# The University of Georgia

**Center for Agribusiness and Economic Development**

**College of Agricultural and Environmental Sciences**

# Economic Contribution of Turfgrass Production, Ornamental Horticulture, Landscape Services, and Related Industry in the Georgia Economy, 2010

**Prepared by:**
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**Center Report: CR-12-05**
**May 2012**

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*This project was supported by a grant from the USDA Agricultural Marketing Service, Specialty Crop Block Grant Program, and administered through the Georgia Department of Agriculture.*

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*Executive Summary*

The Center for Agribusiness and Economic Development (CAED) is working with the Georgia Center for Urban Agriculture to assist with the objective of determining a baseline of the size, scope, and economic impact of the turfgrass and related industries in Georgia, from which progress can be measured. The result is an analysis of the economic contribution of the those defined as Turfgrass Production, Ornamental Horticulture, Landscape Services, and Related (hereafter "Turfgrass and Related") industry in the Georgia economy in 2010. Highlights of the study include:

- Overall, the Turfgrass and Related industry directly contributes $4.0 billion in output, and indirectly another $3.8 billion for a total of $7.8 billion of Georgia's over $700 billion economy. The industry also directly and indirectly accounts for a total of nearly 87,000 full- and part-time jobs.
- In terms of earnings, the industry directly contributes over $2.0 billion, and indirectly adds another $1.4 billion for a total contribution to the Georgia economy of $3.4 billion. The value added direct contribution is $2.2 billion, with indirect value added of another $2.4 billion for a total of $4.6 billion.
- The Turfgrass and Related industry affects major sectors throughout the Georgia economy. Of the over 87,000 jobs, the largest contribution is in the service sector for a total of 61,284 full- and part-time jobs. This is followed by the trade sector with a total of 15,639 and agriculture, which accounts for a total of 6,324 jobs.
- Given the linkages throughout the economy, the contribution of the Turfgrass and Related sectors affects over 93% of the Georgia sectors. The largest overall contribution in terms of output is in the service sector of $5.0 billion, followed by the trade sector at $1.2 billion. It is apparent that the total contribution of the Georgia Turfgrass and Related industry spans across the major sectors.
- The top industries (ranked by employment) affected by the Turfgrass and Related industry – both directly and indirectly – include services to buildings and dwellings (38,242 jobs), greenhouse, nursery, floriculture production (5,866 jobs), building material and garden supply stores (5,599 jobs), food services and drinking places (2,818), and miscellaneous retail stores (2,415 jobs).
- Another facet of the impact of the industry includes the tax impact. For the Turfgrass and Related industry, the state and local tax impact is over $388 million, while the federal totals over $649 million, including household, business, and corporate taxes.

*Brief Background and Overview*

The Center for Agribusiness and Economic Development (CAED) is working with the Georgia Center for Urban Agriculture as part of a Specialty Crop Block Grant to assist with the objective of establishing a "baseline of the size, scope, and economic impact of the integrated turfgrass industry in Georgia, from which progress can be measured." In setting out the scope of this study, researchers reviewed other studies that measured and analyzed the industry or portions of the industry (with varying definitions) in Georgia or nationally.

The first is the annual Ag Snapshots (Kane and Luke-Morgan 2012) based on the unique Farm Gate Value Report (Wolfe and Luke-Morgan 2011), which found that the industry described as ornamental horticulture provided an economic contribution to the Georgia economy in 2010 of approximately $6.1 billion and nearly 70,000 jobs. This analysis is based on a comprehensive survey of the direct county farm gate values for greenhouse, container nursery, turfgrass, and field nursery production and the resulting economic effects on the directly- related industries[1]. Another analysis is the "Size and Value of the Professional Turfgrass and Environmental Horticulture Industry in Georgia" featured on the Georgia Center for Urban Agriculture website showing the contributions of various sectors in terms of revenue, employees, and firms in 2005[2]. These findings include total revenues of $8.2 billion, nearly 80,000 employees, and over 6,800 firms. This analysis included the sectors described as the greenhouse, nursery, container, field, landscape installation & maintenance, retail garden centers, turfgrass growers, golf courses and related business, re-wholesalers, landscape architects, and florists.

A Southern Cooperative Series Bulletin report (Hodges, Hall et al. 2011) examines the economic contributions of what they refer to as the green industry for 2007-8 and reviews recent reports (1978-2009) from state-level analyses throughout the U.S. Their report outlines an approach to make consistent evaluations of the industry for the future and publishes findings for the most recent year available given data limitations (see Table 1 for a summary of their findings from Georgia by sector). An advantage of their approach is that they build consistent estimates of green industry impact for each state, enabling a total estimate for the entire U. S. According to Dr. Hodges (Hodges 2011), they are planning to update the study in 2014-15 with underlying data from the 2012 Economic Census and the

[1] These directly-related industries are sometimes referred to as "first-line" related, indicating that they purchase a product directly from another industry and use it to make their final product. In this study, the analysis will go beyond first-line all the way to the retail consumer.
[2] http://apps.caes.uga.edu/urbanag/indeconomics.cfm

2013 National Nursery Survey. Their findings for Georgia show an overall total of $6.3 billion output, nearly 66,000 jobs, $1.8 billion in earnings impact, and $3.8 billion in value-added impact[3].

*Methodology*

This analysis builds upon the foundations of the approaches mentioned, given available data and the desire for a benchmark to measure future changes in the sector. Largely, the industry definition will be coming from the Hodges, et al., study[4]. The economic analysis of the contributions of the industry to the Georgia economy in this study will be based on the IMPLAN model protocol for multi-sector contribution analysis[5].

As described by the providers of the IMPLAN model (MIG 2010), an economic contribution analysis describes how much of a particular geographic area's economy can be credited to an existing industry, event, or policy. The contribution analysis utilizes data existing within the model to identify all backward linkages in the study area related to the subject. In this case, the total amount of output for the sector (also referred to as sales or revenue) – not just purchases made by the end consumer – provides the initial effects of the analysis. Comparing these results to the rest of the economy offers unique insight into the relative extent and magnitude of the industry, event, or policy within the geographic region.

Because of model customization required to perform this type of analysis, the direct and indirect effects relate to all sales, not just final sales as in a typical economic impact analysis. As seen in the tables in the results section of this report, the direct effects should be interpreted as all sales by the industry in Georgia and the indirect effects should be interpreted as all sales by the industry supply chain, or any industries from which purchases must be made to produce final output. For example, the purchase of seed, transportation services, water, or electricity would all be part of the supply chain or "backward linkages" to the sector. The induced effects are the response by an economy to an initial change (the direct effect) resulting from re-spending of income received by households, causing further local economic activity.

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[3] The values found in the Hodges, Hall, and Palma study vary from those in the current effort, not just because of different years of analysis (2007 vs. 2010), but also background data for certain portions and the application of RIMSII multipliers vs. IMPLAN contribution analysis.

[4] Hodges, Hall and Palma contains detailed descriptions of their methodology and review of previous research efforts. We use the same proportion of retail sectors attributable to horticulture-related sales based on the 2007 Economic Census, customized to correspond to IMPLAN aggregated sectors. Further, we apply Farm Gate Value data and data internal to the model as applicable. The establishment data for sectors is based on the Georgia Department of Labor Annual Covered Employment and Wages (2010). Unless otherwise noted, all estimates are for the calendar year 2010.

[5] A full description of the approach can be found on the MIG, Inc. website: http://implan.com/V4/index.php?option=com_multicategories&view=article&id=660:660&Itemid=14

Table 1. Economic Contributions of "Green Industry" in Georgia, 2007-08

| Industry Group / Sector (NAICS) | # Establishments | Horticultural Sales (Mn$) | Horticultural Output (Mn$) | Output Impact (Mn$) | Horticultural Employment (jobs) | Employment Impact (jobs) | Horticultural Payroll (Mn$) | Earnings Impact (Mn$) | Value Added Impact (Mn$) |
|---|---|---|---|---|---|---|---|---|---|
| Production and Manufacturing | 441 | 1,595 | 1,595 | 2,302 | 12,493 | 18,153 | 350 | 522 | 1,305 |
| Nursery and greenhouse production (1114) | 435 | 1,014 | 1,014 | 1,474 | 11,387 | 15,664 | 310 | 435 | 987 |
| Lawn and garden equipment manufacturing (333112) | 6 | 581 | 581 | 828 | 1,106 | 2,489 | 40 | 87 | 318 |
| Horticultural Services | 3,016 | 1,877 | 1,877 | 2,867 | 20,303 | 35,004 | 569 | 888 | 1,703 |
| Landscaping services (56173) | 2,838 | 1,762 | 1,762 | 2,731 | 19,383 | 33,912 | 526 | 839 | 1,607 |
| Landscape architectural services (54132) | 178 | 114 | 114 | 136 | 920 | 1,092 | 42 | 49 | 96 |
| Wholesale and Retail Trade | 40,972 | 2,785 | 767 | 1,160 | 8,843 | 12,732 | 247 | 368 | 791 |
| Building material and garden equipment and supplies dealers (444) | 2,793 | 1,285 | 392 | 608 | 5,424 | 7,897 | 147 | 215 | 412 |
| Merchant wholesalers, durable goods (423) | 8,468 | 706 | 170 | 276 | 707 | 1,521 | 40 | 72 | 189 |
| Miscellaneous store retailers (453) | 3,233 | 125 | 54 | 73 | 1,044 | 1,252 | 18 | 24 | 50 |
| General merchandise stores (452) | 1,797 | 186 | 49 | 49 | 916 | 916 | 18 | 18 | 34 |
| Merchant wholesalers, nondurable goods (424) | 3,791 | 291 | 48 | 83 | 201 | 434 | 10 | 21 | 57 |
| Food and beverage stores (445) | 3,818 | 61 | 18 | 19 | 337 | 352 | 6 | 6 | 13 |
| Wholesale electronic markets and agents and brokers (425) | 1,906 | 85 | 17 | 28 | 43 | 126 | 2 | 5 | 19 |
| Nonstore retailers (454) | 1,676 | 23 | 10 | 12 | 57 | 77 | 2 | 2 | 8 |
| Furniture and home furnishings stores (442) | 2,275 | 21 | 9 | 13 | 105 | 148 | 3 | 4 | 9 |
| Sporting goods, hobby, book, and music stores (451) | 1,476 | 1 | 0 | 0 | 5 | 5 | 0 | 0 | 0 |
| Electronics and appliance stores (443) | 1,605 | 1 | 0 | 0 | 3 | 3 | 0 | 0 | 0 |
| Health and personal care stores (446) | 2,889 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Gasoline stations (447) | 5,245 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 44,429 | 6,256 | 4,239 | 6,330 | 41,639 | 65,889 | 1,165 | 1,779 | 3,800 |

Source: Unpublished table from Hodges, Hall, and Palma (2011)

*Economic Contribution*

The economic contribution that begins with turfgrass production, ornamental horticulture, landscaping services, and related industries encompasses other industries as the effects of the economic activity generated ripple throughout the state economy. For this study, the industry is directly defined as consisting of production and manufacturing, which covers greenhouse, nursery, and lawn/garden equipment; horticultural services, comprised of landscaping and landscape architectural services; and portions of the wholesale and retail trade sectors to incorporate the turfgrass and related industry products that are part of their sales[6]. The breakdown allows analysis from the point of production to the final user. The sectors can be seen in Table 2, which includes the North American Industry Classification System (NAICS) code sectors that comprise the system and highlights the number of establishments in each. The complete list of NAICS code definitions can be found in Appendix I[7].

Table 2. Number of Establishments in Turfgrass Production, Ornamental Horticulture, Landscaping Services, and Related Industry, Georgia 2010

| Industry Group / Sector (NAICS) | 2010 Establishments (#) |
|---|---|
| **Production and Manufacturing Total** | **206** |
| Greenhouse and nursery production (1114) | 200 |
| Lawn and garden equipment manufacturing (333112) | 6 |
| **Horticultural Services Total** | **2,998** |
| Landscaping services (56173) | 2,849 |
| Landscape architectural services (54132) | 149 |
| **Wholesale and Retail Trade Total** | **24,130** |
| Building material and garden supply stores (444) | 1,986 |
| Merchant wholesalers, durable goods (423) | 7,451 |
| Miscellaneous store retailers (453) | 2,888 |
| General merchandise stores (452) | 2,174 |
| Merchant wholesalers, nondurable goods (424) | 3,273 |
| Food and beverage stores (445) | 3,519 |
| Nonstore retailers (454) | 1,094 |
| Furniture and home furnishings stores (442) | 1,745 |
| **Grand Total** | **27,334** |

[6] The methodology applied allows for counting all of these effects without double-counting.

[7] Please note that, although portions of the Wholesale and Retail Trade sector output or sales have been used for this analysis, the number of establishments is for the entire sector as given in the Georgia Department of Labor Annual Covered Employment and Wages data. Therefore, we are not counting portions of establishments in the same manner as we are counting portions of sales or output in the Wholesale or Retail Trade sectors, nor are we counting any establishments that might not be reported under the Covered Employment and Wages Data.

The economic contribution consists of the direct effects, which represent the Georgia Turfgrass and Related industry, the indirect effects which represent the supply chain to the industry, and the induced effects which result from the economic activity of households[8]. Table 3 shows these contributions further broken down by employment, earnings, value added, and output (also referred to as revenue or sales).

In terms of employment, the industry directly contributes nearly 56,000 full-and part-time jobs, while the supply chain accounts for over 9,000. The induced effects resulting from economic activity of households contributes well over 21,000 jobs for a total of nearly 87,000. For earnings or labor income, the industry directly contributes over $2.0 billion, with the supply chain accounting for another $440 million. Including the induced effects of $863 million, the total earnings contribution is $3.4 billion.

For the value added contribution, the direct contribution is $2.2 billion, with the supply chain accounting for another $767 million. Including the induced effects of $1.6 billion, the total value added contribution is $4.6 billion. The industry direct output contribution is $4.0 billion, supply chain of $1.2 billion, induced effects of $2.5 billion for a total of $7.8 billion.

Table 3. Overview of Economic Contribution of Turfgrass and Related Industry in Georgia, 2010

| Contribution | Employment | Earnings | Value Added | Output |
|---|---|---|---|---|
| Direct Effect | 55,871.6 | $2,072,727,049 | $2,210,207,168 | $4,033,135,132 |
| Indirect Effect | 9,337.2 | $439,999,310 | $766,768,260 | $1,205,479,638 |
| Induced Effect | 21,663.7 | $863,456,953 | $1,591,031,874 | $2,535,953,294 |
| Total Effect | 86,872.5 | $3,376,183,312 | $4,568,007,302 | $7,774,568,064 |

Table 4 highlights how the Turfgrass and Related industry affects the major sectors of the Georgia economy. The largest jobs contribution comes from the service sector with 38,457 direct jobs and 61,284 full- and part-time jobs. This is followed by the trade sector with 10,395 direct jobs and 15,639 total after considering the supply chain. Next is the agriculture sector with 5,866 direct jobs and 6,324 total employment. The largest overall contribution in terms of output is in the service sector of $5.0 billion, followed by the Trade sector at $1.2 billion. It is apparent that the total contribution of the Georgia Turfgrass and Related industry spans across the major sectors; in fact, 93% of the sectors in the model were affected.

[8] In some places in this report, particularly the Executive Summary, the indirect and induced effects will be combined and referred to as indirect effects.

Table 4. Georgia Turfgrass and Related Industry Employment Contribution by Major Sector, 2010

| | Employment | | Earnings | | Value Added | | Output | |
|---|---|---|---|---|---|---|---|---|
| Description | Direct | Total | Direct | Total | Direct | Total | Direct | Total |
| | (#) | | (Million $) | | | | | |
| Total | 55,872 | 86,873 | $2,073 | $3,376 | $2,210 | $4,568 | $4,033 | $7,775 |
| Agriculture | 5,866 | 6,324 | $756 | $771 | $380 | $395 | $586 | $611 |
| Mining | 0 | 7 | $0 | $0 | $0 | $1 | $0 | $1 |
| Construction | 0 | 297 | $0 | $13 | $0 | $16 | $0 | $32 |
| Manufacturing | 1,154 | 1,668 | $36 | $66 | $70 | $126 | $408 | $604 |
| TIPU* | 0 | 1,222 | $0 | $70 | $0 | $138 | $0 | $206 |
| Trade | 10,394 | 15,639 | $374 | $569 | $577 | $881 | $813 | $1,243 |
| Service | 38,457 | 61,284 | $906 | $1,857 | $1,183 | $2,987 | $2,226 | $5,004 |
| Government | 0 | 431 | $0 | $29 | $0 | $25 | $0 | $74 |

*Transportation, Information, and Public Utilities

Table 5 shows the top industries (ranked by employment) affected by the Turfgrass and Related Industry sectors – both directly and indirectly - including services to buildings and dwellings (38,242 jobs), greenhouse, nursery, floriculture production (5,866 jobs), building material and garden supply stores (5,599 jobs), food services and drinking places (2,818), and miscellaneous retail stores (2,415 jobs). Tables 6 and 7 describe the potential impact in terms of state, local, and federal taxes. State and local taxes combine to total over $388 million, while federal taxes total over $649 million, including household, business, and corporate taxes.

Table 5. Top Ten Industries Affected, by Employment 2010

| Sector Description | Employment | Earnings | Value Added | Output |
|---|---|---|---|---|
| | (#) | (Million $) | | |
| Services to buildings and dwellings | 38,242 | $872 | $1,151 | $2,178 |
| Greenhouse, nursery, and floriculture production | 5,866 | $756 | $380 | $586 |
| Retail Stores-Building material & garden supply | 5,599 | $212 | $308 | $446 |
| Food services and drinking places | 2,818 | $53 | $82 | $151 |
| Retail Stores - Miscellaneous | 2,415 | $49 | $75 | $115 |
| Real estate establishments | 2,001 | $33 | $242 | $272 |
| Wholesale trade businesses | 1,970 | $152 | $271 | $348 |
| Retail Stores - General merchandise | 1,940 | $51 | $79 | $104 |
| Employment services | 1,677 | $44 | $47 | $57 |
| Retail Stores - Food and beverage | 1,199 | $32 | $46 | $62 |

Table 6. State & Local Tax Impact, Georgia 2010

| Description | Employee Compensation | Indirect Business Tax | Households | Corporations |
|---|---|---|---|---|
| Dividends | | | | $25,249 |
| Social Ins Tax- Employee Contribution | $246,429 | | | |
| Social Ins Tax- Employer Contribution | $570,953 | | | |
| Indirect Bus Tax: Sales Tax | | $81,745,320 | | |
| Indirect Bus Tax: Property Tax | | $203,545,440 | | |
| Indirect Bus Tax: Motor Vehicle License | | $0 | | |
| Indirect Bus Tax: Severance Tax | | $0 | | |
| Indirect Bus Tax: Other Taxes | | $8,047,646 | | |
| Indirect Bus Tax: S/L NonTaxes | | $3,685,505 | | |
| Personal Tax: Income Tax | | | $67,470,472 | |
| Personal Tax: NonTaxes (Fines- Fees) | | | $21,413,684 | |
| Personal Tax: Motor Vehicle License | | | $0 | |
| Personal Tax: Property Taxes | | | $1,747,884 | |
| Personal Tax: Other Tax (Fish/Hunt) | | | $0 | |
| Total State and Local Tax | $817,382 | $297,023,911 | $90,632,040 | $25,249 |

Table 7. Federal Tax Impact, Georgia 2010

| Description | Employee Compensation | Proprietor Income | Indirect Business Tax | Households | Corporations |
|---|---|---|---|---|---|
| Social Ins Tax- Employee Contribution | $134,341,312 | $42,724,052 | | | |
| Social Ins Tax- Employer Contribution | $132,433,232 | | | | |
| Indirect Bus Tax: Excise Taxes | | | $40,803,928 | | |
| Indirect Bus Tax: Custom Duty | | | $16,008,125 | | |
| Indirect Bus Tax: Fed NonTaxes | | | $27,258,586 | | |
| Corporate Profits Tax | | | | | $57,359,796 |
| Personal Tax: Income Tax | | | | $198,981,600 | |
| Total Federal Tax | $266,774,544 | $42,724,052 | $84,070,639 | $198,981,600 | $57,359,796 |

*About the IMPLAN Model*

MIG, Inc. (formerly Minnesota IMPLAN Group, Inc.) is the sole-source provider of the IMPLAN® (IMpact analysis for PLANning) economic impact modeling system. IMPLAN is used to create complete, extremely detailed social accounting matrices and multiplier models of local economies. MIG, Inc. provides software tools, region-specific data, and outstanding technical support to enable users to make in-depth examinations of state, multi-county, county, sub-county, and metropolitan regional economies. MIG, Inc. has been developing complex localized databases, conducting IMPLAN training workshops and distributing IMPLAN software to public and private organizations since 1993.

MIG, Inc. was founded in 1993 by Scott Lindall and Doug Olson as an outgrowth of their work at the University of Minnesota which began in 1984. This developmental work closely involved the U.S. Forest Service's Land Management Planning Unit in Fort Collins, and Dr. Wilbur Maki at the University of Minnesota.

In 1993, Lindall and Olson entered into a technology transfer agreement with the University of Minnesota that allowed them to form the company. At first, MIG, Inc. focused on database development and provided data that could be used in the Forest Service version of the software. In 1995 however, MIG, Inc. took on the task of writing a new version of the IMPLAN software. This new version extended past the previous Forest Service version by incorporating an entirely new modeling system that included the creation of Social Accounting Matrices (SAMs) – an extension of input-output accounts, and the resulting SAM multipliers. Version 2 became available in May of 1999.

The Version 3.0 system was released in November of 2009. It updated and improved on the functionality of the Implan Version 2.0 software, including better utilities for customizing IMPLAN databases to match individual industries within a study and the addition of Multi-regional Analysis capabilities.

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*Appendix I: NAICS Definitions*

**Greenhouse and nursery production** (1114): This includes those industries that grow crops of any kind under cover and/or those that grow nursery stock and flowers. Usually greenhouses, cold frames, cloth houses, and lath houses are considered "under cover." These crops have annual or perennial life cycles. Includes establishments primarily engaged in (1) growing nursery and floriculture products (e.g., nursery stock, shrubbery, cut flowers, flower seeds, foliage plants) under cover or in open fields and/or (2) growing short rotation woody trees with a growing and harvesting cycle of 10 years or less for pulp or tree stock (e.g., cut Christmas trees, cottonwoods). Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=1114&search=2007%20NAICS%20Search

**Lawn and garden equipment manufacturing** (333112): This includes industries that manufacture power lawnmowers, lawn and garden tractors, tillers, shredders, yard vacuums, and leaf blowers. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=333112&search=2007%20NAICS%20Search

**Landscaping services** (56173): This includes establishments that provide landscape care and maintenance services such as planting trees, shrubs, plants, lawns, and gardens. These services are also engaged in design and construction of walkways, decks, fences, ponds, retaining walls and other similar structures. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=561730&search=2007%20NAICS%20Search

**Landscape architectural services** (54132): This includes establishments that are involved in the planning and designing for projects such as parks, recreational areas, airports, highways, hospitals, schools, land subdivisions, and commercial, industrial, and residential areas. They are involved in these projects by using knowledge of the land and landscape and applying it to the project. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=541320&search=2007%20NAICS%20Search

**Building material and garden supply stores** (444): These stores sell new building material and garden equipment and supplies from a fixed location. The materials may be kept indoors or under a cover outdoors. The staff is knowledgeable about their products and the construction and maintenance of the home and lawn. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=444&search=2007%20NAICS%20Search

**Merchant wholesalers, durable goods** (423): Industries in this sector sell capital or durable goods to other businesses. Merchant wholesalers buy and sell goods on their own account. Durable goods are those goods with a normal life of three or more years. They include products such as motor vehicles, furniture, construction materials, machinery and equipment, metals and minerals, sporting goods, toys and hobby goods, recyclable materials, and parts. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=423&search=2007%20NAICS%20Search

**Miscellaneous store retailers** (453): These retailers sell retail merchandise from a fixed location. Many of these stores have specific characteristics such as pet supplies or florist. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=453&search=2007%20NAICS%20Search

**General merchandise stores**: These retailers sell new retail merchandise from a fixed location. These establishments have a wide variety of goods and a large staff that are trained specifically for a type of goods. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=452&search=2007%20NAICS%20Search

**Merchant wholesales, nondurable goods**: These industries sell nondurable goods to other businesses. Non durable goods usually have a life span of less than three years and include 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. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=424&search=2007%20NAICS%20Search

**Food and beverage stores**: These industries retail food and beverages from a fixed location. They have specialized equipment for displaying food and beverages such as refrigerated display cases, freezers and refrigerators. Their staff is specialized in the proper storage and sanitary conditions needed for this industry. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=445&search=2007%20NAICS%20Search

**Nonstore retailers**: These industries retail merchandise using methods such as broadcasting of infomercials, broadcasting and publishing of direct-response advertising, publishing of paper and electronic catalogs, door-to-door solicitation, in-home demonstrations, selling from portable stalls, and distribution through vending machines. These industries can include the direct sale of products such as heating oil dealers and newspaper delivery providers. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=454&search=2007%20NAICS%20Search

**Furniture and home furnishings stores**: These industries retail new furniture and furnishings from a fixed location. These products are normally displayed in a showroom. Interior decorating may also be available from these industries. Source: http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=442&search=2007%20NAICS%20Search

# The Center for Agribusiness & Economic Development

**The Center for Agribusiness and Economic Development is a unit of the College of Agricultural and Environmental Sciences of the University of Georgia, combining the missions of research and extension. The Center has among its objectives:**

To provide feasibility and other short term studies for current or potential Georgia agribusiness firms and/or emerging food and fiber industries.

To provide agricultural, natural resource, and demographic data for private and public decision makers.

**To find out more, visit our Web site at: http://www.caed.uga.edu**

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**Report Number: CR-12-05** **May 2012**

**Issued in furtherance of Cooperation Extension Acts of May 8 and June 30, 1914, the University of Georgia College of Agricultural and Environmental Sciences, and the U.S. Department of Agriculture cooperating.**

**J. Scott Angle, Dean and Director**