

# 2009

## Economic Scope of the Green Industry in Texas



Final Report to the  
Texas Nursery and Landscape Association

Marco A. Palma, PhD  
Department of Agricultural Economics  
Texas AgriLife Extension Service  
Texas A&M University System

# Economic Scope of the Green Industry in Texas



Final Report to the  
Texas Nursery and Landscape Association  
2009

by

Marco A. Palma, PhD  
Texas AgriLife Extension Service  
Texas A&M University System  
458D Blocker Building, 2124 TAMU, College Station, TX. 77843-2124  
[mapalma@tamu.edu](mailto:mapalma@tamu.edu)

## Acknowledgements

This report was made possible by a grant from the Texas Nursery and Landscape Association (TNLA). The Data was obtained from the Texas Comptrollers office, Baseline data from the Floriculture and Nursery Yearbook from the United States Department of Agriculture (USDA), and the Texas Green Industry Survey of 2008. Others who contributed with this report include Carmen Guajardo (TDA), Charles Hall (Texas A&M University), Don Wilkerson (Texas A&M University) and Alan Hodges (University of Florida).

This report complies with the terms of the TNLA contract. The author welcomes comments or information about the usefulness and implications of these findings.

## Economic Scope of the Green Industry in Texas

This year is the second year we are using the North American Industry Classification System (NAICS) in analyzing data for the Scope Report. This system allows us to report *total green industry sales, including all sectors related to the green industry*. **Total sales for the Green Industry in Texas went up 4.17% to a record high \$14.1 Billion in sales, despite the economic and financial crisis.**

Environmental horticulture or the green industry includes production of nurseries, greenhouses, sod, herbs, cut-flowers, retail garden centers and florists, and landscape and tree services. The environmental horticulture industry, often referred to as the “**Green Industry**” is one of the fastest growing sectors of agriculture in the US. However, the green industry is currently facing many challenges such as an economic downturn, stronger competition from less expensive imports, considerable price variation and seasonal consumption patterns.

The data used in this report were provided by the State Comptrollers Office, baseline data from the Floriculture and Nursery Yearbook from the United States Department of Agriculture (USDA), and the Texas Green Industry Survey of 2008; and **includes industry sales through the end of fiscal year 2008**. Every business in the state and the country is now classified by the North American Industry Classification System (NAICS), which replaced the old Standard Industrial Classification (SIC) system. NAICS was developed jointly by the United States, Canada and Mexico to provide new comparability in statistics about business activity across North America. Green industry firms fall within one of the following NAICS codes:

Table 1. NAICS Codes for Green Industry Sectors

| Industry Sector  | NAICS Code |
|--|------------|
| Nursery & Greenhouse                                   | 1114       |
| Lawn & Garden Equipment Mfg                            | 333112     |
| Greenhouse Manufacturing (Prefab. Metal Buildings)*    | 332311     |
| Landscaping Services                                   | 561730     |
| Landscape Architectural Services                       | 541320     |
| Flower, Nursery Stock And Florist Supplies Wholesalers | 424930     |
| Lawn & Garden Equipment & Supplies Stores              | 4442       |
| Florists   | 4531       |
| Building Material & Supplies Dealers*                  | 4441       |
| Food & Beverage Stores*                                | 445        |
| General Merchandise Stores*                            | 452        |
| Farm & Garden Machinery & Equipment Wholesalers*       | 423820     |

\* Green industry represents a portion of overall business activity (Sectors not included in Previous Scope reports).

When reporting sales to the State Comptroller’s office, each firm must report all sales, including those sales in which sale taxes are collected and those that are not collected (wholesale). This reporting system has an area of potential slippage. For example, since wholesale growers do not collect any sales tax (for the state), some small and medium size growers are unaware of their reporting responsibilities. The same thing happens within the landscape contractor and maintenance sectors as well. Not all of these firms realize that their services are subject to sale taxes. Therefore, unintended non compliance has been a source of under reporting, which would underestimate green industry sales in Texas. Retail firms, on the other hand, are more aware of their reporting responsibility since they collect sale taxes and turn them over to the state. Because of this potential slippage problem, additional data were used to supplement this report’s methodology. Table 1 shows Total Green Industry Sales in 2008, and Table 2 shows sales from 2003-2008.

**Table 1. Total Green Industry Sales in 2008**

| Sector (NAICS code)   | Sales                 |
|---|-----------------------|
| <b>Production/Manufacturing</b>                                 | <b>1,529,253,230</b>  |
| Nursery & Greenhouse (1114) ^                                   | 1,236,186,012         |
| Lawn & Garden Equipment Manufacturing (333112) ^                | 240,929,603           |
| Prefabricated metal buildings (332311) (Greenhouses) ^*         | 52,137,614            |
| <b>Horticultural Services</b>                                   | <b>3,817,264,770</b>  |
| Landscaping Services (561730)                                   | 3,623,688,254         |
| Landscape Architectural Services (541320)                       | 193,576,516           |
| <b>Wholesale &amp; Retail Trade Horticulture Products</b>       | <b>8,776,589,656</b>  |
| Flower, Nursery Stock and Florist Supplies Wholesalers (424930) | 609,499,529           |
| Lawn & Garden Equipment & Supplies Stores (4442)                | 3,187,384,233         |
| Florists (4531)   | 951,478,389           |
| Building Material & Supplies Dealers (4441)*                    | 1,358,630,144         |
| Food & Beverage Stores (445)*                                   | 324,556,613           |
| General Merchandise Stores (452)*                               | 1,679,261,429         |
| Farm & Garden Equipment Wholesalers (423820)*                   | 665,779,319           |
| <b>Total All Sectors</b>  | <b>14,123,107,656</b> |

^ Estimated from Baseline data from Economic Research Service and Texas Comptrollers Office Data

\* NAICS Represents a portion of Total Green Industry Sales

Data obtained from Texas Comptrollers Office, Economic Research Service, and Green Industry Survey

**Table 2. Total Green Industry Sales 2003-2008**

|             | <b>GROWER</b>   | <b>LANDSCAPE</b> | <b>RETAIL</b>   | <b>TOTAL</b>            |        |
|-------------|-----------------|------------------|-----------------|-------------------------|--------|
| <b>2008</b> | \$1,529,253,230 | \$3,817,264,770  | \$8,776,589,656 | <b>\$14,123,107,656</b> | 4.17%  |
| <b>2007</b> | \$1,512,784,904 | \$3,545,988,845  | \$8,475,662,978 | \$13,534,436,727        | 6.72%  |
| <b>2006</b> | \$1,496,345,000 | \$3,312,425,799  | \$7,815,902,417 | \$12,624,673,216        | 3.92%  |
| <b>2005</b> | \$1,585,219,000 | \$2,959,226,023  | \$7,584,753,102 | \$12,129,198,125        | 14.07% |
| <b>2004</b> | \$1,424,295,000 | \$2,497,304,439  | \$6,501,463,738 | \$10,423,063,177        | 12.47% |
| <b>2003</b> | \$1,324,625,000 | \$2,198,716,514  | \$5,599,952,929 | \$9,123,294,443         |        |

Total industry sales, including grower, landscaping and retailing sales increased 4.17 % from 2007 to a record high total of \$14.12 billion in 2008. Figures 1, 2, 3 and 4 represent industry sales for growers, landscaping, retailing and total industry sales respectively. Grower sales increased to \$1.53 billion in 2008 still below the 2005 peak of \$1.59 billion. Landscaping sales increased to a record \$3.8 billion in 2008, up 7.11% from the 2007 level. Retailing sales increased 3.43% to reach nearly \$8.8 billion dollars in 2008. Table 3 presents green industry sales by sector and by major Metropolitan Statistical Area (MSA). There are 27 MSAs in Texas. The major MSAs are, Austin, Dallas, Ft. Worth, Houston, El Paso, and San Antonio. The economic scope reports sales in five of the six major MSAs; together, the five major MSAs included in this report represent more than half of the total industry sales as shown in Figure 6. Houston and Dallas hold the largest share of the state’s total green industry sales in 2008 with 38.2 and 27.9 percent respectively. Figure 7 is a graphical representation of grower, landscaping and retailing sales by MSA in Texas.

**Figure 1. Grower Sales 2008**

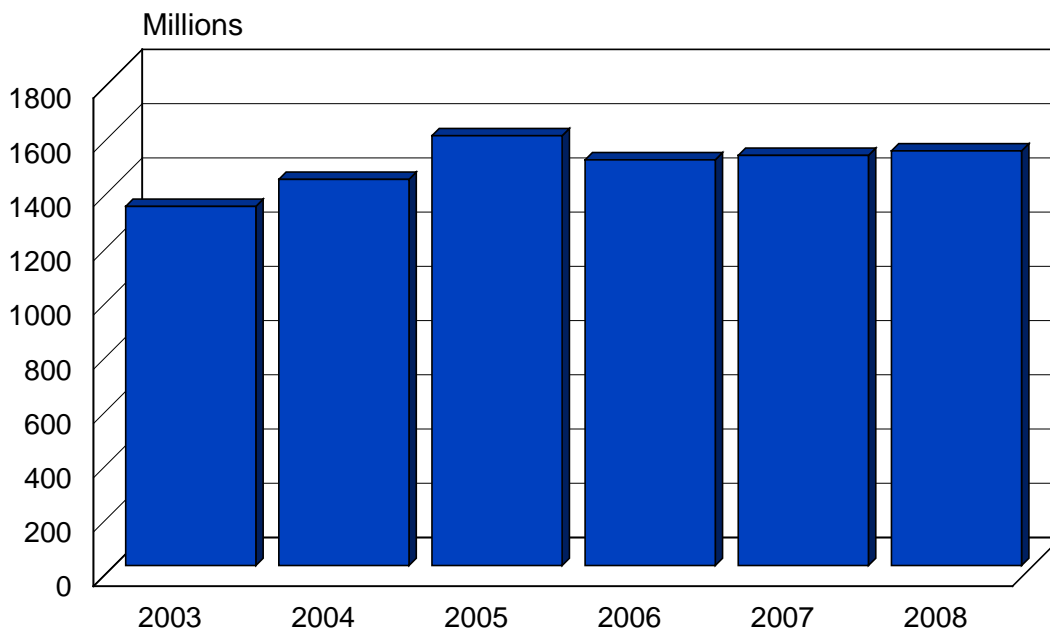


Figure 2. Landscaping Sales 2008

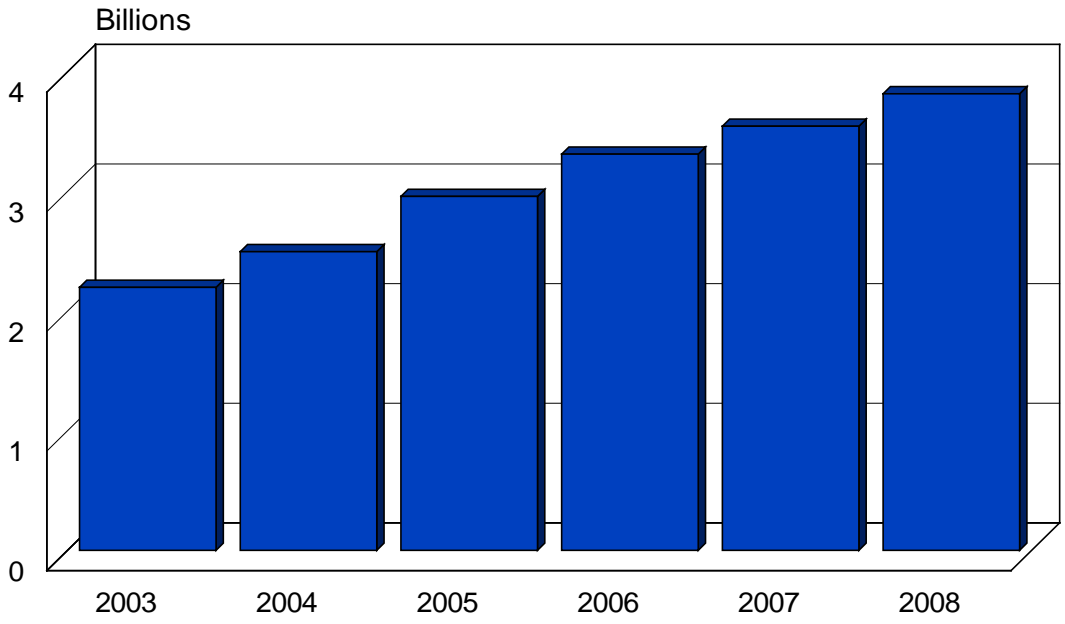
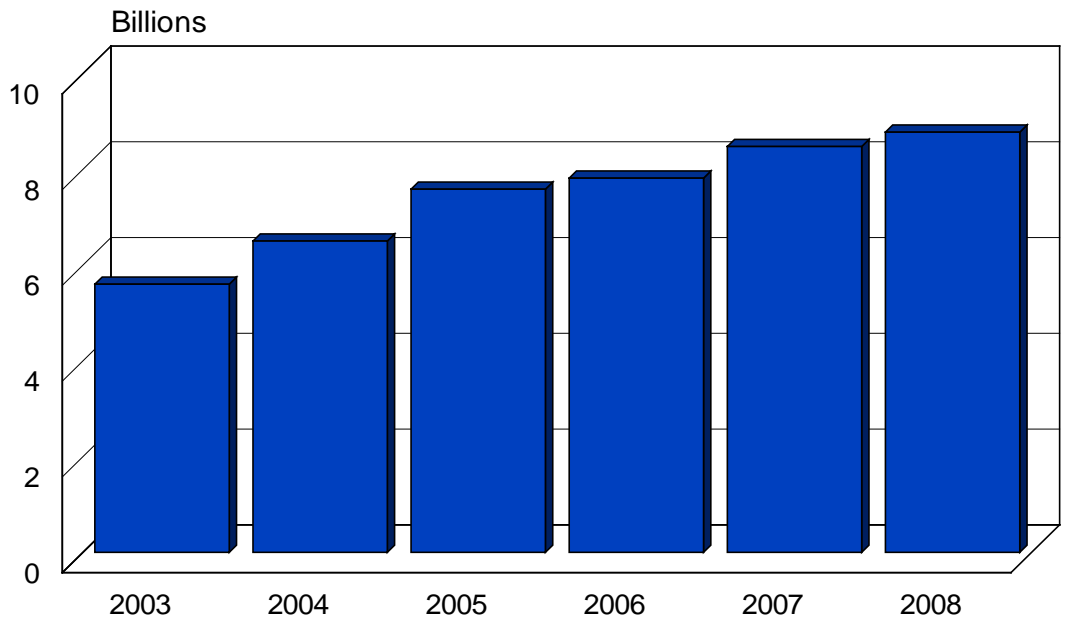
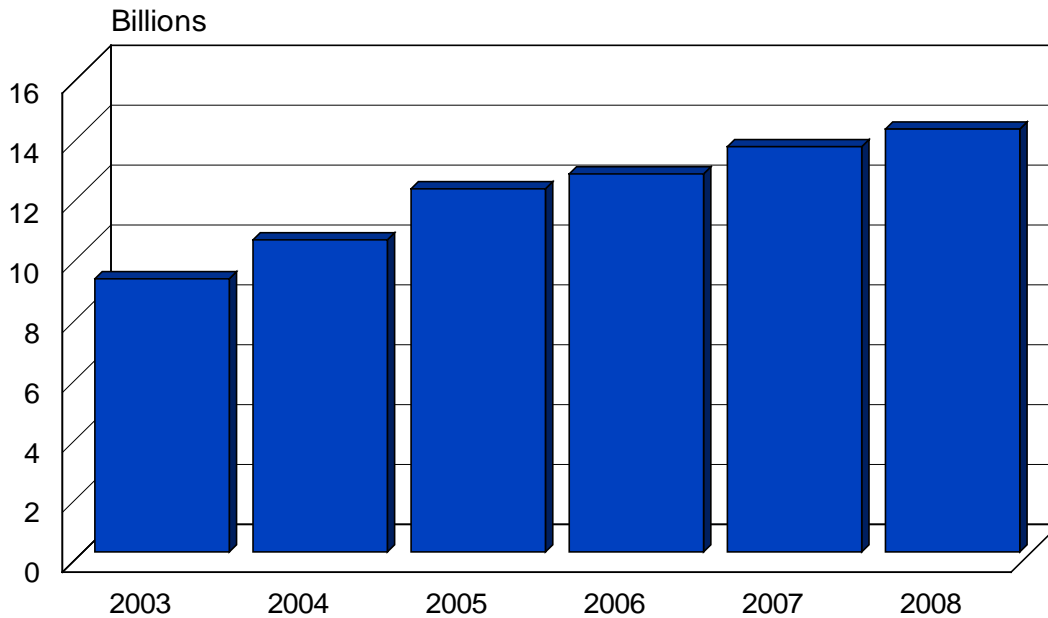


Figure 3. Retailing Sales 2008



**Figure 4. Total Industry Sales 2008**



**Table 3. Total Green Industry Sales by Metropolitan Statistical Area (MSA) 2008**

| MSA          | GROWER               | LANDSCAPE            | RETAIL               | TOTAL                 | % OF TOTAL     |
|--------------|----------------------|----------------------|----------------------|-----------------------|----------------|
| Austin       | 42,939,002           | 419,950,687          | 454,886,236          | 917,775,924           | 6.50%          |
| Dallas       | 122,022,189          | 825,388,799          | 1,398,844,234        | 2,346,255,222         | 16.61%         |
| Ft Worth     | 97,548,622           | 315,791,038          | 690,332,633          | 1,103,672,293         | 7.81%          |
| Houston      | 288,104,323          | 1,181,852,060        | 1,742,231,930        | 3,212,188,313         | 22.74%         |
| San Antonio  | 72,915,904           | 278,813,697          | 485,524,720          | 837,254,321           | 5.93%          |
| Other        | 905,723,191          | 795,468,489          | 4,004,769,902        | 5,705,961,582         | 40.40%         |
| <b>Total</b> | <b>1,529,253,230</b> | <b>3,817,264,770</b> | <b>8,776,589,656</b> | <b>14,123,107,656</b> | <b>100.00%</b> |

The data from the comptroller’s office and the USDA were used to estimate sales by outlet (grower, landscaping, retailing, and total) for each reporting county in the state. Maps that show green industry sales were constructed with the help of the Texas A&M Spatial Sciences Laboratory. These maps use ArcIMS technology to show green industry sales in the State. ArcIMS is a powerful Geographic Information System (GIS) application that allows manipulating the data to obtain specific information. A copy of the maps is included in the next pages of this report (Figures 8-11).

In the next month’s edition of Green Magazine, the author will use these sales data to calculate the economic impacts of the green industry to the state of Texas economy and number of jobs generated.

Figure 6. Total Green Industry Sales by MSA

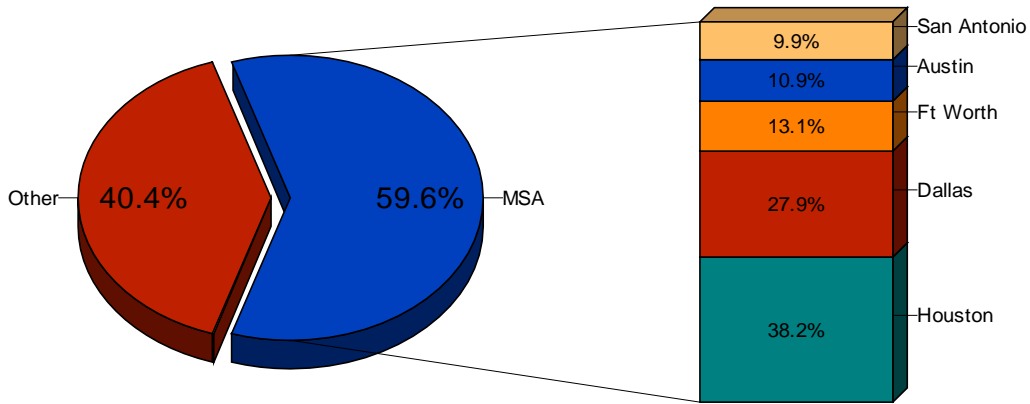
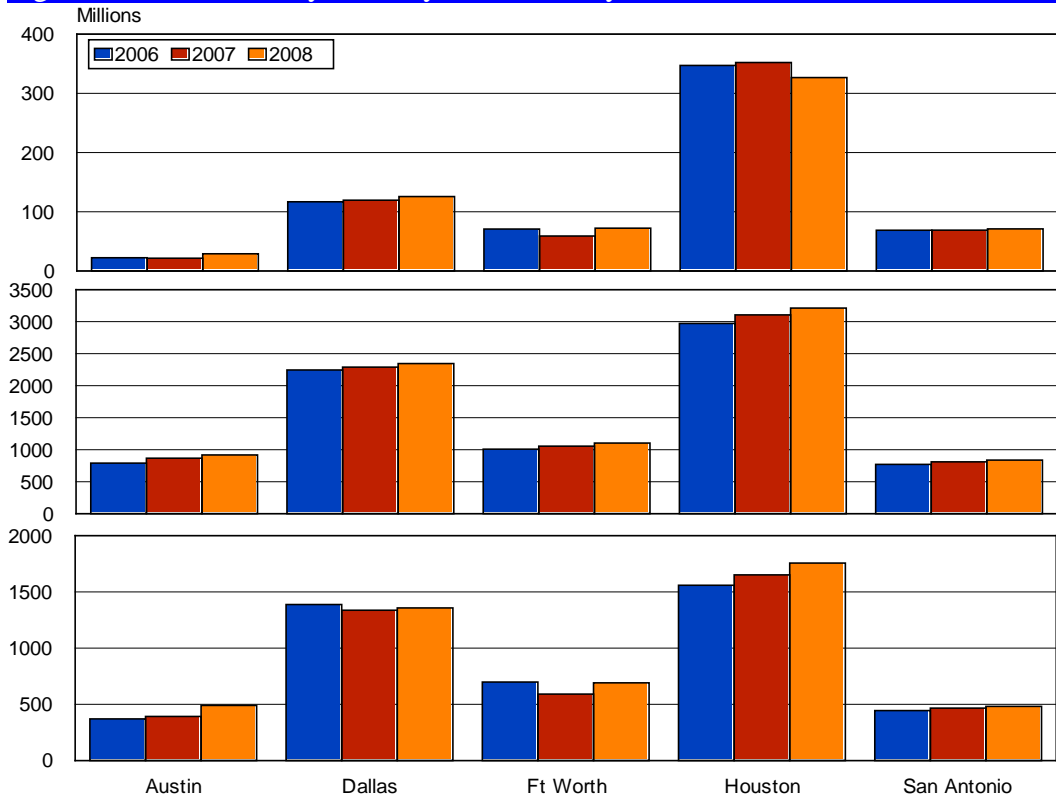
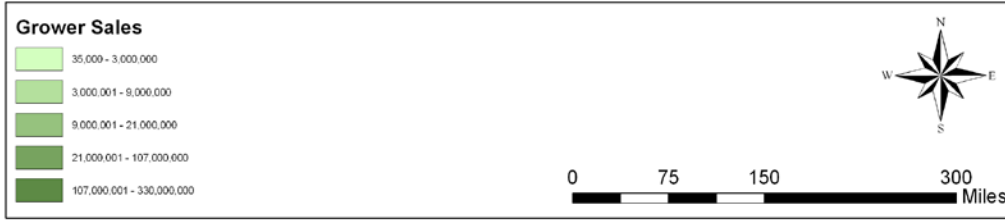
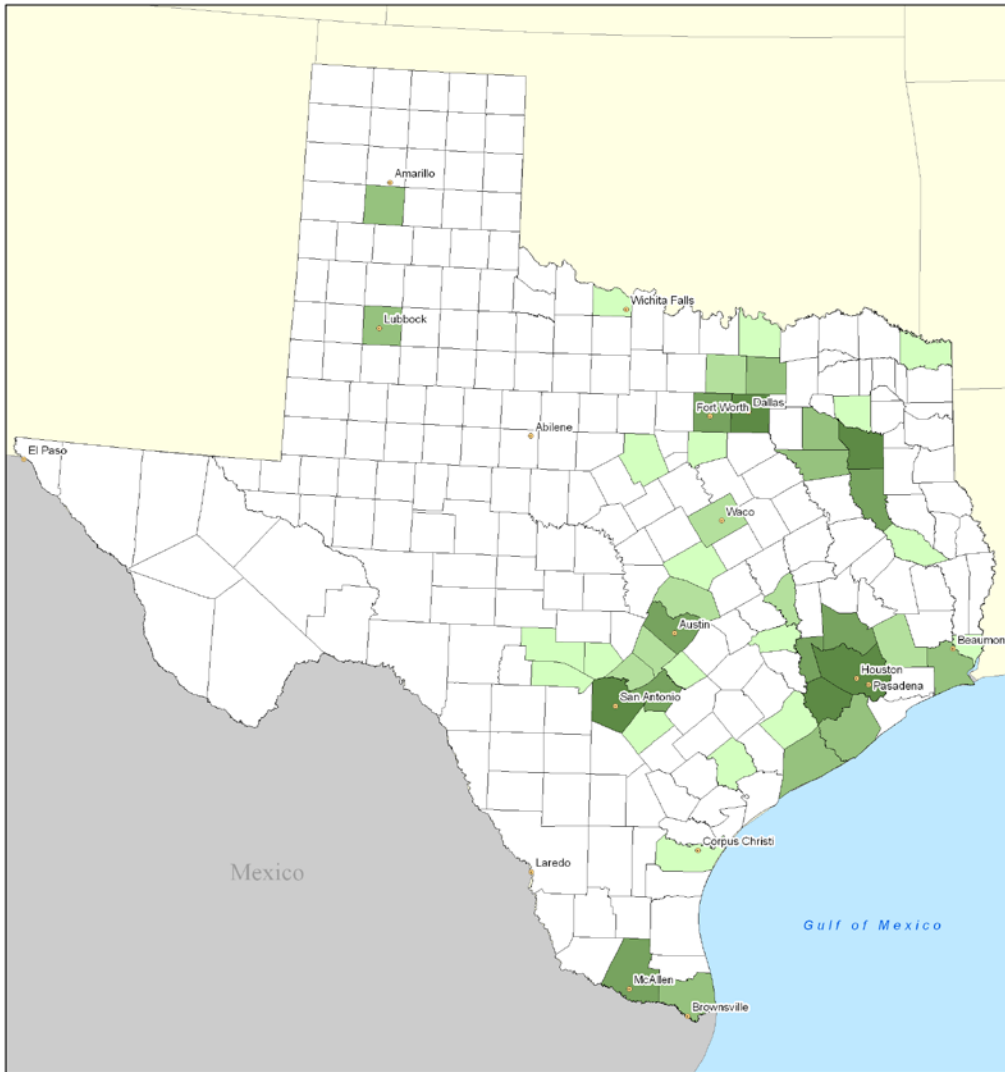


Figure 7. Green Industry Sales by Outlet and by MSA , 2006-2008

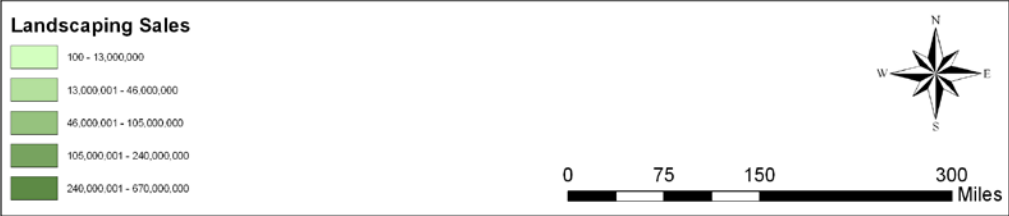
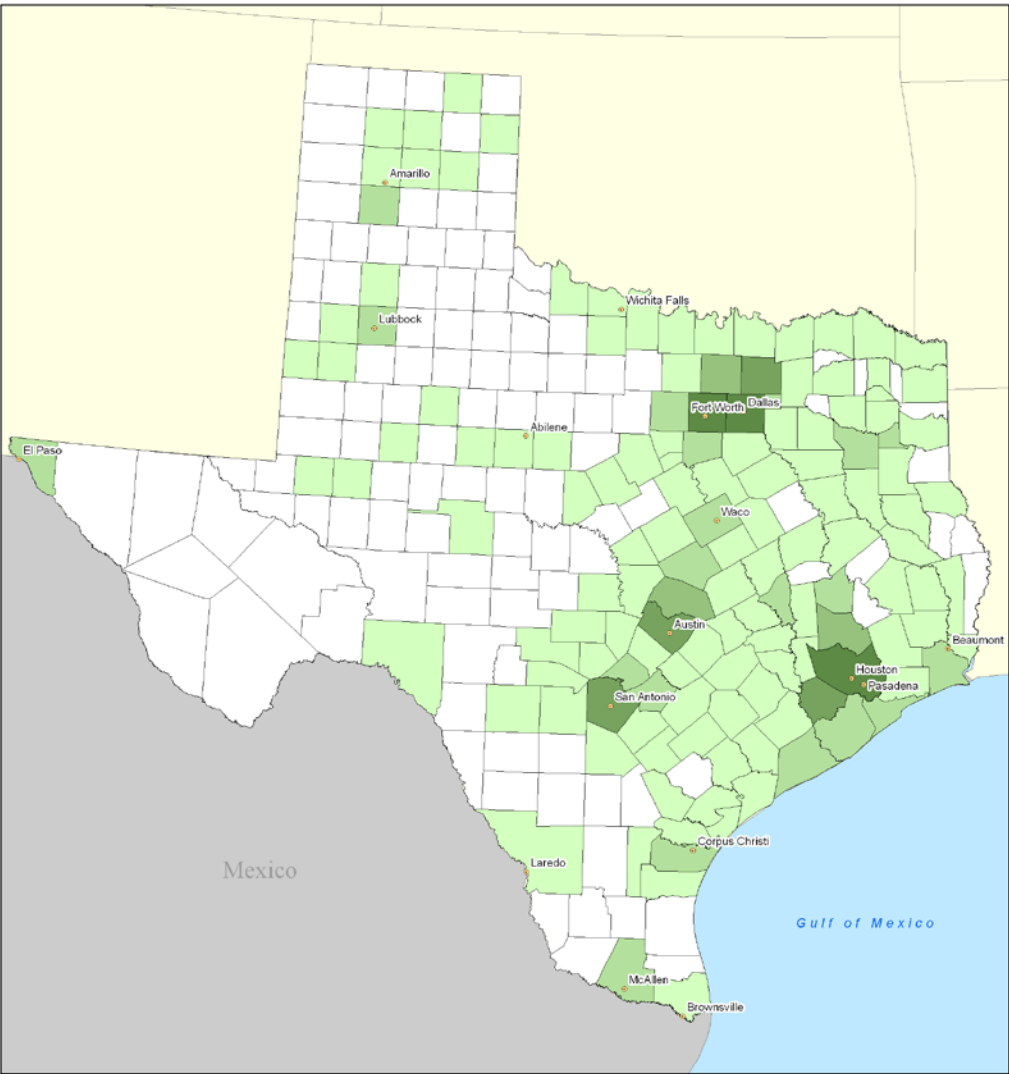


# Grower Sales



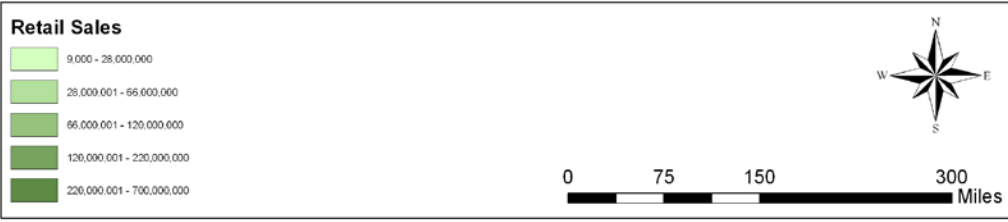
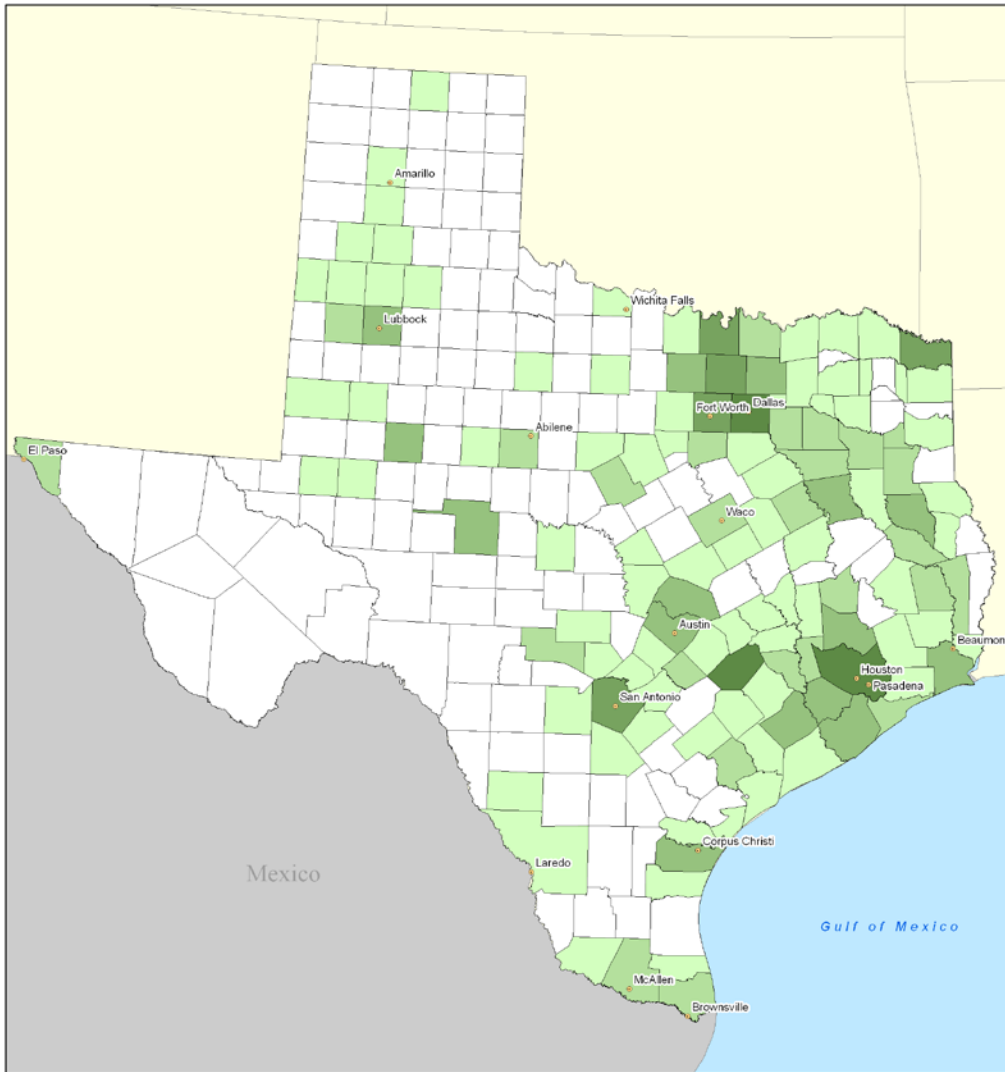
Spatial Sciences Laboratory, 2007

# Landscaping Sales



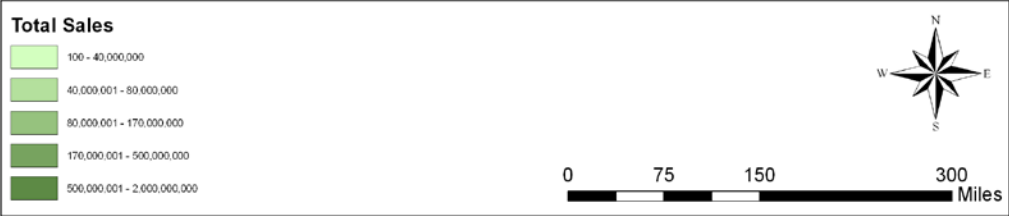
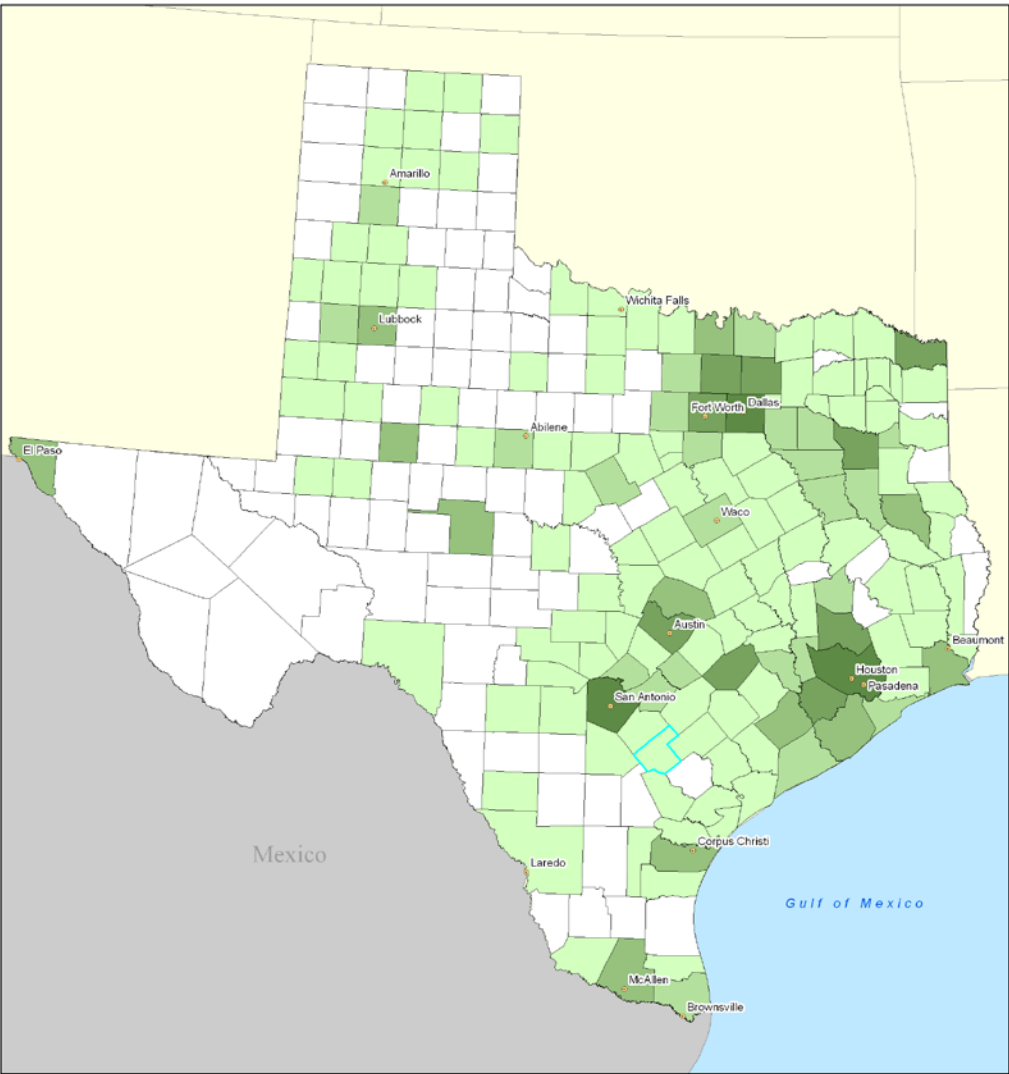
Spatial Sciences Laboratory, 2007

# Retail Sales



Spatial Sciences Laboratory, 2007

# Total Sales



Spatial Sciences Laboratory, 2007