED STATES ECONOMIC FORECAST 2001-2002

United States	1997	1998	1999	2000	2001	2002
Gross Domestic Product, Bil. of 96$	8159.5	8508.9	8856.5	9224.0	9301.8	9206.0
Percent change	4.4	4.3	4.1	4.1	0.8	-1.0
Nonfarm Employment (Mil.)	122.7	125.8	128.9	131.8	132.3	130.7
Percent change	2.6	2.6	2.4	2.2	0.4	-1.2
Civilian Unemployment Rate (%)	4.9	4.5	4.2	4.0	4.8	6.8
CPI-U, Ann. % Chg.	2.3	1.5	2.2	3.4	3.1	1.8

Source: The Selig Center for Economic Growth, The Terry College of Business, The University of Georgia, November 13, 2001.

communications equipment plunged. With the exceptions of power plants and scientific instruments, spending declined for nearly every type of equipment and software. Spending on new facilities held up well in the first half of 2001, but softened after that.

A turnaround in investment spending is not expected until profits stabilize and excess capacity is either utilized or eliminated. Profits are not expected to rebound until late in 2002 and capacity utilization will remain extremely depressed throughout the year. The nation is only using about 75 percent of industrial capacity, which is the lowest level of use in 17 years. In high-tech industries, recent investment was huge and the situation is even worse: the nation is only using 60 percent of capacity.

The country is experiencing the worst drop in capital spending in the post-World War II era. Still, in the second half of 2002, overall spending on capital goods may stabilize, but spending on facilities, communications equipment, and light vehicles will continue to decline. There is a real risk that the software side of the IT downturn will intensify. The bottom line is that significantly higher rates of GDP growth will not be possible until capital spending rebounds, so the prospects for a broad-based revival of investment spending in 2002 are exceedingly slim.

Government Expenditures

Tax cuts and a surge in federal spending will stimulate growth, leading the economy towards recovery. The record surplus will become a deficit in the coming fiscal year, however. In 2002, the combined fiscal and monetary policy stimulus will be huge. Receipts received by state and local governments, however, will grow much more slowly in calendar year 2002. Almost all jurisdictions will see hiring slowdowns and freezes on discretionary spending, such as outlays for travel, equipment, and facilities. Many states will cut their budgets or dip into reserves to make their budgets balance. Property tax collections will be relatively unaffected by the slowdown. Lower capital gains, less stock option exercise, and the contracting labor market will reduce personal income tax collections. Sales tax collections will roughly match trends in consumer spending. Corporate income tax collections will decline in most jurisdictions, although increases in funds derived from federal grants-in-aid will help to offset weak receipts from other revenue sources. Effective tax rates are not expected to change in 2002, and thus diminishing revenue growth will unmask two festering problems: erosion of the tax base as the economy becomes more dependent on services and the void created when stable elements were removed from the tax base during the booming 1990s.

Monetary Policy

In 2001, the Federal Reserve cut key interest rates ten times, lowering the federal funds rate (the overnight bank-to-bank rate) from 6.5 percent to 2 percent. Since the recession will persist well into 2002, further cuts to 1.5 percent are probable; but when the economy gets stronger, the Fed will reverse course and raise rates quickly, thus avoiding the risk of setting off an inflationary spiral. Meanwhile, the low rates not only help to encourage spending on big-ticket items that are typically bought on credit, but also help to liquefy the economy. Homeowners will refinance mortgages, which will improve household finances and help to prop up consumer spending. Businesses will refinance old debts to lower their capital costs and thus be able to expand hiring and other forms of spending.

Many of the forces that have held inflation to the lowest levels in more than thirty years still exist. Inflation bottomed out in 1998 when the consumer price index rose by only 1.6 percent. Partly due to higher energy prices, the CPI rose to 3.4 percent in 2000 and to 3.1 percent in 2001. If oil prices behave as expected, the index will increase by 1.8 percent in 2002.

Although there are several reasons to believe that slower productivity growth will not lead to higher inflation, the most important is slack capacity. The terrorist attacks reduced aggregate demand much more than they reduced aggregate supply, and thus widespread labor surpluses and excess capacity in many economic sectors will keep the lid on wage and benefits. Worried workers will not make more aggressive demands for higher compensation. The global economic slowdown will prevent commodity prices from rising as weak demand coupled with excess capacity will restrain retail prices and will continue to crush commodity prices. The bottom line: businesses will not find it any easier to raise the prices of the goods and services they produce.

In the late Nineties, the relative strength of the U.S. economy and continuing capital flight from distressed areas to safe havens in this country were the most important forces behind the stronger dollar. Foreign investors were eager to fund the nation's growing external account deficit.

The situation in the currency markets shifted in 1999. As economic conditions improved elsewhere in the world, so did investment opportunities in other countries. Foreign

Forecast Spotlight
March Update

The same structural problems that brought growth to a virtual standstill prior to 9/11 will prevent a vigorous recovery in economic growth. Recovery is imminent, but the threat of a double-dip recession will be unusually high—about 35 percent.

investors therefore were no longer as willing to finance the large U.S. current account deficit. Consequently, the trade-weighted value of the dollar depreciated by 2.3 percent, transforming a counter-inflationary force into one that reinforced it. (The weaker dollar is inflationary because it increases the prices of imported goods and stimulates foreign demand for U.S. products.) From late 1999 through mid 2001, the dollar stabilized and its trade-weighted value rose. Since September 11, the deteriorating domestic economy, pressures from the current account, and some reduction in America's safe-haven status pushed it back down again. In 2002, the dollar's trade-weighted value will decline by 2 percent, and then gradually depreciate for the next several years.

Housing Markets

Some of the most attractive mortgage rates in decades have helped to sustain home sales and starts, but despite this, the National Association of Home Builders' September index of housing market activity posted its biggest one-month drop since the index was started.

Although the Federal Reserve will keep interest rates very low, the construction forecast calls for housing starts to decline substantially in 2002. Nationally, sales of both new and existing homes are expected to drop. Nonetheless, the average sales price of existing homes probably will rise slightly.

Because mortgage rates are very low and the levels of activity already are very high, even very attractive mortgage rates will not coax additional buyers. To some extent, 2001's very low mortgage rates borrowed sales from 2002. Because almost nobody is waiting for lower mortgage rates, there will be less pent-up demand to tap into in the coming year. The other determinants of demand—growth in employment, population, personal income, relocation activity, and consumers' confidence—suggest a lower level of homebuilding.

Many factors will help to support demand for home renovations, an activity that is much less cyclical than new construction because the peaks are less pronounced and tend to occur later. Since this business cycle has seen booming sales of existing homes, owners are likely to invest in remodeling, which they can readily afford, thanks to appreciating values that have increased equities, and refinancing that has lowered monthly payments.

A Federal Government-Led Economic Recovery

In 2002, the combined fiscal and monetary policy stimulus in the pipeline will be huge. By all accounts, we have seen the most aggressive interest rate cuts in over 40 years. Tax cuts and a surge in federal spending will provide a big push to growth. In short, this is shaping up to be a federal government-led economic recovery. Lower energy costs and low inflation also should help to heal the economy. ❖

Forecast Spotlight
March Update

General optimism about a recovery is based on the Federal Reserve's actions over the past year; a surge in federal spending; the effects of the federal tax cuts; and the end of the squeeze on profit margins.

Last year the Fed cut key interest rates eleven times, lowering the federal funds rate from 6.5 percent to 1.75 percent. It chose not to cut rates in January, and we believe that the Fed easing cycle is over. In the second half of 2002, when the economy gets stronger, the Fed will reverse course and raise interest rates, and it won't be surprising if the Fed funds rate rose to 3 percent by year's end. Meanwhile, the low rates not only help to encourage spending on big-ticket items that are typically bought on credit, but also help to liquefy the economy.

The direct effects of lower taxes on disposable personal income and increases in federal spending are providing a big push to growth. It appears that overwithholding in the second half of last year was significant, which implies that bigger than usual refund checks will be an economic boost in 2002.

In the short term, it would be wise to be cautious because there are several unresolved structural problems that make the economy extremely vulnerable to an unpredictable shock. These problems include high levels of household debt, a large trade deficit, excess capacity, and the overvalued stock market.

Georgia's economic outlook for 2002

Jeffrey M. Humphreys
P. George Benson

The Terry College of Business's 2002 forecast calls for the synchronous recession of the state and national economies. The recession will be relatively long, but shallow. The Georgia economy slid into recession in the third quarter of 2001, and the slide will continue through the second quarter of 2002. In the final quarter of 2001 and the first quarter of 2002, the economy will be hammered by layoffs at Delta Air Lines, the lagged effects of declining stock prices that have reversed the wealth effect, and sharp year-over-year decreases in flexible compensation—so-called "bonus" shock. Nonetheless, a gradual recovery will begin in the second half of 2002.

The underlying forces of recession in Georgia and the nation are basically the same: the purging of structural imbalances—excesses in business investment, staffing levels, and bubbles in the equities markets—and the collapse of consumers' and businesses' confidence. Unlike previous recessions where Georgia and Atlanta held out a little longer, the unique characteristics of this recession will work against us. Georgia's unusually large air transportation, hospitality, and information technology clusters will face difficult market conditions in the first half of 2002.

Atlanta's very large air transportation cluster has been—and will continue to be— hammered. Activity in convention and tourism has plummeted and it's unlikely to bounce back quickly, at least to pre-recession levels. Atlanta has the largest high-tech cluster in the Southeast, and it is being staggered by the excessive investment that occurred in the late 1990s. Most of the direct layoffs in these three sectors will come quickly, but the ripple effects will continue through mid-2002.

Georgia also will suffer because it is home to many military bases. The bases are huge economic engines, but when troops are deployed overseas, they cannot spend money in Georgia, and their dependents understandably are not in the mood to do so. During the Persian Gulf War, military towns across Georgia experienced a sharp drop in base-related consumer spending, and this pattern will be repeated in late 2001 and in 2002.

Another problem is that the recession is creating a fiscal imbalance in state government revenues and expenditures. Because Georgia must balance its budget, there have been and will be additional sharp cuts in spending by state government. These cuts will intensify and prolong the recession. Fortunately, the state's "rainy day" reserve funds were full, and these funds help to reduce the impact of a sour economy on the budget, but the cushion will be thin or gone in 2002. Consequently, the cuts will have a more damaging impact on the economy in the coming year.

Since the 1990-91 recession, Georgia has become increasingly integrated with the global economy, and now this shift in orientation has suddenly become a short-term burden. In the wake of September 11, businesses prefer to do business with companies in the U.S. instead of overseas. Even though this increased aversion to international trade will prove to be temporary, it will hurt trade-dependent companies in 2002. The increased security measures implemented in the wake of the terrorists' attacks also will act like a tax on cross-border business activities in a deteriorating global economy. Both exports and imports have been declining for over a year (starting in the fourth quarter of 2000), and since the first quarter of 2001, exports have been dropping even faster than imports. The sharp pullback in IT-related spending and growing doubts about the productivity payback from the IT buildup will reduce this particular push to globalization.

On an annual average basis, Georgia's real gross state product—the inflation-adjusted sum of goods and services produced in Georgia—expanded by 1.6 percent in 2001. This overall positive value reflects strength early in the year that more than offset the contraction in economic activity that began later in the year. The GSP forecast calls for a 0.9 percent decrease in 2002, with declines in the first two quarters of the year only partially offset by increases in the year's third and fourth quarters. Unfortunately, the slump will feel worse that the overall statistics suggest. The 2002 percentage gain is down dramatically from the peak growth of 6.4 percent in 1998, 5.7 percent in 1999, and 4.7 percent in 2000.

Georgia's inflation-adjusted personal income will follow a similar path, decreasing by 0.8 percent in 2002. Job losses will be the most important factor curbing income growth.

Employment

In 2002, the state's nonagricultural employment will decrease by almost 33,000 jobs, or a drop of 0.9 percent. The percentage loss is only slightly smaller than the 1.2 percent decrease predicted for the nation, but is much smaller than the 1.8 percent loss— 54,300 jobs—Georgia experienced in the "oil-shock" 1990-91 recession that followed Iraq's invasion of Kuwait. The unemployment rate will rise by almost two full percentage points—from 4.2 percent in 2001 to 6.1 percent in 2002. Job losses and growth in the number of people in the labor force will create an uncomfortable degree of slack in state's formerly taut labor market.

The services sector is projected to add 14,500 jobs and will see the fastest growth (1.3 percent). Educational services and medical services have underlying growth trends that will cushion the sector against recessionary forces. Security firms will be hiring, too. Jobs lost in the state's large lodging and hospitality industries will retard overall employment gains in services, however.

Retailers will be thwarted by the 0.1 percent decline in wholesale and retail employment brought about by a drop in sales of new cars, big-ticket consumer durables, and discretionary goods. Consumers' tendency to switch from costly name brands to lower-priced generics will curb job creation in retailing. The retail employment forecast also reflects a surge in retail bankruptcies and store failures. Free money (zero percent financing) boosted new car and truck sales in 2001, but these incentives detract from future sales and will prolong the recession. As the costly incentives are curtailed, auto sales will drop sharply. In fact, it appears that automakers already are cutting production, apparently anticipating a big drop in sales in 2002.

Employment in government will expand by 0.1 percent, or 900 jobs, all of which will be in local and federal government. State government employment will decline due to intense budgetary pressures. Job losses consequently will limit the growth of personal income tax collections. Dejected consumers and slow personal income growth will stymie sales and use tax collections, too. The recession in corporate profits that was already underway before the terrorist attacks will continue, which will prolong the slide in corporate income tax collections. Because local government especially depends on property tax collections, revenues collected at this level will fare better than those collected by state government. Nonetheless, hotel and motel tax collections will be stunned by sharp cutbacks in leisure and business travel. Local option sales tax collections also will flatten as consumers retrench.

Forecast Spotlight
Budget Update

Another problem is that Georgia's leaders must balance the state's $15 billion budget, and the spending cuts that have been made will intensify and prolong the recession. Fortunately, the state's financial cushion—comprised of a $735 million reserve fund and another $815 million in surplus collections from last year—will help to reduce the impact of a sour economy. Still, the sobering truth is that revenue collections in the first seven months of the fiscal year were down by 5.6 percent.

Forecast Spotlight
Jobs Update

In the second half of the year, Georgia lost about 87,000 jobs, or a 2.1 percent drop from the June peak through December. In the first half of 2002, the state probably will lose another 20,000 jobs.

Most of the job losses will be in manufacturing, retailing, real estate, construction, and state government.

Job growth will occur in health services, biotechnology, the federal government, security services, private sector educational services, and insurance.

Sagging confidence also has made homebuilders extremely vulnerable to recession. Because fewer new homes will be built, construction employment will decline by 18,800 jobs, or by 9 percent. Georgia's homebuilders operated at record levels in 1998-2001, but the forecast calls for permits authorizing 8.8 percent fewer new homes in 2002. The slump in multi-unit residential construction will be even steeper: 20.4 percent fewer units will be authorized in 2002. In contrast, spending on home improvements will decline only slightly. Public spending for schools and other infrastructure should hold steady and may even increase slightly. Private spending for new nonresidential structures will plummet, however.

Manufacturers will be punched again in 2002, as sectoral employment drops by 2.8 percent, or by 15,900 jobs. Manufacturers of durable goods are expected to cut jobs faster those of nondurables, but all will be hurt by global recession, excessive capacity in many manufacturing subsectors, increased competition from imported goods, and more automation in production.

The transportation, communications, and public utilities sector will lose 8,500 jobs. Indeed, activity in air transportation will decrease much faster than GSP, cutting demand for workers. Meanwhile, the steady job outlook for the telecommunications sector reflects rising demand for telecom and Internet services.

Due to deregulation, technical advances, and restructuring, relatively few jobs will be created in public utilities. Once the recession ends, California's highly publicized energy problems could help Georgia compete more effectively for energy-dependent businesses because an adequate supply of reliable and affordable energy suddenly is a crucial factor in site selections for new operations, relocations, or expansions.

In 2002, employment in finance, insurance, and real estate will decline by 1.5 percent, or by 3,100 jobs. Intense

GEORGIA'S GROSS STATE PRODUCT, 1988-2002, IN CURRENT AND CONSTANT (1996) DOLLARS WITH YEAR-TO-YEAR PERCENTAGE CHANGES (billions of dollars)

			Percentage Change from Previous Year	
Year	Current $	Constant (1996) $	Current $	Constant (1996) $
1988	127.6	159.5	8.3	4.4
1989	134.9	162.8	5.7	2.1
1990	141.4	164.8	4.8	1.2
1991	148.7	167.1	5.2	1.4
1992	160.8	175.6	8.1	5.1
1993	172.2	183.1	7.1	4.3
1994	187.6	195.3	9.0	6.6
1995	203.5	206.4	8.5	5.7
1996	219.5	219.5	7.9	6.3
1997	235.7	231.8	7.4	5.6
1998	255.4	246.6	8.4	6.4
1999	275.7	260.7	7.9	5.7
2000	291.9	272.8	5.9	4.7
2001	303.7	277.3	4.0	1.6
2002	306.7	274.8	1.0	-0.9

Source: Data for 1988-98 were obtained from the U.S. Department of Commerce. Data for 1999-2002 were obtained from the Selig Center for Economic Growth, Terry College of Business, The University of Georgia (November 13, 2001).

competition, less origination and refinancing of mortgages, and weak market conditions imply fewer positions with banks and insurance companies. Less active single-family housing and commercial real estate markets and the consolidation of real estate firms will cut jobs in this industry. Also, the increasing emphasis on less labor-intensive ways to do business will restrain employment growth across the entire sector.

Favorable Demographics

A major plus is the continuing influx of people to Atlanta, the coast, and Georgia's mountains. Though the state's annual rate of population growth is about double the nation's, the Terry College of Business predicts that this growth will slow down in response to the contracting economy, and to traffic congestion and pollution in metro areas.

During periods of economic growth, the majority of people who move to Georgia are attracted by job opportunities here, which in turn makes Georgia a prime choice for companies seeking expansion or relocation. This population-fueled cycle of growth is responsible for much of Georgia's prosperity, is vital to expanding the state's consumer market, and provides human capital that is crucial to the expansion of industries ranging from high technology to hospitality. Population growth also has helped many rural counties to diversify their economic bases, which often were overly dependent on labor-intensive manufacturing, agriculture, and government.

During a recession, the slowdown in population growth tends to lag the slowdown in economic activity, providing a degree of stability to states like Georgia where population growth trends are especially strong. Despite the shrinking number of jobs, people will continue to move here because they believe that economic opportunities are better here than they are elsewhere—at least for a while. Also, the chain-migration of family members of those who moved to Georgia during the 1990s will prove to be very resilient to recessionary forces.

Georgia is one of the states that benefit the most from retiree migration to and from Florida. Despite the economic slump, retirees—whose incomes are less affected by the business cycle—will continue to move here, bringing experience, steady income, and considerable capital. Their impact is seen in the economic revitalization of Georgia's sub-Appalachian and mountain counties, where retirement and second-home developments, plus road improvements that make long-distance commuting more appealing, will continue to enrich what once were some of the nation's poorest counties.

Prospects for MSAs

Atlanta The twenty-county Atlanta MSA will lose 22,200 jobs, a year-over-year decrease of 1 percent. Job losses will be centered in the area's large high tech, air transportation, and hospitality clusters; and temporarily, Atlanta's technology-driven economy has become a disadvantage. Construction activity also will decline sharply. These same industrial clusters will help to reinforce the rebound that will inevitably follow the recession, however.

GEORGIA'S ECONOMIC FORECAST, 2001-2002

Georgia	1997	1998	1999	2000	2001	2002
Real Gross State Product, Bil of 96$	231.8	246.6	260.7	272.9	277.3	274.8
Percent change	5.6	6.4	5.7	4.7	1.6	-0.9
Nonfarm Employment (thousands)	3614.4	3740.8	3883.1	3993.3	4027.4	3994.7
Percent change	2.5	3.5	3.8	2.8	0.9	-0.8
Real Personal Income, Bil of 96$	180.3	194.0	203.5	213.7	219.3	218.4
Percent change	4.3	7.6	4.9	5.0	2.6	-0.4
Housing Permits, Total	75123	85401	89581	91820	92500	82000
Percent change	0.3	13.7	4.9	2.5	0.7	-11.4
Unemployment Rate (percent)	4.5	4.2	4.0	3.7	4.2	6.1

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, November 13, 2001.

The typically vibrant metropolitan area ranks high on the list of the nation's best locations for business. The large pool of talented people, industrial diversity, and the growth of several major research universities foster economic prosperity. Transportation also underpins the region's growth. Hartsfield Atlanta International is the second busiest passenger airport in the world, and its extensive schedule of daily flights to domestic and international destinations makes Atlanta a prime location for headquarters operations, foreign direct investment, trade shows, and conventions. The convergence of major fiber optic trunk lines here also attracts telecom and IT firms, which increasingly power Atlanta's economy.

Atlanta's location at the confluence of rail lines and three interstates—only four other U.S. cities are served by three interstates—makes the area ideal for distribution centers and parts manufacturing. The city also is home to MARTA, the largest rail passenger transit system in the Southeast. But due to inadequate funding, the lack of regional planning, and unprecedented growth, local roads are stretched to capacity, which highlights the pressing need for alternatives to I-285 and for MARTA rail extensions, light rail, and inter-city commuter rail. Over the next decade, traffic congestion will be a much greater threat to the Atlanta region's—and Georgia's—prosperity than the 2001-2002 recession.

Albany The Albany MSA will lose 600 jobs, representing a 1 percent decrease in employment. Sources of strength, however, include a low cost of doing business, an excellent telecommunications infrastructure, the Materiel Command for the Marine Corps, the area's low crime rate, and a low cost of living. The area has considerable potential as a center for back office operations and telemarketing. Once the recession is over, Albany will benefit from its role as a regional retail center and from the spillover from Florida's economy. Because spending on health care will expand despite economic hard times, the area's increasing role as a regional center for health care weighs in its favor.

The Marine Corps Materiel Command employs over 3,000 people and is authorized to purchase $1.9 billion worth

GEORGIA'S EMPLOYMENT FORECAST, 2001-2002

Georgia	1997	1998	1999	2000	2001	2002
Nonfarm Employment[1]	3614.4	3740.8	3883.1	3993.3	4027.4	3994.7
Employment by Industry[1]						
Mining	7.8	7.9	8.1	7.8	7.6	7.1
Construction	168.0	181.5	199.2	206.5	208.9	190.1
Manufacturing	588.6	594.6	596.7	587.3	566.2	550.3
Trans., Comm., Public Utilities	230.4	243.9	258.7	267.9	271.0	262.5
Wholesale and Retail Trade	910.8	930.7	959.6	981.6	998.6	997.3
Finance, Insurance, and Real Estate	187.2	198.2	202.6	206.5	205.2	202.1
Services	944.4	998.1	1065.8	1132.4	1156.4	1170.9
Government	577.3	586.0	592.4	603.3	613.5	614.4
Percent Change						
Nonfarm Employment	2.5	3.5	3.8	2.8	0.9	-0.8
Employment by Industry						
Mining	0.0	1.3	2.5	-3.7	-2.6	-6.6
Construction	2.4	8.0	9.8	3.7	1.2	-9.0
Manufacturing	0.5	1.0	0.4	-1.6	-3.6	-2.8
Trans., Comm., Public Utilities	3.2	5.9	6.1	3.6	1.2	-3.1
Wholesale and Retail Trade	1.9	2.2	3.1	2.3	1.7	-0.1
Finance, Insurance, Real Estate	3.7	5.9	2.2	1.9	-0.6	-1.5
Services	4.5	5.7	6.8	6.2	2.1	1.3
Government	1.4	1.5	1.1	1.8	1.7	0.1

[1]Indicates thousands of workers.

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, November 13, 2001.

of equipment and other goods and services. MATCOM's sheer spending power and the outsourcing of contracts will help to attract business to Albany, too.

Recognizing the commercial potential of a thriving downtown, Albany has embarked on ambitious urban revitalization projects, which are sure to attract business and visitors. The Albany project, with the $32 million Flint River Center as the main attraction, is scheduled for completion by 2005.

Athens The number of jobs in the Athens MSA will decrease by 0.7 percent in 2002, because the area will suffer job losses in manufacturing and construction. There have been and will be more budget cuts at the University of Georgia, but this is the first recession since HOPE scholarships were introduced, and the HOPE money will help to support student-related spending.

Although the immediate prospects for employment growth are limited, the Athens economy will benefit from several area-specific factors. Athens is favorably located in the path of Atlanta's future growth, but lacks an interstate-quality connection to the state's capital. The university's presence contributes substantially to the economy, and has helped to promote the city as a center for biotechnology. There have been improvements to the area's infrastructure, especially Highway 316, the city's new Convention Center, and massive new additions to the UGA campus.

The proposed development of a massive high technology park along the 316 corridor connecting Atlanta and Athens, undoubtedly would bring desirable, environmentally benign development and high paying jobs to the Athens area. The future shape of this development, however, is contingent upon the proposed upgrades to Highway 316. Other prime sites include the intersection of U.S. Highway 78 and Highway 316, which many are eyeing for commercial possibilities. In addition, a large commercial tract straddling the Clarke and Oconee county line soon may become a commercial mega-zone, bringing investment and jobs to the region.

The arrival of high-tech and other investors would provide a welcome addition to the local economy, where the University of Georgia and other state and federal government agencies provide about 27 percent of jobs. Although unemployment has been exceptionally low in recent years, per capita personal income in the area also has been lower than in the state primarily because a number of jobs in Athens do not pay as much as comparable jobs in other cities.

Augusta Compared to the state's other major cities, Augusta's economy will be relatively stable. The area's employment will decrease by only 0.1 percent in 2002, and the 200 lost jobs will be concentrated in manufacturing and construction. The city's health care industry will continue to thrive because these services—which consumers are very reluctant to forego even during hard times—are vital to Georgia's burgeoning population. Telecomminications services, including telemarketing and reservations, is another employment driver.

Once the national economy regains its footing, the hospitality industry will benefit from downtown development, including Riverwalk, the Morris Museum of Art, the National Science Center's Fort Discovery, and Georgia's Golf Hall of Fame. Retirees also are drawn to Augusta by its low costs, good climate, and medical facilities, or by ties to Fort Gordon.

Augusta's location astride I-20 is perfect for regional distribution and manufacturing because the interstate links the city to markets in Atlanta and South Carolina; and when the Savannah River Parkway opens, truckers will have a four-lane connection to Savannah's port.

Having Fort Gordon in the neighborhood hasn't hurt, either. This Army installation houses the largest communication electronics-training center in the world, and its presence helps attract technology-oriented people and businesses. Thus, Augusta is emerging as a center for telecommunications infrastructure.

Columbus Employment in this MSA will decrease by 0.3 percent in 2002. Even prior to the recession, traditional blue-collar jobs in the area's once thriving manufacturing sector were dwindling. Nonetheless, the demonstrated commitment of business, government, and residents to business and economic development is one of the area's greatest strengths. The recent expansion of Columbus College and the large-scale training of employees for Total Systems Services improved the skills of the labor force, making Columbus more attractive to technology-oriented companies. In addition, Columbus could benefit from successful efforts to move some state government operations out of Atlanta. Fort Benning is by far the area's largest employer and its importance as an economic mainstay will be even more crucial now.

Several of the world's most respected financial services companies are headquartered in Columbus, including AFLAC and Synovous Financial Corporation. Ranked highly as among the best companies in the nation in which to work, both AFLAC and Synovous are expanding. Their presence helps to position Columbus as a place where high-tech companies flourish. Moreover, Blue Cross/Blue Shield's claims processing center adds to the city's growing reputation as a hub for transactions processing.

The importance of Total Systems Services' decision to keep and expand its operations in Columbus is vital because the company's transformative potential is enormous, and gives the MSA a solid base for a high-tech future. The area's advanced telecommunications infrastructure also helps to attract technology-oriented companies, which is a major economic benefit. Industries such as business services and information and data processing pay higher salaries than most other industries and attract highly qualified workers. With this young workforce comes a corollary benefit: the city and metropolitan area are enhanced by the increased demand for better schools, which in turn makes Columbus even more attractive to business.

Macon The 1,100 jobs lost in the Macon MSA will represent a year-over-year decrease of 0.7 percent, and most of these jobs will be in manufacturing, construction, and in finance, insurance, and real estate. Luckily, the area has a diversified economic base, with trade, manufacturing, lodging, and food services providing the most jobs. The aerospace, health, and insurance industries also provide a large number of well-paid jobs.

Other pluses include an extensive surface transportation system and proximity to Atlanta. Macon is located strategically at the intersection of I-75 and I-16, has two railroad lines, and a good airport that is used by local residents as well as others from throughout much of South Georgia. In addition, Atlanta's Hartsfield International is just over an hour's drive away.

As Atlanta becomes more congested, locations in Macon will become very attractive to both private businesses and state government operations. The 1999 transfer of 158 government jobs from Atlanta to Macon is a good example of this trend. When the Fall Line highway is completed, Macon will have major highway connections to Augusta and Columbus, too. The city's growing air quality problems may limit future access to federal funds for highway work, however.

Macon's central location is ideal for hosting statewide meetings, which should be less affected by the downturn in economic activity than national and regional meetings and conventions. The city's areas, festivals, and places of special interest such as the Georgia Music Hall of Fame, the Sports Hall of Fame, the Tubman Museum, and the Ocmulgee National Historical Monument already draw tourists; and major revitalization projects will turn the downtown into an even more attractive center for business and tourism.

Savannah Due to the global recession, decreased demand for transportation, a shell-shocked hospitality industry, and strong economic ties to Atlanta, the Savannah area will see the largest percentage decrease in employment: 1.3 percent, or 1,800 jobs. Savannah has the largest number of international firms outside of Atlanta, and the foreign sector will be in trouble in 2002. The economic slowdown has punched the cyclically-sensitive transportation industry very hard, and Savannah's economy will move in tandem with demand for transportation services. The prospects for the Port of Savannah will not improve until a recovering global economy stimulates international trade again.

Although it is destined to become a premier destination for national conventions and trade shows, the bleak outlook for business and government travel in 2002 will halt progress temporarily. Vacation and other leisure travel also will be reduced as the recession unfolds.

Once the global economy begins to expand, Savannah's economy will build on its excellent transportation infrastructure that unites sea, air, rail, and interstates, making it an ideal center for distribution and manufacturing. The area's diverse economic base, recent growth, and greater integration with the global economy also improve its long-term prospects because Savannah is not overly dependent on any single industry, and its wide range of supporting industries provides a broader spectrum of locally-produced goods and services each year.

Georgia's Economic Recovery

Once the recession ends, Georgia's structural strengths and favorable demographics will underpin a recovery that may be slightly stronger than that of most other states. Also, the high tech, hospitality, and transportation clusters that got hammered by the recession actually have above-average long-term growth prospects.

Still, it would be wise to be cautious. There are several unresolved structural problems that make the economy extremely vulnerable to an unpredictable shock—such as a terrorist attack or financial crisis. These problems include high levels of household debt, a large trade deficit, widespread excess capacity, and the overvalued stock market. Because systemic risk is so high, we believe that there is a 40 percent chance of a dreaded double-dip recession in 2002-2003. ❖

Savannah's outlook for 2002

Barbara D. Bart

Although all of the numbers for 2001are not finalized, it is safe to say that 2001 was a disappointing year for the Savannah MSA. Although slower growth was anticipated, I did not expect all of the manufacturing job losses we experienced. These losses are particularly painful because manufacturing represents a larger share of our economy than many of the other economies in the state and region. Manufacturing's share of our workforce is 12.5 percent, but its share of our total income is 19.1 percent, and over the past 12 months the Savannah MSA (which includes Chatham, Effingham and Bryan counties) lost 1,700 manufacturing jobs. These jobs also carry significantly higher salaries than do jobs in any other sector; an average of about $49,000 for manufacturing compared to $26,000 in the services sector. So, the recent loss of manufacturing jobs can be expected to affect everything from haircuts to real estate and from retail sales to tax revenue and more. Nonetheless, some of these jobs will return as the national and state economies improve. The prospects for increased employment in paper and chemicals still look grim and I expect additional job losses in these industries, but new orders for corporate jets are coming in to Gulfstream and I expect that the demand for transportation equipment to service the increased container shipment activity at the Port of Savannah also will be strong.

Comparing Georgia Department of Labor data from November 2000 to November 2001, (the last month of the year for which data were available), it seems that total employment in the Savannah MSA grew by 345 jobs, from 132,478 to 132,823. The growth in the same period from 1999 to 2000, by comparison, was 3,314 jobs. Once the *annual* numbers are available, however, they are likely to show employment growth in 2001at a loss of about 1,000 jobs. The good news is that even though total employment may have declined, the unemployment rate is still much lower than the state and nation as a whole. As of November 2001, the metro area's unemployment rate was only 3 percent compared to 4.1 percent for the state and 5.7 percent for the country. Nonetheless, since unemployment figures usually lag behind actual job losses, this number probably will increase to somewhere between 3.5 to 3.8 percent in our MSA within the next six months.

But, to give 2001's grim numbers some perspective, remember the past ten years have been excellent. Savannah's population grew from 258,000 in 1990 to 293,000 in 2000. Employment grew at a compound annual growth rate of 1.8 percent over all sectors, with an increase in services employment of approximately 4.5 percent each year. Other sectors to experience growth over this ten-year period were wholesale and retail trade (primarily at the retail level), and government. Manufacturing employment declined very slightly (by 100 employees) over this same period, as did employment in transportation, communication and public utilities, and real estate and finance and insurance. During this period, our average wage increased at a compound annual growth rate of 4.5 percent, which was slightly higher than the nation as a whole but less than the average of 4.9 percent for the state. So, the important point is not to dwell on the recent slide, but to look at the prospects for the future.

Unfortunately, my forecast for 2002 is not much better than 2001. We can expect more losses in manufacturing jobs, and some additional losses in retail and wholesale trade employment. Nonetheless, the level of economic activity in almost every sector probably will pick up by the summer, and by year's end we will have regained many of the early 2002 losses so that we wind up with a net zero gain or loss in total employment in 2002. Things will quicken again in 2003 as the economy adjusts to all of the changes brought on by the recession and by September 11. The important point, however, is that while total employment may remain the same in 2002, the employment mix will look different. We will have fewer total manufacturing jobs and a lot more jobs in services. Construction will go up slightly as will the transportation, communication, and public utilities sector, but these sectors generally are fairly small. Employment in finance, insurance and real estate will remain flat; and although the consolidation debate continues, we can expect to see some job losses in government employment. The employment gains will balance out the employment losses in 2002, but the mix will be different and the manufacturing job losses will be reflected in lower average earnings and lower consumer spending for the community as a whole.

Growth Factors

What's going to work in our favor this coming year? What factors can contribute to new growth in our economy? Remarkably, they are the same factors that have underpinned growth for the past ten years, namely: population, investment in infrastructure, diversity of economic activity, and increased personal income and consumer spending.

■ Population ■

Plainly put, there will be more of us. From 1990 to 2000, the local population grew by approximately 14 percent. The most interesting aspect of this growth is that the percentage of children under 5 declined 3.2 percent while the percentage pf those 65 and over increased 12.4 percent. Savannah has the highest percentage of adults 65 and over of any MSA in the state. This trend is not expected to change. This is not only true for our three-county MSA, but for our entire six-county trade area including Liberty county, Jasper and Beaufort counties in South Carolina, which grew by 16 percent in the past ten years. The growth continues to come from an in-migration of adults from other areas of the country and it is only the tip of the iceberg of baby-boomers who will come here to retire. From an economic standpoint, these retirees are a major boon because they bring their financial stability with them and their incomes are less affected by the ups and downs of the business cycle than employed persons. Therefore, embracing the needs of an aging population will continue to be important to our local economy. Population increases drive increases in retail sales of all types, residential home sales and their values, increases in financial and legal services, health care services, government services, and more.

■ Infrastructure Investment ■

The next factor to contribute to growth is our economy's continued investment in its infrastructure, and the Georgia Ports leads the pack in this regard. Within the past 18 months, the port has enhanced its logistics and computer information systems, enlarged its gate operations, ordered new state-of the art container handling cranes for the eighth container berth, and opened the James D. Mason Intermodal Container Transfer Facility, to name just a few. The Intermodal Container Transfer Facility, or ICTF, is the big news, because it has created numerous advantages for importers and exporters moving goods to and from points beyond a 250-mile radius of Savannah. In addition to overnight service to and from Atlanta, delivery extends to locations in the Midwest and Southwest including Chicago, Louisville, St. Louis, and Houston. The Savannah port is now gaining market share from the West Coast where the congestion has encouraged Midwest shippers to seek openings on the East Coast instead. The new intermodal facility, combined with the longest contiguous dock on the East Coast, gives the Savannah port its competitive advantage. It is not surprising, therefore, that container handling increased 20 percent in their fiscal year 2001 or that the port was named number one in the top 100 cities for logistics by *Expansion Management* magazine this past October. All of the year's growth, coupled with the steady gains of the past fourteen years, makes the Port of Savannah the fastest growing containerport in the nation. In 2002, the Ports Authority hopes to be able to complete the funding for the eighth container berth at the Garden City location, continue expanding the new ICTF terminal, and complete studies for the deepening of the Savannah River Federal Navigation Channel from 42 feet to 48 feet. If there is a recession, someone forgot to tell the Georgia Ports Authority about it.

Growth at all of Georgia's ports has contributed to the huge growth in the distribution and transportation sector of the local economy and I expect new growth and development for distribution centers in 2002 and beyond. Over the past five years alone, distribution centers have been developed or enlarged for Best Buy, Kmart, Dollar General, Dollar Tree, The Home Deport, Lowe's, Michael's, Pier I Imports, and Wal-Mart Distribution Centers in Savannah and Statesboro. With well-established Asian routes and carrier services, particularly to China, I expect these distribution centers to thrive and would be surprised if additional businesses did not consider the Port of Savannah as a site for their distribution centers as well.

The airport is holding its own, too. Although air traffic was down by slightly more than 30 percent after September 11, it seems to be returning slowly and the number of nonstop service destinations keeps improving. This airport is the second busiest in the state. It added nonstop service to Detroit on Northwest Airlink this past year, giving passengers new opportunities to connect all over the world. These enhancements not only affect the Savannah area's ability to conduct business, but also make us a more attractive tourist destination.

Growth is less likely to occur in communities that lack the electric and gas power needed to meet demand. By this summer, however, Savannah Electric will be able to tap into the new power that is expected to come on line from its state-of-the-art power plant in west central Georgia. Called "combined cycle generation," this power plant incorporates features and operating characteristics that improve efficiency and environmental performance. This additional capacity is another good example of our community's investment in infrastructure. Georgia is not California; and electric power is a very important criterion in business relocation decisions.

What about other infrastructure improvements? Our schools are being rebuilt and modernized. The convention center is gaining new business, albeit more slowly than it had hoped, and new property developments are planned for Hutchinson Island, Pooler, Godley Station, Westbrook, Berwick Plantation, and more. Another big infrastructure improvement for the future is the Crossroads Technology Center planned by SEDA. The technology campus is expected to have a research focus that encourages alliances between universities and the private sector.

The community continues to attract a lot of interest from technology companies. For example, VeriSign recently announced it would purchase HO Systems for $340 million from LiveWire Corp. This is great news for several reasons. First, for HO Systems and its 300 Savannah employees, the purchase provides the capital and customer base needed to expand from handling regional contracts to providing wireless billing services for national and international clients. This is due to the fact that VeriSign also purchased Illuminet, a world leader in wireless communications systems, and between the two subsidiaries there are now many synergies in service and technology that will provide added value to a combined list of customers. HO Systems is expected to quickly outgrow their current location and expand services to meet the demands of an ever-larger customer base. Second, for Savannah, this type of news attracts the attention and interest of other technology entrepreneurs who see our community as an incubator for technology business success.

■ Economic Diversity ■

The third factor is the diversity of the economic activity in our MSA. This is not a one-factory town. The job losses in our paper and chemical factories hurt, but not as badly as they would if they were our exclusive economic engine. Savannah has a thriving services industry, led by health care and business services, which represent a far greater portion of total employment. Everything about our health care services sector is encouraging and there is evidence that there may even be some cooperation on efforts to bring new cancer treatment and research funds to our community. This sector is expanding not only its ability to provide state-of-the-art patient care but also its ability to conduct research; and, given the demographics of our community, health care can be expected to play an even larger role in the future. In addition, we still have our military bases, and fewer than 200 troops have been deployed in Operation Enduring Freedom so far—so the huge economic contraction expected with the deployment of our troops may not materialize. Every nonagricultural economic sector (except mining) is represented here , and it is this diversity that it softens the blow when the times are bad.

■ Consumer Spending and Income ■

Although the final figures for 2001 are not yet available, I expect that they will be lower than 2000. The good news, however, is that inflation was also lower so our incomes did not lose as much ground as they could have. The bad news is that after several years of gaining ground in our effort to reach the national income average, Savannah is now losing ground. The most recent data indicates that from 1998 to 1999, income rose 3.2 percent while the national average rose 4.5 percent. In 1999, Savannah had a per capita personal income of $26,534, which was 93 percent of the national average of $28,546. (In 1998, the per capita personal income was $25,135 and the national average was $27,203.) I suspect that when the 2000 and 2001 data are available, they will show a similar slowdown. This past year, we did not make much progress in our effort to reach the national income average; and when the recent losses in manufacturing jobs are replaced by service jobs at half their average annual wage, the per capita income picture looks grim. I believe that the increased effort on tourism development relative to other higher paying industries has put a drag on our overall income growth. The time for an emphasis on technology and higher paying service jobs in business and health care is overdue.

It is interesting to know that Savannah holds one key advantage when it comes to personal income and that is that only 65.8 percent of our total income comes from wages and earnings. This is lower than any other MSA in the state. Fortunately, the lower percentage from earnings, as compared to other MSAs in the state, means that there is a higher percentage from dividends, rents, and interest. In fact, the percentage of our MSA's total personal income that comes from dividends, rents, and interest is a 20.8 percent, which is the highest percentage of all of the MSAs in the state. So, if our average earnings are losing ground, we had better hope that more retirees bring their interest and dividend income here to compensate for this.

The slowdown in personal income growth is somewhat reflected in reduced consumer spending, although this seemed to be holding up quite well before September 11 and recent car sales have been particularly strong here. Consumer spending increased dramatically for ten straight years in our MSA primarily because the population continued to grow. Spending is also related to consumer confidence, however, and some national studies are beginning to report some rebounds in consumer confidence. After months of declining confidence ratings, the Federal Reserve cut interest rates several times, and most analysts agree that, given time, these cuts will work.

The big question is whether a federal government economic stimulus package can work, and whether it can work here. I do believe that cuts in our marginal tax rates will leave us with more money to spend, which should improve retail and wholesale sales and stimulate the economy. However, even if they are allowed to take effect, we will not see them work for many months.

So, the economic outlook for 2002 calls for a rough start and promises a better ending. As a community, we have planted the seeds for new growth when the economy turns around, and we can expect a better 2003 because our investments at the port, airport, technology center, and convention center will bear new fruit. ❖

THE ECONOMIC IMPACT OF THE GEORGIA WORLD CONGRESS CENTER AND THE GEORGIA DOME ON GEORGIA'S ECONOMY IN FY 2001

Jeffrey M. Humphreys

Since it opened in 1976, the Georgia World Congress Center (GWCC) has helped to lead economic development in the entire state. Major expansions in 1985 and 1992 boosted interior space to nearly 2.5 million square feet—including 950,000 square feet in eight exhibition halls and a 33,000 square-foot ballroom—solidified the GWCC's competitive position as a world-class site for meetings and exhibitions. The completion in 1992 of the Georgia Dome, which is interconnected to the GWCC, added a 71,500-seat domed stadium to the facilities. The Georgia Dome's 102,000 square feet of column-free space and its many seating configurations accommodate a broad range of activities: sporting events, conventions, trade shows, exhibits, cultural events, banquets, and receptions. Building C, scheduled for completion in mid-2002, will add 420,000 additional square feet of exhibition space and a new 27,000 square-foot ballroom. The GWCC will have 1.4 million square feet of combined exhibition space, all at ground level.

Economic Impact Highlights

In the simplest and broadest terms, the total economic impact of the GWCC and the Georgia Dome on Georgia's economy was $2.3 billion in fiscal year 2001. This amount represents the combined impact of the GWCC and the Dome on output (sales or gross receipts). Out of the $2.3 billion, $1.5 billion (66 percent) results from spending by attendees, $679 million (30 percent) from spending by exhibitors, and $94 million (4 percent) from spending by sponsoring organizations.

Of the FY 2001 total, $1,430 million is the initial spending by attendees, exhibitors, and the organizations who sponsor the events; $838 million is the induced or re-spending (multiplier) impact. Dividing the FY 2001 total output impact ($2,268 million) by initial spending by attendees, exhibitors, and sponsoring organizations ($1,430 million) yields an average multiplier value of 1.59. On average, therefore, every dollar of initial spending generates an additional 59 cents for the economy.

The GWCC and the Georgia Dome together add $894 million in labor income (earnings) to the Georgia economy and 36,869 jobs. Collectively, the GWCC and the Georgia Dome generated $87 million in tax revenue for state government, $40 million in sales tax revenues for local government, and $25 million in bed (hotel/motel) tax revenues.

The Georgia World Congress Center

In FY 2001, the GWCC accounted for $2.1 billion (92 percent) of the combined economic impact on output. The GWCC generated $818 million in labor income and 32,869 jobs. In addition, the facility added $79 million to tax revenues received by state government. Local sales taxes increased by $36 million and bed taxes rose by $23 million.

The Georgia Dome

In FY 2001, the Georgia Dome accounted for $193 million (8 percent) of the combined economic impact on output. The Georgia Dome generated $70 million in labor income and 3,362 jobs. In addition, the Dome added $8 million to tax revenues received by state government. Local sales taxes increased by $4 million and bed taxes rose by $2 million.

The Concept of Economic Impact

Short-term economic impacts are the net changes in regional output, labor income, and employment that are due to new dollars flowing into a region from a given enterprise or event of economic development. In this study, the enterprises or events of economic development are the GWCC and the Georgia Dome and the region is the state of Georgia. The effects of expenditures that go to people, businesses, or governments located outside the region are not included in the labor income and employment impact estimates, but the output impacts include both domestic and foreign trade.

Economists speak of economic impacts in terms of the changes in output, value added, labor income, or employment that occur in the region's industries (including households) when they produce goods and services to satisfy demand by consumers, businesses, investors, or governments that are from outside the region. Throughout this study, expenditures that represent the statewide repercussions of spending originating from within Georgia are not counted as economic impacts. Also, expenditures that immediately flow to recipients located outside the state are not counted as economic impacts.

For goods made outside of Georgia, wholesale and retail firms within the region create local value, but not by the manufacturing firms that originally produced the goods elsewhere. So when these goods are purchased locally, the benefit to Georgia's economy consists only of the wholesale and retail margins.

Methodology

Estimating the economic impact of the GWCC and the Georgia Dome on the state's economy in FY 2001 involved several distinct steps. First, the number of attendees was obtained from the GWCC authority for each event; and each event was allocated to one of several event categories. the number of out-of-state attendees and their average lengths of stay were estimated. Average daily expenditures per out-of-state attendee were estimated for attendees, sponsoring organizations, and exhibitors (when appropriate). Total spending by out-of-state attendees, exhibitors, and sponsoring organizations was estimated for each event category. Expenditures then were allocated to industrial sectors. The IMPLAN Professional Version 2.0 modeling system was used to estimate the economic impact of facility-related spending on output, labor income, and employment. Finally, tax impacts on state government and local government were estimated.

For analytical purposes, all dollar amounts were converted to inflation-adjusted 1998 dollars, but the amounts expressed in this report are re-inflated to current dollars. Using the IMPLAN model and Type SAM multipliers, impacts associated with all categories of initial spending then are estimated in terms of output, labor income, and employment. Type SAM multipliers capture the original expenditures resulting from the impact, the indirect effects of industries buying from industries, and the induced effects of household expenditures based on information in the social account matrix; and also account for Social Security and income tax leakage, institutional savings, commuting, and inter-institutional transfers. Wherever appropriate, the IMPLAN software applied margins to convert purchaser prices to producer prices. In addition, the entire analysis was conducted using the full range of industrial sectors in order to avoid aggregation bias.

■ Spending by Out-of-State Attendees ■

Spending by out-of-state attendees makes up the largest component of total spending and generates the largest proportion of total economic impact. Estimating spending by out-of-state attendees at the GWCC and the Georgia Dome involved several distinct steps. First, each event was classi-

TABLE 1

Economic Impact of the Georgia World Congress Center and the Georgia Dome on Georgia's Economy, FY 2001

Expenditure Category	Total Spending ($ 2000)	Economic Impact on Output ($ 2000)	Economic Impact on Labor Income ($ 2000)	Economic Impact on Employment (jobs)
GRAND TOTAL	1,429,873,272	2,268,191,707	893,619,934	36,231
Attendees	963,089,004	1,495,377,157	590,818,818	25,012
Exhibitors	409,930,080	678,993,655	263,390,550	9,550
Sponsors	56,854,188	93,820,895	39,410,566	1,669
GEORGIA WORLD CONGRESS CENTER	1,305,040,632	2,075,367,269	817,696,693	32,869
Attendees	847,098,676	1,317,144,319	521,024,950	21,910
Hall Events, Private	828,885,673	1,288,979,713	509,935,622	21,431
Hall Events, Public	7,775,341	11,947,730	4,678,589	208
Non-Hall Events, Private	9,653,371	15,011,720	5,938,814	250
Non-Hall Events, Public	784,291	1,205,156	471,925	21
Exhibitors	409,930,080	678,993,655	263,390,550	9,550
Hall Events, Private	404,804,631	670,504,043	260,097,318	9,431
Hall Events, Public	5,125,449	8,489,612	3,293,232	119
Sponsoring Organizations	48,011,876	79,229,295	33,281,193	1,409
Hall Events, Private	46,814,141	77,252,790	32,450,939	1,374
Hall Events, Public	592,739	978,139	410,879	17
Non-Hall Events, Private	545,207	899,702	377,930	16
Non-Hall Events, Public	59,789	98,664	41,445	2
GEORGIA DOME	124,832,640	192,824,438	75,923,241	3,362
Attendees	115,990,328	178,232,838	69,793,868	3,102
Sponsoring Organizations	8,842,312	14,591,600	6,129,373	260

Source: GWCC Authority and the Selig Center for Economic Growth, Terry College of Business, The University of Georgia (October, 2001).

TABLE 2

The Georgia World Congress Center and the Georgia Dome: Total Attendance, FY 2001

Category of Event	Total Attendance	Percentage of Out-of-State Attendance	Out-of-State Attendance
GRAND TOTAL	2,666,067	36.6	976,866
GEORGIA WORLD CONGRESS CENTER	1,291,779	55.5	716,798
Hall Events, Private	724,677	95.0	688,443
Hall Events, Public	348,670	5.0	17,434
Non-Hall Events, Private	183,264	5.0	9,163
Non-Hall Events, Public	35,168	5.0	1,758
GEORGIA DOME	1,374,288	18.9	260,068

Source: GWCC Authority and the Selig Center for Economic Growth, Terry College of Business, TheUniversity of Georgia (October, 2001).

TABLE 3

The Georgia World Congress Center and the Georgia Dome: Out-of-State Visitor Days, FY 2001

Category of Event	Out-of-State Attendance	Average Length of Stay (Days)	Total Number of Out-of-State Visitor Days
GRAND TOTAL	976,866	3.4	3,344,363
GEORGIA WORLD CONGRESS CENTER	716,798	3.9	2,824,227
Hall Events, Private	688,443	4.0	2,753,773
Hall Events, Public	17,434	2.0	34,867
Non-Hall Events, Private	9,163	3.5	32,071
Non-Hall Events, Public	1,758	2.0	3,517
GEORGIA DOME	260,068	2.0	520,136

Source: GWCC Authority and the Selig Center for Economic Growth, Terry College of Business, TheUniversity of Georgia (October, 2001).

TABLE 4

Out-of-State Attendees: Average Daily Expenditures per Out-of-State Visitor, FY 2001 ($ 2000)

Private, Hall, and Non-Hall Events

Expenditure Class	Daily Amount per Attendee ($)
Lodging & Incidentals	156
Hotel Food & Beverage	37
Other Food & Beverage	38
Tours/Sightseeing	5
Admission to Museums, Theaters, etc.	3
Recreation	3
Sporting Events	1
Retail Stores	28
Local Transportation	7
Auto Rental	11
Gasoline, Tolls, Parking	5
Other	7
Total	301

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, based on data obtained from the International Association of Convention and Visitor Bureaus' 2000 Update and 1998 Convention Income Surveys (October 2001).

fied as either private or open to the general public and as either a hall (with exhibitors) or a non-hall (without exhibitors) event. Accordingly, events as the GWCC fell into four categories: private hall events, public hall events, private non-hall events, and public non-hall events. Table 2 reports total attendance, the percentage of out-of-state visitors, and the number of out-of-state visitor days.

Spending by out-of-state visitors was estimated for each event category. The average length of a visitor's trip was assumed to vary by the event category—4 days for private hall events, 3.5 days for private non-hall events, and 2 days for visitors attending the remaining types of events. For each category of event, multiplying the number of out-of-state visitor days by the average length of stay yielded estimates of total out-of-state visitor days, which are reported in Table 3. The GWCC and the Georgia Dome together generated more than 3.3 million out-of-state visitor days.

Average daily expenditures per out-of-state visitor day are reported for private hall and private non-hall events in Table 4, and are based on data obtained from the International Association of Convention and Visitor Bureaus' 2000 Update and 1998 Convention Income Surveys. The $301 average daily expenditure is based on data for out-of-town delegates attending events in large markets (cities with a population of 1.5 million or more). Average daily expenditures per out-of-state visitor day are reported for all other visitor segments in Table 5. The $223 average daily expenditure reflects the increased tendency for the remaining types of visitors to stay with friends and relatives, to share rooms, or to stay in less expensive lodging properties. Total expenditures attributed to out-of-state visitors were obtained by multiplying average daily expenditures by the appropriate number of visitor days. Total expenditures are reported in the first column of Table 1, and amount to $963 million.

Expenditures were allocated to various economic sectors recognized by the IMPLAN Professional Version 2.0 economic impact modeling system. Finally, the IMPLAN modeling system was used to estimate the total economic impact of spending by sponsoring organizations on output, labor income, and employment. These impacts are reported in column 2, column 3, and column 4 of Table 1, respectively.

■ Spending by Exhibitors ■

Spending by exhibitors also represents an important source of economic impact. Once again, data used to estimate expenditures by exhibitors were obtained from the International Association of Convention and Visitor Bureaus. Average spending by exhibitors per delegate (visitor) day is reported in Table 7 and amounts to $147. Total

TABLE 5

Average Daily Expenditures per Out-of-State Visitor
All Other Visitor Segments, FY 2001
($ 2000)

Expenditure Class	Daily Amount per Attendee ($)
Lodging & Incidentals	78
Hotel Food & Beverage	37
Other Food & Beverage	38
Tours/Sightseeing	5
Admission ot Museums, Theaters, etc.	3
Recreation	3
Sporting Events	1
Retail Stores	28
Local Transportation	7
Auto Rental	11
Gasoline, Tolls, Parking	5
Other	7
Total	223

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, based on data obtained from the International Association of Convention and Visitor Bureaus' 2000 Update and 1998 Convention Income Surveys (October 2001).

TABLE 6

Sponsoring Organizations: Average Daily Spending
per Out-of-State Attendee, FY 2001
($ 2000)

Expenditure Class	Daily Amount per Attendee ($)
Food & Beverage	7
Exhibition Space Fees to Facility	1
Additional Exhibit Hall/Meeting Room	2
Staff Members' Living Expenses	1
Equipment Rental	2
Services Hired	2
Other	2
Total	17

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, based on data obtained from the International Association of Convention and Visitor Bureaus' 2000 Update and 1998 Convention Income Surveys (October 2001).

TABLE 7

Average Spending by Exhibitors per Delegate Day, FY 2001 ($ 2000)

Expenditure Class	Exhibitor Spending per Delegate Day ($)
Food & Beverage	41
Hospitality Suites	11
Advertising (Local)	6
Additional Meeting Rooms	3
Equipment Rental	9
Services Hired	10
Vendor Services	47
Other	20
Total	147

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, based on data obtained from the International Association of Convention and Visitor Bureaus' 2000 Update and 1998 Convention Income Surveys (October 2001).

spending by exhibitors is reported in the first column of Table 1 and amounts to $410 million. Expenditures were allocated to various economic sectors recognized by the IMPLAN Professional Version 2.0 economic impact modeling system. Finally, the IMPLAN modeling system was used to estimate the total economic impact of spending by sponsoring organizations on output, labor income, and employment. These impacts are reported in column 2, column 3, and column 4 of Table 1, respectively.

■ Spending by Sponsoring Organizations ■

Spending by sponsoring organizations also generates economic impacts. Data regarding sponsoring organizations' spending per delegate (visitor) day were obtained from the International Association of Convention and Visitor Bureaus. The average expenditure per delegate day is reported in Table 8 and amounts to $17. Total spending by sponsoring organizations is reported in the first column of Table 1 and amounts to $57 million. Expenditures were allocated to various economic sectors recognized by the IMPLAN Professional Version 2.0 economic impact modeling system. Finally, the IMPLAN modeling system was used to estimate the total economic impact of spending by sponsoring organizations on output, labor income, and employment. These impacts are reported in column 2, column 3, and column 4 of Table 1, respectively.

Tax Revenues Collected by State and Local Government

The GWCC and the Georgia Dome generate substantial tax revenue for Georgia's state and local governments, primarily through sales taxes, personal income taxes, and bed taxes. Tax revenue impacts to state and local governments are reported in Table 8. Tax revenues were estimated by combining secondary data with the estimates generated by the IMPLAN modeling system. Simple ratios were used to calculate tax revenue impacts of the facilities. Accordingly, the values for revenue impacts are likely to be somewhat less precise that the expenditure, income, and earnings estimates, from which revenue impacts are derived.

At least two factors prevent direct multiplication of the output impacts by the state's general sales and use tax rate of four percent or by local sales tax rates. First, the IMPLAN modeling system expresses dollar amounts for retail trade, a major expenditure category subject to the tax, as the margin that is captured by local establishments. The tax rates apply to actual sales, however, not just to the margin that is captured locally. Second, the aggregation of business categories makes it difficult to determine to what extent some categories are subject to taxation under current tax law. Estimating sales tax collections therefore involved estimating both the portion of initial spending that is subject to the tax and the portion of induced spending that is subject to the

TABLE 8

The Impact of the Georgia World Congress Center and the Georgia Dome on Taxes Collected by State and Tax Revenue Source

Revenue ($ 2000)

GRAND TOTALS	
Georgia Department of Revenue, Total	87,214,884
State Sales Tax Collections	53,845,892
State Personal Income Tax Collections	25,787,752
Other State Tax Collections	7,581,240
Local Government, Total	65,741,274
Bed Tax	25,356,855
Local Sales Taxes	40,384,419
GEORGIA WORLD CONGRESS CENTER	
Georgia Department of Revenue, Total	79,116,385
State Sales Tax Collections	48,582,386
State Personal Income Tax Collections	23,596,872
Other State Tax Collections	6,937,127
Local Government, Total	59,609,072
Bed Tax	23,172,284
Local Sales Taxes	36,436,788
GEORGIA DOME	
Georgia Department of Revenue, Total	8,098,499
State Sales Tax Collections	5,263,506
State Personal Income Tax Collections	2,190,880
Other State Tax Collections	644,113
Local Government, Total	6,132,202
Bed Tax	2,184,571
Local Sales Taxes	3,947,631

Other State Tax Collections include revenue from the motor fuel tax, corporate income tax, liquor, beer and wine taxes, cigars and cigarette tax, motor vehicle fees, and other tax revenues. Local sales taxes include revenues from local option, MARTA, and Education sales taxes.

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia (October 2001).

tax. In the case of the bed (hotel/motel) tax, only initial spending for hotel/motel space (rooms) was multiplied by the bed tax rate—bed taxes on induced spending were not estimated. Estimates of the sales tax revenue impacts are reported in Table 8.

Georgia's maximum personal income tax rate in FY 2000 was 6 percent, but due to progressivity, exemptions, and deductions, the effective tax rate on earnings by place of residence is estimated at 2.9 percent. This rate was calculated by dividing personal income tax collections by earnings (adjusted for place of residence). Data for earnings by place of work and for the residence adjustment were obtained from the Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce. Data for personal income tax collections were obtained from the Georgia Department of Revenue. Multiplying the effective tax rate on earnings by the model-based estimates of labor income yields an approximate estimate of by how much the facilities increased personal income taxes collected by the Georgia Department of Revenue. The tax revenue impacts are reported in Table 8.

Estimating the impact of the GWCC and the Georgia Dome on other state tax collections (motor fuel tax, corporate income tax, liquor, beer and wine taxes, cigars and cigarette tax, motor vehicle fees, and other tax revenues) was a two-step process. First, revenues collected by the Georgia Department of Revenue for other state taxes were divided by total earnings by place of residence. Second, the quotient (0.00848) was multiplied by the labor income impacts generated by the facilities. The tax revenue impacts are reported in Table 8.

Conclusions

To the extent that currently available information allows, this report estimates some of the economic impacts that the GWCC and the Georgia Dome bring to the state. In the simplest terms, the collective or rolled-up impact of both facilities on Georgia was $2.3 billion in FY 2001. The GWCC and the Georgia Dome generated $894 million in labor income and 36,869 jobs. In addition, the GWCC and the Georgia Dome added $79 million to tax revenues received by state government. Local governments received an extra $36 million in sales taxes and $23 million in bed taxes. The estimated economic impacts only count the repercussions of "new" dollars flowing into Georgia from outside the state.

The actual impact is much higher than these estimates, however, because the study's limited scope does not consider any of the long-term benefits of the GWCC and the Georgia Dome to the state's economic development. Also, the study does not consider the benefits of capturing spending by in-state attendees that attend events at the GWCC or the Georgia Dome. If the GWCC and the Georgia Dome were not available, it is likely that some portion of spending related to in-state attendees would not have taken place in Georgia. Finally, the study does not attempt to measure intangible benefits to residents of the state, such as quality of life. Nonetheless, the vast majority of economic impact studies also do not consider the above-mentioned impacts.

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