

St. Joseph Missouri  
Economic Nexus for Travel and Shipping  
A Transshipping Case Study

John W Tiner  
University of Nebraska at Omaha

## **Abstract**

This paper focuses on the city of St. Joseph, Missouri and its role as a transshipping point for travel in the United States for travel in all directions. Additionally, an analysis is made of the three main sectors of the economy of St. Joseph, including, private goods, private services, and governmental services. The analysis shows the role of St. Joseph as a transshipping point has continued to benefit the city due to its geography. Additionally, all sectors of the economy have experienced respectable growth in the economic sector of private goods. Goods for export continue increasing significantly faster than the other economic sectors despite healthy growth in those sectors.

Because of St. Joseph, Missouri's unique geographic location and structure, the city has become a focal point for travel and of course transshipping of supplies. When traveling along the Missouri River, it is an excellent place to stop. Louis and Clark with the Corp of Discovery chose the location as a place to camp while exploring the Missouri River. Not only was St. Joseph historically a good place to stop while traveling along the Missouri River, it was also a good crossing point to travel westwardly. It is at St. Joseph the Iowas (Native American Nation) crossed to go into Kansas when it became apparent the expansion of the United States was moving further westward. St. Joseph was also the last stop to restock and get supplies, when heading out on the Oregon Trail, because the path crossed the Missouri River at St. Joseph. St. Joseph was the starting point of the Pony Express, in part because of the ability to easily cross the Missouri River to head west. Additionally, people headed west for the gold rush found St. Joseph to be the place to stock-up on dry goods, resulting in a large number of dry goods sellers, prior to crossing the Missouri River to head to California in search of gold (St. Joseph Economic Development Partnership, 2025). The first railroad to cross the State of Missouri started at Hannibal and had St. Joseph as its terminus. There continues to be significant rail transportation even today with the BNSF rail line still having St. Joseph as a point for loading and unloading cargo.

Currently, St Joseph has as its main industry Life Science and Agriculturally related Chemicals as its main industries (Lau, 2025). Common regional workers have helped to keep the focus on working with Chemicals and Agriculturally based industries as well as industries related to animals. For example, the North American Headquarters for Purina to work on Research and Development of feline and canine products is located in St. Joseph. As a result, employers who wish to find a place where there are workers with experience doing lab work and work with chemicals know St. Joseph is a place where there are workers who are already skilled in that aspect of manufacturing (St. Joseph Economic Development Partnership, 2025).

Another example of research in health and animal science related chemistry is Boehringer Ingelheim, a company with over 53,000 total employees (not all in the St. Joseph area) work with primarily animal health care and medical products. Boehringer Ingelheim also

does work related to human health care and medical products (<https://www.boehringer-ingelheim.com/us/about-us/who-we-are>, 2025).

A major industry connected with St. Joseph is an industry that is directly inspired by St. Joseph as a transshipping point between Kansas City, Missouri, Omaha, Nebraska, and Chicago, Illinois. This is the industry related to hydraulic jacks and hydraulic lifts. Additionally, this industry probably developed directly as a result of the need for equipment to load and unload vehicles traveling by rail, the Missouri River, and by over the road trucking along Interstate 29 running north and south and Federal Highway 36 headed east and west. Please note, Highway 36 also crosses Interstate 35 near St. Joseph as Interstate 35 goes from the Mexican border in Texas through the Dallas – Fort Worth Metroplex in Texas to Montana near the Canadian Border as well as having several convenient ways to head to other major cities in the United States such as Chicago, Illinois.

In order to respond to the need to load and unload large heavy pieces of cargo, whether from trains, barges, or even over the road trucks, Gray Manufacturing, is a company that originated in St. Joseph to produce hydraulic equipment to support lifting of heavy items for loading and unloading trains, trucks, and barges. Gray manufacturing also produces equipment used to repair items such as trucks, and the heavy equipment used for loading and unloading shipments. As a result, the expertise and workers related to hydraulics, heavy equipment, and heavy equipment repair, has helped to bring additional industries into St. Joseph that are related. For example, Altec is a major industry in St. Joseph as well as a major employer. Although Altec is very diversified, the industry focuses on equipment that uses hydraulics and of course cranes and other items used in loading and unloading freight from trains, barges, and over the road trucks. Joining Altec and Gray manufacturing is Snorkel Lifts that creates products that use hydraulics in order to transport and move materials such as the Snorkel Easy Loader for easily getting heavy materials on and off of trucks. In addition to industries directly related to hydraulics and equipment used in transshipping cargo, the Clarios Battery Plant in St. Joseph produces batteries used in trucks, heavy equipment and cars.

However, the major industry of St. Joseph is related to Life Science / Agriculture, and Chemicals manufacturing with Chemicals being usually related to Agriculture. According to The Missouri Economic Resource and Information Center (MERIC):

St. Joseph is situated in the Midwest's Agricultural Research Triangle where companies, universities, researchers, and farmers team together to test and discover the most efficient and effective ways that bioscience can benefit the country. Within this triangle, at least five major universities offer special programs for those in the agricultural sciences field. The central location in the United States' Midwest has made St. Joseph a primed and ready hub for agriculture. We export food across the nation as well as the globe through multiple types of farming; including wheat, corn, soy, hogs, poultry, and cattle . This agricultural advantage also makes St. Joseph a top location choice for the Agricultural Sciences Industry (<https://meric.mo.gov>, 2025).

Because St. Joseph is located in an area where agriculture is a premier economic activity, and because of the need for the proper handling of agriculturally related products for example Nor-Am Cold Storage for keeping animal products as well as other products such as pharmaceuticals that need to be kept in cold storage. As a result of derived demand, Schutz Packaging Systems produces containers and large totes for chemical and food industries. Both Nor-Am and Schutz are directly related to the chemical and agricultural related element of the St. Joseph Economy as well as the transshipping aspect of where St. Joseph is related geographically.

There are other aspects of the St. Joseph area having an agricultural basis such as the Triumph Foods where meat is processed, and Ventura Foods Soybean based products. This is made possible by the refrigeration and shipping containers as well as the central location for transporting the finished product in the area. When it comes to exports such as meat, chemicals, and pharmaceuticals, St. Joseph is the third largest exporter in Missouri behind KC and St. Louis (but not the third largest city) (MERIC, 2025).

Of course there are other supportive industries as well as government agencies. For example, the United States Department of Agriculture (USDA) has a strong presence (side note: my wife, a veterinarian by training, was an investigator for the USDA and was considered federal law enforcement (and completed federal law enforcement training) to investigate food

related problems and even food related crimes). St. Joseph has seen a 17% growth in General Medical and Surgical Hospitals as well as 59% growth in Offices of Mental Health Practitioners over the last five years (note: there is also the Northwest Missouri Psychiatric Rehabilitation Center and Hospital for forensic psychiatric patients. This place pays well (more than regional hospitals) and has an amazing retirement plan. I work there on a PRN basis as a registered nurse, and they pay a lot better than any local hospital) (MERIC, 2025). The highway and transportation department also has a strong presence in the region.

There is also a local university, Missouri Western State University, and St. Joseph is within a two-hour driving distance to Northwest Missouri State University, Central Missouri University, and the University of Missouri at Kansas City, the University of Kansas, the University of Kansas City (medically focused university), University of Nebraska at Omaha (just over two hours from St. Joseph at two-hours and two minutes) and North Central Missouri College where there is also a heavy medical focus. Additionally, there are a lot of other regional smaller colleges and vocational-technical schools. The Missouri Highway and Transportation Department has a strong presence also.

There is also the Rosecrans USAF base in St. Joseph that is a military transportation focused base. As well as a number of places to shop, entertainment in the form of movie theaters, a stage theater, two miniature golf courses, and outdoor activities nearby such as Mingo Lake and Smithville, Lake.

St. Joseph has approximately 72,000 people in 2023 and a GDP adjusted for inflation is flat. However, over the past 5 years there has seen 151% Growth in General Warehousing and Storage. (MERIC, 2025).

Of those who either live in St. Joseph and commute elsewhere or live elsewhere and commute to St. Joseph, approximately 17,489 people travel to the St. Joseph area daily for work, proving that a good employer can draw labor from a wide radius. Additionally, this map shows that 15,907 people drive from St. Joseph's region to work in other locations. This creates a potential workforce as the vast majority of these 15,907 workers will consider working in the St. Joseph area, as more jobs are created (St. Joseph Economic Development Partnership, 2025).

Compared to the rest of the United States, St. Joseph has:  
8 times more employed in Support Activities for Rail Transportation than US average  
4 times more employed in Refrigerated Warehousing and Storage than US average  
27 times more employed in Light Truck and Utility Vehicle Manufacturing  
176% Growth in Plastics Packaging Film and Sheet Manufacturing  
18 times more employed in Pesticide and Other Agricultural Chemical Manufacturing  
2 times more people employed in Medical Laboratories (MERIC, 2025).

The growth areas listed by MERIC, that I have shown in this paper, are all related to transportation / transshipping (including storage), agriculture, and chemical/pharmaceutical manufacturing.

When comparing St. Joseph, Missouri to Omaha, Nebraska I note the population of Omaha, Nebraska in 2023 was approximately 860,000 a difference of 788,000. Both St. Joseph and Omaha are along the Missouri River, Interstate 29, and along the BNSF railway lines.

The Location Quotient is a measure of the concentration of a profession or industry in a specific location when compared to the United States as a whole and is defined as, “the ratio of an industry’s share of the local employment (locality) divided by its share of the reference area (the nation, the state, or the region)”, (Rupasingha & Patrick, 2009). When looking at St. Joseph, Missouri we see break down production into three non-farm sectors of private goods, private services, and government services. Because there are government agencies headquartered in St. Joseph that provide services across several states, to a certain degree, St. Joseph “exports” government services such as USDA investigative services.

Information retrieved for the Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)) was used to glean information about the nature of the economy in St. Joseph, Missouri. Because of the uniqueness of St. Joseph based on its geography and history it is not surprising the economy seems to be very much related to exporting items from the area. As

mentioned previously, storage is a major industry in St. Joseph as well as transportation of goods.

When looking at three areas of production, we compare the concentration of industry in private goods, private services, and government services when contrasted with the United States as a whole known as the Location Quotient

St. Joseph, Missouri	2004	2024
Private Goods	1.15	2.00
Private Services	0.97	0.81
Government Services	0.97	1.01

For Contrast I will include information about Omaha, Nebraska, a city upriver from St. Joseph and still along the Missouri River.

Omaha, Nebraska	2004	2024
Private Goods	0.79	0.98
Private Services	1.10	1.02
Government Services	0.81	0.90

When looking at private goods, it appears St. Joseph has a higher level of industry related to this area; however, has a lower level of private services when compared to Omaha. St. Joseph has an economy based more on goods, producing goods, and shipping / transshipping goods. This is emphasized by St. Joseph historic connection to not only sending supplies westwardly but also for sending products to Chicago, Illinois and the East Coast. Omaha has a much stronger relationship with private services such as financial services. St. Joseph has a larger sector devoted to government services and this is probably due to the animal related industries as well as pharmaceuticals, and agriculturally based chemicals. As a

result, there is a large number of government oversight and inspection, especially involving the US Department of Agriculture.

The base employment of St. Joseph is 9,700 in 2004 and 24,100 in 2024 showing a steep increase in employment for export. When looking at a comparison of the base multiplier of St. Joseph with Omaha we can see the difference between the St. Joseph economy with a heavy focus on manufacturing and transshipping when compared to the economy of Omaha based with a heavy focus on private services.

Base Multiplier	2004	2024
St. Joseph	5.25	3.26
Omaha	1.36	1.36

Looking at the base multiplier it does appear St. Joseph has a greater portion of economic activity focused on the local market than Omaha. This may be reflected in the private services sector of Omaha having a large customer base outside of the city (for example Mutual of Omaha Insurance services). However, we can see the ratio of production for the local market in St. Joseph when compared to production for export has changed from 2004 to 2024 suggesting greater production for export occurring. This greater production for export is probably related to expansions of companies in St. Joseph such as Altec in St. Joseph where there has been an increase over the past few years. There are possibly other factors representing cultural shifts as well such as more people having pets and thus benefiting the pet industry in St. Joseph.

Because of a dearth of information specific to St. Joseph, provided by the Bureau of Labor Statistics, the numbers are less reliable when looking at shift-share. Shift-share looks at changes in the local economy compared to the national economy to examine the rate of growth in specific industries. When analyzing the data available to me, it appeared in the area of private services, St. Joseph was competitive in some areas, especially those related to information and professional services. This fits with the recent boom of regional companies

that focus on health informatics as well as the construction of a business incubator. The business incubator, the Christopher S. "Kit" Bond Science and Technology Incubator, is not only aimed at assisting with the development of business; but, is in the "animal health corridor" and has a heavy focus on information services related to animal health and nutrition industries. The grant for the incubator was awarded in 2006 and the facility became operational in 2008 (Missouri Western State University, 2025). St. Joseph placing a focus on information services since 2004 could help to explain the competitive shift in this area for the St. Joseph region.

The Herfindahl-Hirschman Index (HHI) is a look at the level of concentration in a specific industry in an economic region. For St. Joseph, again data was not as in-depth as it was for Omaha. Additionally, "Diversity" (D) is calculated using the HHI.

The more diversified the economy, the closer the HHI is to zero. Because of the economic data provided being provided being limited, the HHI would appear to be focused on only three sectors, rather than the much more diversified breakdown of the Omaha data, it makes sense the St. Joseph HHI would be a much higher number than the HHI for Omaha. Additionally, when calculating D it would of course appear Omaha has a great deal more economic diversity.

Exports and base industries have been increasing while secondary services as a share of the economy have been decreasing since 2004 in St. Joseph. Part of this is most likely the impact of Covid along with the rise of shopping online. From my calculations it did appear the economy of St. Joseph has become less diversified despite growth in private services and government services from 2004 to 2024. The number I had for D was 0.8526 for 2004 and the number for D in 2024 was 0.6802. The higher "D" the more diversified the economy. However, these numbers would seem to suggest, although private services have grown in St. Joseph since 2004 as demonstrated by the shift-share analysis, the rate of public goods has grown even faster making the diversity "D" show the economy to be less diversified than it was in 2004. Because of the economic growth in St. Joseph in terms of production for export over the past 20 years, St. Joseph has increased its profile as a point for transshipping as well as the production of private goods.

In conclusion, the role of St. Joseph, Missouri as a point for transshipping from not only north and south along the I-29 corridor but east and west, especially to Chicago and the northeast, helps St. Joseph continue to grow economically. Although St. Joseph has seen growth in all three sectors of private goods, private services, and government services, the growth in private goods has increased significantly more rapidly than the other two economic sectors. As a result, the diversity of the St. Joseph economy has shrunk. While this might be in some cases be considered a bad thing, in the case of St. Joseph this actually shows a significant strength as well as demonstrating regional expertise and facilitating more related business to move into the region. Historically, St. Joseph has benefited from geography for travel both along the Missouri River as well as travel east and west. Additionally, St. Joseph's position in agriculture is also set to continue to grow with the US Department of Agriculture moving more resources to the region. Due to St. Joseph's demonstrated expertise as a region for transshipping and agriculture, it appears the city will see an even greater role as a crossroads of economic activity for the foreseeable future.

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