

# CHAPTER 6: INTERMODAL TRANSPORTATION

Intermodal facilities are those at which people or goods switch modes of transportation in route to their final destination. For the purposes of the 2040 LRTP, the intermodal network section outlines information related to truck, rail, barge, and air facilities in the SIMPCO MPO planning area. Specifically, this chapter addresses the present state of facilities for truck, rail, air, and waterborne freight, as well as passenger issues.

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## PERFORMANCE MEASURES

The efficient movement of people and goods throughout and beyond the SIMPCO MPO planning area is a legitimate planning goal. The area’s position along interstate, waterway, and rail corridors necessitates the evaluation of existing transportation facilities and an eye toward future concerns. The following performance measures reflect the priorities of the MPO with regard to maintaining and developing an efficient, safe, and secure intermodal system and will be reviewed on an annual basis. As stated in Chapter 1 of the plan, a base for each performance measure will be calculated after approval of the 2040 LRTP. SIMPCO transportation staff will track changes throughout the calendar year and submit a report to the MPO TTC and Policy Board each January with performance measure updates.

<b>PERFORMANCE MEASURES</b>		
Freight bottle necks frequency		Decrease
Quantity of Intermodal Connector Facilities		Increase
Tonnage of Freight Transferred		Increase
Tonnage of Freight Moved Through the Area		Increase
Barges Entering the Planning Area		Increase
Train-Train and Train-Motorist Crashes		Decrease
Number of Impediments		Decrease
Number of Airlines		Increase

## TRUCK

### CURRENT FACILITIES

The SIMPCO MPO planning area is principally served by Interstates I-29 and I-129; as well as US 75, US 77 and US 20. I-29 provides a north/south route for truck, bus, and automobile traffic from Sioux City into North and South Dakota, western Iowa, eastern Nebraska, and Missouri. It links with I-90 to the north at Sioux Falls and I-80 and I-35 at Omaha and Kansas City, respectively. US 75 and 77 run north/south through Iowa and Nebraska, and US 20 runs east/west across Iowa and Nebraska. Table 6.1 provides a summary of the major highways in the metropolitan area and the regional connections these highways provide.

**Table 6.1:** SIMPCO Metropolitan Area Major Arterials and Connected Cities

Major Arterial	Connected Cities
I-29	Fargo, ND; Sioux Falls, SD; Omaha, NE; Kansas City, MO
U.S. Highway 20	Fort Dodge, Dubuque, IA; Rockford, IL; I-39/90
U.S Hwy. 75/77	I-90; Le Mars, IA; Omaha, Lincoln, NE

Source: Siouxland Interstate Metropolitan Planning Council



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Because the trucking industry is privately owned and operated, the MPO can only provide a general idea of trucking activity in the region. With several meat-processing plants in the vicinity, a large percentage of truck traffic involves hauling live animals to be slaughtered and processed. These trips are normally not very long, typically approximately 100 miles, coming from neighboring farm country in Iowa, Nebraska, and South Dakota. Le Mars, IA, located northeast of Sioux City, is home to Wells Dairy and major dairy products are transported on the primary network throughout the MPO area. These products are transported in all directions of the United States and overseas via airports such as Eppley Airfield in Omaha, NE. Corn, soybeans, fertilizers, and other agricultural commodities, as well as manufactured items, are frequently transported throughout the MPO area. As with any metropolitan area, the other major freight category includes traffic servicing the consumptive needs of the MPO area itself with commodities such as: foodstuffs, electronics, manufactured furniture, clothing, and other products. Warehousing is significant in areas generating corresponding high truck activity. Table 6.2 provides 2001 freight values and tonnage moved along some of the major corridors in the metropolitan area. A new travel demand model has since been developed by the Iowa DOT, and is called the iTRAM. This method tracks the inbound and outbound amount of freight tonnage and cargo category at the county level. The data shown in table 6.3 is taken from 2007, and is the most recent measured cargo data available. The top five cargo categories are listed for both trucking and all modes of travel.

**Table 6.2: 2001 Freight Values and Tonnage**

Corridor	Freight Value	Freight Tonnage
I-129	\$2,203,000,000	3,304,053 tons
US 77	\$204,000,000	283,220 tons
I-29	\$10,315,000,000	5,142,857 tons
<b>Totals</b>	<b>\$12,722,000,000</b>	<b>8,730,130 tons</b>

Source: IA DOT

**Table 6.3: 2007 iTRAM freight movements (truck and all modes)**

Domestic Inbound Freight: Units in thousands of tons			
Truck		All Modes	
Cereal Grains	1,534	Cereal Grains	1,590
Gravel	1,144	Gravel	1,218
Nonmetal min. prods.	652	Nonmetal min. prods.	671
Other ag prods.	574	Other ag prods.	594
Other food stuffs	495	Other food stuffs	533
Domestic Outbound Freight: Units in thousands of tons			
Truck		All Modes	
Cereal Grains	1,924	Cereal Grains	2,124
Gravel	637	Gravel	1,041
Nonmetal min. prods.	627	Nonmetal min. prods.	650
Other ag prods.	517	Other ag prods.	641
Other food stuffs	487	Other food stuffs	381

Source: IA DOT

There are no major truck stops akin to the Walcott area on I-80 in eastern Iowa; however, Sioux City does lie along a major route from western Canada to the upper Midwest, south and southeast United States and Mexico. The potential for growth along the corridor is deemed to be significant with the NAFTA treaty economic effects.

Map 6.1 is a representation of trucking throughout the SIMPCO MPO. The truck annual average daily traffic (AADT) is represented by increasing thickness of line representing increasing AADT. The truck routes throughout the MPO area have a high AADT of just over 6,000 interstates, highways, and major arterials. This map facilitates the planning for the future needs of existing trucking routes; based on known traffic levels, decision makers can better plan for and incorporate potential upgrades to these facilities.

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### CHALLENGES

As of 2012, FHWA estimated 947.0 million tons of freight to, from, and within Iowa traveled via the state's highway system. The number is projected to grow to 1661.2 million by 2040. The Sioux City area is developing into a regional retail center which has implications regarding increased truck traffic in the area. For example, the recent development of CF Industries fertilizer manufacturing facility and the future Seaboard/Truimph Food pork processing facility.

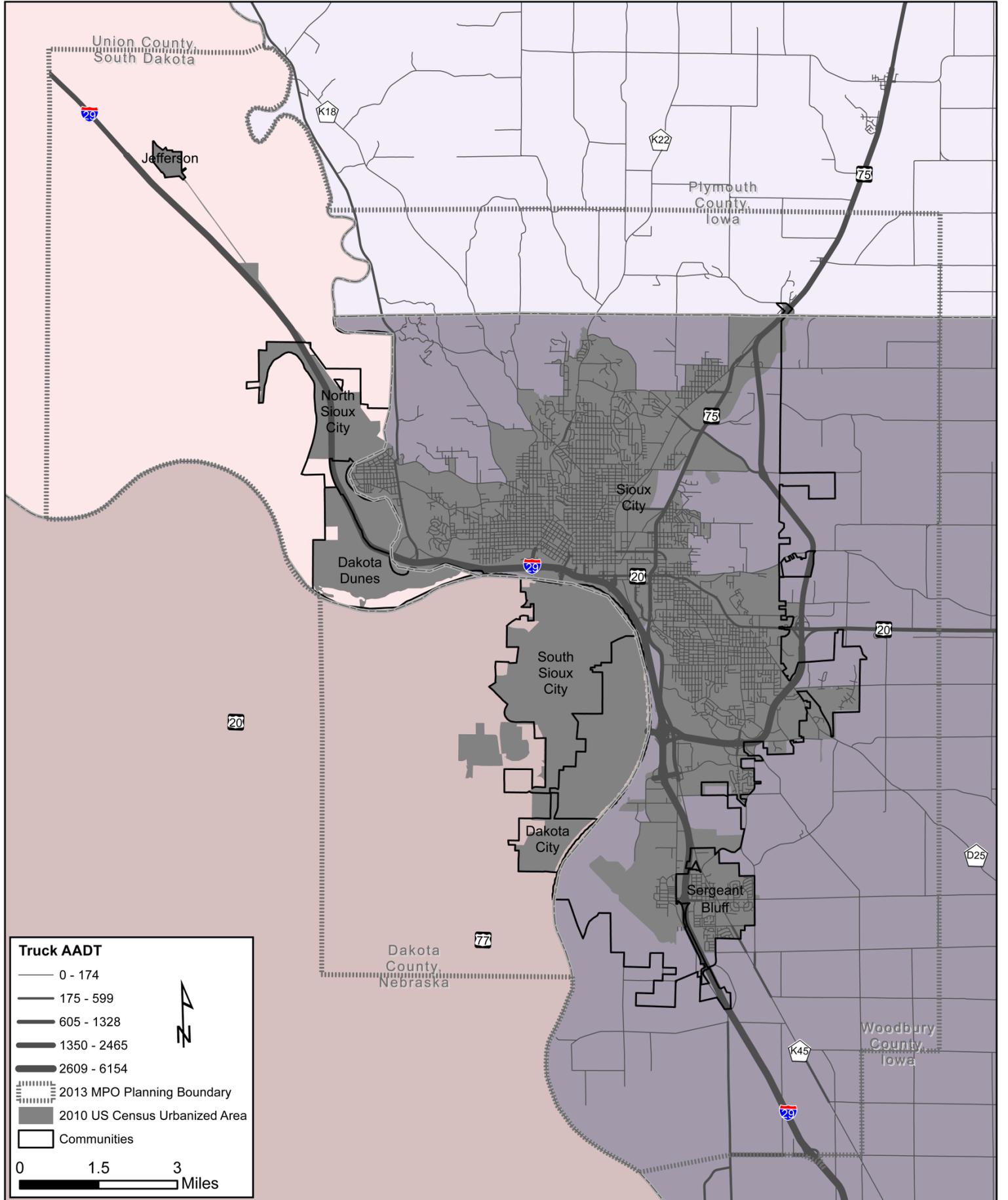
The implementation of the CF Industries expansion is expected to increase the amount of truck traffic significantly. Currently CF Industries is located just south of both Sioux City and Sergeant Bluff, and is outlined in Map 6.5. The industrial site is expected to complete expansion in 2016, and will become one of the country's largest agricultural nitrogen plants. Dealing with the manufacturing and distribution of nitrogen and nitrogen fertilizer, the company expects to use both rail and truck as primary transportation methods for their finished product. CF Industries has created the trucking capacity to be within 30,000 trucks per year. This expected increase is likely to have a direct impact on the traffic of the current infrastructure. All recent road construction in the area however has been made to tolerate the potential capacity listed above.

In addition, the opening of the Seaboard/Truimph Food pork processing facility is also expected to increase the amount of truck traffic to the region. The plan will have the capacity to slaughter 10,000 to 12,000 hogs per day and will initially employ 1,100 workers.

Both facilities require shipments by truck during the construction and once the plants are up and running. This likely expansion of truck traffic will undoubtedly affect the highway system in the metropolitan planning area, due to the region's access to I-29 and the expansion of IA 60 to Minnesota, as well as NE 35 toward Norfolk in Nebraska. Accelerating increases in truck traffic, could have major implications, particularly on I-29 and the interchanges just north and south of the airport, as well as to local roads servicing the area.

# SIMPCO MPO Truck AADT

Truck AADT not available for Dakota County, and limited in Union County.



### RAIL

#### CURRENT FACILITIES

Though many changes in size, track mileage, and importance have occurred over the years, the railroads are still a major part of the economic activity of the SIMPCO MPO region. Three major Class One railroads serve the area including the Burlington Northern Santa Fe (BNSF) Railway, the Union Pacific (UP) Railroad and the Canadian National (CN) Railway. There is also a light density line, the Nebraska Northeastern (NENE) serving South Sioux City, used primarily to haul grain products and interchange with the Class Ones, particularly the BNSF and the D&I Railroad (DAIR) a short line railroad company owned by L.G. Everist Inc., a construction and aggregate company that is used primarily to haul rock and sand with seasonal grain. The DAIR operates from Sioux Falls, SD to Sioux City, IA. Including some likely abandoned yard mileage, there are about 120 miles of mainline, switching, and yard track facilities in the metro area. BNSF Railway has about 50 miles of trackage making it the largest track owner in the area, following its 2005 purchase of the South Dakota owned Dakota and Iowa railroad trackage through the northwest of the metro area. UP operates approximately 35 miles with CN, various industrial users, the Siouxland Historical Railroad Association (SHRA), NENE, and DAIR making up the balance. The track layout throughout the metropolitan area can be thought of as an “X” with no direct long distance east or west routes (excepting NENE). The CN line eventually swings east 25 miles northeast of the metro area in Le Mars, IA. From the metropolitan area, direct connections are possible to the UP transcontinental mainline in Missouri Valley, IA running to San Francisco, CA and Chicago, IL. Other connections include Fort Dodge, Waterloo, Dubuque, IA via the CN/IC; Minneapolis, MN via the UP; and Sioux Falls, SD, Fremont, NE, Lincoln, NE, and Denver, CO via the BNSF. Map 6.2 shows present track ownership and destinations, as well as the SIMPCO MPO area intermodal facilities.

Railroad operations in the MPO area are concentrated in the Hoeven Valley corridor with the three major Class One roads operating small yards primarily servicing the adjacent agricultural processing industry properties. The BNSF operates the track facilities along the eastern side of the Hoeven Valley whereas the UP and CN operate on the western side. To the southeast, a spur connects the MidAmerican Energy coal fired power plant and the industrial areas north of the airport including the Big Soo Terminal to the UP line to Missouri Valley. In South Sioux City, there is some yard activity with the NENE and BNSF. Additionally in South Dakota, there is DAIR, which uses tracks owned by the State of South Dakota and operated by the BNSF that run along I-29 to the Steuben Street yard.

The principal commodity transported by rail throughout the metropolitan area is coal. This coal is burned in large steam Rankine Cycle electricity plants located either in the region or along rail routes emanating from the metro area. The principal examples are the four MidAmerican Energy units located near Salix, IA just south of the metropolitan area. The usual area of origin for this low sulfur coal is the Powder River Basin near Gillette, WY, about 400 miles to the west.

Given the focus on serving the agricultural processing industry, other principal cargo consists of grain products, usually transported in 100 ton covered hopper cars. Large quantities of edible oils are also transported, usually in tank cars along with smaller quantities of general merchandise including metal products, plastics, forestry products, processed foods in refrigerated boxcars and aggregate material like gravel and stone. There is no intermodal container traffic in the region given the geographic disadvantages as compared to Council Bluffs/Omaha or Kansas City which lie on the main transcontinental lines to the West Coast ports of Oakland/San Francisco/Sacramento and Los Angeles/Long Beach, CA respectively. Intermodal containers are trucked to the Sioux City metropolitan area after being offloaded at the major intermodal facilities of the Class Ones.

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In July 2009, the city of Sioux City developed the *Rail Freight Movement and Economic Development Analysis*. Phase I of the plan gives a detailed look at the inventory and operations of rail in the Sioux City metropolitan area. The tasks completed in Phase I set up the base for the tools and data that are necessary to develop a further analysis for the city. Although the timeline of Phase II is undetermined, Sioux City has stated that it will include the following elements:

- Identifying freight rail constraints
- Identifying current or potential freight rail and rail/roadway interface safety issues
- Establishing land use parameters for property adjacent to the rail corridors
- Performing analysis of impacts to the existing transportation network associated with the 2030 growth forecast
- Developing alternatives and the associated feasibility for rail and roadway system improvements
- Developing realistic cost/benefit estimates for recommended improvements

### CHALLENGES

Railroads are inherently more energy efficient at moving freight than trucks. This is owing to the long slender profile of trains, minimizing aerodynamic drag and the low rolling friction of steel wheels rolling on steel rails. A typical intermodal train moves a ton of containerized freight three times further on a gallon of diesel than a semi-trailer truck. For bulk commodities, the advantage can be as great as five to six times further. Therefore, in a planning environment where fuel prices are likely to remain high, it can be anticipated that a larger portion of non-time sensitive freight may utilize rail for long distance transportation. The intermodal container portion of the business is likely to be the greatest such beneficiary. Another trend that is noteworthy is the increasing use of coal for electricity generation versus natural gas. Given that coal is primarily transported by rail and barge, it implies that more rail capacity may be required. At the MPO level, these developments point to the possibility of a need for intermodal transloading facilities to minimize the road haul portion of intermodal costs to the region. Additional siding tracks, and signaling may be necessary to cope with increased traffic throughout the region.

Other issues at the MPO level include railroad crossing safety and operational efficiency. The railroads are interested in expanding yard space, sidings, and spurs for industrial and agricultural process projects to accommodate increased demand. For communities, there is the persistent issue of railroad noise at crossings from locomotive horns. Recently, Sioux City designated several downtown crossings as quiet zones, as well as several crossings in South Sioux City. Sergeant Bluff is now in the process of designating quiet zones. Quiet zones are areas in which locomotive horns are not sounded when traveling through the populated area. To accommodate such zones, however, safety must not be compromised and alternative warning devices and barriers are essential.

Although comparatively non-polluting per ton-mile of freight moved, railroad yard activities nonetheless can be important mobile sources of localized pollution, particularly of particulates and oxides of nitrogen (NOX). To this end, any planning assistance granted to the railroads at the local, state, and federal levels improving their ability to replace polluting and old locomotives, replace and upgrade track, and replace signaling should be pursued. Some argue that privately owned railroads should be in control of their own investments, but it is clear that the benefits railroads provide at the local, regional, national, and global levels warrant assistance wherever appropriate. Examples of technologies available for reducing pollution include hybrid-electric yard switcher locomotives and low sulfur diesel locomotives.

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From the viewpoint of competition, there are recurring national arguments in favor of further consolidation in the railroad industry resulting in two continental carriers. The pros and cons of such a development from shippers' perspectives should be weighed and the MPO, state, and Federal organizations should support the developments most favorable to shippers, economic development, and transportation efficiency. The CF Industry expansion has already added a future increase in demand. The expanded industry will begin to use a rail stop of their own starting after construction is completed.

Map 6.2 shows the addition of TrinityRail, within the Southbridge area, located at the southernmost point of the map. The rail company has chosen a 120-acre site for their new transportation facility, and is planning on completing construction in the summer of 2015. TrinityRail plans to offer services towards the transportation of the industrial, energy, and construction sectors. This project is one that is expected to help increase demand in the usage of the Southbridge business park (shown in Map 6.2). In addition to the rail service, the business park is expecting further implementation of vital utilities, such as a water treatment plant, and an electrical substation. As these implementations begin to grow and expand throughout the Southbridge area, there will also be a need for the construction of newly paved roads.

The local rail industry's transport of Bakken crude oil through the SIMPCO MPO planning area has created recent safety concerns (Map 6.3). Bakken crude oil is an especially explosive and flammable oil taken from the Bakken shale formation, located in Canada, Montana, and North Dakota. There have been several explosive rail incidents in the US and Canada involving Bakken crude oil. Efforts to improve safety standards have been pursued at the federal level, but local planning efforts are required to ensure that a swift and effective response is ready in case an incident occurs. Several planning methods can help ensure an improved response to any rail incident. The existing Local Emergency Planning Committee (LEPC) should continue to work toward improved communication between emergency responders, law enforcement, planning staff, and department of transportation/roads personnel. The LEPC should address how to respond to a rail incident within the planning area. In addition, local first responders should be trained in Transportation Community Awareness and Emergency First Response (TRANSCAER). This training will prepare first responders to act appropriately when faced with an incident involving hazardous materials. Furthermore, incident management exercises can help to prepare first responders to act and identify areas for improvement within the incident planning and response process.

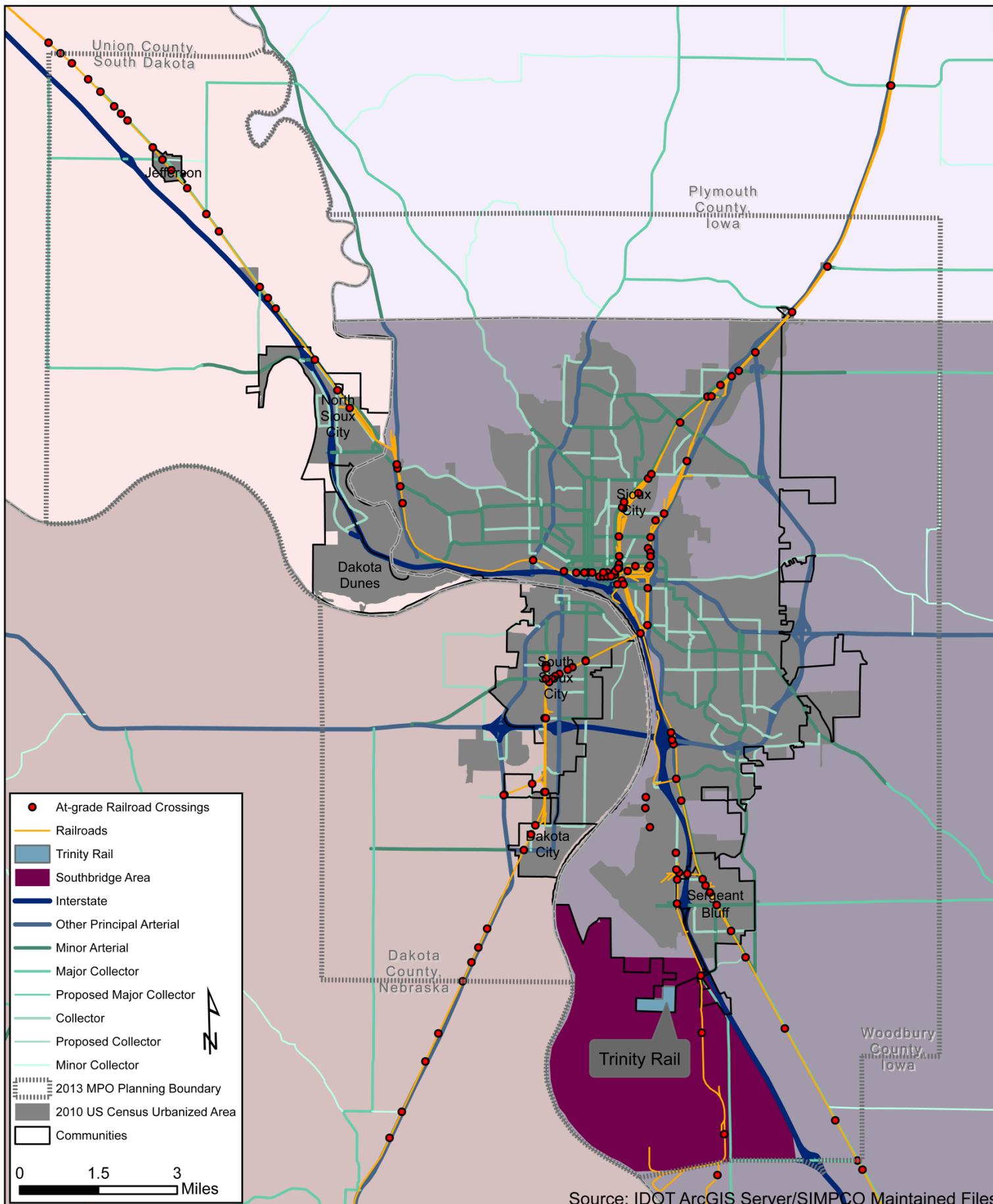


**Map 6.3:** Bakken Crude Oil Rail Routes through Iowa. *Source: Iowa DOT.*

# SIMPCO MPO

## Rail

Rail is changing in the Siouxland Area, thanks to a new railcar servicing facility, Trinity Rail, in the Southbride Area.



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### PIPELINES

The SIMPCO MPO planning area has a large quantity of pipelines carrying various products. At this time, the MPO does not have involvement with pipeline planning, challenges, and implications. For a map of these pipelines visit the [National Pipeline Mapping System](#).

### PASSENGER RAIL

#### CURRENT FACILITIES

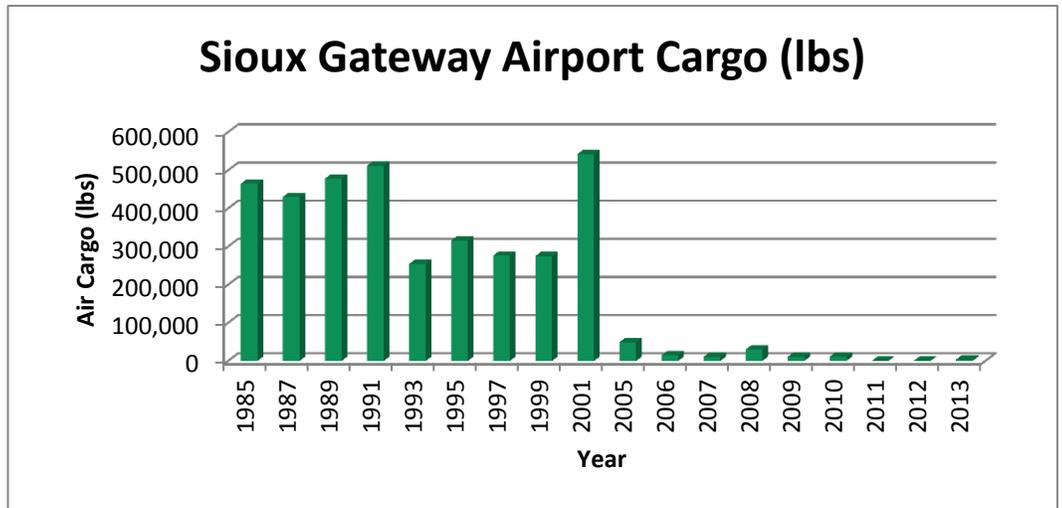
There is no passenger rail service in the metropolitan area, and it is unlikely that it will develop over the planning horizon, barring a major shift of transportation priorities at the national level. The closest passenger service is the current AMTRAK California Zephyr, which passes through Omaha and Lincoln, NE in route to Emeryville, CA (San Francisco Bay Area) and Chicago, IL. Should there be a shift of national priorities, the most likely and economic route would be a connection between Sioux Falls, SD and Kansas City, MO via Sioux City, IA and Omaha, NE. Such a service would most economically use short self-propelled units commonly called Diesel Multiple Units (DMU) or in the future Fuel Cell Multiple Units if they become available. The routing would hypothetically use the BNSF alignment between Sioux Falls and Sioux City and the UP from Sioux City to Omaha and Kansas City.

### AIR

#### CURRENT FACILITIES

Map 6.4 shows the airport locations throughout the MPO, as well as any local air fields.

The main air terminal for the SIMPCO MPO region is the Sioux Gateway Airport/Colonel Bud Day Field, located on the southern edge of Sioux City to the west of Sergeant Bluff (see Map 6.4). The airport is owned by the city of Sioux City and is governed by a Board of Trustees that reports to the City Council, while the day-to-day operation of the airport is undertaken by a professional airport director hired by the City Council.



**Figure 6.1:** Amount of Air Cargo in Pounds through Sioux Gateway Airport. *Source: Sioux Gateway Airport*

There is no dedicated cargo carrier (such as FedEx, UPS, Emery, Airbourne etc.) serving Sioux Gateway Airport, in part due to the proximity of Omaha's Eppley Field and Sioux Falls' Joe Foss Field, which are served by major air cargo companies. The cargo passing through Sioux Gateway Airport is handled by the passenger airline, American Airlines. Map 6.4 (page 6-9) shows the total yearly amounts of air cargo through Sioux Gateway Airport. It is important to note that cargo has shown a sharp decrease due to the reduction in the size of aircraft operating at the Sioux Gateway Airport, which has left little to no capacity to carry cargo on passenger planes.

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Table 6.4: 2008-2013 Sioux Gateway Airport operation statistics

	2008	2009	2010	2011	2012	2013
<b>Enplanements</b>	49,871	33,096	24,819	28,348	27,521	25,602
<b>Total Tons of cargo</b>	13.3	4.7	4.9	0	0.15	1.4
<b>Number of aircraft operations</b>	25,171	23,217	19,290	17,354	16,782	17,717

### PASSENGER AIR

#### CURRENT FACILITIES

Sioux Gateway Airport is classified as a non-hub commercial service airport. There are presently two daily departures and two daily arrivals to and from Sioux Gateway Airport. All are through American Airlines, and all connect to Chicago O’Hare International Airport. Previously, the major airline that serviced the Sioux Gateway airport was Delta; however, they were replaced in 2012. Figure 6.2 (page 6-14) illustrates the annual number of passenger enplanements, or the number of passengers boarding aircraft at Sioux Gateway Airport, since 1990. It is important to note that from 1990-2001, more than one airline was serving Sioux Gateway Airport. In 1997, United left and in 2002, American left which helps account for the decrease in passenger enplanements. The increase in service in 2008 was due to having a second carrier, Frontier, which served Sioux Gateway airport from October 2007 to May 2008. In 2013, Frontier airlines chose to service the Sioux Gateway airport; however, they decided to end their service within the year.

The service area of Sioux Gateway Airport encompasses 309,739 people and parts of 17 counties; however, Sioux Gateway Airport loses market share of counties and communities on the periphery of this service area to Omaha and Sioux Falls. In order to capture market share, the airport must provide a comparable level of service and fare rate to its competitors to the north and south, or at least competitive enough to deter the potential passengers from driving extra miles. Recent improvements to the terminal facility include a complete rehab of the terminal including restaurant, waiting area, restrooms, ticket counters, and baggage claim areas. A new canopy was installed at the front entry for passenger loading and unloading.

Due to airline capacity reductions, the Siouxland Gateway airport has moved from five down to two flights per day. Along with 5 of the total 8 commercial service airports across Iowa, the Siouxland Gateway Airport is being provided funds in order to retain commercial airline service. The funds are from the US DOT’s Essential Air Service (EAS) program. This program subsidizes the Siouxland Gateway Airport’s existing American Airlines service. The federal assistance helps subsidize airline operation costs which helps maintain competitive fares for commercial flights from Sioux City.

The airport’s master plan has set out to plan future development based on changes in demand rather than on a fixed time schedule. A cyclical economy and events such as the terrorist attacks of September 11, 2001 can have a significant year-to-year impacts on demand that make it nearly impossible to forecast along a specific timeline. There are demand milestones for cargo, passengers, and aircraft operations calling for consideration toward implementing the next step in the long-range master plan. Additionally, the master plan includes capital project requirements geared at maintaining the current infrastructure in a safe and secure condition.

Two privately owned airports are located within the metropolitan area for local commuters and owners of small aircraft. North Sioux City is home to Graham Field Airport, which is located one mile north of the city and boasts two concrete and turf runways. Martin’s Field is located three miles southwest of South Sioux City and has two asphalt runways.

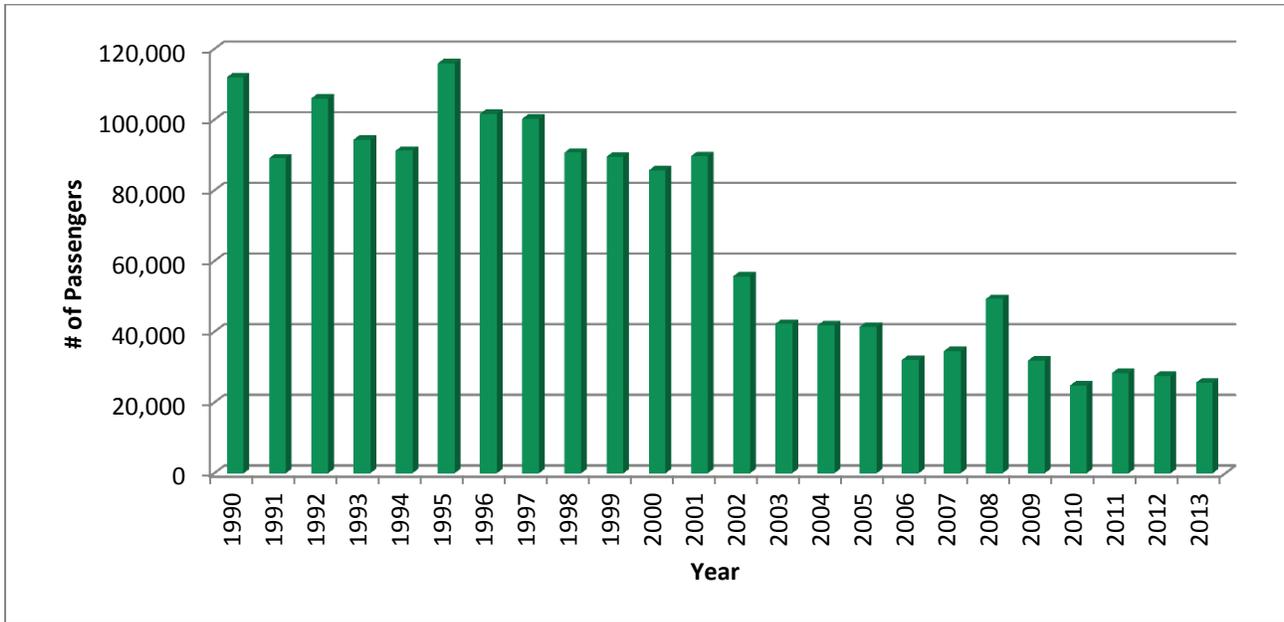


Figure 6.2: Annual Passenger Enplanements at Sioux Gateway Airport. Source: Sioux Gateway Airport

AIR AND PASSENGER AIR

CHALLENGES

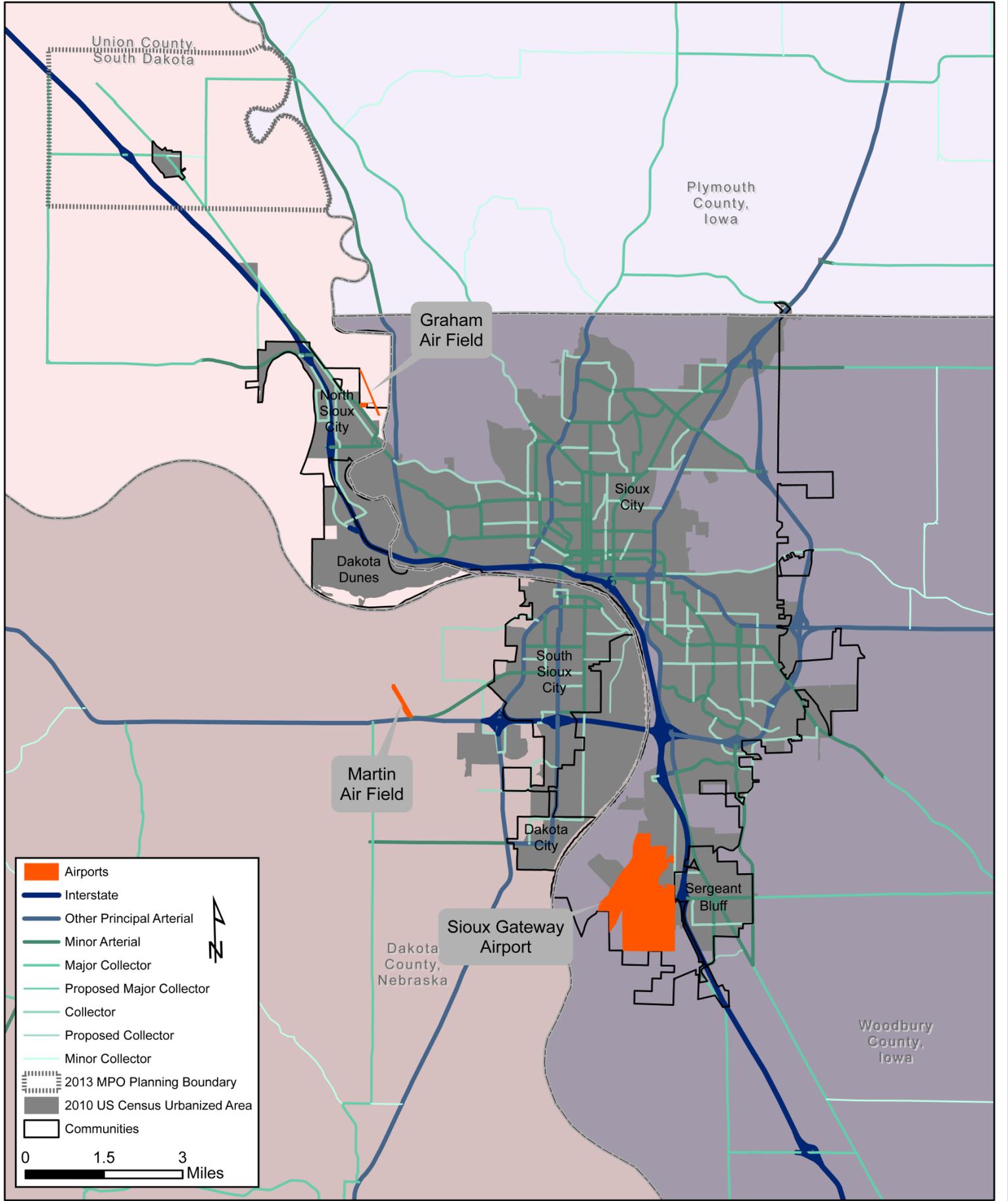
The Sioux Gateway Airport Master Plan forecasts the possibility of the entrance of an all-cargo carrier, which the facility presently lacks. Sioux Gateway’s service area is large enough to support such a carrier, but the nearby competition of Omaha and Sioux Falls hinders this development. The Sioux Gateway Master Plan notes many companies are utilizing just-in-time freight practices, which in most instances are better accommodated by air freight than by truck. The addition of an air cargo facility in any future airport expansion would be dependent on the arrival of a dedicated cargo carrier.

Local planning efforts should include designating a local champion or air service recruiting task force to reach out to air service providers in order to create more choices for regional fliers. This will likely require strategic partnerships between local governments and commercial airlines. There should also be a continued focus on sustaining and enhancing air service. Recent improvements at the Sioux Gateway airport include taxiway improvements and reconstruction, terminal improvements/remodel, and reconstruction of the Airport’s crosswind runway. Funding to further improve or assist in airport activities may be gained through the US DOT’s Small Community Air Service Development Program or the Iowa DOT’s Air Service Development Program.

Strategic planning for air service in addition to contingency planning should be pursued. Contingency planning should be used in order to plan and prepare for an unexpected, dramatic change in the amount of local air service. Such changes may include an air carrier deciding to no longer service the metropolitan area or the loss of existing EAS funding. Such planning can prepare locals for these changes and have a plan in place to fill the loss of service.

# SIMPCO MPO Airports

There are 3 airports in the MPO Planning Boundary:  
Sioux Gateway Airport, Martin Air Field, and Graham Air Field



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### GOVERNMENT AIR | 185<sup>TH</sup> AIR REFUELING WING

The 185<sup>th</sup> Air Refueling Wing plays a crucial role in providing rapid, global mobility and refueling capability for America’s Armed Forces. The unit currently flies the KC-135R Stratotanker and is home to 950 Airmen. The 185<sup>th</sup> has a proud history of service both at the federal level and also closer to home at the state level. The 185<sup>th</sup> was active in 1951 and performed admirably in Korea. Slightly more than a decade later, the 185<sup>th</sup> was activated in response to the Pueblo Crisis. During their year in Vietnam, the unit flew 6,539 missions totaling 11,359 hours of combat. More recently, the unit integrated with active duty forces at Manas AB, Kyrgyzstan flying 288 combat sorties and offloading a record 15.8 million pounds of fuel. Meanwhile on the home front, over 500 Airmen deployed throughout the state of Iowa to support communities ravaged by the floods of 2008. Currently, the unit has aircraft deployed on almost a daily basis in support of war efforts.

### WATERBORNE FREIGHT

#### CURRENT FACILITIES

Sioux City is the northernmost navigable point on the Missouri River for barge traffic. This is due to the dam crossings on the Missouri River north of Sioux City, which have no locks allowing boat passage. The Sioux City region is the head of a nine foot deep, 735 mile navigational channel. This channel stretches down to the Missouri River’s confluence with the Mississippi River, north of St. Louis. During non-drought years, the metropolitan area takes advantage of its position on the river as a port for barge freight. For the past several years drought conditions in much of the upstream areas of the Missouri River have hampered barge navigation. As of 2010, the Missouri River has been returned to full draft so barge traffic may again play a role in transportation of freight into and out of Sioux City.

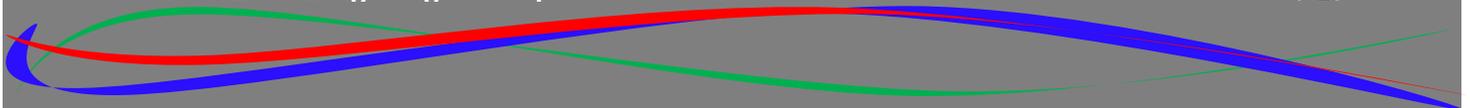
In 2013, the portion of the Missouri River stretching from Kansas City, MO to Sioux City, IA was designated by the US Transportation Secretary as Marine Highway M-29. This designation may prove important for waterborne freight transportation within the SIMPCO MPO area. The designation makes port facilities along the route eligible to apply for federal funds. These federal funds can be used to improve or expand existing waterborne freight infrastructure. The SIMPCO MPO should communicate with existing port facilities to determine if a desired project may qualify for federal assistance.

From 1991 to 2000, the amount of barge freight on the Missouri River from Sioux City to Omaha varied between 165,000 short tons to a high of 309,000 short tons in 1997. Table 6.5 provides yearly totals from 1991. According to figures released by the Army Corps of Engineers, there was no barge traffic to Sioux City in 2001 or from 2003 – 2008. This lack of traffic was due, in part, to vessel draft restrictions put into place because of drought conditions. However, during 2014, the construction on the CF industries plant called for the first use of barge transportation in the last 12 years. Map 6.5 shows the location of CF industries to the temporary barge delivery location.

**Table 6.5:** Yearly Barge Traffic, in Thousands of Short Tons

Year	Total	Year	Total	Year	Total	Year	Total
1991	202	1997	309	2003	0	2009	0
1992	218	1998	249	2004	0	2010	0
1993	231	1999	234	2005	0	2011	0
1994	263	2000	300	2006	0	2012	0
1995	165	2001	0	2007	0	2013	0
1996	257	2002	125	2008	0	2014	0

Source: U.S. Army Corps of Engineers



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### CHALLENGES

The present state of the Missouri River in the metropolitan area is an effect of both climactic and political conditions. Upstream communities and interest groups rely on adequate water levels in their reservoirs for fishing and recreation, while communities including Sioux City and points south use the Missouri River for power plant cooling water, navigation, goods movement, drinking water, and recreational activities. Even in wet years there is frequently not enough water to satisfy both constituencies, and the previous several years have seen drier than usual conditions upstream of the metropolitan planning area.

There are seven port facilities in the Sioux City area, six of which are privately owned. The public port facility is owned by the City of Sioux City. Of the private facilities, there are two in Sergeant Bluff and four in Sioux City. Of these privately held facilities, four were operational in the year 2000. All of the privately owned facilities have rail connections to the UP Railroad.

### INTERCITY BUS

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#### CURRENT FACILITIES

The metropolitan area is presently served by one intercity bus line, Jefferson Lines, which provides service to Omaha, Sioux Falls, and other destinations to the north and south. The Sioux City terminal for Jefferson Lines is the MLK Jr. Transportation Center in downtown Sioux City, which provides automobile and bike parking as well as taxi access. The MLK Jr. Transportation Center is also the focal point of SCTS.

### INTERMODAL

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#### CURRENT FACILITIES

FHWA maintains a nationwide list of intermodal connectors, of which the SIMPCO MPO has two. The Big Soo Terminal is a port terminal serving as a connector between the barge docks and I-29. As of 2002, 1/3 of the products shipped into and out of the Big Soo Terminal in Sioux City utilize barges, mainly fertilizer in the spring and steel and ore products the rest of the year. Decreased summer flows could result in a split navigation season during a drought, cutting into the most profitable summer months of July and August for the towing and barge industry. The UP serves as a rail link for the warehouses. The other intermodal connector is a truck/pipeline terminal that serves as a connector between the terminal and US 75. As stated above, the principal passenger intermodal connecting facility is the MLK Jr. Transportation Center downtown where intercity, taxi and city transit as well as pick up/drop off service is available. A multi-level parking ramp is located immediately above the transfer center.

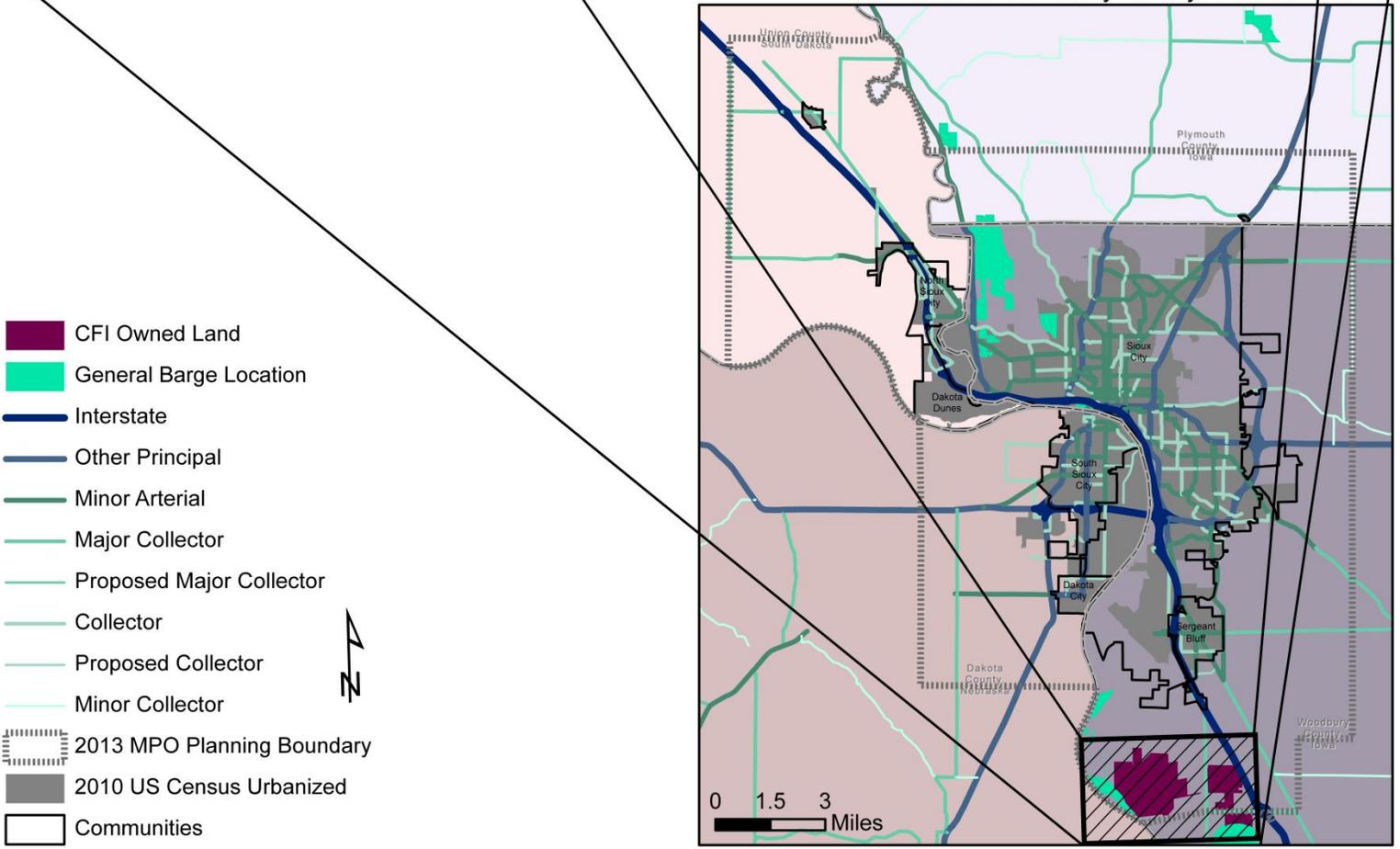
Map 6.5

# SIMPCO MPO Barge Activity

Barge traffic on the Missouri River has been exclusive to the CFI Industries plant construction project in 2014 and 2015. It is not expected that the barge infrastructure will be permanent.



Source: Woodbury County Assessor Parcels



## CHAPTER 6: INTERMODAL TRANSPORTATION

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### RECOMMENDATIONS

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Planning for intermodal cooperation occupies problematic territory for local governments and MPO's, as the primary participants in passenger and cargo transport are private firms such as airlines and barge, truck, and railroad companies. In addition, with the exception of the airport and the MLK Jr. Transportation Center, all of the existing and potential intermodal facilities mentioned in this chapter are privately owned. Under these circumstances it is difficult to compel specific actions, but broad recommendations are listed:

- The formation of an Intermodal Advisory Committee to study the freight industry in the tri-state area and how it affects and is affected by the associated transportation system.
- Implement changes suggested by the ITS Architecture for Metropolitan Sioux City Area report to help minimize safety and security issues associated with at-grade rail crossings and to enhance the efficiency of the overall transportation system.
- To have intermodal representatives (both passenger and freight) be a consultant in the MPO process. Representative could serve in an advisory capacity to the Transportation Technical Committee.
- Monitor national developments in intermodal transport for passengers and freight and seek to act quickly on opportunities as they present themselves.