# **Forestry in Illinois**

# The Impact of the Forest Products Industry on the Illinois Economy: An Input-Output Analysis

This Analysis was Commissioned by the

**Illinois Forestry Development Council** 



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#### INTRODUCTION

Forest resources are a major component of Illinois' resource base. Timberland accounts for 13.4% of the state's total land area, covering over 4.78 million acres (USDA-Forest Service). Capitalizing on this resource base, the forest products industry makes an important contribution to Illinois' economy.

The forest products industry includes four main sectors, logging, solid wood products, pulp and paper, and wood furniture manufacturing, and two related sectors, miscellaneous forest products and urban forestry. The impact of the forest products industry on Illinois' economy is measured by four key statistics: employment - the number of full- and part-time jobs in the sector; employee compensation - the wages paid by the sector; output - the sector's total value of production; and value-added - total sector output minus the costs of purchased inputs. Value-added represents the amount of money available for disbursement, either in the form of wages, owner compensation, or taxes.

Forest products industry sectors impact Illinois' economy in three ways. First, these sectors impact the state economy directly through their own employment, wages, production, and value-added. Second, there is an indirect effect resulting from the industry's purchase of goods and services from supporting industries located in the state, resulting in increased employment, wages, production, and value-added in these supporting industries to meet the demands of the forest products industry. Finally, there is an induced effect, resulting from purchases of consumer goods and services by employee households associated with both the forest products industry and its supporting industries.

This study evaluates the importance of the forest products industry to the state's economy.

#### **METHODS**

Input-Output Modeling - Forest industry economic impacts were modeled using the Impact Analysis for Planning (IMPLAN) System, originally developed by the USDA Forest Service in cooperation with the Federal Emergency Management Agency and the University of Minnesota. The IMPLAN model was designed by the Forest Service to estimate the regional economic impacts of management plans for National Forests (Alward et al. 1985; MIG, 2004). IMPLAN is a computerized database and modeling system for constructing regional economic accounts and regional input-output tables. The IMPLAN model used a 440 sector input-output transactions table based upon the Bureau of Economic Analysis' National I-O table (USDC 1984). The Minnesota IMPLAN Group, Inc. of Stillwater, Minnesota, a commercial venture, provides current data and analytical support necessary to run the model (MIG, 2004).

For reporting purposes, this study combines the results for the 440 sectors into 32 aggregated sectors – 4 major forest products sectors, 2 sectors of miscellaneous forestry related activities, and 26 nonforestry related sectors (Table 1). This procedure follows Barnett and Reinschmiedt (1996) who modeled the Mississippi agriculture industry using 45 aggregated sectors – 26 food and fiber sectors and 18 non-food and non-fiber sectors. The focus of this study is the forest products industry;

therefore, the non-forestry related sectors were further aggregated into three sectors: agricultural production, agricultural processing, and food processing, following Munn (1998). Similar aggregation schemes were used in Xu (2002), Munn and Henderson (2003), Hodges et al. (2005), Mehmood and Pelki (2005), and Henderson et al. (2008). IMPLAN data for 2010, the most recent available, were used.

The impact of the four primary sectors and two related sectors of the forest products industry were examined individually, followed by the impact of the entire industry. Direct impacts of the six sectors and the entire forest products industry were obtained from IMPLAN's study area data for Illinois. Total impacts (i.e. direct, indirect, and induced) were estimated within the IMPLAN model by removing the total employment for the relevant sector and calculating the impact on the state economy resulting from the total loss of industry production for that sector. This is the procedure recommended by the Minnesota IMPLAN Group Inc. (2000) for estimating the economic impact of an industry. This will also provide information about which industries benefit the most from the forest products industry. The importance of Illinois' forest products industry to the state, local, and federal governments were also examined through tax revenue generated.

#### **RESULTS**

Table 2 provides data on the direct impacts on Illinois' economy of the industry aggregations used in this study. Employment, wages and salaries, output, and value-added are reported for each industry aggregation. The forest products industry (all forest-related sectors) employed 36,309 people in 2010, roughly 0.5% of the state's total employment of 7,264,332. The industry paid out over \$2.8 billion in wages. The industry's average annual wage was \$77,715. The average industry wage was calculated by dividing the wages and salaries for all forestry related sectors by the employment for all forestry related sectors given in Table 2. Value-added generated by the industry totaled over \$3.0 billion.

Each sector of the forest products industry made substantial contributions to the state economy. Tables 3 to 8 provide data on the total impacts (i.e. direct, indirect and induced) of the miscellaneous forest products, urban forestry, logging, solid wood products, pulp and paper, and wood furniture sectors on the state economy, respectively. Total impacts are reported by aggregated industrial sectors. In general, the impacts reported for each forestry sector are direct impacts, while the impacts reported for all other sectors are indirect and induced impacts. The total impact of the specific forestry sector evaluated on the state economy is summarized in the table row titled Totals.

Table 9 provides data on the total impacts of the aggregated forest-related sectors. Summing the impacts of the individual forest-related sectors overestimates the impacts of the forest products industry. Considered separately, each sector has indirect and induced impacts on the other forest-related sectors. However, when all forest-related sectors are considered as a group, these impacts are internal and thus do not result in additional indirect or induced impacts. Controlling for indirect and induced impacts between forest-related sectors allows IMPLAN to internalize these impacts and generate the true impact of the forest products industry on the state economy.

#### **Miscellaneous Forests Products**

The miscellaneous forests products sector includes all establishments engaged in activities affiliated with forestry, such as tree nurseries, forestry consultants, and support activities for forestry. Support activities for forestry are included in IMPLAN sector 15, support activities for agriculture and forestry, which includes three four digit NAICS sectors: support activities for crop production, 1151; support activities for animal production, 1152; and support activities for forestry, 1153. The U.S. Census Bureau 2009 County Business Patters data base indicates the annual payroll for the three NAICS sectors. This information was used to estimate the proportion of IMPLAN sector 15 that each of the three sub sectors comprise. The support activities for forestry proportion of the output, employment, wages and salaries, and value-added for IMPLAN sector 15 was subtracted from the IMPLAN study area data values and listed separately with the aggregated miscellaneous forest products sector. The remaining portion of IMPLAN sector 15, accounting for support activities for crop production and support activities for animal production, was included in the aggregated resource services sector. Thus, only the portion of IMPLAN sector 15 relating to forestry activities was included in the direct effects for this study.

Miscellaneous forest products establishments represent the smallest forestry-related sector but their services are critical to the other sectors in the industry. Firms in the miscellaneous forest products sector employed 468 people and paid \$12.3 million in wages. Value-added exceeded \$22 million (Table 2). The total effect (i.e. direct, indirect, and induced) of this sector on Illinois' economy was even greater (Table 3). In 2010, 965 jobs were related to activities associated with the production of miscellaneous forest products with wages totaling \$38.49 million. Miscellaneous forest products generated an estimated \$110.9 million addition to Illinois' total industry output and \$63.6 million in value-added to Illinois' economy. Based on employment, miscellaneous services, wholesale and retail trade, education, financial and real estate, government, and health services are among those sectors that benefit substantially from the indirect and induced impacts created by this sector.

## **Urban forestry**

The urban forestry sector includes all firms engaged in urban forest management, tree pruning, removal, trimming, arboriculture, and related services. There is no IMPLAN sector that corresponds directly to urban forestry. Urban forestry activities are included as a part of a much larger sector - IMPLAN sector 388, services to buildings and dwellings. The output value for urban forestry related activities was estimated using results from Sass et al. (2010) indicating a total expenditure of \$178,432, 101 in 2009. Using the output value of \$178.4 million, the corresponding employment, wages and salaries, and value-added were obtained from the IMPLAN study area data values for sector 388. As urban forestry, within the original IMPLAN data set, is included in this much larger sector, the component represented by urban forestry related activities was subtracted from sector 388 IMPLAN study area data values and included as a separate sector in the direct effects for this study along with other forestry related sectors.

In 2010, urban forestry firms employed 2,696 workers and paid \$74.79 million in wages. The average annual wage was \$27,741. Total industry output for the sector was \$98.75 million and the value-added totaled \$22.07 billion (Table 2). Other industrial sectors that benefited from the

indirect and induced impacts of the urban forestry sector included miscellaneous services, wholesale and retail trade, financial and real estate, education, health services and government. Direct, indirect, and induced employment totaled 5,214. Total wages totaled \$208.96 million. Industry output related to the activities of the urban forestry sector amounted to \$521.53 million with an associated \$316.87 million in value-added (Table 4)

# Logging

The logging sector includes all establishments engaged in cutting timber and producing rough, round, hewn, or riven primary forestry and wood raw materials, including wood chips, in the field. Logging is extremely important to Illinois' economy for two reasons. First, the sector is essential in providing wood-based raw materials for the rest of the forest products industry. Second, the sector is important because of the economic contributions it makes through its own employment and income creation.

Timber is an important crop. The direct effect of the industry was substantial. Landowners received \$16.66 million for their standing timber (Topinka 2011). Logging firms employed 662 people and paid \$16.18 million in wages. Total industry output, the value of Illinois' timber harvest at the point of first processing was \$51.49 million. Value-added exceeded \$16.98 million (Table 2). The total effect of logging on Illinois' economy was even greater (Table 5). In 2010, 1,190 jobs were related to timber harvesting activities with wages totaling \$45.35 million. Logging generated an estimated \$122.1 million addition to Illinois' total industry output and \$61.68 million in value-added to Illinois' economy. Miscellaneous services, wholesale and retail trade, financial and retail trade, education, health services, and government are among those sectors that benefit substantially from the indirect and induced impacts created by the logging industry based on employment. However, the sector's overall importance was much greater than stated here. Timber harvesting and transportation are essential for solid wood products, pulp and paper, and wood furniture manufacturing - three sectors that make up the remainder of the forest products industry in the state.

#### **Solid Wood Products**

The solid wood products sector is a major component of Illinois' forest products industry and a key component of the state economy. Included in this sector are sawmills, plywood mills, veneer mills, reconstituted wood product mills, and firms manufacturing articles made primarily of wood (Table 1). In 2010, these firms directly employed 6,675 workers and paid \$368 million in wages. The average annual wage was \$54,365. Industry output for the sector was \$1.02 billion and the value-added exceeded \$376 million (Table 2).

The total impact of the solid wood products sector on Illinois' economy was substantial. This sector generated 18,316 jobs, either directly or in supporting industries. Employee compensation for these jobs was over \$917 million, annually. Total value-added was exceeded \$1.37 billion and industry output generated by the solid wood products sector and its supporting industries amounted to \$2.59 billion (Table 6).

# **Pulp and Paper**

Pulp mills, paper mills, paperboard mills, and manufacturers of paperboard containers and boxes, converted paper and paperboard products and other related paper products are included in this sector (Table 1). In 2010, these firms employed 18,645 workers and paid \$1.92 billion in wages. The average annual wage was \$103,111, almost \$20,000 greater than the state average. Total industry output for the sector was \$7.47 billion and value-added by manufacturing exceeded \$1.99 billion (Table 2).

The indirect and induced impacts of the pulp and paper sector had a major impact on the miscellaneous services, wholesale and retail trade, financial and real estate, education, government, health services, transportation and communications, and construction, increasing employment in these sectors by more than 2,700 each. The number of full- and part-time jobs generated by the pulp and paper sector, either directly, indirectly or through induced impacts, totaled 90,425. Total wages exceeded \$5.38 billion. Industry output related to pulp and paper sector activities amounted to \$17.60 billion with an associated \$8.35 billion value-added (Table 7).

#### **Wood Furniture**

This sector includes firms that manufacture wood household furniture, upholstered furniture on wood frames, wood office furniture, and wood partitions and fixtures (Table 1). In 2010, these firms employed 7, 072 workers and paid \$428 million in wages. The average annual wage was \$60,554. Total industry output for the sector was \$1.03 billion and the value-added by manufacturing totaled \$433.4 million (Table 2).

Other industrial sectors that benefited from the indirect and induced impacts of the wood furniture sector included the miscellaneous services, wholesale and retail trade financial and real estate, education, health services, government sectors. Direct, indirect, and induced employment totaled 20,267. Total wages totaled \$1.05 billion. Industry output related to the activities of the wood furniture and related products sector amounted to \$2.83 billion with an associated \$1.58 billion in value-added (Table 8).

### **Total Industry Impact**

In 2010, the combined impact of all sectors of the forest products industry on Illinois' economy was dramatic. Forestry related employment (i.e. direct, indirect, and induced) accounted for 1.8% of all jobs in Illinois. The average annual wage in forestry related occupations was \$61,609 (Table 2).

In Illinois, total industry output related to the forest products industry exceeded \$23.08 billion and related value-added was over \$11.4 billion. Related employment totaled 131,549 full- or part-time jobs with an associated annual payroll of \$8.10 billion (Table 9). The industrial sectors that benefit most from the forest products industry are miscellaneous services, wholesale and retail trade, financial and real estate and education. Wholesale and retail trade output generated

by the forest products industry, for example, was \$1.7 billion, accounting for 16,268 additional jobs

Illinois' forest products industry generated over \$2.49 billion in tax revenue in 2010. Federal government, non-defense, taxes exceeded \$1.6 billion (Table 10a). State and local government, non-education, taxes totaled over \$871 million (Table 10b).

#### LITERATURE CITED

- Alward, G.S., H.C. Davis, K.A. Depotakis, and E.M. Lofting. 1985. Regional non-survey inputoutput analysis with IMPLAN. Paper presented at the Southern Regional Science Association Conference. Washington, D.C. May 9-10, 1985.
- Barnett, B. and L. Reinschmiedt. 1996. Agriculture and Forestry in Mississippi An Analysis of the Impacts of Food and Fiber Related Sectors on the Mississippi Economy. Agricultural Economics Technical Bulletin No. 95. Mississippi State University, Mississippi State, Mississippi.
- Henderson, J.E. 2008. 2007 Harvest of Forest Products. Forest Resources Market Notes, Cooperative Extension Service, Mississippi State University, Mississippi State, Mississippi.
- Hodges, A.W., W.D. Mulkey, J.R. Alavalapati, D.R. Carter, and C.F. Kiker. 2005. Economic impacts of the forest industry in Florida, 2003. Institute of Food and Agricultural Sciences, University of Florida.
- Mehmood, S.R., and M.H. Pelkki. 2005. The Arkansas forest products industry, 1985-2001. Arkansas Forest Resources Center Series 006, School of Forest Resources, University of Arkansas-Monticello, Monticello, AR.
- Minnesota IMPLAN Group, Inc. 2000. Introduction to IMPLAN. Minnesota IMPLAN Group, Inc., Stillwater, Minnesota.
- Minnesota IMPLAN Group, Inc. 2004. IMPLAN Professional<sup>TM</sup>: User's Guide, Analysis Guide, Data Guide, Minnesota IMPLAN Group, Inc. Stillwater, MN.
- Munn, I.A. 1998. Forestry in Mississippi The Impact of the Forest Products Industry on the Mississippi Economy: An Input-Output Analysis. Forest and Wildlife Research Center, Research Bulletin FO 087. Mississippi State University, Mississippi State, Mississippi.
- Munn, I.A. and J.E. Henderson. 2003. Forestry in Mississippi: The Impact of the Forest Products Industry on the Mississippi Economy An Input-Output Analysis. Research Bulletin FO 216, Forest and Wildlife Research Center, Mississippi State University.
- Sass, L., R. Hildebrandt, and S. Key. 2010. Illinois urban and community tree programs: an update of the protection, care, and management of our urban forests. Illinois Natural History Survey Technical Report 2010 (52).
- Topinka, J.B. 2011. State of Illinois Comptroller. Available: http://www.whl.ioc.state.il.us
- United States Census Bureau. County Business Patterns. Available: http://www.census.gov/econ/cbp/

- United States Department of Commerce 1984. The detailed input-output structure of the U. S. economy, 1977. The Use and Make of Commodities by Business. Vol. 1. U.S. Department of Commerce, Bureau of Economic Analysis, Washington, D.C.
- USDA Forest Service, Forest Inventory and Analysis Program. Available: http://www.fia.fs.fed.us/tools-data/
- Xu, W., 2002. Economic impact of the Texas forest sector. Publication 161, Texas Forest Service, College Station, TX.

Table 1. Aggregation Scheme of Commercial Sectors used for IMPLAN Input-Output Analysis of the Forest Products Industry Impacts on the Illinois Economy, 2010.

MODEL SECTORS	ORIGINAL IMPLAN SECTORS
MISCELLANEOUS FOREST PRODUCTS	Forest nurseries, forest products, and timber tracts; Agriculture and forestry support activities
URBAN FORESTRY	Services to buildings and dwellings
LOGGING SOLID WOOD PRODUCTS	Logging  Sawmills; Wood preservation; Reconstituted wood product manufacturing; Veneer and plywood manufacturing; Engineered wood member and truss manufacturing; Cut stock, resawing lumber, and planning; Other millwork, including flooring; Wood container and pallet manufacturing; Prefabricated wood building manufacturing; Miscellaneous wood product manufacturing; Wood windows and door manufacturing
WOOD FURNITURE	Wood kitchen cabinet and countertop manufacturing; Upholstered household furniture manufacturing; Nonupholstered wood household furniture manufacturing; Wood office furniture manufacturing; Custom architectural woodwork and millwork
PULP AND PAPER	Pulp mills; Paper and paperboard mills; Paperboard container manufacturing; Surface-coated paperboard manufacturing; Coated and laminated paper and packaging materials; Coated and uncoated paper bag manufacturing; Die-cut paper office supplies manufacturing; Envelope manufacturing; Sanitary paper product manufacturing; All other converted paper product manufacturing
RESOURCE SERVICES	Fishing; Hunting and trapping; Agriculture and forestry support activities
MINING	Oil and gas extraction; Coal mining; Iron ore mining; Copper, nickel, lead, and zinc mining; Gold, silver, and other metal ore mining; Stone mining and quarrying; Sand, gravel, clay, and refractory mining; Other nonmetallic mineral mining; Drilling oil and gas wells; Support activities for oil and gas operations; Support activities for other mining
CONSTRUCTION	New residential 1-unit structures, nonfarm; New multifamily housing structures, nonfarm; New residential additions and alterations, nonfarm; New farm housing units and additions and alterations; Manufacturing and industrial buildings; Commercial and institutional buildings; Highway, street, bridge, and tunnel construction; Water, sewer, and pipeline construction; Other new construction; Maintenance and repair of farm and nonfarm residential structures; Maintenance and repair of nonresidential buildings; Maintenance and repair of highways, streets, bridges, and tunnels; Other maintenance and repair construction
AGRICULTURAL PRODUCTION	Oilseed farming; Grain farming; Vegetable and melon farming; Tree nut farming; Fruit farming; Greenhouse and nursery production; Tobacco farming; Cotton farming; Sugarcane and sugar beet farming; All other crop farming; Cattle ranching and farming; Poultry and egg production; Animal production, except cattle and poultry and eggs
AGRICULTURAL PROCESSING	Dog and cat food manufacturing; Other animal food manufacturing; Flour milling; Rice milling; Wet corn milling; Soybean processing; Other oilseed processing; Fats and oils refining and blending; Breakfast cereal manufacturing; Fluid milk manufacturing; Creamery butter manufacturing; Cheese manufacturing; Dry, condensed, and evaporated dairy products; Ice cream and frozen dessert manufacturing; Animal, except poultry, slaughtering; Meat processed from carcasses; Rendering and meat byproduct processing; Poultry processing
FOOD PROCESSING	Malt manufacturing; Sugar manufacturing; Confectionery manufacturing from cacao beans; Confectionery manufacturing from purchased chocolate; Nonchocolate confectionery manufacturing; Frozen food manufacturing; Fruit and vegetable canning and drying; Seafood product preparation and packaging; Frozen cakes and other pastries manufacturing; Bread and bakery product, except frozen, manufacturing; Cookie and cracker manufacturing; Mixes and dough made from purchased flour; Dry pasta manufacturing; Tortilla manufacturing; Roasted nuts and peanut butter manufacturing; Other snack food manufacturing; Coffee and tea manufacturing; Flavoring syrup and concentrate manufacturing; Mayonnaise, dressing, and sauce manufacturing; Spice and extract manufacturing; All other food manufacturing; Soft drink and ice manufacturing; Breweries; Wineries; Distilleries; Tobacco stemming and redrying; Cigarette manufacturing; Other tobacco product manufacturing
FARM INPUTS AND MACHINERY	Nitrogenous fertilizer manufacturing; Phosphatic fertilizer manufacturing; Fertilizer, mixing only, manufacturing; Pesticide and other agricultural chemical manufacturing; Farm machinery and equipment manufacturing; Lawn and garden equipment manufacturing
FABRIC MILLS AND LEATHER	Fiber, yarn, and thread mills; Broadwoven fabric mills; Narrow fabric mills and schiffli embroidery; Textile and fabric finishing mills; Leather and hide tanning and finishing; Other leather product manufacturing
PETROLEUM AND CHEMICALS	Petroleum refineries; Asphalt paving mixture and block manufacturing; Asphalt shingle and coating materials manufacturing; Petroleum lubricating oil and grease manufacturing; All other petroleum and coal products manufacturing; Petrochemical manufacturing; Industrial gas manufacturing; Synthetic dye and pigment manufacturing; Other basic inorganic chemical manufacturing; Other basic organic chemical manufacturing; Plastics material and resin manufacturing; Synthetic rubber

GLASS, STONE, AND CLAY	manufacturing; Cellulosic organic fiber manufacturing; Noncellulosic organic fiber manufacturing; Pharmaceutical and medicine manufacturing; Paint and coating manufacturing; Adhesive manufacturing; Soap and other detergent manufacturing; Polish and other sanitation good manufacturing; Surface active agent manufacturing; Toilet preparation manufacturing; Printing ink manufacturing; Explosives manufacturing; Custom compounding of purchased resins; Photographic film and chemical manufacturing; Other miscellaneous chemical product manufacturing; Plastics packaging materials, film and sheet; Plastics pipe, fittings, and profile shapes; Laminated plastics plate, sheet, and shapes; Plastics bottle manufacturing; Resilient floor covering manufacturing; Plastics plumbing fixtures and all other plastics products; Foam product manufacturing; Tire manufacturing; Rubber and plastics hose and belting manufacturing; Other rubber product manufacturing
	manufacturing; Porcelain electrical supply manufacturing; Brick and structural clay tile manufacturing; Ceramic wall and floor tile manufacturing; Nonclay refractory manufacturing; Clay refractory and other structural clay products; Glass container manufacturing; Glass and glass products, except glass containers; Cement manufacturing; Ready-mix concrete manufacturing; Concrete block and brick manufacturing; Concrete pipe manufacturing; Other concrete product manufacturing; Lime manufacturing; Gypsum product manufacturing; Abrasive product manufacturing; Cut stone and stone product manufacturing; Ground or treated minerals and earths manufacturing; Mineral wool manufacturing; Miscellaneous nonmetallic mineral products
METAL INDUSTRIES	Iron and steel mills; Ferroalloy and related product manufacturing; Iron, steel pipe and tube from purchased steel; Rolled steel shape manufacturing; Steel wire drawing; Alumina refining; Primary aluminum production; Secondary smelting and alloying of aluminum; Aluminum sheet, plate, and foil manufacturing; Aluminum extruded product manufacturing; Other aluminum rolling and drawing; Primary smelting and refining of copper; Primary nonferrous metal, except copper and aluminum; Copper rolling, drawing, and extruding; Copper wire, except mechanical, drawing; Secondary processing of copper; Nonferrous metal, except copper and aluminum, shaping; Secondary processing of other nonferrous; Ferrous metal foundaries; Aluminum foundries; Nonferrous foundries, except aluminum; Iron and steel forging; Nonferrous forging; Custom roll forming; All other forging and stamping; Cutlery and flatware, except precious, manufacturing; Hand and edge tool manufacturing; Saw blade and handsaw manufacturing; Kitchen utensil, pot, and pan manufacturing; Prefabricated metal buildings and components; Fabricated structural metal manufacturing; Plate work manufacturing; Metal window and door manufacturing; Sheet metal work manufacturing; Ornamental and architectural metal work manufacturing; Power boiler and heat exchanger manufacturing; Metal tank, heavy gauge, manufacturing; Metal can, box, and other container manufacturing; Hardware manufacturing; Spring and wire product manufacturing; Metal coating and nonprecious engraving; Electroplating, anodizing, and coloring metal; Metal valve manufacturing; Ball and roller bearing manufacturing; Small arms manufacturing; Other ordnance and accessories manufacturing; Fabricated pipe and pipe fitting manufacturing; Industrial pattern manufacturing; Enameled iron and metal sanitary ware manufacturing; Miscellaneous fabricated metal product manufacturing; Ammunition manufacturing
MACHINERY AND EQUIPMENT	Construction machinery manufacturing; Mining machinery and equipment manufacturing; Oil and gas field machinery and equipment; Sawmill and woodworking machinery; Plastics and rubber industry machinery; Paper industry machinery manufacturing; Textile machinery manufacturing; Printing machinery and equipment manufacturing; Food product machinery manufacturing; Office machinery manufacturing; Optical instrument and lens manufacturing; Other commercial and service industry machinery manufacturing; Automatic vending, commercial laundry and drycleaning machinery; Air purification equipment manufacturing; Industrial and commercial fan and blower manufacturing; Heating equipment, except warm air furnaces; AC, refrigeration, and forced air heating; Industrial mold manufacturing; Metal cutting machine tool manufacturing; Special tool, die, jig, and fixture manufacturing; Cutting tool and machine tool accessory manufacturing; Rolling mill and other metalworking machinery; Turbine and turbine generator set units manufacturing; Other engine equipment manufacturing; Speed changers and mechanical power transmission equipment; Pump and pumping equipment manufacturing; Air and gas compressor manufacturing; Measuring and dispensing pump manufacturing; Overhead cranes, hoists, and monorail systems; Power-driven handtool manufacturing; Welding and soldering equipment manufacturing; Packaging machinery manufacturing; Welding and soldering equipment manufacturing; Packaging machinery manufacturing; Fluid power pump and motor manufacturing; Scales, balances, and miscellaneous general purpose machinery; Electric lamp bulb and part manufacturing; Household vacuum cleaner manufacturing; Household cooking appliance manufacturing; Household refrigerator and home freezer manufacturing; Household laundry equipment manufacturing; Other major household appliance manufacturing; Switchgear and switchboard apparatus manufacturing; Relay and industrial control manufacturing; Storage battery manufacturing; Primary battery manufacturing;

	Fiber optic cable manufacturing; Other communication and energy wire manufacturing; Wiring device manufacturing; Carbon and graphite product manufacturing; Miscellaneous electrical equipment manufacturing
TRANSPORTATION EQUIPMENT	Industrial truck, trailer, and stacker manufacturing; Automobile and light truck manufacturing; Heavy duty truck manufacturing; Motor vehicle body manufacturing; Truck trailer manufacturing; Motor home manufacturing; Travel trailer and camper manufacturing; Motor vehicle parts manufacturing; Aircraft manufacturing; Aircraft engine and engine parts manufacturing; Other aircraft parts and equipment; Propulsion units and parts for space vehicles and guided missiles; Railroad rolling stock manufacturing; Ship building and repairing; Boat building; Motorcycle, bicycle, and parts manufacturing; All other transportation equipment manufacturing
TECHNOLOGY INDUSTRIES	Photographic and photocopying equipment manufacturing; Electronic computer manufacturing; Computer storage device manufacturing; Computer terminal manufacturing; Other computer peripheral equipment manufacturing; Telephone apparatus manufacturing; Broadcast and wireless communications equipment; Other communications equipment manufacturing; Audio and video equipment manufacturing; Electron tube manufacturing; Semiconductors and related device manufacturing; All other electronic component manufacturing; Electromedical apparatus manufacturing; Search, detection, and navigation instruments; Automatic environmental control manufacturing; Industrial process variable instruments; Totalizing fluid meters and counting devices; Electricity and signal testing instruments; Analytical laboratory instrument manufacturing; Irradiation apparatus manufacturing; Software reproducing; Audio and video media reproduction; Magnetic and optical recording media manufacturing; Guided missile and space vehicle manufacturing; Military armored vehicles and tank parts manufacturing; Laboratory apparatus and furniture manufacturing; Surgical and medical instrument manufacturing; Surgical appliance and supplies manufacturing; Dental laboratories
TRANSPORTATION AND COMMUNICATION SERVICES	Air transportation; Rail transportation; Water transportation; Truck transportation; Transit and ground passenger transportation; Pipeline transportation; Scenic and sightseeing transportation and support activities for transportation
MISCELLANEOUS MANUFACTURING	Nonwoven fabric mills; Knit fabric mills; Fabric coating mills; Carpet and rug mills; Curtain and linen mills; Textile bag and canvas mills; Tire cord and tire fabric mills; Other miscellaneous textile product mills; Sheer hosiery mills; Other hosiery and sock mills; Other apparel knitting mills; Cut and sew apparel manufacturing; Accessories and other apparel manufacturing; Footwear manufacturing; Manufactured home, mobile home, manufacturing; Flexible packaging foil manufacturing; Stationery and related product manufacturing; Manifold business forms printing; Books printing; Blankbook and looseleaf binder manufacturing; Commercial printing; Tradebinding and related work; Prepress services; Watch, clock, and other measuring and controlling device manufacturing; Metal household furniture manufacturing; Institutional furniture manufacturing; Other household and institutional furniture; Office furniture, except wood, manufacturing; Showcases, partitions, shelving, and lockers; Mattress manufacturing; Blind and shade manufacturing; Jewelry and silverware manufacturing; Sporting and athletic goods manufacturing; Doll, toy, and game manufacturing; Office supplies, except paper, manufacturing; Sign manufacturing; Gasket, packing, and sealing device manufacturing; Musical instrument manufacturing; Broom, brush, and mop manufacturing; Burial casket manufacturing; Buttons, pins, and all other miscellaneous manufacturing
UTILITY SERVICES	Power generation and supply; Natural gas distribution; Water, sewage and other systems; Waste management and remediation services
WHOLESALE AND RETAIL TRADE	Wholesale trade; Warehousing and storage; Motor vehicle and parts dealers; Furniture and home furnishings stores; Electronics and appliance stores; Building material and garden supply stores; Food and beverage stores; Health and personal care stores; Gasoline stations; Clothing and clothing accessories stores; Sporting goods, hobby, book and music stores; General merchandise stores; Miscellaneous store retailers; Nonstore retailers; Newspaper publishers; Periodical publishers; Book publishers; Database, directory, and other publishers; Software publishers
FINANCIAL AND REAL ESTATE	Nondepository credit intermediation and related activities; Securities, commodity contracts, investments; Insurance carriers; Insurance agencies, brokerages, and related; Funds, trusts, and other financial vehicles; Monetary authorities and depository credit intermediation; Real estate
MISCELLANEOUS SERVICES	Information services; Data processing services; Legal services; Other support services; Nursing and residential care facilities; Child day care services; Social assistance, except child day care services; Hotels and motels, including casino hotels; Other accommodations; Food services and drinking places; Car washes; Automotive repair and maintenance, except car washes; Electronic equipment repair and maintenance; Commercial machinery repair and maintenance; Household goods repair and maintenance; Personal care services; Death care services; Drycleaning and laundry services; Other personal services; Religious organizations; Grantmaking and giving and social advocacy organizations; Civic, social, professional and similar organizations; Couriers and messengers; Accounting and bookkeeping services; Architectural and engineering services; Specialized design services; Custom computer programming services; Computer systems design services; Other computer related services, including facilities management; Management consulting services; Environmental and other technical consulting services; Scientific research and development services; Advertising and related services; Photographic services; Veterinary services; All other miscellaneous professional and technical services; Management of companies and enterprises;

	Office administrative services; Facilities support services; Employment services; Business support services; Travel arrangement and reservation services; Investigation and security services; Services to buildings and dwellings; Private households
RECREATION AND AMUSEMENT	Motion picture and video industries; Performing arts companies; Spectator sports; Independent artists, writers, and performers; Promoters of performing arts and sports and agents for public figures; Museums, historical sites, zoos, and parks; Fitness and recreational sports centers; Bowling centers; Other amusement, gambling, and recreation industries
HEALTH SERVICES	Home health care services; Offices of physicians, dentists, and other health practioners; Other ambulatory health care services; Hospitals
EDUCATION	Elementary and secondary schools; Colleges, universities, and junior colleges; Other educational services State & Local Education
GOVERNMENT	Postal service; Federal electric utilities; Other Federal Government enterprises; State and local government passenger transit; State and local government electric utilities; Other State and local government enterprises; State & Local Non-Education; Federal Military; Federal Non-Military
DOMESTIC SERVICES	Sound recording industries; Radio and television broadcasting; Cable networks and program distributionl; Telecommunications; Automotive equipment rental and leasing; Video tape and disc rental; Machinery and equipment rental and leasing; General and consumer goods rental except video tapes and discs; Lessors of nonfinancial intangible assets
BALANCE	Noncomparable imports; Scrap; Used and secondhand goods; Rest of the world adjustment to final uses; Inventory valuation adjustment; Owner-occupied dwellings

Table 2. Direct Impacts on Illinois Employment, Wages, Output, and Value-Added of the Aggregated Industrial Sectors (2010).

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	468	12.29	45.17	22.07
Urban Forestry	2,696	74.79	98.75	178.43
Logging	662	16.18	51.49	16.98
Solid Wood Products	6,765	367.78	1,021.35	376.27
Pulp and Paper	18,645	1,922.50	7,466.73	1,992.34
Wood Furniture	7,072	428.24	1,025.17	433.40
FOREST PRODUCTS	36,309	2,821.79	9,708.66	3,019.50
INDUSTRY				
(sum of above sectors)				
Agricultural Production	95,436	4,755.32	15,408.28	4,932.45
Agriculture Processing	33,271	4,370.89	34,190.21	4,473.65
Construction	325,501	21,898.28	46,099.11	22,188.35
Domestic Services	91,382	18,409.71	35,144.79	20,473.66
Education	586,255	34,060.00	40,094.13	34,423.53
Fabric Mills and Leather	1,322	74.60	235.00	76.44
Farm Inputs and Machinery	6,967	1,484.04	4,613.13	1,509.99
Financial and Real Estate	794,432	97,540.06	168,833.08	104,662.20
Food Processing	47,858	5,593.89	20,686.05	5,993.20
Glass, Stone, and Clay	12,362	1,476.90	3,567.59	1,522.62
Government	504,496	41,267.02	48,356.53	40,189.27
Health Services	503,546	34,363.36	58,597.15	35,094.63
Machinery and Equipment	91,031	12,652.88	34,949.40	12,936.56
Metal Industries	104,359	10,839.73	29,768.60	11,080.60
Mining	28,889	5,706.80	9,484.40	6,671.48
Miscellaneous Manufacturing	66,344	5,499.70	12,444.76	5,637.09
Miscellaneous Services	2,291,117	133,358.47	208,747.22	139,285.88
Petroleum and Chemicals	89,446	23,103.92	85,811.85	23,610.50
Recreation and Amusement	150,223	4,943.79	9,225.61	5,573.62
Resource Services	9,920	352.08	477.11	359.56
Technology Industries	45,022	6,188.80	16,134.05	6,314.84
Transportation and	212,212	16,046.08	31,701.37	17,568.58
Communication Services				
Transportation Equipment	31,638	3,695.96	17,082.46	3,810.13
Utility Services	37,585	11,500.69	19,411.56	14,033.40
Wholesale and Retail Trade	1,067,410	63,682.79	112,511.23	79,348.16
Balance	-	38,120.58	53,546.57	43,479.15
Total	7,264,332	603,808.13	1,126,829.88	648,269.07

Table 3. Total Impacts of the Miscellaneous Forest Products Sector on Illinois Employment, Wages, Output, and Value-Added for the Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
<b>Miscellaneous Forest Products</b>	468	12.29	45.17	22.07
Urban Forestry	8	0.22	0.53	0.29
Logging	0	0.00	0.00	0.00
Solid Wood Products	0	0.01	0.03	0.01
Pulp and Paper	0	0.03	0.14	0.04
Wood Furniture	0	0.01	0.02	0.01
Agricultural Production	15	0.52	2.22	0.76
Agriculture Processing	1	0.06	0.80	0.12
Construction	21	1.18	3.05	1.44
Domestic Services	5	0.40	2.04	1.16
Education	55	3.08	3.93	3.35
Fabric Mills and Leather	0	0.00	0.00	0.00
Farm Inputs and Machinery	1	0.11	0.79	0.26
Financial and Real Estate	53	2.96	11.41	7.13
Food Processing	2	0.10	0.75	0.21
Glass, Stone, and Clay	0	0.03	0.11	0.04
Government	45	3.24	4.36	3.70
Health Services	41	2.70	4.89	2.89
Machinery and Equipment	1	0.12	0.56	0.20
Metal Industries	1	0.06	0.24	0.09
Mining	0	0.05	0.15	0.10
Miscellaneous Manufacturing	1	0.09	0.27	0.12
Miscellaneous Services	144	6.75	12.60	8.22
Petroleum and Chemicals	2	0.18	1.82	0.48
Recreation and Amusement	13	0.28	0.78	0.45
Resource Services	0	0.00	0.00	0.00
Technology Industries	0	0.04	0.15	0.07
Transportation and Communication Services	9	0.51	1.22	0.68
Transportation Equipment	0	0.04	0.21	0.05
Utility Services	3	0.28	1.22	0.90
Wholesale and Retail Trade	74	3.16	6.95	5.00
Balance	0	0.00	4.40	3.72
Total	965	38.49	110.85	63.57

Table 4. Total Impacts of the Urban Forestry Sector on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	0	0.01	0.02	0.01
Urban Forestry	2,696	178.43	98.75	74.79
Logging	0	0.00	0.00	0.00
Solid Wood Products	1	0.05	0.17	0.06
Pulp and Paper	2	0.14	0.77	0.21
Wood Furniture	1	0.04	0.11	0.05
Agricultural Production	3	0.32	0.69	0.31
Agriculture Processing	4	0.24	2.62	0.41
Construction	92	5.23	13.63	6.39
Domestic Services	49	3.64	18.35	10.49
Education	242	13.31	17.03	14.44
Fabric Mills and Leather	0	0.00	0.01	0.00
Farm Inputs and Machinery	1	0.05	0.39	0.13
Financial and Real Estate	288	15.70	61.65	40.00
Food Processing	8	0.51	3.98	1.12
Glass, Stone, and Clay	2	0.15	0.56	0.23
Government	208	15.25	20.82	17.34
Health Services	214	14.22	25.76	15.23
Machinery and Equipment	6	0.54	2.49	0.91
Metal Industries	4	0.27	1.06	0.43
Mining	5	0.69	1.83	1.25
Miscellaneous Manufacturing	8	0.52	1.58	0.73
Miscellaneous Services	872	40.84	75.27	49.79
Petroleum and Chemicals	9	1.29	19.39	4.26
Recreation and Amusement	59	1.35	3.73	2.21
Resource Services	0	0.00	0.03	0.02
Technology Industries	2	0.21	0.78	0.35
Transportation and Communication Services	47	2.67	6.50	3.61
Transportation Equipment	1	0.11	0.71	0.16
Utility Services	15	1.59	6.76	4.93
Wholesale and Retail Trade	373	15.26	33.71	23.83
Balance	0	0.00	22.71	19.21
Total	5,214	208.96	521.53	316.87

Table 5. Total Impacts of the Logging Sector on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	31	0.77	3.14	1.49
Urban Forestry	7	0.18	0.44	0.24
Logging	662	16.18	51.49	16.98
Solid Wood Products	0	0.02	0.07	0.02
Pulp and Paper	0	0.02	0.11	0.03
Wood Furniture	0	0.01	0.02	0.01
Agricultural Production	11	0.90	2.65	0.96
Agriculture Processing	1	0.05	0.58	0.09
Construction	17	0.95	2.46	1.16
Domestic Services	7	0.49	2.39	1.36
Education	53	2.94	3.74	3.19
Fabric Mills and Leather	0	0.00	0.00	0.00
Farm Inputs and Machinery	0	0.02	0.16	0.05
Financial and Real Estate	53	2.92	11.31	7.19
Food Processing	2	0.10	0.79	0.22
Glass, Stone, and Clay	0	0.02	0.10	0.04
Government	44	3.19	4.32	3.64
Health Services	44	2.89	5.24	3.10
Machinery and Equipment	1	0.09	0.42	0.15
Metal Industries	1	0.04	0.17	0.07
Mining	0	0.06	0.16	0.11
Miscellaneous Manufacturing	1	0.08	0.25	0.11
Miscellaneous Services	152	6.87	12.88	8.34
Petroleum and Chemicals	1	0.17	1.92	0.49
Recreation and Amusement	11	0.26	0.71	0.42
Resource Services	0	0.00	0.01	0.00
Technology Industries	0	0.04	0.13	0.06
Transportation and Communication Services	15	0.90	2.11	1.17
Transportation Equipment	0	0.02	0.12	0.03
Utility Services	2	0.27	1.21	0.90
Wholesale and Retail Trade	84	3.71	8.14	5.92
Balance	0	0.00	4.86	4.11
Total	1,190	45.35	122.10	61.68

Table 6. Total Impacts of the Solid Wood Sector on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	47	1.10	5.21	2.37
Urban Forestry	217	6.02	14.35	7.94
Logging	232	6.21	18.42	6.09
Solid Wood Products	6,765	367.78	1,021.35	376.27
Pulp and Paper	15	1.14	6.03	1.58
Wood Furniture	5	0.22	0.65	0.26
Agricultural Production	31	2.50	7.19	2.71
Agriculture Processing	18	1.05	11.83	1.82
Construction	444	25.28	64.97	30.87
Domestic Services	167	12.31	62.54	35.81
Education	1,052	58.08	74.09	63.10
Fabric Mills and Leather	6	0.29	1.16	0.41
Farm Inputs and Machinery	2	0.24	1.66	0.57
Financial and Real Estate	1,198	65.55	250.41	160.56
Food Processing	35	2.24	17.47	4.92
Glass, Stone, and Clay	16	1.15	4.81	2.04
Government	925	67.74	93.13	76.84
Health Services	936	62.13	112.55	66.53
Machinery and Equipment	31	2.81	12.74	4.71
Metal Industries	44	2.90	11.00	4.45
Mining	11	1.34	3.70	2.51
Miscellaneous Manufacturing	45	2.84	8.84	3.95
Miscellaneous Services	3,514	169.99	317.82	208.10
Petroleum and Chemicals	48	5.30	51.68	13.47
Recreation and Amusement	262	5.91	16.20	9.59
Resource Services	1	0.01	0.11	0.07
Technology Industries	11	1.08	4.00	1.68
Transportation and Communication Services	453	27.13	63.37	35.55
Transportation Equipment	6	0.49	3.21	0.71
Utility Services	77	8.95	39.78	29.69
Wholesale and Retail Trade	1,895	87.73	193.36	140.74
Balance	0	0.00	98.99	83.73
Total	18,316	917.40	2,592.58	1,376.33

Table 7. Total Impacts of the Pulp and Paper Sector on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	20	0.58	1.59	0.86
Urban Forestry	1,435	39.81	94.97	52.56
Logging	202	5.41	16.05	5.30
Solid Wood Products	122	4.99	18.39	6.36
Pulp and Paper	18,645	1,922.50	7,466.73	1,992.34
Wood Furniture	19	0.93	2.83	1.20
Agricultural Production	95	5.76	17.51	6.87
Agriculture Processing	114	6.99	83.63	12.77
Construction	2,863	163.05	418.10	199.10
Domestic Services	1,019	74.83	400.61	234.70
Education	6,509	360.23	457.84	392.02
Fabric Mills and Leather	4	0.18	0.71	0.24
Farm Inputs and Machinery	14	1.38	9.39	3.22
Financial and Real Estate	7,260	397.35	1,515.21	971.36
Food Processing	211	13.35	104.18	29.33
Glass, Stone, and Clay	56	4.08	16.16	6.72
Government	5,729	418.35	576.05	474.21
Health Services	5,578	370.41	671.05	396.66
Machinery and Equipment	167	15.80	71.51	26.32
Metal Industries	308	19.92	71.32	29.43
Mining	85	10.52	28.14	19.12
Miscellaneous Manufacturing	1,357	93.38	427.43	130.00
Miscellaneous Services	21,443	1,061.18	1,970.00	1,290.64
Petroleum and Chemicals	561	55.86	448.80	111.08
Recreation and Amusement	1,571	35.29	96.79	57.25
Resource Services	7	0.06	0.66	0.45
Technology Industries	70	6.43	24.01	9.99
Transportation and Communication Services	2,685	165.52	398.38	222.27
Transportation Equipment	32	2.71	18.12	3.97
Utility Services	551	65.05	301.99	218.37
Wholesale and Retail Trade	12,060	584.56	1,287.01	947.47
Balance	0	0.00	588.95	498.13
Total	90,425	5,381.30	17,602.36	8,350.82

Table 8. Total Impacts of the Wood Furniture Sector on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
Miscellaneous Forest Products	4	0.11	0.35	0.18
Urban Forestry	260	7.21	17.20	9.52
Logging	12	0.31	0.93	0.31
Solid Wood Products	84	3.88	18.24	6.17
Pulp and Paper	37	2.85	14.73	3.83
Wood Furniture	7,072	428.24	1,025.17	433.40
Agricultural Production	16	1.05	3.09	1.25
Agriculture Processing	21	1.20	13.27	2.07
Construction	518	29.48	75.67	35.99
Domestic Services	209	15.61	80.00	45.64
Education	1,175	64.68	82.76	70.19
Fabric Mills and Leather	4	0.18	0.85	0.28
Farm Inputs and Machinery	3	0.25	1.70	0.59
Financial and Real Estate	1,442	78.38	300.14	190.19
Food Processing	41	2.57	20.08	5.65
Glass, Stone, and Clay	14	1.05	4.37	1.86
Government	1,034	75.98	104.99	86.16
Health Services	1,076	71.44	129.41	76.50
Machinery and Equipment	28	2.72	12.57	4.60
Metal Industries	50	3.34	13.11	5.17
Mining	11	1.34	3.72	2.52
Miscellaneous Manufacturing	75	4.43	13.85	5.94
Miscellaneous Services	4,119	197.68	376.69	249.37
Petroleum and Chemicals	89	8.43	65.27	18.00
Recreation and Amusement	304	6.94	18.99	11.28
Resource Services	1	0.01	0.13	0.09
Technology Industries	12	1.17	4.34	1.83
Transportation and Communication Services	382	21.98	52.38	29.13
Transportation Equipment	5	0.44	3.08	0.65
Utility Services	93	10.18	43.28	31.87
Wholesale and Retail Trade	2,214	97.58	215.40	154.45
Balance	0	0.00	113.72	96.18
Total	20,267	1,052.29	2,829.48	1,581.08

Table 9. Total Impacts of the Forest Products Industry on Illinois Employment, Wages, Output, and Value-Added by Aggregated Industrial Sectors (2010)

Sectors	Employment	Wages and Salaries (\$MM)	Total Industry Output (\$MM)	Value-Added (\$MM)
<b>Miscellaneous Forest Products</b>	468	12.29	45.17	22.07
Urban Forestry	2,696	74.79	98.75	178.43
Logging	662	16.18	51.49	16.98
<b>Solid Wood Products</b>	6,765	367.78	1,021.35	376.27
Pulp and Paper	18,645	1,922.50	7,466.73	1,992.34
Wood Furniture	7,072	428.24	1,025.17	433.40
Agricultural Production	158	9.95	30.19	11.68
Agriculture Processing	155	9.32	109.72	16.82
Construction	3,851	219.26	562.57	267.73
Domestic Services	1,407	103.68	547.76	318.76
Education	8,816	487.36	620.30	530.07
Fabric Mills and Leather	13	0.65	2.68	0.92
Farm Inputs and Machinery	20	1.97	13.47	4.61
Financial and Real Estate	9,984	545.91	2,084.11	1,333.86
Food Processing	290	18.30	142.89	40.22
Glass, Stone, and Clay	86	6.31	25.44	10.66
Government	7,753	566.75	780.45	642.54
Health Services	7,653	508.16	920.61	544.17
Machinery and Equipment	228	21.48	97.52	35.88
Metal Industries	402	26.17	95.48	39.07
Mining	109	13.38	36.08	24.50
Miscellaneous Manufacturing	1,478	100.66	449.92	139.89
Miscellaneous Services	29,321	1,439.92	2,684.93	1,761.59
Petroleum and Chemicals	700	69.83	570.50	143.59
Recreation and Amusement	2,156	48.55	133.12	78.80
Resource Services	10	0.08	0.91	0.61
Technology Industries	94	8.73	32.54	13.59
Transportation and Communication Services	3,523	214.71	514.40	287.09
Transportation Equipment	44	3.69	24.68	5.39
Utility Services	723	84.45	386.04	280.64
Wholesale and Retail Trade	16,268	773.52	1,703.83	1,248.24
Balance	0	0.00	808.52	683.84
Total	131,549	8,104.60	23,087.32	11,484.24

# Table 10a. Federal, Non-Defense Tax Impacts (\$MM) Generated by the Forest Products Industry in Illinois (2010).

Type of Tax	
Corporate Profits Tax	229.84
Indirect Business Taxes <sup>1</sup>	95.88
Personal Taxes <sup>2</sup>	525.30
Social Security Taxes <sup>3</sup>	772.72
Total	1,623.74

<sup>&</sup>lt;sup>1</sup>Includes Custom Duty; Excise Taxes; and Federal Non Taxes. <sup>2</sup>Includes Estate and Gift Taxes; and Income Taxes.

# Table 10b. State and Local Government, Non-Education Taxes (\$MM) Generated by the Forest **Products Industry in Illinois (2010).**

Type of Tax	
Corporate Profits Tax	49.19
Dividends	1.64
Indirect Business Taxes <sup>1</sup>	635.71
Personal Taxes <sup>2</sup>	165.79
Social Security Taxes <sup>3</sup>	19.45
Total	871.78

<sup>&</sup>lt;sup>1</sup>Includes Motor Vehicle License; Property Taxes; State and Local Non Taxes; Sales Tax; Severance Tax; and Other Taxes.

<sup>&</sup>lt;sup>3</sup>Includes Employee Contribution; and Employer Contribution.

<sup>&</sup>lt;sup>2</sup>Includes Estate and Gift Taxes; Income Taxes; Motor Vehicle License; Non Taxes; Property Taxes; and Other Taxes.

<sup>&</sup>lt;sup>3</sup>Includes Employee Contribution; and Employer Contribution.