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Economic Outlook
Update: April 2000

Alabama

For the remainder of 2000, Alabama’s gross state product is expected to grow about 3.5 percent. The state will add about 23,000 new nonagricultural jobs, an increase of 1.3 percent. Most new jobs will be in retail trade and services related industries. Construction is expected to slow down, primarily due to higher interest rates and a weaker housing market compared to 1999. The trade sector will add about 9,300 new jobs and the services sector is forecasted to add about 12,000 new jobs.

In the past year economic growth in Alabama has been driven by retail and wholesale trade, services, construction, and state and local government. From March 1999 to March 2000, employment increased by 37,700, reaching approximately 1.9 million nonagricultural jobs in the state.

These 37,700 new jobs have been created primarily in the following sectors:

- Retail trade—approximately 30 percent of the new jobs (11,300),
- Services—about 37 percent (13,700),
- Construction industries—approximately 12 percent (4,500), and
- State and local government—approximately 15 percent (5,600), primarily in education (3,500 of the 5,600).

Manufacturing, which accounts for almost 25 percent of the state’s employment, gained 2,900 new jobs. Most manufacturing gains were in durable goods producing industries (about 1,300 net new jobs), including manufacturing of fabricated steel, transportation equipment, and other durable goods. Job gains in other durable goods producing industries were mainly concentrated in firms involved in furniture and fixtures production. There is a strong housing market for both existing and new homes in the state’s metropolitan areas.

Employment in Alabama’s nondurable goods producing industries, which employ approximately 169,000 people, declined by 4,200, primarily due to jobs lost in apparel firms.

In the balance of 2000 the state’s paper industry, which employs approximately 20,000 people, could suffer job losses if the proposed merger between International Paper and Champion materializes.

Major risks to the state economy in 2000 include:

- Interest rate increases;
- Steeper inflation or price levels; and
- High levels of consumer debt and spending.

United States

Most of the country’s present economic growth has been led by two factors: consumer spending and strong investment in information technology (including software, equipment, and information processing). After increasing by an average annual rate of 6 percent in 1999, consumer spending increased by 8.3 percent during the first quarter of 2000. Durable goods purchases increased by 26.6 percent in the first quarter, a significant jump from 1999. Most of this increase was accounted for by automobile sales. Home furnishings and other big-ticket household equipment also sold well in the first quarter.

Consumer spending has outpaced income growth in recent years. During the first two months of 2000, consumer debt increased by an amazing $18.2 billion and $12.0 billion, respectively, after increasing by a monthly average of approximately $7.0 billion in 1999. At these unsustainable debt levels, consumers sooner or later will notice the effects of higher interest rates and higher prices.

However, to this point higher interest rates and price levels have not had much impact on consumers. Consumer confidence in the economy remains upbeat. One of the reasons is the strong job market. For example, in March of 2000 the U.S. economy created almost 416,000 new jobs. Despite the fact that this number included 117,000 new census workers, job growth remains a major factor in determining consumer confidence toward spending.

Another factor driving economic growth is investment spending on information technology. Business investment in equipment and software increased by 12 percent in 1999, and is expected to increase another 11 percent in 2000. After a big gain in 1999, information technology investment may increase another 20 percent in 2000.

Consumer spending and business investment in technology have kept productivity growth high during the
current economic expansion, while also keeping inflation in check. In view of the present economic conditions, the national forecast for 2000 includes these expectations:

- GDP growth will average 4.5 percent.
- U.S. employment growth will be slightly lower than in 1999. Approximately 2.7 million new jobs will be created in 2000, compared to about 2.8 million in 1999.
- The inflation rate will pick up. Consumer price inflation is expected to increase from 2.2 percent in 1999 to between 2.7 and 2.8 percent in 2000.
- Absenting any economic or financial market shock, there will be another year of strong economic growth, extending even further the longest economic expansion in U.S. history.

**Southeast**

The Southeast region includes Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee. The region is expected to add about 632,000 new jobs in 2000, an increase of 3 percent, slightly above the 2.8 percent increase in 1999.

Florida and Georgia will remain the strongest growing states in the region. Recently, these two states together have accounted for almost 67 percent of the job growth in the region. Florida is expected to add about 259,600 jobs in 2000, while Georgia will create about 163,000 jobs. With strong manufacturing growth in the latter part of 1999 and thus far in 2000, North Carolina is also becoming a job growth engine. North Carolina will add 96,000 jobs in 2000. Manufacturing industries in North Carolina account for almost 30 percent of the state’s economy. South Carolina and Tennessee are expected to add approximately 55,000 and 40,000 new jobs in 2000, respectively.

Growing economies in both Europe and Asia will also contribute to job growth in these states. However, the high value of the U.S. dollar could hamper some growth attributable to exports. As shown in Table 1, exports account for a larger share of the economies of four of these states than they do for Alabama. At present the export sector remains weak due to global competition and pricing pressures. Nevertheless, exports offer some opportunities for all six southeastern states.

*Ahmad Ijaz*
Economic Abstract of Alabama 2000

If your area of interest is in Alabama, the Economic Abstract of Alabama 2000 is the reference book you need. The Abstract’s 17 chapters cover virtually every facet of the state. Topics range from funding for education by district, to retail sales by county, to a variety of statistics on employment, income, health care, manufacturing, and population. Many of the data items are presented at national, state, MSA, and county or city levels and cover several years to facilitate comparisons and trend analysis.

The 2000 edition has been printed in 8½ by 11 format. The soft-cover volume is perfect bound, with over 500 pages, including a guide to statistical sources, glossary, and index. With the CD-ROM package, which includes the Abstract book and a CD-ROM, this wealth of data is instantly available for computer analysis. CD-ROM tables are in Microsoft Excel format. The books are only $35 each plus $5 shipping and handling. The CD-ROM packages (includes book and CD) are only $65 each plus $5 shipping and handling.

ALABAMA ECONOMIC OUTLOOK 2000

The Alabama Economic Outlook 2000 examines current economic conditions and trends and their likely effects on the national and Alabama economies in the coming year.

The Alabama forecast focuses on the short term outlook for output and employment in the state by sector and presents a look at state revenues. Trends in the state’s metropolitan areas are discussed.

The Alabama Economic Outlook 2000 is the 20th in an annual series produced by the Center for Business and Economic Research. Copies are $18 each.

Please make checks payable to The University of Alabama and send with name and address to:

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The University of Alabama
Box 870221
Tuscaloosa, Alabama 35487-0221
Alabama Housing Affordability First Quarter, 2000

Despite substantial increases in home prices and rising mortgage loan rates, the statewide housing affordability index barely changed from the fourth quarter of last year. It remains near the record highs recorded over the last decade. During the first quarter of the year the statewide housing affordability index was 162.5, declining by only 1.6 percentage points from the previous quarter. During the same period the median price of an existing, single family home in Alabama rose by $5,700, a 6 percent increase in only three months.

The reason housing affordability in Alabama remains so high can be attributed to the substantial increase in median family income. The new income estimates from the U.S. Department of Housing and Urban Development show that statewide median family income for fiscal 2000 increased by slightly more than $3,300 over 1999. For 2000, median income rose to $45,450 from $42,114 in 1999, an increase of almost 8 percent. This is a substantial year to year increase in income and reflects the continuing strong Alabama economy. With unemployment at record lows in many of the state’s metro areas, rising incomes mean more families and individuals can afford to purchase homes.

The Statewide Housing Affordability Index is calculated as the ratio of the state’s actual median family income and the family income needed to purchase the median priced home in the state. An index number of 100 means that a family earning the median income has just enough buying power to qualify for a mortgage loan on the median priced, existing single-family house, given standard underwriting criteria. The higher the index number the better, as housing is more affordable. For Alabama an HAI of 162.5 means that a family earning the state’s median income had almost 1.63 times the income needed to purchase the statewide median priced home. Stated differently, a family earning the state’s median income of $45,450 could afford to purchase a house valued at $162,000 given a 20 percent down payment and a mortgage interest rate of 7.94 percent. In the second quarter, the statewide median priced home was only $99,805. Given the HAI of 163, more than half the families and individuals in Alabama can afford to purchase larger and more expensive homes.

In contrast to Alabama, the U.S. Housing Affordability Index actually increased slightly during the second quarter, up almost 1.4 percentage points. At the national level, existing home prices remained virtually unchanged over the last six months, reflecting a slowdown in the housing market, at least in some parts of the country.

Within Alabama, housing affordability increased in six of the state’s 11 metro areas. Huntsville had the highest HAI of the four largest metro areas, reflecting the fact that Huntsville also has the highest median family income at $58,100. Almost all the other metro areas in the state reported income gains between 6 and 7 percent.

During the first quarter of the new century, mortgage interest rates rose almost 30 basis points, a little over a quarter percentage point. Mortgage loan rates have been steadily rising over the last three quarters, reflecting the continuing credit tightening by the Federal Reserve.
In Alabama the existing housing market remains surprisingly robust, despite five interest rate increases, with total homes sales up from last month and ahead of last year at the same time. Although we expect the housing market to remain strong, we do not anticipate reaching the same sales levels that were attained in 1999 as the Federal Reserve has signaled that it intends to continue raising short term interest rates to slow the economy and preempt future inflationary pressures. How much the Fed tightens credit in the months ahead will, in large part, determine how the existing housing markets will fare for the remainder of the year.

_Neald V. Zumpano_

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### Alabama Housing Affordability Index
First Quarter 2000 and Fourth Quarter 1999

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Median Income</th>
<th>Median Price</th>
<th>Loan/Value 80%</th>
<th>Monthly Payment 7.94%</th>
<th>Annual Payment</th>
<th>Required Income</th>
<th>HA Index 1st Quarter 2000</th>
<th>HA Index 4th Quarter 1999</th>
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<td>Anniston</td>
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<td>$78,833</td>
<td>$63,067</td>
<td>$460</td>
<td>$5,522</td>
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<td>Auburn/Opelika</td>
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<td>118,402</td>
<td>94,722</td>
<td>691</td>
<td>8,293</td>
<td>33,172</td>
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<td>142.2</td>
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<td>Birmingham</td>
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<td>124,300</td>
<td>99,440</td>
<td>726</td>
<td>8,706</td>
<td>34,824</td>
<td>146.7</td>
<td>138.1</td>
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<td>Decatur</td>
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<td>98,300</td>
<td>78,640</td>
<td>574</td>
<td>6,885</td>
<td>27,540</td>
<td>180.5</td>
<td>183.8</td>
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<td>43,400</td>
<td>81,650</td>
<td>65,320</td>
<td>477</td>
<td>5,719</td>
<td>22,875</td>
<td>189.7</td>
<td>167.3</td>
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<td>Florence</td>
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<td>83,833</td>
<td>67,067</td>
<td>489</td>
<td>5,872</td>
<td>23,487</td>
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<td>69,650</td>
<td>55,720</td>
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<td>4,878</td>
<td>19,513</td>
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<td>99,633</td>
<td>79,707</td>
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<td>6,978</td>
<td>27,913</td>
<td>208.1</td>
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<td>43,300</td>
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<td>33,032</td>
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<td>107.2</td>
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<td>161.5</td>
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<td>32,886</td>
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<td>45,450</td>
<td>99,805</td>
<td>79,844</td>
<td>583</td>
<td>6,990</td>
<td>27,961</td>
<td>162.5</td>
<td>164.1</td>
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<td>U.S. Average</td>
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<td>133,433</td>
<td>133,433</td>
<td>583</td>
<td>6,990</td>
<td>27,961</td>
<td>131.1</td>
<td>129.7</td>
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Sources: The Alabama Real Estate Research and Education Center, Culverhouse College of Commerce and Business Administration, The University of Alabama and the Alabama Association of REALTORS. National data supplied by the Federal Housing Finance Board and the Research Division of the National Association of REALTORS.

* Mobile-MA, which is made up of Baldwin and Mobile counties, is atypical because of the higher concentration of vacation properties located in Baldwin county. Because these vacation homes have much higher prices than owner-occupied properties, the HAI understates housing affordability for the Mobile Metro Area.
Looking at Occupations in the Coming Decade

Health-related occupations dominate the list of the fastest growing jobs for the coming decade. Registered nurses, personal care and home health aides, nursing aides, orderlies, and attendants will have numerous employment opportunities. Personal care and home health aides provide personal and physical care for elderly people and for patients who are recovering from surgery and other serious health conditions. They perform a variety of light housekeeping tasks for those in need of home care. Employment in this occupation is expected to increase because the number of people in their seventies and older who will need the services of these workers will be rising as the population ages. Also, there will be an increasing reliance on home care for patients of all ages. This trend reflects several developments, including

- efforts to contain costs by moving patients out of hospitals and nursing facilities as quickly as possible,
- a growing recognition that treatment can be more effective in familiar surroundings than in clinical surroundings, and
- improved medical technologies for in-home treatment.

Employment of physical therapy assistants and aides, occupational therapy assistants and aides, and occupational therapists is expected to grow much faster than average, partly due to the aging of the population, even though federal Medicare reimbursement policies may restrict growth in the short term. Efforts to cut the rapid growth of spending on health care, by private medical insurers and health maintenance organizations and by the government, will restrict the growth of some health care occupations. In particular, provisions of the Balanced Budget Act of 1997 will restrict growth in physical and occupational therapists due to caps on Medicare payments, at least through 2003. On the other hand, some health-related occupations are projected to grow rapidly as a result of efforts to reduce health care costs. For example, employment among physician assistants is expected to grow because these workers perform duties that formerly had been performed only by physicians, who generally are paid considerably more than physician assistants.

The number of medical records and health information technicians employed also is expected to grow rapidly due to the need to maintain records for an increasing number of medical tests, treatments, and procedures that will undergo increasing scrutiny by third-party payers, courts, and consumers. Other health-related occupations in which employment is projected to grow rapidly include medical assistants, respiratory therapists, dental assistants, surgical technologists, dental hygienists, cardiovascular technologists and technicians, speech-language pathologists and audiologists, and ambulance drivers.

The computer industry is expected to generate numerous opportunities in the coming decade. Systems analysts, computer support specialists, and computer engineers are among the occupations with the largest projected numerical job growth through 2008. Rapid growth is also expected for data processing equipment repairers and for electronic semiconductor processors. Electronic semiconductor processors produce the chips used in computers and many other products currently on the market.

Conversely, changing technologies in the computer field will also adversely affect some computer-related occupations. Computer operators are on the list of declining occupations due to the shift away from large mainframe computers that these workers operate. Some occupations, such as computer programmer, already a sizeable category, will generate large numbers of new jobs, even though they are expected to grow at average or below-average rates.

Occupations requiring education beyond high school will be in higher demand in the future. Occupations requiring an associate degree or higher education, which accounted for 25 percent of all jobs in 1998, will account for 40 percent of job growth from 1998 to 2008. The overwhelming majority of employees in this category work in managerial and administrative occupations. Almost all workers in these occupations earn more than the median for all wage and salary workers. All categories of occupations requiring at least an associate degree are
projected to have faster-than-average employment growth over the coming decade. All categories requiring less education and training are expected to grow more slowly than average.

Despite those forecasts, there will still be large numbers of available jobs that will require no education and training beyond high school, other than short-term on-the-job training. These occupations in the lowest training categories will have many openings, but there will be more new jobs in occupations that require at least an associate degree. In general, workers in occupations requiring the least amount of education and training have less job attachment than do employees in other occupations. Therefore, there is a great need for replacement workers when people leave these existing low-skill jobs. Earnings in these jobs most often fall in the lowest earnings quartile. Occupations in this category include clerical workers, operators, fabricators, laborers, and many jobs in the service industry.

Only a small proportion of new jobs in the coming decade will require more education than a bachelor’s degree, such as a master’s degree, a doctoral degree, or a first-professional degree. However, occupations requiring these advanced degrees are the most highly paid. Occupations requiring work experience plus an advanced degree are at the top of the earnings rankings.

Some kinds of occupations are in decline. There are two major reasons occupations fall into decline. Either the industry they are concentrated in is projected to decline, or else technological or business practices will reduce the industries’ demand for the occupation. Industry change is the major cause of projected declines for sewing machine operators and for butchers and meat cutters. The manufacturing sector of the economy will continue to automate, and thus require fewer workers. Jobs for operators, fabricators, and laborers will continue to disappear.

Most of the occupations with the largest declines are affected by technological change. Changing computer technology will significantly reduce demand for word processors and typists; accounting bookkeepers and auditing clerks; and bank tellers. Printing and publishing occupations will be greatly affected by the continued shift to computerized printing and publishing methods. There will be decreased demand for offset lithographic press operators, typesetting and composing machine operators, printing film strippers, and proofreaders and copy markers.

Some occupations will be affected by both changes in technology and business practice and also by declines in the industries in which they are employed. Such occupations include farmers, farm workers, welfare eligibility workers and interviewers, and railroad brake, signal, and switch operators.

Job openings in any occupation occur for two reasons. Some are new jobs resulting from additional demand for a particular kind of worker. Other openings are for replacement workers in existing jobs. People retire and people quit. In most occupations, replacement needs exceed new growth. Even occupations that are projected to decline will provide some job openings. Many jobs are expected for retail salespersons, cashiers, waiters and waitresses, marketing and sales worker supervisors, and food, counter, fountain, and related workers. These will largely be replacement jobs. New jobs in the trade sector are projected to increase more slowly in the coming period than in the recent past.

These new projections describe an economy marked by moderate growth, low unemployment, strong foreign markets, and improving technology. The now familiar movement to a service-based economy will continue. Computer technology, health care, and other professional services will dominate the list of fast growing occupations. Jobs requiring high levels of education will continue to grow fastest. Nevertheless, there will also be a proportion of new jobs that will have very limited education and training requirements.

The New Economy: What is it and is Alabama ready?

Alabama is a participant in the “New Economy” of the 21st century where economic wealth and job creation are increasingly driven by ideas, innovation, and technology. This does not mean that most firms are manufacturing technology or delivering technology services—such firms accounted for about 11 percent of U.S. GDP in 1999. Rather, most firms are organizing their work around some aspect of technology. Investment in information technology is a major factor in enhancing business operations and increasing productivity throughout the U.S. economy.

The demands of a technology-driven economy are in some ways the same, but in many ways quite different from those of the old industrial order. Location decisions are influenced in part by traditional factors that affect the cost of doing business including tax rates or incentives, compensation costs, land and office costs, energy costs, capital costs, and the business climate, areas as a whole where Alabama can do well. But technology-oriented firms also emphasize the availability of a trained and educated workforce, proximity to excellent higher educational facilities and research institutions, an existing supplier network, access to venture capital, and a good quality of life. While workforce demands tend to rule out many rural areas, an emphasis on quality of life may increasingly result in more activity outside the nation’s major urban centers. Although parts of Alabama have much to offer in many of these areas, availability of an adequate trained and skilled workforce is a major weakness. Recent reports indicate that even in Huntsville, home to Alabama’s highest concentration of high-tech industries, firms are having a hard time finding college-educated engineers and technical workers to fill available jobs. Shortages have been noted in Birmingham and Montgomery as well.

Where are the citizens of Alabama today?

Workforce—On the key factor of an educated working age population, we lag behind. In 1998, 78.8 percent of Alabamians 25 years old and over had completed high school, ranking the state 42nd. With 20.6 percent of these residents completing a bachelor’s degree or higher, the state’s 1998 ranking was 38th. Many of today’s high-tech jobs require a college education and recent projections from the Bureau of Labor Statistics indicate that jobs needing at least an associate’s degree will increase more rapidly to 2008 than jobs requiring less education. Of course, educational attainment is not evenly dispersed across counties—in 1990, 37 of Alabama’s 45 rural counties had fewer than 60 percent of adults with a high school education. On the other hand, Alabama’s worker training initiatives through the Alabama Industrial Development Training Program (AIDT) have been a significant factor in attracting major firms like Mercedes, Boeing, and Honda.

Computer Literacy—With the development of the Internet and the declining cost of personal computers, more and more Americans have electronic access to the information economy. According to the National Telecommunications Information Administration, by the end of 1998 over 40 percent of U.S. households owned computers and 25 percent had Internet access. However, the South as a region is behind, creating what has been termed a “digital divide.” Alabama ranked just 46th, with 34.3 percent of households owning computers in 1998. It earned a ranking of 39th for 21.6 percent of households with Internet access, better than eight other southern states. Actual usage is of course higher, as many access computers and the Internet at work, school, and community centers.

Where is Alabama’s high-tech economy today?

Certain areas of Alabama are heavily involved in high-tech manufacturing and services. A 1999 study by the Milken Institute asserts that the high-tech sector is boosting the long-term growth path of the U.S. economy. Focusing on the nation’s metro areas, they conclude that high-tech activity explains 65 percent of the differences in output growth among metro areas during the 1990s. In their definition of “tech poles”—metro areas that assert the strongest technology gravitational pull—Huntsville ranked 50th and Birmingham ranked 57th. Huntsville ranked 23rd on the percentage of total real output in high-tech in 1998 at 16.1 percent, with high-tech employment of 34,380. Further breaking down high-tech industries, the Institute ranked Huntsville high on several indices: 9th on overall concentration of high-tech services; 3rd on output of guided missiles, space vehicles, and parts; 7th on computer and data processing services; and 2nd on engineering and architectural services output. Birmingham also showed its high-tech strength with the 2nd highest concentration of telephone communications services among all U.S. metro areas and a 15th place ranking on overall high-tech services. High-tech services accounted for 9.2 percent of total area output and employed 21,140 in 1998.

Business Alabama Monthly’s December 1999 ranking of the state’s top 100 technology firms confirms these area
concentrations—the Huntsville MSA claimed 45 of the 100, followed by Birmingham with 21. Huntsville was home to two of the nation’s top 150 electronics companies in a 1999 ranking by Electronic Business—SCI Systems at number 52 and Intergraph at 172. The state is a major player in contract manufacturing, with SCI Systems the largest in the nation; Avex Electronics of Huntsville 8th largest; and Mid-South Industries of Gadsden 39th. The Huntsville and Montgomery MSAs made the list of the top 20 U.S. sites for electronics companies in the 1999 Electronics Industry Year Book. Montgomery is home to almost 100 information technology firms focusing primarily on software development.

Support for New Technology Ventures

Incubators—Many fledgling high-tech companies must be nurtured in their early stages. Incubators have been growing in number with about 600 nationwide in 1999 compared to 12 in 1980. Two Alabama groups made Digital South’s 1999 list of major incubators: the Office for Advancement of Developing Industries (OADI), started in Birmingham in 1986, currently with 25 tenants and a $1 million budget from UAB; and the Business Technology Development Center in Huntsville, founded in 1997 and housing five tenants in 1999 with a $500,000 budget from NASA, TVA, and state and city grants. OADI has been instrumental in the development of Birmingham’s biotechnology cluster.

Venture Capital—Venture capitalists provide the finances to develop new firms. The MoneyTree U.S. Report’s recent survey of venture capital firms found venture capital investments totaling $35.6 billion nationwide in 1999, up 150 percent from 1998. Ninety percent of the 1999 venture capital was directed at technology-based companies. Software firms captured 18.5 percent of the total; telecommunications, 14.7 percent; and business services, 12.8 percent. With $59.2 million in venture funds invested in the state in 1999, Alabama ranked 28th.

### Venture Capital Investments

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<thead>
<tr>
<th>State</th>
<th>1999</th>
<th>1998</th>
</tr>
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<td>Alabama</td>
<td>$ 59.2</td>
<td>$ 76.7</td>
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<tr>
<td>Florida</td>
<td>725.6</td>
<td>301.4</td>
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<td>Georgia</td>
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<td>North Carolina</td>
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<td>Tennessee</td>
<td>159.0</td>
<td>67.5</td>
</tr>
</tbody>
</table>


IPOs—Most IPOs are spawned from the high-tech and Internet sectors, making them a barometer of an area’s technology growth. Alabama has had few IPOs in recent years. In addition, over a dozen of the state’s publicly traded companies have been bought out or folded over the last several years. And there do not appear to be many companies than might be ready to go public in the next few years. However, innovation as measured by patents awarded has accelerated during the last several years, with UAB alone tallying 45 for 1999 and the first quarter of 2000.

### Where do we rank on The State New Economy Index?

<table>
<thead>
<tr>
<th>Alabama’s New Economy Index Ranking by Selected Components</th>
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</thead>
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<tr>
<td>“Gazelle” Jobs</td>
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<tr>
<td>High-Tech Jobs</td>
</tr>
<tr>
<td>Job Churning</td>
</tr>
<tr>
<td>Venture Capital</td>
</tr>
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<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>Digital Government</td>
</tr>
<tr>
<td>Industry Investment in R&amp;D</td>
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<tr>
<td>Export Focus of Manufacturing</td>
</tr>
<tr>
<td>Managerial, Professional, and Technical Jobs</td>
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<td>Scientists and Engineers</td>
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<tr>
<td>Workforce Education</td>
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<td>Initial Public Offerings</td>
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<td>Online Population</td>
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<tr>
<td>Patents</td>
</tr>
<tr>
<td>Technology in Schools</td>
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<tr>
<td>Overall Ranking</td>
</tr>
</tbody>
</table>

Source: Progressive Policy Institute.

“The State New Economy Index,” compiled by the Progressive Policy Institute (PPI) in 1999 for their “Technology and New Economy Project,” ranks Alabama 44th among the 50 states on a composite of variables that contribute to successful economic transformation in a technology-based environment. These variables represent five factors: knowledge jobs, globalization, economic dynamism, transformation to a digital economy, and technological innovation capacity. Alabama received its highest rankings on jobs in “gazelle” companies (companies with revenue growth of at least 20 percent for four straight years), high tech jobs as a share of total, and job churning (a measure of business start-ups and failures). It came up especially short on technology in schools, online population, IPOs and patents, and workforce education (a weighted measure of postsecondary education). Massachusetts ranked first on the index, followed by California and Colorado. Mississippi, Arkansas, and West Virginia had the lowest index scores.

According to the Institute, low costs, tax abatements and other financial incentives no longer insure success. “In the New Economy, states’ economic success will
increasingly be determined by how effectively they can spur technological innovation, entrepreneurship, education, specialized skills, and the transition of all organizations—public and private—from bureaucratic hierarchies to learning networks.” The study also offers policy strategies for states:

- Co-invest in the skills of the workforce
- Co-invest in an infrastructure for innovation
- Promote innovation and customer-oriented government
- Foster the transformation to a digital economy
- Foster civic collaboration.

**How can Alabama move into the mainstream of the New Economy?**

Given Alabama’s economic history, the socioeconomic makeup of our people, and a development strategy traditionally focused on low costs and abundant natural resources, it is not surprising that we lag in readiness. According to the PPI, this should be seen as a challenge: “While history shapes the hand a state is dealt, public policy determines how the hand is played.” In key aspects of business, Alabama is headed in the right direction.

A number of statewide initiatives and organizations are geared toward encouraging the growth of high-tech industry in Alabama. The Alabama Semiconductor Alliance, formed by the Economic Development Partnership of Alabama (EDPA), has been at work promoting Alabama sites suitable for the semiconductor industry. And the Microelectronics Education Consortium, an organization of 13 two-year colleges and EDPA, is working to increase the readiness of Alabama’s workforce for jobs in the microelectronics and semiconductor industries. The Alabama Technology Network, a collaborative effort of The University of Alabama system, Auburn University, selected two-year colleges, and EDPA, is available to help existing industry make the transition to the “New Economy.” In addition, the newly-formed nonprofit Alabama Information Technology Association is promoting high-tech companies and providing networking opportunities for inventors and investors.

On the governmental side, Governor Don Siegelman’s Commerce Commission has proposed legislation designed to support the growth of small, high-tech companies, which often cannot benefit from traditional incentives or tax breaks. A state tax credit for 80 percent of research expenditures above a base level, including research and development contracts with state universities, would be given to help fledgling high-tech companies get on their feet. The credits could be sold to other firms to raise capital if the firm did not owe taxes. The state is also contemplating incentives to help lure a semiconductor manufacturer to Alabama.

Some areas of the state are doing well in the knowledge-based economy. But urban and rural Alabama must both move forward if the state as a whole is to flourish. A well-educated citizenry with up-to-date work skills is fundamental to attracting and growing more technology-based jobs. Efforts to build Alabama’s high-tech sector will fall flat if we cannot provide these industries with the engineers, computer scientists, and other technologists they need.

*Carolyn Trent*