

Business Opportunities Study for Spalding County, Georgia

Final Report

Prepared for

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Economic Performance

Before examining existing industry in the county and in the study region to seek business growth opportunities, researchers looked at the recent economic performance of both areas. These are the major findings:

- Spalding County's private-sector job growth between 2001 and 2005 was 2.0 percent per year compared to the study region's growth of 2.1 percent.
- Although private-sector job growth was very similar between Spalding and the study region, performance of major business sectors was quite different. In Spalding, manufacturing fell 6.9 percent, and in the study region it fell 16.9 percent. Jobs in warehousing grew by 33.3 percent in Spalding and fell by 11.8 percent in the study region.
- In Spalding County, jobs in the government sector (local, state, and federal) grew 22 percent between 2001 and 2005, and in the study region it was 14.2 percent.
- Only four major business sectors saw a drop in real average weekly wages in the study region over the 2001 to 2005 period. In Spalding County, nine of the 14 major business sectors saw a drop in real average weekly wages.
- The 2005 private-sector average weekly wage in Spalding County was \$507 and in the study region it was \$630.

Business Growth Opportunities

This study targeted existing high-wage industry in the county and in the study region to look for private-sector growth opportunities. The 2000 study took a traditional approach by matching the area's assets with location criteria for each industry. Besides different approaches, the two studies also used different industry classification schemes.

The older study used the Standard Industrial Classification (SIC) system because industry data was only available in this scheme. This more recent study used the current North American Industrial Classification System (NAICS). The difference in industry classification schemes impacts the analyses and makes it somewhat difficult to draw comparisons.

High-wage industry was defined as those three-digit NAICS industries having an average weekly wage in 2005 that was 115 percent or better of the private-sector average weekly wage. This was calculated for the county to be \$625 in current dollars. Using this as the cutoff, there were 29 out of a total of 74 three-digit NAICS private-sector industries in 2005 that were considered to be high-wage in Spalding County.

Further analysis of these 29 three-digit industries, using location quotients (LQ) and growth projections for their U.S. counterparts, produced the following findings:

- NAICS 325 *chemical manufacturing* does have a small presence in Spalding beginning in 2003. This industry also exists in all four of the core study region counties (Clayton, Coweta, Fayette, and Henry). Although the LQ for this industry in Spalding County and in the study region is well below 1.0, there may

be an opportunity for further expansion of this industry, but it would require interviews with the existing firms to understand why they located in the region, whether they have expansion plans, and what problems they have encountered (if any) operating in the region.

- NAICS 326 *plastics and rubber products manufacturing* has a very large location quotient, but it fell between 2003 and 2005. Interviews with executives in this industry should be attempted to understand what has happened to this industry in the county and how the slide can be stopped.
- NAICS 327 *nonmetallic mineral product manufacturing* is a high-wage industry in Spalding, but with a small location quotient. However, the national outlook for job and output growth for this industry is positive.
- NAICS 333 *machinery manufacturing* is a small but growing high-wage manufacturing industry in the county.
- NAICS 335 *electrical equipment, appliance, and component manufacturing* is a high-wage manufacturing industry that has been growing in the county and adding to its job base. The location quotient for this industry in Spalding county was 8.16 in 2005.

The other major sectors that could be considered for expansion are wholesale trade, warehousing, and business services:

- The wholesale trade industry sector has shrunk considerably in the county but has grown in the study region. This could mean that firms are moving to other counties in the study region or simply closing up shop. This industry is usually tied to manufacturing and retail expansion in an area, so it may not be possible to significantly impact the industry's growth. This industry sector offers only a small opportunity and would require an effort to understand why it has shrunk in the county before a strategy can be developed to grow it again.
- Warehousing, or "distribution centers" as firms in this category are usually referred to, has grown significantly in the four core study-region counties, but has only a small presence in Spalding County. The county may be able to shift future expansion of these firms to its locations if firms find it difficult to find suitable tracts of land in the other four counties.
- In this study, business services comprises NAICS 511 through 551. These firms provide other firms with accounting, legal, software, architectural, engineering, financing, and investing services. The presence of these businesses in the county and in the study region is not great; most location quotients are well below 1.0. However, these businesses are usually sought after by economic developers because of their high wages and office-based facilities. They tend to be small firms with few employees. The best opportunity for the county in this sector is to grow key components that have a very small presence in the county now, so they provide these services to other existing industry in the county. This "import

substitution” effect has the same economic impact that attracting new basic industry has on a local economy.

Two Non-Traditional Opportunities

Besides the business growth opportunities just mentioned, the county has two other opportunities that could be considered non-traditional. The first is the University of Georgia’s Griffin campus and its research initiatives, specifically, the new Food Product Innovation & Commercialization Program (FOODPI&C). Given the state’s large and diverse food processing industry, this initiative has a ready-made client base and test-bed for its research. If it becomes a reality with a state-of-the-art facility and incubator, it will be the only such facility in the Southeast.

The other opportunity is represented by the recent announcement of an active adult retirement community (AARC) called Sun City Peachtree, to be built in Spalding County. The residents of these types of facilities are usually (1) above average in income, and (2) active in recreational activities that can spur retail sales. They are also age restricted meaning no children are allowed as residents, consequently they have no impact on enrollment in public schools. Therefore, they very likely have a positive fiscal impact on counties where they locate.

SECTION 1

Introduction

In 2000, a target industry study was conducted for the three-county area composed of Spalding, Henry, and Fayette counties. The study was conducted by the Economic Development Institute at Georgia Tech, which is now the Enterprise Innovation Institute. The original study looked at business growth opportunities for the three-county region based on its assets, industrial makeup at the time, and interviews with key stakeholders and manufacturers.

Recently, the Griffin-Spalding Development Authority asked the Enterprise Innovation Institute (EI²) to re-examine the results from the original study and focus on a revised analysis for just Spalding County. This report details the findings from that study. Where appropriate, comparisons between the original report and the current analysis will be presented to provide the Development Authority with a perspective on how Spalding County has changed in the six years since the first study, with respect to the elements that drove the recommendations in the original report.

The remainder of the report is organized as follows. Section 2 contains a review of the original report's findings. Section 3 provides an analysis of Spalding County and its surrounding region in terms of economic performance. Section 4 explores business recruitment and expansion opportunities from an examination of existing high-wage industries in the county and in the region. Section 5 takes a look at two emerging opportunities in the county consisting of the UGA Griffin research capabilities and the development of a large active adult retirement community. Recommendations are found in the final section, Section 6.

SECTION 2

Findings from the Original Study

One difficulty in comparing the old and new studies is the fact that the federal government's industrial classification system has changed dramatically. This impacts a good deal of the data analysis because many industries have changed composition; some have been combined and some have been disaggregated into a new array of businesses. Also, the previous study combined data for all three counties into regional data and reported only regional results. This analysis focuses only on Spalding County, but it does examine industry composition in the region surrounding the county in looking for linkages that offer opportunities for Spalding County.

Original Target Industry Study Findings

One of the aims of the original study was to target high-technology businesses. A list of industries by four-digit SIC¹ codes was used to define "high-tech" based on a 1991 list published in *Monthly Labor Review*.² The authors defined high-tech industry based on an industry's ratio of research and development (R&D) jobs to total jobs. Each such ratio was compared to the overall average to determine if the industry could be considered as high-tech. Since then, several researchers have attempted to define high-tech industries, some using occupation data to categorize industries as high-tech, rather than R&D job proportions.

With the change from SIC to North American Industrial Classification System (NAICS) codes for classifying businesses, high-technology definitions found in the literature changed again. NAICS provides a richer array of business classifications that is much more in tune with the current composition of products and services in the national economy.

The industry recommendations from the original study are:

Location-related Opportunities – Based on the three counties' proximity to Hartsfield-Jackson International Airport and to the main branch of the U.S. Postal Service, researchers selected four industry sectors that use these facilities. These are: (1) non-scheduled air transportation (SIC 4522), (2) air courier services (SIC 4513), (3) freight arrangement (SIC 4731), and (4) direct-mail advertising services (SIC 7331).

Computer-related Opportunities – Based on the region's educational and workforce assets, researchers suggested these industries: (1) custom computer programming (SIC 7371), (2) prepackaged software (SIC 7372), (3) computer integrated systems (SIC 7373), (4) data processing services (SIC 7374), and (5) information retrieval services (SIC 7375).

¹ Stands for Standard Industrial Classifications and is the old industrial classification system created by the federal Office of Management and Budget.

² Hadlock, P., et al., "High Technology Employment: Another View,": *Monthly Labor Review*, July 1991.

Wholesale Opportunities –The region’s proximity to large consumer markets and access to interstates led to selection of these sectors: concrete, stone, and structural clay products (SIC 5032); and roofing, siding, and insulation (SIC 5033). Also, SIC 5033 is a supplier to one of the region’s clusters. Another population-driven wholesale sector suggested for the region was computer and computer peripheral equipment and software (SIC 5045).

Manufacturing Opportunities – These manufacturing sectors were suggested: industrial gases (SIC 2813); industrial inorganic chemicals, n.e.c. (SIC 2819); plastics materials and resins (SIC 2821); noncellulosic organic fibers (SIC 2824); nitrogenous fertilizers (SIC 2873); and phosphatic fertilizers (SIC 2874).

Other Opportunities – A final group of industries was suggested that did not meet all of the selection criteria used in the study, but still offered reasonable opportunities. It comprised commercial printing, gravure (SIC 2754); fabricated rubber products, n.e.c. (SIC 3069); commercial lighting fixtures (SIC 3646); motor vehicles and car bodies (SIC 3711); and metal coating and allied services (SIC 3479).

The older study employed a traditional approach to target industry analysis that relies on lists of location criteria. The problem with this approach is that the lists are the same for broad industry sectors. Because most regions considered to be a competitor have the same set of assets, matching location criteria to assets results in the same list of industry sectors from one region to the next, with little connection to existing industry in each region.

Another result of the older methodology is that too often an industry that doesn’t have a presence in the region is selected and recommended. Starting a new industry cluster where one does not yet exist is a daunting task. With limited resources, it makes better sense to leverage existing industry in the specific county or in the surrounding region, which this study encourages. This study employs a different methodology, one that focuses on existing industry trends.

Leveraging UGA-Griffin

In a separate analysis and report³, the original study also examined the opportunity represented by the University of Georgia’s Griffin campus and its research assets. Much of the research conducted at the facility is in food technology and safety. Researchers interviewed key scientists and university administrators at the Griffin facility, as well as individuals at Cornell University’s Agricultural Experiment Station in Geneva, New York, who at the time, were studying the feasibility of creating a research facility similar to what was envisioned for the Griffin campus.

³ “Opportunities Related to the University of Georgia’s College of Agricultural and Environmental Sciences,” Georgia Tech Research Corporation, October 2000.

The findings of the Cornell study supported the idea of a food technology park close to the research assets of Cornell University. This study will look at what has transpired since the original Cornell study was completed because it relates to the potential of new initiatives at the UGA-Griffin campus.

SECTION 3

Analysis of Spalding County and Its Region

Spalding County is located in the southern portion of the metropolitan Atlanta region. Its connections to the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA) make it a part of this very large 28-county MSA. Figure 1 below shows all 28 counties in the Atlanta MSA. The region surrounding Spalding County consists of each county contiguous to it and includes Fayette, Clayton, Henry, Butts, Lamar, Pike, Meriwether, and Coweta counties. These counties are shown in yellow in the map and will be referred to as the study region throughout this report. All figures and tables showing data for the study region do *not* contain data for Spalding County.

Figure 1: Atlanta-Sandy Springs-Marietta, GA MSA and Study Region



Regional Performance

Figure 2 shows a map of the Atlanta MSA illustrating population density throughout the 28-county region. The darkest colors represent higher densities. Spalding County is in the range of 248 to 435 persons per square mile, which is the third category in the legend. Its actual population density in 2005 was 310, which ranked squarely in the middle of all Atlanta metro counties at 15th. Its 2000 to 2005 population growth rate ranks 24th out of the 28 Atlanta metro counties, making it one of the slowest growing counties in the MSA, in terms of population.

Figure 2: Population Density in the Atlanta MSA

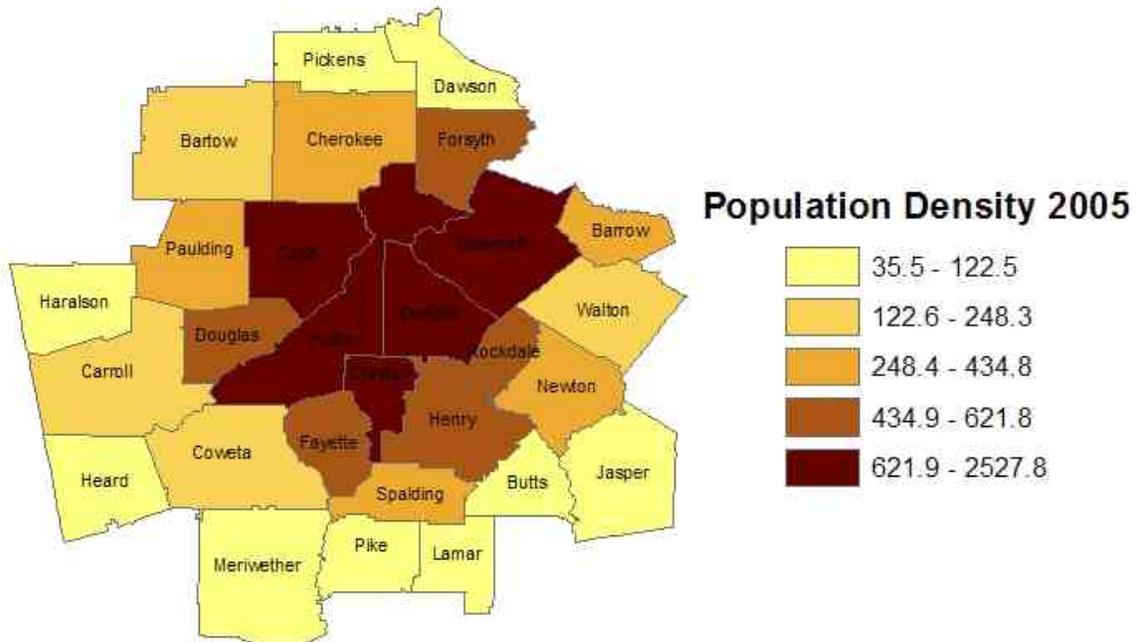


Figure 3 displays total private-sector annual job growth in each county in the study region for 2001 through 2005. Some counties in the study region have fared a good deal better than Spalding, such as Henry, Butts, Pike, and Fayette, while others have shown less job growth than Spalding. Table 1 provides the data used to generate the chart in Figure 3. In terms of size, Clayton County has the most private-sector jobs at 92,514 jobs and Pike County has the fewest at 1,726. Spalding County had 18,920 private-sector jobs in 2005 (see Figure 4).

Figure 5 shows the percentage change in jobs in the study region by major economic sector⁴. These sectors are defined using the North American Industrial Classification System (NAICS). Most of the study region’s job growth has been in *financial services* (41.7%), followed by *real estate services* (25.9%) and *accommodations and food services* (21.7%). Industries that have the largest negative percentage changes are, in order, *information services* (-32.7%), *manufacturing* (-16.0%), and *transportation* (-14.3%). Table 2 contains the data that generated the chart in Figure 5.

Figure 6 displays real⁵ average weekly wages (AWW) in 2001 and 2005 for each industry in the study region. Most of the industries showed a rise in real AWW with the exception of *transportation; warehousing; information services; and professional, scientific, and technical services*. This means that study-region workers in the remaining industries saw

⁴ The “Other” economic sector includes agriculture, mining, utilities, construction, administrative and support, and waste management and remediation services, educational services, and all other services.

⁵ “Real wages” are wages that have been adjusted for inflation using the Consumer Price Index (CPI) for the Atlanta urban area. The base year for the index used here is 2001.

their purchasing power rise over the 2001 to 2005 period, on average. Table 3 contains the data behind the chart in Figure 6.

Figure 3: Private-Sector Job Growth, 2001 through 2005

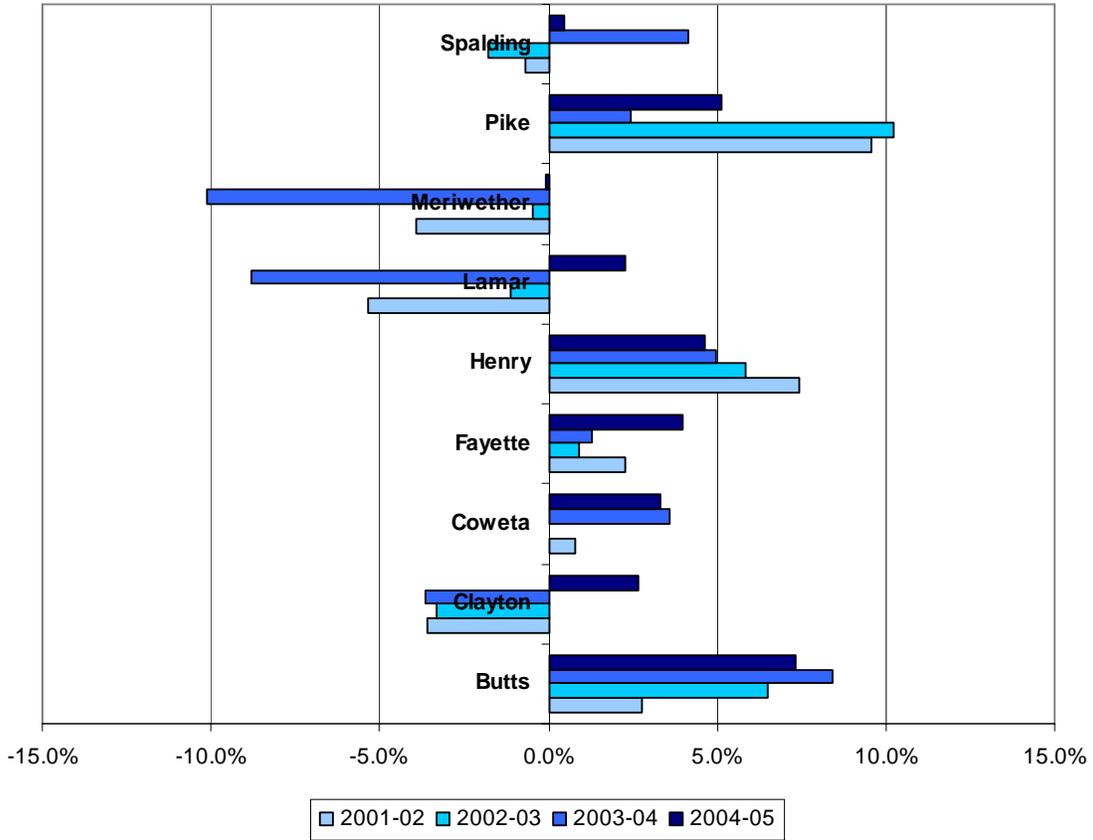


Table 1: Private Sector Job Growth

County	2001-02	2002-03	2003-04	2004-05
Butts	2.8%	6.5%	8.4%	7.3%
Clayton	-3.6%	-3.3%	-3.7%	2.7%
Coweta	0.8%	0.0%	3.6%	3.3%
Fayette	2.3%	0.9%	1.3%	4.0%
Henry	7.4%	5.9%	4.9%	4.6%
Lamar	-5.3%	-1.1%	-8.8%	2.3%
Meriwether	-3.9%	-0.5%	-10.1%	-0.1%
Pike	9.6%	10.2%	2.4%	5.1%
Spalding	-0.7%	-1.8%	4.1%	0.5%

Source: Georgia Department of Labor

Figure 4: Private Sector Jobs in 2005 by County

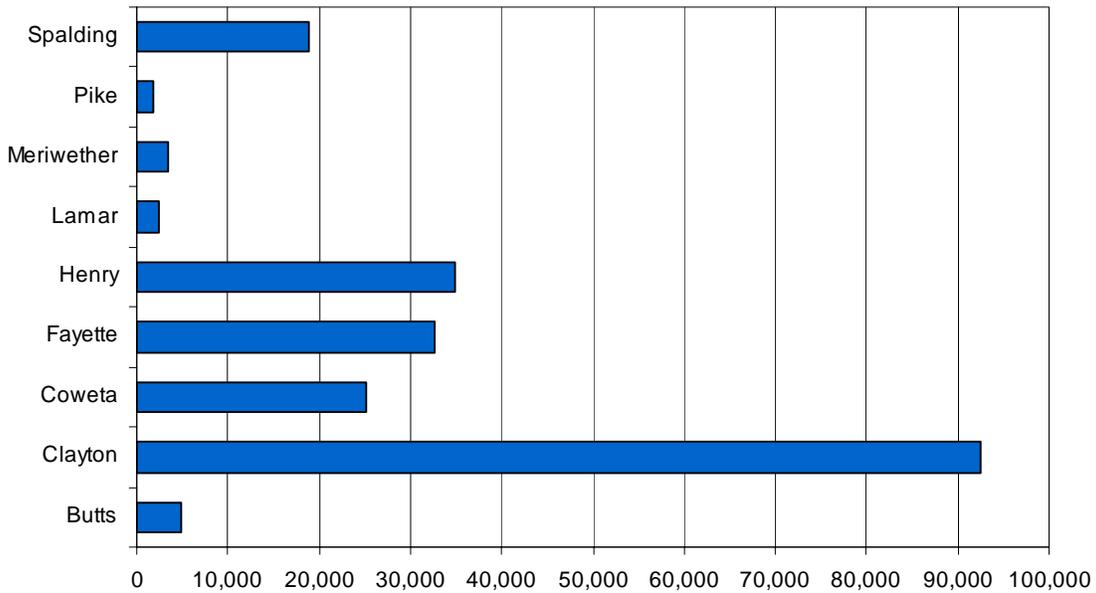


Figure 6 also provides insight into which industries pay the highest wages and salaries. The dark blue bars correspond to 2005 after adjusting for inflation. AWW over all private-sector industries, in 2001 dollars, was \$630 and, with government jobs added in, the average was \$631. Industries that are above the private-sector average, in rank order from highest to lowest, are *management services; transportation; wholesale trade; professional, scientific, and technical services; financial services; manufacturing; warehousing; health services; information services; and government.*

The charts thus far have measured the study region’s performance one metric at a time. Another kind of chart can summarize three metrics at once and provide a much richer viewpoint of the study region’s economic performance in a single chart. Figure 7 contains this chart.

Figure 7 shows a “bubble chart” that displays three data points for each private-sector industry. The horizontal axis shows the industry’s AWW in 2005, in 2001 dollars, the vertical axis shows the industry’s percentage change in jobs between 2001 and 2005, and the size of the bubble shows total jobs in the industry in 2005. All of these values are shown in various tables above, so no table was generated for this chart.

In Figure 7, the farther to the right and up an industry lands, the better the industry is for the regional economy. Although none of the industries in Figure 7 is in the upper right hand corner, some are close. For example, *management services* had a high AWW in 2005 and a low but positive percentage change in jobs between 2001 and 2005. *Financial services* experienced the highest percentage change in jobs but falls in the middle with respect to AWW. Both are relatively small industries, as shown by the size of their bubbles.

Figure 5: Percentage Change in Study Region Jobs, 2001-2005

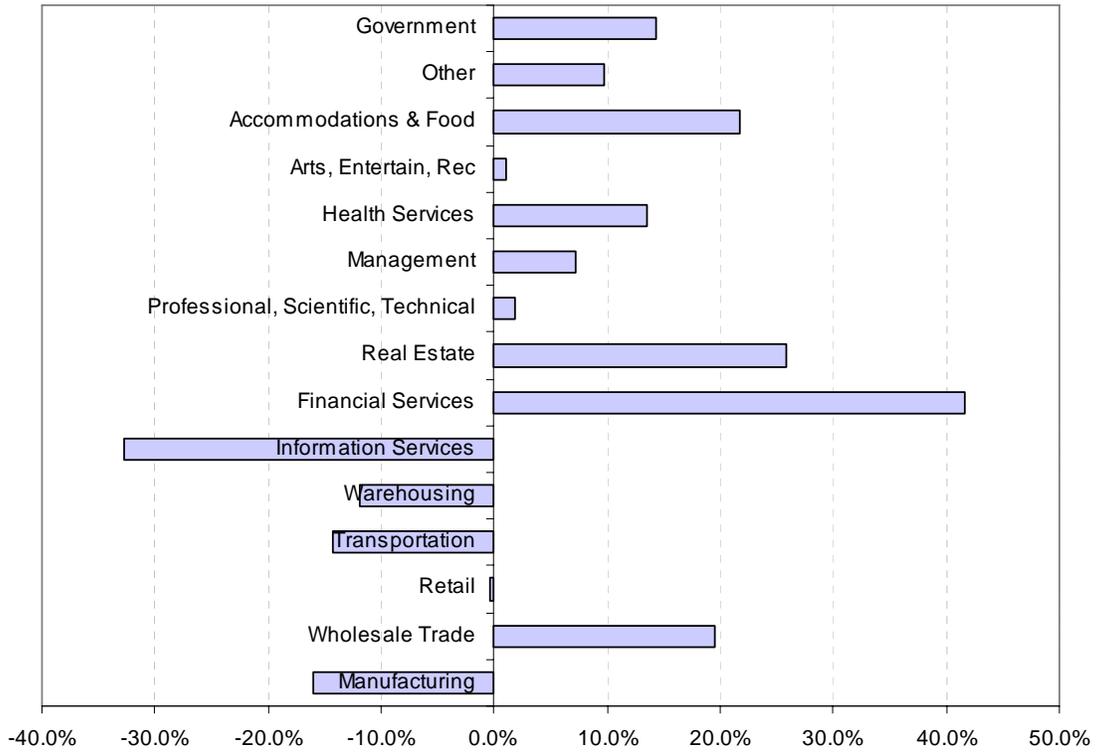


Table 2: Percentage Change in Study Region Jobs, 2001-2005

Economic Sector	2001-2005
Manufacturing	-16.0%
Wholesale Trade	19.5%
Retail	-0.4%
Transportation	-14.3%
Warehousing	-11.8%
Information Services	-32.7%
Financial Services	41.7%
Real Estate	25.9%
Professional, Scientific, Technical	1.9%
Management	7.3%
Health Services	13.5%
Arts	1.0%
Accommodations	21.7%
Other	9.7%
Government	14.2%
Total - All Sectors	3.9%
Private Sector	2.1%

Source: Georgia Department of Labor

Figure 6: Real Average Weekly Wages - Study Region

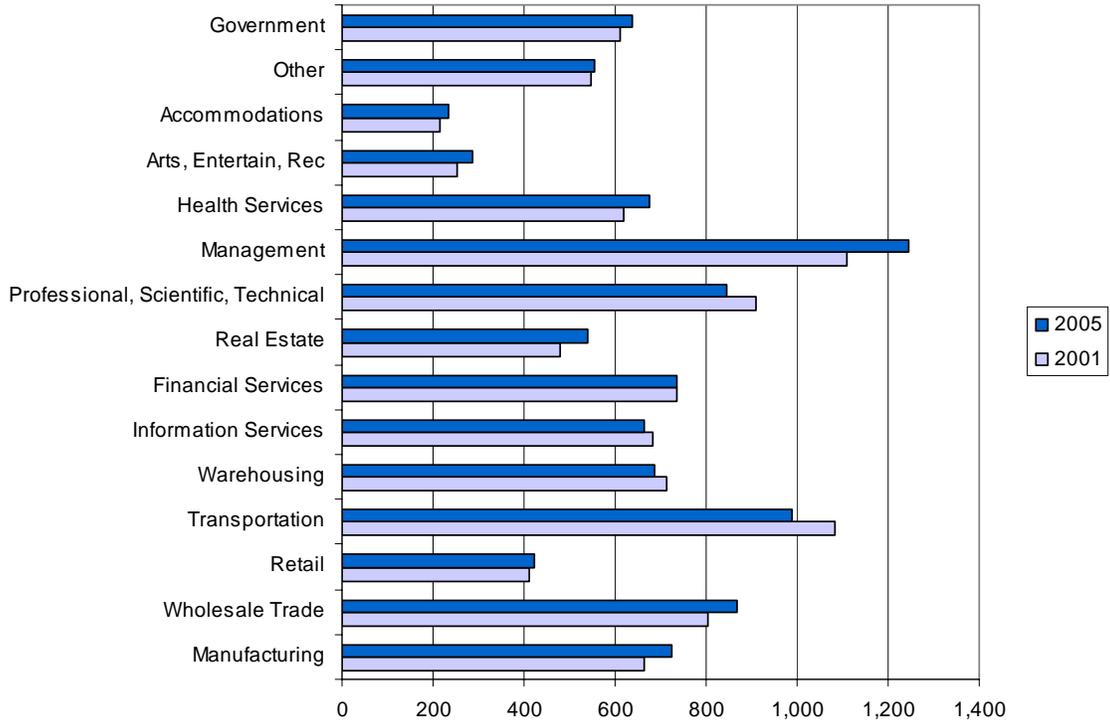
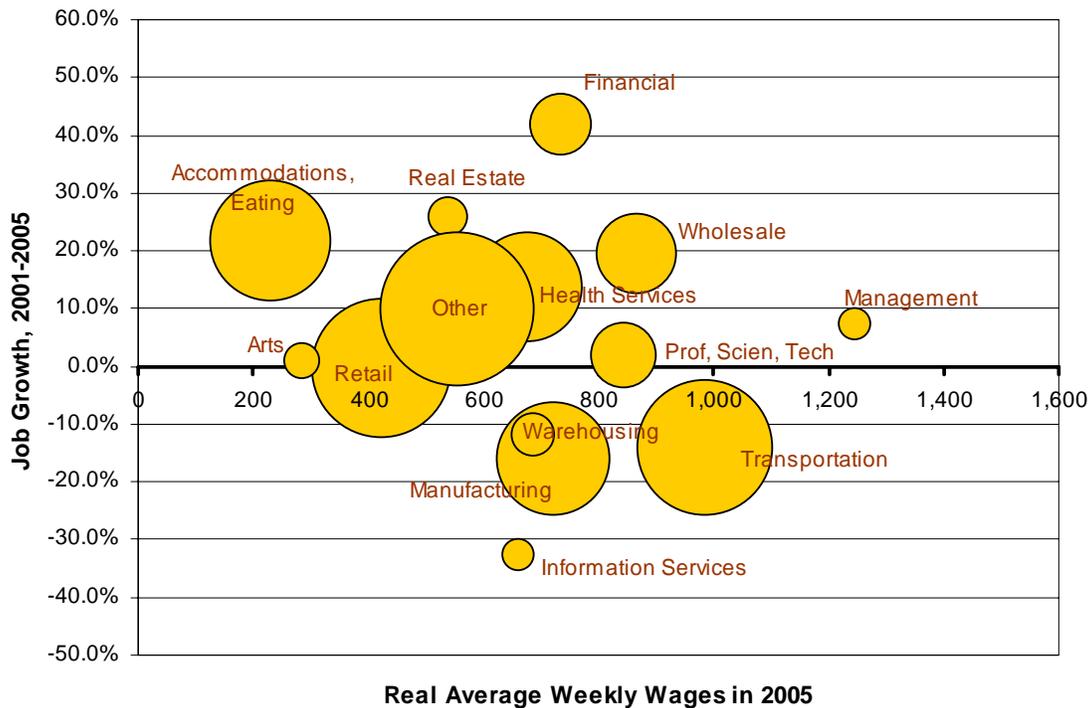


Table 3: Real AWW by Sector - Study Region

Economic Sector	2001	2005	Percentage Change
Manufacturing	\$664	\$724	9.0%
Wholesale Trade	\$805	\$866	7.6%
Retail	\$410	\$424	3.5%
Transportation	\$1,084	\$988	-8.9%
Warehousing	\$715	\$688	-3.8%
Information Services	\$681	\$663	-2.7%
Financial Services	\$734	\$735	0.1%
Real Estate	\$477	\$541	13.3%
Professional, Scientific, Technical	\$910	\$844	-7.2%
Management	\$1,110	\$1,246	12.3%
Health Services	\$618	\$677	9.5%
Arts	\$254	\$287	13.2%
Accommodations	\$217	\$233	7.4%
Other	\$546	\$556	1.9%
Government	\$610	\$639	4.7%
Total - All Sectors	\$638	\$631	-1.0%
Private Sector	\$643	\$630	-2.0%

Source: Georgia Department of Labor

Figure 7: Average Weekly Wages, Job Change, and Size



Relatively high-wage jobs that are lost have a proportionately higher detrimental impact on the regional economy than do lost low-wage jobs. Any bubbles below the horizontal axis and with real AWW above \$630 fall in the former category and industries below \$630 fall in the latter. A primary goal for any economic development program is to raise average wages in the community. Therefore, from a strategic standpoint, it makes most sense to focus on growing industries with above-average weekly wages. This principal will be discussed further in the next section when location quotient analysis and industry recommendations are discussed.

Focus on Spalding County

The previous discussion focused on the study region (which does not contain Spalding County) to provide a backdrop to Spalding County's performance using similar metrics. Figure 8 shows a chart similar to Figure 5 above but just for Spalding County. The results are quite different. For example, jobs in *management services* fell over 60 percent in Spalding County but rose by 7.3 percent in the study region. On the other hand, *warehousing* jobs rose in the county but fell in the region. The top job generating industry in the county was *health services* (39.9%) over the period 2001 to 2005.

Figure 9 shows jobs by sector in the county in 2005. These are arranged from smallest to largest to provide an easy way to see which economic sectors are largest and which are smallest. Government-sector jobs are the largest, followed by manufacturing.

Figure 8: Percentage Change in Spalding County Jobs, 2001-2005

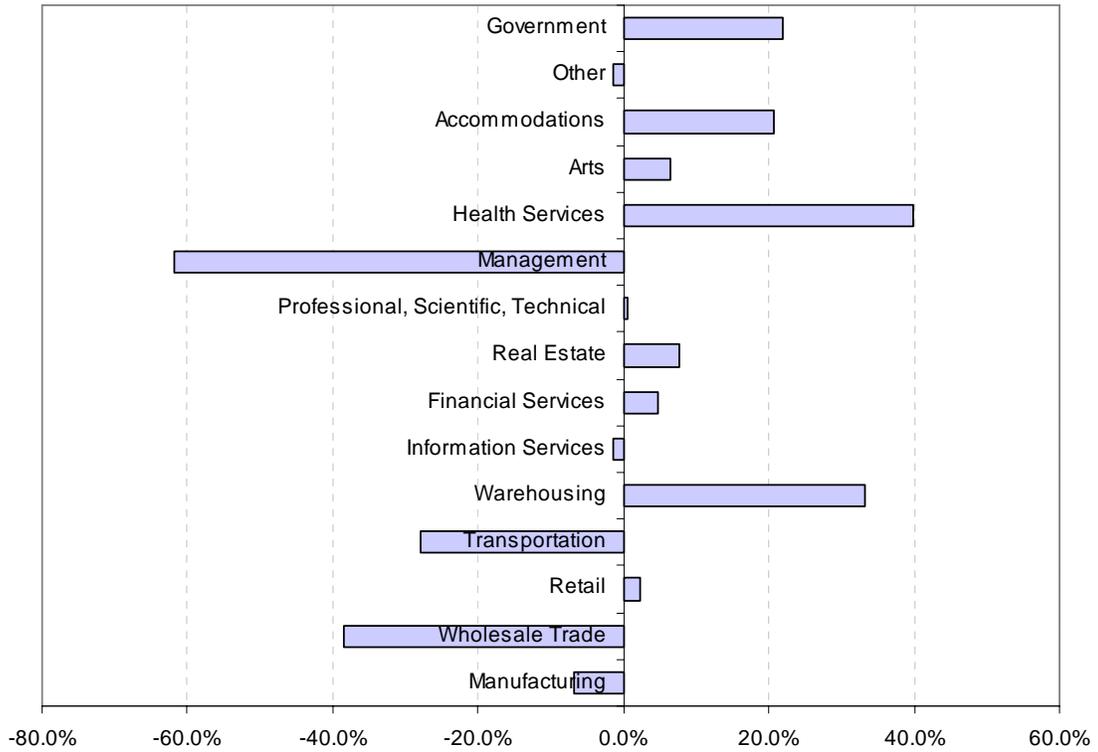


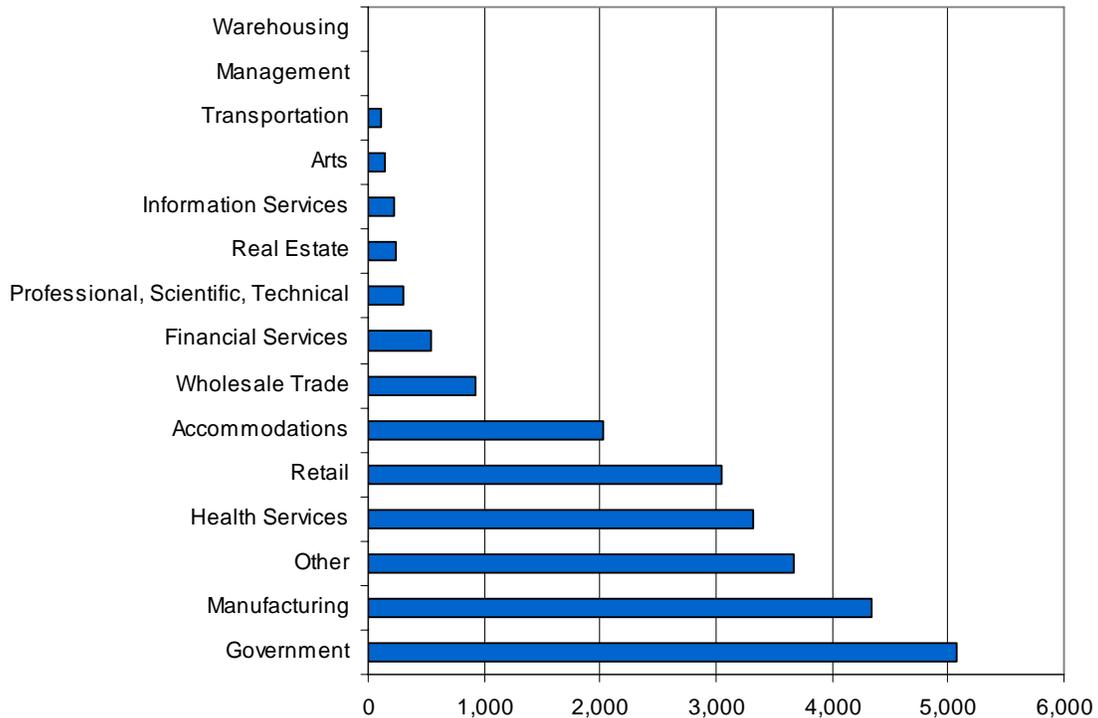
Table 4: Percentage Change in Spalding County Jobs, 2001-2005

Economic Sector	2001-2005
Manufacturing	-6.9%
Wholesale Trade	-38.4%
Retail	2.2%
Transportation	-27.9%
Warehousing	33.3%
Information Services	-1.4%
Financial Services	4.7%
Real Estate	7.7%
Professional, Scientific, Technical	0.7%
Management	-61.7%
Health Services	39.9%
Arts	6.4%
Accommodations	20.7%
Other	-1.5%
Government	22.0%
Total - All Sectors	5.7%
Private Sector	2.0%

Source: Georgia Department of Labor

One thing to note is that percentage changes don't provide insight into the size of the industry. Although warehousing shows a large percentage change in jobs in the county, it represents a very small number of jobs, as shown in Figure 9.

Figure 9: Total Jobs by Industry - Spalding County - 2005



Like the study region, government (federal, state, and local) jobs make up the largest sector of the county's economy. In the study region, government makes up 16.4 percent of all jobs, and in Spalding County the government sector makes up 21.2 percent. In the study region, manufacturing places sixth in terms of jobs and second in Spalding County.

Real AWW in Spalding County for 2001 and 2005, by economic sector, are shown in Figure 10. Unlike the study region, real AWW fell in most industry sectors. However, manufacturing showed a significant rise in real AWW, with a percentage change of 10.4 percent from 2001 to 2005. Table 5 shows the data that generated the chart in Figure 10.

The county's 2005 AWW in 2001 dollars, over all private-sector industries, is \$507 compared to \$630 for the study region, a 24 percent difference. This disparity in AWW between the county and the study region is reflected in every sector. It appears that, on average, the firms located in Spalding County pay less than similar firms in the study region.

Figure 10: Real Average Weekly Wages - Spalding County

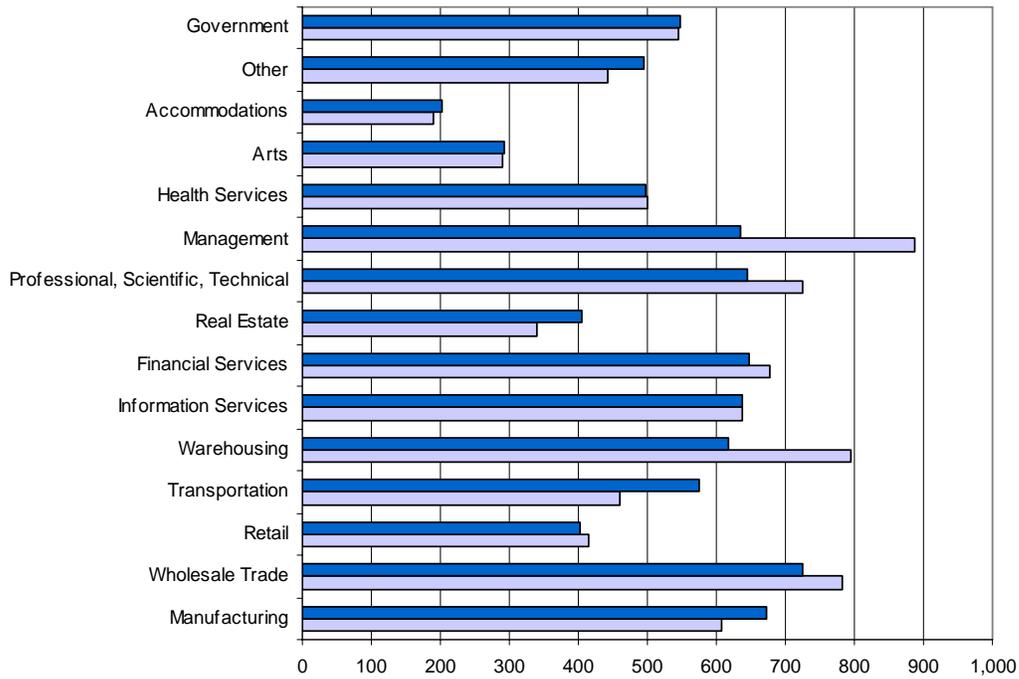


Table 5: Real Average Weekly Wages in Spalding County

Economic Sector	2001	2005	Percentage Change
Manufacturing	\$608	\$671	10.4%
Wholesale Trade	\$783	\$726	-7.3%
Retail	\$414	\$402	-2.9%
Transportation	\$459	\$574	25.0%
Warehousing	\$794	\$618	-22.1%
Information Services	\$639	\$638	-0.1%
Financial Services	\$678	\$648	-4.4%
Real Estate	\$340	\$406	19.5%
Professional, Scientific, Technical	\$724	\$644	-11.1%
Management	\$887	\$634	-28.5%
Health Services	\$499	\$496	-0.5%
Arts	\$291	\$292	0.3%
Accommodations	\$191	\$201	5.6%
Other	\$443	\$495	11.8%
Government	\$545	\$548	0.5%
Total - All Sectors	\$512	\$516	0.8%
Private Sector	\$504	\$507	0.6%

Source: Georgia Department of Labor

Figure 11: Average Weekly Wages, Job Change, and Size

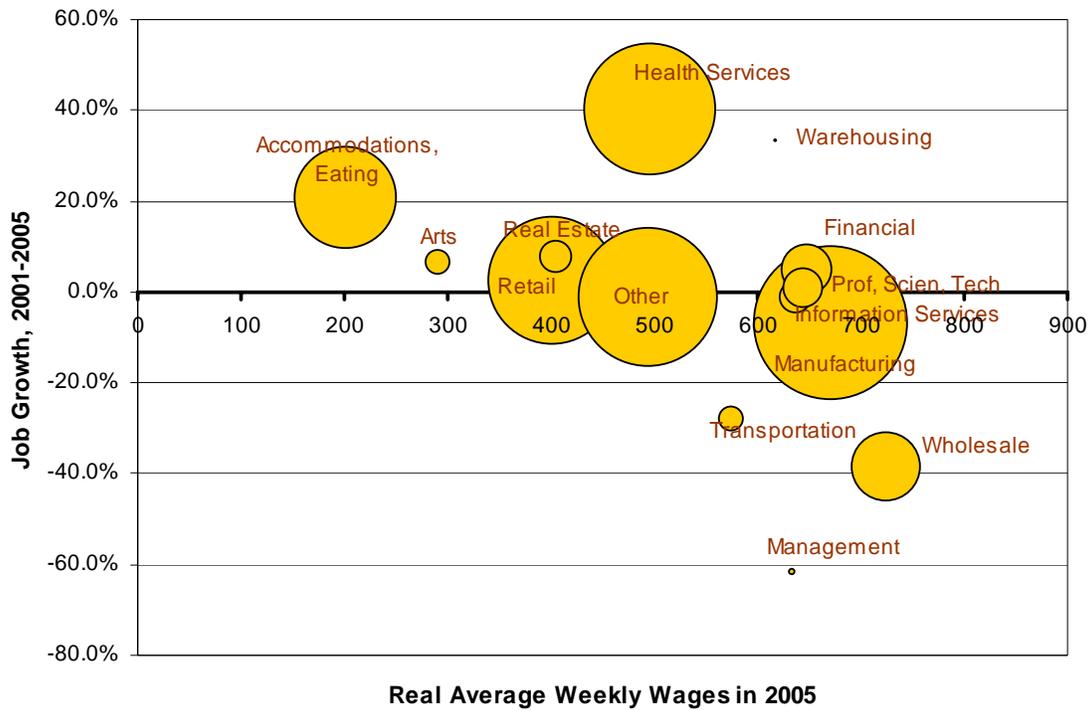


Figure 11 shows a bubble chart like the one in Figure 7 for the study region. Although the bubbles appear to be farther to the right on the AWW axis, the scale of the axis is different because all the AWW figures by sector are smaller in the county relative to the study region. The average AWW for private-sector industries is \$507 in Spalding County; therefore, as the chart illustrates, industries such as *arts, entertainment, and recreation* and *accommodations and eating places* are much lower than the average. Even though these two industries showed positive growth in the 2001 to 2005 period, efforts to grow these industries even more would only exacerbate the disparity in the county's AWW and the AWW found in the study region.

SECTION 4

An Analysis of Business Growth Opportunities

In the previous section, an analysis of Spalding County's economic performance and that of the study region revealed a disparity in average weekly wages and overall job growth, with the county suffering the lower values. Identifying opportunities for the county to pursue should take into account these findings and work to attract industry that can raise the county's average weekly wage, while building on Spalding's economic foundation.

The following analysis will drill down into key industry sectors to look for specific opportunities using location quotient analysis, projections of national growth by industry, and average weekly wages.

Selecting Industries for Analysis

County-level employment and wage data from the Georgia Department of Labor (GDOL) for the years 2001 through 2005 use NAICS codes to identify industry types. These data form the basis for the analysis of high-wage industries in Spalding County.

Defining High-Wage Industry

The definition for high-wage industry is based on average weekly wage data from GDOL. These data correspond to jobs within the county that may or may not be filled by county residents. This employment definition is called "by place of work." The data collected by GDOL is based on information each firm in the state must submit under the Employment Security Law. Firms submit these data quarterly, and GDOL creates county-level annual estimates of establishments, employment (jobs), and average weekly wages by industry category.

Table 6 shows total establishments, jobs, and average weekly wages (unadjusted for inflation) in the private sector⁶ for Spalding County for the years 2001 through 2005. The high-wage cutoff was set at 15 percent above the county's private-sector average weekly wage in each year. All three-digit NAICS industries in the county in 2005 were compared to the 2005 cutoff, and those industries above the cutoff were selected as the initial group of high-wage industries.

The Spalding County list of high-wage industries came to 29 out of a total of 74 three-digit NAICS private-sector industries in 2005. Because 2005 is the most recent data available for this analysis, we only concentrate on high-wage industries as of 2005.

⁶ Private-sector average weekly wages are used rather than total average weekly wages, which includes federal, state, and local government jobs, because the objective of a business development strategy is to stimulate growth in private-sector jobs.

Table 6: Average Weekly Wage Cutoffs for High-Wage Definition in Spalding County

	2001	2002	2003	2004	2005
Establishments	1,152	1,221	1,242	1,256	1,282
Jobs	18,544	18,417	18,085	18,829	18,920
Average Weekly Wages (current dollars)	\$504	\$516	\$518	\$541	\$544
Cutoff for High-Wage (current dollars)	\$580	\$593	\$595	\$622	\$625

Source: Georgia Department of Labor, Current Employment and Wages

Selecting High-Wage Industries for Further Analysis

Not all of the high-wage NAICS industries represent opportunities for recruitment. Many of these serve the local Spalding County market; efforts at recruitment and efforts to grow existing industries should concentrate on NAICS industries that serve markets outside of Spalding County. Industries that serve non-Spalding markets bring new money into the local economy and are considered “basic” industries. The injection of new money into an economy creates further economic activity (multiplier impacts). Industries that serve local markets recirculate existing income (and also support basic industry). Spalding County is well situated, given its proximity to the core metro Atlanta counties, to grow its basic industries by selling products and services to markets in those counties.

Given this reality, some of the industries in the complete list of high-wage industries will not be considered for further analysis. Manufacturing is typically considered to be a basic or “export” industry because it sells its products outside the immediate area. Most business services serve a local or small regional market and, therefore, don’t fit the definition of export industries. However, many high-wage jobs are found in business service sectors and because Spalding is within the large and complex Atlanta MSA economy, there may be opportunities to market these services to the greater MSA region and to the immediate study region. Therefore, the potential for the county’s service sector to be a basic industry is significant.

In addition, if companies in Spalding are purchasing services from businesses outside of the county, these purchases represent a leakage that could be “captured” if companies in Spalding had an opportunity to purchase these services from other Spalding firms. Referred to as “import substitution,” stopping these leaks has the same impact as new money coming into the Spalding economy through sales to outside firms.

This study’s emphasis is on existing industry rather than industries that don’t yet exist in the county. This is based on the reality that creating an industry cluster from nothing is much harder than growing healthy, high-wage industries from what already exists in the county or in the study region.

Location Quotient Analysis

A location quotient provides insight into which industries appear to be concentrated in a given geographic area. It is estimated by dividing the percentage of total employment a particular NAICS industry represents in the study area by the same ratio for a reference region, usually the United States. A location quotient greater than 1.0 indicates a larger-than-average (using the U.S. ratio as “average”) share of total employment in the area. A

value less than 1.0 indicates just the opposite, and a value of 1.0 means it represents an average concentration.

Table 7: Location Quotient Values and Their Definitions

LQ > 1.0	Indicates the industry's employment share is larger than that of the United States. These industries satisfy local demand and "export" the excess.
LQ = 1.0	Indicates the industry's employment share is equal to the U.S. value. These industries produce just enough to satisfy local demand.
LQ < 1.0	Indicates the industry's employment share is smaller than that of the United States. These industries do not satisfy local demand, and the difference must be imported.

Location quotients were estimated for 2001 through 2005 (most recent year data was available) for all high-wage, three-digit NAICS industries in the county. Sometimes a high location quotient may not indicate a robust and growing industry cluster. When calculating location quotients for a small geographic area like a county, one large plant can produce a large location quotient because its employment is relatively large in relation to total employment in the county. Typically, one-firm industries with large location quotients are not selected as targets for further expansion unless there are special conditions that make it a good strategy.

Table 7 contains location quotient data for 2001, 2003, and 2005, average weekly wages for 2005, and projected U.S. job and output annual growth rates for the period 2004 through 2014. The U.S. projections are from the federal Bureau of Labor Statistics (BLS).⁷ In some cases, the BLS does not provide forecasts at the three-digit NAICS level of detail, therefore, the same growth rates are used for several three-digit industries. Spalding County location quotients for 2001 through 2004 only appear if that industry existed in the county in any of these years and met the high-wage definition. All high-wage, three-digit NAICS industries are included in Table 7.

⁷ The federal Bureau of Labor Statistics (BLS) produces a forecast of employment and output for the period 2004 through 2014, by four-digit NAICS code (some are only at the three-digit level). Because the primary purpose of the business opportunities analysis is to find suitable industries for recruitment, U.S. growth rates are more appropriate.

Table 7: High-Wage NAICS Industries in Spalding County

NAICS	NAICS Title	2001 Spalding LQ	2003 Spalding LQ	2005 Spalding LQ	2005 Spalding AWW	U.S. Projections	
						2004-2014 Jobs Growth	2004-2014 Output Growth
Mining, Utilities, Construction							
212	Mining (except Oil & Gas)	1.49	1.42	1.33	N/A	-1.4	0.3
221	Utilities	0.18	0.19	0.17	N/A	-0.1	0.8
237	Heavy & Civil Engineering Construction	1.64	1.46	1.97	\$658	1.1	2.2
Manufacturing							
322	Paper Manufacturing	3.14	1.76	1.93	N/A	-0.2	0.8
324	Petroleum & Coal Products Manufacturing	1.26	1.95	2.08	N/A	-1.5	0.7
325	Chemical Manufacturing	0.00	0.22	1.16	N/A	-0.1	1.8
326	Plastics & Rubber Products Manufacturing	8.45	8.15	6.48	\$742	-1.0	3.7
327	Nonmetallic Mineral Product Manufacturing	0.29	0.27	0.42	\$716	0.4	1.6
333	Machinery Manufacturing	0.24	0.41	0.77	\$723	-1.4	0.9
334	Computer & Electronic Product Manufacturing	2.86	3.45	2.99	N/A	-0.7	12.7
335	Electrical Equip, Appliance, & Component Mfg.	0.52	6.13	8.16	\$1,083	-2.1	2.2
336	Transportation Equipment Manufacturing	0.08	0.05	0.40	\$635	0.5	3.5
Wholesale Trade							
423	Merchant Wholesalers, Durable Goods	2.11	0.92	1.14	\$685	0.8	6.4
424	Merchant Wholesalers, Nondurable Goods	1.03	0.70	0.62	\$1,008	0.8	6.4
425	Wholesale Electronic Markets & Agents and Brokers	0.33	0.87	1.04	\$812	0.8	6.4
Retail Trade							
441	Motor Vehicle and Parts Dealers	1.55	1.33	1.43	\$689	1.0	4.6
Transportation and Warehousing							
484	Truck Transportation	0.44	0.38	0.32	\$635	0.9	3.5
488	Support Activities for Transportation	0.68	0.32	0.40	\$650	1.1	4.8
492	Couriers & Messengers	0.75	0.88	0.75	N/A	0.7	2.3
493	Warehousing & Storage	0.03	0.05	0.04	N/A	2.2	4.6
Information							
517	Telecommunications	0.45	0.49	0.51	\$1,097	-0.7	3.7
Finance and Insurance							
522	Credit Intermediation & Related Activities	0.88	0.83	0.76	\$626	0.5	3.7
523	Securities, Commodity Contracts, & Other Fin Invests.	0.13	0.09	0.11	\$2,216	1.5	6.7
524	Insurance Carriers & Related Activities	0.30	0.35	0.41	\$718	1.8	2.3
Professional, Scientific, and Technical Services							
541	Professional, Scientific, & Technical Services	0.26	0.27	0.26	\$694	2.5	4.8
Management of Companies & Enterprises							
551	Management of Companies & Enterprises	0.16	0.13	0.06	\$680	1.0	5.5
Health Care and Social Assistance							
621	Ambulatory Health Care Services	1.01	0.98	1.17	\$729	3.6	4.1
622	Hospitals	1.25	1.27	1.18	\$687	1.5	3.5
Arts, Entertainment, & Recreation							
711	Performing Arts, Spectator Sports, & Related Indust.	0.00	0.02	0.02	N/A	2.0	3.2

Further Refinement of Selected Industries

The next step in this process is to further refine the list shown in Table 4. All high-wage industries were included in Table 7 to provide an overall look at each major industry in Spalding County that had at least one high-wage, three-digit NAICS industry. Not all of these warrant further examination in this business opportunities analysis.

Industry Categories with Little Appeal

Industry sectors that will not be considered further in this report are listed below. Some components may be worthy of further examination and that will be noted.

Mining, Utilities, Construction

Construction in general is not a good industry on which to spend economic development resources because it tends to serve a very local market (residential construction), but the companies that work outside of the county do have positive economic impact and therefore may warrant further investigation. The heavy & civil engineering construction industry had a LQ of nearly 2.0 in 2005 and may be exporting its product outside the county, so it may warrant further investigation. The utilities industry serves a local market and would not make a good candidate. The mining industry consists of too few firms to show the wage data⁸. Its LQ is larger than 1.0 but because the number of firms in this industry is so small, it is probably an aberration and not worthy of further consideration.

Retail Trade

Retail stores may also be considered import substitution firms if they keep retail expenditures by local residents in the county rather than see them go to another county. They can also attract retail dollars into the county. However, retail is typically not considered an industry that local economic development efforts would target for recruitment or expansion (except in the case of specialized retail tied to the tourism industry). Large retailers do their own analysis and base their expansions on demographic analysis; that is, trends in population and income growth. Retail growth occurs as a result of population and household growth, which results from expansion of the “exporting” companies like manufacturing and certain non-manufacturing firms.

For these reasons, retail is usually not a good candidate for recruitment unless there is an opportunity for a retail center at an interstate interchange that could capture business from pass-through travelers. These types of malls are usually discount outlets and some are very successful. However, to establish a business case for that type of development is beyond the scope of this project. Recruiting retail to serve the residents of Spalding County may not be a good expenditure of economic development resources unless it recaptures dollars leaving through import substitution. Specialty retail that serves a growing tourism sector is another way that retail can be part of an overall growth strategy.

⁸ Georgia Department of Labor rules on disclosure of data.

Health and Social Services

This industry category can represent an opportunity if certain five-digit industries in this category show up for the area. For example, medical and diagnostic laboratories, along with medical equipment and supplies manufacturing and a research hospital, could be the makings of a health industry cluster. However, Spalding County does not have any of these elements; therefore, this industry category does not appear to offer any business growth opportunities to pursue. It should be noted that with the impending AARC development by Del Webb, Inc., there may be more of a case to be made for the potential growth of this industry sector.

Arts, Entertainment, and Recreation

Judging by the very small LQ for this industry and the non-disclosure problem with wages, it is a very inconsequential industry in the county.

Industry Categories Offering the Best Opportunities

An examination of industry location quotients and growth potential should reveal the best opportunities, but there are limits to this type of numerical analysis. For example, high location quotients don't reveal how large an industry is in terms of establishments or employment. A very small industry group with only one or two firms may still have disproportionately high employment resulting in a high location quotient. With such a small number of firms, it may be very difficult to recruit more of the same or expand the existing firms. It also is unlikely that any kind of supplier network exists in the immediate area. Because of Georgia Tech's confidentiality agreement with GDOL, such small industries cannot be revealed in terms of number of establishments and number of employees. Reporting of these metrics must occur at a higher level of aggregation.

Manufacturing

As mentioned above, manufacturing is usually a county's export (or basic) industry and responsible for much of its economic growth because of the income it pulls into the local economy from outside. Table 8 below shows the manufacturing industries that made the high-wage cut (taken from Table 7 above).

Several of these 3-digit industries have high location quotients, but several are too small (under three firms) to show their average weekly wage data. NAICS 326 *plastics & rubber products manufacturing* has a very high LQ, although it declined in the last couple of years. A more in-depth look at this industry reveals a decline in jobs between 2001 (1,287 jobs) and 2005 (887). Figuring out why this industry is declining is an important objective given its relative importance to manufacturing in the county.

NAICS 334 *computer & electronic product manufacturing* also has a high LQ, but it has only one firm, although large, and therefore a difficult industry to target for recruitment. In the study region, only Fayette County has a high LQ in this industry, with over 1,500 jobs and seven firms.

Table 8: High-Wage Manufacturing Industries in Spalding County

NAICS	NAICS Title	2001 Spalding LQ	2003 Spalding LQ	2005 Spalding LQ	2005 Spalding AWW	U.S. Projections 2004-2014	
						Jobs Growth	Output Growth
322	Paper Manufacturing	3.14	1.76	1.93	N/A	-0.2	0.8
324	Petroleum & Coal Products Manufacturing	1.26	1.95	2.08	N/A	-1.5	0.7
325	Chemical Manufacturing	0.00	0.22	1.16	N/A	-0.1	1.8
326	Plastics & Rubber Products Manufacturing	8.45	8.15	6.48	\$742	-1.0	3.7
327	Nonmetallic Mineral Product Manufacturing	0.29	0.27	0.42	\$716	0.4	1.6
333	Machinery Manufacturing	0.24	0.41	0.77	\$723	-1.4	0.9
334	Computer & Electronic Products Manufacturing	2.86	3.45	2.99	N/A	-0.7	12.7
335	Electrical Equip, Appliance, & Component Mfg.	0.52	6.13	8.16	\$1,083	-2.1	2.2
336	Transportation Equipment Manufacturing	0.08	0.05	0.40	\$635	0.5	3.5

NAICS 335 *electrical equipment, appliance, & component manufacturing* is growing, as the LQ indicates. Employment in this industry has grown over the last three years and the number of firms in the county stood at three in 2006.⁹

In the study region, Henry County has also experienced growth in this industry, and in two counties on the northeast border of Henry—Rockdale and Newton—the industry is showing strong growth. These four counties—Spalding, Henry, Rockdale, and Newton—form a contiguous group of counties showing strong growth in this industry. This type of clustering should be investigated to determine why this industry finds the area so compatible to its business.

Table 9 shows the “core” study region counties—Clayton, Coweta, Fayette, Henry—and the three-digit manufacturing sectors in which the industry’s AWW in each county is above the high-wage cutoff AWW for Spalding (\$625 from Table 7). These four counties are the largest and most diverse in the study region and, therefore, would contain the best evidence of industry clustering.¹⁰ For this reason, it is more constructive to examine high LQ industries in Clayton, Coweta, Fayette, and Henry for possible opportunities for expansion of a regional industry.

An example of a regional industry was mentioned above (NAICS 335), but also included two counties outside the study region—Newton and Rockdale. Two more examples of strong regional manufacturing industries are:

- NAICS 327 *nonmetallic mineral product manufacturing* exists as a high-wage industry in Spalding, Butts, Clayton, Coweta, Fayette, Henry, and Lamar counties. The regional industry contains 1,841 jobs and 44 firms (or 2,371 jobs and 54 firms with Newton and Rockdale added).

⁹ Based on 2006 second-quarter data from the Georgia Department of Labor.

¹⁰ Total private-sector jobs in Butts, Lamar, Meriwether, and Pike counties is small resulting in large LQs for any industry that has even one firm with 100 or more jobs. These are cases where the LQ statistic breaks down and does not provide useful information about the strength of an industry in a county. In isolated cases, there may three or more firms in an industry in these counties, but they are rare.

- NAICS 333 *machinery manufacturing* has a regional presence and it also exists in Spalding County as a high-wage industry. The regional industry contains 1,647 jobs and 41 firms (or 2,517 jobs and 55 firms with Newton and Rockdale added).

Industries as large as the examples just mentioned may be purchasing supplies in the study region or within Georgia, adding to each industry’s impact. All three offer opportunities worth further investigation for Spalding County’s recruitment efforts.

Table 9: LQs for High-Wage Manufacturing Industries in Study Region Counties

NAICS	NAICS Title	Clayton	Coweta	Fayette	Henry
311	Food Manufacturing				0.51
312	Beverage & Tobacco Product Manufacturing				
313	Textile Mills				
314	Textile Product Mills				
315	Apparel Manufacturing				5.91
316	Leather & Allied Product Manufacturing				
321	Wood Product Manufacturing	0.38			0.23
322	Paper Manufacturing	0.40		2.72	2.00
323	Printing & Related Support Activities			0.64	0.90
324	Petroleum & Coal Products Manufacturing			2.65	4.41
325	Chemical Manufacturing	0.87	0.06	0.90	0.75
326	Plastics & Rubber Products Manufacturing	0.75	1.51	0.68	
327	Nonmetallic Mineral Product Manufacturing	2.17	3.66	1.96	0.79
331	Primary Metal Manufacturing		5.02		0.15
332	Fabricated Metal Product Manufacturing	0.23	1.88		0.57
333	Machinery Manufacturing	0.34	0.59	1.46	1.36
334	Computer & Electronic Product Manufacturing		1.15	4.01	0.03
335	Electrical Equipment, Appliance, & Component Manufacturing		0.18		2.27
336	Transportation Equipment Manufacturing	0.35	2.79	0.06	0.25
337	Furniture & Related Product Manufacturing	0.31	0.61		
339	Miscellaneous Manufacturing	0.24	0.49		0.27

Source: Georgia Department of Labor

Wholesale

Table 7 shows three wholesale industries in Spalding County with high wages; 423 *merchant wholesalers, durable goods*; 424 *merchant wholesalers, nondurable goods*; and 425 *wholesale electronic markets and agents and brokers*. The average number of jobs per firm in this industry (13) is much smaller than the 98 jobs/firm average for manufacturing. Each is defined as follows¹¹:

NAICS 423: Industries in the *merchant wholesalers, durable goods* subsector sell capital or durable goods to other businesses. Merchant wholesalers generally take title to the goods that they sell; in other words, they buy and sell goods on their

¹¹ Definitions are from the Census Bureau web site at <http://www.census.gov/epcd/naics02/naicod02.htm#N42>

own account. Durable goods are new or used items generally with a normal life expectancy of three years or more. Durable goods merchant wholesale trade establishments are engaged in wholesaling products, such as motor vehicles, furniture, construction materials, machinery and equipment (including household-type appliances), metals and minerals (except petroleum), sporting goods, toys and hobby goods, recyclable materials, and parts.

NAICS 424: Industries in the *merchant wholesalers, nondurable goods* subsector sell nondurable goods to other businesses. Nondurable goods are items generally with a normal life expectancy of less than three years. Nondurable goods merchant wholesale trade establishments are engaged in wholesaling products, such as paper and paper products, chemicals and chemical products, drugs, textiles and textile products, apparel, footwear, groceries, farm products, petroleum and petroleum products, alcoholic beverages, books, magazines, newspapers, flowers and nursery stock, and tobacco products.

NAICS 425: Industries in the *wholesale electronic markets and agents and Brokers* subsector arrange for the sale of goods owned by others, generally on a fee or commission basis. They act on behalf of the buyers and sellers of goods. This subsector contains agents and brokers as well as business-to-business electronic markets that facilitate wholesale trade.

Of these three, NAICS 423 is the largest in Spalding County with 36 firms employing 586. In the region, the industry is considerably larger in terms of jobs and establishments, but the study region LQ is only 1.04. Total jobs in the study region come to 11,556 for these three industries combined.

Some wholesale establishments may be connected with a single manufacturer and promote and sell the particular manufacturer's products to a wide range of other wholesalers or retailers. Other wholesalers may be connected to a retail chain or a limited number of retail chains and only provide a variety of products needed by these customers, and they may obtain the products from a wide range of manufacturers. How the wholesalers in Spalding County operate may be something to investigate, if growth in this sector is an objective. However, growth in wholesale generally happens as a result of growth in population and businesses and, therefore, may be difficult to grow proactively.

Transportation and Warehousing

The transportation industry comprises several components including air, rail, truck, and water transportation. All counties in the study region and Spalding have trucking companies, but only Clayton and Fayette have a presence in air transportation. Clayton County had 17,827 jobs in air transportation (and an LQ value of 43) in 2005 and Fayette had 1,094. Clayton and Fayette counties' air transportation firms are certainly tied to Hartsfield-Jackson International Airport, and it would probably do little good for Spalding to compete for this industry. No counties have rail or water transportation companies.

Spalding County has four three-digit NAICS industries in the *transportation and warehousing* category, but none have LQ values larger than 1.0, which would indicate that they are relatively small industries in the county. Also, the LQ values in 2001 either fell by 2005 or rose only slightly, indicating that growth in these industries has been lackluster.

NAICS 493 *warehousing* is quite strong in the region, with Clayton, Coweta, Fayette, and Henry counties having LQ values in 2005 well above 1.0; 3.26, 2.89, 2.34, and 3.85, respectively. Each of these counties has better access to an interstate than does Spalding County, which probably accounts for these results. For these reasons, it would appear that *transportation and warehousing* are not viable targets for industry recruitment in Spalding County unless available land for large distribution centers in these four counties becomes scarce and companies want to locate in the same general vicinity.

Business Services (511 through 551)

The last four high-wage industries in Spalding County to be considered fall into the business services category¹². Typically, these are composed of small firms and, therefore, don't add up to a large number of jobs in most counties. The three-digit industries that exceeded the high-wage cutoff in Spalding are components of *information services; finance and insurance; professional, scientific, and technical services; and management of companies & enterprises*. Most of these industries have very low LQ values in Spalding and in the region, with only a few exceptions.

Table 10 displays LQ values for the three-digit NAICS in the business services category, in the study region's four core counties. These range from NAICS 511 to 551. LQ values in red indicate that the industry's AWW was above the cutoff value for Spalding County in 2005.

As the LQs indicate, there is no evident "cluster" of firms in any particular three-digit industry. With only a few exceptions, all LQ values are less than 1.0, therefore it is unlikely that Spalding County can target any of these industries to take advantage of a growing cluster in the study region. All of these firms are most likely servicing other businesses or government in their respective counties or neighboring counties.

Figure 12 is a chart displaying the total number of jobs in the study region in each of these industries. *Professional, scientific, and technical services* firms have the most jobs, followed by *credit intermediation and related activities*.

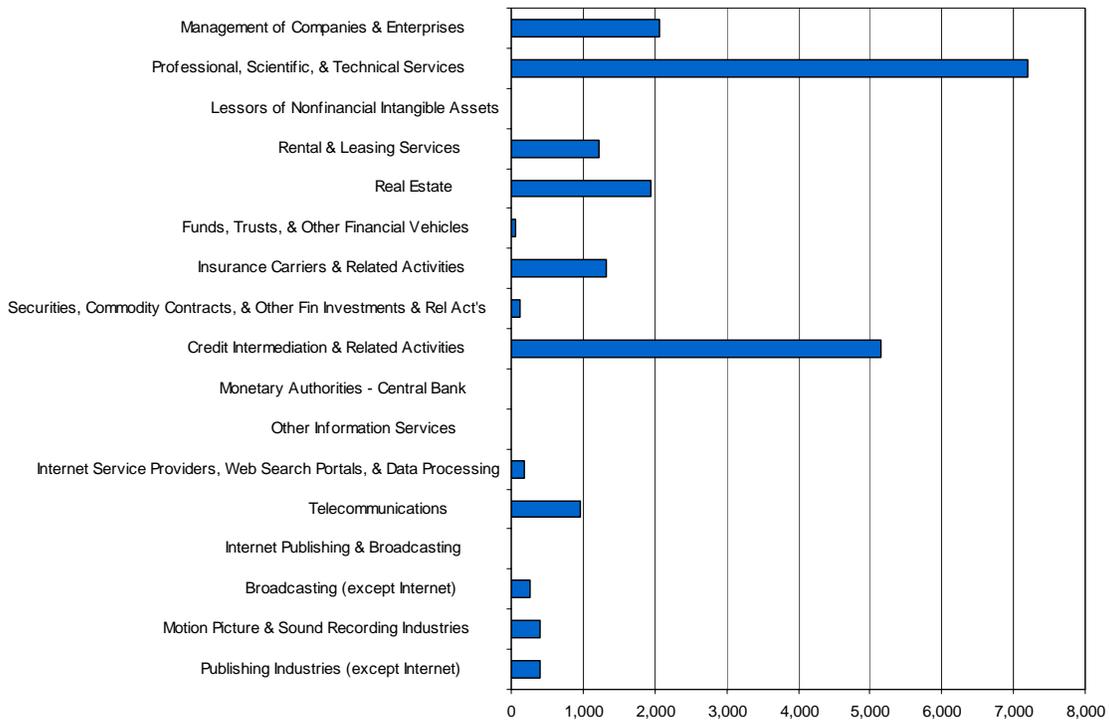
¹² Many of these industries were part of the aggregate "business services" sector in the older Standard Industrial Classification code system. Some do business directly with consumers, but most do support other businesses.

Table 10: Business Services Location Quotients in the Study Region's Core Counties

NAICS	Industry	Clayton	Coweta	Fayette	Henry
511	Publishing Industries (except Internet)	0.15	0.36	0.36	0.06
512	Motion Picture & Sound Recording Industries	0.62	0.92	0.93	0.06
515	Broadcasting (except Internet)	0.67		0.24	
516	Internet Publishing & Broadcasting	0.04		0.00	
517	Telecommunications	0.35	1.62	0.27	0.40
518	Internet Service Providers, Web Search Portals, & Data Processing	0.16	1.31	0.06	0.06
519	Other Information Services		0.09	0.20	0.38
521	Monetary Authorities - Central Bank	0.34			
522	Credit Intermediation & Related Activities	0.59	0.74	1.12	1.70
523	Securities, Commodity Contracts, & Other Fin Investments & Rel Act's	0.01	0.07	0.26	0.14
524	Insurance Carriers & Related Activities	0.19	0.39	0.38	0.50
525	Funds, Trusts, & Other Financial Vehicles	0.70		0.04	0.07
531	Real Estate	0.72	0.44	0.70	0.97
532	Rental & Leasing Services	1.22	1.02	0.65	0.80
533	Lessors of Nonfinancial Intangible Assets	0.36		0.77	0.24
541	Professional, Scientific, & Technical Services	0.49	0.47	0.90	0.53
551	Management of Companies & Enterprises	1.08	0.39	0.37	0.22

Source: Georgia Department of Labor and the federal Bureau of Labor Statistics

Figure 12: Jobs in Business Services - Study Region



SECTION 5

Emerging Non-Traditional Opportunities

Two non-traditional opportunities will be examined in this section. The first is the potential to develop a high-technology cluster around the research programs at the University of Georgia's Griffin facility, specifically, the FOODPI&C initiative. The other opportunity is represented by the recent announcement from Dell Webb, Inc. to build an active adult retirement community (AARC) called Sun City Peachtree in Spalding County.

University of Georgia Griffin Campus

The College of Agriculture and Environmental Sciences (CAES) at the University of Georgia operates the Agricultural Experiment Station facility in Griffin, Georgia. CAES established the Griffin campus in 1888 to serve Georgia agriculture by providing research services to help with problems specific to this industry. Today, the campus has established itself as a premier agricultural research center and has several innovative and successful research initiatives that bode well for the county's economic development efforts. It focuses on the following areas:

- Food safety and quality enhancement
- Biotechnology and genetics
- Crop and pest management
- Environment and natural resources
- Urban agriculture
- Education.

In the initial study, a short addendum to the final report was created that focused just on the prospects for the campus and its research initiatives to impact the county's economic development. Specifically, the paper addressed the question of whether the campus could be a focal point in economic development by attracting food processing plants because of the perception that being near such a research facility would benefit the industry.

Through interviews with food processors, researchers of the original study found little interest among manufacturers to relocate or locate a new plant near the campus. Proximity to such a research facility was not deemed necessary by the industry representatives interviewed for gaining access to research services.

Food Technology Park at Cornell University

The idea of a food technology incubator was also examined by looking at an effort at Cornell University in Geneva, N.Y., to start a food technology industrial park. It took nearly 10 years of planning by Cornell University, culminating in \$10 million of local, state, and federal funding being raised to complete the early development of the park, now referred to as "The Technology Farm." It was built on 72-acres adjacent to Cornell University's Agricultural Experiment Station.

In October 2006, the state of New York announced a \$40 million investment in the facility to add a state-of-the-art food laboratory. In addition, a \$25 million Grape Genetics Research Center for the United States Department of Agriculture's Agricultural Research Service is scheduled to begin construction in 2007.

The aim of The Technology Farm is to have companies locate their own research facilities there to collaborate with university faculty. According to its web site, "the park fosters economic development through the creation of innovative technologies that enhance the production of new products and processes related to food, beverages and agriculture."

Current tenants at the facility include the ARS, the U.S. Department of Agriculture's chief scientific research agency; Berrigen Biotechnology, LLC; Cherrypharm, Inc.; Terramend, LLC; Stony Brook Cookie Company; Organix Green Industries, LLC; ZedX, Inc.; and Cole and Parks.

Other food technology parks exist in the United States, such as Rutgers University's Food Innovation Center. Rutgers' center has over 250 clients who should have a cumulative impact of \$84 million in new revenue from 2006 through 2010. The center is near completion of an incubator projected to increase the revenue impact to \$200 million by 2010.

A Food Technology Park at the Griffin Campus

The success of The Technology Farm and the Rutgers University Food Innovation Center has given birth to a similar idea for the Griffin campus. Called the Food Product Innovation and Commercialization (FOODPI&C) initiative, it is described as a partnership between the University of Georgia, the Griffin-Spalding community, and the food industry. Its purpose is to assist the food industry in Georgia and the Southeast with the development and commercialization of new food products.

This initiative currently lacks suitable facilities to reach its potential in research, development, and outreach activities. It is now housed in the Melton Building on the university's Griffin campus where two programs already exist—Center for Food Safety and the Food Science and Technology group. Faculty of these two existing initiatives form the core for FOODPI&C.

To begin to reach its potential, a new building is envisioned for a food technology incubator (formally named the University Food Technology Center). The proposed building would contain 18,000 square feet, with 10,000 square feet for R&D and incubator space. The remaining 8,000 square feet would be devoted to administrative offices, conferencing space, library-informational facilities, test kitchens, client offices, quality control laboratories, and worker amenities.

Gauging the potential success of this facility is certainly beyond the scope of this project. However, it appears to have a realistic potential given:

- The success of similar facilities at Cornell University and Rutgers University.
- The fact that it would be the only such facility in the Southeast.
- The faculty that would initially support the research programs are world-class, with international and national reputations.
- The center has community support.
- An existing, large food processing industry in Georgia that represents a potential, existing client base.
- Experience within the University System of Georgia with developing and operating high-technology incubators, for example, the Advanced Technology Development Center at Georgia Tech.

Food Processing in Georgia

The food processing industry in Georgia has several five-digit NAICS industries with location quotients (LQ) larger than 1.0, but many are small. Table 11 contains the five-digit food processing industries that made up NAICS 311 *food manufacturing* along with total jobs and LQs in 2001 and 2005. The whole three-digit industry, 311, contains nearly 64,000 jobs and 616 establishments statewide.

Table 11: Food Processing Industry in Georgia

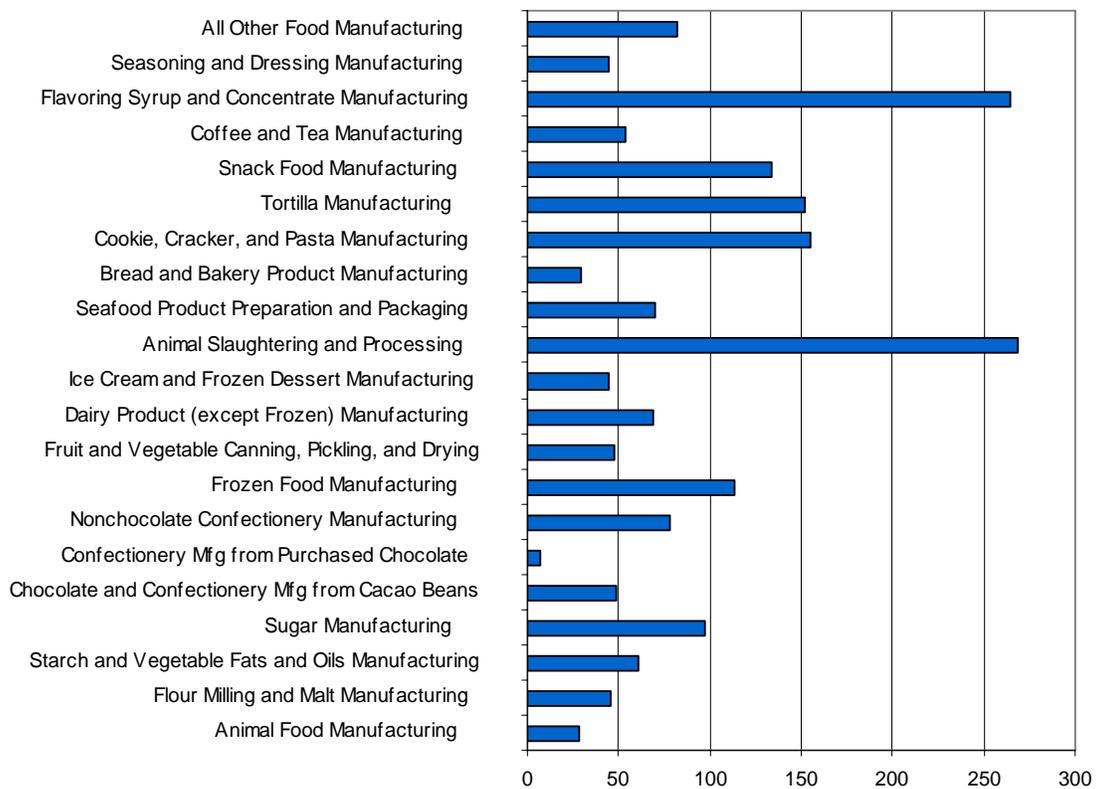
NAICS	Title	Jobs 2001	Jobs 2005	LQ 2001	LQ 2005
31111	Animal Food Manufacturing	1,271	1,456	0.67	0.84
31121	Flour Milling and Malt Manufacturing	506	551	0.68	0.84
31122	Starch and Vegetable Fats and Oils Manufacturing	971	725	0.98	0.74
31123	Breakfast Cereal Manufacturing	N/A	N/A	0.65	0.42
31131	Sugar Manufacturing	521	389	0.97	0.83
31132	Chocolate and Confectionery Manufacturing from Cacao Beans	80	147	0.25	0.51
31133	Confectionery Manufacturing from Purchased Chocolate	87	101	0.06	0.08
31134	Nonchocolate Confectionery Manufacturing	1,557	1,175	1.85	1.88
31141	Frozen Food Manufacturing	1,092	906	0.31	0.29
31142	Fruit and Vegetable Canning, Pickling, and Drying	554	667	0.16	0.21
31151	Dairy Product (except Frozen) Manufacturing	422	552	0.11	0.14
31152	Ice Cream and Frozen Dessert Manufacturing	245	178	0.30	0.22
31161	Animal Slaughtering and Processing	38,224	38,675	2.09	2.16
31171	Seafood Product Preparation and Packaging	1,048	560	0.63	0.38
31181	Bread and Bakery Product Manufacturing	5,690	6,217	0.72	0.84
31182	Cookie, Cracker, and Pasta Manufacturing	3,628	3,259	1.62	1.66
31183	Tortilla Manufacturing	926	1,215	1.75	2.07
31191	Snack Food Manufacturing	2,441	2,277	1.50	1.41
31192	Coffee and Tea Manufacturing	266	271	0.61	0.55
31193	Flavoring Syrup and Concentrate Manufacturing	5,212	4,755	12.83	12.49
31194	Seasoning and Dressing Manufacturing	652	709	0.66	0.63
31199	All Other Food Manufacturing	1,345	1,979	0.71	0.97

Source: Georgia Department of Labor (GDOL), N/A means the industry falls under GDOL's non-disclosure rules and therefore, the jobs data cannot be shown.

The largest five-digit industry, based on jobs, is NAICS 31161 *animal slaughtering and processing*, which is primarily the poultry industry concentrated in Hall County. The second largest is NAICS 31181 *bread and bakery product manufacturing* and the third is NAICS 31193 *flavoring syrup and concentrate manufacturing*, which had a very large LQ in 2005 of 12.49.

Size, as measured in jobs per establishment, vary widely among the five-digit industries in Table 11. The largest is *animal slaughtering and processing* with a 269 jobs-per-firm average in 2005 and the smallest is *confectionery manufacturing from purchased chocolate* with only seven jobs-per-firm.

Figure 10: Average Jobs-Per-Firm in the NAICS 311 Industry



Given the size of the food processing industry in the state and range in average firm size, there is a broad and diverse client base for the research initiatives on the Griffin campus.

Active Adult Retirement Communities

A 2006 report on retirement communities found seven major AARC developments either in place, under construction, or planned for Georgia [Duke, 2006]. AARCs target the 50 to 55 age group but also accept older persons. As the name implies, they are geared toward retirees who want an active life style.

One of the largest companies building these developments is Del Webb, Inc., a subsidiary of Pulte Homes. Del Webb has adopted the “Sun City” name for many of its developments, including one it is building in Spalding County called Sun City Peachtree. The company has facilities in 22 states and three facilities under way in Georgia.

Sun City Peachtree will have almost 3,400 homes on 1,726 acres. As in all the Sun City communities, this development will have resort-style amenities, such as a club/recreational center over 35,000 square feet, indoor and outdoor pools, a state-of-the-art fitness center, and miles of walking trails. The company also provides health and fitness, cultural, continuing education, and social activities within the community. An 18-hole golf course is also included. It plans to open in spring 2007.

Economic Development Potential

The literature contains very little research on the fiscal or economic impact of AARC developments. There is research that has been conducted for similar developments called Continuous Care Retirement Communities (CCRC), but there are major differences in these two types of retirement developments. The first is age range. The CCRCs tend to have older residents who do not engage in the kinds of activities that residents of AARCs engage in. CCRC developments generally don’t have the kinds of amenities for recreation that AARCs do.

What is known about these kinds of retirement communities is that they vary in size, amenities, facilities, and income levels. However, both are age-restricted housing communities, so they don’t have any school age children. This makes their fiscal impact usually very positive on the local government where they are located. In Spalding County, the Sun City Peachtree facility will not have any school-age children, thus there will be no impact on school expenditures. However, there would be a positive stream of revenue for the school system if properties at Sun City Peachtree pay the school millage.

The “high-end” market that Sun City Peachtree markets to means that the average income of its residents will be relatively high. Whether they spend some of that income in the county is an open question, but they would add to the sales tax base if they do. The recreational amenities at Sun City Peachtree should encourage some purchasing of recreation-related goods and services. At the very least, visiting relatives will likely spend money at local stores and add to the county’s sales tax base.

SECTION 6

Summary and Recommendations

The examination of Spalding County's economy and the study region economy have shown some disparities between the two. In general, the data show (1) that Spalding County is not growing jobs as fast as the study region and (2) for every major industry category average weekly wages in the county are less than the study region average. Also, over half of the major industries in Spalding County experienced a drop in real average weekly wages from 2001 to 2005.

This study recommends that economic development efforts, whether recruitment or expansion, concentrate on industries that can raise the average wages in Spalding County. Without that goal, the county will continue to fall behind its neighbors in wages, which only makes it more difficult to attract labor to the county.

This study examined all three-digit NAICS industries in the county with average weekly wages above 115 percent of the average weekly wage in the county's private sector. Some of these, like retail, were not recommended for recruitment or expansion efforts, but others were because (1) they represent basic industry and therefore bring in new money to the county's economy, or (2) could act as import substitution industries and stop the flow of out-of-county purchasing of goods and services. The latter has the same effect as a basic industry when it diverts out-of-county purchasing to in-county purchasing.

Manufacturing Opportunities

The fact that the study region counties, primarily its four core counties—Clayton, Coweta, Fayette, and Henry—appear to be performing better than Spalding County could be seen as an opportunity. Strong regional manufacturing industries such as NAICS 327, 333, and 335 offer opportunities for Spalding to capitalize on through further expansion of these industries in the county. Each of these already has a presence in Spalding County.

- NAICS 327 is also a high-wage industry in Spalding, but with a small location quotient. However, the national outlook for job and output growth for this industry is positive.
- NAICS 333 is a small but growing high-wage manufacturing industry in the county.
- NAICS 335 is a high-wage manufacturing industry that has been growing in the county and adding to its job base there. The location quotient for this industry in Spalding County was 8.16 in 2005.

The 2000 study recommended recruitment of several manufacturing industries in the SIC 28 *chemicals and allied products* industry. The five SIC industries shown as opportunities in the earlier study match up with NAICS codes in the following table

showing the bridge between SIC and NAICS codes. The “Part” column indicates (with a “pt”) that part of the SIC industry matching with the NAICS code shown in the same row.

Table 12: SIC to NAICS Bridge for Manufacturing Selected in Previous Study

SIC	Part	Title	NAICS	Title
2813		Industrial Gases	32512	Industrial Gas Manufacturing (pt)
2819	pt	. Recovering Sulfur from Natural Gas	211112	Natural Gas Liquid Extraction (pt)
2819	pt	. Activated Carbon & Charcoal	325998	All Other Misc. Chemical Product & Preparation Mfg (pt)
2819	pt	. Alumina	331311	Alumina Refining
2819	pt	. Inorganic Dyes	325131	Inorganic Dye & Pigment Manufacturing (pt)
2819	pt	. Other	325188	All Other Basic Inorganic Chemical Manufacturing (pt)
2821		Plastics Mat. & Synth. Resins, & Nonvulcanizable Elastomers	325211	Plastics Material & Resin Manufacturing
2824		Manmade Organic Fibers, Except Cellulosic	325222	Noncellulosic Organic Fiber Manufacturing
2874		Phosphatic Fertilizers	325312	Phosphatic Fertilizer Manufacturing

NAICS 325 *chemical manufacturing* does have a small presence in Spalding beginning in 2003. This industry also exists in all four of the core study region counties. Although the LQ for this industry in Spalding County and in the study region is well below 1.0, there may be an opportunity for further expansion of this industry, but it would require interviews with the existing firms to understand why they located in the region, whether they have expansion plans, and what problems they have encountered (if any) operating in the region. The other NAICS matches shown in Table 12 have no presence in the county or the study region.

Another major category of opportunity noted in the previous study was called “Other Opportunities.” All the SIC industries in this category are in manufacturing. They match with three-digit NAICS industries 313, 315, 323, 326, 332, 335, and 339. Two of these, 313 and 315 are textile and apparel manufacturing, respectively. Neither is a growing industry in the United States except for selected sub-sectors within each. And neither passed the high-wage cutoff in the county or the study region; therefore, they are not recommended.

NAICS 323 exists in the county but it did not pass the high-wage cutoff, so is not recommended. NAICS 326 exists in the county with a very high LQ, but the LQ value fell from 2003 to 2005, which may indicate that the industry is not as strong in Spalding County as it once was. Only through interviewing executives in these companies can it be determined why the industry has declined in numbers and jobs over the last few years. That kind of effort should be made to see if the industry can be supported to begin growing again in the county.

Of the remaining three NAICS industries—332, 335, and 339—only 335 has a presence in the county as a high-wage industry. It was recommended above as a very promising and growing industry in Spalding County.

Table 13: SIC to NAICS Bridge for Other Manufacturers Selected in Previous Study

SIC	Part	Title	NAICS	Title
2754		Commercial Printing, Gravure	323111	Commercial Gravure Printing (pt)
3069		Fabricated Rubber Products, NEC		
3069	pt	. Rubberizing Fabric or Purchased Textile Products	31332	Fabric Coating Mills (pt)
3069	pt	. Rubber Pants & Raincoats	315299	All Other Cut & Sew Apparel Manufacturing (pt)
3069	pt	. Rubber Bibs, Aprons, & Bathing Caps	315999	Other Apparel Accessories & Other Apparel (pt)
3069	pt	. Rubber Gloves & Life Jackets	339113	Surgical Appliance & Supplies Manufacturing (pt)
3069	pt	. Rubber Wet Suits	33992	Sporting & Athletic Goods Manufacturing (pt)
3069	pt	. Rubber Toys, Except Dolls	339932	Game, Toy, & Children's Vehicle Manufacturing (pt)
3069	pt	. Rubber Resilient Floor Covering	326192	Resilient Floor Covering Manufacturing (pt)
3069	pt	. Other	326299	All Other Rubber Product Manufacturing
3479		Coating, Engraving, & Allied Services, NEC		
3479	pt	. Jewelry Engraving & Etching, Costume Jewelry	339914	Costume Jewelry & Novelty Manufacturing (pt)
3479	pt	. Jewelry Engraving & Etching, Precious Metal	339911	Jewelry (except Costume) Manufacturing (pt)
3479	pt	. Silverware & Flatware Engraving & Etching	339912	Silverware & Hollowware Manufacturing (pt)
3479	pt	. Other Coating, Engraving & Allied Services	332812	Metal Coating, Engraving, & Allied Services to Mfg'ers
3646		Commercial, Industrial, & Institutional Elec. Lighting Fixtures	335122	Com, Ind, & Institutional Elec. Lighting Fixture Mfg
3711		Motor Vehicles & Passenger Car Bodies		
3711	pt	. Automobiles	336111	Automobile Manufacturing
3711	pt	. Light Truck & Utility Vehicles	336112	Light Truck & Utility Vehicle Manufacturing
3711	pt	. Heavy Duty Trucks	33612	Heavy Duty Truck Manufacturing
3711	pt	. Kit Car & Other Passenger Car Bodies	336211	Motor Vehicle Body Manufacturing (pt)
3711	pt	. Military Armored Vehicles	336992	Mil. Armored Vehicle, Tank, & Tank Component Mfg (pt)

Other Industry Recommendations

Wholesale Trade

Of the wholesale industry opportunities found in the previous study, none fall into NAICS codes that have a high-wage industry presence in Spalding County. The three wholesale industries in the county that pass the high-wage cutoff are 423, 424, and 425, and all were examined in the previous section. As noted above, these industries generally grow with a county's economy because they act as the middleman between manufacturers and retail operations. Therefore, as retail expands there is a need for more wholesale distributors. However, the authors of this study don't recommend spending economic development resources on expansion of the industry because it is hard to recruit an industry whose market is local or, at best, regional.

Transportation and Warehousing

Transportation encompasses air, water, rail, and trucking forms of transportation. Air transportation has a major presence in Clayton and to a lesser extent in Fayette, but nowhere else in the study region or in Spalding County. The previous study recommended location-related industries in the air transportation industry, but this current study does not make the same recommendation. There are a few components of the transportation industries recommended in the previous study that do pass the high-wage cutoff criterion in the county, but they are small in number and small in jobs-per-firm.

The warehousing component of this major industry sector has a very large presence in the study region, especially in Clayton, Coweta, Fayette, and Henry counties. Each has a location quotient for NAICS 493 *warehousing* between 2.34 and 3.85. Spalding County lacks the same kind of easy access to an interstate that these four counties enjoy, so it is hard to see how this industry would select Spalding for expansion. Possibly, if the large tracts of land required for distribution centers are exhausted in these other counties, the industry would look to Spalding for expansion.

Business Services (511 through 551)

The last major industry sector investigated in detail is business services, which encompasses NAICS 511 through 551. In Spalding County, components of *information services; finance and insurance; professional, scientific, and technical services; and management of companies & enterprises* passed the high-wage cutoff. However, none of these has LQ values above 1.0 and most are under .50.

Firms in this major sector are typically small, but they do pay some of the highest wages and, therefore are usually sought after by economic developers. They service other firms by providing accounting, legal, software, architectural, engineering, financing, and investing services, consequently, they depend on the strength of the other sectors in the local and regional economy to grow. Some do act as basic industries and sell their services well beyond the borders of the county they locate in, but these cases are rare.

The only opportunity the current research can identify for this major sector is the growing market represented by the Atlanta metropolitan area. But, competition for these clients is stiff as many of the suburban Atlanta counties have these types of firms that can also service the core of the MSA. One way to gauge this opportunity is to survey firms in these industries to determine where their client base resides.

Two Non-Traditional Industry Recommendations

In Section 5, the University of Georgia's Griffin campus and its research initiatives, in particular, its FOODPI&C program, were discussed. Given the state's large food processing industry, a research program dedicated to serving the research needs of this industry should work well, if funding can be found to create the research and incubator facilities it needs. If established, such a facility would be the only one in the Southeast, which only adds to its chances for success.

The other non-traditional opportunity discussed in Section 5 is retirement communities. In particular, active adult retirement communities (AARC) seem to be a good match for Spalding County because a major AARC development called Sun City Peachtree is locating in the county. Residents of this AARC should be above average in income and active in recreational activities. Because it's an age-restricted community, there is no impact on school enrollment (except for its employees, but that should be negligible) and therefore, the fiscal impact on the county should be quite positive.

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