

Chapter 5 Oklahoma Economic Conditions and Freight Transportation

Background Economic Information

Overview of Oklahoma Economy

The Oklahoma economy has evolved significantly over the past two decades. Since the oil price collapse in the mid-1980s and the subsequent economic slowdown, Oklahoma has become less dependent on its natural economic resource bases of energy and agriculture. Although they remain an important part of Oklahoma's economy, other sectors, such as services and manufacturing, have grown in relative importance. As a result, the Oklahoma economy has become more diverse than it was 20 years ago.

In 2008, the Gross State Product (GSP¹) of Oklahoma was \$108 billion, accounting for one percent of U.S. Gross Domestic Product (GDP). Five industries contributed to more than half of the State's GSP. The five largest contributors to Oklahoma's real GSP by rank in 2008 are² government (15 percent), manufacturing (13 percent), retail trade (9 percent), real estate (8 percent), and healthcare (7 percent). The State's real GSP increased at a compound annual growth rate (CAGR) of 2.91 percent from 1999 to 2009 as compared to the nation's real GDP growth of 1.83 percent during this period. It should be noted that during the latter half of this time period, 2004 to 2009, Oklahoma's real GSP continues to grow at a faster pace as compared to the U.S., as shown in **Figure 5-1**.

Employment

According to the U.S. Bureau of Labor Statistics (BLS), total non-farm employment in Oklahoma increased over the past decade at a CAGR (2001–2008) of 1.3 percent. Growth of Oklahoma employment has outpaced the

nation's, which registered a CAGR of 0.8 percent over the same period. High oil prices and mining sector expansion are partly responsible for the State's higher employment growth, as are the State's expanding service sectors.

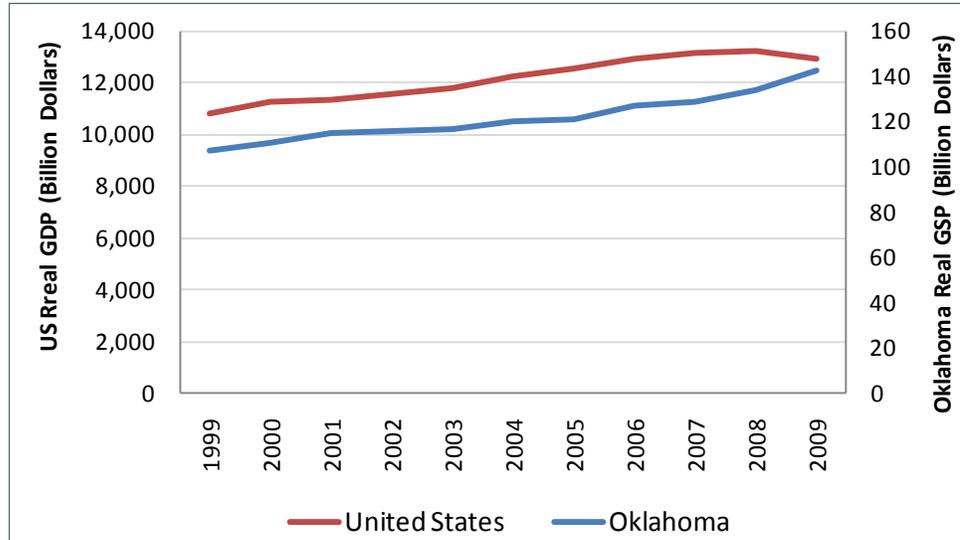
In 2009, a total of 1.7 million persons worked in Oklahoma, and over 95 percent of this group worked non-farm jobs (**Figure 5-2**). The largest employer is health care and social assistance, while state and local government, manufacturing, professional and business services, and retail trade continue to be a major source of the State's employment. While agriculture is an important contributor to State GSP, the industry is not labor-intensive.

Major Industries

Agriculture Industry

Oklahoma is one of the nation's largest producers of livestock and wheat, generating \$5.8 billion in value of agricultural products in 2007.³ Over the past decade, Oklahoma's agriculture sector has become increasingly diversified. While it has traditionally been dominated by wheat and cattle production, the swine and poultry industries have grown rapidly over the past decade, becoming the nation's second and third largest producers of the respective commodities.

Based on the *2007 National Agricultural Statistics Survey*, there were approximately 86,500 farms in Oklahoma, a slight increase from the 84,000 figure recorded in 1997. Farm acreage has exhibited little change over the period. Despite the relative stability in physical size and number of operations, the industry has been changing in terms of its structure. It has been increasingly shifting ownership from small independent farming to large corporate-based farming.



Source: Bureau of Economic Analysis (BEA) database.

Figure 5-1. Oklahoma Gross State Product and U.S. Gross Domestic Product, 1997 to 2009

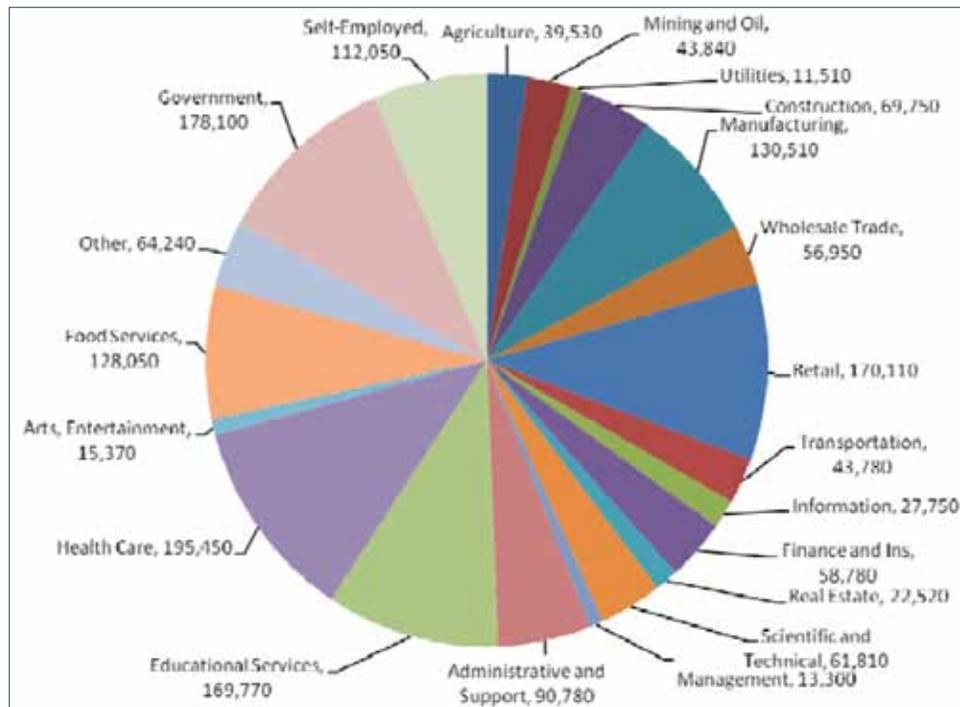


Figure 5-2. 2009 Employment by Industry

Oil and Gas

Since the oil-price collapse in the 1980s, Oklahoma’s economy greatly reduced its reliance on the “boom and bust” oil and gas sector through its diversification into aerospace,

finance and other industries. Oil and gas mining currently makes up three percent of the State’s employment, a much lower share than its 8.7 percent in 1982.

Over the past eight years, the oil and gas sector experienced strong growth as a result of high oil prices. The value of the sector’s economic activity increased at an average annual rate of 7.5 percent, employment at 4.1 percent, and the average number of active drilling rigs increased from 129 in 2000 to 200 rigs in 2008. However, this positive trend did not carry through 2009, as falling oil prices (that began in the last quarter of 2008) affected State drilling activity. During the first quarter of 2009, the number of active oil rigs in Oklahoma fell to 150.⁴

Minerals Mining

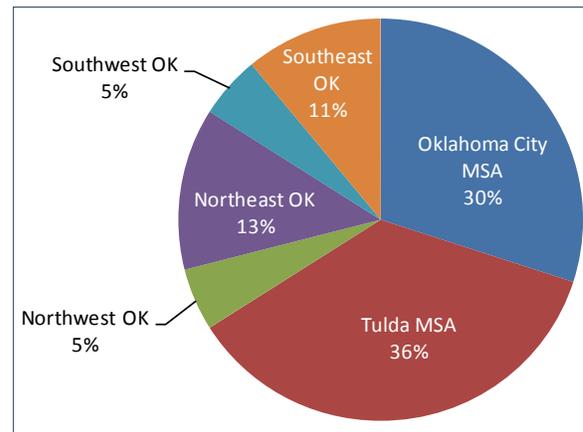
In addition to oil and gas, Oklahoma has abundant mineral resources, such as coal, sand, gravel, gypsum, granite, limestone, and salt. Over the past 20 years, the mining industry in Oklahoma has changed. Coal production has significantly declined from the peak production period of the early 1980s, while limestone, sand, and gravel have emerged as dominant commodities within the mining sector. Although not as prominent a sector as in the 1980s, Oklahoma’s minerals mining industry (not including oil and gas) is an important contributor to GSP, generating \$1.8 billion⁵ in 2007.

Manufacturing

In 2007, the manufacturing sector contributed 11 percent, or \$15.5 billion to Oklahoma’s GSP. The sector is dominated by the manufacturing of energy and aerospace machinery, fabricated metal products, and food processing, particularly that of meat products.

In 2007, 4,444 manufacturing establishments operated in the State.⁶ The Oklahoma City and Tulsa MSAs are home to over 65 percent of these establishments (**Figure 5-3**). While machinery and fabricated metal product

manufacturing are concentrated in the two major MSAs and the northeastern part of the State, food manufacturing is more concentrated in the agricultural northwestern and southeastern parts.



Source: Oklahoma Economic Development Council (OEDC).

Figure 5-3. Geographical Distribution of Manufacturing Establishments in Oklahoma, 2007

Over the past decade, the real value of economic activity generated from Oklahoma’s manufacturing sector increased at a CAGR (1997–2008) of 2.6 percent, slightly outpacing the nation’s overall 2.4-percent growth. This growth in economic value was largely bolstered by the expansion of high-value goods manufacturing, such as aerospace and industrial machinery.

Transportation and Warehousing

According to the U.S. Census, 2,630 transportation and warehousing establishments exist in the State, employing over 64,000 people or three percent of Oklahoma’s labor force in 2006. Distribution facilities are especially abundant in the Oklahoma City metropolitan area, where the major highways of I-44, I-40 and I-35 intersect, offering connections to the State’s major north-south and east-west corridors.



Over the recent years, distribution center development increased in south central Oklahoma, in Garvin and Carter Counties. This growth is largely supported by the rapidly growing U.S. consumer market, to which these counties are proximately located. Within Carter County, the City of Ardmore has become a particularly attractive retail center and warehousing site, as it offers direct access to the Texas market via I-35, Burlington Northern Santa Fe Railroad (BNSF), as well as a 2,900-acre industrial airport.

Entertainment, Arts, and Recreation

Oklahoma's booming entertainment, arts, and recreation industry has become an important State revenue source. The popularity of Oklahoma's entertainment industry has spurred growth among Native American tribes to develop bigger and more elaborate casinos to capture market share. In 2008, Oklahoma's gaming revenues amounted to \$ 2.5 billion, a 22.5 percent increase from the previous year.⁷

This significant jump is primarily attributed to the passage of State legislation that allowed tribes to use Class III games, such as slot machines and card games. The industry's contribution to the State is estimated to be \$178 million in 2008.⁸

Military Related

The military is one of the State's largest employers in Oklahoma, providing approximately 38,400 jobs in 2008. The State has three air force bases—Altus in the southwest, Tinker

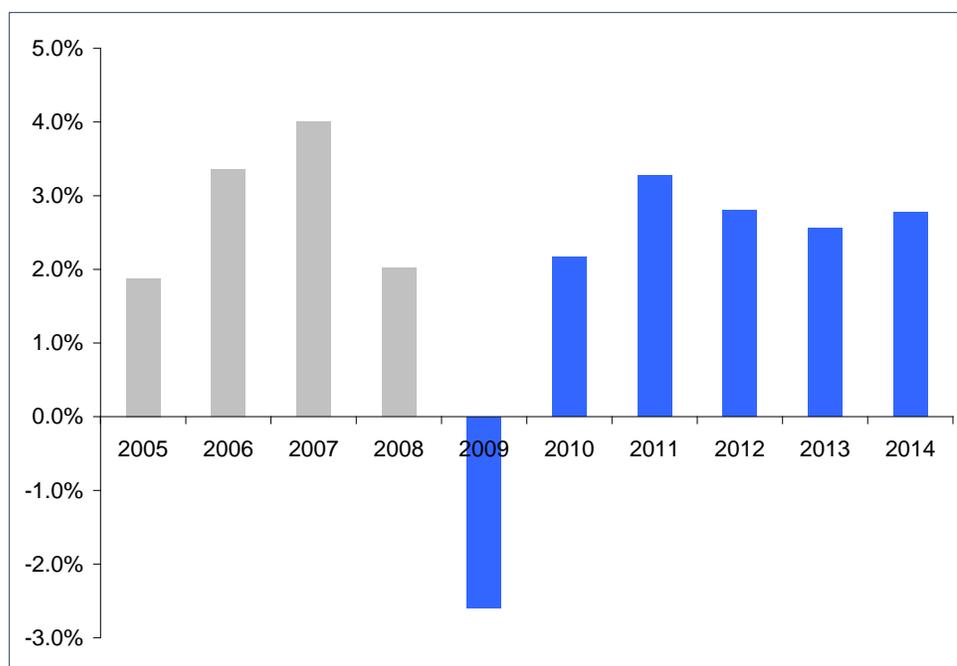
in Oklahoma City, and Vance in Enid—as well as the Fort Sill army post in Lawton.

Economic Forecast, 2008 to 2035

Overview

IHS/Global Insight's Regional Economic Service estimates that the economy of Oklahoma will recede in 2009, decreasing by 2.6 percent before resuming a 2.2-percent growth the following year, as shown in **Figure 5-4**. Overall, Oklahoma's downturn is expected to be less severe than that of the nation because of the relative stability of the State's housing market, which did not experience the same tremendous boom as much of the U.S. in the past decade. The strong military presence in the State also lends a buffer to the local economy, providing relatively stable employment and external monetary resources in the form of federal defense spending.

Over the long run, the Oklahoma economy is estimated to grow at a moderate pace, with real GSP projected to increase at a CAGR of 2.5 percent and employment at 0.9 percent from 2015 to 2038. The local economy will continue its course of diversification away from its dependence on natural resources. The strongest growth, both in terms of contribution to GSP and employment, will be led by expansion of the service sectors, specifically professional and business, healthcare, and finance.



Source: IHS Global Insight Regional Economic Forecast Services, February 2009

Figure 5-4. Oklahoma Gross State Product, 2005 to 2015 (Short-term)

Freight Flows

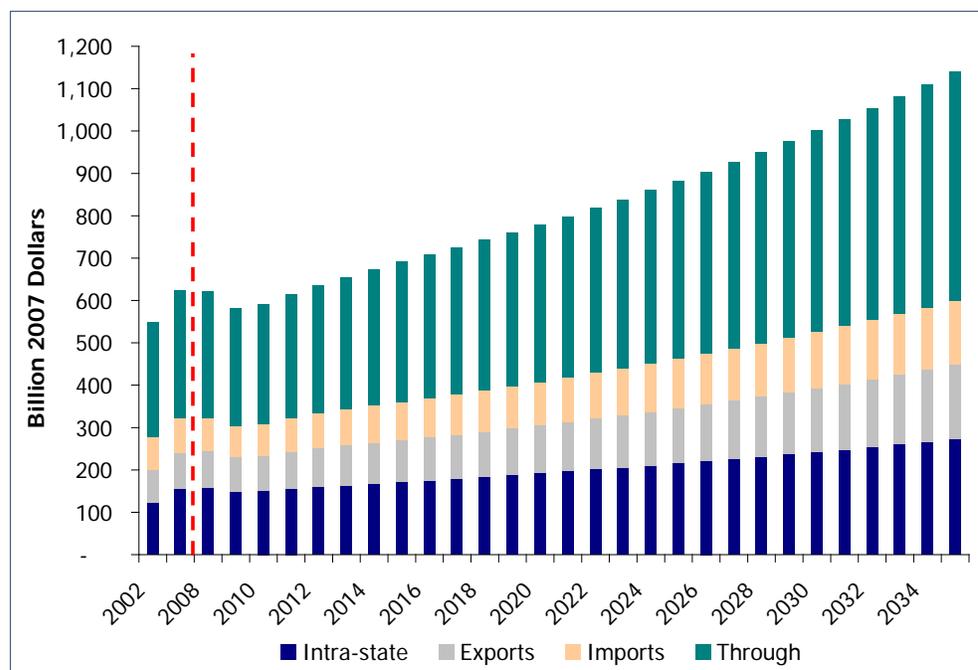
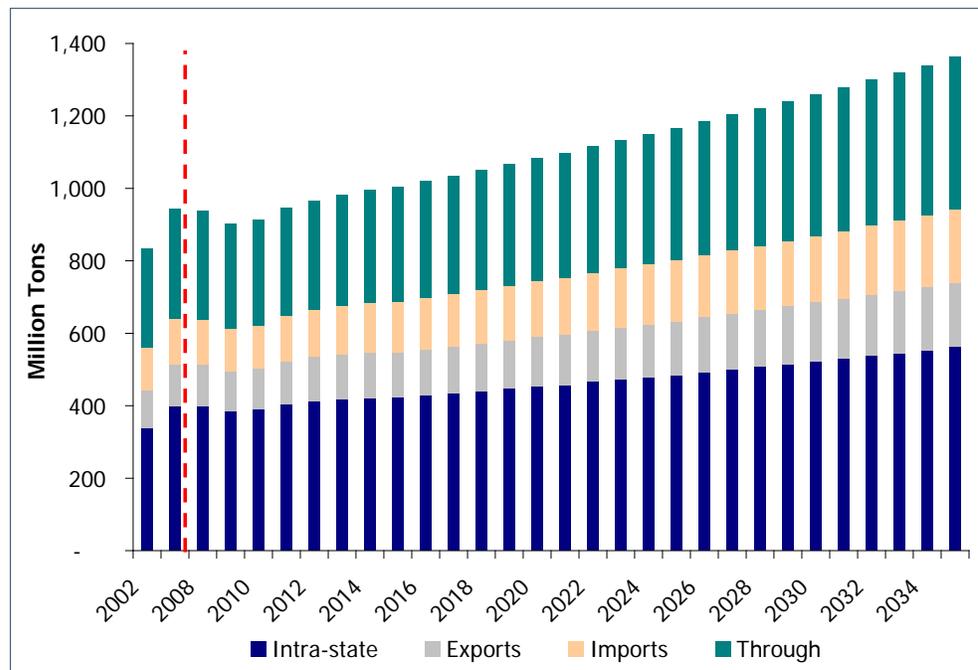
This section converts the economic forecast in the previous section into the current and projected quantities of goods moving into (“imports”), out of (“exports”), and within the State (“intra-state”). The analysis includes coverage of freight flows that neither originate nor terminate in Oklahoma, but use Oklahoma transportation corridors to move goods through the State. All freight flows will be described as movements between the Oklahoma City metropolitan area, Tulsa metropolitan area, and remaining regions of State (defined herein as “Remainder of State”⁹) and a set of 14 origin and destination regions in the U.S. and abroad. These will be specified at the individual commodity and modal level.¹⁰ Establishing a current “as-is” picture of current goods movement flows, as well as a “to-be” picture of future trends, is necessary to understand which intermodal corridors or facilities may need future reconstruction or expansion to maximize the State’s long-term economic growth.

Current and Future Freight Volume

The total quantity of freight flows moving into, out of, within, and through Oklahoma on all transport modes, measured in gross tonnage and 2007 dollars, is shown in **Figure 5-5**. Freight flows totaled 945 million tons in 2007, the last year of available historical data, with a value of \$624 billion.

On a tonnage basis, goods that were produced and consumed within Oklahoma, or intra-state flows, comprised 42 percent of all 2007 flows to/from/within/through the State, while exports and imports comprised 12 and 13 percent, respectively (**Table 5-1**).

Total through traffic (i.e., traffic not originating or terminating in Oklahoma) across all modes accounted for roughly one-third of total State flows. Excluding pipeline flows, through traffic accounted for 42 percent of total freight tonnage.



Source: Federal Highway Administration, IHS Global Insight, and PB Analysis.¹¹

Figure 5-5. Historical and Projected Freight Flows to/from/within Oklahoma, 2002-2035

Table 5-2 shows the annual growth rates in freight flows expected over the short term (2007–2010), medium term (2010–2020), and long-term horizons (2020–2035), along with the historical growth rate experienced from 2002 to 2007. Over the 2007 to 2010 period, total Oklahoma-specific freight flow tonnage is projected to decline 1.1 percent per year resulting from the current economic downturn and global financial crisis. The Oklahoma economy should rebound beginning in 2010, with several above-average years of growth to compensate for the depth of the current economic downturn. As a result, freight tonnage is expected to increase at a 1.7-percent annual growth rate from 2010 until 2020, slightly higher than the long-term rate of 1.5 percent per year over the 2020 to 2035 period.

Major Destination Regions for Oklahoma Exports

Over 115 million tons of goods were shipped from Oklahoma to states and countries beyond the State’s borders in 2007. Annual export tons are projected to increase 34 percent over the forecast period to reach 155 million tons in 2035.

Table 5-2 shows the breakdown of Oklahoma exports by final destination region.¹²

Oklahoma’s main trading partners are its neighbors Kansas, Texas, and Arkansas, which constituted 72 percent of Oklahoma’s export destinations in 2007. Roughly 25 percent of all exports, when measured in tonnage, are destined for Kansas. Together, Houston and Dallas receive approximately 17 percent of all exports, almost as much as the 18 percent that goes to the rest of Texas. Arkansas received 16 percent of Oklahoma’s 2007 exports.

Modes of Transportation for Oklahoma Exports

Because the majority of Oklahoma exports are destined for nearby states, trucks (which are most often used for short distance movements within 300 miles) transport the largest volumes of exported goods relative to rail, water, or air. Oklahoma export volumes moving on trucks are expected to increase 2.2 percent per year over the forecast period, nearly doubling from 55 tons in 2007 to 103 tons in 2035.

Other modes are also expected to grow. Pipeline volumes should increase slowly over the forecast horizon, growing from 41 million tons in 2007 to 52 million tons in 2035. Rail movements of freight tonnage are expected to expand at the slowest rate of all transportation modes, increasing 0.5 percent per year. Goods moving via water and air are expected to feature the fastest growth of all export modes, with each mode increasing at a 3.3 and 3.4 percent, respectively, annual pace. See **Table 5-3** for projected Oklahoma export volumes by mode.

Total Future Freight Flows by Mode

As shown in **Table 5-4** and **Table 5-5**, the majority of goods flowing to/from/within/through Oklahoma move on the State highway network using trucks, with 51 percent of total freight tonnage and 76 percent of freight value moving via truck in 2007. Truck tonnage flows are projected to grow at a 1.7 percent annual pace over the forecast horizon. By 2035, truck flows are expected to account for 57 percent of total goods movement tonnage moving to/from/within/through Oklahoma.

**Table 5-1. Total Freight Tonnage by Trade Type, 2007-2035**

Trade Type	2007	2010	2020	2035
Intrastate	42.3%	42.7%	41.9%	41.4%
Exports	12.3%	12.3%	12.6%	13.2%
Imports	13.4%	13.2%	14.2%	14.9%
Through	32.1%	31.9%	31.2%	30.5%
TOTAL	100.0%	100.0%	100.0%	100.0%

Source: Federal Highway Administration, IHS Global Insight, and PB Analysis.

Table 5-2. Annual Growth Rates in Freight Tonnage to/from/Within Oklahoma, Selected Periods

Trade Type	2002-2007	2007-2010	2010-2020	2020-2035
Total	2.5%	-1.1%	1.7%	1.5%
Intra-state	3.4%	-0.8%	1.5%	1.4%
Exports	2.0%	-1.1%	2.0%	1.8%
Imports	1.2%	-1.6%	2.5%	1.8%
Through	2.1%	-1.3%	1.5%	1.4%

Source: Federal Highway Administration, IHS Global Insight, and PB Analysis.

Table 5-3. Projected Oklahoma State Exports to Destination Region

Destination Region	2007	2010	2020	2035	Share of Total Exports, 2007	Annual Growth, 2007 to 2035
Kansas	29.5	27.5	33.2	42.0	25%	1.3%
Rest of Texas	21.4	21.2	25.0	31.3	18%	1.4%
Arkansas	18.2	17.8	23.0	31.3	16%	2.0%
Dallas-Ft. Worth, TX	16.2	16.0	20.1	28.3	14%	2.0%
Southwest	6.1	5.7	6.3	7.4	5%	0.7%
Missouri	5.3	5.1	6.5	9.7	5%	2.2%
Southeast	4.4	4.3	5.4	7.3	4%	1.8%
Midwest	3.4	3.2	3.6	4.1	3%	0.7%
Houston, TX	3.2	3.5	3.9	4.5	3%	1.2%
Grain Belt	3.1	2.8	3.5	4.3	3%	1.2%
International	2.0	2.0	2.5	3.4	2%	1.9%
Northeast	1.7	1.6	2.1	2.8	1%	1.7%
Mexico	0.8	0.8	0.9	1.2	1%	1.4%
Pacific Northwest	0.5	0.4	0.5	0.7	0%	1.5%
Total	115.9	112.0	136.6	178.3	100%	1.6%

Source: Federal Highway Administration, IHS Global Insight, and PB Analysis (in million tons).

Table 5-4. Projected Oklahoma State Export Volumes by Mode

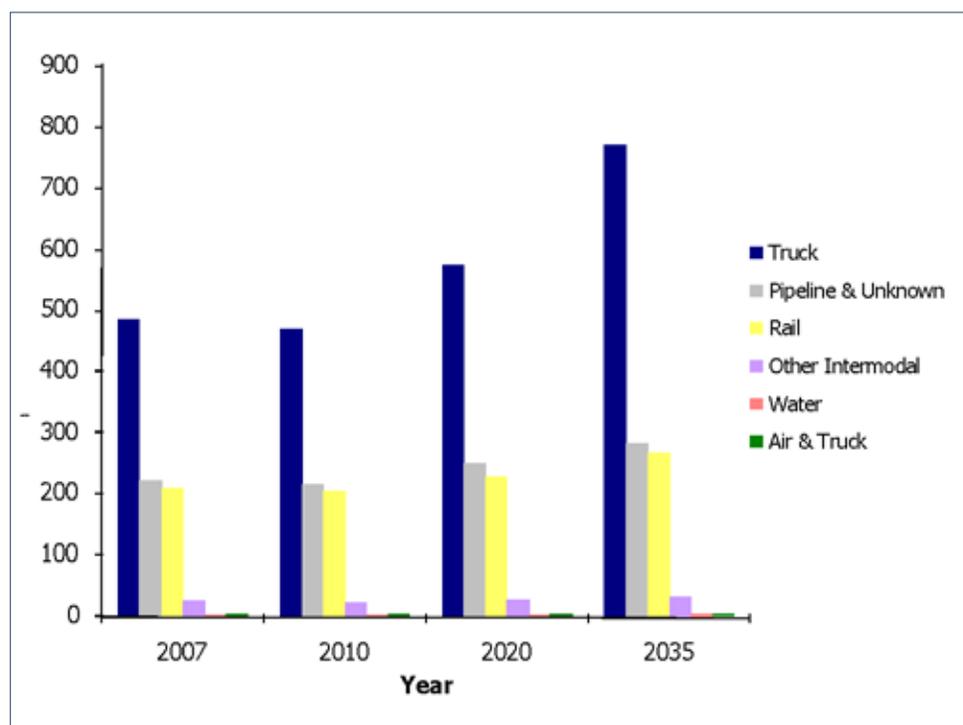
Transportation Mode	2007	2010	2020	2035	Annual Growth, 2007 to 2035
Truck	55.4	54.8	70.4	102.7	2.2%
Pipeline and Unknown	41.0	38.3	45.0	52.0	0.9%
Rail	17.4	16.7	18.6	20.3	0.5%
Truck and Rail	1.6	1.7	1.9	2.1	1.0%
Water	0.4	0.4	0.5	0.9	3.3%
Other Intermodal	0.1	0.1	0.2	0.3	2.1%
Air and Truck	0.02	0.02	0.03	0.05	3.4%
Total	115.9	112.0	136.6	178.3	1.6%

Source: Federal Highway Administration, IHS Global Insight, and PB Analysis (in million tons).

Table 5-5. Projected Freight Flows to/from/within/through Oklahoma by Mode

Transportation Mode	2007	2010	2020	2035	Share of Total, 2007	Annual Growth, 2007 to 2035
Truck	484.5	467.5	573.6	769.5	51%	1.7%
Pipeline and Unknown	220.0	213.5	247.3	280.9	23%	0.9%
Rail	212.1	206.0	230.1	269.1	22%	0.9%
Other Intermodal	26.1	24.1	27.3	32.9	3%	0.8%
Water	1.7	1.7	2.1	2.8	0%	1.7%
Air and Truck	0.11	0.10	0.14	0.23	0%	2.7%
Total	944.5	912.8	1,080.6	1,355.5	100%	1.3%

Source: Federal Highway Administration, IHS Global Insight, and PB Analysis (in million tons).



Source: Federal Highway Administration, IHS Global Insight, and PB Analysis (in million tons).

Figure 5-6. Projected Freight Flows to/from/within/through Oklahoma by Mode



Pipeline and rail are the second and third most important transportation modes from a tonnage perspective. Both modes are expected to grow at a slower pace than freight on the highway and road network.

The rail network is most competitive for long-distance freight flows (such as coal imports from Wyoming). The rail network will likely be unable to gain significant market share from trucks over the forecast period. This is because most of the expected growth in freight flow centers on either shipments within Oklahoma or between neighboring states, and on high-value or time-sensitive products like agricultural products, durable goods or chemical products.

Goods movement flows over water to/from the Port of Catoosa in the Tulsa MSA are expected to grow at a 1.7-percent annual pace from 2007 to 2035. Airborne freight is expected to grow at a 2.7-percent rate per year over the forecast period. Along with trucks, these two modes are expected to grow the fastest of all transportation modes over the forecast period.

Figure 5-6, on the previous page, illustrates that the majority of goods flowing to/from/within/through the State of Oklahoma in 2007 were transported on the highway network using trucks. By 2035, truck flows are expected to account for 57 percent of total goods movement tonnage moving to/from/within/through Oklahoma. Growth of each mode, and in intermodal goods movement, is expected over the next 25 years.

Opportunities for Development

Given Oklahoma's current and trending economy, the characteristics of its freight flows and the current intermodal transportation network, economic growth sectors that are most likely to benefit from strategic intermodal

improvements have been identified in this section.

Agricultural Commodity Processing

As noted in previous plan sections, food processing is one of the targeted industry clusters for economic development in Oklahoma. Although many major agribusiness firms are enterprises that also include retail-end activities, such as meat packing and processing, at the time of writing, much of this processing of Oklahoma agricultural output continues to be done outside the State. Should the value-added food processing business grow in Oklahoma, increased value-added/perishable processed foods will necessitate a greater shift toward fast and reliable transport. Increasingly efficient supply chain systems, including efficient truck distribution and air freight transport, may become more important.

Industrial Livestock Production

Oklahoma may need to consider the specific transportation needs of vertically integrated swine and poultry production, which has become a major economic presence in the Panhandle. This may include increased or improved rail freight service in these areas, as well as a more comprehensive supply chain study—where producers of swine and poultry and food manufacturers are surveyed and more detailed information on their existing transportation patterns, perceived transportation needs and identified logistics challenge are obtained. This information would greatly aid in the targeted development of road or rail enhancements for this industry.

Opportunities for a specialized high-volume truck to rail hub facilities for livestock should be investigated. This should include the potential for a direct tie-in with UPPR's routing through

the Panhandle and through the poultry-producing eastern counties.

Aerospace and Electronics Manufacturing

Given Oklahoma’s competitive labor costs, proximity to major military logistics centers, and current specialization in aircraft and aerospace equipment, military communication systems, and various electronic appliances and components production, continued growth in this sector is likely to occur. This growth will supply local demand from the State’s military industry. Reliable airports and highway networks will be necessary to solidify Oklahoma’s competitiveness as a national supplier.

Alternative Energy

With the State tax incentives offered to alternative energy development, this alternative energy sector is well-poised to expand over the next few decades. As wind energy farms are most likely to be concentrated in the northern and western parts of the State, away from the inland waterway system, transport of oversized and overweight loads via truck becomes an increasingly more important need to be addressed.

Retail, Warehousing, and Distribution

Warehousing and distribution activities in the southern counties along I-35 have increased significantly over the recent years because of the robust growth of the Texas market. The Ardmore and Durant areas have been highly successful at attracting some retail distribution centers, such as Dollar Tree, Wal-Mart distribution, and Big Lots, though most large retailers still locate near large consumer markets, such as Texas.

Oklahoma’s advantage lies in its central location. Oklahoma will benefit from close coordination of its transportation plans with

those of bordering states, so that volumes of north-south truck and rail freight can be consistently accommodated. Improved east-west highway links, including enhanced highway capacity for trucks between these distribution centers and Oklahoma’s sub-regional economies, are crucial to the increasing viability of this retailing, warehousing, and distribution sector.

Entertainment, Arts, and Recreation

The Oklahoma entertainment, arts, and recreation industry has been expanding rapidly over recent years, gaining tremendous market share in the Southern U.S. Most notably, the casinos located close to the Texas border have tremendous potential to become regional destinations, as gaming remains illegal in Texas.

Conclusion

Long-term economic growth in Oklahoma is projected to average 2.5 percent per year, lower than in past decades. This projection is in line with national trends. These suggest that the U.S. economy will expand at a slower pace in the future relative to recent decades, as the economy reflects the effects of high trade and budget deficits. Oklahoma’s future economic growth is expected to be led by service industries, such as professional services, healthcare, and finance.

Because of the moderation in GDP growth and diversification from heavy industries, such as oil and gas, mining, and agriculture, freight tonnage on the Oklahoma transportation network is expected to increase at a slower pace than that seen over the 2002 to 2007 period. Freight tonnage to/from/within/through the State on all transportation modes is projected to increase at a 1.3-percent annual rate over the 2007 to 2035 forecast period.



The largest increases in goods movement are expected to occur on the highway, airport, and water networks. Highway freight tonnage is expected to increase its share of total freight tonnage from 51 percent in 2007 to 57 percent in 2035, driven mainly by strong growth in imports and exports. The State's growth in exports is expected to be concentrated in agricultural products, durable goods, and live animals. Freight tonnage is also expected to grow fastest in areas of the State outside of the Oklahoma City and Tulsa MAs, as defined in the FHWA's FAF database.

Annual truck traffic on I-35, I-40, and I-44 is projected to grow at a 1.6-percent annual pace over the 2007 to 2035 forecast period. By 2035, roughly 13,000 and 14,500 trucks are expected to use I-35 and I-40, respectively, on average each day throughout the State; and 8,500 trucks are expected to use I-44. This compares with roughly 8,500, 9,500 and 5,300 vehicles in 2007.

Rail demand is expected to grow at a 0.9 percent annual rate from 2007 to 2035, with the largest growth occurring on the Class I network in the center of the State, passing through the Oklahoma City MSA. Other rail-highway hubs will be needed to serve industrial livestock productions in eastern Oklahoma and the Panhandle.

Goods movement on water is expected to increase at 1.7 percent annually, or 65 percent over the forecast period. Air freight is also expected to grow by 2.7 percent annually, or over double in the next 28 years.

Chapter 5 Endnotes

¹ GSP measures the value of all the goods and services produced in a state in a given year using the prices prevailing during that year, while real GSP is the value of all goods and services expressed in the prices of a base year. In evaluating the state economy over a period of time, "real" GSP is often used instead of "nominal" GSP. This is because GSP can over-estimate the growth

of the economy—the general increase in prices (inflation) can cause GSP to increase even if the volume of the state's goods and services remains unchanged. Real GSP growth is adjusted for inflation and thus a more accurate measure of how much the economy has grown in terms of output over a given period of time.

² <http://www.okcommerce.gov/Data-And-Research/Economic-Data> - accessed Nov 23, 2010.

³ United States Department of Agriculture, National Agricultural Statistics Services 2007 Census

⁴ IHS Global Insight Regional Economic Service

⁵ National Mining Association, "The Economic Contributions of U.S. Mining in 2007", Feb 2009

⁶ Oklahoma Economic Development Council

⁷ Casino City Indian Gaming Industry Report, 2008

⁸ IHS Global Insight Regional Economic Service

⁹ Please note that the Oklahoma City metropolitan area, Tulsa metropolitan area and remainder of state regions in this section of the report are slightly different from the Metropolitan Statistical Area (MSA) definition as defined in the economic section. Please refer to Appendix A for further details.

¹⁰ Historical estimates from 1997, 2002, and 2007 presented throughout this section are based on the FHWA's Freight Analysis Flows (FAF²) database. Oklahoma state-level production projections by commodity are based on Global Insight industrial production forecasts (updated in January 2009) and PB analysis. Future regional allocations of state production, as well as final destination regions, are based on FAF² projections. Modal share forecasts are based on FHWA FAF² and PB analysis. For more information regarding forecast methodology, see Appendix A.

¹¹ The Oklahoma freight flows forecasts were generated using the Federal Highway Administration's Freight Analysis Flows (FAF) database, which provides historical trade flow data and forecasts for a set of 121 U.S. and international regions and 43 commodity groups. Because the FAF forecast was developed in 2005 based on 2002 data, these forecasts were adjusted to reflect current economic conditions. Additional information regarding the methodology used to adjust the FAF forecast is presented in Appendix B.

¹² Destinations are listed in the table as states, subparts of states, state clusters, country or international, according to the following definitions. The Dallas-Ft. Worth and Houston metropolitan areas are defined as their own regions; the "Rest of Texas" region includes all other parts of the state. The Southwest region includes Arizona, California, Colorado, New Mexico, Nevada, and Utah. The Southeast region includes Alabama, Mississippi, Louisiana, Florida, Georgia, Louisville, Kentucky, Tennessee, North Carolina, South Carolina, and Virginia. The Midwest includes Indiana, Illinois, St. Louis, Missouri, the remainder of Kentucky, Detroit, Michigan, Ohio, West Virginia, and Wisconsin. The Northeast region includes Washington, DC, Maryland, Pennsylvania, Delaware, New Jersey, New York, Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont, and Maine. The Grain Belt includes Minnesota, Iowa, North Dakota, South Dakota, Nebraska, and the remainder of Michigan. The Pacific Northwest includes Wyoming, Montana, Idaho, Oregon, and Washington. International designation includes Canada, Southwest Asia, Northeast Asia, Central and South America, Europe, and the rest of the world. Definitions are based on PB analysis of FHWA FAF data and are used in the remainder of this report.