

**The Grocery Retail Industry in Ohio
IMPACT STUDY**

Prepared for the Ohio Grocers Association



By

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SUMMARY

Ohioans not only depend on grocers as distributors of their food supply, but as employers and taxpayers as well. This analysis was conducted to assess the economic impact of the grocery retail industry in Ohio, in order to illustrate the importance of grocery retailers, large and small, as employers and taxpayers in the state.²

Table 1

Number of Grocery Retail Locations	7,951
Economic Impact	\$5,625,883,100
Sales	\$ 18,528,800,000
Employees	109,430
Full-Time	76,600
Part-Time (16,415 FTE)	32,830
Jobs (FTE)	93,020
Wages	\$ 2,339,362,300
State Taxes Paid by Retailers	\$ 720,942,367
Federal Taxes Paid by Retailers	\$ 349,650,122

DIRECT IMPACTS

The grocery retail industry is comprised of a broad spectrum of retail food stores ranging from local-neighborhood markets to national retail chains. The grocery retail industry in Ohio is defined as those businesses that generally sell food products for off-premise consumption. These include retailers such as supermarkets, meat and fish markets, bakeries, fruit and vegetable markets, and dairy products and beverage stores. In addition, jobs associated with off-premise food sales in general merchandise and variety stores (such as Target and Wal-Mart) and warehouse club stores (like Costco and BJ's) are included in the analysis. Other retail stores that sell a small amount of grocery items as a sideline business (including drug stores and convenience stores) are not included in the analysis.

- Based on data from Dun and Bradstreet, there are approximately **7,951 grocery retail stores** in the state.³
- The industry directly generates **\$5.6 billion in economic activity** in Ohio.⁴
- In 2010, these retailers sold over **\$18.5 billion in sales** of food and beverage items to Ohio consumers.⁵

² This analysis was conducted by John Dunham and Associates, a New York City based economic research firm. It was commissioned by the Ohio Grocers Association.

³ Dun & Bradstreet data is recognized nationally as a premier source of micro industry data. The D&B database contains information on over 15 million businesses in the United States. It is used extensively for credit reporting, and according to the vendor, encompasses about 98 percent of all business enterprises in the country.

⁴ Economic impact is described as the economic effects generated in a location by the activity of a firm and its employees. In the case of grocery retailing, this may differ greatly from sales, as most of the value of food products is passed through to consumers.

⁵ Based on U.S. Census Bureau, "2007 Economic Census, Advance Comparative Statistics for the United States, (2002 NAICS Basis): 2007 and 2002;" <<http://www.census.gov/econ/census07/>>

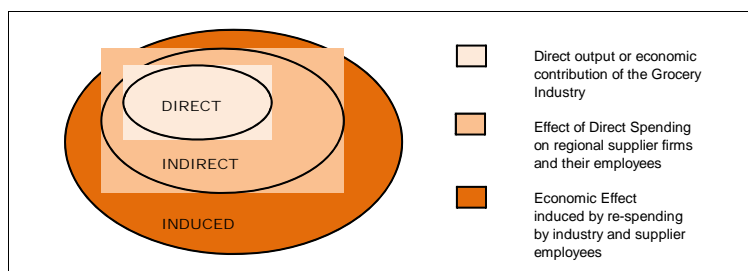
- Ohio grocery retailers **employ 109,430 people** in both full and part-time jobs. This equates to over 93,000 full-time equivalent jobs.⁶ These are good jobs, paying on average \$24,600 in wages.
- In total, Ohio employers pay **over \$2.3 billion in wages** annually.
- In 2010, **Ohio Grocers paid \$720.9 million in state and local taxes, and \$349.6 million in federal taxes.**

Table 2
Tax Payments Made by Grocery Retailers

Total Federal Tax	\$349,650,122
State Taxes	
Income Taxes	\$10,104,005
Profits Taxes	\$19,070,034
Gross Receipts and Sales (including the CAT)	\$303,304,928
Property Taxes	\$312,061,792
Excise and Other Taxes	\$38,486,202
License, Fines and Fees	\$37,915,406
Total State Taxes	\$720,942,367
Total Taxes	\$1,070,592,489

While the actual food sales made by grocery retailers are not included in the economic impact of the industry in the state, they are a substantial and important part of the market-basket of goods and services purchased by Ohio’s citizens. It is estimated that over \$18.5 billion of food products are purchased from retailers in the state each year. While not all of these purchases are part of the sales tax base, many are, and these purchases provide additional revenues to state and local governments that are not captured in the estimates presented above.

SECONDARY IMPACTS



It is sometimes mistakenly thought that initial spending accounts for all of the impact of an economic activity or a product. For example, at first glance it may appear that consumer expenditures for a product are the sum total of the impact on the local economy.

However, one economic activity always

leads to a ripple effect whereby other sectors and industries benefit from this initial spending. This inter-industry effect of an economic activity can be assessed using multipliers from regional input-output modeling. The economic activities of events are linked to other industries in the state economy. The activities required to operate and manage a grocery store, to packaging and shipping generate the direct effects on the economy. Indirect impacts occur when these activities require purchases of goods and services such as building materials from local or regional suppliers. Additional, or induced, impacts occur when workers involved in direct and indirect activities spend their wages in the state. The ratio between

⁶ Based on an estimate of part-time employees in the grocery store industry of 30%. See: Bureau of Labor Statistics, U.S. Department of Labor, *Career Guide to Industries, 2010-11 Edition*, Grocery Stores , on-line at <http://www.bls.gov/oco/cg/cgs024.htm>

total economic and direct impact is termed the multiplier.

This method of analysis allows the impact of local production activities to be quantified in terms of final demand, earnings, and employment in the state. Once the direct impact of the industry has been calculated, the input-output methodology discussed below is used to calculate the contribution of the supplier sector and of the re-spending in the economy by employees in the industry and its suppliers. This induced impact is the most controversial part of economic impact studies and is often quite inflated. In the case of this model, only the most conservative estimate of the Induced Impact has been used.

In addition to directly providing jobs to Ohio residents, firms supplying goods and services to grocery retailing operations employ Ohio residents in sectors ranging from displays and construction to transportation and communication services. Supplier companies located in Ohio generate a total of 13,070 full-time equivalent jobs, paying \$610.6 million in wages.⁷ In addition, the operations of supplier firms create \$1.75 billion in economic activity in Ohio.⁸

Table 3
The Economic Impact of the Grocery Retail Industry in Ohio

	Direct	Supplier	Induced	Total
Output	\$5,625,883,100	\$1,750,928,500	\$2,406,292,300	\$9,783,103,900
Jobs	93,020	13,070	20,420	126,510
Employment	109,430	N/A	N/A	N/A
Full-time	76,600	N/A	N/A	N/A
Part-time (16,415 FTE)	32,830	N/A	N/A	N/A
Wages	\$ 2,339,362,280	\$ 610,616,840	\$ 784,616,220	\$ 3,734,595,340
Taxes				\$ 1,857,258,608

In total, the industry is responsible for **126,510 full-time equivalent jobs** in the state, generating **\$3.73 billion in wages**, and a total of **\$9.78 billion in economic activity**.⁹ This is equal to a little more than 2 percent of the state's GSP.¹⁰

These employees and businesses contribute to the fiscal budgets of state and local governments throughout Ohio. All told, the grocery retailing industry and its employees generate about **\$1.08 billion in state and local taxes and \$772.8 million in federal taxes**. These tax revenues are generated by the activities of the retailers themselves, their suppliers, and their employees.

Model Description and Data

This Ohio Grocer Economic Impact Model (Model) was developed by John Dunham and Associates based on data provided by Dun and Bradstreet (D & B, Inc.). In the case of the grocery retailing sector, establishment employment is based directly on data provided to John Dunham and Associates by Dun & Bradstreet, Inc. as of February 2011. Dun & Bradstreet data is recognized nationally as a premier source of micro industry data. The D&B database contains information on over 15 million businesses in the

⁷ Note that many jobs are only partly linked to the grocery retailing industry. In this case only the portion of the individual jobs linked to the grocery retailing industry is included in this figure. In addition, firms supplying grocers located outside of Ohio are not included in this number.

⁸ It should be noted that supplier jobs in this context are created in firms that supply goods and services to grocery retailing operations such as energy, shelving, insurance, etc. The supply of food products is not included as these would be considered part of the food products industry, not the retailing industry.

⁹ This includes direct, supplier and induced jobs and impacts.

¹⁰ Based on a total estimated 2009 Ohio Gross State Product of \$471.26 billion. See State Gross Domestic Product: Fourth Quarter 2009, US Department of Commerce, Bureau of Economic Analysis, February 7, 2011, at: <http://www.bea.gov/regional/gsp/>

United States.¹¹ It is used extensively for credit reporting, and according to the vendor, encompasses about 98 percent of all business enterprises in the country. This data is gathered at the facility level; therefore, a company with a store, warehouse and sales office would have three facilities, each with separate employment counts. This data compares reasonably well with Federal government data from the Economic Census, which reported that there were approximately 99,000 grocery jobs in the state at the end of 2009.¹²

Table 4
Supplier and Induced Impacts by Economic Sector

	Jobs	Wages	Output
Supplier Impacts			
Agriculture	18	\$ 631,800	\$ 2,006,200
Mining	8	\$ 778,100	\$ 3,406,100
Construction	218	\$ 11,605,000	\$ 23,926,100
Manufacturing	5	\$ 303,900	\$ 2,919,100
Wholesaling	440	\$ 31,672,300	\$ 83,980,400
Retailing	325	\$ 8,450,200	\$ 20,314,700
Transportation and Communication	2,571	\$ 147,769,300	\$ 497,991,600
Finance, Insurance and Real Estate	3,261	\$ 142,607,800	\$ 550,365,800
Business and Personal Services	4,876	\$ 216,596,700	\$ 464,021,900
Travel and Entertainment	873	\$ 15,847,600	\$ 46,315,000
Government	440	\$ 33,704,700	\$ 51,065,600
Other	40	\$ 649,400	\$ 4,616,000
Total	13,074	\$ 610,616,800	\$ 1,750,928,500
Induced Impacts			
Agriculture	81	\$ 1,243,500	\$ 8,172,100
Mining	8	\$ 726,800	\$ 3,178,400
Construction	173	\$ 7,921,300	\$ 17,538,900
Manufacturing	119	\$ 7,310,500	\$ 70,236,700
Wholesaling	643	\$ 46,265,600	\$ 122,675,200
Retailing	4,329	\$ 119,811,100	\$ 290,215,500
Transportation and Communication	851	\$ 53,651,700	\$ 222,137,200
Finance, Insurance and Real Estate	2,686	\$ 138,063,200	\$ 800,019,800
Business and Personal Services	8,361	\$ 339,410,900	\$ 662,914,700
Travel and Entertainment	2,893	\$ 53,221,500	\$ 162,280,500
Government	209	\$ 15,503,700	\$ 36,667,000
Other	72	\$ 1,486,500	\$ 10,256,400
Total	20,423	\$ 784,616,300	\$ 2,406,292,400

The analysis utilizes the Minnesota IMPLAN Group Model in order to quantify the economic impact of the Ohio grocery retailing industry on the state economy. The model adopts an accounting framework through which the relationships between different inputs and outputs across industries and sectors are computed. This model can show the impact of a given economic decision – such as a factory opening or operating a sports facility – on a pre-defined, geographic region. It is based on the national income accounts generated by the US Department of Commerce, Bureau of Economic Analysis (BEA).¹³

¹¹ The D&B information database updates over 1 million times a day, over 350 million payment experiences are processed annually, and over 110 million phone calls are made to businesses. In addition, D&B uses a patented matching technology and over 2,000 information computer validations to ensure a high standard of data quality.

¹² US Department of Commerce, Quarterly Workforce Indicators.

¹³ The IMPLAN model is based on a series of national input-output accounts known as RIMS II. These data are developed and maintained by the U.S. Department of Commerce, Bureau of Economic Analysis as a policy and economic decision analysis tool.

In order to estimate employment, data were gathered from Dun and Bradstreet for companies that reported a primary SIC codes related to the grocery industry such as, establishments described as department stores; supermarkets; grocery stores; meat and fish markets; fruit and vegetable markets; dairy product stores; and bakeries.

Data on the retail sectors are all based on data from Dun & Bradstreet as of February 2011. Data on total employment by zip code was obtained from Dun & Bradstreet's Zapdata system for establishments with the following primary SIC codes:

- 5311 Department Stores
- 5331 Variety Stores
- 5399 General Merchandise Stores
- 5411 Grocery Stores
- 5421 Meat and Fish Markets
- 5431 Fruit and Vegetable Markets
- 5451 Dairy Products Stores
- 5461 Retail Bakeries
- 5499 Beverage Stores

Employment data for warehouse clubs and mass merchandise stores were adjusted to account for the percentage of employees involved in food and grocery retailing. This is done by multiplying the total number of employees by a factor derived from the 2007 Economic Census.¹⁴

Once the initial direct employment figures have been established, they are entered into a model linked to the IMPLAN database.¹⁵ The IMPLAN data are used to generate estimates of direct wages and output in each of the retail sectors. IMPLAN was originally developed by the US Forest Service, the Federal Emergency Management Agency and the Bureau of Land Management. It was converted to a user-friendly model by the Minnesota IMPLAN Group in 1993. The IMPLAN data and model closely follow the conventions used in the "Input-Output Study of the US Economy," which was developed by the BEA.

- ❖ **Wages:** Data from the US Department of Labor's ES-202 reports are used to provide annual average wage and salary establishment counts, employment counts and payrolls at the county level. Since this data only covers payroll employees, it is modified to add information on independent workers, agricultural employees, construction employees, and certain government employees. Data are then adjusted to account for counties where non-disclosure rules apply. Wage data include not only cash wages, but health and life insurance payments, retirement payments and other non-cash compensation. It includes all income paid to workers by employees. Further details are available from the Minnesota IMPLAN Group at <http://www.implan.com>.
- ❖ **Output:** Total output is the value of production by industry in a given state. It is estimated by IMPLAN from sources similar to those used by the BEA in its RIMS II series. Where no Census or government surveys are available, IMPLAN uses models such as the Bureau of Labor Statistics Growth model to estimate the missing output.
- ❖ **Taxes:** The model includes information on income received by the Federal, State and Local Governments. The model produces estimates for the following taxes at the Federal Level: Corporate

¹⁴ US Department of Commerce, Bureau of the Census, 2007 Economic Census, Retail Trade: Industry Series: Preliminary Product Lines Statistics by Kind of Business for the United States: 2007, September 29, 2009. Sales of *Groceries & other foods for human consumption off the premises* divided by total sales in each retailer type. On premise food sales in these establishments are not included.

¹⁵ Implan Input/Output Tables are for 2008.

Income, Payroll, Personal Income, Estate, Gift, and Excise Taxes; Customs Duties; and Fines, Fees, etc. State and Local tax revenues include estimates of: Corporate Profits, Property, Sales, Severance, Estate, Gift and Personal Income Taxes; Licenses; Fees; and certain Payroll Taxes.