

Truck Transportation Industry Contribution Analysis for Warren County, Kentucky (2022)



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Introduction

This report examines the economic impact of the Truck Transportation Industry in Warren County, Kentucky, utilizing IMPLAN's Industry Contribution Analysis model. This analysis considers not only the direct contributions of the industry but also the broader indirect and induced effects that permeate the local economy. By evaluating employment, output, tax revenue, and environmental impacts, this report provides a comprehensive view of the industry's influence on Warren County.

Methodology

The Industry Contribution Analysis was conducted using IMPLAN, an economic impact modeling tool that estimates the flow of economic contributions generated by an industry. This analysis focuses on three main types of effects: direct, indirect, and induced. Direct effects represent the immediate impact of the Truck Transportation Industry, such as the jobs and income directly within the industry. Indirect effects capture the ripple effect on supplier industries that provide goods and services to the industry. Induced effects reflect the economic activity resulting from spending by employees within the industry and its supply chain. Together, these components reveal a holistic view of the Truck Transportation Industry's impact on Warren County's economy.

To estimate the contributions of the Truck Transportation industry to the county, we use the Input-Output tables and Industry multipliers for 2022 provided by the Bureau of Economic Analysis. While the data used is for 2022 -the latest official data available- all dollar amounts have been adjusted for inflation and are expressed in 2024 dollars.

Economic Impact Summary

In 2022, the Truck Transportation Industry in Warren County generated a total output of \$501.3 million (in 2024 dollars). This output encompasses not only the products and services created directly by the industry but also the resulting spending throughout the county. The industry directly supports 2,607 jobs,

contributing substantially to local employment. In addition to these direct jobs, the industry sustains an additional 1,554 jobs through its supply chain relationships and 818 jobs through the spending activity of its workforce and those of its suppliers. Overall, labor income associated with the industry’s activities amounted to \$135.3 million, contributing to a broader value-added impact of \$188.9 million, a significant portion of Warren County's GDP.

Findings and Analysis

Direct Economic Contributions

The direct contributions of the Truck Transportation Industry to Warren County's economy are noteworthy. With a value-added contribution of \$188.9 million, the industry accounts for a substantial share of the county's GDP. Labor income within this sector, amounting to \$135.3 million, represents wages and benefits for employees, highlighting the industry's role as an employer in the county.

Table 1 provides a list of the top occupations employed by the Truck Transportation industry in Warren County, according to the 2022 data. Key occupations within the industry include Motor Vehicle Operators, which comprise 29.5% of the industry’s workforce in the county. Other significant roles include Material Moving Workers (approximately 12%), Retail Sales Workers (approximately 5.7%), and Vehicle Mechanics (approximately 4.8%). However, the industry employs other occupations as well, illustrating the diverse skills and roles necessary to sustain this industry.

Table 1: Top Occupation Employment in the Truck Transportation Industry in Warren County

Occupation	Jobs
Motor Vehicle Operators	830
Material Moving Workers	339
Retail Sales Workers	161
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	136
Material Recording, Scheduling, Dispatching, and Distributing Workers	99
Food and Beverage Serving Workers	89
Other Office and Administrative Support Workers	82
Information and Record Clerks	81
Business Operations Specialists	67
Healthcare Diagnosing or Treating Practitioners	63
Financial Clerks	57
Top Executives	51

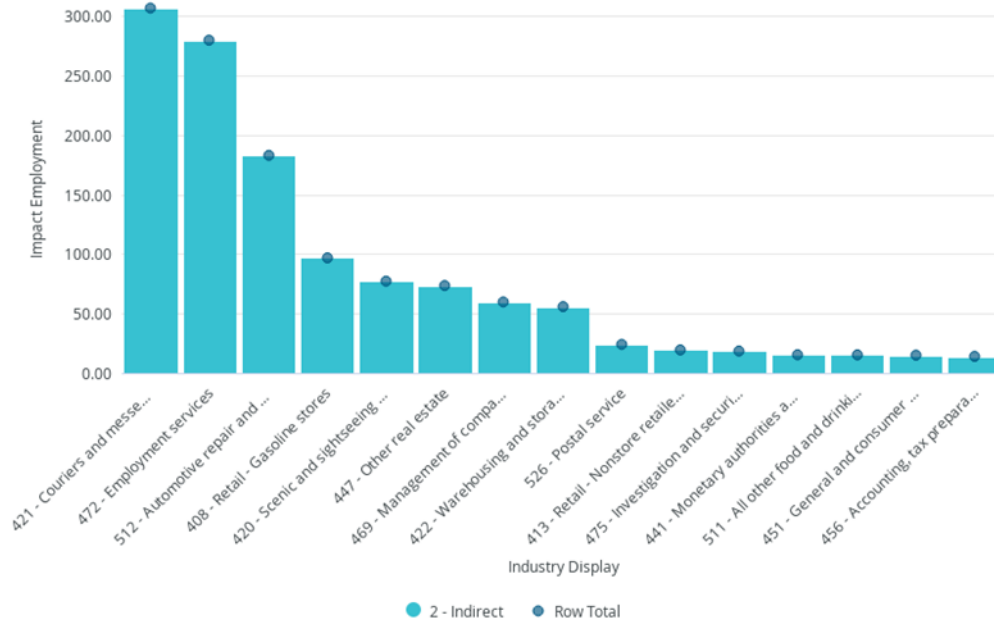
Indirect Economic Contributions

Beyond its direct impacts, the Truck Transportation Industry in Warren County indirectly supports an additional 1,554 jobs through its interactions with local suppliers.

As stated by IMPLAN, “Every industry needs to purchase goods and services (Commodities) from other Industries to operate their business. These are known as Intermediate Inputs. The industry takes these Intermediate inputs to create a product of greater value (Output). The cost of doing business above and beyond the cost of Intermediate Inputs is known as Value Added.” The industries from which they purchase those goods and services are known as the suppliers, some of which are not in the county, or even the state, but many of which are indeed in Warren County, and are responsible for those additional 1,554 jobs. Within impact and contribution analyses, it is said that those 1,554 jobs are supported by the Truck Transportation industry, even though they are provided by other industries.

Of note, these industries employ many more people in the county. However, these are the ones that, on the margin, are there due to the demands of the local Truck Transportation industry. These suppliers range across sectors, with Couriers and Messengers, Employment Services, and Automotive Repair seeing the most significant job growth (Figure 1).

Figure 1: Top 15 Industries of Truck Transportation-supported Jobs among Suppliers in Warren County



In terms of economic output, the industry's demand for goods and services contributes an indirect output of \$255.6 million to the county. Out of the \$255.6 million, approximately \$72,583,239 is attributed to labor income, while \$129,971,427 is attributed to the added value (AV) generated by other industries, as a result of the Truck Transportation industry demands.

Petroleum Providers, in particular, generate the largest share of this output, adding approximately \$55.3 million. Employment Services and Automotive Repair also produce a large amount of economic activity because of their business with the Trucking industry, showcasing how the Truck Transportation Industry's presence catalyzes business for other sectors (Figure 2).

Figure 2: Indirect Output Supported by the Truck Transportation Industry in Warren County

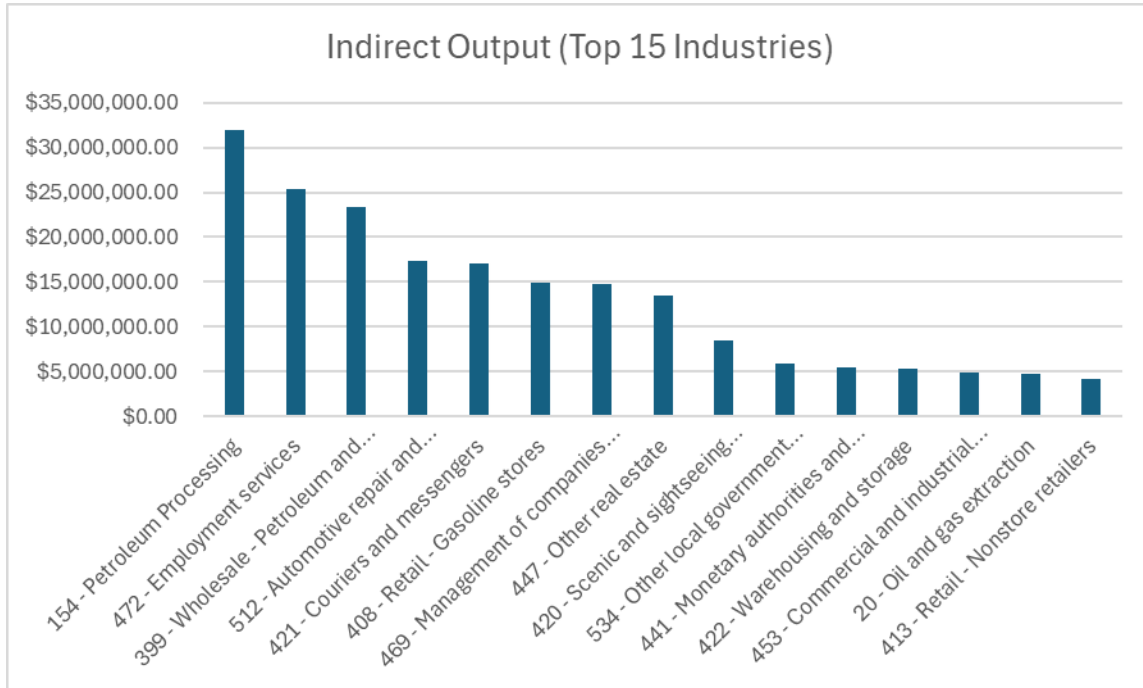


Table 2 shows the industry's indirect economic support by occupation. Topping the list are Management, Legal Occupations, and Architecture and Engineering.

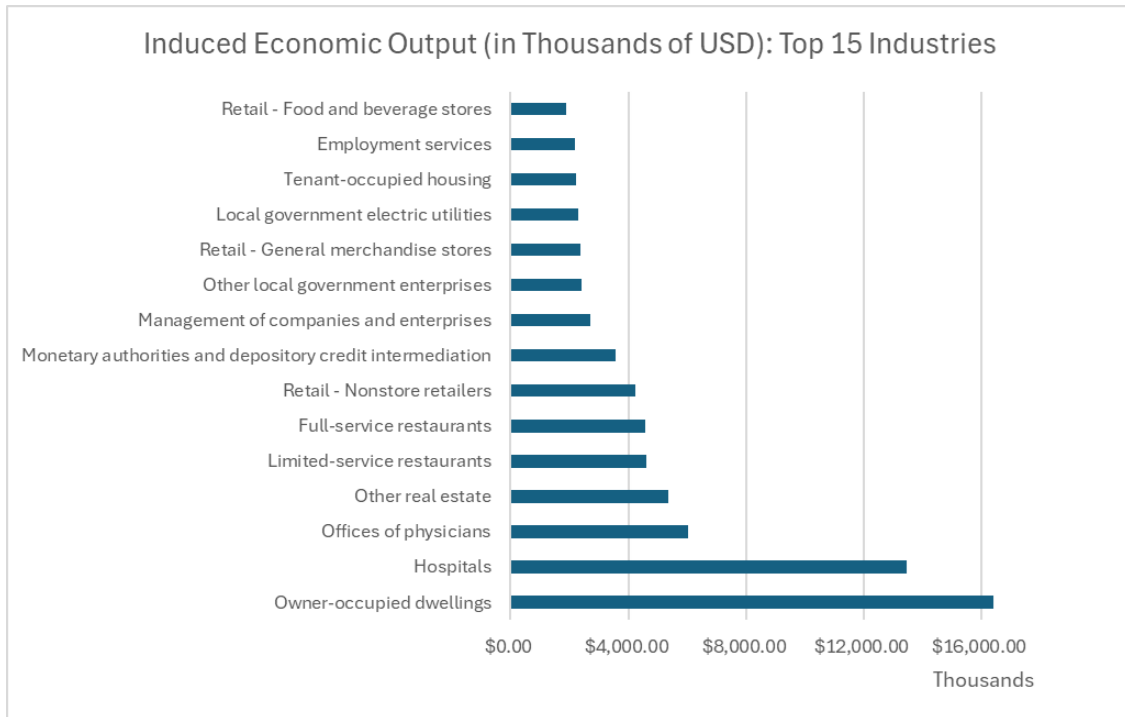
Table 2: Top Occupations of Supplying Industries Due to Truck Transportation-Supported Economic Activity in Warren County

Occupation	Average Wage and Salary Income	Average Supplements to Wages and Salaries	Average Employee Compensation	Average Hours per Year	Average Wage and Salary Income per Hour	Average Supplements to Wages and Salaries per Hour	Average Employee Compensation per Hour
Management Occupations	\$123,100.04	\$20,981.28	\$144,081.33	2,162.24	\$56.93	\$9.70	\$66.64
Business and Financial Operations Occupations	\$76,732.16	\$12,547.24	\$89,279.40	1,978.15	\$38.79	\$6.34	\$45.13
Computer and Mathematical Occupations	\$91,717.76	\$14,453.68	\$106,171.43	1,963.52	\$46.71	\$7.36	\$54.07
Architecture and Engineering Occupations	\$89,998.02	\$18,162.27	\$108,160.29	2,017.24	\$44.61	\$9.00	\$53.62
Life, Physical, and Social Science Occupations	\$80,384.57	\$15,507.86	\$95,892.42	1,994.13	\$40.31	\$7.78	\$48.09
Community and Social Service Occupations	\$45,143.08	\$6,911.33	\$52,054.41	1,802.15	\$25.05	\$3.84	\$28.88
Legal Occupations	\$99,280.53	\$16,666.48	\$115,947.01	1,989.22	\$49.91	\$8.38	\$58.29
Educational Instruction and Library Occupations	\$35,755.46	\$6,018.18	\$41,773.65	1,523.43	\$23.47	\$3.95	\$27.42
Arts, Design, Entertainment, Sports, and Media Occupations	\$63,444.46	\$10,477.57	\$73,922.04	1,753.63	\$36.18	\$5.97	\$42.15
Healthcare Practitioners and Technical Occupations	\$68,228.86	\$10,336.43	\$78,565.29	1,793.08	\$38.05	\$5.76	\$43.82
Healthcare Support Occupations	\$25,885.27	\$3,807.69	\$29,692.97	1,649.96	\$15.69	\$2.31	\$18.00
Protective Service Occupations	\$35,793.72	\$5,933.11	\$41,726.83	1,821.54	\$19.65	\$3.26	\$22.91
Food Preparation and Serving Related Occupations	\$22,194.47	\$3,531.69	\$25,726.16	1,266.83	\$17.52	\$2.79	\$20.31
Building and Grounds Cleaning and Maintenance Occupations	\$32,052.74	\$5,566.10	\$37,618.84	1,652.26	\$19.40	\$3.37	\$22.77
Personal Care and Service Occupations	\$37,734.63	\$7,819.60	\$45,554.22	1,188.97	\$31.74	\$6.58	\$38.31
Sales and Related Occupations	\$32,900.96	\$5,676.25	\$38,577.21	1,540.37	\$21.36	\$3.69	\$25.04
Office and Administrative Support Occupations	\$43,379.58	\$10,144.70	\$53,524.28	1,785.98	\$24.29	\$5.68	\$29.97
Farming, Fishing, and Forestry Occupations	\$32,430.49	\$5,117.14	\$37,547.64	1,889.44	\$17.16	\$2.71	\$19.87
Construction and Extraction Occupations	\$44,205.92	\$8,508.12	\$52,714.05	1,939.54	\$22.79	\$4.39	\$27.18
Installation, Maintenance, and Repair Occupations	\$57,049.43	\$9,796.22	\$66,845.65	2,001.55	\$28.50	\$4.89	\$33.40
Production Occupations	\$37,747.98	\$7,473.29	\$45,221.28	1,903.51	\$19.83	\$3.93	\$23.76
Transportation and Material Moving Occupations	\$38,748.40	\$6,805.25	\$45,553.65	1,810.80	\$21.40	\$3.76	\$25.16

Induced Economic Contributions

In addition to its direct and indirect impacts, the Truck Transportation Industry supports economic growth through induced effects. This induced impact arises from the spending by the industry’s workforce and the employees in its supply chain. As employees spend their income locally, they support an estimated 818 jobs in sectors such as retail, housing, and healthcare. This household spending contributes a total of \$128.2 million to the county’s economy, with approximately \$71 million attributed to value-added impacts within these sectors. This flow of spending emphasizes the interconnectedness of this industry and local businesses, creating a cycle of economic activity that extends beyond the Truck Transportation industry itself.

Figure 3: Truck Transportation’s Induced Output by Industry in Warren County



Environmental Impact

The Truck Transportation Industry has a notable environmental footprint in Warren County. Directly, it generates around 5.8 million kilograms of non-hazardous waste and approximately 4.97 million kilograms of hazardous waste. Indirectly, supplier industries involved in supporting the Truck Transportation Industry contribute to additional environmental outputs, including 2.8 million kilograms of non-hazardous waste, 395,000 kilograms of hazardous waste, 337,000 kilograms of air emissions, and about 46 million kilograms of greenhouse gas emissions (Table 3). These figures reflect the environmental costs associated with both the industry’s direct operations and the wider network of its supply chain.

Table 3: Indirect Environmental Impact of the Truck Transportation Industry in Warren County

Environmental Impact	Units	Total
Commercial Non-Hazardous Waste Excluding Construction Activities	kg	2,117,783.17
Commercial Non-Hazardous Waste From Construction Activities	kg	652,423.43
Commercial RCRA Defined Hazardous Waste	kg	394,875.36
Criteria and Hazardous Air Emissions	kg	337,107.56
Greenhouse Gases	kg	46,054,048.07
Mineral Extraction	kg	2,923,678.30
Nitrogen and PHosphorous Releases from Agriculture	kg	21.52
Pesticide Releases	kg	1.03
Point Source Industrial Releases to Ground	kg	26.33
Point Source Releases to Water	kg	39,121.72
Water Withdrawals	kg	243,455,297.18

Tax Contributions

The Truck Transportation Industry makes significant tax contributions that benefit both local and federal governments. Direct tax payments by the industry total \$35.9 million, with the majority (\$26.3 million) allocated to federal taxes, followed by state taxes (\$6.8 million) and local government taxes (\$2.7 million). Additional tax revenue generated by the industry's indirect and induced economic activities amounts to \$1.5 million for Warren County and nearly \$49 million across state and federal levels. These tax revenues play a vital role in funding public services and infrastructure, further demonstrating the broader societal value of the industry.

Conclusion

In summary, the Truck Transportation Industry is a cornerstone of economic activity in Warren County, Kentucky. Its operations support approximately 4,980,350 jobs earning about \$246,281,000 in labor income per year and inject substantial value into the local economy, with a value-added contribution to GDP of \$390,065,000 per year, for a total economic output valued at approximately \$885,130,000 per annum. In addition, the industry supports a combined tax revenue of around \$94,993,000 at the local, state, and federal levels.

Although the industry has an environmental footprint, its contributions in terms of economic output, employment, and tax revenue underscore its importance to Warren County. The interconnected effects highlight the Truck Transportation

Industry's role in sustaining and stimulating local businesses, making it an essential component of the county's economic landscape.