

Economic Contributions of the Green Industry to the Texas Economy

Report to the Texas Nursery and Landscape Association
2010

by

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Introduction

2010 was supposed to be the accelerating year in the recovery from the Great Recession of 2008 to mid-2009. The best of intentions, however, was never realized. The national economy grew only modestly and although Texas has fared better than our national counterparts during the recession, we have felt the delayed effects. Weather continues to play a major role affecting the demand for plants and landscape services across the country, but particularly here in the Southwest region. As you glean from this report, bear in mind the trends and the picture becomes a bit clearer.

The grower sector in 2010 grew slightly, but only because of the strong spring season with consumers exhibiting a pent-up demand for color in their landscapes. Trees sales continued to be dismal, with average prices well below breakeven for the grower. The tree sector continues to struggle and not much relief is expected until housing turns a corner. Bright spots at the grower level continue to be the bedding plant and perennials sectors. The slight increase in retail sales in 2010 reflected the strong spring season more so than anything else.

The shift from hiring landscape services to more do-it-yourself gardening and landscaping was reflected in the landscape numbers in 2010, with that sector experiencing a decline in sales. That trend is starting to reverse, but only slightly as the economy continues to struggle. Look for landscape services to increase in the coming years, though the weather patterns of 2011 have taken its toll on the entire industry as a whole.

Methodology

In order to estimate economic contributions of the Green Industry to the Texas economy sales by each green industry sector need to be measured. The North American Industry Classification System (NAICS) was used to gather data on *total green industry sales, including all sectors related to the green industry*. The data used in this report were provided by the State Comptrollers Office, baseline data from the Green Industry Research Consortium National Nursery Survey, and **includes industry sales through the end of fiscal year 2010**. Every business in the state and the country is now classified by 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 AICS 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).

Green Industry Sales in Texas

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. 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. Because of this potential slippage problem, additional data were used to supplement this report’s methodology. Table 2 shows Total Green Industry Gross Sales in 2010, and Table 3 shows sales from 2005-2010 for each green industry sectors. This year we are consolidating the scope and economic impact report; Table 3 shows sales for the retail industry including gross sales, and also net sales. Net sales represent the margin sales that correspond to the retail sector only.

Table 2. Total Green Industry Gross Sales in 2010

Sector (NAICS code)	Sales	Establishments
Production/Manufacturing	1,694,779,144	726
Nursery & Greenhouse (1114) ^	1,004,894,283	641
Lawn & Garden Equipment Manufacturing (333112) ^	657,568,160	75
Prefabricated metal buildings (332311) (Greenhouses) ^*	32,316,701	10
Horticultural Services	3,405,399,000	14,343
Landscaping Services (561730)	3,226,066,843	13,796
Landscape Architectural Services (541320)	179,332,157	547
Wholesale & Retail Trade Horticulture Products (Gross)	9,553,207,768	17,883
Flower, Nursery Stock and Florist Supplies Wholesalers (424930)	530,615,940	388
Lawn & Garden Equipment & Supplies Stores (4442)	3,812,868,705	2,112
Florists (4531)	1,454,376,676	3,513
Building Material & Supplies Dealers (4441)*	1,177,461,379	1,819
Food & Beverage Stores (445)*	334,927,211	2,470
General Merchandise Stores (452)*	1,562,403,253	7,372
Farm & Garden Equipment Wholesalers (423820)*	680,554,604	197
Total All Sectors	14,653,385,912	32,952

^ Estimated from baseline data from National Nursery Survey, and Texas Comptroller's Office Data.

* NAICS represents a portion of Total Green Industry Sales

Table 3. Total Green Industry Sales 2005-2010

	GROWER	LANDSCAPE	RETAIL (Gross)	RETAIL (Net)	TOTAL
2010	\$1,694,779,144	\$3,405,399,000	\$9,553,207,768	\$3,612,463,109	\$8,712,641,253
2009	\$1,322,462,333	\$3,421,012,900	\$9,149,538,011	\$3,459,818,873	\$8,203,294,106
2008	\$1,646,905,683	\$3,903,651,168	\$8,599,018,918	\$3,251,644,827	\$8,802,201,677
2007	\$1,512,784,904	\$3,567,729,013	\$8,431,798,582	\$3,188,411,899	\$8,268,925,816
2006	\$1,496,345,000	\$3,312,425,799	\$7,815,902,417	\$2,955,516,077	\$7,764,286,876
2005	\$1,585,219,000	\$2,959,226,023	\$7,584,753,102	\$2,868,108,958	\$7,412,553,981

Total industry sales, including grower, landscaping and retailing sales increased about 5% in 2010 for a total of \$14.7 billion in gross sales. The grower sector experienced the highest increased in growth with almost 22% for a total of \$1.69 billion, the highest sales level recorded for the grower sector. The landscaping had a slight decrease of 0.46% in 2010. Gross retail sales increased 4.2% to a total of \$9.55 billion in 2010. Figures 1, 2, 3 and 4 represent industry sales for growers, landscaping, retailing (gross) and total gross industry sales respectively.

Figure 1. Grower Sales 2010

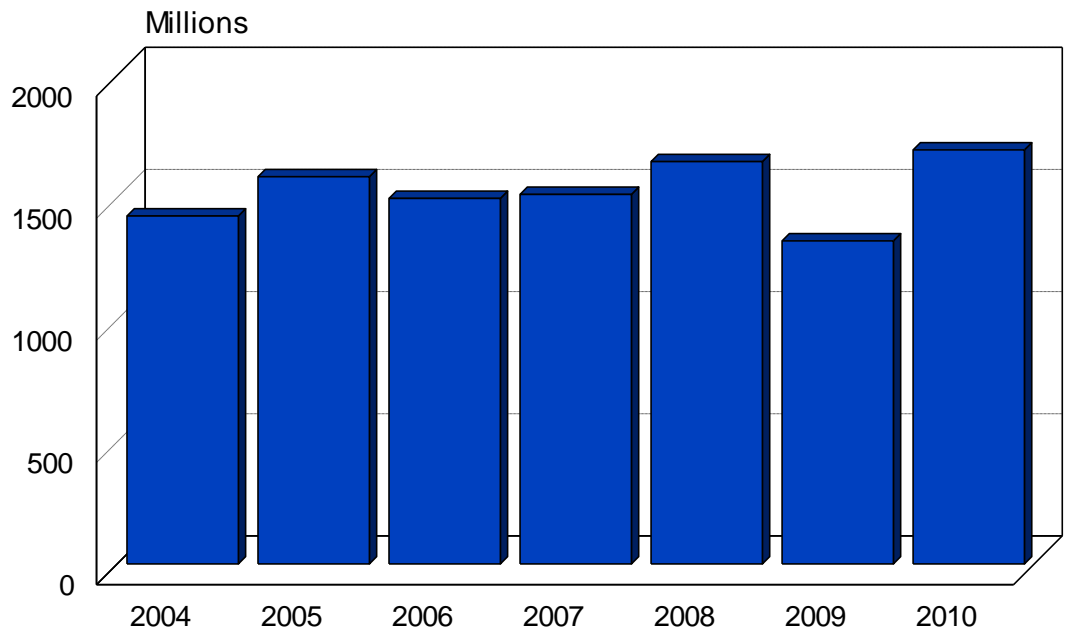


Figure 2. Landscaping Sales 2010

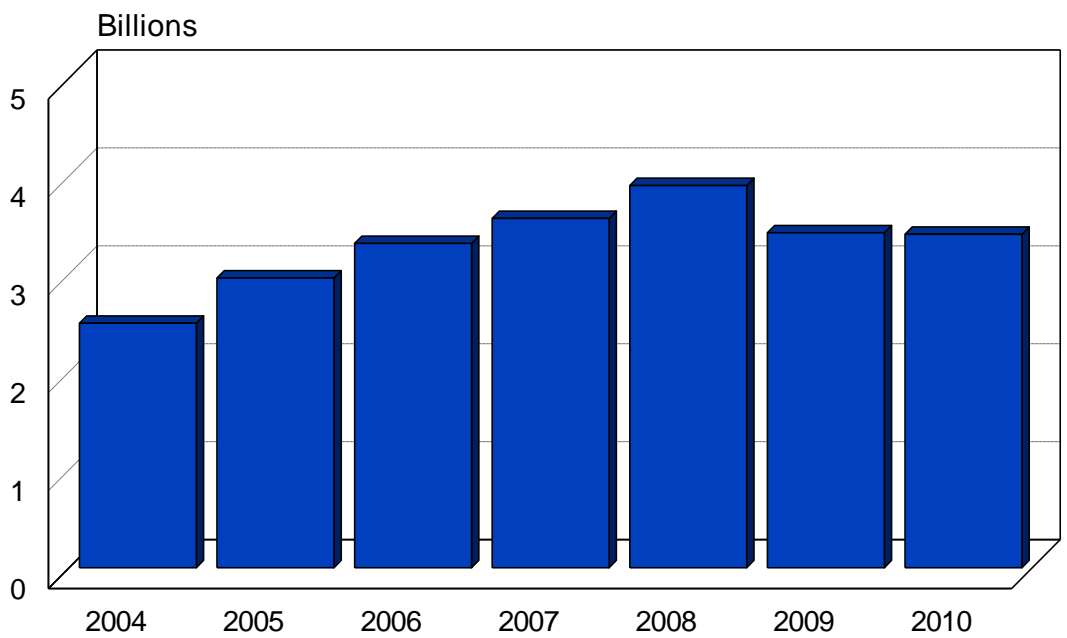


Figure 3. Retailing Sales 2010

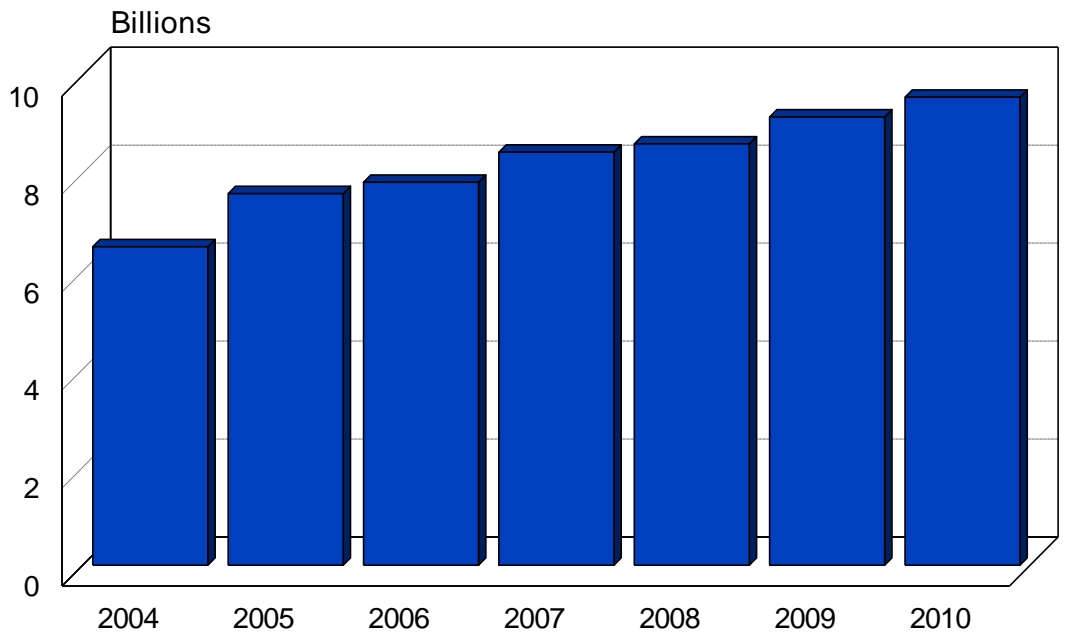


Figure 4. Total Industry Sales 2010

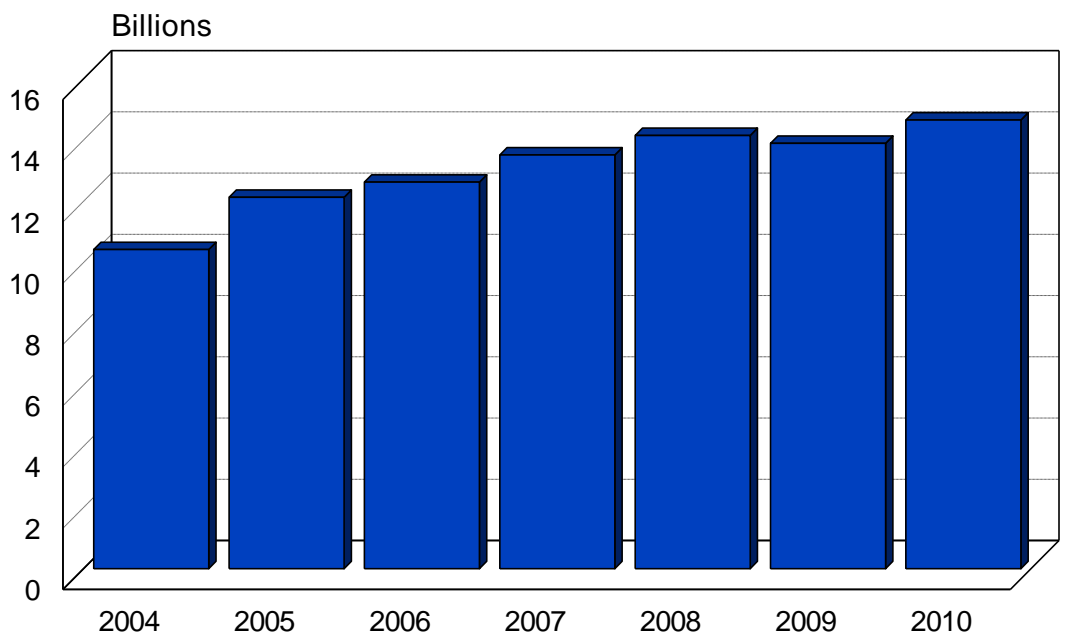


Table 4 presents green industry sales by sector and by major Metropolitan Statistical Area (MSA). There are 27 MSAs in Texas. The major MSAs are, Austin, Dallas, Ft. Worth, Houston, El Paso, and San Antonio. The economic scope reports sales in five of the major MSAs; together, the five major MSAs included in this report represent more than half of the total industry sales as shown in Figure 5. Houston and Dallas hold the largest share of green industry sales in 2010 with 19.9 and 16.8 percent respectively. Figure 6 is a graphical representation of grower, landscaping and retailing sales by MSA in Texas.

Table 4. Total Green Industry Sales by Metropolitan Statistical Area (MSA) 2010					
MSA	GROWER	LANDSCAPE	RETAIL (Gross)	TOTAL	% OF TOTAL
Austin	50,970,044	394,892,147	622,785,249	1,068,647,440	7.29%
Dallas	192,312,384	766,867,767	1,507,429,569	2,466,609,720	16.83%
Ft Worth	161,776,552	242,509,030	691,552,649	1,095,838,230	7.48%
Houston	229,826,120	976,494,105	1,705,057,494	2,911,377,718	19.87%
San Antonio	147,467,434	269,863,498	601,289,840	1,018,620,772	6.95%
Other	912,426,611	754,772,453	4,425,092,968	6,092,292,031	41.58%
Total	1,694,779,144	3,405,399,000	9,553,207,768	14,653,385,912	100.00%

Figure 5. Total Green Industry Sales in Texas by MSA in 2010

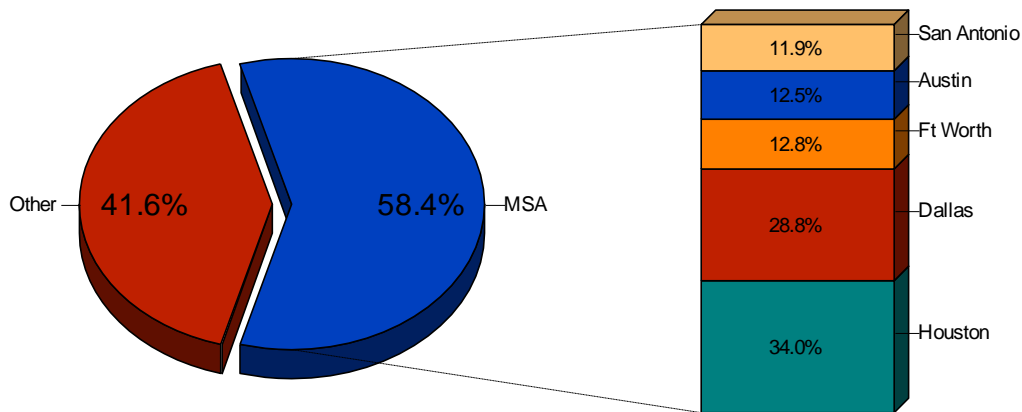
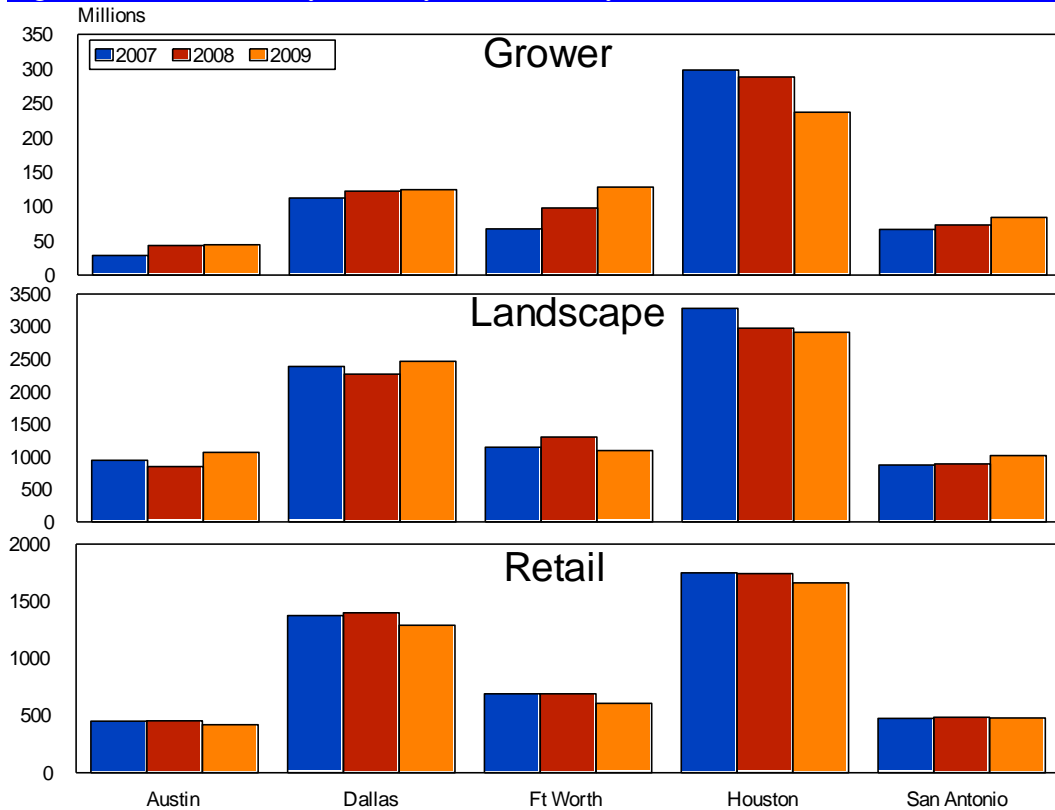


Figure 6. Green Industry Sales by Outlet and by MSA , 2008-2010



Economic Contributions of the Green Industry to the Texas Economy

The net sales data from the previous section was used to estimate total economic contributions of the Green Industry to the Texas Economy. To evaluate the economic impact contributions of the green industry to the Texas economy, economic models were developed using the Implan software system and associated Texas datasets (MIG, 2010). The Implan system includes more than 500 industries. Input-Output models represent the structure of a regional economy in terms of transactions, employees, households, and government institutions (Miller & Blair, 1985).

The economic multipliers derived from the Implan model were used to estimate the total economic activity generated in the state by sales (*output*) to final demand or exports. This includes the effects of intermediate purchases by green industry firms from other economic sectors (*indirect effects*) and the effects of green industry employee household consumer spending (*induced effects*), in addition to direct sales by industry firms. The wholesale and retail sectors use products from the production/manufacturing and horticultural services sectors; therefore, when calculating the impacts for the wholesale and retail trade horticulture products, output (retail sales) are reduced to reflect only the gross margin on sales to those sectors, otherwise we would be double counting the economic impact stemming from those products.

Total economic contributions of the Green Industry in Texas were estimated at \$16.9 billion in output; 192,565 jobs, and \$10.1 billion in value added as shown in Table 5. For the production and manufacturing sectors, including nursery and greenhouse, lawn and garden equipment manufacturing, and metal building manufacturers, total output impacts were \$3.2 billion; employment impacts were 26,786 jobs; and value added impacts were \$1.5 billion. For the horticultural services sectors, including landscaping services and landscape architecture services, total output impacts were \$7.3 billion; employment impacts were 85,356 jobs; and value added impacts were \$3.9 billion. For the wholesale and retail trade sectors, total output impacts were \$6.4 billion; employment impacts were 80,423 jobs; and value added impacts were \$4.7 billion. The largest economic impact contributions for individual sectors were landscaping services, nursery and greenhouse and lawn and garden stores.

Table 5. Economic Contributions of the Green Industry in Texas, 2010

	Output	Employment	Value
	(\$Mn)	(jobs)	Added (\$Mn)
Production & Manufacturing	3,248	26,786	1,525
Nursery & Greenhouse	2,080	22,057	1,094
Lawn & Garden Equipment Manufacturing	1,106	4,428	404
Prefabricated Metal Buildings ¹	62	301	28
Horticultural Services	7,290	85,356	3,901
Landscaping Services	6,895	82,315	3,659
Landscape Architecture Services	396	3,042	242
Wholesale & Retail Trade Horticulture Products²	6,405	80,423	4,663
Flower Nursery Stock & Florist Supplies Wholesalers	195	1,186	122
Lawn & Garden Equipment & Supplies Stores	3,170	34,507	2,343
Florists	1,169	22,405	845
Building Material & Supplies Dealers ¹	689	7,853	507
Food & Beverage Stores ¹	175	2,358	129
General Merchandise Stores ¹	757	10,594	559
Farm & Garden Equipment Wholesalers ¹	250	1,521	157
Total (All Sectors)	16,944	192,565	10,088

Figure 7. Green Industry Economic Contributions to the Texas Economy in 2010

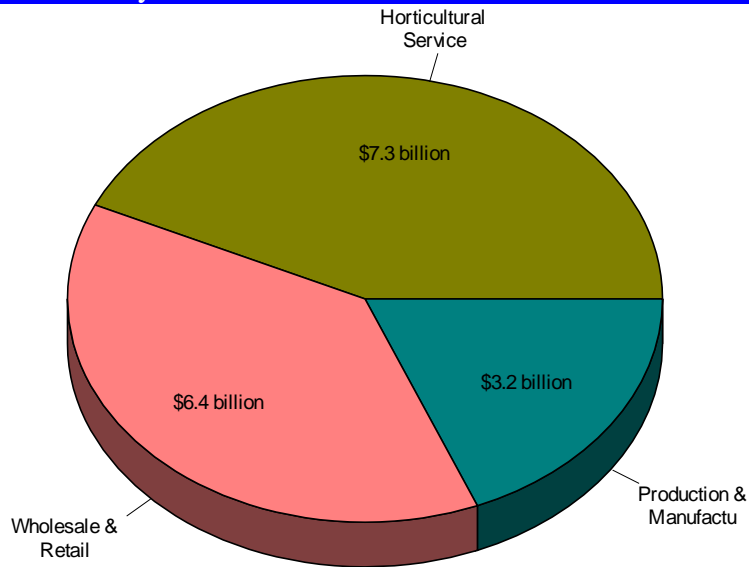


Figure 8. Number of Jobs Created by the Green Industry in Texas

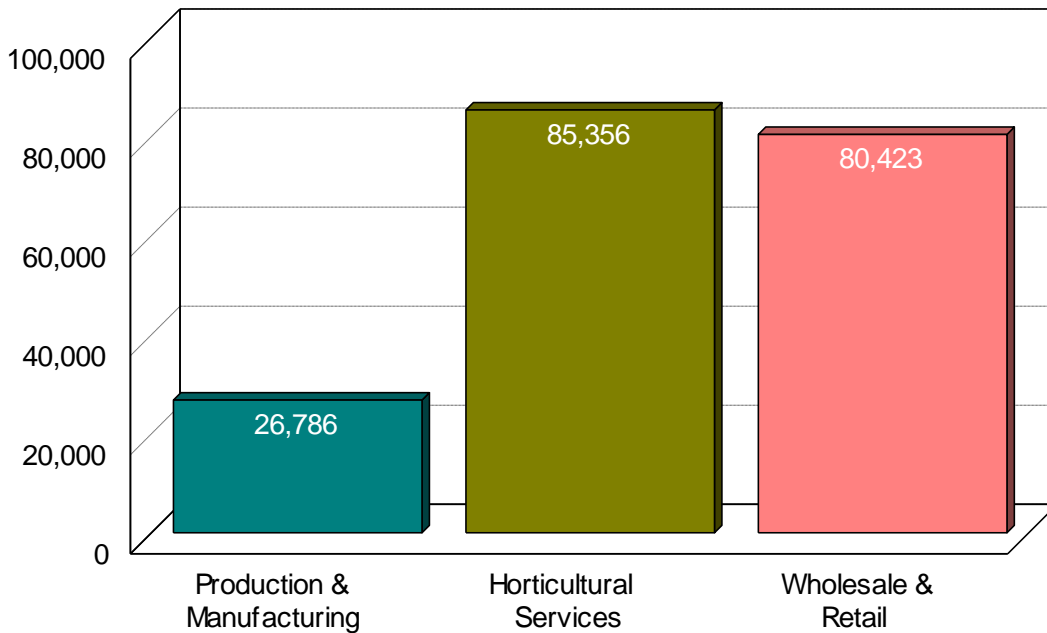


Figure: Number of Jobs Created by the Green Industry in Texas

Economic impact results are also reported by major metropolitan statistical area (MSA) as summarized in Table 6. The MSAs with the greatest economic impact contributions to the State's economy are Houston and Dallas.

Table 6. Economic Impact Contributions of the Green Industry in Texas by MSA

	Output	Employment	Value
	(\$Mn)	(jobs)	Added (\$Mn)
Austin	1,236	14,043	736
Dallas	2,852	32,415	1,698
Ft. Worth	1,267	14,401	754
Houston	3,366	38,259	2,004
San Antonio	1,178	13,386	701
Other	7,045	80,061	4,194
Total	16,944	192,565	10,088

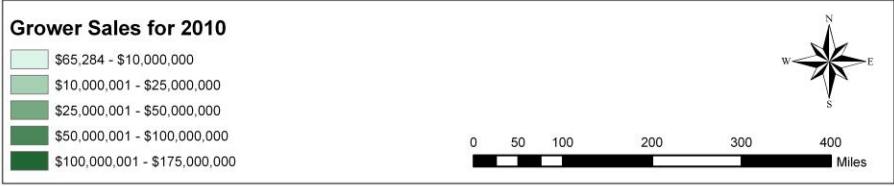
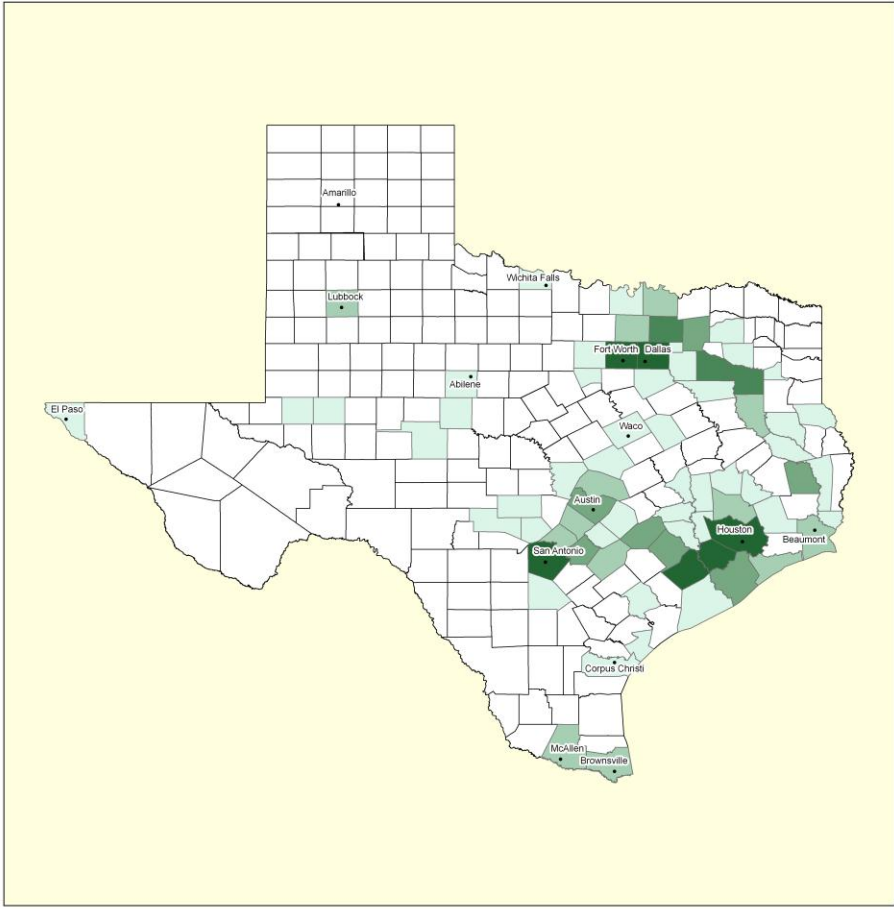
Measures of economic activity.

Sales or output is the dollar volume of a good or service produced or sold. **Final Demand** is sales to final consumers, including households, governments, and exports. **Intermediate sales** are sales to other industrial sectors. **Income** is the money earned within the region from production and sales. **Total income** includes personal income (wage and salary income, including income of sole proprietor's profits and rents). **Jobs or employment** is a measure of the number of jobs required to produce a given volume of sales/production, expressed as full time equivalents, or as the total number including part time and seasonal positions. **Value Added** is the sum of total income and indirect business taxes.

Appendix – Total Green Industry County Sales Estimates for 2010

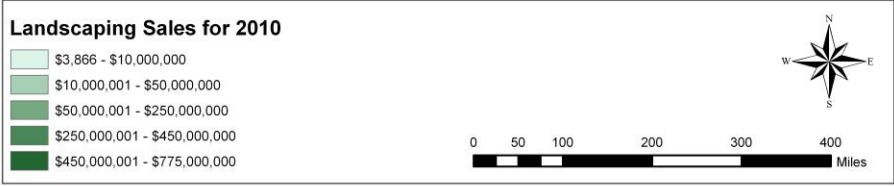
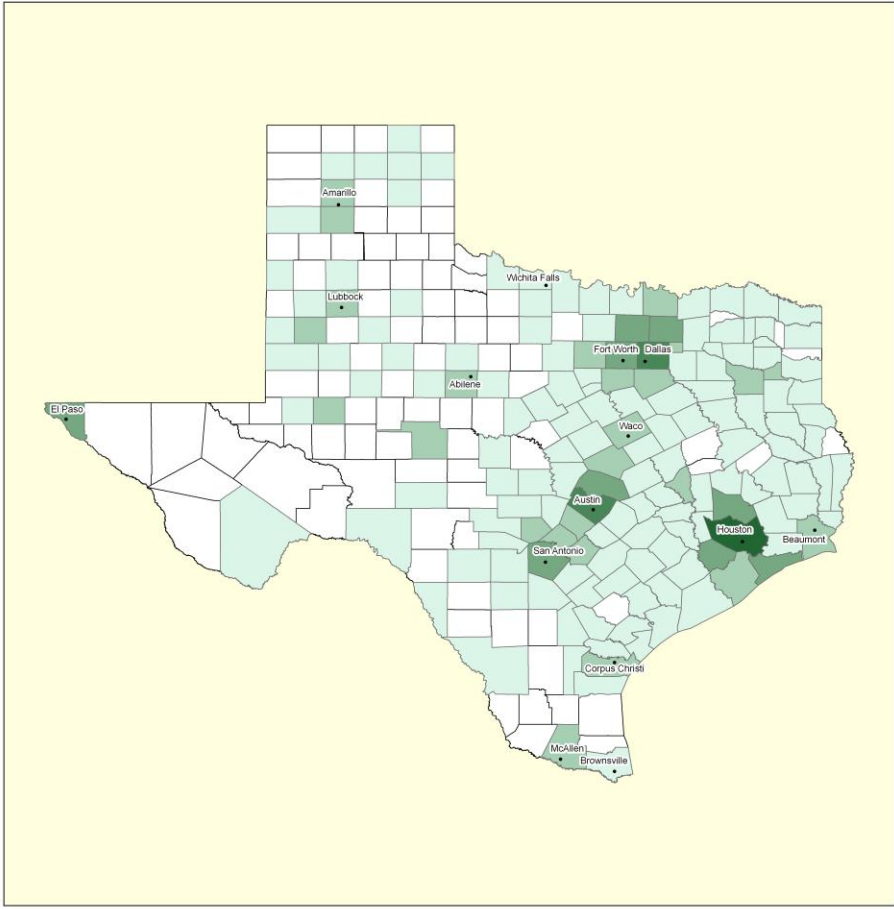
County	Sales	County	Sales	County	Sales	County	Sales	County	Sales
Anderson	33,840,291	Deaf Smith	139,158,753	Hutchinson	2,377,403	Navarro	26,885,226	Val Verde	6,954,312
Andrews	937,344	Delta	0	Irion	0	Newton	876,493	Van Zandt	108,108,318
Angelina	45,692,744	Denton	351,704,709	Jack	279,975	Nolan	33,113,714	Victoria	69,935,029
Aransas	12,311,262	De Witt	2,526,963	Jackson	16,057,883	Nueces	191,754,780	Walker	34,035,226
Archer	2,554,564	Dickens	3,866	Jasper	13,715,371	Ochiltree	586,671	Waller	62,223,663
Armstrong	0	Dimmit	980,348	Jeff Davis	34,583	Oldham	0	Ward	534,225
Atascosa	33,329,265	Donley	26,093	Jefferson	140,657,405	Orange	28,084,185	Washington	40,696,486
Austin	87,186,852	Duval	1,500,681	Jim Hogg	142,572	Palo Pinto	6,946,078	Webb	67,725,533
Bailey	6,835,454	Eastland	11,860,038	Jim Wells	11,163,386	Panola	9,616,532	Wharton	173,303,962
Bandera	2,993,947	Ector	57,506,440	Johnson	106,298,370	Parker	62,196,698	Wheeler	233,298
Bastrop	31,430,485	Edwards	0	Jones	235,452	Parmer	148,651	Wichita	70,007,066
Baylor	59,433	Ellis	54,329,760	Karnes	5,940,465	Pecos	1,904,485	Wilbarger	1,392,080
Bee	18,250,620	El Paso	188,573,242	Kaufman	44,916,460	Polk	16,604,935	Willacy	879,905
Bell	121,984,367	Erath	30,007,147	Kendall	36,646,658	Potter	69,011,999	Williamson	339,907,465
Bexar	866,878,043	Falls	2,472,427	Kenedy	0	Presidio	482,362	Wilson	19,533,550
Blanco	1,288,845	Fannin	8,275,736	Kent	0	Rains	3,501,263	Winkler	247,894
Borden	0	Fayette	63,166,036	Kerr	28,724,883	Randall	90,799,276	Wise	41,605,362
Bosque	3,586,367	Fisher	0	Kimble	348,284	Reagan	84,416	Wood	23,370,142
Bowie	113,189,282	Floyd	3,153,736	King	0	Real	136,414	Yoakum	1,509,783
Brazoria	160,907,882	Foard	0	Kinney	0	Red River	361,904	Young	6,800,892
Brazos	186,536,693	Fort Bend	367,268,607	Kleberg	4,810,687	Reeves	879,683	Zapata	664,199
Brewster	946,075	Franklin	3,458,046	Knox	7,988,308	Refugio	1,485,957	Zavala	169,155
Briscoe	0	Freestone	13,456,992	Lamar	57,178,820	Roberts	17,197		
Brooks	539,969	Frio	1,297,684	Lamb	1,015,712	Robertson	1,049,830		
Brown	14,496,813	Gaines	28,899,372	Lampasas	8,843,677	Rockwall	46,369,264		
Burleson	24,932,841	Galveston	147,276,988	La Salle	148,354	Runnels	11,265,580		
Burnet	20,291,709	Garza	134,278	Lavaca	6,670,768	Rusk	12,658,563		
Caldwell	5,645,691	Gillespie	19,766,385	Lee	6,711,233	Sabine	999,304		
Calhoun	18,846,481	Glasscock	0	Leon	1,706,785	San Augustine	346,063		
Callahan	1,632,514	Goliad	76,327	Liberty	48,762,221	San Jacinto	1,100,223		
Cameron	107,134,815	Gonzales	34,057,959	Limestone	19,517,471	San Patricio	90,243,521		
Camp	1,126,346	Gray	9,618,798	Lipscomb	70,772	San Saba	182,599		
Carson	74,420	Grayson	83,452,507	Live Oak	352,201	Schleicher	63,249		
Cass	4,438,966	Gregg	167,821,204	Llano	2,628,324	Scurry	1,945,307		
Castro	469,130	Grimes	11,737,771	Loving	0	Shackelford	92,752		
Chambers	52,644,948	Guadalupe	89,145,281	Lubbock	183,426,866	Shelby	17,167,511		
Cherokee	45,082,789	Hale	70,090,431	Lynn	769,247	Sherman	12,659		
Childress	962,525	Hall	9,871	Madison	1,203,693	Smith	254,676,409		
Clay	471,967	Hamilton	479,206	Marion	203,602	Somervell	738,941		
Cochran	16,892	Hansford	5,627,045	Martin	76,642	Starr	8,782,378		
Coke	84,252	Hardeman	102,748	Mason	449,802	Stephens	1,128,755		
Coleman	565,594	Hardin	11,439,467	Matagorda	21,883,828	Sterling	0		
Collin	697,491,629	Harris	2,063,303,831	Maverick	10,311,635	Stonewall	22,458		
Collingsworth	0	Harrison	66,012,067	McCulloch	10,993,999	Sutton	158,359		
Colorado	46,132,200	Hartley	0	McLennan	176,119,161	Swisher	17,972		
Comal	103,891,264	Haskell	103,821	McMullen	0	Tarrant	989,941,455		
Comanche	7,003,950	Hays	83,187,888	Medina	12,700,489	Taylor	86,045,275		
Concho	0	Hemphill	66,710	Menard	9,960	Terrell	0		
Cooke	19,198,826	Henderson	39,888,131	Midland	87,866,495	Terry	33,091,125		
Coryell	14,610,556	Hidalgo	246,914,272	Milam	2,662,255	Throckmorton	0		
Cottle	0	Hill	21,470,028	Mills	10,869,505	Titus	11,367,822		
Crane	35,255	Hockley	12,909,779	Mitchell	232,042	Tom Green	94,493,618		
Crockett	40,330	Hood	23,492,945	Montague	4,542,359	Travis	726,182,826		
Crosby	481,968	Hopkins	25,216,538	Montgomery	291,727,877	Trinity	1,019,493		
Culberson	46,667	Houston	18,101,218	Moore	76,279,960	Tyler	53,742,302		
Dallam	267,167	Howard	13,403,448	Morris	2,001,331	Upshur	8,797,057		
Dallas	1,488,329,691	Hudspeth	44,292	Motley	0	Upton	25,834		
Dawson	1,221,491	Hunt	71,028,141	Nacogdoches	36,265,836	Uvalde	5,244,345		

Grower Sales



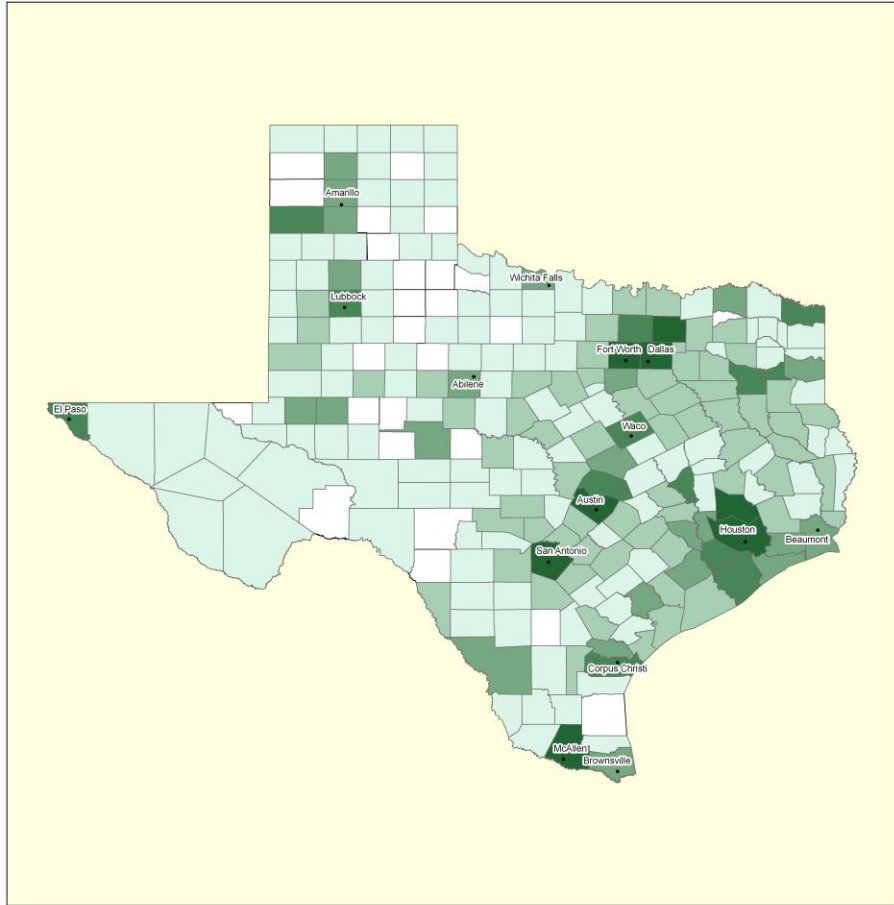
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Landscaping Sales

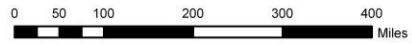
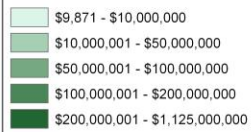


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Retail Sales

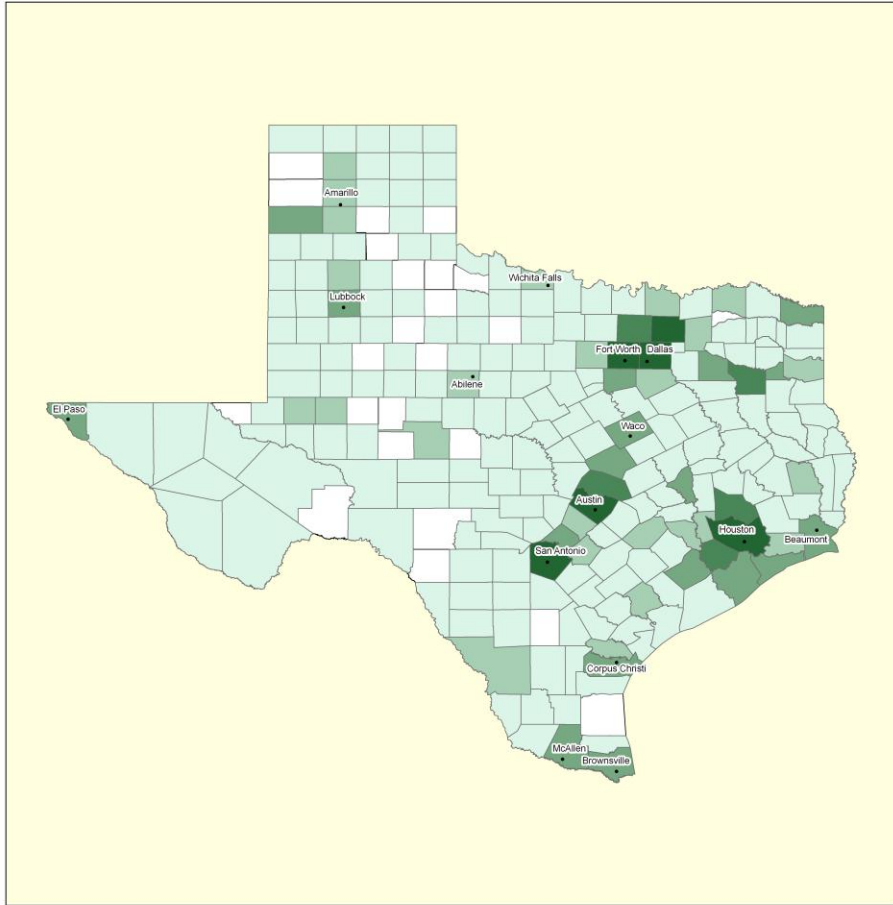


Retail Sales for 2010

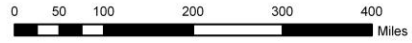
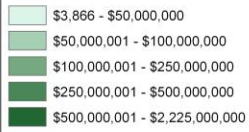


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Total Sales



Total Sales for 2010



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