



WAMPO Economic Development Report - Transportation

May 2023

In Partnership With:





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Introduction

The transportation industry in Wichita is a significant sector that includes various logistics sectors within wholesale and selected sectors within the traditional transportation NAICS sector. The industry landscape was analyzed using a growth matrix, which identified cities in growth mode, declining sectors, and economic weaknesses.

Wichita had strong growth in employment and wages, ranking eighth in total employment but among the top cities with substantial growth. The labor discussion highlighted the employment growth rates, with Wichita exceeding most comparison metro areas except for Flint and Spartanburg.

When examining the transportation sector components, motor vehicle and motor vehicle parts, lumber, and other construction materials experienced consistent employment growth. However, some sectors faced challenges, such as petroleum and petroleum products, which saw a decline in employment. Miscellaneous nondurable goods reported negative growth rates, while warehousing and storage demonstrated significant growth. The key occupations in the transportation industry showed that Wichita had a lower-than-average location quotient for airline pilots, copilots, flight engineers, and heavy and tractor-trailer truck drivers, indicating some supply chain concerns. Productivity within the transportation sector showed consistent technology improvements, leading to increased value added per worker.

The list of organizations within the sector with 100 or more employees provided insights into workforce commuting patterns, emphasizing the importance of analyzing thoroughfares to support industry growth. Specific examples, such as Barry Manufacturing, demonstrated the need for interconnectedness and considerations of use cases in transportation planning.

The analysis of the industry's competitive forces revealed moderate barriers to entry, a moderate threat of substitutes, a moderate bargaining power of buyers, and a moderate bargaining power of suppliers. However, there is high rivalry among existing firms due to the rapid growth and high demand for transportation services in Wichita.



Industry Landscape

The following NAICS codes, provided by the Greater Wichita Partnership, constitute the "Transportation" category, which includes some of the logistics sectors within wholesale and selected sectors within the traditional transportation NAICS sector. These codes were used to extract specific industry data related to these subsections.

Transportation & Logistics		
NAICS	Description	Subsector
4821	Rail Transportation	Transportation
4841	General Freight Trucking	Transportation
4842	Specialized Freight Trucking	Transportation
4882	Support Activities for Rail Transportation	Transportation
4884	Support Activities for Road Transportation	Transportation
4885	Freight Transportation Arrangement	Transportation
4889	Other Support Activities for Transportation	Transportation
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	Logistics
4233	Lumber and Other Construction Materials Merchant Wholesalers	Logistics
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	Logistics
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	Logistics
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	Logistics
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	Logistics
4239	Miscellaneous Durable Goods Merchant Wholesalers	Logistics
4245	Farm Product Raw Material Merchant Wholesalers	Logistics
4246	Chemical and Allied Products Merchant Wholesalers	Logistics
4247	Petroleum and Petroleum Products Merchant Wholesalers	Logistics
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	Logistics
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	Logistics
4931	Warehousing and Storage	Logistics
541614	Process, Physical Distribution, and Logistics Consulting Services	Logistics

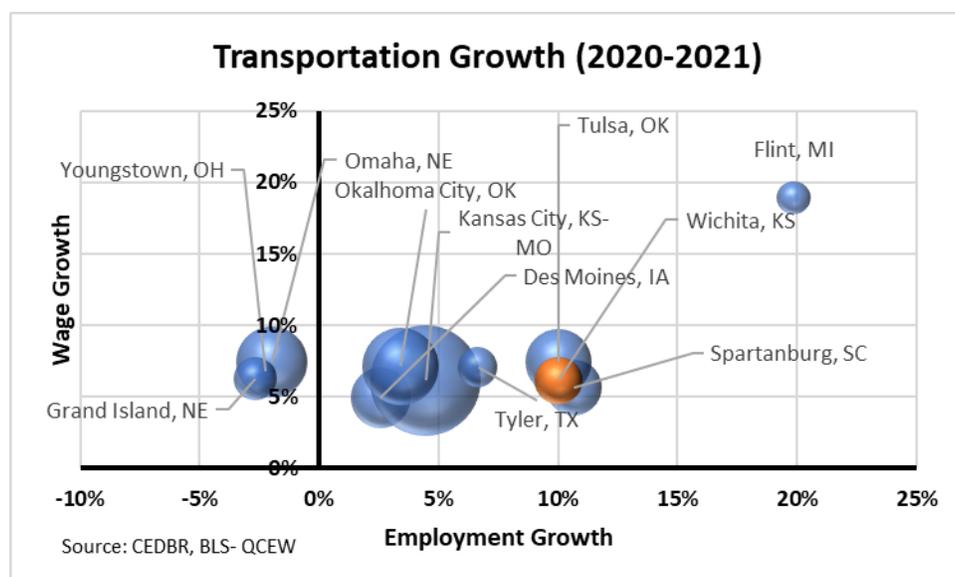
Key Transportation Communities

Des Moines - West Des Moines, IA MSA
Flint, MI MSA
Grand Island, NE MSA
Kansas City, KS-MO MSA
Oklahoma City, OK MSA
Omaha - Council Bluff, IA MSA
Spartanburg, SC MSA
Tulsa, OK MSA
Tyler, TX MSA
Youngstown-Warren-Boardman, OH-PA MSA

The comparison cities were selected based on the following criteria: employment concentration, size of the town, and preference for Midwest. Furthermore, all of the communities were vetted with the Greater Wichita Partnership as communities that the Wichita area competes within the respective sector.

In order to capture the broad industry landscape and recent competitiveness of the aerospace manufacturing sector within the Wichita area, this study developed a growth matrix. The matrix captures the relative growth and size of the market compared to the selected comparable communities. Any city within the top right quadrant should be considered in a growth mode. Those in the bottom left quadrant are in declining sectors. The other two quadrants, bottom right and top left, identify economic weaknesses that must be addressed.

Although Wichita had the eighth largest market in terms of total employment, it was among a select few with overall strong growth in employment and wages over the past year. In 2021, the Wichita area had 7,630 jobs, an overall employment growth rate of 10%, and wage growth of over 5%. Three markets had similar or more robust growth: Flint, Oklahoma, and Spartanburg.



Labor

The selected region's annualized employment growth rate from 2015 to 2021 was 3.8%, whereas Wichita grew by 1.2%. Only two communities grew slower than Wichita: Youngstown and Grand Island. Regarding recent growth, however, Wichita far exceeded the comparison metro areas apart from two locations: Flint and Spartanburg grew faster.



Transportation Employment

	2015	2016	2017	2018	2019	2020	2021	Annualized growth	
								2015-21	2020-21
Des Moines, West Des Moines, IA MSA	17,081	17,020	17,325	18,582	18,877	18,788	19,272	2%	3%
Flint, MI MSA	5,118	5,359	5,294	5,370	5,691	4,966	5,954	2%	20%
Grand Island, NE MSA	2,002	1,879	1,871	1,782	1,773	1,793	1,753	-2%	-2%
Kansas City, KS-MO MSA	50,678	52,757	57,668	63,258	64,380	64,347	67,216	5%	4%
Oklahoma City, OK MSA	26,833	26,907	27,425	28,806	30,074	30,894	31,946	3%	3%
Omaha-Council Bluffs, NE-IA MSA	16,170	26,616	26,628	27,209	27,806	27,387	26,845	9%	-2%
Spartanburg, SC MSA	10,715	10,486	11,687	12,298	13,335	14,906	16,492	8%	11%
Tulsa, OK MSA	17,748	18,806	19,251	20,661	20,779	21,272	23,403	5%	10%
Tyler, TX MSA	6,446	6,502	6,994	7,665	7,787	7,787	8,305	4%	7%
Wichita, KS MSA	11,253	11,335	11,295	11,309	11,518	11,056	12,164	1%	10%
Youngstown-Warren-Boardman, OH-PA MSA	11,745	11,195	10,895	10,743	10,489	9,843	9,579	-3%	-3%

Source: CEDBR, BLS- QCEW

When breaking down the Transportation sector into its components, the motor vehicle and motor vehicle parts sector exhibited a consistent increase in employment, with a 5% growth from 2020 to 2021 and a 1% annualized growth from 2015 to 2021. Lumber and other construction materials also experienced positive growth, with a 4% increase both in 2020-2021 and overall. However, certain sectors faced challenges, such as petroleum and petroleum products, which saw a decline of 6% in employment from 2020 to 2021. In addition, despite the overall positive trend, some sectors, like miscellaneous and nondurable goods, reported negative growth rates. On the other hand, warehousing and storage demonstrated significant growth, with a remarkable 71% increase in employment from 2020 to 2021, indicating its growing importance within the transportation industry.



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Transportation Employment

	2015	2016	2017	2018	2019	2020	2021	Annualized growth	
								2015-21	2020-21
Motor vehicle and motor vehicle parts	810	820	854	867	886	844	883	1%	5%
Lumber and other construction materials	416	418	448	470	491	514	537	4%	4%
Metal and mineral	389	391	416	480	547	516	483	3%	-6%
Household appliances and electrical	408	377	368	370	375	387	455	2%	18%
Hardware, and plumbing and heating equipment	457	455	442	469	473	445	449	0%	1%
Machinery, equipment, and supplies	2,289	2,136	2,119	2,026	1,989	1,858	2,003	-2%	8%
Miscellaneous durable goods	225	211	200	237	224	210	227	0%	8%
Farm product raw material	284	343	394	380	314	312	319	2%	2%
Chemical and allied products	200	210	220	196	201	204	207	1%	1%
Petroleum and petroleum products	721	758	714	622	629	538	505	-4%	-6%
Beer, wine, and distilled alcoholic beverage									
Miscellaneous nondurable goods	585	590	595	507	463	367	361	-5%	-2%
General freight trucking	1,772	1,802	1,849	1,887	1,717	1,864	1,888	1%	1%
Specialized freight trucking	904	928	960	990	915	998	1,020	2%	2%
Support activities for rail	50	52	52	84	83	107	95	13%	-11%
Support activities for road	118	121	115	111	139	128	137	2%	7%
Freight transportation arrangement	314	395	389	461	757	688	753	20%	9%
Other support activities for transportation									
Warehousing and storage	1,311	1,327	1,161	1,153	1,315	1,075	1,843	6%	71%

Source: CEDBR, BLS- QCEW

Transportation Establishments

Communities	Annual 2020	Annual 2021	YR/YR %
Des Moines, West Des Moines, IA MSA	1,432	1,479	3%
Flint, MI MSA	336	310	-8%
Grand Island, NE MSA	290	292	1%
Kansas City, KS-MO MSA	3,971	4,024	1%
Oklahoma City, OK MSA	1,977	1,999	1%
Omaha-Council Bluffs, NE-IA MSA	1,731	1,776	3%
Spartanburg, SC MSA	523	543	4%
Tulsa, OK MSA	1,425	1,431	0%
Tyler, TX MSA	304	318	5%
Wichita, KS MSA	962	991	3%
Youngstown-Warren-Boardman, OH-PA MSA	757	764	1%

Source: CEDBR, BLS- QCEW



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Community	Transportation Wages						
	2015	2016	2017	2018	2019	2020	2021
Des Moines, West Des Moines, IA MSA	\$60,331	\$62,261	\$64,533	\$67,477	\$69,029	\$71,732	\$75,255
Flint, MI MSA	\$49,916	\$50,435	\$49,955	\$52,729	\$50,086	\$51,998	\$61,843
Grand Island, NE MSA	\$50,599	\$55,074	\$52,595	\$54,277	\$56,885	\$59,549	\$63,577
Kansas City, KS-MO MSA	\$58,154	\$58,365	\$61,010	\$65,551	\$66,762	\$69,184	\$73,433
Oklahoma City, OK MSA	\$48,159	\$47,520	\$49,494	\$52,470	\$52,487	\$53,478	\$57,289
Omaha-Council Bluffs, NE-IA MSA	\$53,935	\$53,726	\$55,834	\$57,404	\$58,846	\$61,036	\$65,545
Spartanburg, SC MSA	\$51,883	\$54,382	\$58,301	\$56,335	\$60,119	\$61,872	\$65,366
Tulsa, OK MSA	\$52,252	\$52,570	\$54,276	\$56,916	\$58,010	\$59,023	\$63,399
Tyler, TX MSA	\$48,659	\$49,443	\$50,987	\$54,330	\$55,251	\$56,139	\$60,102
Wichita, KS MSA	\$53,279	\$54,378	\$56,287	\$57,803	\$58,907	\$61,514	\$65,282
Youngstown-Warren-Boardman, OH-PA MSA	\$46,982	\$46,828	\$48,763	\$51,076	\$52,241	\$53,820	\$57,177

Source: CEDBR, BLS - QCEW

Of the key occupations in the transportation industry, Wichita had a lower-than-average location quotient in both the categories of Airline Pilots, Copilots, and Flight Engineers, as well as Heavy and Tractor-Trailer Truck Drivers. While the weak location quotient for pilots is likely due in part to Dwight D. Eisenhower Airport not being a central airline hub, the low location quotient for Heavy and Tractor-Trailer Truck Drivers is something to take into account when discussing the overall supply chain between all the sectors.

Key Occupations		
Occupation	Wichita MSA Employment	US Employment
Airline Pilots, Copilots, and Flight Engineers	40	83,490
Bus Drivers, School	1,310	
Heavy and Tractor-Trailer Truck Drivers	3,630	1,152,570

Source: CEDBR: BLS, OES

2021 Labor Costs - Transportation				
Occupation (SOC code)	Mean Wage	10th Percentile Wage	90th Percentile Wage	Location Quotient
Airline Pilots, Copilots, and Flight Engineers(532011)	\$125,330	\$100,210	\$155,460	0.24
Heavy and Tractor-Trailer Truck Drivers(533032)	\$49,220	\$32,820	\$67,360	0.91
Bus Drivers, School(533051)	\$40,750	\$29,820	\$44,630	1.78

Source: CEDBR, BLS-OES

A location quotient is a statistical measure used to compare the concentration or specialization of a particular industry or occupation in a specific geographic area relative to its concentration in a larger reference area, typically a region or a nation. It is calculated by dividing the proportion of employment in a specific industry or occupation in the target area by the proportion of employment in the same industry or occupation in the reference area, and then comparing the result to a value of one. A location quotient greater than 1 indicates a higher concentration of the industry or occupation in the target area compared to the reference area, suggesting specialization or a comparative advantage in that particular sector. Conversely, a location quotient of less than 1 indicates a lower concentration, less specialization in the industry or occupation in the target area.

Productivity is an important component of the labor discussion. Using national figures, the following list of occupations has been detailed for the transportation sector, where productivity is compared against the base year 2012. Those sectors with increasing productivity, as represented by rates above 100, are growing and have the opportunity for increased wages and profitability.

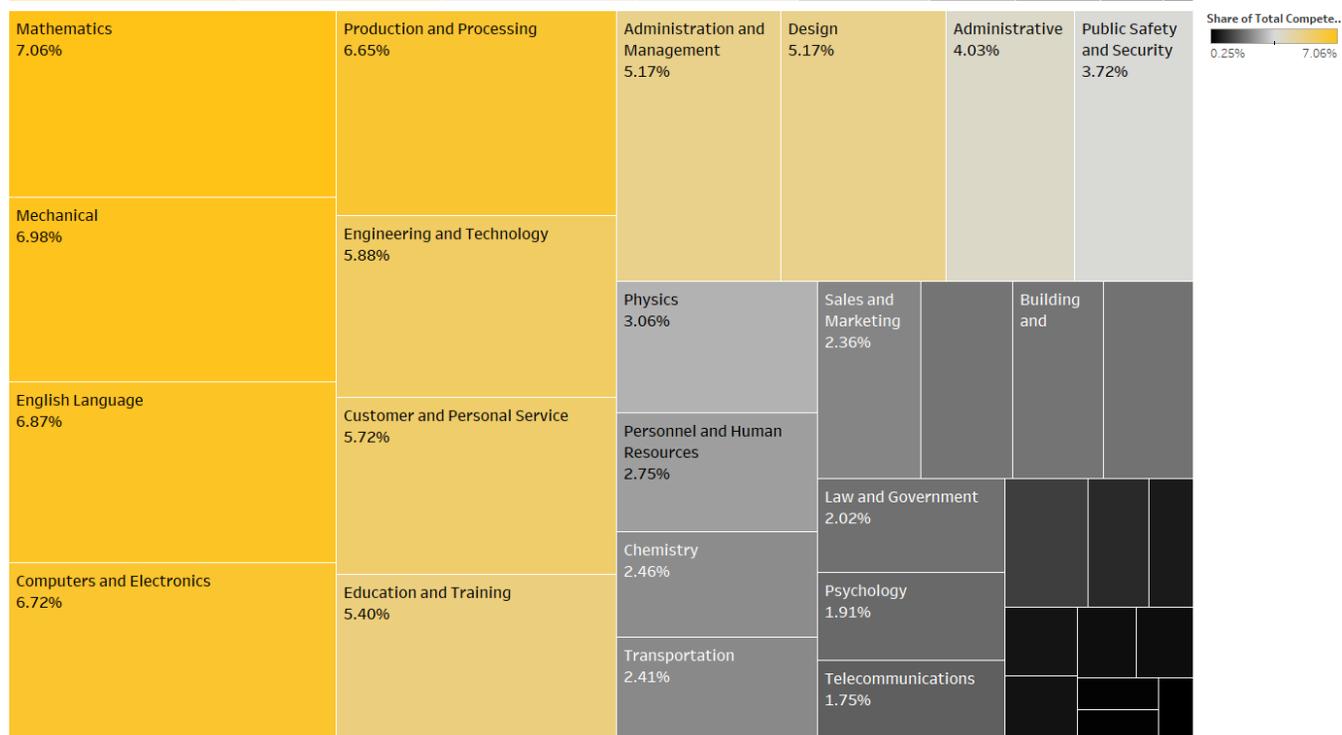
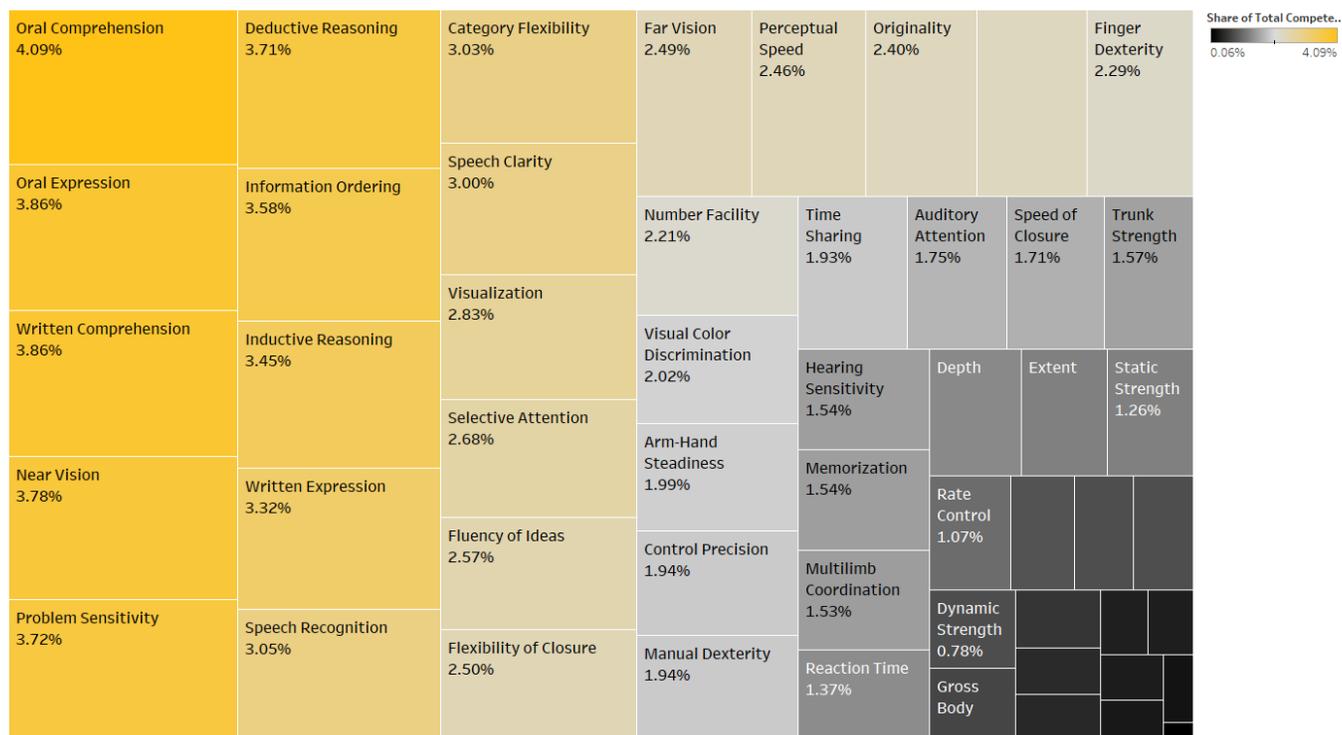
Of the fifteen subsectors within transportation, only two had declining productivity rates. Overall, this sector has seen consistent technology improvements that have increased the value added per worker.

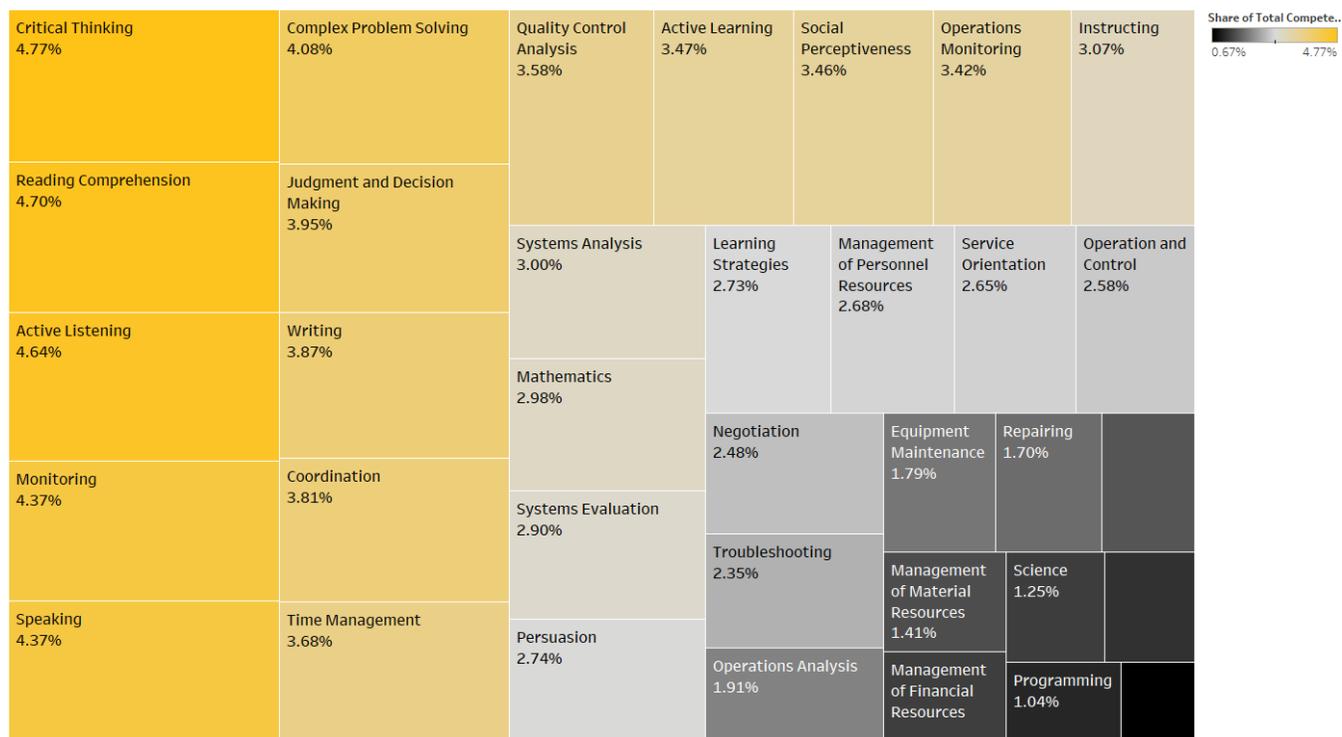
Transportation Productivity												
Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Motor vehicles and parts	82.6	89.7	100.0	101.1	99.7	101.8	99.1	95.7	100.2	101.1	97.4	104.1
Lumber and construction supplies	95.9	96.9	100.0	93.8	91.1	90.2	93.3	86.4	90.4	89.1	89.2	91.7
Metals and minerals	99.3	99.8	100.0	102.8	100.7	102.3	99.3	103.7	104.2	103.5	98.7	104.0
Electrical and electronic goods	90.0	95.6	100.0	107.2	107.1	110.9	105.9	109.2	115.7	110.2	117.8	134.8
Hardware and plumbing	94.5	96.4	100.0	100.1	103.7	105.9	105.9	104.9	104.1	103.1	108.1	107.2
Machinery and supplies	92.8	99.7	100.0	99.6	104.3	96.9	94.7	101.9	106.9	103.3	101.5	110.8
Miscellaneous durable goods	106.0	106.5	100.0	104.2	103.8	101.7	99.2	104.5	110.8	108.7	124.3	142.7
Farm product raw materials	118.3	98.4	100.0	122.8	127.1	129.9	138.3	138.7	143.3	137.8	136.6	123.4
Chemicals	107.4	103.9	100.0	104.7	111.3	110.7	111.1	115.4	115.2	109.3	112.4	117.1
Petroleum	105.1	96.6	100.0	99.6	101.6	109.7	119.9	119.6	120.0	124.1	123.5	122.8
Alcoholic beverages	102.1	99.1	100.0	98.7	96.3	99.1	104.9	106.4	107.1	110.3	124.4	137.3
Miscellaneous nondurable goods	100.3	98.6	100.0	101.1	100.8	107.5	105.1	112.2	114.1	110.9	118.1	115.3
General freight trucking	100.9	102.2	100.0	100.8	103.2	105.2	106.5	114.2	114.6	110.4	116.8	114.6
Specialized freight trucking	97.8	98.2	100.0	102.2	106.1	106.7	108.8	110.9	110.5	111.9	114.6	119.9
Warehousing and storage	88.1	94.0	100.0	103.9	105.1	99.4	91.2	85.7	78.0	77.4	71.3	63.6

Note: Data not available for all Transportation sectors

Source: CEDBR, BLS

Another component of the labor discussion is the skills, knowledge, and abilities required for the sector of the workforce. The most important skills in the transportation support sector were oral comprehension and expression. The most essential knowledge components were mathematics and mechanical. The most critical abilities were active listening and reading comprehension.





To summarize the labor conversation through the framework of this particular sector, it is essential to consider where the workforce is commuting throughout the day. Therefore, a list of all organizations within this sector with 100 employees or more has been collected. With knowledge of these particular businesses' locations and workforce density, WAMPO can leverage this list to analyze what thoroughfares can be strengthened to propagate the industry.



Key WAMPO players

Company Name	Location	Employee Size
Berry Co Inc		400
First Student Inc		400
Hyper Pet LLC		370
Cornejo & Sons LLC		325
Dillons Distribution Ctr		300
Pioneer Balloon Co		250
Qualatex		250
KICE Industries		200
Piping & Equipment Inc		200
Protection 1		141
Bunting Magnetics Co		125
Price Truck Lines Inc		125
Air Capitol Delivery Inc		120
Foley Equipment Co		120
TMX Aerospace		120
Continental American Corp		115
Chance Rides Mfg Inc		105
Dustrol Inc		100
Petro Choice Co		100
Premier Processing		100
Union Pacific Railroad Co		100
Vitran Corp		100

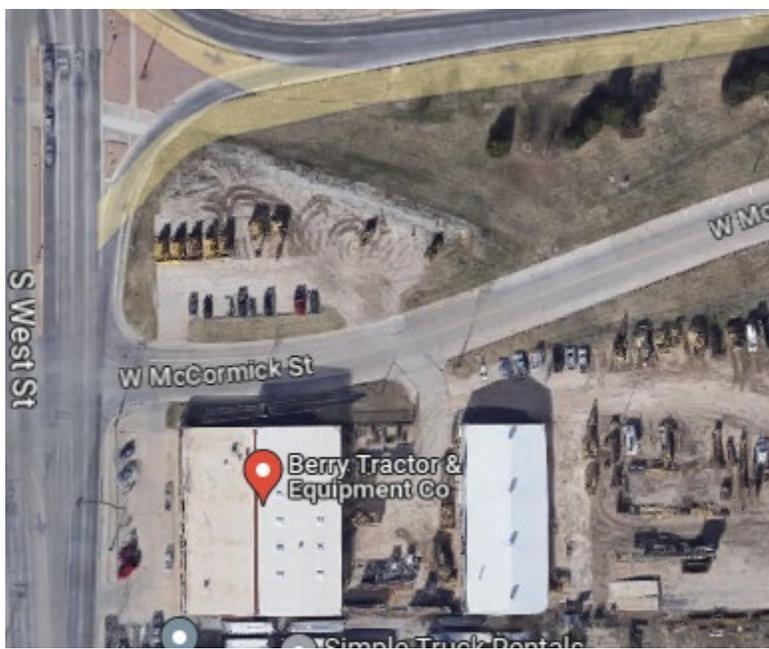
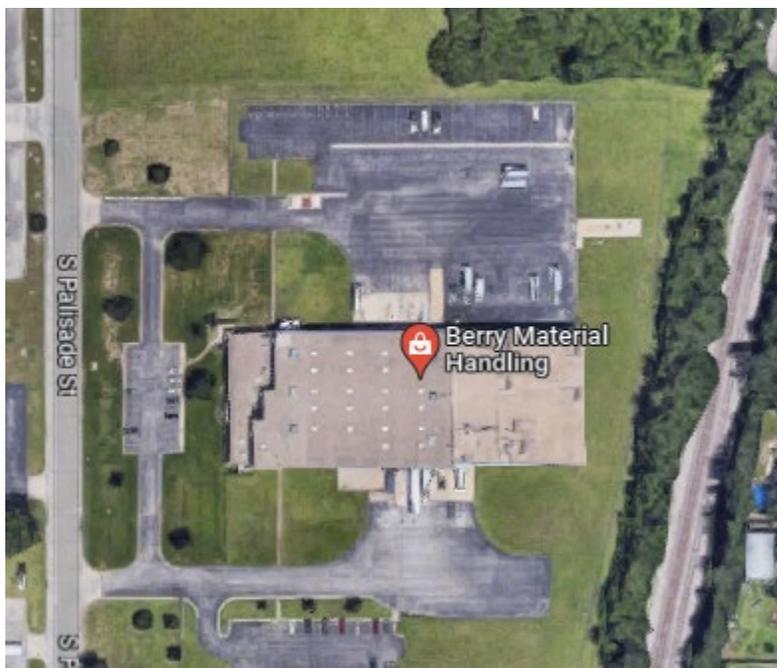
Source: CEDBR, Data Axle

Main WAMPO Thoroughfares

Berry Manufacturing is a large player in the WAMPO region as a large equipment distributor. With three different campuses across the Wichita area, the diaspora of the company is a prime example of the need for interconnectedness throughout the region. Each campus has different demands on the transportation system, but each is a component of the firm's operations. The retail center near West & Kellogg has demands for heavy highway and trailers that will be able to accommodate the movement of heavy equipment. The Berry Material Handling location near 47th St. & Broadway Ave is a mixed-use facility, with both inbound goods and outbound goods utilizing heavy highway and light freight along needs for access for its labor force. Meanwhile, the main office off of 37th St. is mostly a location with demand solely for labor access.

This reiterates the importance of considering use cases when analyzing the broader industry, as transportation planning can affect both distribution channels and labor access. Many other firms

supplying the transportation sector with equipment and supplies will have varying demands on the transportation system depending upon their supply chain offerings.



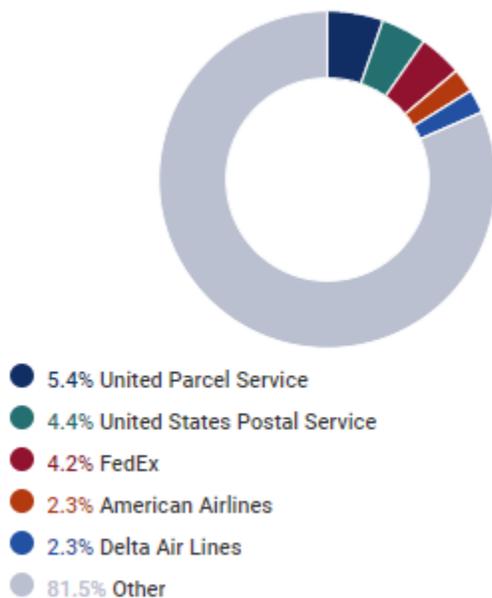


General US Trends

To assess the potential growth of the transportation sector, this study examined five economic forces at the national level. Those broad economic conditions were then applied to the regional market, firms, and trends to provide the context of its economic competitiveness.

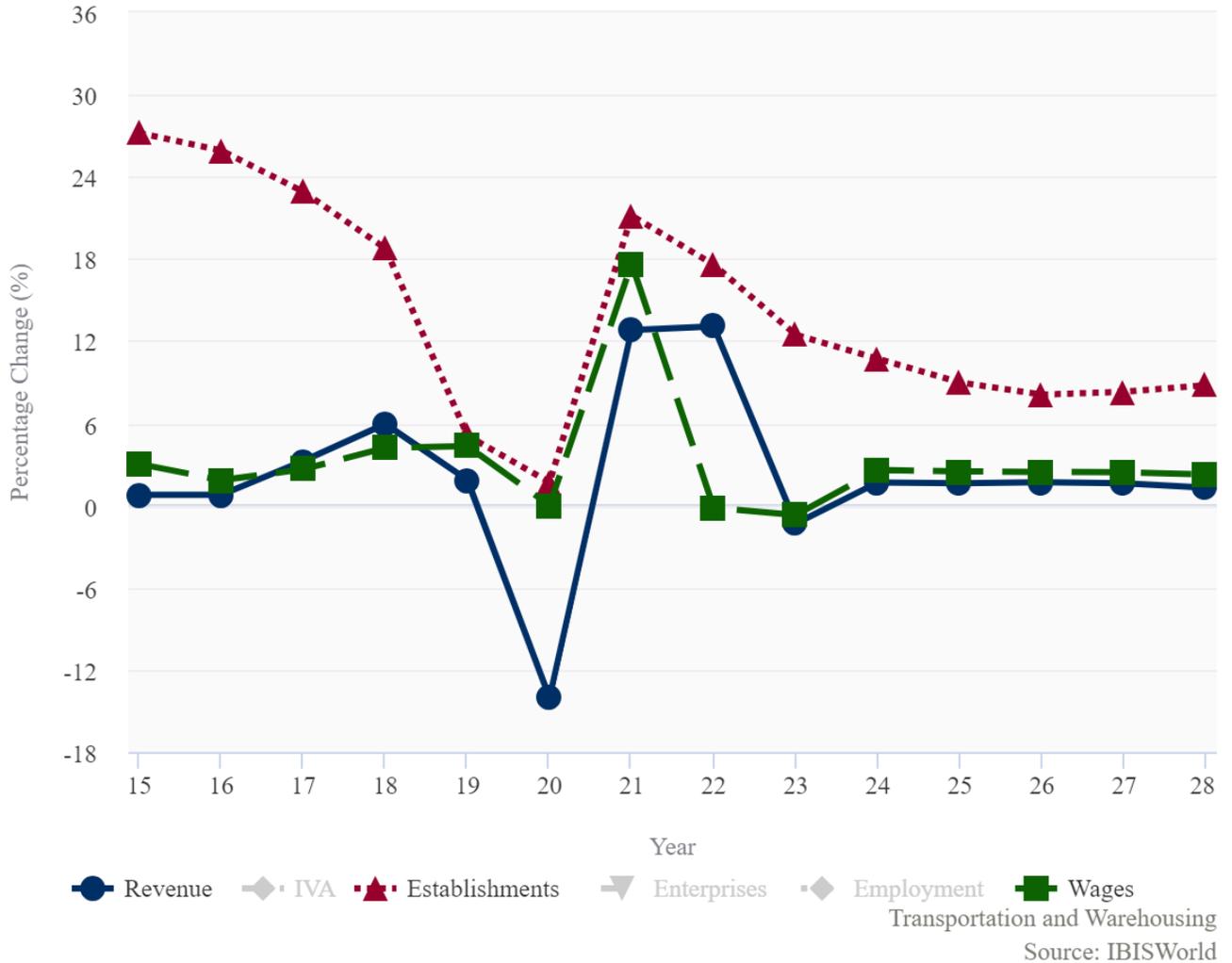
The transportation industry has several major players, such as UPS, USPS, and FedEx. The COVID-19 pandemic heavily impacted the industry, but wages, revenues, and establishments are expected to rebound and continue to increase over the coming years.

Major Players



Transportation and Warehousing
Source: IBISWorld

Industry Performance 2015–2028



Threat of new entrants

- **Moderate barriers to entry:** The transportation industry in Wichita is not heavily regulated, and there are no significant capital requirements. However, a certain level of expertise and experience is required to enter the market, such as knowledge of the local market and the ability to obtain the necessary permits and licenses. For example, a new company could enter the transportation industry in Wichita by starting a taxi company, a bus company, or a ride-hailing service. However, this would require a significant investment in vehicles, drivers, and marketing.

Threat of substitutes

- Moderate threat of substitutes: There are some close substitutes for transportation services in Wichita, such as walking, biking, and public transportation. However, these substitutes are not always practical or available for all trips. For example, walking or biking may not be feasible for long distances or in inclement weather. Public transportation is also limited in Wichita, with only a few bus lines and no light rail or subway system.

Bargaining power of buyers

- Moderate bargaining power of buyers: There are a large number of businesses and individuals who need transportation services in Wichita, so buyers have some bargaining power. However, the bargaining power of buyers is limited by the fact that they need these services to get around. For example, businesses may not operate without reliable transportation for their employees, and individuals may not get to work or school without a car.

Bargaining power of suppliers

- Moderate bargaining power of suppliers: There are a large number of transportation providers in Wichita, so suppliers have some bargaining power. However, the bargaining power of suppliers is limited by the fact that businesses and individuals need these services to get around. For example, if a taxi company raises its prices, businesses and individuals may simply switch to another taxi company.

Rivalry among existing firms

- High rivalry among existing firms: The transportation industry in Wichita is highly competitive, with a large number of companies competing for a share of the market. This is due to the fact that the industry is growing rapidly, and there is a high demand for transportation services. For example, the number of people living in Wichita is expected to grow by 10% over the next five years, which will create a need for more transportation services.

The transportation industry in Wichita is competitive, with a high level of rivalry among existing firms. The industry is also characterized by moderate barriers to entry, a moderate threat of substitutes, and moderate bargaining power of buyers and suppliers.

The transportation industry is a vital part of the Wichita economy and a major employer in the area. The industry is also a source of innovation and technology and plays an important role in the movement of people and goods.

The transportation industry is a major economic force in Wichita and a major employer in the area. The industry is important for the movement of people and goods, and it is also a source of innovation and technology.