

Prepared for:

**Connecticut
Resources Recovery
Authority**

**The Economic Impact on Connecticut from
Recycling Activity**

Prepared by:



November 2012

Table of Contents

Table of Contents ii

Table of Figures: ii

 Recycling Contributes to Connecticut’s Economy 1

 2012 Economic Impact Analysis – Including All Appropriate Economic Activity 2

 Multipliers of Connecticut’s Recycling Activity 4

 Components of Recycling Activities 5

 Connecticut’s Recycling Activity 2006-2012..... 6

 Distribution of Impacts by Industry 11

 Contributions from the Connecticut Resources Recovery Authority 13

 Summary 15

 Appendix A: Modeling the Economic Impacts of Recycling in Connecticut 16

 Appendix B: IMPLAN Industry Structure for Connecticut..... 19

Table of Figures:

Figure 1: Direct and Total Impacts on Jobs in Connecticut by Type of Recycling Activity, 2012..... 2

Figure 2: Impacts from Connecticut’s Recycling Activity 2012 4

Figure 3: Direct Recycling Employment by Type and Indirect and Induced Impacts from All Sources in Connecticut Activity in Connecticut, 2012 5

Figure 4: Output and Employment Impacts of Recycling Activity in Connecticut, 2006-2012 7

Figure 5: Total Impact on Output from Recycling by Type of Activity, 2006-2012 8

Figure 6: Total Economic Impacts on Connecticut’s Output from Recycling Activity, 2006-2012..... 10

Figure 7: Employment from the Indirect and Induced Impacts from the Economic Activity Associated with Connecticut’s Recycling Industry 12

Figure 8: Indirect and Induced Impacts on Output from the Activity of the Recycling Industry in Connecticut, 2006-2012..... 13

Figure 9: Total Economic Impact on Connecticut’s Output from CRRA Recycling Activities, 2006-2012 14

Figure 10: Total Economic Impact on Connecticut’s Jobs from CRRA’s Recycling Activities, 2006-2012 15

Figure A-1: Estimates of Economic Impacts on Output from Recycling Activity in the State of Connecticut, 2006-2012..... 18

Figure A-2: Estimates of the Economic Impacts on Employment from Recycling Activity in the State of Connecticut, 2006-2012..... 18

Figure A-3: Estimates of the Economic Impacts on Value Added from Recycling Activity in the State of Connecticut, 2006-2012..... 19

Figure A-4: Estimates of the Economic Impacts on Labor Income from Recycling Activity in the State of Connecticut, 2006-2012.....	19
Appendix B: IMPLAN Industry Structure for Connecticut.....	20
Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010.....	21
Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added: Employee Compensation, Proprietors’ Income, Indirect Business Taxes, and Other Property Type Income, 2010.....	28
Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added: Employee Compensation, Proprietors’ Income, Indirect Business Taxes, and Other Property Type Income, 2010 (continued)	29
Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added: Employee Compensation, Proprietors’ Income, Indirect Business Taxes, and Other Property Type Income, 2010 (continued)	32
Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added: Employee Compensation, Proprietors’ Income, Indirect Business Taxes, and Other Property Type Income, 2010 (continued)	33
Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added: Employee Compensation, Proprietors’ Income, Indirect Business Taxes, and Other Property Type Income, 2010 (continued)	34

This analysis was conducted by the [Connecticut Economic Resource Center, Inc. \(CERC\)](#) at the request of the [Connecticut Resources Recovery Authority](#) under the guidance of Paul Nonnenmacher, CRRA director of public affairs. The Research Department at CERC is directed by Alissa DeJonge. The analysis for this report was managed by Dale Shannon. Data on collecting and hauling of recycling materials was provided by [DSM Environmental](#).

Recycling Contributes to Connecticut's Economy

Although we know recycling is good for the environment, most of the time we do not recognize its connections to the economy and the value it provides to our local economy. In Connecticut's economy in 2012, recycling activity from businesses and households is estimated to generate over \$746 million in sales and to create 4,860 jobs once all effects are accounted for. In value added measure of the increase in the wealth in an economy over a given period of time — the total impact from recycling in Connecticut is estimated to be \$469 million. This includes:

- Labor income of \$275 million;
- Indirect business taxes of \$59 million; and
- Other profit-type income (dividends, interest, rents and profits) of \$134 million.

These measures of the total impact from the recycling industry in Connecticut start when recyclables are collected from businesses, households and at transfer stations, transported to materials recovery facilities (MRFs) for processing and then shipped to companies who purchase the recycled materials for use as inputs for production. Thus, the recycling activity that starts at our homes and businesses connects in many ways directly with local markets and with broader national or even international markets bringing value into the state from beyond its borders. Although export dollars are important this analysis focuses on the connections recycling activity has locally and state-wide.

Local employees are hired by municipal governments and private contractors to collect and transport recycled goods and to maintain vehicles. Additional workers hired by the MRFs assist in processing the materials and various administrative duties. In addition, the MRFs make purchases of office supplies, computers and services) and significant capital investments. Overall, the total direct local activity associated with recycling in Connecticut is estimated to account for approximately 2,780 jobs that span many different industries, occupations and skill levels. Figure 1 shows the distribution by type of recycling activity for the 2,785 jobs that are directly associated with recycling and the 4,884 total jobs from the direct activity and all the secondary activity that is required and associated with those direct jobs.

Figure 1: Direct and Total Impacts on Jobs in Connecticut by Type of Recycling Activity, 2012

	Direct Impacts	Total Impacts
Connecticut Statewide recycling impact	2,785	4,884
All Materials Recovery Facilities Activity	1,320	2,381
Materials Recovery Facilities	252	396
Collecting and Hauling	1,068	1,985
Recyclable Materials Wholesale Activity	1,465	2,502

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, IMPLAN, CERC, Inc

When measured in jobs, nearly half (1,320) of all recycling activity in Connecticut is associated with what the public thinks of as core recycling activities. A slightly larger share of the employment directly associated with recycling (53 percent, or 1,465 jobs) is accounted for in the recyclable materials wholesale activity. These are private companies that purchase materials (mostly metals, plastics and glass) collected from households and businesses, aggregate the materials and then sell them for further production.

This analysis was conducted to provide a measure of the economic impacts associated with Connecticut's recycling activity under the direction of the Connecticut Resources Recovery Authority (CRRA). This report includes a comprehensive review of recycling activity in Connecticut for 2012, and an extension of the one-year assessment that looks at state-wide recycling activity from 2006 through 2012. The final section of this report focuses on the unique contributions made to the state by CRRA. Through the knowledge gained by overseeing the state's recycling activities associated with its Hartford materials recycling facility CRRA provides insight and vision that encourages economically efficient recycling and informs state policy. CRRA also provides an experiential and educational component of recycling in Connecticut through the CRRA Trash Museum.

2012 Economic Impact Analysis — Including All Appropriate Economic Activity

Just as the activity associated with recycling materials starts at our homes and businesses and then moves out to a large stream as more people and services become involved, the overall economic activity also ripples throughout Connecticut's economy. This concept, the rippling out of economic activity, suggests the necessity to account for the involvement of supporting

industries within and outside of the state whose goods and services are required to provide for efficient operations within the recycling process.

The supporting activity within the state provides wages for workers that allows for expenditures by households within Connecticut. It is this additional economic activity rippling out into Connecticut's economy that explains the difference of \$330 million in sales and nearly 2,100 jobs between the direct recycling activity observed and the total impact on the state's economy from that activity.

For this report, this secondary activity has been estimated using the IMPLAN economic impact model¹ that accounts for these impacts with two distinct effects. The first effect described above, the purchases of goods and services necessary to provide the level of output specified by the direct activity, is called the indirect impact. The IMPLAN model estimates the value of these purchases from 440 different industries. Since it is only the share of the purchases that are made from companies within the state the model estimates the share of the total purchases that are local. This share is called the regional purchase coefficient and is dependent on the industry profile for the specific region that is being modeled as well as for each industry. This first effect is called the indirect impact and the model estimates that the \$440 million in sales that are directly associated with the recycling impact in 2012 would require an indirect impact of \$115 million in sales from other companies within Connecticut as shown in Figure 2.

The model estimates the indirect impacts from recycling to add 774 Connecticut jobs and \$79 million in value added for 2012 and including \$51 million in total labor income².

¹ The input/output model used for this analysis was the IMPLAN model v3. The IMPLAN model is based on a comprehensive economic geography methodology that results in the model being fully regionally aware. This regional awareness means that the size of the economy for the State of Connecticut and the industry mix within the state are used in calculating the impacts. For all the analysis reviewed in this report the 2010 State of Connecticut data from IMPLAN was used. The deflators used to estimate all dollar values in 2012 data were from IMPLAN.

² Labor income is personal income that includes employee compensation and proprietors' income. Employee compensation includes benefits.

Figure 2: Impacts from Connecticut’s Recycling Activity 2012

Economic Measure	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Total Output (Millions 2012 \$)	\$440	\$115	\$190	\$746
Total Employment	2,785	774	1,325	4,884
Total Value Added (Millions 2012 \$)	\$263	\$79	\$127	\$469
Total Labor Income (Millions 2012 \$)	\$153	\$51	\$71	\$275
Total Indirect Business Taxes (Millions 2012 \$)	\$43	\$5	\$12	\$59

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN

The other secondary effect estimated by the IMPLAN model and shown in Figure 2, the induced impact, is the effect on the economy from the change in consumer expenditures within the state. These expenditures are based on the increase in labor income (personal income) that derives from the direct recycling activity specified and indirect impacts that have been estimated by the model. These expenditures are based on the induced impacts associated with recycling activity across the state of Connecticut and are estimated to be \$190 million in sales, 1,325 jobs and total value added of \$127 million in 2012, as noted in Figure 2. The direct effects from the recycling activities specified in this analysis account for 59 percent of the total impact on output (\$440 million/\$746 million), 57 percent of the total impact on employment (2,785 jobs/4,884 jobs) and 56 percent of the total value added (\$263 million/\$469 million).

Multipliers of Connecticut’s Recycling Activity

Another way to examine the impact of an industry on the economy is to look at the impact an additional \$1 or additional job has on the economy. The result is what is called an economic impact multiplier that is unique for each type of economic activity and in every geographic region. A multiplier is distinct since it takes into account the local inputs required for each specified industry. These local inputs are dependent on the availability of the inputs within the specified region. The economic input-output model used for this analysis has 440 distinct industries and was built on the specific profile of these industries for the state of Connecticut. Although there were six distinct recycling associated activities specified for the state level analysis, overall one summary multiplier can be observed for each economic measure. For 2012 these multipliers were:

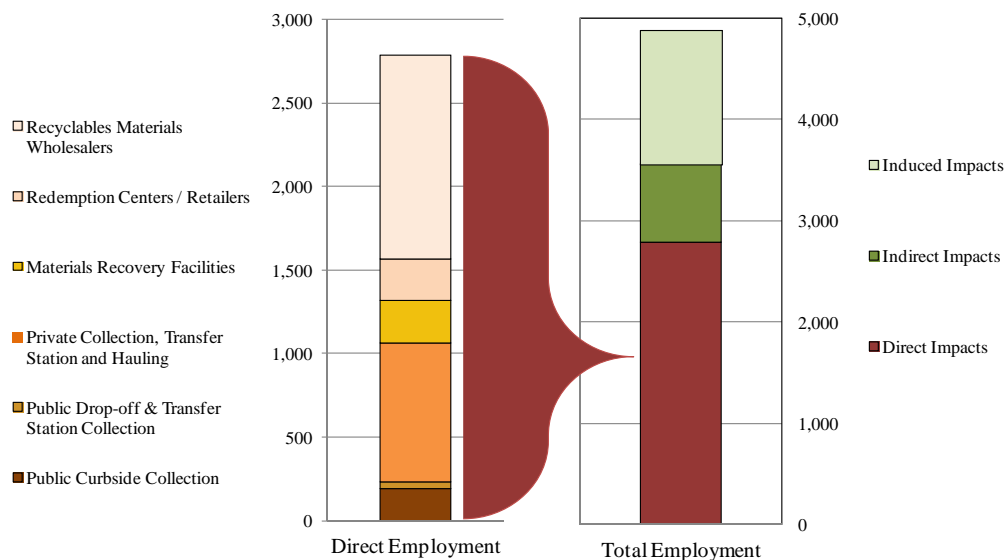
- 1.69 for output;
- 1.75 for employment; and
- 1.78 for value added.

Thus, during 2012, for each 100 jobs in recycling related activities in Connecticut, it is estimated that there is a total of 175 jobs in the state; and for each \$1 million in output (sales and inventory change) from recycling related activities, there is a total increase in output across the state of \$1.69 million.

Components of Recycling Activities

The six distinct direct impacts specified in this analysis for recycling in the State of Connecticut are graphically shown for the employment levels on the left half of Figure 3. In 2012 these six component impacts totaled 2,785 jobs. The indirect and induced impacts that result from these direct jobs are visually presented along with the direct jobs in the right half of Figure 3.

Figure 3: Direct Recycling Employment by Type and Indirect and Induced Impacts from All Sources in Connecticut Activity in Connecticut, 2012



Source: U.S. Census Bureau-County Business Patterns, DSM Environmental, IMPLAN, CERC Estimates

The order of the activities shown in the right half of Figure 3 starts with the three activities that are associated with collecting and aggregating recycling materials from households. Government managed services such as curbside collection and public drop-off and transfer stations are estimated to account for about 135 jobs in 2012. Curbside collections, transfer stations, and

hauling of recyclable materials by private contractors are estimated to account for slightly more than 830 jobs. These jobs are all focused on bring recycled materials to MRFs which are estimated to employ slightly more than 250 workers in 2012. Redemption centers and the work associated with maintaining facilities at retail centers associated primarily with returns of beverage bottles and cans covered by the state's container-deposit law are estimated to account for nearly 250 jobs in 2012.

Finally, there were estimated to be slightly more than 1,210 jobs in the recyclables materials wholesalers industry in 2012. Two of these estimates, MRFs (NAICS³ industry 56292) and Recyclables Materials Wholesalers (NAICS industry 42393), are developed from U.S. Census Bureau's County Business Patterns (CBP) data. The CBP has estimates for these industries in Connecticut through 2010. The 2012 estimates are forecasted based on a conservative approach that includes the observed growth from 2010 to 2011 for the larger industry group's data from the Connecticut Department of Labor. The estimates for all collections and hauling are extrapolated from 2010 estimates provided by DSM Environmental⁴.

Connecticut's Recycling Activity 2006-2012

To provide a broader overview of Connecticut's recycling activity in recent years this impact analysis explores the economic impact of the recycling industry at the state level and also the impacts associated with the Connecticut Resources Recovery Authority (CRRA). For both of these impacts the specific activities for each year from 2006 through 2012 were analyzed independently. Over those years the total impact on output is estimated to be nearly \$5.2 billion⁵ as shown in Figure 4 while the average employment impact from recycling activities is estimated to average nearly 4,800 a year.

³NAICS stands for the North American Industry Classification System which is used by businesses and governments to classify business establishments according to the type of economic activity or production they engage in.

⁴ DSM Environmental, an internationally recognized consulting firm with experience in all aspects of resource recovery and solid waste management. DSM Environmental has done considerable work in Connecticut and is currently engaged by the Governor's Working Group on Modernizing Recycling.

⁵ Throughout this analysis all dollars have been inflation adjusted to 2012.

Figure 4: Output and Employment Impacts of Recycling Activity in Connecticut, 2006-2012

	Total Output (Millions 2012 \$)	Employment (average 2006-2012)
Direct Impacts	\$3,045	2,710
Indirect Impacts	\$791	755
Induced Impacts	\$1,332	1,325
Total Impacts	\$5,168	4,790
Multiplier	1.70	1.77

Source: U.S. Census Bureau's County Business Patterns
DSM Environmental, CERC, and IMPLAN 2010

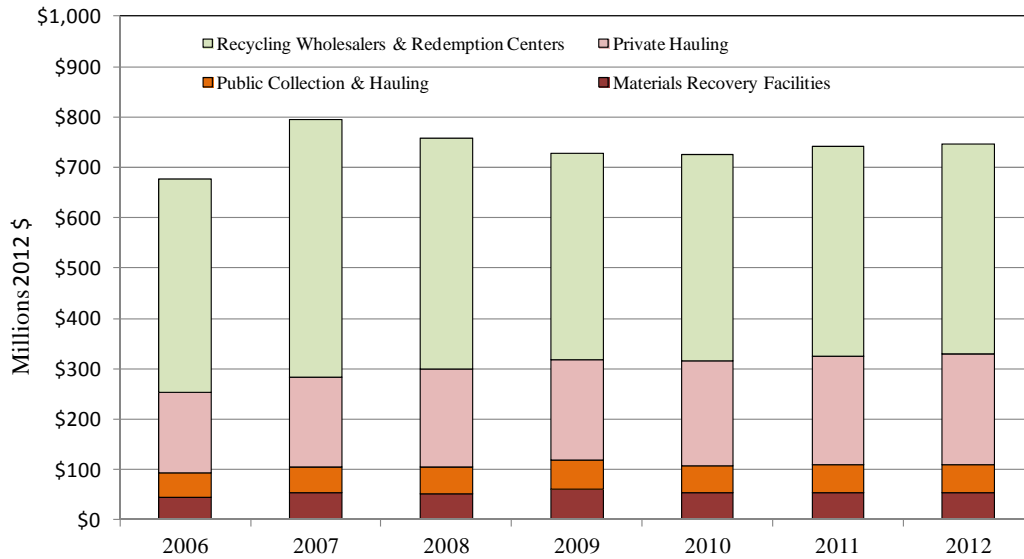
The impact multiplier for output over those years was estimated to be 1.70 while the impact multiplier for employment was 1.77. This means for every \$100 in output (sales and changes in inventories) of recycling activity in Connecticut an additional \$70 in output occurs.

Figure 4 provides an aggregate of the recycling activity in Connecticut over seven years as specified in the six different activities that comprise the direct effects observed above for 2012:

1. Public curbside collection;
2. Public drop-off and transfer station collection;
3. Private collection, transfer stations, and hauling;
4. Materials recovery facilities;
5. Redemption centers and retail collection sites; and
6. Recyclables material wholesalers.

The state-wide approach for each year from 2006 through 2012 follows the same methodology presented above for 2012. Figure 5 presents the total of the direct, indirect and induced impacts associated with recycling by the type of activity on output from 2006 through 2012. The six distinct activities that comprise the direct activities discussed above are aggregated into the four shown in Figure 5 with both public services (Collections and Transfer Station activity) included in Public Collections Hauling, all private collection, transfer and hauling activity are included in private hauling and the wholesaler activity includes redemption and retail bottle-bill activity.

Figure 5: Total Impact on Output from Recycling by Type of Activity, 2006-2012



Source: U.S. Census Bureau-County Business Patterns, DSM Environmental, IMPLAN, CERC Estimates

In studying Figure 5 it is important to recognize that it presents a simplified graphic of a larger number of activities that work together to fill in a rather complex market within the state of Connecticut. While there are still pieces of the recycling market such as composting of food and other organics that can be filled in, and additional expansions in recycling in many of the areas already present, the various pieces of the state’s recycling puzzle are put together in economically sound ways.

Where the market supports recycling, private independent wholesalers collect and re-sell materials in the international market. These recycled materials become resource inputs for industries and because they use less energy decrease manufacturing’s carbon footprint of manufacturing and put downward pressure on the prices of natural resources. All this, in turn, decreases prices to consumers.

On average, over the years, the wholesale recyclable materials industry in Connecticut account for about 60 percent of the total impact and because companies involved in this industry operate in a competitive market and sell most of their output outside of the state the market requires them to remain competitive and focus on efficient production. Over the seven years the total sales made by wholesale recyclable materials industry in Connecticut are estimated to be \$1.89 billion while the total impact from this activity is estimated to be more than \$3.04 billion in output.

A second focus the recycling market is on the MRFs. It is within this industry that CRRA operates and accounts for between 30 and 40 percent of the state's total industry employment. Although MRFs engage in recycling activities that extend beyond recycling materials from households (including governments, schools and some businesses) much of CRRA's activity is associated with providing opportunities for households to recycle. As noted in Figure 3 the direct activity of the state's MRFs accounts for a relatively small share (only around seven percent) of the total state recycling activity. Yet this seven percent still accounts for more than \$53 million in sales (385 jobs) in the state per year. Over the seven years the total sales associated with the impact on Connecticut's economy from MRF activity is estimated to be more than \$370 million.

The collecting and hauling of recycled materials from generators (households, governments, schools and businesses) directly requires an estimated 969 jobs (yearly average for 2006-2012). This activity creates a total impact on the state's economy that accounts for slightly more than 1,803 jobs each year. Figure 5 shows this activity, which includes both the municipally-run and private contractors that collect recyclables from households, accounts for an average of 33 percent of the total statewide impact on recycling when measured in output.

As noted previously, the direct effects on collections and hauling that drive this aspect of the overall recycling activity were provided by DSM Environmental, which has worked on recycling and waste management in the state for a number of years and was able to use detailed recycling data from the State Department of Energy & Environmental Protection as well as data from recent surveys in developing these estimates. Within the recyclable hauling activity, government contractors are estimated to account for around 18 percent of the total impact on output from hauling activity from 2006 through 2012 while private haulers account for the remaining 82 percent.

In total dollars the output associated with hauling impact in the state increased from about \$208 million in 2006 to slightly more than \$260 million in 2010 due to the advent of single-stream recycling in 2008. As shown in Figure 6, the growth in collecting and hauling is estimated to increase by nearly \$13 million from 2010 due to the continual increase in use of single-stream activity and an increase observed in employment in the hauling industry.

Figure 6: Total Economic Impacts on Connecticut’s Output from Recycling Activity, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	7 Year Average	7 Year Total
Connecticut Statewide recycling impact	\$676	\$795	\$758	\$728	\$725	\$741	\$746	\$738	\$5,168.3
All Materials Recovery Facilities Activity	\$253	\$284	\$300	\$318	\$315	\$325	\$329	\$303	\$2,123.1
Materials Recovery Facilities	\$45	\$53	\$52	\$61	\$53	\$54	\$55	\$53	\$373.4
Collecting and Hauling	\$208	\$231	\$248	\$257	\$261	\$270	\$274	\$250	\$1,749.6
Recyclable Materials Wholesale Activity	\$423	\$511	\$458	\$410	\$411	\$416	\$417	\$435	\$3,045.2

Source: U.S. Census Bureau’s County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN,

While the total impacts are substantial, they are conservative estimates of the overall impact of all aspects of recycling activities in Connecticut. This conservative nature is a result of the complex market structure of recycling in Connecticut which results in some dimensions associated with recycling not being classified in recycling or easily associated with that activity. Among these factors include efficiencies associated with some of the aspects of recycling which are not quantifiable but reduce costs; the economies associated with various reduced and avoided waste-disposal requirements; and the economic value residents attach to having less land taken up with landfills or other waste-disposal facilities.

In addition to these complex and often intangible factors associated with recycling that undoubtedly have a positive impact on Connecticut’s economy, one additional factor that significantly contributes to the conservative nature of this analysis is that composting activity is not included for this analysis. Composting activity was not included because it is undergoing some significant change and can be extremely variable depending on environmental conditions. For example, the two storms in 2012 created a significant number of activities associated with collecting, hauling and composting of storm debris such as trees and leaves. These jobs were not annual jobs that occur every year and it would not be correct to include them in an average.

However, in 2010, a year without significant storm activity in the state, a comprehensive estimate of total recycling jobs that included composting was estimated to examine the full impact of all recycling activities for that year. The total impact on jobs from all recycling activity including composting for that year was estimated to be 5,122. This was 396 more jobs than estimated without including the composting and thus an affirmation of the conservative methodological approach in this analysis. This increase is due to the 257 composting jobs as estimated by DSM Environmental. These jobs in turn created 139 additional jobs due to the

indirect and induced effects. The total impact on labor income (employee compensation and proprietors' income) estimated in 2010 from all activity including the 257 composting jobs exceeded \$284 million with a total value added of \$490 million (in 2012 dollars).

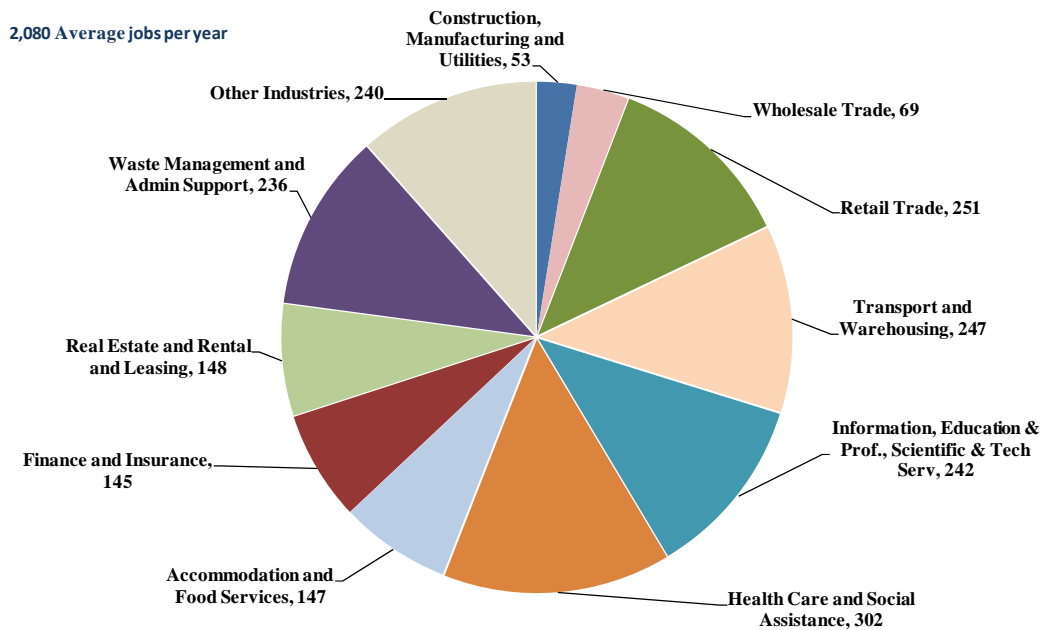
Distribution of Impacts by Industry

The recycling industry's economic impacts reach into all other industry sectors within the state. This activity provides economic activity across the state to companies in a diverse set of industries and can be measured in output (total sales and the net change in inventory), employment and value added. Value added is a measure that includes employee compensation, proprietors' incomes, indirect business taxes, profits and other property-type income.

Figure 7 shows the average number of Connecticut jobs necessary to provide for the recycling activity in the state from each of the major industry sectors. These jobs are for either the production that contributes to the recycling industry or created due to the consumer expenditures of labor income that is associated with recycling. The annual average of total number of jobs associated with the secondary impacts (the indirect and induced impacts) of the recycling industry in Connecticut was 2,080. Some of the industries with the most indirect jobs include

- Transportation and Warehousing;
- Professional, Scientific and Technical Services; and
- Information.

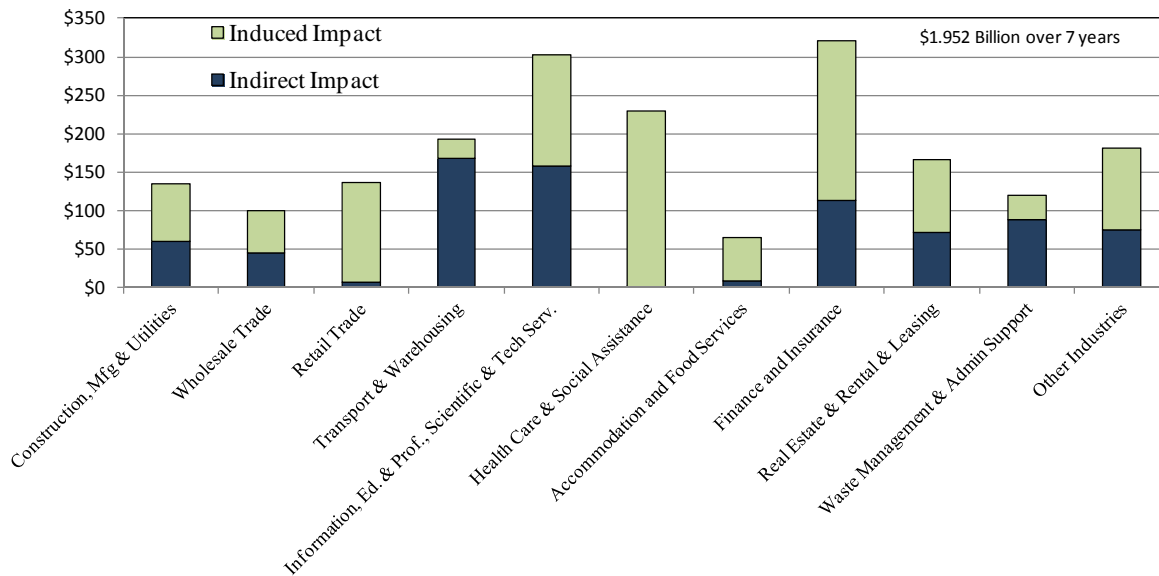
Figure 7: Employment from the Indirect and Induced Impacts from the Economic Activity Associated with Connecticut’s Recycling Industry



Source: U.S. Census Bureau-County Business Patterns, DSM Environmental, IMPLAN, CERC Estimates

As is commonly observed, the industries with the highest numbers of jobs from induced impacts include Retail Trade and Accommodations and Food Services. Figure 7 shows the total over seven years of both secondary (indirect and induced) impacts as measured by the total value of sales by industry sector within Connecticut that were associated with the economic activities of Connecticut’s recycling industries. The deep-blue sections of the bars used in the graph shown in Figure 8 represent each industry’s part of the \$791 million of output in indirect impacts as shown earlier in Figure 3. The light-green sections of the bars shows that industrial sector’s total of the \$1,332 million (Induced impacts, also in Figure 3) estimated by the model to be the increase in total sales in Connecticut due to the impact of the increase of personal income from economic activities associated with recycling over seven years.

Figure 8: Indirect and Induced Impacts on Output from the Activity of the Recycling Industry in Connecticut, 2006-2012



Source: U.S. Census Bureau-County Business Patterns, DSM Environmental, IMPLAN, CERC Estimates

Contributions from the Connecticut Resources Recovery Authority

The Connecticut Resources Recovery Authority (CRRA) provides a number of benefits for the State of Connecticut above and beyond those provided by other MRFs in the state. Its mandate is to work for and in the best interest of the municipalities of Connecticut to find best practices for managing their solid waste. Since its founding in 1973 CRRA has fostered the evolution of the state’s solid-waste management system, replacing town dumps with single-stream recycling and trash-to-energy facilities. One of CRRA’s innovative undertakings has been the development of recycling educational programs and, specifically, the CRRA Trash Museum in Hartford. CRRA also contracts and oversees the MRF in Hartford which has served as many as 82 municipalities. Overseeing this system allows it to gain valuable information on best practices and efficient methods for handling materials recovery.

The total impact from 2006 through 2012 from CRRA was:

- \$883 million in total output;
- 861 jobs per year; and
- \$529 million in total value added

- which includes labor income of \$362 million.

The inputs for this analysis include CRRA’s marketing activities, its operation of the CRRA Trash Museum, its capital investments and the daily operating employment of its contractor at the Hartford MRF. For this analysis CRRA provided costs and expenditures associated with its operations and those of the contractor that operates the Hartford facility from 2006 through 2012. Hauling activities were based on the estimates provided by DSM Environmental and shared out to CRRA based on its share of total industry employment. Although recycled tonnage would have been a better estimator of CRRA’s hauling share, state totals to compare to CRRA’s tonnages were not readily available at the time of this report. These impacts are more detailed than those used to generate the state-impact estimates and do not include Recycling Wholesale activity because CRRA is not involved in or classified in that industry. However, the impacts associated with CRRA do provide parallel estimates to the statewide examination previously presented for MRFs and collecting and hauling.

Figure 9 presents the impacts on Connecticut’s output that result from CRRA’s recycling and educational activity from 2006 through 2012.

Figure 9: Total Economic Impact on Connecticut’s Output from CRRA Recycling Activities, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	7 Year Average	7 Year Total
CRRA Recycling Total Impact	\$96	\$85	\$110	\$121	\$129	\$154	\$137	\$119	\$833
CRRA Admin & Education	\$3	\$4	\$4	\$4	\$3	\$3	\$3	\$3	\$24
Education	\$1	\$1	\$1	\$2	\$1	\$1	\$1	\$1	\$7
Hartford MRF	\$27	\$14	\$18	\$20	\$22	\$39	\$23	\$23	\$163
Collecting and Hauling	\$66	\$67	\$87	\$97	\$104	\$113	\$112	\$92	\$646

Source: CRRA, DSM Environmental, CERC, Inc., IMPLAN

The largest output impact associated with CRRA’s recycling activities is the collecting and hauling component which was estimated to account for nearly \$646 million, or 77 percent of the entire economic impact. This includes the Connecticut-wide sales of the inputs required for collecting and hauling as well as the expenditures from the income associated with this activity.

The total impact on employment in Connecticut associated with CRRA’s recycling activities includes an average of 653 jobs each year in collecting and hauling and 179 jobs from the activity of the contractor at the Hartford MRF.

Figure 10: Total Economic Impact on Connecticut’s Jobs from CRRA’s Recycling Activities, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	Average Jobs per Year
CRRA Recycling Total Impact	672	600	804	841	950	1,145	1,014	861
CRRA Admin & Education	27	34	38	36	30	23	21	30
Education	9	9	13	14	5	5	6	9
Hartford MRF	188	108	143	157	168	301	181	178
Collecting and Hauling	457	458	623	648	752	820	812	653

Source: CRRA, DSM Environmental, CERC, Inc., IMPLAN

Summary

In summary, this analysis, which is admittedly conservative in its approach to estimating the total impact in Connecticut due to recycling, observes that the recycling industry in Connecticut directly contributes \$435 million in sales and provides more than 2,710 jobs in the state’s economy. As this activity ripples through the state and across all industries due to purchases of goods and services to support all aspects of recycling and then as workers who spend their incomes across the state, this activity grows so that on average between 2006 and 2012 it accounts for more than \$738 million in total sales and 4,790 jobs per year. In addition to these significant economic impacts, the comprehensive structure of this activity takes full advantage of free-market structures where possible and provides for efficiently managed recycling solutions for households and other institutions in situations where the function of the market is weakest.

The largest and most active component of recycling activity for households in Connecticut, CRRA contributes nearly \$120 million in output on a yearly average once the collecting, hauling, handling, and educational activities of the Authority are taken into account.

Finally, as noted in at the start of this report, some of the best values associated with Connecticut’s recycling activities — smaller and fewer landfills, more open space, and allowing the state’s residents to appropriately dispose of their waste — are benefits from recycling that are not quantifiable but positively enhance the well-being of the state’s residents.

Appendix A: Modeling the Economic Impacts of Recycling in Connecticut

The above assessment of the economic activity across the State of Connecticut from the impact of recycling activity is based on a comprehensive economic impact analysis developed by the Connecticut Economic Resource Center, Inc. (CERC), at the request of CRRA. The data for this analysis have been compiled from the following sources:

- Public data from the 2007 economic census and the U.S. Census Bureau's County Business Patterns 2006 through 2010.
- Public data from the State of Connecticut's Department of Labor employment estimates for 2011 employment estimates for 2011 were used to forecast 2011 estimates based on the trends observed in the U.S. Census Bureau's County Business Patterns data.
- 2012 estimates conservatively estimated off observed historical trends and most recent 2012 estimates (employment and recycling tons).
- Privately estimated employment data associated with collections, transfer stations and hauling of recyclable materials and activity associated with bottle-redemption activity including required retail activity.
- The IMPLAN input/output economic impact model v3 for the State of Connecticut using the 2010 input/output data matrices as the basis for the impacts. This model was revised so that an industry and its associated production function specific to MRFs recycling activity was developed by CERC, Inc. All economic measures in the model were estimated for this industry subtracting the values from the IMPLAN industry Waste Management and Remediation Services. (IMPLAN Industry Code 390).

CERC developed the analysis in this report. The estimates of the economic impacts that accrue across the State of Connecticut due to the expansion of the direct effects modeled to include the indirect and then induced impacts as noted below.

1. **The initial direct spending associated with the employment and payroll for collecting the recyclable materials from “generators,” primarily Connecticut's households, to the MRFs.** These annual impacts were primarily driven employment or jobs estimates provided by DSM Environmental. This activity was modeled in the Transportation by Truck IMPLAN industry.

2. **The initial direct spending associated with the employment and payroll observed from the ongoing activities in the MRF industry (NAICS industry 56292).** The primary data source for these establishments was the U.S. Census Bureau’s County Business Patterns from 2006 to 2010. Because the 2011 and 2012 data from County Business Patterns is not available the changes in employment for the MRF industry for 2011 and 2012 were estimated. The change from 2010 to 2011 was based on the published change in the aggregate Waste Management and Remediation Services industry (NAICS industry 562) by Connecticut Department of Labor data. For 2012 the growth rate observed from 2010 to 2011 was assumed to slow to half that rate for that industry between 2011 and 2012. Because the best available industry in the IMPLAN model for this industry is the larger Waste Management and Remediation Services (IMPLAN Industry 390), CERC revised the IMPLAN production function to better reflect the purchases of goods and services, and the payrolls and output-per-worker ratios of the MRF industry.

3. **The direct spending associated with the employment and payroll observed from Connecticut’s Recyclable Material Merchant Wholesalers (NAICS industry 42393).** The primary data source for the data of these establishments was the U.S. Census Bureau’s County Business Patterns from 2006 to 2010. For 2011 the growth rate in employment from the two-digit Industry Wholesale Trade observed from 2010 to 2011 in the Connecticut Department of Labor data was used to estimate the growth rate from 2010 to 2011 for employment. For 2012 a conservative estimate that halved the 2010 to 2011 growth rate was applied.

Using the “multiplier effect,” applied in all economic impact analyses, the IMPLAN model estimates the indirect effects associated with the increases in production within the state. These indirect effects are from the companies within the state for the specific industries that provide the goods and services necessary to produce the level of output specified by the direct spending. The IMPLAN model then estimates the induced impacts, which result from the increase in household income due to the increase in production observed in the direct and indirect effects.

Figure A-1: Estimates of Economic Impacts on Output from Recycling Activity in the State of Connecticut, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	7 Year Average	7 Year Total
Direct Recycling Output (Sales) Activity (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$395.9	\$466.2	\$443.1	\$432.0	\$429.7	\$438.1	\$440.3	\$435.0	\$3,045.2
All Materials Recovery Facilities Activity	\$138.0	\$154.6	\$162.5	\$173.0	\$171.1	\$176.0	\$178.2	\$164.8	\$1,153.3
Materials Recovery Facilities	\$27.0	\$30.5	\$29.9	\$35.0	\$31.0	\$31.6	\$31.9	\$31.0	\$216.9
Collecting and Hauling	\$111.0	\$124.1	\$132.6	\$138.1	\$140.1	\$144.4	\$146.3	\$133.8	\$936.4
Recyclable Materials Wholesale Activity	\$257.9	\$311.7	\$280.6	\$258.9	\$262.1	\$262.1	\$262.1	\$270.3	\$1,891.9
Indirect Output Impact (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$102.0	\$119.4	\$114.8	\$112.8	\$112.4	\$114.7	\$115.3	\$113.1	\$791.4
All Materials Recovery Facilities Activity	\$41.8	\$46.8	\$49.4	\$52.3	\$52.0	\$53.5	\$54.2	\$50.0	\$350.0
Materials Recovery Facilities	\$6.6	\$7.5	\$7.3	\$8.5	\$7.6	\$7.7	\$7.8	\$7.6	\$53.0
Collecting and Hauling	\$35.2	\$39.3	\$42.1	\$43.8	\$44.4	\$45.8	\$46.4	\$42.4	\$297.0
Recyclable Materials Wholesale Activity	\$60.2	\$72.6	\$65.5	\$60.5	\$60.4	\$61.2	\$61.2	\$63.1	\$441.4
Induced Output Impact (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$177.7	\$209.1	\$200.2	\$200.2	\$183.3	\$188.0	\$190.1	\$190.2	\$1,331.7
All Materials Recovery Facilities Activity	\$73.2	\$82.8	\$88.1	\$92.4	\$91.6	\$95.2	\$96.5	\$88.5	\$619.8
Materials Recovery Facilities	\$11.9	\$14.9	\$14.6	\$17.3	\$14.7	\$15.0	\$15.1	\$14.8	\$103.6
Collecting and Hauling	\$61.3	\$67.9	\$73.4	\$75.1	\$76.9	\$80.2	\$81.4	\$73.7	\$516.2
Recyclable Materials Wholesale Activity	\$104.5	\$126.3	\$112.1	\$91.0	\$91.6	\$92.8	\$93.6	\$101.7	\$711.9
Total Output Impact (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$676	\$795	\$758	\$728	\$725	\$741	\$746	\$738	\$5,168.3
All Materials Recovery Facilities Activity	\$253	\$284	\$300	\$318	\$315	\$325	\$329	\$303	\$2,123.1
Materials Recovery Facilities	\$45	\$53	\$52	\$61	\$53	\$54	\$55	\$53	\$373.4
Collecting and Hauling	\$208	\$231	\$248	\$257	\$261	\$270	\$274	\$250	\$1,749.6
Recyclable Materials Wholesale Activity	\$423	\$511	\$458	\$410	\$411	\$416	\$417	\$435	\$3,045.2

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN.

Figure A-2: Estimates of the Economic Impacts on Employment from Recycling Activity in the State of Connecticut, 2006-2012

Direct Recycling Employment Activity									
	2006	2007	2008	2009	2010	2011	2012	7 Year Average	
Connecticut Statewide recycling impact	2,459	2,829	2,746	2,704	2,697	2,750	2,785	2,710	
All Materials Recovery Facilities Activity	1,025	1,133	1,198	1,254	1,265	1,301	1,320	1,214	
Materials Recovery Facilities	\$213.0	\$241.0	\$236.0	\$276.0	\$245.0	\$249.5	\$252.0	245	
Collecting and Hauling	812	892	962	978	1,020	1,051	1,068	969	
Recyclable Materials Wholesale Activity	1,434	1,696	1,548	1,450	1,432	1,449	1,465	1,496	
Indirect Employment Impact									
Connecticut Statewide recycling impact	678	790	766	754	753	769	774	755	
All Materials Recovery Facilities Activity	298	334	353	373	373	384	389	358	
Materials Recovery Facilities	\$32.8	\$37.1	\$36.4	\$42.5	\$37.7	\$38.4	\$38.8	38	
Collecting and Hauling	265	297	317	330	335	345	350	320	
Recyclable Materials Wholesale Activity	380	457	412	381	380	385	385	397	
Induced Employment Impact									
Connecticut Statewide recycling impact	1,238	1,457	1,394	1,277	1,276	1,310	1,325	1,325	
All Materials Recovery Facilities Activity	510	577	614	644	638	663	673	617	
Materials Recovery Facilities	\$82.8	\$103.6	\$101.9	\$120.7	\$102.4	\$104.5	\$105.4	103	
Collecting and Hauling	428	474	512	523	536	559	567	514	
Recyclable Materials Wholesale Activity	728	880	781	634	638	647	652	708	
Total Employment Impact									
Connecticut Statewide recycling impact	4,375	5,076	4,906	4,735	4,726	4,829	4,884	4,790	
All Materials Recovery Facilities Activity	1,834	2,044	2,165	2,270	2,276	2,348	2,381	2,188	
Materials Recovery Facilities	\$328.7	\$381.8	\$374.3	\$439.2	\$385.2	\$392.4	\$396.2	385	
Collecting and Hauling	1,505	1,662	1,791	1,831	1,890	1,956	1,985	1,803	
Recyclable Materials Wholesale Activity	2,541	3,032	2,741	2,465	2,451	2,481	2,502	2,602	

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN.

Figure A-3: Estimates of the Economic Impacts on Value Added from Recycling Activity in the State of Connecticut, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	7 Year Average	7 Year Total
Direct Recycling Value Added Activity (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$248.3	\$294.2	\$277.2	\$255.6	\$254.6	\$260.6	\$262.8	\$264.7	\$1,853.2
All Materials Recovery Facilities Activity	\$79.7	\$90.0	\$95.2	\$100.6	\$99.0	\$102.8	\$104.3	\$95.9	\$671.5
Materials Recovery Facilities	\$17.8	\$21.5	\$21.2	\$25.0	\$21.5	\$21.9	\$22.1	\$21.6	\$150.9
Collecting and Hauling	\$61.9	\$68.5	\$74.1	\$75.6	\$77.5	\$80.9	\$82.2	\$74.4	\$520.6
Recyclable Materials Wholesale Activity	\$168.6	\$204.1	\$182.0	\$155.0	\$155.7	\$157.7	\$158.5	\$168.8	\$1,181.6
Indirect Value Added (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$70.1	\$82.0	\$78.9	\$77.5	\$77.2	\$78.8	\$79.3	\$77.7	\$544.0
All Materials Recovery Facilities Activity	\$28.6	\$32.0	\$33.8	\$35.8	\$35.7	\$36.7	\$37.2	\$34.3	\$239.8
Materials Recovery Facilities	\$4.1	\$4.7	\$4.6	\$5.4	\$4.8	\$4.9	\$4.9	\$4.8	\$33.3
Collecting and Hauling	\$24.5	\$27.4	\$29.2	\$30.4	\$30.9	\$31.8	\$32.3	\$29.5	\$206.5
Recyclable Materials Wholesale Activity	\$41.5	\$50.0	\$45.1	\$41.7	\$41.6	\$42.1	\$42.1	\$43.4	\$304.1
Induced Value Added (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$118.4	\$139.4	\$133.4	\$122.2	\$122.1	\$125.3	\$126.7	\$126.8	\$887.6
All Materials Recovery Facilities Activity	\$48.8	\$55.2	\$58.7	\$61.6	\$61.0	\$63.4	\$64.3	\$59.0	\$413.1
Materials Recovery Facilities	\$7.9	\$9.9	\$9.8	\$11.6	\$9.8	\$10.0	\$10.1	\$9.9	\$69.0
Collecting and Hauling	\$40.9	\$45.3	\$48.9	\$50.0	\$51.2	\$53.5	\$54.3	\$49.2	\$344.1
Recyclable Materials Wholesale Activity	\$69.6	\$84.2	\$74.7	\$60.6	\$61.1	\$61.9	\$62.4	\$67.8	\$474.5
Total Value Added Impacts (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$436.8	\$515.6	\$489.5	\$455.2	\$454.0	\$464.7	\$468.8	\$469.2	\$3,284.7
All Materials Recovery Facilities Activity	\$157.1	\$177.3	\$187.8	\$197.9	\$195.6	\$203.0	\$205.8	\$189.2	\$1,324.4
Materials Recovery Facilities	\$29.8	\$36.2	\$35.5	\$41.9	\$36.1	\$36.7	\$37.1	\$36.2	\$253.3
Collecting and Hauling	\$127.2	\$141.1	\$152.2	\$156.1	\$159.6	\$166.2	\$168.7	\$153.0	\$1,071.2
Recyclable Materials Wholesale Activity	\$279.7	\$338.3	\$301.8	\$257.3	\$258.3	\$261.7	\$263.0	\$280.0	\$1,960.2

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN.

Figure A-4: Estimates of the Economic Impacts on Labor Income from Recycling Activity in the State of Connecticut, 2006-2012

	2006	2007	2008	2009	2010	2011	2012	7 Year Average	7 Year Total
Direct Labor Income from Recycling Activity (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$145.1	\$170.6	\$163.5	\$147.1	\$147.2	\$151.4	\$153.3	\$154.0	\$1,078.3
All Materials Recovery Facilities Activity	\$61.1	\$69.2	\$73.8	\$77.1	\$76.5	\$79.8	\$80.9	\$74.1	\$518.4
Materials Recovery Facilities	\$9.9	\$12.6	\$12.4	\$14.7	\$12.4	\$12.6	\$12.7	\$12.5	\$87.4
Collecting and Hauling	\$51.3	\$56.6	\$61.4	\$62.4	\$64.1	\$67.1	\$68.2	\$61.6	\$431.0
Recyclable Materials Wholesale Activity	\$84.0	\$101.4	\$89.7	\$70.0	\$70.7	\$71.6	\$72.4	\$80.0	\$559.9
Indirect Impact on Labor Income (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$44.7	\$52.3	\$50.4	\$49.5	\$49.4	\$50.5	\$50.8	\$49.7	\$347.6
All Materials Recovery Facilities Activity	\$18.8	\$21.1	\$22.3	\$23.6	\$23.5	\$24.2	\$24.5	\$22.6	\$158.1
Materials Recovery Facilities	\$2.3	\$2.6	\$2.5	\$2.9	\$2.6	\$2.7	\$2.7	\$2.6	\$18.3
Collecting and Hauling	\$16.6	\$18.5	\$19.8	\$20.6	\$20.9	\$21.6	\$21.8	\$20.0	\$139.8
Recyclable Materials Wholesale Activity	\$25.9	\$31.2	\$28.1	\$26.0	\$25.9	\$26.3	\$26.3	\$27.1	\$189.5
Induced Impact on Labor Income (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$66.5	\$78.3	\$75.0	\$68.6	\$68.6	\$70.4	\$71.2	\$71.2	\$498.6
All Materials Recovery Facilities Activity	\$27.4	\$31.0	\$33.0	\$34.6	\$34.3	\$35.6	\$36.1	\$33.2	\$232.1
Materials Recovery Facilities	\$4.5	\$5.6	\$5.5	\$6.5	\$5.5	\$5.6	\$5.7	\$5.5	\$38.8
Collecting and Hauling	\$23.0	\$25.4	\$27.5	\$28.1	\$28.8	\$30.0	\$30.5	\$27.6	\$193.3
Recyclable Materials Wholesale Activity	\$39.1	\$47.3	\$42.0	\$34.1	\$34.3	\$34.8	\$35.0	\$38.1	\$266.6
Total Impact from Recycling Activity on Labor Income (Millions 2012 \$)									
Connecticut Statewide recycling impact	\$256.4	\$301.2	\$288.9	\$265.3	\$265.2	\$272.3	\$275.3	\$274.9	\$1,924.6
All Materials Recovery Facilities Activity	\$107.4	\$121.3	\$129.1	\$135.3	\$134.3	\$139.6	\$141.6	\$129.8	\$908.6
Materials Recovery Facilities	\$16.6	\$20.8	\$20.4	\$24.2	\$20.5	\$20.9	\$21.1	\$20.6	\$144.5
Collecting and Hauling	\$90.8	\$100.6	\$108.7	\$111.1	\$113.8	\$118.7	\$120.5	\$109.2	\$764.1
Recyclable Materials Wholesale Activity	\$148.9	\$179.8	\$159.8	\$130.0	\$131.0	\$132.6	\$133.7	\$145.1	\$1,016.0

Source: U.S. Census Bureau's County Business Patterns, DSM Environmental, CERC, Inc., IMPLAN.

Appendix B: IMPLAN Industry Structure for Connecticut.

The IMPLAN model is based on federally available data from various sources. The input-output tables, the backbone of the model, are derived from the U.S. Bureau of Economic Analysis input-output tables. Regional estimates were built through multipliers using the IMPLAN National Trade Flows Model. Institutions included in the model were nine household groups based on the income levels for each household group. Version 3 of the IMPLAN input/output economic impact model for the State of Connecticut using the 2010 input/output data matrices served as the basis for the impacts. This model was revised so that an industry and its associated production function specific to MRFs recycling activity was developed by CERC, Inc. All economic measures for this additional industry in the model were estimated for this industry based on data from the U.S. Census Bureau's County Business Patterns data and the U.S. Census Bureau's 2007 Economic Census. After the appropriate values for all the economic measures in the IMPLAN model were established and a new "Materials Recovery Facilities" industry specified in the model the model was rebalanced so that totals for the state remained unchanged by subtracting the appropriate values from the Waste Management and Remediation Services (IMPLAN Industry Code 390) industry in IMPLAN. This industry in IMPLAN is based on the NAICS industry 562, "Waste Management and Remediation Services". It is appropriate to base the recycling industry developed for this analysis from this industry since the data within this larger industry includes NAICS industry 56292 materials recovery facilities. The production function for the created materials recovery facilities industry was initially based on the larger "Waste Management and Remediation" industry but was revised to reduce or eliminate the share of inputs associated with activities such as inputs from hotels and accommodations industry, real estate buying and selling activity, the self purchases from within the Waste Management and Remediation industry. Figures B 1 and B 2⁶ provide the overview of the study area data used for the state of Connecticut in the IMPLAN model.

⁶ The dollars shown in Figures B 1 and B 2 are for the base year 2010 and are not adjusted to 2012.

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
	Total	2,165,453	\$365,981,250	\$229,653,867
1	Recycling - Materials Recovery Facilities	250	\$33,159	\$20,224
3	Vegetable & melon farming	278	\$33,814	\$16,785
4	Fruit farming	321	\$32,260	\$16,576
5	Tree nut farming	55	\$2,827	\$1,560
6	Greenhouse, nursery, & floriculture production	3,010	\$241,907	\$158,327
7	Tobacco farming	299	\$11,663	\$2,189
10	All other crop farming	450	\$58,860	\$17,888
11	Cattle ranching & farming	110	\$8,679	\$1,444
12	Dairy cattle & milk production	743	\$66,798	\$24,436
13	Poultry & egg production	129	\$43,585	\$7,970
14	Animal production, except cattle & poultry & eggs	1,633	\$41,467	\$20,304
15	Forestry, forest products, & timber tract production	88	\$22,061	\$10,727
16	Commercial logging	410	\$28,511	\$7,836
17	Commercial Fishing	654	\$37,977	\$16,855
18	Commercial hunting & trapping	17	\$2,902	\$2,011
19	Support activities for agriculture & forestry	1,696	\$47,867	\$35,421
20	Extraction of oil & natural gas	2,604	\$320,877	\$234,292
25	Mining & quarrying stone	119	\$38,975	\$24,921
26	Mining & quarrying sand, gravel, clay, & ceramic & refractory minerals	673	\$138,165	\$86,854
27	Mining & quarrying other nonmetallic minerals	10	\$3,242	\$2,182
29	Support activities for oil & gas operations	44	\$14,352	\$8,756
30	Support activities for other mining	15	\$2,765	\$339
31	Electric power generation, transmission, & distribution	4,633	\$3,497,352	\$3,021,093
32	Natural gas distribution	1,132	\$1,152,624	\$477,495
33	Water, sewage & other treatment & delivery systems	944	\$309,041	\$246,408
34	Const. new nonresidential commercial & health care structures	19,735	\$2,772,753	\$1,405,960
35	Const. new nonresidential mfg. structures	3,305	\$456,787	\$251,786
36	Const. other new nonresidential structures	33,507	\$5,054,079	\$2,514,439
37	Const. new residential permanent site single- & multi-family structures	7,013	\$1,287,096	\$596,784
38	Const. other new residential structures	24,562	\$4,081,739	\$1,885,927
39	Maintenance & repair construction of nonresidential structures	18,393	\$2,398,166	\$1,292,987
40	Maintenance & repair construction of residential structures	2,973	\$538,443	\$313,807
42	Other animal food mfg.	57	\$69,754	\$9,880
46	Fats & oils refining & blending	32	\$51,292	\$4,756
47	Breakfast cereal mfg.	31	\$22,147	\$7,932
50	Chocolate & confectionery mfg. from cacao beans	40	\$24,507	\$3,182
51	Confectionery mfg. from purchased chocolate	321	\$104,504	\$24,152
52	Nonchocolate confectionery mfg.	113	\$39,819	\$8,546
53	Frozen food mfg.	230	\$80,419	\$20,921
54	Fruit & vegetable canning, pickling, & drying	316	\$165,348	\$38,223
55	Fluid milk & butter mfg.	331	\$206,050	\$38,596
56	Cheese mfg.	131	\$100,573	\$10,352
58	Ice cream & frozen dessert mfg.	643	\$278,136	\$65,580
59	Animal (except poultry) slaughtering, rendering, & processing	332	\$146,173	\$15,033
60	Poultry processing	100	\$23,681	\$4,455
61	Seafood product preparation & packaging	76	\$26,420	\$4,511
62	Bread & bakery product mfg.	3,028	\$529,153	\$179,546
63	Cookie, cracker, & pasta mfg.	8	\$2,954	\$491
65	Snack food mfg.	742	\$526,230	\$150,077
66	Coffee & tea mfg.	222	\$160,507	\$37,127
67	Flavoring syrup & concentrate mfg.	48	\$155,186	\$69,477
68	Seasoning & dressing mfg.	242	\$141,647	\$27,838
69	All other food mfg.	367	\$114,909	\$25,239

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
70	Soft drink & ice mfg.	477	\$404,940	\$106,782
71	Breweries	17	\$20,008	\$8,717
72	Wineries	140	\$54,097	\$11,568
73	Distilleries	3	\$6,158	\$4,554
74	Tobacco product mfg.	286	\$1,788,556	\$1,224,609
75	Fiber, yarn, & thread mills	17	\$4,058	\$713
76	Broadwoven fabric mills	222	\$59,210	\$21,975
77	Narrow fabric mills & schiffli machine embroidery	31	\$4,826	\$2,162
80	Textile & fabric finishing mills	113	\$24,779	\$9,244
81	Fabric coating mills	332	\$104,060	\$32,009
82	Carpet & rug mills	6	\$1,857	\$664
83	Curtain & linen mills	249	\$39,714	\$17,148
84	Textile bag & canvas mills	607	\$89,558	\$43,224
85	All other textile product mills	180	\$44,429	\$23,726
86	Apparel knitting mills	107	\$20,573	\$9,729
87	Cut & sew apparel contractors	56	\$6,135	\$4,057
88	Men's & boys' cut & sew apparel mfg.	14	\$1,706	\$664
89	Women's & girls' cut & sew apparel mfg.	71	\$18,807	\$3,371
91	Apparel accessories & other apparel mfg.	195	\$30,294	\$13,828
94	Other leather & allied product mfg.	198	\$30,580	\$15,876
95	Sawmills & wood preservation	139	\$28,448	\$5,145
97	Engineered wood member & truss mfg.	67	\$8,761	\$3,117
99	Wood windows & doors & millwork mfg.	455	\$72,123	\$24,562
100	Wood container & pallet mfg.	379	\$45,436	\$18,369
102	Prefabricated wood building mfg.	79	\$11,114	\$4,217
103	All other miscellaneous wood product mfg.	136	\$23,341	\$10,464
105	Paper mills	881	\$705,685	\$251,865
106	Paperboard Mills	256	\$182,753	\$51,268
107	Paperboard container mfg.	1,543	\$622,595	\$184,484
108	Coated & laminated paper, packaging paper & plastics film mfg.	697	\$324,272	\$113,806
109	All other paper bag & coated & treated paper mfg.	84	\$27,289	\$5,683
110	Stationery product mfg.	67	\$21,223	\$5,550
112	All other converted paper product mfg.	156	\$52,163	\$18,928
113	Printing	5,837	\$1,104,035	\$543,199
114	Support activities for printing	602	\$90,940	\$59,011
116	Asphalt paving mixture & block mfg.	272	\$231,756	\$125,589
117	Asphalt shingle & coating materials mfg.	3	\$2,645	\$1,605
118	Petroleum lubricating oil & grease mfg.	3	\$2,988	\$1,238
120	Petrochemical mfg.	268	\$1,976,511	\$540,400
121	Industrial gas mfg.	144	\$267,639	\$141,963
122	Synthetic dye & pigment mfg.	71	\$69,028	\$31,162
125	All other basic inorganic chemical mfg.	130	\$96,431	\$24,109
126	Other basic organic chemical mfg.	446	\$558,677	\$94,053
127	Plastics material & resin mfg.	645	\$782,810	\$115,428
128	Synthetic rubber mfg.	23	\$13,506	\$2,228
129	Artificial & synthetic fibers & filaments mfg.	100	\$50,103	\$6,707
130	Fertilizer mfg.	83	\$107,360	\$10,027
131	Pesticide & other agricultural chemical mfg.	41	\$59,970	\$14,949
132	Medicinal & botanical mfg.	1,524	\$1,033,254	\$481,415
133	Pharmaceutical preparation mfg.	4,516	\$6,791,255	\$2,676,125
134	In-vitro diagnostic substance mfg.	1,078	\$543,447	\$211,811
135	Biological product (except diagnostic) mfg.	23	\$19,989	\$7,949
136	Paint & coating mfg.	246	\$169,734	\$50,388
137	Adhesive mfg.	777	\$479,454	\$143,702
138	Soap & cleaning compound mfg.	203	\$275,225	\$85,188
139	Toilet preparation mfg.	965	\$881,517	\$351,759
140	Printing ink mfg.	65	\$27,780	\$5,948

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
141	All other chemical product & preparation mfg.	1,222	\$730,307	\$217,869
142	Plastics packaging materials & unlaminated film & sheet mfg.	562	\$211,138	\$70,076
143	Unlaminated plastics profile shape mfg.	298	\$75,286	\$31,134
144	Plastics pipe & pipe fitting mfg.	8	\$2,899	\$859
145	Laminated plastics plate, sheet (except packaging), & shape mfg.	327	\$91,512	\$30,706
146	Polystyrene foam product mfg.	190	\$68,008	\$25,487
147	Urethane & other foam product (except polystyrene) mfg.	359	\$118,715	\$39,211
148	Plastics bottle mfg.	195	\$73,408	\$22,672
149	Other plastics product mfg.	3,306	\$825,758	\$313,169
150	Tire mfg.	43	\$14,165	\$4,505
151	Rubber & plastics hoses & belting mfg.	17	\$4,170	\$1,362
152	Other rubber product mfg.	523	\$144,683	\$57,709
153	Pottery, ceramics, & plumbing fixture mfg.	13	\$2,227	\$1,153
154	Brick, tile, & other structural clay product mfg.	33	\$7,073	\$4,002
156	Flat glass mfg.	20	\$4,599	\$1,537
157	Other pressed & blown glass & glassware mfg.	5	\$885	\$313
159	Glass product mfg. made of purchased glass	205	\$43,418	\$15,737
161	Ready-mix concrete mfg.	408	\$115,273	\$41,288
162	Concrete pipe, brick, & block mfg.	93	\$25,108	\$10,955
163	Other concrete product mfg.	616	\$140,097	\$73,271
164	Lime & gypsum product mfg.	112	\$50,827	\$19,871
165	Abrasive product mfg.	259	\$93,768	\$48,610
166	Cut stone & stone product mfg.	465	\$58,793	\$28,893
168	Mineral wool mfg.	21	\$6,241	\$2,351
169	Miscellaneous nonmetallic mineral product mfg.	32	\$9,986	\$3,028
170	Iron & steel mills & ferroalloy mfg.	189	\$127,640	\$24,176
171	Steel product mfg. from purchased steel	651	\$290,763	\$62,309
174	Aluminum product mfg. from purchased aluminum	407	\$228,894	\$53,975
176	Primary smelting & refining of nonferrous metal (except Cu & alum.)	1	\$912	\$189
177	Copper rolling, drawing, extruding & alloying	952	\$783,947	\$137,871
178	Nonferrous metal (except Cu & alum.) rolling, drawing, extruding	576	\$364,841	\$88,815
179	Ferrous metal foundries	332	\$81,660	\$34,353
180	Nonferrous metal foundries	251	\$50,475	\$18,588
181	All other forging, stamping, & sintering	797	\$220,641	\$68,148
182	Customroll forming	40	\$11,524	\$2,207
183	Crown & closure mfg. & metal stamping	3,403	\$850,826	\$339,664
184	Cutlery, utensil, pot, & pan mfg.	736	\$268,819	\$160,912
185	Handtool mfg.	944	\$236,971	\$124,128
186	Plate work & fabricated structural product mfg.	1,019	\$263,608	\$104,717
187	Ornamental & architectural metal products mfg.	1,883	\$395,204	\$166,694
188	Power boiler & heat exchanger mfg.	173	\$56,395	\$25,938
189	Metal tank (heavy gauge) mfg.	106	\$25,778	\$11,522
190	Metal can, box, & other metal container (light gauge) mfg.	419	\$257,410	\$70,245
191	Ammunition mfg.	85	\$26,771	\$15,920
192	Arms, ordnance, & accessories mfg.	1,293	\$538,014	\$319,534
193	Hardware mfg.	1,843	\$648,061	\$351,915
194	Spring & wire product mfg.	1,584	\$417,941	\$215,778
195	Machine shops	4,167	\$670,998	\$361,479
196	Turned product & screw, nut, & bolt mfg.	2,909	\$603,560	\$299,007
197	Coating, engraving, heat treating & allied activities	3,486	\$721,329	\$337,278
198	Valve & fittings other than plumbing mfg.	1,611	\$482,364	\$233,889
199	Plumbing fixture fitting & trim mfg.	214	\$116,777	\$55,844
200	Ball & roller bearing mfg.	1,094	\$385,869	\$191,751
201	Fabricated pipe & pipe fitting mfg.	164	\$50,218	\$24,036
202	Other fabricated metal mfg.	396	\$92,095	\$47,004
204	Lawn & garden equipment mfg.	90	\$39,538	\$12,209
205	Construction machinery mfg.	6	\$3,403	\$866

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
206	Mining & oil & gas field machinery mfg.	132	\$63,298	\$18,690
207	Other industrial machinery mfg.	1,151	\$251,724	\$87,841
208	Plastics & rubber industry machinery mfg.	162	\$43,733	\$16,810
209	Semiconductor machinery mfg.	554	\$229,464	\$75,920
210	Vending, commercial, industrial, & office machinery mfg.	2,071	\$810,332	\$301,396
211	Optical instrument & lens mfg.	943	\$333,794	\$145,693
212	Photographic & photocopying equipment mfg.	33	\$16,746	\$6,826
213	Other commercial & service industry machinery mfg.	268	\$83,272	\$31,642
214	Air purification & ventilation equipment mfg.	294	\$70,067	\$29,525
215	Heating equipment (except warm air furnaces) mfg.	128	\$31,765	\$13,583
216	Air conditioning, refrigeration, & warm air heating equipment mfg.	55	\$20,254	\$7,451
217	Industrial mold mfg.	421	\$61,702	\$32,527
218	Metal cutting & forming machine tool mfg.	878	\$178,829	\$80,340
219	Special tool, die, jig, & fixture mfg.	1,193	\$184,407	\$99,678
220	Cutting tool & machine tool accessory mfg.	400	\$54,362	\$26,655
221	Rolling mill & other metalworking machinery mfg.	988	\$231,421	\$96,095
222	Turbine & turbine generator set units mfg.	1,850	\$1,210,817	\$607,215
223	Speed changer, industrial high-speed drive, & gear mfg.	16	\$4,050	\$1,502
224	Mechanical power transmission equipment mfg.	644	\$167,009	\$63,065
225	Other engine equipment mfg.	179	\$109,603	\$21,405
226	Pump & pumping equipment mfg.	284	\$120,662	\$46,199
227	Air & gas compressor mfg.	53	\$26,359	\$6,818
228	Material handling equipment mfg.	556	\$233,772	\$94,647
229	Power-driven handtool mfg.	81	\$30,556	\$11,588
230	Other general purpose machinery mfg.	1,256	\$318,677	\$122,772
231	Packaging machinery mfg.	222	\$52,158	\$18,648
232	Industrial process furnace & oven mfg.	122	\$25,476	\$10,160
233	Fluid power process machinery mfg.	97	\$23,862	\$8,508
234	Electronic computer mfg.	12	\$15,635	\$3,298
235	Computer storage device mfg.	94	\$79,764	\$12,907
236	Computer terminals & other computer peripheral equipment mfg.	297	\$131,341	\$33,869
237	Telephone apparatus mfg.	215	\$125,680	\$31,845
238	Broadcast & wireless communications equipment mfg.	582	\$289,026	\$62,489
239	Other communications equipment mfg.	538	\$187,236	\$60,669
240	Audio & video equipment mfg.	85	\$35,779	\$6,905
242	Bare printed circuit board mfg.	730	\$137,086	\$40,693
243	Semiconductor & related device mfg.	535	\$326,863	\$113,082
244	Electronic capacitor, resistor, coil, transformer, & inductor mfg.	558	\$92,107	\$35,484
245	Electronic connector mfg.	469	\$105,611	\$33,632
246	Printed circuit assembly (electronic assembly) mfg.	864	\$269,779	\$67,153
247	Other electronic component mfg.	741	\$152,407	\$52,492
248	Electromedical & electrotherapeutic apparatus mfg.	399	\$162,057	\$49,699
249	Search, detection, & navigation instruments mfg.	1,075	\$418,461	\$146,985
250	Automatic environmental control mfg.	88	\$23,202	\$8,341
251	Industrial process variable instruments mfg.	2,056	\$587,936	\$203,081
252	Totalizing fluid meters & counting devices mfg.	255	\$98,126	\$15,351
253	Electricity & signal testing instruments mfg.	218	\$69,164	\$29,000
254	Analytical laboratory instrument mfg.	1,066	\$413,519	\$124,554
255	Irradiation apparatus mfg.	480	\$207,412	\$66,311
256	Watch, clock, & other measuring & controlling device mfg.	1,374	\$382,028	\$137,646
257	Software, audio, & video media for reproduction	2	\$549	\$71
258	Magnetic & optical recording media mfg.	67	\$27,879	\$5,553
259	Electric lamp bulb & part mfg.	345	\$84,433	\$42,484
260	Lighting fixture mfg.	628	\$172,708	\$76,327
261	Small electrical appliance mfg.	164	\$125,199	\$68,632
262	Household cooking appliance mfg.	396	\$253,065	\$119,203
266	Power, distribution, & specialty transformer mfg.	51	\$21,498	\$9,441

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
267	Motor & generator mfg.	541	\$207,948	\$96,555
268	Switchgear & switchboard apparatus mfg.	708	\$288,093	\$151,437
269	Relay & industrial control mfg.	1,519	\$981,618	\$613,342
270	Storage battery mfg.	81	\$28,705	\$9,671
271	Primary battery mfg.	214	\$119,917	\$63,000
272	Communication & energy wire & cable mfg.	1,136	\$567,763	\$174,904
273	Wiring device mfg.	1,926	\$584,569	\$289,797
274	Carbon & graphite product mfg.	22	\$7,358	\$3,596
275	All other miscellaneous electrical equipment & component mfg.	1,813	\$492,981	\$230,558
276	Automobile mfg.	509	\$729,576	\$164,141
278	Heavy duty truck mfg.	216	\$196,170	\$32,215
279	Motor vehicle body mfg.	30	\$8,495	\$2,077
283	Motor vehicle parts mfg.	3,165	\$1,236,362	\$334,465
284	Aircraft mfg.	9,190	\$6,063,516	\$1,914,570
285	Aircraft engine & engine parts mfg.	15,253	\$8,202,644	\$2,757,962
286	Other aircraft parts & auxiliary equipment mfg.	5,607	\$1,752,584	\$729,570
289	Railroad rolling stock mfg.	2	\$1,303	\$480
290	Ship building & repairing	7,686	\$2,039,403	\$975,716
291	Boat building	46	\$10,046	\$3,705
292	Motorcycle, bicycle, & parts mfg.	94	\$62,676	\$19,248
294	All other transportation equipment mfg.	5	\$2,389	\$704
295	Wood kitchen cabinet & countertop mfg.	1,275	\$157,778	\$55,004
296	Upholstered household furniture mfg.	45	\$6,501	\$2,177
297	Nonupholstered wood household furniture mfg.	240	\$34,754	\$18,376
298	Metal & other household furniture (except wood) mfg.	62	\$14,174	\$5,391
299	Institutional furniture mfg.	106	\$20,977	\$7,977
300	Wood television, radio, & sewing machine cabinet mfg.	143	\$40,203	\$20,417
301	Office furniture & custom architectural woodwork & millwork mfg.	426	\$58,038	\$28,878
302	Showcase, partition, shelving, & locker mfg.	185	\$35,487	\$16,080
303	Mattress mfg.	340	\$115,580	\$40,989
304	Blind & shade mfg.	112	\$17,099	\$7,001
305	Surgical & medical instrument, laboratory & medical instrument mfg.	6,061	\$2,005,615	\$1,028,983
306	Surgical appliance & supplies mfg.	1,135	\$349,370	\$210,924
307	Dental equipment & supplies mfg.	212	\$67,458	\$38,964
308	Ophthalmic goods mfg.	194	\$38,861	\$24,677
309	Dental laboratories mfg.	396	\$36,198	\$24,551
310	Jewelry & silverware mfg.	248	\$66,516	\$25,177
311	Sporting & athletic goods mfg.	220	\$51,215	\$22,496
312	Doll, toy, & game mfg.	522	\$194,685	\$111,247
313	Office supplies (except paper) mfg.	147	\$33,526	\$19,873
314	Sign mfg.	669	\$93,058	\$42,619
315	Gasket, packing, & sealing device mfg.	328	\$60,634	\$28,702
316	Musical instrument mfg.	114	\$13,200	\$6,634
317	All other miscellaneous mfg.	759	\$195,702	\$108,782
319	Wholesale trade businesses	68,558	\$14,638,986	\$11,398,543
320	Retail Stores - Motor vehicle & parts	21,352	\$2,235,422	\$1,367,798
321	Retail Stores - Furniture & home furnishings	7,013	\$703,826	\$468,198
322	Retail Stores - Electronics & appliances	6,673	\$780,830	\$492,325
323	Retail Stores - Building material & garden supply	14,837	\$1,364,307	\$953,854
324	Retail Stores - Food & beverage	46,044	\$2,861,385	\$2,098,017
325	Retail Stores - Health & personal care	14,352	\$1,134,022	\$780,113
326	Retail Stores - Gasoline stations	6,752	\$913,584	\$639,510
327	Retail Stores - Clothing & clothing accessories	22,961	\$1,359,349	\$788,504
328	Retail Stores - Sporting goods, hobby, book & music	10,063	\$523,015	\$346,988
329	Retail Stores - General merchandise	25,501	\$1,423,714	\$1,090,175
330	Retail Stores - Miscellaneous	17,181	\$799,914	\$520,625
331	Retail Nonstores - Direct & electronic sales	20,886	\$2,883,986	\$1,826,185

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
332	Transport by air	1,648	\$463,348	\$230,396
333	Transport by rail	399	\$168,793	\$100,898
334	Transport by water	1,079	\$606,108	\$299,741
335	Transport by truck	8,655	\$1,136,544	\$646,405
336	Transit & ground passenger transportation	14,291	\$935,182	\$742,782
337	Transport by pipeline	204	\$98,296	\$28,383
338	Scenic & sightseeing transportation & support activities for transport.	4,213	\$597,221	\$407,023
339	Couriers & messengers	9,483	\$810,668	\$637,695
340	Warehousing & storage	9,130	\$850,047	\$565,943
341	Newspaper publishers	4,413	\$503,895	\$270,775
342	Periodical publishers	2,318	\$653,776	\$260,184
343	Book publishers	687	\$213,048	\$101,667
344	Directory, mailing list, & other publishers	1,269	\$420,588	\$184,509
345	Software publishers	2,335	\$1,117,074	\$637,367
346	Motion picture & video industries	4,066	\$834,377	\$555,429
347	Sound recording industries	38	\$33,292	\$10,719
348	Radio & television broadcasting	1,664	\$349,649	\$156,038
349	Cable & other subscription programming	4,640	\$2,109,563	\$1,000,328
350	Internet publishing & broadcasting	1,404	\$429,142	\$251,680
351	Telecommunications	10,533	\$5,437,086	\$3,088,652
352	Data processing, hosting, ISP, web search portals & related services	2,689	\$770,600	\$603,435
353	Other information services	1,255	\$142,425	\$112,819
354	Monetary authorities & depository credit intermediation activities	19,806	\$8,223,785	\$4,070,653
355	Nondepository credit intermediation & related activities	30,849	\$5,917,315	\$3,895,234
356	Securities, commodity contracts, investments, & related activities	71,013	\$16,441,246	\$8,230,897
357	Insurance carriers	56,617	\$27,146,981	\$19,362,601
358	Insurance agencies, brokerages, & related activities	12,311	\$2,221,850	\$1,476,164
359	Funds, trusts, & other financial vehicles	10,285	\$4,529,829	\$2,544,016
360	Real estate establishments	98,099	\$12,312,027	\$10,949,753
361	Imputed rental activity for owner-occupied dwellings	0	\$19,833,403	\$16,104,478
362	Automotive equipment rental & leasing	2,313	\$1,010,282	\$614,211
363	General & consumer goods rental except video tapes & discs	1,950	\$394,173	\$263,714
364	Video tape & disc rental	611	\$63,907	\$39,968
365	Commercial & industrial machinery & equipment rental & leasing	1,512	\$824,941	\$490,644
366	Lessors of nonfinancial intangible assets	1,249	\$4,532,967	\$3,684,875
367	Legal services	23,275	\$3,344,861	\$2,774,530
368	Accounting, tax preparation, bookkeeping, & payroll services	17,383	\$2,361,913	\$1,897,590
369	Architectural, engineering, & related services	20,155	\$2,334,047	\$1,456,500
370	Specialized design services	1,981	\$270,723	\$231,241
371	Custom computer programming services	21,412	\$2,716,526	\$1,825,652
372	Computer systems design services	16,994	\$1,821,586	\$1,188,556
373	Other computer related services, including facilities management	4,970	\$1,247,149	\$997,737
374	Management, scientific, & technical consulting services	15,817	\$2,973,292	\$2,158,616
375	Environmental & other technical consulting services	2,886	\$367,295	\$263,350
376	Scientific research & development services	9,343	\$1,962,376	\$1,242,704
377	Advertising & related services	12,628	\$1,892,169	\$1,440,911
378	Photographic services	1,133	\$100,351	\$79,191
379	Veterinary services	6,128	\$369,182	\$231,357
380	All other miscellaneous professional, scientific, & technical services	4,469	\$1,672,838	\$1,395,453
381	Management of companies & enterprises	28,519	\$6,994,341	\$4,973,862
382	Employment services	35,227	\$1,721,668	\$1,422,420
383	Travel arrangement & reservation services	2,747	\$488,536	\$301,437
384	Office administrative services	6,086	\$830,976	\$564,003
385	Facilities support services	447	\$219,617	\$162,319
386	Business support services	6,993	\$470,702	\$322,657
387	Investigation & security services	12,106	\$639,730	\$478,472
388	Services to buildings & dwellings	35,774	\$2,264,892	\$1,263,346

Figure B 1: IMPLAN Study Area Data for Connecticut, Employment, Output and Value Added, 2010 (continued)

Industry Code	Description	Employment	Output (Thous. 2010 \$)	Total Value Added (Thous. 2010 \$)
389	Other support services	3,526	\$541,683	\$354,630
390	Waste management & remediation services revised	5,836	\$1,349,837	\$823,286
391	Private elementary & secondary schools	22,321	\$1,358,707	\$812,310
392	Private junior colleges, colleges, universities, & professional schools	34,667	\$3,914,058	\$2,425,095
393	Other private educational services	13,211	\$676,503	\$385,931
394	Offices of physicians, dentists, & other health practitioners	65,973	\$9,025,245	\$6,152,240
395	Home health care services	17,266	\$1,137,105	\$847,254
396	Medical & diagnostic labs & outpatient & other ambulatory care srvc	17,487	\$2,406,132	\$1,374,212
397	Private hospitals	60,556	\$8,285,064	\$4,864,122
398	Nursing & residential care facilities	62,290	\$4,110,314	\$2,936,485
399	Child day care services	15,446	\$675,013	\$461,175
400	Individual & family services	28,908	\$1,166,728	\$819,107
401	Community food, housing, & relief, including rehabilitation services	13,150	\$658,623	\$433,208
402	Performing arts companies	7,675	\$184,948	\$91,164
403	Spectator sports companies	2,441	\$75,987	\$28,237
404	Promoters of performing arts & sports & agents for public figures	8,456	\$343,989	\$133,749
405	Independent artists, writers, & performers	1,989	\$217,923	\$127,106
406	Museums, historical sites, zoos, & parks	1,897	\$199,438	\$114,633
407	Fitness & recreational sports centers	10,601	\$406,532	\$238,225
408	Bowling centers	556	\$23,399	\$14,871
409	Amusement parks, arcades, & gambling industries	4,714	\$248,152	\$150,621
410	Other amusement & recreation industries	7,248	\$494,542	\$319,226
411	Hotels & motels, including casino hotels	7,234	\$778,113	\$454,638
412	Other accommodations	3,091	\$336,128	\$200,476
413	Food services & drinking places	115,194	\$6,958,503	\$3,943,588
414	Automotive repair & maintenance, except car washes	13,633	\$1,536,832	\$962,265
415	Car washes	2,728	\$144,156	\$91,534
416	Electronic & precision equipment repair & maintenance	2,901	\$516,143	\$336,465
417	Commercial & industrial machinery & equipment repair & maintenance	2,763	\$389,413	\$289,194
418	Personal & household goods repair & maintenance	1,498	\$257,145	\$108,334
419	Personal care services	15,264	\$1,263,031	\$766,619
420	Death care services	2,252	\$262,827	\$183,201
421	Dry-cleaning & laundry services	6,164	\$432,804	\$345,070
422	Other personal services	4,345	\$603,214	\$234,777
423	Religious organizations	2,123	\$280,589	\$73,512
424	Grantmaking, giving, & social advocacy organizations	7,478	\$874,683	\$483,799
425	Civic, social, professional, & similar organizations	22,563	\$1,704,075	\$740,416
426	Private household operations	26,797	\$351,359	\$351,359
427	US Postal Service	9,026	\$958,129	\$807,989
429	Other Federal Government enterprises	602	\$211,977	\$40,503
430	State & local government passenger transit	709	\$41,180	\$9,271
431	State & local government electric utilities	258	\$90,105	\$48,638
432	Other state & local government enterprises	6,729	\$1,887,996	\$522,702
437	* Employment & payroll only (state & local govt, non-education)	84,477	\$7,454,067	\$7,454,067
438	* Employment & payroll only (state & local govt, education)	137,532	\$11,595,816	\$11,595,817
439	* Employment & payroll only (federal govt, non-military)	8,924	\$1,001,993	\$1,001,993
440	* Employment & payroll only (federal govt, military)	15,485	\$1,958,659	\$1,958,659

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
	Total	\$124,409,854	\$17,595,719	\$72,099,887	\$15,548,408
1	Recycling - Materials Recovery Facilities	\$8,443	\$2,069	\$8,486	\$1,226
3	Vegetable & melon farming	\$6,825	\$4,800	\$4,788	\$372
4	Fruit farming	\$6,123	\$5,060	\$4,663	\$730
5	Tree nut farming	\$1,133	\$181	\$182	\$64
6	Greenhouse, nursery, & floriculture production	\$107,710	\$44,798	\$3,718	\$2,100
7	Tobacco farming	\$731	\$605	\$470	\$383
10	All other crop farming	\$7,140	\$4,322	\$4,037	\$2,389
11	Cattle ranching & farming	\$821	\$16	\$425	\$181
12	Dairy cattle & milk production	\$4,793	\$186	\$18,679	\$778
13	Poultry & egg production	\$4,266	\$819	\$2,669	\$216
14	Animal production, except cattle & poultry & eggs	\$7,822	\$588	\$10,774	\$1,121
15	Forestry, forest products, & timber tract production	\$39	\$3,470	\$5,757	\$1,461
16	Commercial logging	\$109	\$7,888	-\$528	\$368
17	Commercial Fishing	\$4,064	\$9,682	\$2,253	\$856
18	Commercial hunting & trapping	\$66	\$132	\$1,510	\$303
19	Support activities for agriculture & forestry	\$25,799	\$10,387	-\$1,769	\$1,004
20	Extraction of oil & natural gas	\$1,359	\$128,781	\$68,269	\$35,882
25	Mining & quarrying stone	\$4,418	\$3,764	\$15,954	\$785
26	Mining & quarrying sand, gravel, clay, & ceramic & refractory minerals	\$38,451	\$33,496	\$10,375	\$4,533
27	Mining & quarrying other nonmetallic minerals	\$620	\$597	\$827	\$136
29	Support activities for oil & gas operations	\$3,238	\$5,119	\$50	\$349
30	Support activities for other mining	\$97	\$81	\$155	\$5
31	Electric power generation, transmission, & distribution	\$668,733	\$105,454	\$1,626,524	\$620,382
32	Natural gas distribution	\$134,823	\$16,227	\$235,421	\$91,024
33	Water, sewage & other treatment & delivery systems	\$91,260	\$13,332	\$121,787	\$20,030
34	Const. new nonresidential commercial & health care structures	\$752,289	\$374,269	\$252,494	\$26,908
35	Const. new nonresidential mfg. structures	\$130,536	\$64,610	\$54,100	\$2,541
36	Const. other new nonresidential structures	\$1,286,527	\$726,921	\$464,061	\$36,930
37	Const. new residential permanent site single- & multi-family structures	\$233,216	\$229,994	\$125,786	\$7,789
38	Const. other new residential structures	\$725,713	\$949,168	\$199,793	\$11,252
39	Maintenance & repair construction of nonresidential structures	\$719,279	\$330,696	\$224,891	\$18,121
40	Maintenance & repair construction of residential structures	\$41,024	\$244,867	\$27,131	\$785
42	Other animal food mfg.	\$3,559	\$208	\$5,918	\$196
46	Fats & oils refining & blending	\$1,524	\$75	\$3,096	\$61
47	Breakfast cereal mfg.	\$1,528	\$108	\$6,229	\$67
50	Chocolate & confectionery mfg. from cacao beans	\$1,882	\$131	\$1,143	\$26
51	Confectionery mfg. from purchased chocolate	\$9,119	\$597	\$14,264	\$172
52	Nonchocolate confectionery mfg.	\$4,307	\$268	\$3,872	\$100
53	Frozen food mfg.	\$12,957	\$735	\$6,940	\$288
54	Fruit & vegetable canning, pickling, & drying	\$16,986	\$873	\$20,082	\$282
55	Fluid milk & butter mfg.	\$22,372	\$1,145	\$14,416	\$664
56	Cheese mfg.	\$7,352	\$387	\$2,457	\$155
58	Ice cream & frozen dessert mfg.	\$35,517	\$2,035	\$27,354	\$675
59	Animal (except poultry) slaughtering, rendering, & processing	\$12,452	\$641	\$1,725	\$215
60	Poultry processing	\$3,473	\$250	\$681	\$51
61	Seafood product preparation & packaging	\$3,458	\$284	\$673	\$96
62	Bread & bakery product mfg.	\$126,114	\$6,867	\$41,920	\$4,645
63	Cookie, cracker, & pasta mfg.	\$207	\$14	\$262	\$7
65	Snack food mfg.	\$38,931	\$2,010	\$107,883	\$1,253
66	Coffee & tea mfg.	\$17,221	\$953	\$18,267	\$685
67	Flavoring syrup & concentrate mfg.	\$7,354	\$434	\$61,547	\$142
68	Seasoning & dressing mfg.	\$17,855	\$1,120	\$8,232	\$631
69	All other food mfg.	\$13,718	\$740	\$10,558	\$223
70	Soft drink & ice mfg.	\$34,393	\$45,751	\$23,950	\$2,687
71	Breweries	\$644	\$1,295	\$2,508	\$4,269
72	Wineries	\$3,697	\$2,988	\$1,220	\$3,663
73	Distilleries	\$201	\$330	\$273	\$3,750
74	Tobacco product mfg.	\$40,612	\$45,780	\$790,326	\$347,891
75	Fiber, yarn, & thread mills	\$527	-\$2	\$162	\$27
76	Broadwoven fabric mills	\$13,359	-\$60	\$7,857	\$818

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
77	Narrow fabric mills & schiffli machine embroidery	\$1,685	-\$7	\$411	\$72
80	Textile & fabric finishing mills	\$6,644	-\$21	\$2,377	\$244
81	Fabric coating mills	\$23,785	-\$115	\$7,766	\$574
82	Carpet & rug mills	\$318	-\$2	\$340	\$7
83	Curtain & linen mills	\$9,689	-\$45	\$6,033	\$1,471
84	Textile bag & canvas mills	\$30,758	-\$151	\$11,859	\$757
85	All other textile product mills	\$14,909	-\$59	\$8,187	\$689
86	Apparel knitting mills	\$4,508	\$3,300	\$1,810	\$111
87	Cut & sew apparel contractors	\$1,987	\$1,433	\$350	\$287
88	Men's & boys' cut & sew apparel mfg.	\$322	\$197	\$134	\$10
89	Women's & girls' cut & sew apparel mfg.	\$1,382	\$871	\$1,089	\$28
91	Apparel accessories & other apparel mfg.	\$9,300	\$5,124	-\$836	\$241
94	Other leather & allied product mfg.	\$12,698	\$219	\$2,730	\$228
95	Sawmills & wood preservation	\$4,325	\$241	\$435	\$143
97	Engineered wood member & truss mfg.	\$2,280	\$117	\$659	\$61
99	Wood windows & doors & millwork mfg.	\$20,351	\$1,106	\$2,514	\$589
100	Wood container & pallet mfg.	\$13,209	\$677	\$4,025	\$458
102	Prefabricated wood building mfg.	\$3,394	\$182	\$569	\$72
103	All other miscellaneous wood product mfg.	\$6,296	\$332	\$3,725	\$110
105	Paper mills	\$88,336	\$20,355	\$132,566	\$10,608
106	Paperboard Mills	\$21,091	\$3,984	\$23,826	\$2,367
107	Paperboard container mfg.	\$119,854	\$24,269	\$32,573	\$7,788
108	Coated & laminated paper, packaging paper & plastics film mfg.	\$53,350	\$13,513	\$45,259	\$1,683
109	All other paper bag & coated & treated paper mfg.	\$3,610	\$678	\$1,219	\$176
110	Stationery product mfg.	\$3,371	\$605	\$1,457	\$116
112	All other converted paper product mfg.	\$11,600	\$1,617	\$5,465	\$245
113	Printing	\$347,058	\$96,793	\$85,580	\$13,767
114	Support activities for printing	\$40,688	\$10,399	\$6,043	\$1,882
116	Asphalt paving mixture & block mfg.	\$37,913	\$1,631	\$85,315	\$729
117	Asphalt shingle & coating materials mfg.	\$339	\$30	\$1,231	\$6
118	Petroleum lubricating oil & grease mfg.	\$412	\$25	\$787	\$13
120	Petrochemical mfg.	\$111,511	\$9,109	\$378,045	\$41,736
121	Industrial gas mfg.	\$54,629	\$5,403	\$73,827	\$8,104
122	Synthetic dye & pigment mfg.	\$20,659	\$2,547	\$6,530	\$1,426
125	All other basic inorganic chemical mfg.	\$13,395	\$1,313	\$8,164	\$1,237
126	Other basic organic chemical mfg.	\$57,839	\$6,307	\$20,962	\$8,945
127	Plastics material & resin mfg.	\$66,581	\$8,169	\$31,673	\$9,005
128	Synthetic rubber mfg.	\$1,488	\$206	\$456	\$79
129	Artificial & synthetic fibers & filaments mfg.	\$5,271	\$760	\$469	\$206
130	Fertilizer mfg.	\$5,314	\$340	\$3,583	\$790
131	Pesticide & other agricultural chemical mfg.	\$3,230	\$433	\$10,984	\$302
132	Medicinal & botanical mfg.	\$289,779	\$45,434	\$141,456	\$4,746
133	Pharmaceutical preparation mfg.	\$795,944	\$126,191	\$1,716,049	\$37,940
134	In-vitro diagnostic substance mfg.	\$163,063	\$21,608	\$24,307	\$2,833
135	Biological product (except diagnostic) mfg.	\$3,918	\$491	\$3,427	\$114
136	Paint & coating mfg.	\$30,925	\$3,029	\$15,404	\$1,029
137	Adhesive mfg.	\$100,349	\$11,859	\$27,531	\$3,963
138	Soap & cleaning compound mfg.	\$20,183	\$2,488	\$61,741	\$775
139	Toilet preparation mfg.	\$110,621	\$15,051	\$222,242	\$3,845
140	Printing ink mfg.	\$6,115	\$872	-\$1,189	\$150
141	All other chemical product & preparation mfg.	\$135,898	\$14,152	\$62,225	\$5,594
142	Plastics packaging materials & unlaminated film & sheet mfg.	\$41,535	\$186	\$27,175	\$1,181
143	Unlaminated plastics profile shape mfg.	\$21,595	\$51	\$9,186	\$302
144	Plastics pipe & pipe fitting mfg.	\$555	\$2	\$290	\$12
145	Laminated plastics plate, sheet (except packaging), & shape mfg.	\$21,177	\$57	\$9,036	\$436
146	Polystyrene foam product mfg.	\$11,957	\$43	\$10,954	\$2,533
147	Urethane & other foam product (except polystyrene) mfg.	\$24,821	\$92	\$13,697	\$600
148	Plastics bottle mfg.	\$11,754	\$38	\$10,527	\$353
149	Other plastics product mfg.	\$213,832	\$762	\$93,794	\$4,781

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
150	Tire mfg.	\$2,900	\$20	\$1,126	\$459
151	Rubber & plastics hoses & belting mfg.	\$921	\$3	\$422	\$16
152	Other rubber product mfg.	\$38,200	\$135	\$16,723	\$2,650
153	Pottery, ceramics, & plumbing fixture mfg.	\$838	\$39	\$248	\$28
154	Brick, tile, & other structural clay product mfg.	\$2,182	\$91	\$1,657	\$72
156	Flat glass mfg.	\$743	\$45	\$719	\$30
157	Other pressed & blown glass & glassware mfg.	\$182	\$10	\$107	\$13
159	Glass product mfg. made of purchased glass	\$10,713	\$722	\$3,881	\$421
161	Ready-mix concrete mfg.	\$27,341	\$1,331	\$11,012	\$1,604
162	Concrete pipe, brick, & block mfg.	\$5,865	\$287	\$4,453	\$349
163	Other concrete product mfg.	\$48,160	\$2,536	\$20,590	\$1,985
164	Lime & gypsum product mfg.	\$8,583	\$452	\$10,151	\$685
165	Abrasive product mfg.	\$21,713	\$1,214	\$25,040	\$643
166	Cut stone & stone product mfg.	\$23,938	\$1,373	\$2,659	\$923
168	Mineral wool mfg.	\$1,191	\$81	\$994	\$85
169	Miscellaneous nonmetallic mineral product mfg.	\$1,463	\$76	\$1,398	\$91
170	Iron & steel mills & ferroalloy mfg.	\$16,236	\$37	\$6,708	\$1,196
171	Steel product mfg. from purchased steel	\$51,038	\$101	\$9,277	\$1,893
174	Aluminum product mfg. from purchased aluminum	\$38,515	\$94	\$13,845	\$1,520
176	Primary smelting & refining of nonferrous metal (except Cu & alum.)	\$112	\$0	\$66	\$10
177	Copper rolling, drawing, extruding & alloying	\$82,348	\$133	\$50,315	\$5,074
178	Nonferrous metal (except Cu & alum.) rolling, drawing, extruding	\$50,243	\$88	\$36,603	\$1,881
179	Ferrous metal foundries	\$26,613	\$73	\$7,082	\$585
180	Nonferrous metal foundries	\$16,729	\$42	\$1,369	\$449
181	All other forging, stamping, & sintering	\$58,042	\$515	\$7,739	\$1,851
182	Custom roll forming	\$1,478	\$15	\$672	\$43
183	Crown & closure mfg. & metal stamping	\$231,572	\$2,263	\$99,617	\$6,212
184	Cutlery, utensil, pot, & pan mfg.	\$74,630	\$955	\$84,930	\$395
185	Handtool mfg.	\$68,330	\$756	\$53,872	\$1,169
186	Plate work & fabricated structural product mfg.	\$68,208	\$629	\$34,368	\$1,511
187	Ornamental & architectural metal products mfg.	\$125,006	\$1,177	\$37,277	\$3,234
188	Power boiler & heat exchanger mfg.	\$15,646	\$149	\$9,934	\$210
189	Metal tank (heavy gauge) mfg.	\$8,173	\$65	\$3,180	\$103
190	Metal can, box, & other metal container (light gauge) mfg.	\$27,154	\$268	\$41,647	\$1,177
191	Ammunition mfg.	\$5,066	\$54	\$9,665	\$1,136
192	Arms, ordnance, & accessories mfg.	\$109,619	\$1,336	\$176,259	\$32,321
193	Hardware mfg.	\$188,740	\$1,693	\$156,866	\$4,616
194	Spring & wire product mfg.	\$119,390	\$1,155	\$93,249	\$1,985
195	Machine shops	\$296,618	\$2,810	\$55,371	\$6,681
196	Turned product & screw, nut, & bolt mfg.	\$192,345	\$1,842	\$100,201	\$4,619
197	Coating, engraving, heat treating & allied activities	\$218,237	\$1,968	\$110,283	\$6,790
198	Valve & fittings other than plumbing mfg.	\$119,438	\$1,047	\$110,256	\$3,148
199	Plumbing fixture fitting & trim mfg.	\$17,515	\$189	\$37,535	\$605
200	Ball & roller bearing mfg.	\$82,780	\$787	\$106,097	\$2,086
201	Fabricated pipe & pipe fitting mfg.	\$13,696	\$110	\$9,923	\$308
202	Other fabricated metal mfg.	\$30,281	\$303	\$15,866	\$554
204	Lawn & garden equipment mfg.	\$6,295	\$22	\$5,706	\$186
205	Construction machinery mfg.	\$475	\$1	\$374	\$16
206	Mining & oil & gas field machinery mfg.	\$11,995	\$29	\$5,669	\$996
207	Other industrial machinery mfg.	\$74,502	\$256	\$10,555	\$2,528
208	Plastics & rubber industry machinery mfg.	\$13,354	\$45	\$2,489	\$923
209	Semiconductor machinery mfg.	\$84,132	\$390	-\$10,290	\$1,688
210	Vending, commercial, industrial, & office machinery mfg.	\$251,069	\$837	\$28,601	\$20,888
211	Optical instrument & lens mfg.	\$114,765	\$469	\$27,217	\$3,242
212	Photographic & photocopying equipment mfg.	\$3,011	\$12	\$3,769	\$34
213	Other commercial & service industry machinery mfg.	\$20,940	\$59	\$10,062	\$581
214	Air purification & ventilation equipment mfg.	\$21,577	\$61	\$7,301	\$587
215	Heating equipment (except warm air furnaces) mfg.	\$9,976	\$40	\$3,286	\$282
216	Air conditioning, refrigeration, & warm air heating equipment mfg.	\$4,025	\$12	\$3,187	\$227

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
217	Industrial mold mfg.	\$29,717	\$114	\$1,681	\$1,016
218	Metal cutting & forming machine tool mfg.	\$69,299	\$271	\$8,243	\$2,527
219	Special tool, die, jig, & fixture mfg.	\$90,430	\$366	\$5,096	\$3,785
220	Cutting tool & machine tool accessory mfg.	\$22,687	\$90	\$3,184	\$694
221	Rolling mill & other metalworking machinery mfg.	\$79,026	\$356	\$13,996	\$2,717
222	Turbine & turbine generator set units mfg.	\$229,918	\$896	\$374,205	\$2,195
223	Speed changer, industrial high-speed drive, & gear mfg.	\$981	\$3	\$437	\$81
224	Mechanical power transmission equipment mfg.	\$42,760	\$142	\$18,248	\$1,914
225	Other engine equipment mfg.	\$12,367	\$47	\$8,607	\$384
226	Pump & pumping equipment mfg.	\$28,581	\$91	\$16,625	\$901
227	Air & gas compressor mfg.	\$4,311	\$12	\$2,239	\$255
228	Material handling equipment mfg.	\$63,241	\$225	\$29,009	\$2,173
229	Power-driven handtool mfg.	\$6,059	\$21	\$5,332	\$176
230	Other general purpose machinery mfg.	\$95,771	\$356	\$24,091	\$2,554
231	Packaging machinery mfg.	\$15,975	\$55	\$2,095	\$523
232	Industrial process furnace & oven mfg.	\$7,400	\$24	\$2,382	\$354
233	Fluid power process machinery mfg.	\$6,332	\$24	\$1,965	\$187
234	Electronic computer mfg.	\$1,184	-\$3	\$2,109	\$8
235	Computer storage device mfg.	\$6,534	-\$28	\$5,964	\$438
236	Computer terminals & other computer peripheral equipment mfg.	\$28,492	-\$56	\$4,425	\$1,008
237	Telephone apparatus mfg.	\$20,124	-\$38	\$11,188	\$572
238	Broadcast & wireless communications equipment mfg.	\$56,177	-\$71	\$4,313	\$2,071
239	Other communications equipment mfg.	\$47,316	-\$75	\$9,816	\$3,611
240	Audio & video equipment mfg.	\$5,908	-\$12	\$663	\$346
242	Bare printed circuit board mfg.	\$39,155	-\$73	\$374	\$1,238
243	Semiconductor & related device mfg.	\$49,488	-\$112	\$58,778	\$4,928
244	Electronic capacitor, resistor, coil, transformer, & inductor mfg.	\$29,197	-\$50	\$4,807	\$1,530
245	Electronic connector mfg.	\$28,870	-\$47	\$3,957	\$853
246	Printed circuit assembly (electronic assembly) mfg.	\$54,148	-\$88	\$11,180	\$1,913
247	Other electronic component mfg.	\$48,682	-\$91	\$2,334	\$1,568
248	Electromedical & electrotherapeutic apparatus mfg.	\$33,642	-\$82	\$15,088	\$1,052
249	Search, detection, & navigation instruments mfg.	\$109,443	-\$210	\$34,970	\$2,782
250	Automatic environmental control mfg.	\$6,099	-\$9	\$2,106	\$144
251	Industrial process variable instruments mfg.	\$179,244	-\$347	\$19,199	\$4,984
252	Totalizing fluid meters & counting devices mfg.	\$11,977	-\$24	\$2,776	\$623
253	Electricity & signal testing instruments mfg.	\$23,669	-\$60	\$4,786	\$605
254	Analytical laboratory instrument mfg.	\$103,604	-\$289	\$16,727	\$4,511
255	Irradiation apparatus mfg.	\$46,561	-\$136	\$19,111	\$774
256	Watch, clock, & other measuring & controlling device mfg.	\$114,988	-\$211	\$19,303	\$3,566
257	Software, audio, & video media for reproduction	\$53	\$0	\$14	\$4
258	Magnetic & optical recording media mfg.	\$3,993	-\$14	\$1,490	\$85
259	Electric lamp bulb & part mfg.	\$24,348	-\$108	\$18,051	\$193
260	Lighting fixture mfg.	\$47,518	-\$421	\$27,818	\$1,412
261	Small electrical appliance mfg.	\$24,846	-\$172	\$42,123	\$1,836
262	Household cooking appliance mfg.	\$53,102	-\$585	\$64,591	\$2,095
266	Power, distribution, & specialty transformer mfg.	\$5,144	-\$61	\$4,137	\$221
267	Motor & generator mfg.	\$48,601	-\$503	\$46,233	\$2,224
268	Switchgear & switchboard apparatus mfg.	\$74,019	-\$580	\$74,739	\$3,260
269	Relay & industrial control mfg.	\$374,070	-\$3,419	\$234,841	\$7,851
270	Storage battery mfg.	\$6,406	-\$90	\$3,030	\$325
271	Primary battery mfg.	\$16,392	-\$288	\$45,775	\$1,121
272	Communication & energy wire & cable mfg.	\$95,342	-\$762	\$75,292	\$5,032
273	Wiring device mfg.	\$154,823	-\$1,373	\$132,552	\$3,795
274	Carbon & graphite product mfg.	\$2,177	-\$24	\$1,331	\$113
275	All other miscellaneous electrical equipment & component mfg.	\$194,124	-\$1,463	\$31,563	\$6,335
276	Automobile mfg.	\$83,871	\$1,908	\$74,826	\$3,537
278	Heavy duty truck mfg.	\$26,803	\$258	\$4,577	\$577

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
279	Motor vehicle body mfg.	\$1,560	\$15	\$475	\$26
283	Motor vehicle parts mfg.	\$257,427	\$3,670	\$60,319	\$13,049
284	Aircraft mfg.	\$1,230,829	\$38,890	\$620,331	\$24,520
285	Aircraft engine & engine parts mfg.	\$1,784,347	\$12,694	\$891,855	\$69,065
286	Other aircraft parts & auxiliary equipment mfg.	\$560,032	\$7,633	\$142,532	\$19,374
289	Railroad rolling stock mfg.	\$271	\$4	\$194	\$11
290	Ship building & repairing	\$791,337	\$21,086	\$119,556	\$43,737
291	Boat building	\$3,251	\$16	\$256	\$182
292	Motorcycle, bicycle, & parts mfg.	\$10,167	\$72	\$8,728	\$281
294	All other transportation equipment mfg.	\$396	\$4	\$287	\$17
295	Wood kitchen cabinet & countertop mfg.	\$59,703	\$1,268	-\$7,236	\$1,269
296	Upholstered household furniture mfg.	\$1,468	\$32	\$660	\$16
297	Nonupholstered wood household furniture mfg.	\$12,555	\$314	\$5,276	\$232
298	Metal & other household furniture (except wood) mfg.	\$3,261	\$69	\$1,995	\$65
299	Institutional furniture mfg.	\$4,823	\$117	\$2,952	\$84
300	Wood television, radio, & sewing machine cabinet mfg.	\$8,998	\$352	\$11,032	\$34
301	Office furniture & custom architectural woodwork & millwork mfg.	\$24,498	\$542	\$3,587	\$251
302	Showcase, partition, shelving, & locker mfg.	\$12,171	\$261	\$3,370	\$277
303	Mattress mfg.	\$18,466	\$234	\$20,830	\$1,460
304	Blind & shade mfg.	\$6,401	\$164	\$303	\$133
305	Surgical & medical instrument, laboratory & medical instrument mfg.	\$504,395	\$69,295	\$441,113	\$14,180
306	Surgical appliance & supplies mfg.	\$80,926	\$9,460	\$119,117	\$1,421
307	Dental equipment & supplies mfg.	\$17,086	\$1,826	\$19,498	\$553
308	Ophthalmic goods mfg.	\$9,396	\$1,138	\$14,097	\$45
309	Dental laboratories mfg.	\$21,045	\$2,539	\$738	\$229
310	Jewelry & silverware mfg.	\$13,188	\$1,660	\$9,873	\$457
311	Sporting & athletic goods mfg.	\$10,864	\$1,687	\$8,900	\$1,045
312	Doll, toy, & game mfg.	\$53,303	\$7,894	\$47,671	\$2,380
313	Office supplies (except paper) mfg.	\$8,020	\$847	\$10,804	\$201
314	Sign mfg.	\$42,289	\$4,947	-\$7,546	\$2,929
315	Gasket, packing, & sealing device mfg.	\$18,873	\$2,131	\$7,306	\$391
316	Musical instrument mfg.	\$4,889	\$613	\$1,057	\$75
317	All other miscellaneous mfg.	\$54,433	\$7,415	\$46,220	\$715
319	Wholesale trade businesses	\$5,941,739	\$504,622	\$2,622,907	\$2,329,274
320	Retail Stores - Motor vehicle & parts	\$1,149,179	\$80,492	-\$116,683	\$254,811
321	Retail Stores - Furniture & home furnishings	\$261,633	\$29,297	\$70,246	\$107,021
322	Retail Stores - Electronics & appliances	\$358,748	\$17,774	\$51,140	\$64,664
323	Retail Stores - Building material & garden supply	\$613,595	\$45,991	\$69,634	\$224,633
324	Retail Stores - Food & beverage	\$1,285,453	\$168,822	\$177,952	\$465,790
325	Retail Stores - Health & personal care	\$565,369	\$22,563	\$1,047	\$191,134
326	Retail Stores - Gasoline stations	\$164,160	\$215,114	\$98,765	\$161,471
327	Retail Stores - Clothing & clothing accessories	\$519,446	\$28,546	\$1,982	\$238,529
328	Retail Stores - Sporting goods, hobby, book & music	\$189,364	\$41,671	\$36,821	\$79,132
329	Retail Stores - General merchandise	\$694,053	\$6,272	\$145,231	\$244,620
330	Retail Stores - Miscellaneous	\$268,126	\$72,188	\$88,513	\$91,797
331	Retail Nonstores - Direct & electronic sales	\$794,146	\$193,083	\$116,488	\$722,468
332	Transport by air	\$141,623	-\$10,100	\$51,522	\$47,351
333	Transport by rail	\$59,166	\$459	\$38,024	\$3,249
334	Transport by water	\$115,137	\$21,926	\$140,174	\$22,505
335	Transport by truck	\$384,746	\$152,929	\$93,848	\$14,882
336	Transit & ground passenger transportation	\$462,027	\$56,354	\$191,882	\$32,519
337	Transport by pipeline	\$25,098	\$4,444	-\$5,242	\$4,083
338	Scenic & sightseeing transportation & support activities for transport.	\$295,426	\$69,343	\$17,189	\$25,064
339	Couriers & messengers	\$342,952	\$22,007	\$256,104	\$16,633
340	Warehousing & storage	\$432,669	\$4,170	\$120,370	\$8,734
341	Newspaper publishers	\$182,213	\$15,643	\$68,901	\$4,018
342	Periodical publishers	\$162,477	\$11,868	\$82,629	\$3,209

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components of Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
343	Book publishers	\$40,838	\$3,386	\$56,211	\$1,233
344	Directory, mailing list, & other publishers	\$74,027	\$6,424	\$101,762	\$2,296
345	Software publishers	\$246,491	\$39,856	\$342,982	\$8,038
346	Motion picture & video industries	\$259,008	-\$3,087	\$271,642	\$27,866
347	Sound recording industries	\$2,316	-\$28	\$8,017	\$414
348	Radio & television broadcasting	\$127,184	\$8,869	\$15,528	\$4,457
349	Cable & other subscription programming	\$471,717	\$85,784	\$413,692	\$29,134
350	Internet publishing & broadcasting	\$216,949	\$40,631	-\$9,010	\$3,111
351	Telecommunications	\$894,982	\$13,202	\$1,838,467	\$342,000
352	Data processing, hosting, ISP, web search portals & related services	\$165,072	\$51,798	\$376,128	\$10,437
353	Other information services	\$33,858	\$4,566	\$73,194	\$1,201
354	Monetary authorities & depository credit intermediation activities	\$1,318,335	\$0	\$2,652,784	\$99,534
355	Nondepository credit intermediation & related activities	\$2,859,181	\$549,345	\$346,646	\$140,063
356	Securities, commodity contracts, investments, & related activities	\$8,401,609	-\$587,158	\$186,501	\$229,944
357	Insurance carriers	\$6,847,036	\$79,902	\$10,944,797	\$1,490,865
358	Insurance agencies, brokerages, & related activities	\$1,114,045	\$96,080	\$252,920	\$13,119
359	Funds, trusts, & other financial vehicles	\$1,036,096	\$276,094	\$1,042,664	\$189,162
360	Real estate establishments	\$970,995	\$558,232	\$8,185,802	\$1,234,724
361	Imputed rental activity for owner-occupied dwellings	\$0	\$0	\$14,119,687	\$1,984,791
362	Automotive equipment rental & leasing	\$89,016	\$126,621	\$264,216	\$134,358
363	General & consumer goods rental except video tapes & discs	\$87,490	\$125,727	\$8,693	\$41,804
364	Video tape & disc rental	\$8,468	\$11,929	\$10,214	\$9,357
365	Commercial & industrial machinery & equipment rental & leasing	\$111,694	\$118,384	\$193,921	\$66,645
366	Lessors of nonfinancial intangible assets	\$69,897	\$5,480	\$3,531,295	\$78,204
367	Legal services	\$1,143,230	\$682,977	\$791,488	\$156,834
368	Accounting, tax preparation, bookkeeping, & payroll services	\$865,543	\$571,752	\$446,507	\$13,788
369	Architectural, engineering, & related services	\$1,013,505	\$418,892	\$8,223	\$15,880
370	Specialized design services	\$80,565	\$41,841	\$101,008	\$7,827
371	Custom computer programming services	\$1,418,105	\$549,104	-\$203,959	\$62,402
372	Computer systems design services	\$1,338,364	\$785,742	-\$984,546	\$48,996
373	Other computer related services, including facilities management	\$274,695	\$152,633	\$557,384	\$13,025
374	Management, scientific, & technical consulting services	\$1,328,872	\$728,368	\$76,388	\$24,988
375	Environmental & other technical consulting services	\$170,299	\$92,076	-\$1,414	\$2,389
376	Scientific research & development services	\$808,081	\$433,928	-\$11,578	\$12,273
377	Advertising & related services	\$570,178	\$270,668	\$570,733	\$29,331
378	Photographic services	\$18,451	\$9,439	\$46,093	\$5,209
379	Veterinary services	\$150,910	\$79,595	-\$9,212	\$10,064
380	All other miscellaneous professional, scientific, & technical services	\$301,203	\$161,081	\$912,563	\$20,605
381	Management of companies & enterprises	\$4,492,123	-\$156,980	\$429,291	\$209,429
382	Employment services	\$1,071,067	\$250,568	\$94,509	\$6,277
383	Travel arrangement & reservation services	\$136,273	\$31,585	\$131,133	\$2,446
384	Office administrative services	\$498,231	\$111,628	-\$53,975	\$8,118
385	Facilities support services	\$94,839	\$22,329	\$42,772	\$2,379
386	Business support services	\$266,108	\$59,920	-\$10,218	\$6,847
387	Investigation & security services	\$382,997	\$86,843	-\$3,167	\$11,799
388	Services to buildings & dwellings	\$781,661	\$176,341	\$261,795	\$43,549
389	Other support services	\$176,657	\$37,213	\$135,034	\$5,726
390	Waste management & remediation services revised	\$343,715	\$84,218	\$345,433	\$49,921
391	Private elementary & secondary schools	\$1,069,348	\$51,338	-\$370,681	\$62,306
392	Private junior colleges, colleges, universities, & professional schools	\$2,246,093	\$120,204	-\$59,041	\$117,839
393	Other private educational services	\$379,318	\$14,063	-\$16,893	\$9,443
394	Offices of physicians, dentists, & other health practitioners	\$4,423,284	\$1,535,548	\$81,442	\$111,966
395	Home health care services	\$633,554	\$196,478	\$7,978	\$9,244
396	Medical & diagnostic labs & outpatient & other ambulatory care srvc	\$830,640	\$281,127	\$235,639	\$26,805
397	Private hospitals	\$4,442,320	\$12,068	\$290,004	\$119,730
398	Nursing & residential care facilities	\$2,531,207	\$20,795	\$184,997	\$199,486
399	Child day care services	\$319,545	\$47,665	\$85,269	\$8,696
400	Individual & family services	\$747,883	\$113,539	-\$49,835	\$7,520
401	Community food, housing, & relief, including rehabilitation services	\$392,311	\$58,120	-\$23,142	\$5,920

**Figure B 2: IMPLAN Study Area Data for Connecticut, Components o Value Added:
Employee Compensation, Proprietors' Income, Indirect Business Taxes, and Other
Property Type Income, 2010 (continued)**

Industry Code	Description	Employee Compensation (Thous. 2010 \$)	Proprietor Income (Thous. 2010 \$)	Other Property Type Income (Thous. 2010 \$)	Indirect Business Taxes (Thous. 2010 \$)
402	Performing arts companies	\$53,775	\$42,051	-\$14,809	\$10,148
403	Spectator sports companies	\$21,278	\$5,853	-\$3,126	\$4,232
404	Promoters of performing arts & sports & agents for public figures	\$61,785	\$48,345	\$7,050	\$16,569
405	Independent artists, writers, & performers	\$44,101	\$41,422	\$40,152	\$1,431
406	Museums, historical sites, zoos, & parks	\$61,938	\$915	\$45,348	\$6,432
407	Fitness & recreational sports centers	\$167,284	-\$10,468	\$62,303	\$19,107
408	Bowling centers	\$7,478	-\$471	\$6,033	\$1,831
409	Amusement parks, arcades, & gambling industries	\$100,566	\$6,049	\$29,998	\$14,009
410	Other amusement & recreation industries	\$181,648	-\$11,725	\$113,327	\$35,976
411	Hotels & motels, including casino hotels	\$196,660	\$34,563	\$152,195	\$71,219
412	Other accommodations	\$163,415	\$11,141	\$17,089	\$8,831
413	Food services & drinking places	\$2,333,500	\$237,959	\$870,129	\$502,001
414	Automotive repair & maintenance, except car washes	\$445,531	\$394,445	\$18,547	\$103,742
415	Car washes	\$43,293	\$40,382	\$209	\$7,650
416	Electronic & precision equipment repair & maintenance	\$154,408	\$97,136	\$55,461	\$29,460
417	Commercial & industrial machinery & equipment repair & maintenance	\$161,407	\$83,896	\$19,416	\$24,475
418	Personal & household goods repair & maintenance	\$43,062	\$39,183	\$14,818	\$11,270
419	Personal care services	\$285,041	\$433,738	\$14,595	\$33,244
420	Death care services	\$82,087	\$121,332	-\$30,161	\$9,943
421	Dry-cleaning & laundry services	\$137,505	\$200,911	-\$6,044	\$12,698
422	Other personal services	\$84,769	\$116,579	\$14,347	\$19,083
423	Religious organizations	\$64,594	\$848	\$8,070	\$0
424	Grantmaking, giving, & social advocacy organizations	\$495,176	\$6,212	-\$24,978	\$7,389
425	Civic, social, professional, & similar organizations	\$733,300	\$9,097	-\$40,575	\$38,594
426	Private household operations	\$351,359	\$0	\$0	\$0
427	US Postal Service	\$826,918	\$0	-\$18,930	\$0
429	Other Federal Government enterprises	\$29,585	\$0	\$10,918	\$0
430	State & local government passenger transit	\$41,769	\$0	-\$30,398	-\$2,100
431	State & local government electric utilities	\$29,442	\$0	\$19,196	\$0
432	Other state & local government enterprises	\$669,237	\$0	\$130,871	-\$277,407
437	* Employment & payroll only (state & local govt, non-education)	\$6,660,295	\$0	\$793,772	\$0
438	* Employment & payroll only (state & local govt, education)	\$10,364,440	\$0	\$1,231,377	\$0
439	* Employment & payroll only (federal govt, non-military)	\$911,087	\$0	\$90,907	\$0
440	* Employment & payroll only (federal govt, military)	\$1,217,405	\$0	\$741,254	\$0