Maximizing Transportation Efficiencies and Economic Impact of the Southwest Missouri Foreign-Trade Zone

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Executive Summary

The most important outcome of this project is to provide a context for economic growth through the utilization of the Foreign-Trade Zone (FTZ) program as a catalyst for creating new and retaining existing jobs in the region. The primary deliverable of this project is retaining jobs, while predicting the prospect of creating new jobs through the FTZ program. Secondary, though critical to Missouri Department of Transportation (MoDOT) is the report from transportation stakeholders who use the roads, bridges, highways and railways in the region. These findings include the stakeholders' opinions as to how each of these elements within the transportation infrastructure could be enhanced in order to foster even more industrial and economic growth, along with better sustained international goods movements.

These two objectives and the affiliated observations made by the project team are presented in this report, along with the methodology used to accomplish these objectives.

During the time of this report a third objective became clear reflecting the need to blend the opportunities of this report into an on-going economic development and marketing program. This recommendation will enable FTZ No. 225 to sustain the efforts outlined herein and convert these opportunities into real jobs gained and retained. Such an effort will perpetuate the value of the investment by MoDOT in this project and return value to the State of Missouri through real jobs creation and retention. The FTZ Grantee, located in Springfield, Missouri is the entity that is responsible for managing the Zone project for the 23 county service area in Southwest Missouri. The affiliated economic development entities in Southwest Missouri must actively pursue these opportunities and utilize the models and tools which resulted from this project to ensure the project investment to be realized. In addition, the Grantee must be active in site selection decisions and inquires made at the state level in order for the FTZ efforts to solidify jobs gained for Missouri.

The project highlights include:

- Identification of 11 companies in Southwest Missouri who have demonstrated an interest or expressed their desire to evaluate the FTZ program as a business strategy and competitive advantage in their multi-national operations. Some of these companies will require long term re-configuration of their supply chains in order to gain the full opportunities and savings available to them through participation within the FTZ. While others, growing at their current pace will meet the necessary scale thresholds to justify investment in the Zone program within the near future.
- One of these 11 companies has filed for FTZ designation through the Grantee of FTZ No. 225 and is expected to receive approval within 90 days.

- Identification of several road, highway infrastructure issues presented by Missouri transportation users and stakeholders for improvement, which are not currently included as part of the Statewide Transportation Improvement Plan.
- Interviews performed in the course of this study showed a remarkably high level of satisfaction with the service level of available highways and motor carriers. This is a remarkable finding and a tribute to the efforts of MoDOT to keep roads and bridges in good condition, to deliver a reliable and convenient transportation system and to use resources wisely in keeping users safe in Missouri.
- An application is being considered for a new FTZ "Magnet Site" in Neosho, Missouri to create a new industrial park within the FTZ No. 225 project. This site will be in support of the proposed new rail infrastructure and industrial development.
- Identification of four companies who currently utilize FTZ sites in their global supply chains as a competitive strategy for their import and distribution platforms.
- Identification of seven companies whose import volumes met the qualification thresholds. However, the decision process is located outside Southwest Missouri for supply chain, global trade routing and FTZ matters.

The companies identified in this project who have a positive interest in the FTZ program or will continue evaluation of the program after the project is completed will require additional support from the Grantee, the state and community economic development entities in Southwest Missouri. This support is essential to fully capture the potential job creation suggested in this report and retain the companies in the region who by virtue of their FTZ status are more likely to stay in Southwest Missouri rather than move to other locations. In order for this success to become a reality, it is imperative for the Grantee to continue processing these findings, work with the companies that have indicated interest and follow the recommendations and strategies made in this report which will encourage companies to participate in the FTZ program.

Companies that utilize the FTZ program remain financially linked through their operations to the local communities which results in jobs retained for Missouri. Some of the companies that are in review or have started review of the FTZ program are significant employers in the region. These prospects will gain a predictable new stream of revenue and profits as they implement the Zone program. This benefit will ensure that the current business performed in Southwest Missouri remains in Southwest Missouri and as these new enhanced revenues and profits are realized, position Southwest Missouri as a prime location for any new growth in manufacturing or distribution at their FTZ facilities.

This study project will provide MoDOT with a return on investment by identifying a wide array of new companies as prime prospects for FTZ No. 225 in Springfield and in Southwest Missouri. Adding more FTZ sites will allow companies to retain and expand jobs and also ensures that these operations will remain in Southwest Missouri producing multiples of returns for MoDOT.

A final set of recommendations are presented in this report which in summary are:

- Continue efforts to market and expand the findings of this report so companies in Southwest Missouri become active in the FTZ program.
- Coordinate efforts across all city, county, regional and state economic development entities in order to continue to advance economic development and enhance job creation and retention in the area through the FTZ program.
- Continue to support the findings of this report and the prospect of new infrastructure in the region that will produce increases in international trade in Southwest Missouri, both on rail networks and on road conveyances.
- Produce enhancements to highway corridors and routes that will be manifested in transportation savings, increased safety and more reliable and convenient transportation systems in Southwest Missouri.

Background

History of the Foreign-Trade Zone Program in the U.S.

The Foreign-Trade Zone program was created in 1934 to provide a means to retain jobs in the U.S. An FTZ is a place (a building, a room, a land site or industrial park) which is designated by the U.S Department of Commerce and the U.S. Customs and Border Protection (CBP) agencies as a location where goods are admitted into a Zone site are considered outside the stream of commerce of the U.S. Only when goods are actually removed from the Zone site and sold into the stream of commerce of the U.S. are they considered to be domestic goods. This generally means that payment of duties, taxes and certain fees on foreign merchandise admitted into a Zone will be deferred until the goods are transferred (sold or exported) from the Zone into U.S. commerce for consumption.

The U.S. FTZ program was designed to stimulate economic growth and development in the U.S. The global market creates competition among nations for jobs, industry and capital investment. The FTZ program was designed to provide companies with a competitive advantage to foster growth of their operations in the U.S. The FTZ program removes some restrictions on manufacturing or distribution activities in the U.S. Duty on products manufactured overseas and imported into the U.S. is assessed on the finished product value rather than the individual parts, materials or contents. The FTZ program allows goods to be manufactured in a Zone as if it were manufactured overseas. The U.S. and in this case, Southwest Missouri benefits because the Zone operator, user or manufacturer uses U.S. labor, services and materials.

Primer on the Foreign-Trade Zone Program

The FTZ program provides operations benefits that streamline the supply chain of multi-national companies. Goods that are purchased or produced overseas and arrive in Southwest Missouri receive enhanced treatment if they are entered into an active FTZ site in the region. Active sites are locations, buildings, facilities, distribution centers, manufacturing centers or industrial parks that apply for and receive FTZ designation by the U.S. Department of Commerce through an entity designated as the Foreign-Trade Zones Board, security approval by the CBP and are supported by the local Grantee. Multi-national companies who import goods into an FTZ and also re-export goods from their FTZ or who manipulate those goods (through assembly, production or other value-added activity) gain access to multiple benefits that were implemented to make them more globally competitive and ultimately resulting in jobs created and retained in the U.S.

The FTZ program promotes the international competitiveness of U.S. based companies. In many cases, Zone activities involve domestic operations while combining foreign inputs with domestic inputs to

production, manufacturing or distribution. Zones facilitate and expedite international trade, retain and create jobs, encourage investment in manufacturing and logistics within the U.S. Businesses that operate in an FTZ site can lower duties and tax costs, while streamlining their production and logistics processes.

Benefits that Foreign-Trade Zones Provide to Companies

The FTZ program provides an array of benefits and is an effective tool for businesses to become more competitive or for a community to expand or recruit business. These benefits include:

- **Duty deferral** - Delay payment of duty until goods enter the U.S. market**.** In an FTZ, goods are not actually considered imported by CBP until they leave the Zone, so duty is delayed or deferred until the goods are removed from the Zone and enter U.S. commerce. This delay or deferral saves substantial money that is paid in duty on inventory upon arrival; in a Zone the money saved can be used for other purposes.
- **Duty exemption** - Duties are never paid on imported goods that are re-exported, destroyed or scrapped. Since activities that occur in a Zone are "outside the stream commerce" of the U.S., when foreign merchandise is brought into a Zone, no duty is paid until the merchandise leaves the Zone and enters into the commerce of the U.S. At that time, merchandise is considered to be imported and the duty must be paid. However, if the goods are exported back out of the country, destroyed or scrapped no Custom's duty is ever required to be paid on these goods.
- **Inverted tariff –** Allow the user to pay the lower applicable tariff rates, either on the components or on the finished product. When a component or raw material carriers a higher duty rate than the finished product, the importer actually pays a lower duty rate than the company manufacturing a similar finished product in the U.S. when the goods leave the FTZ. This gives the importer an advantage over the domestic manufacturer. In an FTZ, the domestic producer or manufacturer, by virtue of paying the lower duty rate on the finished goods can compete directly with a foreign company or importer.
- **Reduced processing fees** – Allow the user to file a single customs entry per week rather than multiple entries. Weekly entry is only allowed for FTZ users. It provides economies for both CBP and the FTZ users. Under these procedures, the Zone user files only one Customs entry per week rather than filing one Customs entry per shipment. CBP no longer has to process an entry for each shipment being imported into the Zone and the FTZ user only pays one entry per week, regardless of the number of shipments imported per week. Companies outside a Zone pay a fee based on the value of merchandise for each and every formal entry processed by CBP. The minimum processing fee per formal entry is $25.00 and the maximum is $485.00 per entry.

Companies who are inside the Zone program only pay a weekly entry fee of $485.00 regardless of the value of products or the number of entries filed per week with CBP. For companies in the Zone program who import a high number of entries which are high value, this results, in substantial savings for the Zone user.

A "White Paper" was created to support the project and to provide a marketing overview for prospective FTZ users during the course of the project. This "White Paper" is designed as a "leave behind" document to educate community members, stakeholders and company representatives about FTZ No. 255. Following is a copy of the document.

Southwest MO Foreign-Trade Zone Primer

Southwest Missouri
Foreign-Trade Zone No. 225
A Catalyst for Economic Growth

FOREIGN-TRADE ZONE PROGRAM OVERVIEW

The FTZ program was created in 1934 to provide a means to retain jobs in the United States. A FTZ is a place (*a building, a room, a land site or an industrial park*) which is designated by the Department of Commerce and U.S. Customs and Border Protection Agencies as a location where goods are admitted and are considered outside the stream of international commerce or trade. This means that generally payment of duties and excise taxes on foreign merchandise admitted to a zone will be deferred until the goods are transferred from the zone to Customs territory for consumption.

The competitive benefits make the FTZ one of the most effective tools for a business to become more competitive or a community to expand and recruit businesses. These benefits include:

- Duty deferral – delay payment of duty until goods enter US market
- Duty Exemption – no duties on imported goods that are re-exported, destroyed, or scrapped
- Inverted Tariff – choose whether to pay tariff on components or on finished product
- Reduced processing fees – file a single customs entry per week rather than multiple entries

Companies that benefit by becoming a zone user or operator include manufacturing, distribution, and retail industries along with research and development firms. The common thread is that many of these are involved in international trade, receive imported products, manufacture, assemble, or test and scrap products before they are sold to consumers in the U.S. or exported to global consumers. Examples include:

- Automotive parts manufacturers and many of their suppliers
- Distribution companies and many third-party logistics companies
- Electronics assemblers or electronics manufacturing companies
- Public warehouse operators
- Local companies who import, manufacture or export goods
- Retail consumer goods industry operating their warehouse facilities

SOUTHWEST MISSOURI FOREIGN-TRADE ZONE

The 23 county Southwest Missouri Foreign-Trade is more flexible than many other FTZs in the country. It is organized under the Alternative Site Framework program. This designation allows businesses to activate at either the Springfield-Branson National Airport general purpose site or at their business site in the 23 county service area as a subzone.

FACTS AND FICTIONS REGARDING FTZS

There are many myths about FTZs. The realities of the FTZ Program are that it provides communities and local companies a way to increase cash flow, remain competitive and expand job creation within a region

- *FTZs are expensive*. **False**. Costs for activating a location within the FTZ vary depending on the security and inventory controls in place at the facility. The initial long-term duty referral benefit to the business often exceeds the activation costs. The business also realizes on-going benefits through delayed payment of duties and inverted tariffs. In addition, no duties are paid on waste, scrap, and rejected or defective products.
- *FTZs are complicated and require a lot of new paperwork*. **False.** FTZ users are often able to file a single customs entry per week rather than making multiple entries during the course of the week.
- *FTZs are only for international companies*. **False**. FTZs are for companies that either buy or receive imported products from foreign or domestic vendors; or have merchandise that is processed, cleaned, tested, re-labeled, re-packaged, scrapped or otherwise manipulated before it is released into the U.S. or exported; or have domestic goods to be sold abroad that carry a high excise tax burden (such as beer, wine or spirits)
- *FTZs are only allowed at port locations*. **False**. The Southwest Missouri FTZ is organized under the Alternative Site Framework program. This means that companies can activate at either the Springfield-Branson National Airport or at any other fixed site with the 23 county service area.
- *FTZs only work for manufacturing companies*. **False.** Companies in FTZs receive imported products, manufacture, assemble, test and scrap products before they are sold to consumers in the U.S. or exported to global consumers. The retail consumer goods industry are now operating their warehouse facilities within FTZs.
- *FTZs slow down commerce*. **False**. FTZs allow businesses to keep production costs closer to the market while still receiving the reduced costs comparable to moving to a foreign market. The FTZ helps businesses reduce production, transaction, and logistics-related costs by lowering the effective duty rates and allowing special entry procedures. Goods that have a US quota restriction may be stored on-site for quicker release into the stream of commerce.
- *FTZs take work away from America*. **False.** By reducing costs, FTZs level the playing field and improve US competitiveness. The benefits of the FTZ program may be the competitive advantage companies need to keep their manufacturing or distribution operations in the US. By helping local employers remain competitive, zones can contribute to maintaining or boosting employment opportunities. The lower FTZ-based production costs encourage increased investment in US facilities.
- *FTZs have a negative impact on a company cash flow*. **False**. FTZs allow businesses to manage cash flow by delay, defer, or elimination of duties and certain taxes on goods. Goods can be stored indefinitely at the FTZ site.

FOREIGN-TRADE ZONE DEFINITIONS:

Foreign-Trade Zone Board

- *Comprised of the Secretary of Commerce and the Secretary of the Treasury. The Board is chaired by the Secretary of Commerce. The Commissioner of U.S. Customs and Border Protection also plays a key role, as it did prior to its recent move from Treasury to the Department of Homeland Security, providing a position during the FTZ Board voting process with respect to customs security, control, and resource matters.*
- *Grants authorization to establish, operate, maintain or expand zones*

Grantee

- *A private entity organized for the purpose of establishing a zone*
- *Responsible for maintaining public utility access to the zone for all users*
- *For FTZ No. 225, located in SW Missouri, the grantee is Springfield-Branson National Airport Board*

General Purpose Zone

- *An industrial park or airport or water port complex whose facilities are available for use by the general public.*

Operator

- *A company that performs or operates the zone and performs Zone activities such as receipt, storage, handling, shipment, recordkeeping, reporting and marketing of the Zone*
- *A company that may operate warehouses which perform storage, manufacturing, distribution or other activities in the Zone*
- *A company that provides third party logistics services to local, regional, national or international firms*

Subzone

- *Fixed locations sponsored by the General Purpose Zone and are normally single-purpose sites for operations that cannot be feasibly moved to or accommodated in a General Purpose Zone.*

U.S. Customs and Border Protection

- *Responsible for the control of merchandise in a zone*
- *Controls admission, activity and release of goods from a zone*
- *Oversees procedures and compliance with all appropriate federal laws and regulations*

User

- *A person or firm using a zone for storage, handling, manufacturing or assembly of merchandise*

Global Trade Setting for Supply Chains and Impact on Southwest Missouri

Companies today look to the world for sourcing and sales. Many companies in Southwest Missouri are active in global trade, commerce and distribution of goods. These companies buy and sell products which are produced, processed, assembled and distributed in a manner that provides the lowest cost solution between production centers and consumers. These companies also locate facilities for production, distribution, assembly and manufacturing based on a wide-array of selection criteria and having an FTZ as part of the overall strategy provides some companies with significant benefits and savings. Companies must manage or balance the pressure to reduce the costs of labor, transportation, inventory in transit and raw materials within their supply chains.

Global supply chains move at the pace of the ships or aircraft that convey the goods between countries. There is a cost impact to the overall amount of goods required between raw material, production, distribution, fulfillment and sale to the consumer. For example, ships that "steam" from Southern China to an East Coast port move at 12 knots per hour and the transit time to Charleston, a major East Coast port through the Suez Canal is 34 days. A similar ship moving from Northern China to the major ports of the West Coast also move at this pace, however upon arrival the goods must be loaded on a train for transit to a regional rail terminal and then transit to their final destination by truck to Southwest Missouri. Slow steaming has added many new days of products in the "pipeline" both in terms of raw materials to be shipped to the distant production center and for finished goods to be shipped from the foreign partner to the company in Southwest Missouri. Concurrently, labor costs in China are increasing, therefore in order to remain competitive, companies are seeking lower cost labor in inland China, Vietnam, India, in some regions of sub-Sahara Africa, while others are relocating to Mexico. These supply chains must still be predictable, secure and must support the production and inventory demands of the companies in Southwest Missouri. This complexity is common for multi-national firms and one benefit that can resolve some of the costs, security and pace of supply chains is mitigated by using an FTZ.

The logistics industry is very fragmented. There are four channels of custody that are required to be coordinated in order for goods to move predictably between the production centers and the manufacturing centers or consumers. These custody channels are managed by the buyer, the seller or a third-party hired by either the buyer or seller.

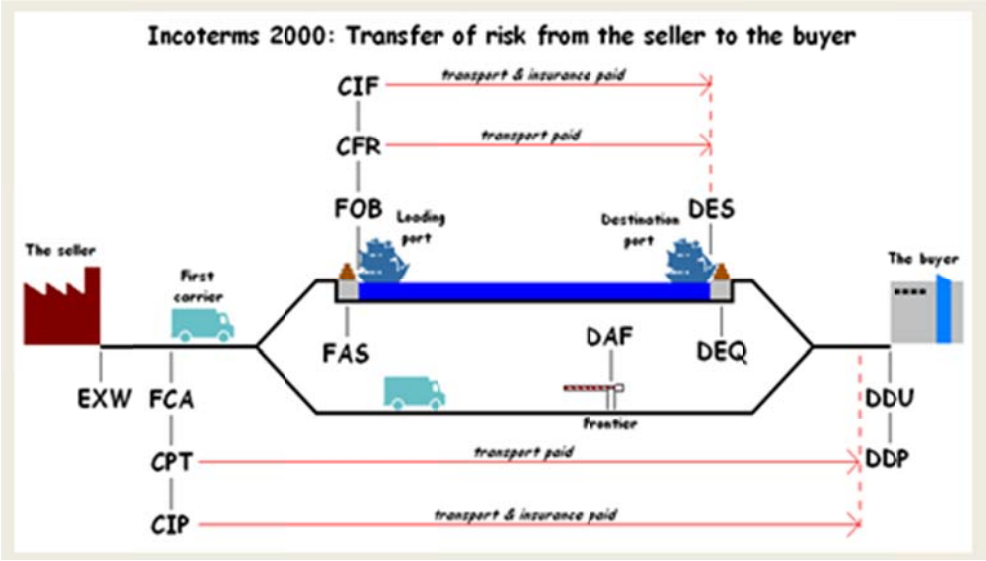
The four channels of custody are:

- Control over each freight movement segment in the supply chain.
- Custody over the overall freight movement across the entire supply chain.
- Custody over financial transactions to support the entire supply chain.

- Custody over information transactions to support the entire supply chain.

The key to managing cargo is to understand who is in control of the cargo and what their responsibilities are in moving the cargo. As shown below, the roles and responsibilities of the custodian who manages the cargo is defined by the International Cargo Terms (INCOTerms). As a supplement to the actual movement of goods between each point in the supply chain, a custodian must also support the flow of information and the financial transactions in order for the supply chain to be predictable and for the goods to arrive at the desired location, on time and secure. Many of the FTZ prospects within Southwest Missouri receive goods in a delivered duty paid (DDP) context. This means that the shipper, the person they buy the goods from overseas, is responsible for moving the goods either to the buyer's door or to a specified port or inland intermodal port. In many cases, companies in Southwest Missouri do not actively participate in the movement of goods directly; rather they rely on the shipper to meet the terms and costs of delivery to their door or a specified port, inland port or rail terminal. Also, third-party service providers are used by many of these companies to control the flow of goods between origins and destinations.

Below is a diagram that reflects the custodians that make up the global supply chain. Each custody event in the movement of goods between origin, the seller, the destination and the buyer in Southwest Missouri is controlled by either the buyer and/or its agent or the seller and/or its agent. These transportation management aspects of the supply chain only apply to the responsibility for insurance/risk (loss, damage, shrinkage) and payment for custodial activities. Transfer of title for goods is not part of the overall Incoterms and is conducted as a separate transaction between the buyer and seller. This chart, however, is important as it demonstrates how freight routing decisions are or are not made by cargo owners in Southwest Missouri.



INCOTERM Definitions

TERM	DEFINITION
INCOTERMS	Incoterms are the rules that govern international trading terms in respect of delivery and insurance. These are reviewed regularly by the International Chambers of Commerce.
EXW – Ex Works	The goods are prepared for collection from the seller's premises or other named place. There is no obligation on the seller to load the goods on to a collecting truck and the goods will not be Customs cleared for export.
FCA – Free Carrier	The seller delivers the goods to the buyer's nominated carrier at a named place. Loading is only the seller's responsibility if that named place is the seller's premises. The goods will already have been Customs cleared for export.
FAS – Free Alongside Ship	The seller is obliged to deliver the goods and place them alongside the ship at a named port of shipment in the country of origin. As soon as the goods are alongside, responsibility passes to the buyer.
FOB – Free on Board	The seller is obliged to deliver the goods over the rail of the ship at a named port of shipment in the country of origin.
CFR – Cost and Freight	The seller is obliged to deliver the goods to the port of destination and responsibility for the goods passes to the buyer when the goods are delivered over the ship's rail at a named port in the country of destination. All insurance costs are for the buyer.
CIF – Cost, Insurance and Freight	The seller is obliged to deliver the goods to the port of destination and responsibility for the goods passes to the buyer when the goods are delivered over the ship's rail at a named port in the country of destination. Insurance costs are for the seller until that point.
CPT – Carriage Paid To	The goods are delivered by the seller to their nominated carrier, cleared for export. The cost of then delivering the goods to a place of destination will also be borne by the seller. All insurance costs are for the buyer.
CIP – Carriage and Insurance Paid To	The goods are delivered by the seller to their nominated carrier, cleared for export. The cost of then delivering the goods to a place of destination will also be borne by the seller. Insurance costs are for the seller until that point.
DAF – Delivered at Frontier	The goods are delivered but not unloaded and cleared for the export but not import, at a named place at a frontier and before the Customs border of the destination country. There is no obligation on the seller to also insure the goods.
DES – Delivered Ex Ship	The goods are delivered on board the carrying ship to a named port of destination and not cleared for import. There is no obligation on the seller to also insure the goods.
DEQ – Delivered Ex Quay	The goods are delivered on to the quay or at a named port of destination and not cleared for import. There is no obligation on the seller to also insure the goods.
DDU – Delivered Duty Unpaid	The seller is obliged to deliver the goods to the buyer not cleared for import and not unloaded from the carrying transport at a named place of destination. There is no obligation on the seller to also insure the goods.
DDP – Delivered Duty Paid	The seller is obliged to deliver the goods to the buyer cleared for import and not unloaded from the carrying transport at a named place of destination. There is no obligation on the seller to also insure the goods.

	EXW	FCA	FAS	FOB	CFR	CIF (2)	CPT (1)	CIP (1) (2)	DAT	DAP	DDP
	Ex Works	Free Carrier	Free Alongside Ship	Free Onboard Vessel	Cost & Freight	Cost, Insurance & Freight	Carriage Paid To	Carriage And Insurance Paid To	Delivered At Terminal	Delivered At Place	Delivered Duty Paid
SERVICES	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays
Origin Warehouse Packaging Service	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Origin Loading	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Origin Export Customs Declaration/Duty/Tax	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Delivery to Port of Export/Inland Freight	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Origin Terminal/Port Charges	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Loading on Vessel	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Carriage Charges (Ocean/Air Freight)	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Insurance	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Buyer	Seller	Seller	Seller	Seller
Destination Terminal/Port Charges	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller
Delivery to Place of Destination	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller	Seller
Import Customs Clearance/Tax/Duty	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller

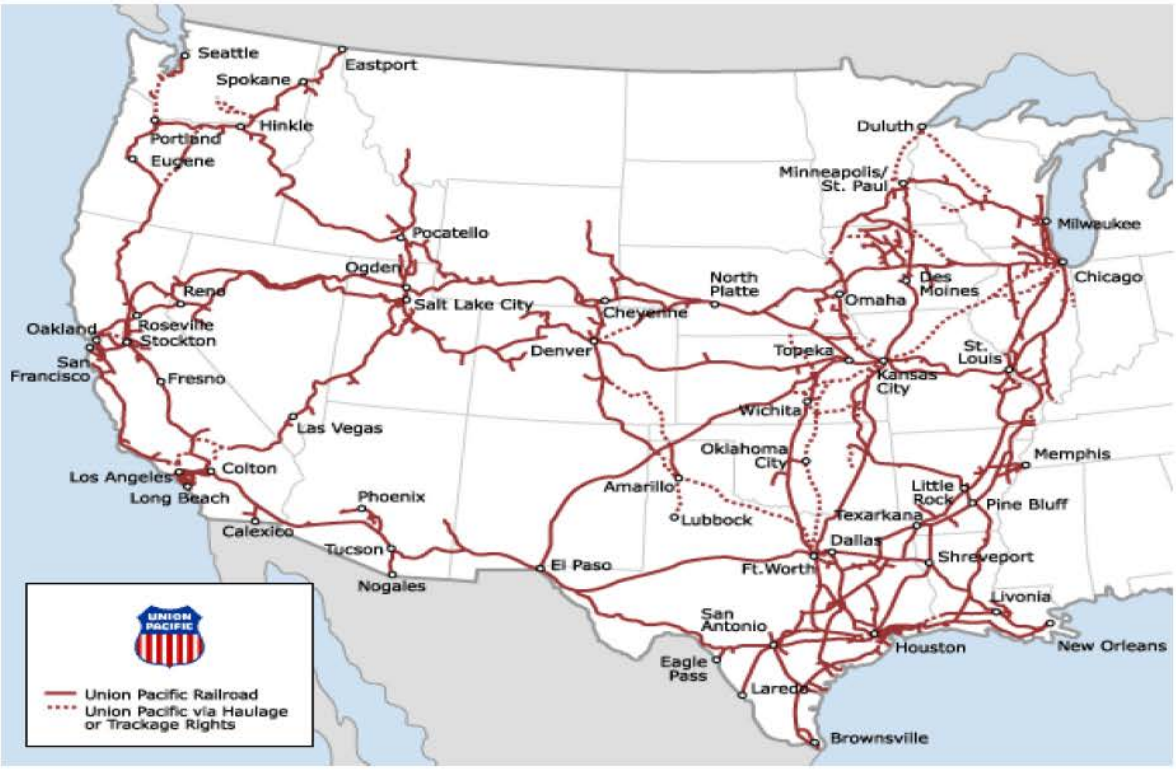
Shipments arriving from foreign origins are loaded in ocean containers. These containers are standard "intermodal" containers, which means that once they are loaded and sealed at a point of origin, the container can be moved by truck/chassis, crane, ship, rail car and other trucks/chassis to the destinations with the seal and contents remaining in-tact inside of the container. The ocean containers are designated as 20'0 or 40'0 and all supporting modes of transport are designed to accommodate both sizes of containers. 20'0 containers are known as a twenty-foot equivalent units (TEU) and 40'0 containers are known as forty-foot equivalent units (FEU). In many cases, cargo receivers in Southwest Missouri choose to receive their container intact, which means the containers are moved from a nearby intermodal rail terminal to the receiver's distribution center, where the seal is finally removed from the container and the goods are removed.

In some cases, cargo owners in Southwest Missouri choose to terminate the shipment at the arrival port and "transload" from an ocean container (either a 20-0 or 40-0 container) into a domestic 53-0 container. There are several reasons for this, one being that three domestic containers can absorb the contents of four ocean containers, making the inland transportation costs lower by eliminating one full container move. Secondly, in many cases, the cost of re-positioning the empty ocean container can offset the benefits of allowing the freight to move inland within the ocean container. When the empty is unloaded, the rail or ocean carrier requires that the receiver who unloaded the cargo in Southwest Missouri to pay a fee to

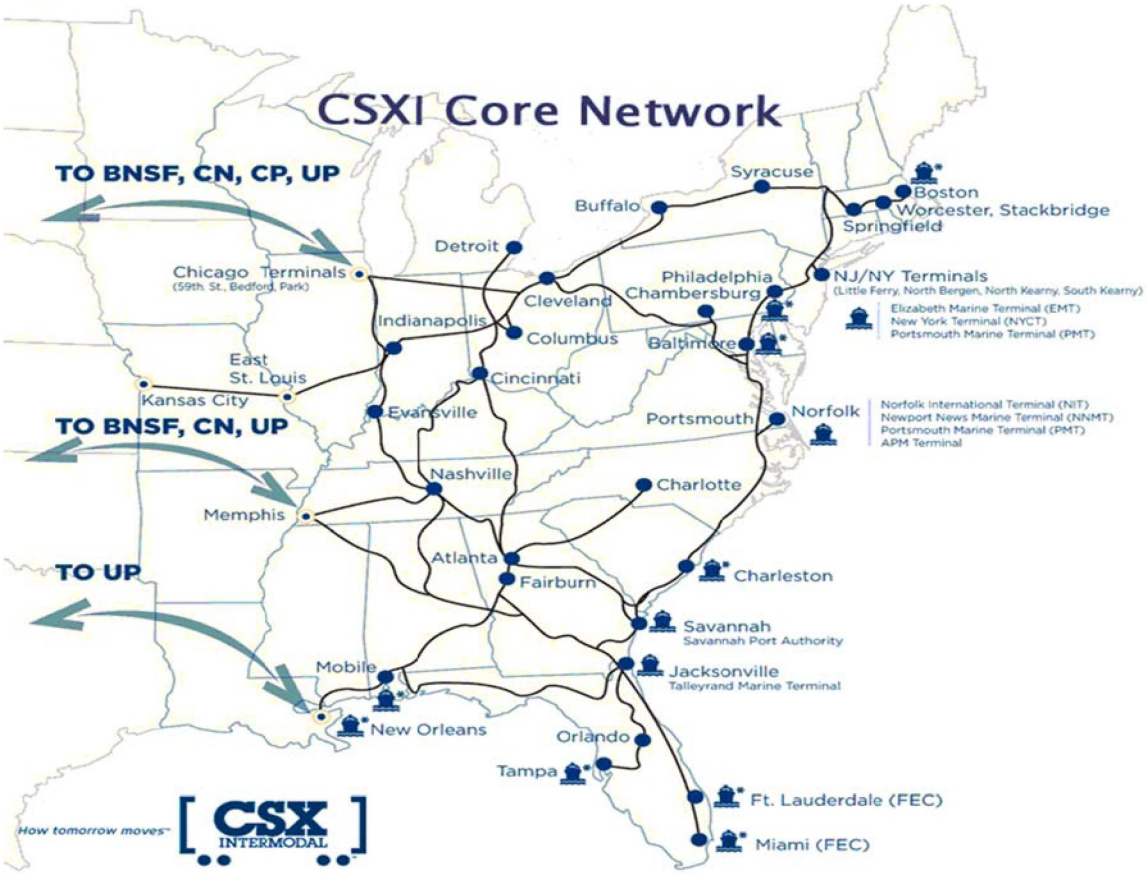
relocate the container back to a location where they have an expectation of gaining a new load, in some cases as far away as Memphis, Chicago, St. Louis or Kansas City.

Each shipper, receiver or their third party service provider makes the case for how they will structure their logistics system. Companies in Howell County support container arrivals from a Memphis rail terminal hub, Texas County supports arrivals from St. Louis rail terminal hub and companies in Greene and Jasper counties use both Kansas City and St. Louis rail terminal hubs for their western shipments. Western shipments are moved by Union Pacific (UP) or Burlington Northern Santa Fe (BNSF) rail carriers and their network rail maps are included. The eastern movement of goods is handled by Norfolk Southern or CSX Transportation. The Kansas City Southern Railway will offer new opportunities for companies in Southwest Missouri as the "near-shoring" cycle returns manufacturing to Mexico. Near-shoring is occurring as Mexico's labor, proximity and transportation capabilities become more competitive than China as a source for production and manufacturing. Companies with higher values in material content are leading this trend from China back to Mexico. Companies with low material content and high labor content will remain in production centers where the lowest global labor rates are available so long as they can manage their supply chains and not erase the benefit of this lower/lowest labor cost by not managing their supply chains.

The prospect of a new intermodal terminal in the region promises to change cargo routing decisions. This prospect is critical for MoDOT. When the new intermodal terminal becomes widely announced, the supporting infrastructure for trucks access and egress to this new logistics facility will need to be elevated in the MoDOT project hierarchy.


Seattle
Eastport
Spokane
Hinkle
Portland
Eugene
Duluth
Minneapolis/
St. Paul
Milwaukee
Pocatello
Ogden
Chicago
Reno
Salt Lake City
North
Platte
Des
Moines
Omaha
Cheyenne
Oakland
Roseville
Stockton
San
Francisco
Denver
Topeka
St.
Louis
Fresno
Kansas
City
Wichita
Las Vegas
Oklahoma
City
Memphis
Colton
Los Angeles
Long Beach
Amarillo
Little
Rock
Pine Bluff
Phoenix
Lubbock
Texarkana
Calexico
Dallas
Tucson
Shreveport
El Paso
Ft. Worth
Nogales
Livonia
San
Antonio
Houston
New Orleans
Eagle
Pass
Laredo
Brownsville
Union Pacific Railroad
Union Pacific via Haulage
or Trackage Rights

SEATTLE (SIG)
PORT OF SEATTLE
S. SEATTLE
PORT OF TACOMA
PORT OF
PORTLAND
PORTLAND
SPOKANE
CANADA
BILLINGS
DILWORTH
ST. PAUL
CHICAGO
(Cicero)
CHICAGO (Corwith)
CHICAGO (Willow Springs)
LOGISTICS PARK CHICAGO
RICHMOND
STOCKTON
OAKLAND
(OIG)
FRESNO
OMAHA
DENVER
KANSAS CITY
ST. LOUIS
LOS ANGELES
PORT OF
LOS ANGELES
PORT OF
LONG BEACH
SAN
BERNARDINO
ALBUQUERQUE
AMARILLO
HARVARD
MEMPHIS
ATLANTA
PHOENIX
ALLIANCE
BIRMINGHAM
PACIFIC
OCEAN
EL PASO
ATLANTIC
OCEAN
BARBOURS CUT
NEW ORLEANS
HOUSTON
BNSF
Regional Carload Connection
Intermodal Haulage Agreement
CHICAGO Intermodal Hub
ATLANTA Haulage Facility
PORTLAND Port Facility
0 100 200 Miles
0 100 200 300 Kilometers
2005 BNSF Railway
www.bnsf.com
Map created by:
MAPQUEST
January 2006
GULF OF
MEXICO
MEXICO
BNSF
INTERMODAL NETWORK


CSXI Core Network
TO BNSF, CN, CP, UP
Syracuse
Boston
Worcester, Stackbridge
Springfield
Buffalo
Detroit
Chicago Terminals
(59th St., Bedford, Park)
Philadelphia
Chambersburg
NJ/NY Terminals
(Little Ferry, North Bergen, North Kearny, South Kearny)
Elizabeth Marine Terminal (EMT)
New York Terminal (NYCT)
Portsmouth Marine Terminal (PMT)
Cleveland
Indianapolis
Columbus
Baltimore
East
St. Louis
Cincinnati
Kansas City
Evansville
Portsmouth
Norfolk
Norfolk International Terminal (NIT)
Newport News Marine Terminal (NNMT)
Portsmouth Marine Terminal (PMT)
APM Terminal
TO BNSF, CN, UP
Nashville
Charlotte
Memphis
Atlanta
Fairburn
Charleston
TO UP
Savannah
Savannah Port Authority
Mobile
Jacksonville
Talleyrand Marine Terminal
New Orleans
Orlando
Tampa
Ft. Lauderdale (FEC)
Miami (FEC)
How tomorrow moves
CSX INTERMODAL

Waterville
Rouses Point
CANADA
Buffalo
Albany
Binghamton
Detroit
Chicago
Des Moines
Toledo
Cleveland
Allentown
New York
Northern New Jersey
Ft. Wayne
Pittsburgh
Harrisburg
Philadelphia
Columbus
Wilmington
Indianapolis
Front Royal
Baltimore
Kansas City
Cincinnati
Manassas
Charleston
St. Louis
Richmond
Louisville
Lexington
Roanoke
Norfolk
Winston-Salem
Raleigh
Knoxville
Asheville
Charlotte
Memphis
Chattanooga
Morehead City
Huntsville
Columbia
Atlanta
Birmingham
Macon
Charleston
Dallas
Meridian
Savannah
Brunswick
Mobile
Jacksonville
New Orleans
Palatka
To Miami
Norfolk Southern System
NS Routes
NS Trackage/Haulage Rights

The transportation system supporting the prospective users in Southwest Missouri with multi-national manufacturing or production footprints are complex and there is no “one size fits all solution.” During the course of this study, it became very clear that each company sorts out the best way to access their cargo by truck and/or rail and each business deploys a transportation strategy that best fits their production or manufacturing requirements. Many decision points are used to deploy the networks that bring cargo to or move cargo out of Southwest Missouri. Each of the FTZ prospects interviewed for this report manages cargo based on controlling the tension between logistics costs and predictability of services.

Shifts in labor costs within global sourcing origins are changing where goods and components are produced. In the course of this study, one company that was a significant importer has “brought back” their entire formerly out-sourced production from China, indicating a lack of control over quality and costs as a driving force. This resulted in many jobs being re-created in the market, but eliminated the need for an FTZ as all their production was nationalized. Other companies are exploring new sourcing for commodities, materials and components. As Mexico’s Foreign Direct Investment continues to grow and as Mexico increases their Free Trade Agreements at a faster pace than the U.S., more companies will seek to build parts, components and products in Mexico. Currently, over 90% of all global automotive parts producers have a manufacturing or distribution center in Mexico. Other growth sectors in Mexico include electronics, aerospace and appliance manufacturing. This shift in production will make the prospect of a new intermodal terminal in Southwest Missouri even more valuable.

Study Description and Methodology

Study Overview and Area

This project consisted of the following primary tasks:

1. Determine the key characteristics of businesses utilizing FTZ projects and use this information to develop a method for identifying business as prospective FTZ users.
2. Identify businesses within the 23 county study area that are prime prospects for FTZ approval, utilization and approval within the Springfield FTZ No. 225 project, using the criteria developed in Task 1 also conducting individual interviews with each identified company.
3. Analyze the product supply chain of the prime prospects to determine opportunities for improving the efficiency of the transportation infrastructure through improved options to reach international shipping hubs.
4. Analyze the current and future economic benefits/costs of the FTZ No. 225 project to the Southwest Missouri region.

The study area for this project included the service area of the Southwest Missouri FTZ No. 225 project. This Zone project is comprised of 23 counties in Southwest Missouri including; Barry, Barton, Cedar,

Christian, Dade, Dallas, Douglas, Greene, Hickory, Howell, Jasper, Laclede, Lawrence, McDonald, Newton, Ozark, Polk Stone, Taney, Texas, Vernon, Webster and Wright. While the Grantee operates from an office in Springfield, their defined "service area" or the geography assigned to the Grantee for FTZ management is made up of all of the communities that comprise these counties within Southwest Missouri. The first step of this study was to determine a strategy for identifying which companies in the service area are prospects for FTZ consideration.

Characteristics of Businesses Benefitting from Utilizing an FTZ

Companies that utilize an FTZ program typically have similar characteristics which allow them to gain benefits from those offered through designation within this national program. Those characteristics are detailed below:

- Significant imported products used in their distribution or manufacturing platform.
    - Imported volumes of over $5 million in total import value is the threshold established in this project to evaluate companies that would benefit by using the FTZ program if they

are manufacturers or conducting a value-added service at the location which would allow them to receive additional FTZ benefits.

  - Imported volumes of over $100 million in total import value is the threshold established in this project to evaluate companies that would benefit by using the FTZ program if they are strictly a retail distribution or fulfillment center. The primary financial benefit they will receive through the Zone will be through the reduction in merchandise processing fees.

- Higher import duties and tariffs accelerate the value of the FTZ program to the importer.
- Increased customs entries also accelerate the value of the FTZ program to the importer.
- Sales to military, high volumes of scrap and rejected parts also add value to the program.
- Companies that have significant exports gain additional FTZ benefits.

These profile elements are the "baseline" parameters used to identify companies who would benefit by using the FTZ and whose global base of business would provide a measurable financial benefit to these prospects. Moving from an evaluation of the FTZ toward an application and activation for FTZ designation will be the long-term challenge of this project as many companies who met the thresholds, above, also operate in multiple other locations in the U.S. and their decision process must include more than just the Southwest Missouri location.

Following are the actual data elements which need to be available in order to determine the cost benefit of utilizing an FTZ for a company. Once these data elements are received, the Grantee can use the data to generate a cost and benefit analysis specific to the prospective FTZ user.

- Company Name:
  - Key Contact:
  - Name:
  - Phone:
  - E-mail:
- Is this facility a manufacturing or distribution center?
- What is the size of your current facility?
- How many employees are at the proposed FTZ facility(s)?
- What is the annual value of imported merchandise into the facility?
- What types of goods are being imported into the facility (including HTS numbers)?
- What are the duty rates on the imported goods (average rates)?
- What percent of imported goods are re-exported?

- What percent of imported goods are rejected or scrapped?
- What is the percentage of imported goods sold to the military?
- What is the annual cost of imported goods subject to duty inversion?
- How many inventory "turns" occur each year?
- Does the operation utilize the duty drawback program?
- How many entries are filed each year?
- What was the average merchandise processing fee per entry filed (last year)?
- At what percent is the company expected to grow annually over the next five years?

Identifying Current Companies as Key FTZ Prospects

In the 23 counties of Southwest Missouri, 257 companies were identified as having import activity in 2011, the most recent data available at the start of this project. Out of this "universe" of importers, IMS Worldwide, Inc. established a threshold for import volumes as a baseline to qualify companies for consideration within the FTZ program.

This baseline was established separately for manufacturing companies and for distribution companies. The following evaluation steps were completed in sequence to determine FTZ eligibility for prospective companies within the 23 county Southwest Missouri FTZ study area.

- **Step 1: Identify all importers** in the Southwest Missouri 23 county study area using the PIERS Import Prospect Data files to identify 257 companies listed as importing goods.
- **Step 2: Select a "threshold"** of five million dollars in total import value and apply it to the original roster of 257 companies in the study area. Once applied 18 companies were identified as meeting this initial threshold and those names were presented as part of the Task 1 deliverable.
- **Step 3: Perform an initial review of the MERIC data files** received on October 25, 2012 via e-mail containing a database generated by MERIC which contained a roster of 421 companies operating within the 23 county study area.
- **Step 4: Sort the MERIC files** to identify those companies indicated in the MERIC roster as having import or export activity. This sort resulted in an FTZ roster of 161 potential companies located in the study area. The MERIC data did not provide a volume of import or export value, only an indication of trade in terms of imports and/or exports.
- **Step 5: Re-sort the queried MERIC data** containing the roster of 161 companies identified as potential FTZ companies and establish a threshold of ten million dollars in total revenue (as provided by the MERIC data files) which resulted in a new target list of 71 companies.

- **Step 6: Compared and contrasted the MERIC prospect list of 71 companies with the new PIERS enhanced data file** containing Dunn and Bradstreet information associated with each importer to further evaluate the prospects and based on this review added 6 new prospects to the overall roster of 19 companies from Task 1's deliverable.
- **Step 7: Performed a sort of the original MERIC data provided based on largest employers** and removed all hospitals, car dealerships, home improvement centers, auto auctions, data processing centers and like companies that would not be in international trade. From the 421 companies, the roster was reduced to 114 names using a threshold of 165 total employers as the baseline.
- **Step 8: Combine the MERIC employee data with the PIERS data** to provide a Dunn and Bradstreet review of the prospects which added another 7 companies to the original roster of 18, the subsequent 6 added under Step 6, bringing the total prospect roster to 31. These prospective companies have been identified as candidates for FTZ discussions and potential applications and activations.

One early project activity was a series of meetings held with city, county, economic development and other interested stakeholders to introduce the project. During these meetings, the facilitator provided the stakeholders with an opportunity to review the companies selected or included in the prospective roster of companies selected based on the initial review criteria discussed earlier within this report. During these two stakeholder meetings held in Springfield and Joplin, additional companies were identified, recommended or suggested by the invitees as key prospects that should be considered and included in the project. These new recommended prospects were added to the "universe" of prospects after they were vetted by IMSW to evaluate their import volumes, total sales scale, review against MERIC data files for employment, import and export activity (MERIC data indicates import and export but does not capture volumes, only total annual revenue). A final roster of 58 prospective companies was created and during the course of the project an additional 3 were added as a result of input from local economic development staff.

Economic Impacts for State and Region

FTZ's are "a job magnet." As more and more multi-national companies take a foothold in an FTZ or FTZ Subzones the attraction grows even faster, more warehouses, more manufacturers and more assembly lines all of which spell more jobs. Statistically, an investment in an FTZ brings 250 – 300% return on investment (ROI) in the first year, thus not only paying for itself, while also creating new commerce and jobs.

What is the value of 200-300 new jobs to Southwest Missouri? What is the value of a Fortune 500 company with a local presence? The short answer is millions of dollars. Depending on the type of jobs created and the amount spent to construct facilities and warehouses the economic multiplier effect could easily run in the 2.2 to 3.4 million dollar range, which means for each dollar spent locally, that dollar will circulate 2 to 3 or more times in the community. Thus, the actual cash value of just one new 15 million dollar building and associated infrastructure could benefit the area by as much as 30 – 40 million dollars.

This means that the prospect of adding jobs in Southwest Missouri as users or operators within the FTZ No. 225 project are more valuable than jobs added outside the Zone program.

Companies that utilize the FTZ program remain financially linked to their operations within the local communities resulting in jobs retained for Missouri. Some of the companies that are in review or have started an FTZ review are significant employers in the region. They will gain a predictable new stream of revenue and profits as they implement the Zone program. This will ensure that the current businesses performed in Southwest Missouri remains. As these companies see new enhanced revenues; they are better positioned to consider new growth in manufacturing or distribution at their FTZ Missouri facilities. Most of the companies who elect to participate in the FTZ program will add at least one or two new staff members for managing the Zone project. These new employees are included into the cost-benefits analysis which is performed to demonstrate the viability and return on investment available through Zone participation. In the FTZ program, companies also gain specific supply chain benefits. FTZ is considered a “best practice” for importers who participate in the C-TPAT (Custom’s Trade Partnership against Terrorism) program. The C-TPAT program is an agreement between CBP and the importers who join the program that all custodians who manage each part of their supply chains are vetted as secure and that the goods loaded into the container at origin are secure in-transit to the point in the supply chain where they are unloaded. The C-TPAT program provides FTZ participating companies with the lowest frequency of inspections, the “front of line” status should an additional port crisis occur and provides CBP with assurance that the importer’s supply chain is secure. As CBP also requires FTZ companies to comply with more robust security requirements for local facilities, there is a layer of knowledge in the community that companies in the FTZ will not be as likely to have security anomalies in their daily operations or in their supply chains.

While the security considerations are more difficult to measure in terms of value, the security requirements and protocols put in place by local companies also link them to their employees through the background check process required for all key staff members within the FTZ operations and further links the companies to the community by way of additional interactions with local law enforcement, safety and medical networks.

What is critical to MoDOT and the Grantee of FTZ No. 225 is that if these companies that have been identified as potential FTZ users stay in their current locations, at least hundreds of jobs will be secured for the community and new jobs will be added to the employment roles in Southwest Missouri. It is expected that each company will save upwards of one-half million dollars annually by enrolling in the FTZ program and create additional income for investment in new technologies, new lines of business and increased production density at their Southwest Missouri facilities. The overall impact of the new business opportunities identified is well above 6 million dollars in potential new investments, new employees, new business and/or profits that are re-invested by companies in Southwest Missouri.

Study Findings

FTZ Findings

A key deliverable in this study for the Grantee and for MoDOT was to identify companies in the FTZ service area that were candidates for the FTZ program. Following the development of a "profile" and applying some secondary screening, a final roster of companies was created. However, some of the recommended companies were not included, such as large employers whose products were deemed to be domestic in nature (egg production, milk production, etc.). During the course of the project, several new names were added to the roster. In some cases, economic development stakeholders who did not attend the original meetings requested that companies in their markets be added and evaluated for qualification for the FTZ program. This final roster of prospects was established as a basis for conducting interviews and vetting companies in-person or by telephone.

From this initial roster of firms, the following companies meet the established criteria for import volumes of goods entered into Southwest Missouri and/or have indicated a positive interest in evaluating the FTZ program. In some cases, companies have expressed interest, but also deferred the evaluation until future volumes justify or until priorities deem the FTZ conversation appropriate based on staff availability and band-width. Other prospects will need to re-configure some parts of their supply chains in order to have the full benefits of the FTZ available. However, there is a willingness to continue to review and evaluate the Zone program.

- Arlee Home Furnishings, Howell County
- Bass Pro Shops, Greene County
- Gamo USA Corp, Texas County
- John Deere Reman, Greene County
- General Dynamics, Jasper County (has FTZ pending)
- La-Z-Boy Midwest, Newton County
- Leggett & Platt Inc., Jasper County
- Lew's Outdoors, Greene County
- O'Reilly Automotive Inc., Greene County
- Premier Turbines, Newton County
- Regal Beloit Corporation, Greene County

Other companies that have indicated an interest in the program but the decision process is located in other markets. These companies will require a longer process to introduce the decision maker(s) to the Zone program and re-align their corporate culture to assimilate the FTZ program within their organization.

These are the companies already utilizing the FTZ program as part of their overall strategy:

- Jardin, Newton County (local FTZ user)
- Fag Bearing, Jasper County (3PL for imports in TN)
- CNH (multiple manufacturing, distribution sites)
- Siemens Energy (two FTZ sites in KS and one in TN)

This is a significant finding and is positive for Missouri's economic development entities. Having such a wide-array of companies who will benefit by using the FTZ program suggests that the economic development efforts are correctly focused on creating and retaining jobs in production, distribution and manufacturing in Missouri and specifically Southwest Missouri. The outcome of this finding is a strong recommendation to the state, regional and local economic development entities to continue to support manufacturing in the region and to focus on bringing more international business to Missouri. This tangible result is positive for FTZ growth.

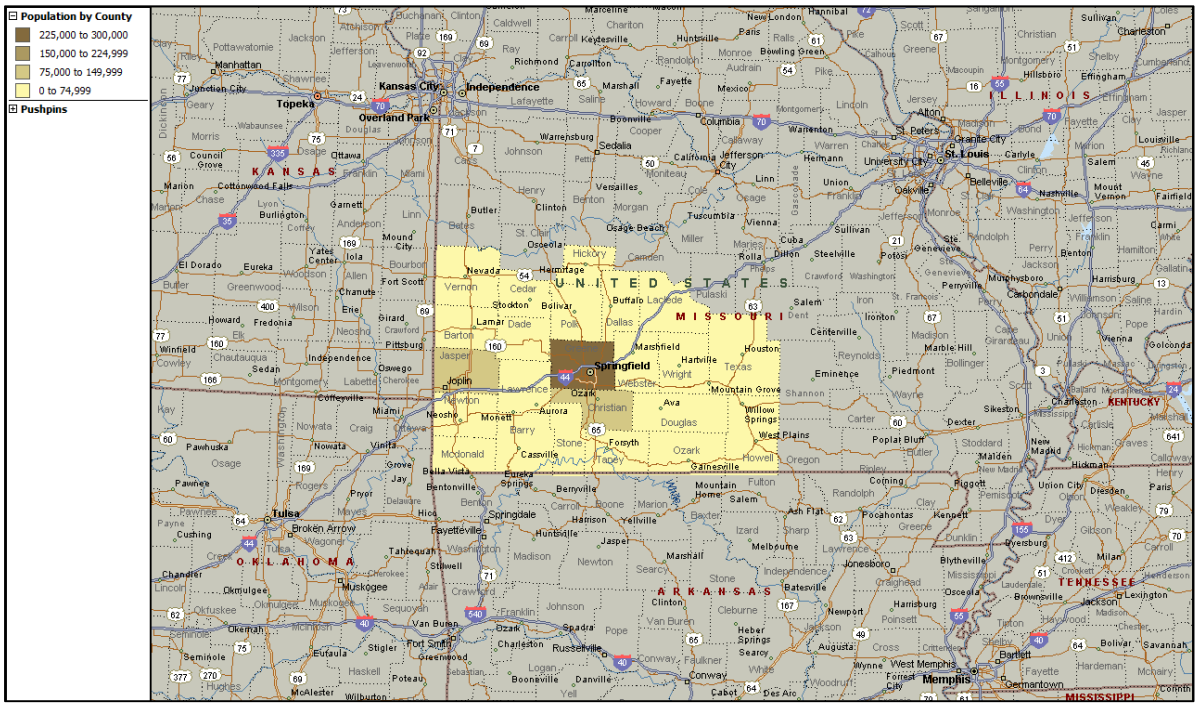
Transportation and Logistics Findings

The objective of Task 3 is a comprehensive analysis of specific transportation needs associated with the goal of enhancing the FTZ in the public interest.

Study Area Overview

The study area consists of 23 counties in Southwest Missouri, centers on Springfield as illustrated in Figure 1. Approximately one million people occupy this region of 15,213 square miles. Major cities bounding the region include Kansas City, St. Louis, Memphis and Tulsa. Figure 1 also illustrates the relative population of the study area counties, with more than a quarter of the population represents in the darker shaded Green County (Springfield). Jasper County (Joplin), with the intersection of I-44 and I-49 (U.S.-71), serves as an important transportation center.

Figure 1: Study and Surrounding Area



Highways and Motor Carrier Services

The most important freight carrying highways in the region include:

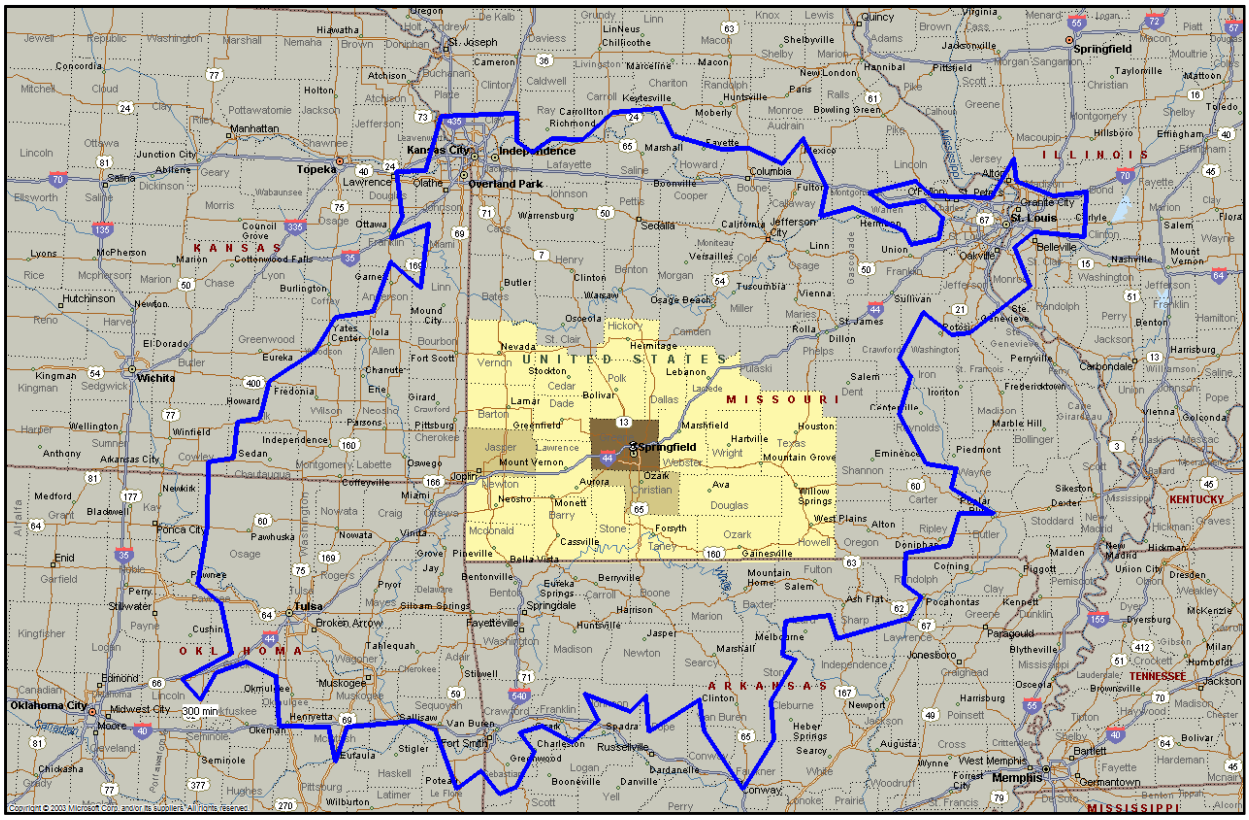
- I-44, which cuts the study region from Southwest to Northeast and hauls 7,000-9000 trucks per day. More than a quarter of the volume on I-44 is accounted to truck traffic.
- I-49 (Formerly U.S.-71), is a north-south highway on the western edge of the study area and hauls 3,000-5,000 trucks per day.
- Within the City of Springfield, U.S. Highways 60 and 65 are carrying between 4,000 and 4,500 trucks per day.

Motor Carrier Service Levels

There are a number of measures of motor carrier service capability available in the region. An example is the highway network that supports motor carrier services from Springfield. It allows a driver to deliver cargo to/from Kansas City, St. Louis and Tulsa in the legal work day of a single driver, as illustrated in Figure 2. This level of service is important to shippers/receivers of international cargo, as the key intermodal rail facilities serving Pacific, Atlantic and Gulf ports are located in Kansas City and St. Louis.

The new hours of service regulations for drivers are not expected to interfere with this capability, a significant shortening of the driver work day or increase in highway or terminal congestion could have an important impact on shippers within the study region.

Figure 2: Radius for a driver bringing and ending his day in Springfield



Another measure of motor carrier service capability is the service level for parcel shipments. The following United Parcel Service (UPS) map illustrates the level of service enjoyed by regional parcel service shippers with four-day delivery to the population centers on both coasts. Following is the United Parcel Service Transit Time Map for Springfield, Missouri.

Figure 3: UPS Ground Service from Springfield, MO

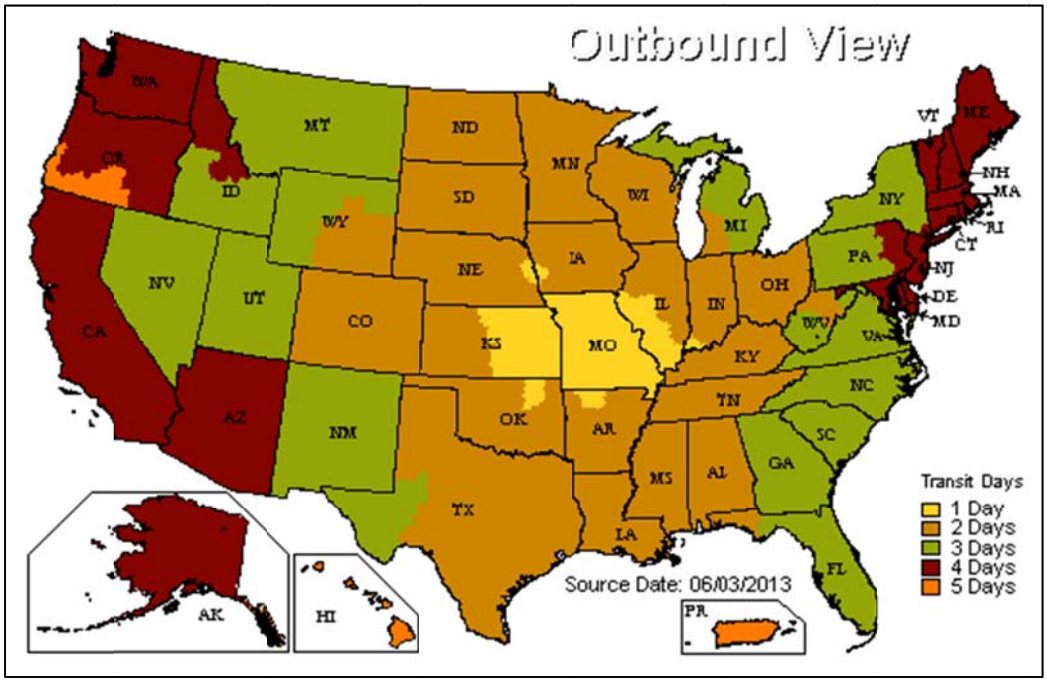
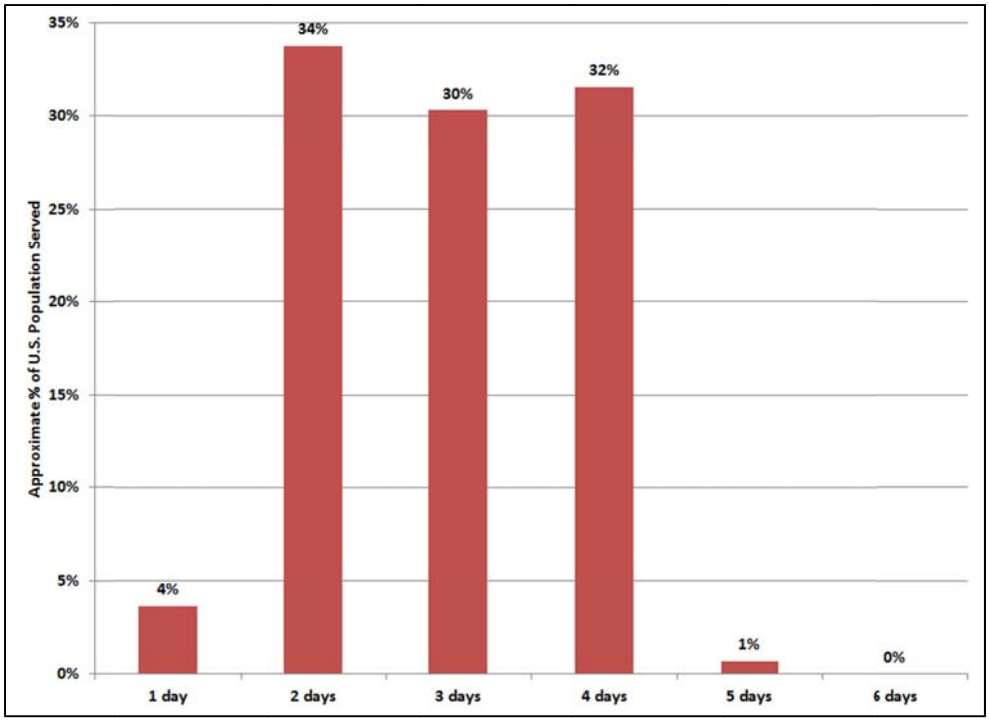


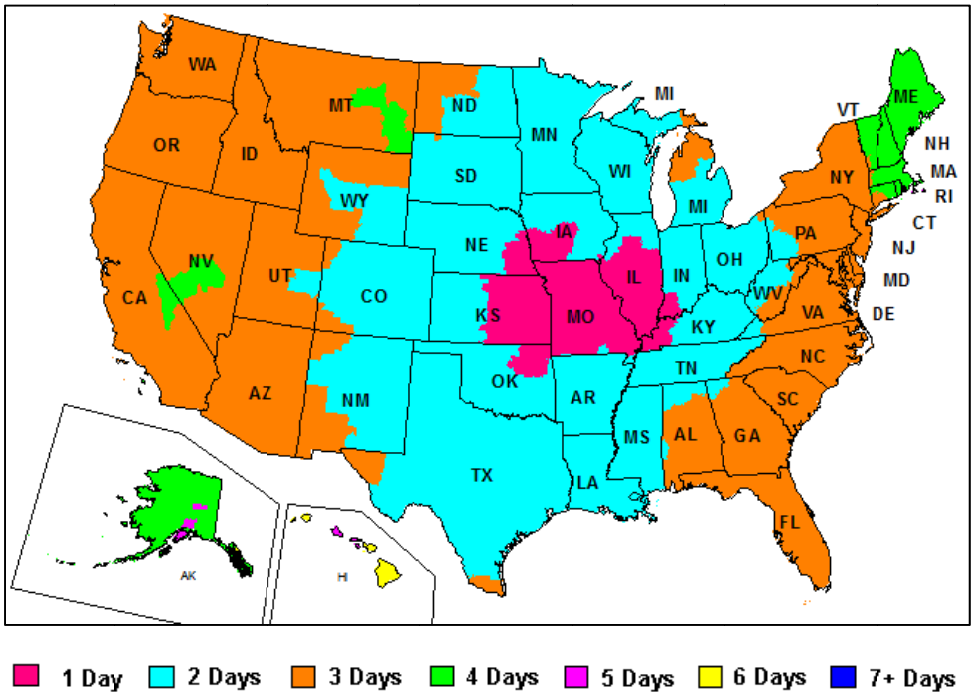
Figure 4 translates the map into an approximate share of the U.S. population which can be reached by UPS Ground Service from Springfield.

Figure 4: Springfield, MO UPS Ground Service Coverage



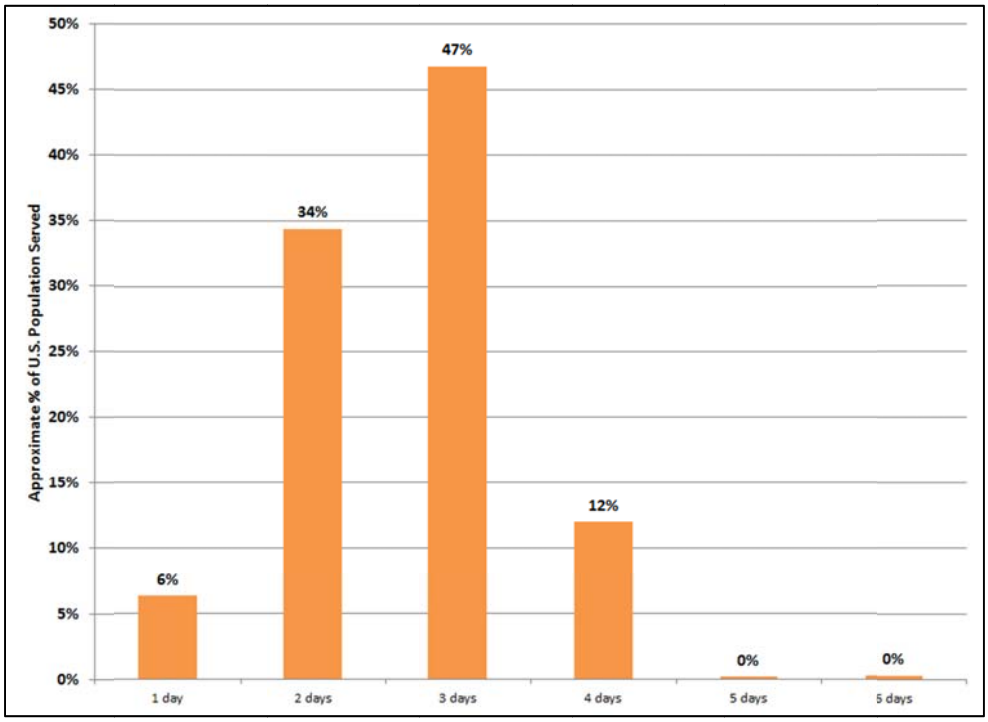
The following figures 5 and 6 illustrate the FedEx Ground Service transit map reflecting their capability from their delivery hubs in the Southwest Missouri.

Figure 5: Springfield, MO FedEx Ground Service Coverage



1 Day | 2 Days | 3 Days | 4 Days | 5 Days | 6 Days | 7+ Days

Figure 6 Springfield FEDEX Ground Service Coverage



The service map for Less than Truckload (LTL) freight shipments is illustrated in Figure 7 and Figure 8. Overnight LTL service is available to Dallas, Sioux City, Memphis and Chicago.

Figure 7: Conway Freight LTL Transit Time Map

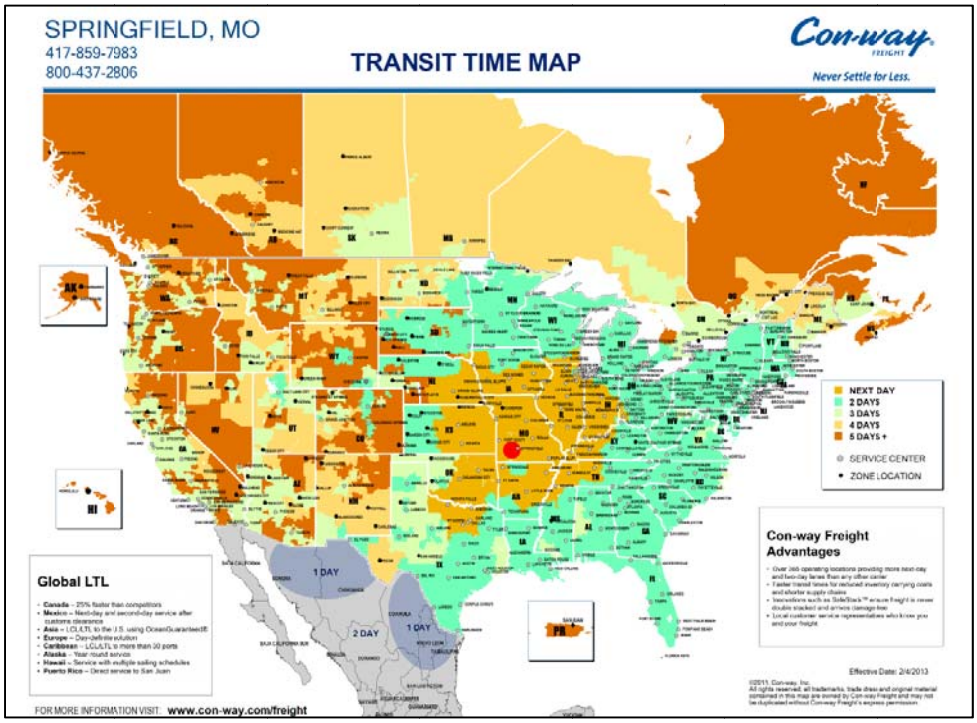
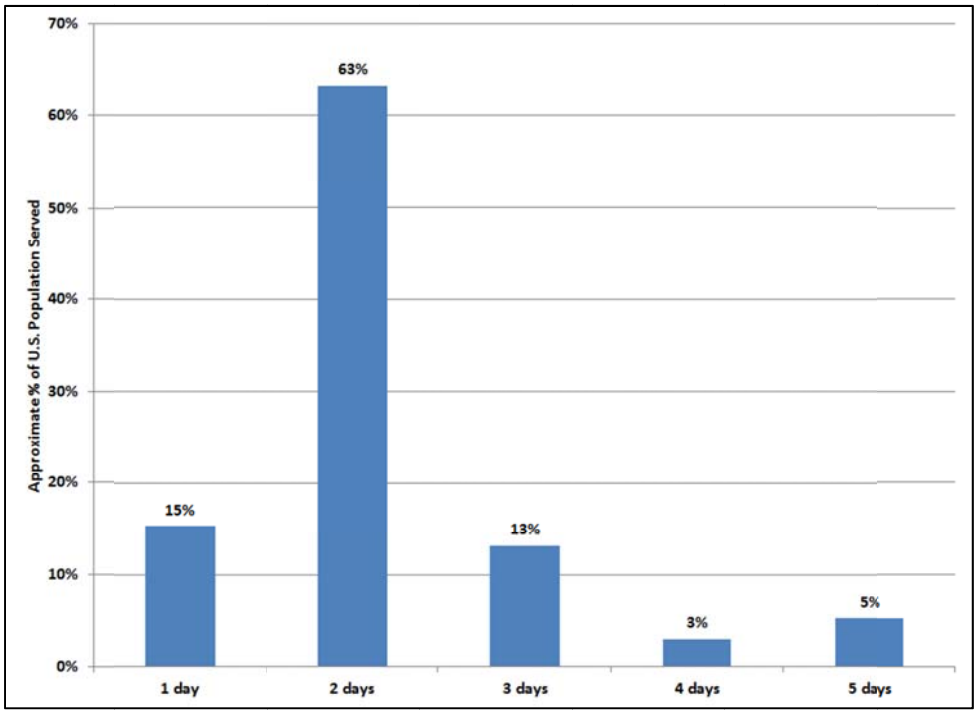


Figure 8: Springfield, MO Conway LTL Service Coverage



Atlanta vs. Springfield UPS Service Comparison

In order to illustrate the type of competition that is faced by firms engaged in e-commerce fulfillment activities, the share of the population served by UPS Ground Service provided from Springfield and Atlanta distribution centers in Figure 9 and 10. Atlanta's location near the East Coast population concentrations provides an advantage.

As e-commerce moves into the mainstream of retail, fulfillment and distribution strategies, it will be critical for MoDOT and the State of Missouri to deliver a solution to these new industries that "places" Missouri on the final site selection "short list." In context, according to Area Development, one-third of all large (over 400,000 square foot) distribution center "deals" across the U.S. were constructed for an e-commerce solution or logistics service provider. The "new retail" models developing are and will forever change the site selection demands, the role of incentives and the competition for companies that support e-commerce fulfillment across Missouri, the U.S. and the world. The State of Missouri must structure their economic development programs to react to and capture this new sector of retail commerce and fulfillment.

Figure 9: Atlanta vs. Springfield UPS Ground Coverage

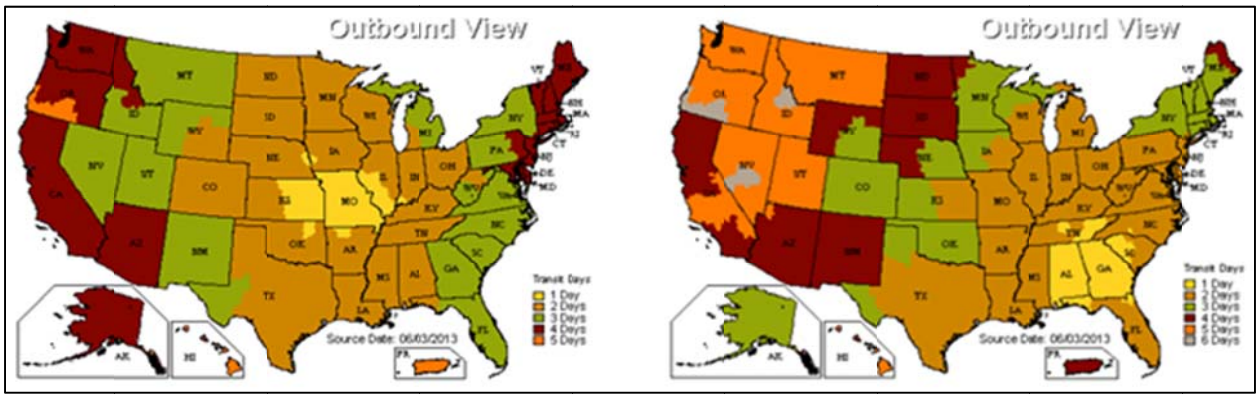
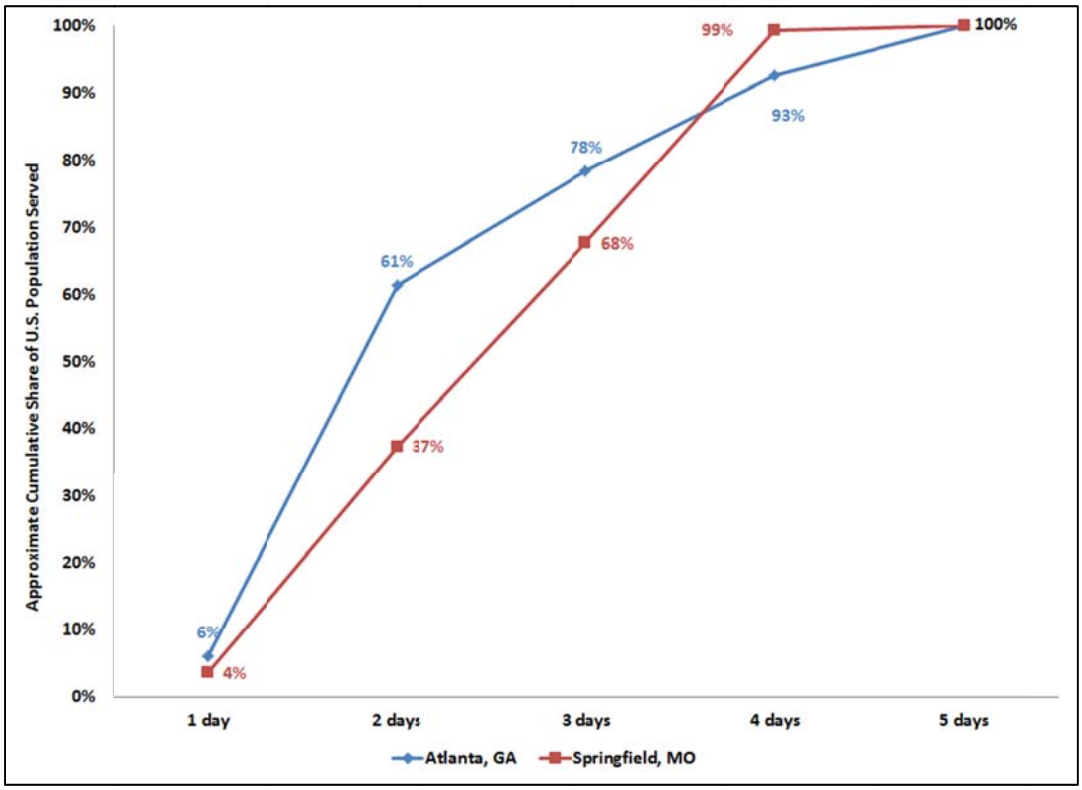


Figure 10: Atlanta vs. Springfield Population Reach



This is a particular consideration for a national retailer which maintains a major distribution facility near Atlanta and Springfield. This retailer uses their Springfield and Atlanta facilities to support their e-commerce platform shipping directly from the distribution centers and stores to consumers.

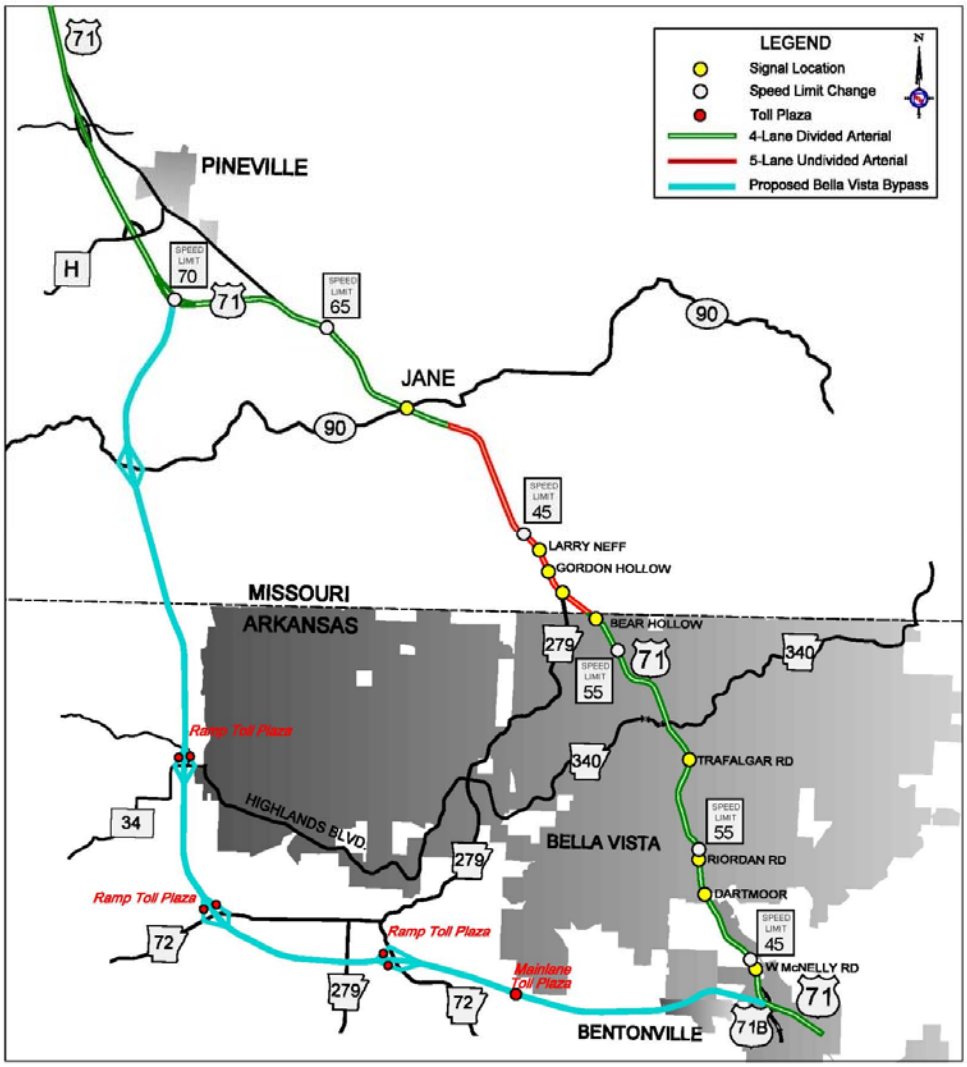
<u>Highway Bottlenecks: What Works and What Needs Work</u>

Interviews performed in the course of this study showed a remarkably high level of satisfaction with the service level of available highways and motor carriers. This is a remarkable finding and a tribute to the efforts of MoDOT to keep roads and bridges in good condition, to deliver a reliable and convenient transportation system and to use resources wisely in keeping users safe in Missouri. When the issue was probed thoroughly, four specific bottlenecks were mentioned to the team.

1. Bella Vista Cut Off

The portion of U.S. 71 immediately north of the Arkansas border was identified by shippers as a transportation bottleneck. At that point the limited access highway ends and traffic slows to 45mph while moving through a region with several traffic signals. This matter is well known to public officials and the corrective Bella Vista Cut Off shown in the following Figure 11.

Figure 11: Bella Vista Cut Off



The Associated Press reported that Arkansas approved a half-cent sales tax in November 2012 to pay for highway construction, including two lanes of the Bella Vista, Arkansas bypass.

It further quoted MoDOT as follows:

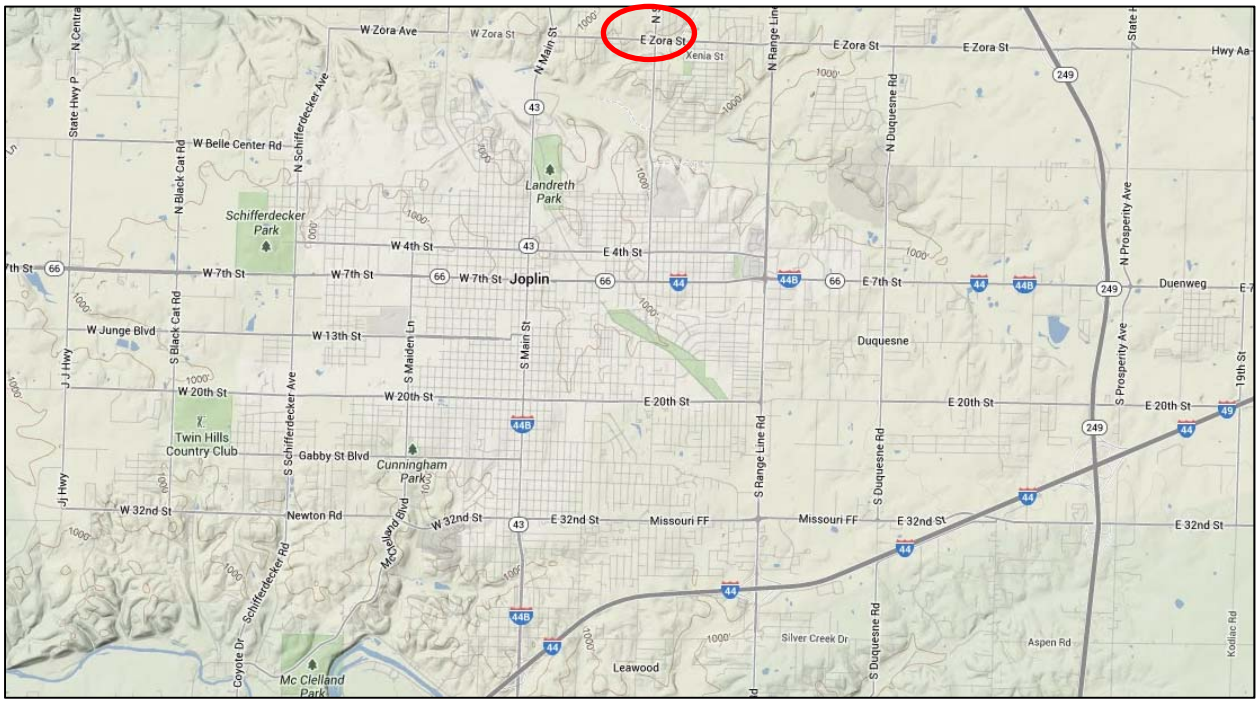
> *Sean Matlock, the Missouri Department of Transportation's manager of the I-49 project, said Missouri has the money to finish its five-mile portion of the bypass, but the state is waiting until Arkansas gets the funds to pay for its 13-mile section.*
>
> *"We've told Arkansas that whatever schedule it sets, we will meet them at the state line," Matlock said. "It made no sense to build a four-lane highway that just dead ends in the middle of nowhere."*

Funds have been included in the current Statewide Transportation Improvement Plan (STIP) for spending in FY 2015.

2. Zora Street and New Western Corridor, Joplin, MO

A motor carrier interviewed in the course of the study identified the need for an efficient, less congested way to move between MO 249 to the southwest side of Joplin. Because trucks are not permitted on Zora Street west of Duquesne, they exit MO 249 westbound onto E. Zora Street and then move southbound on Duquesne Rd. and westbound on 20th Street.

Figure 12: Zora Street and Western Corridor in Joplin, Missouri



This movement has been a challenge for auto traffic as well, but in June 2013 work was completed on construction of a new interchange between Zora Street and North Main Street (Route 43). According to MoDOT "This project will connect two sections of Zora Street by bridging over the railroad tracks just west of Main Street. It is designed to improve east-west traffic flow on Zora Street across Joplin's north side. It also will accommodate growth on the city's west side." The motor carrier would like the same routing option.

Figure 13: Zora Street Interchange

Clearly, permitting trucks to flow eastbound on Zora Street and then southbound on Shifferdecker Road and Coyote Drive to Exit 4 on Interstate 44 would complete an effective truck bypass around the northern and western portions of the city. As this is not presently a through truck route MoDOT should conduct a thorough study of the improvements that would need to be completed in order to address technical and social issues.

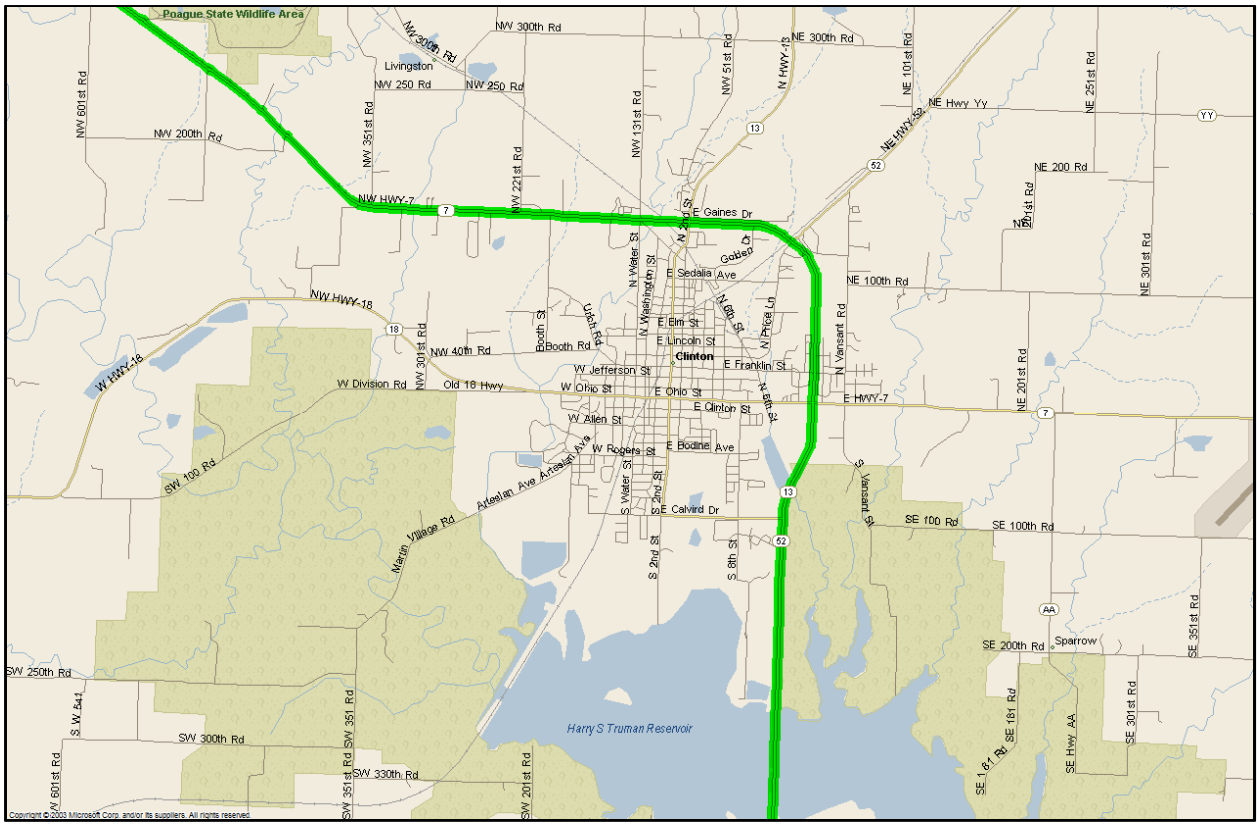
The demand for this kind of link is illustrated by the 2,000 acre Wildwood Ranch mixed use community, which is presently being developed. The area is located a mile west of Shifferdecker between 20th and 32nd streets.

A suggested routing alternative would be to extend Zora a mile to the west. This would permit Central City Road (JJ Hwy) to be a second or alternate north/south link.

3. Clinton, Missouri

Clinton, Missouri is on the truck route (Highways 13, 7, I-49) between Springfield and Kansas City. The high speed route turns into an arterial with traffic signals as it skirts Clinton, Missouri. The associated delays were noted in one interview as a bottleneck. The current Statewide Transportation Improvement Plan (STIP) does not address this concern. (A thin lift overlay of this section is included in the STIP for 2016.) The logical solution would be a creation of a bypass similar to the situation at Bella Vista.

Figure 14: Rt 7/13 Clinton, MO



4. Logistics Park Kansas City

BNSF is currently developing a large, new intermodal facility at Edgerton, Kansas on its main transcontinental route between Chicago and Los Angeles. The facility is planned to serve both domestic and international cargo and BNSF's Intermodal Terminal will serve as the anchor tenant for a larger industrial park. Completion is scheduled for late 2013 at which time operations will be transferred from BNSF's current facility in Kansas City.

Figure 15: BNSF Logistics Park Kansas City

Logistics Park Kansas City and motor carrier routing between the study area and BNSF intermodal service in Kansas City

Regional shippers currently use BNSF's facility at Argentine Yard in Kansas City to access BNSF's rail intermodal service for cargo moving between the central and western portions of the study area and West Coast cities and ports. The figure below illustrates the typical route that motor carriers would travel between Joplin/Springfield and the BNSF terminal.

For Joplin shippers, the typical route is 155 miles using U.S. 69 in Kansas between the study region and central Kansas City. The route via I-49 is slightly longer, but may be preferred due to the characteristics of the highway, particularly for shippers on the east side of Joplin.

For Springfield the typical route is 176 miles, in which State Highways 13 and 7 are used as well as I-49/I-670 to get to Kansas City. The multilane route is free of traffic signals except for a section of the roadway near Clinton.

Shippers in Joplin benefit by the change to the new BNSF facility at Edgerton, Kansas which is about 10 miles closer and avoids congestion assoicated with the former urban location.

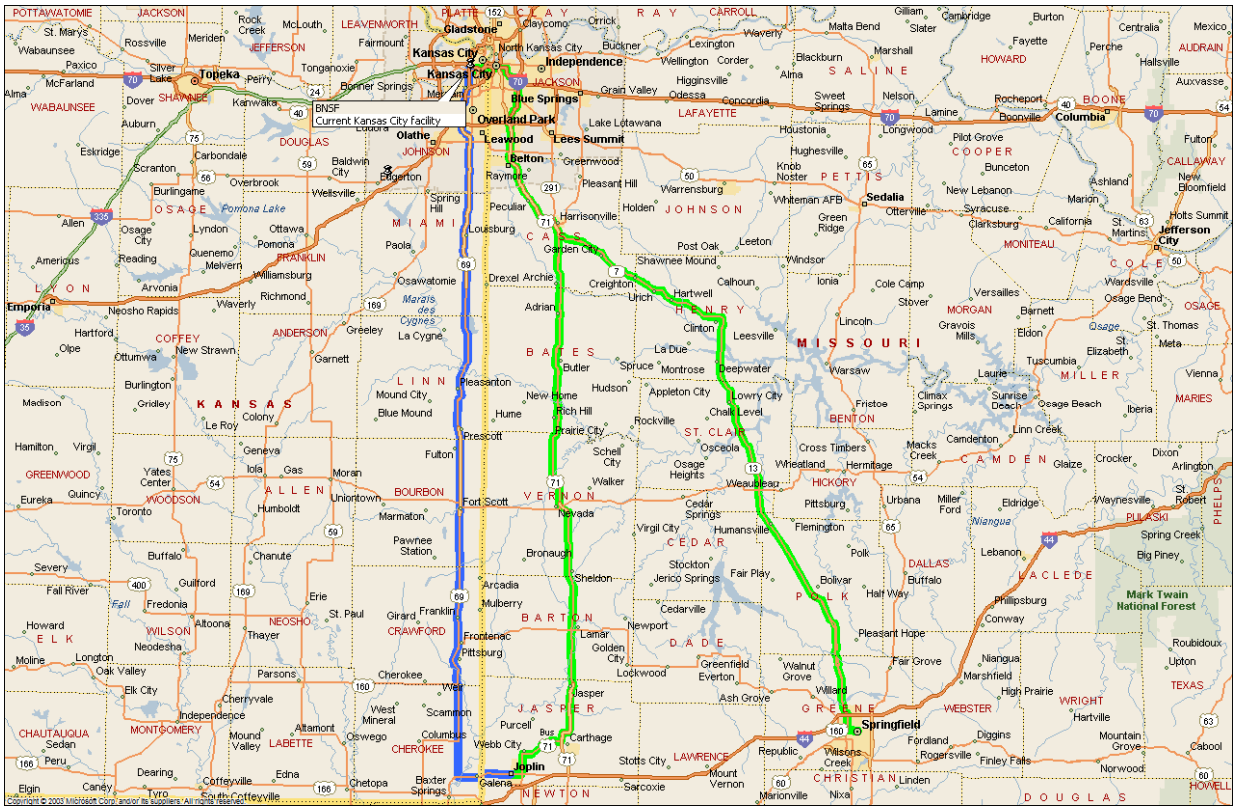
Conversely, motor carriers serving shippers in Springfield will be faced with a trip that is about 10 miles longer. The route now involves State Highways 13 and 7 and I-49/U.S. 71 as before. Additional legs on I-35 and I-435 are required to reach Edgerton.

Recommendation

Development of a truck arterial along the line of West 199th street in Kansas and East 195th street in Missouri as shown in red on Figure 18 and 19 would reduce the Springfield-Edgerton distance by about 10 miles each way and permit the trucks to avoid a measure of congestion. Creation of such a roadway would create a clear advantage for Springfield area shippers and receivers. Such project is not currently in the STIP. As this is not presently a through truck route MoDOT should conduct a thorough study of the improvements that would need to be completed in order to address technical and social issues.

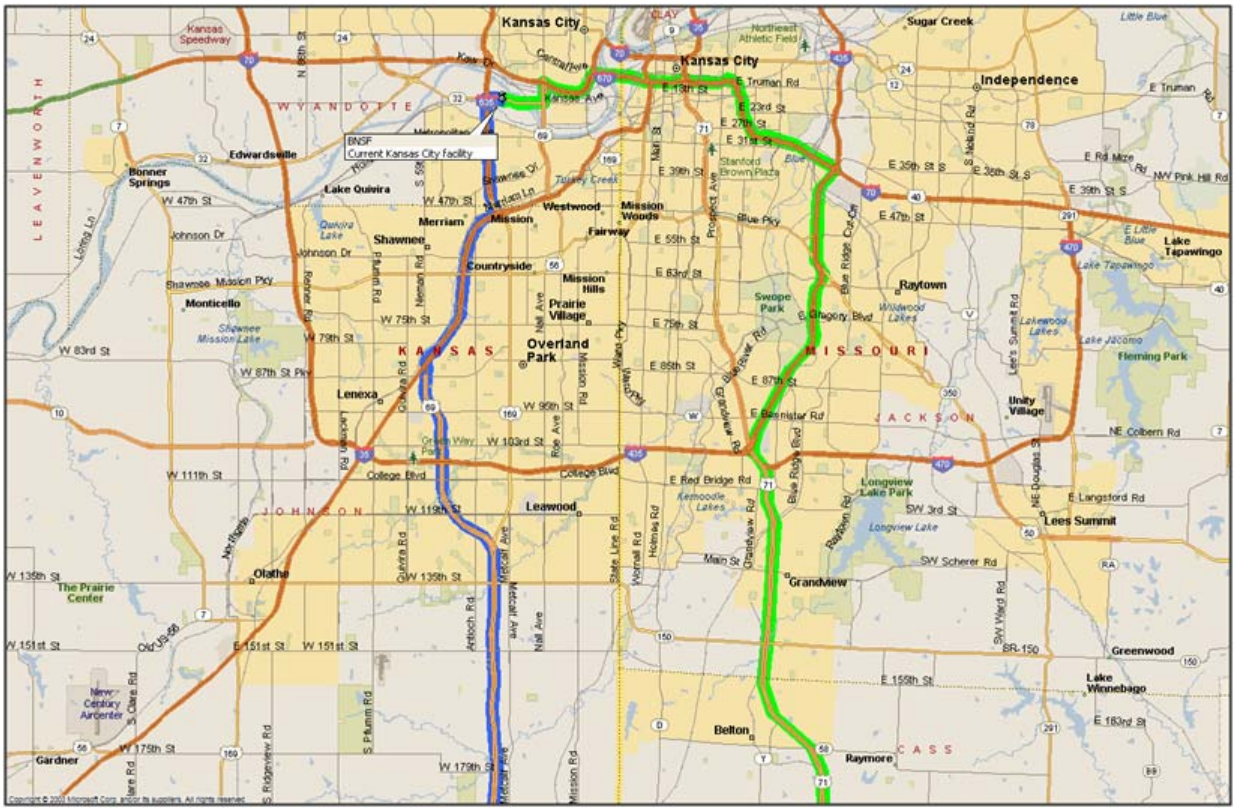
Figure 16 below is the highway routes currently used to move containers to and from the existing BNSF intermodal ramp in Kansas City. Currently, truckers have an option to travel in Missouri or Kansas.

Figure 16



The following image, Figure 17 reflects the detail in Kansas City of the connectors between Joplin or Springfield utilizing routes in Kansas or Missouri for access to the existing BNSF intermodal ramp.

Figure 17



The next graphic (Figure 18) shows the options for truckers to access the new BNSF intermodal rail ramp in Edgerton, KS. Truckers from Joplin have an option to travel in Kansas or Missouri. However, it is likely that they will choose the Kansas route as it is more direct, unless or until the recommended connector (shown in red) is completed to allow access from Missouri.

Figure 18

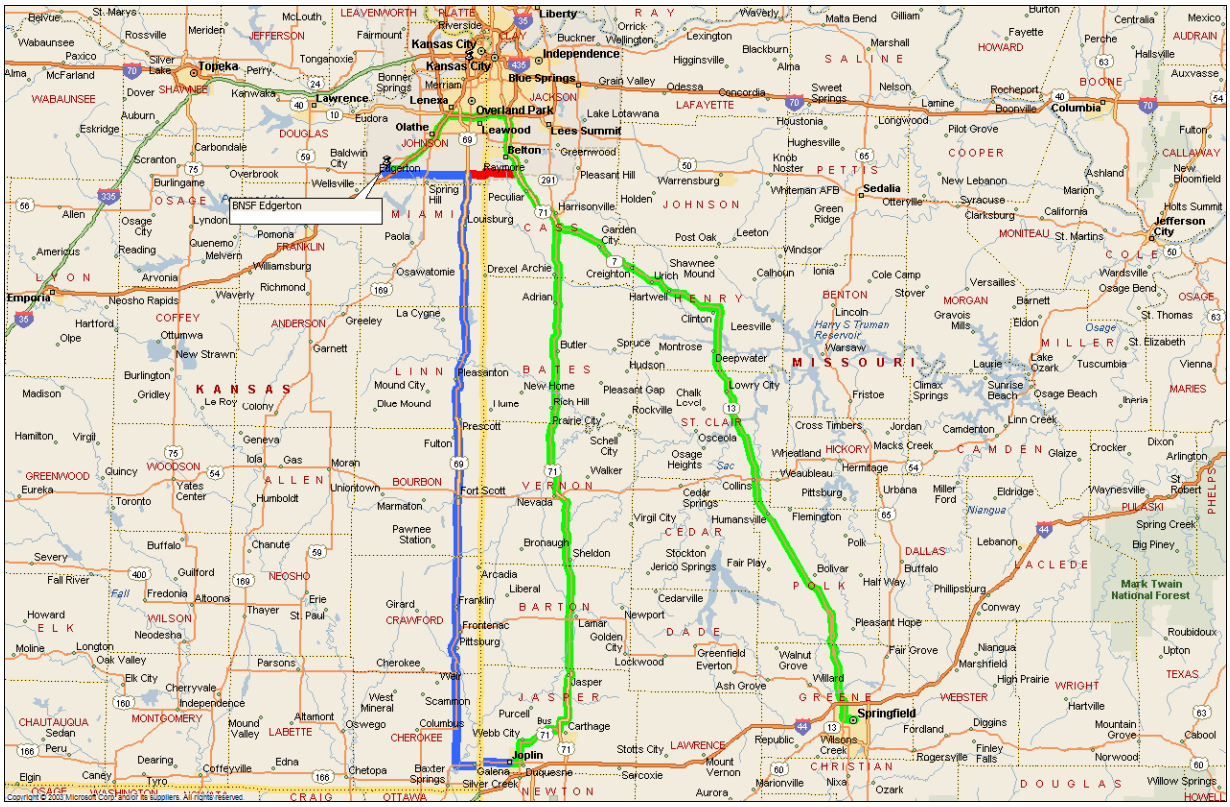
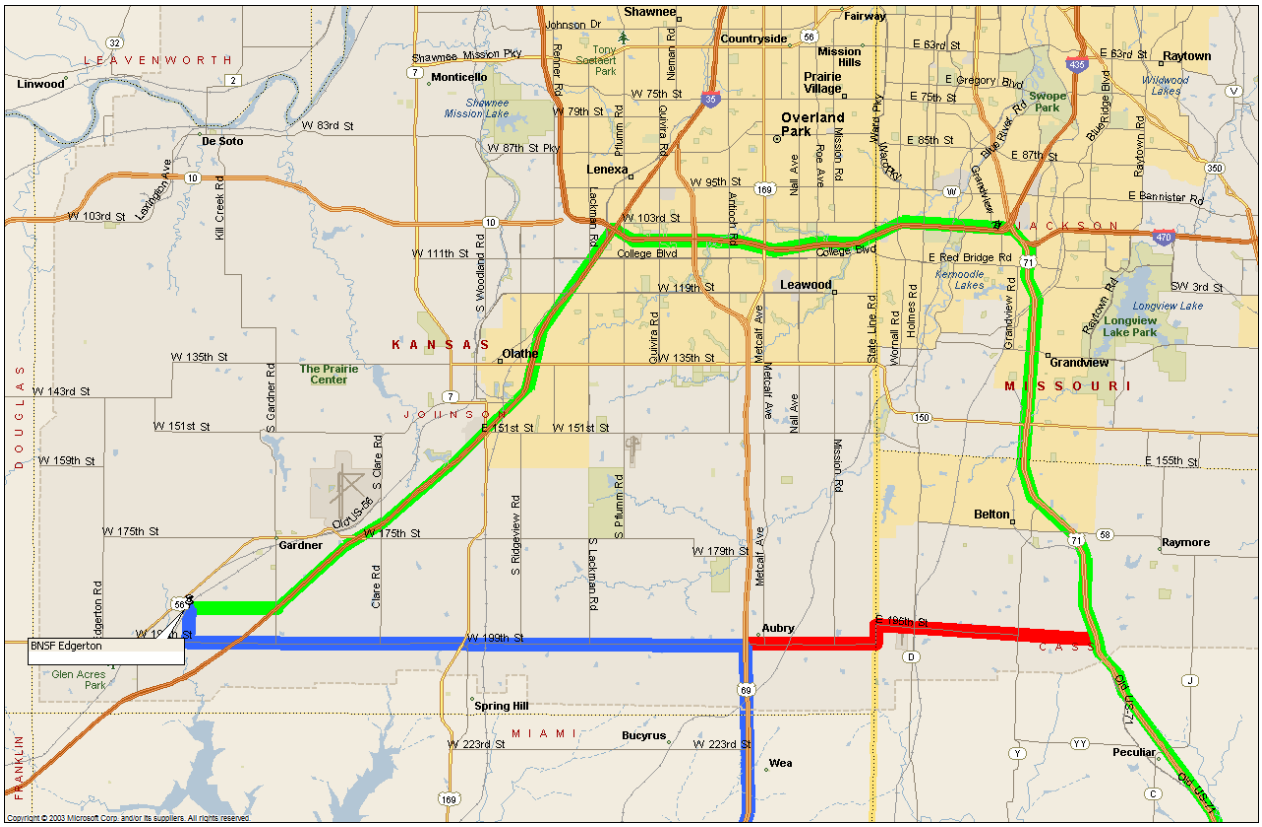


Figure 19 shows the detail for the recommended connector to provide truckers in Missouri with access to the new BNSF Edgerton rail ramp from highways in Missouri.

Figure 19



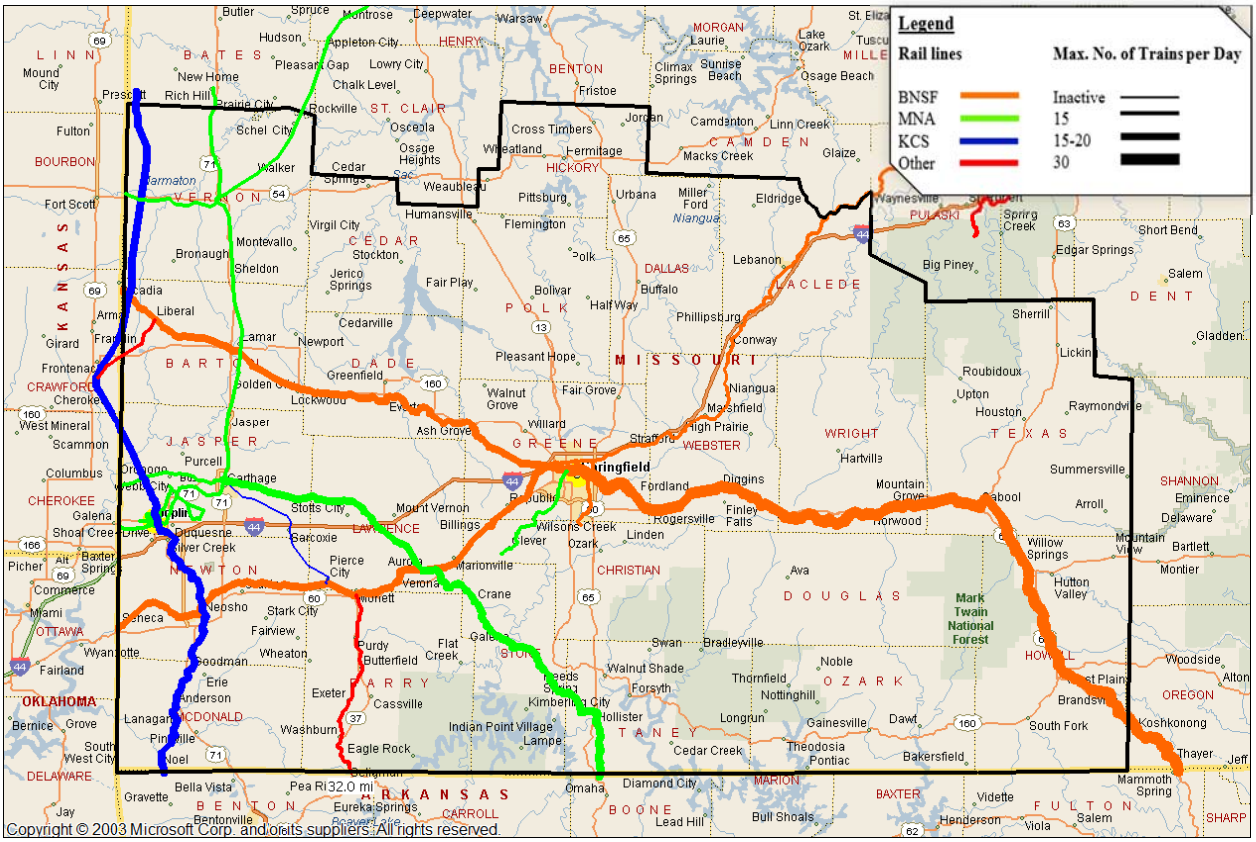
Regional Carload Rail Network

The region is well served by the carload rail system as illustrated below.

BNSF Rail Lines

BNSF is the major Class I carrier in the region with Springfield being the junction of main lines arriving from St. Louis and Birmingham/Memphis and then heading to Texas and Kansas City. Springfield is a BNSF division headquarters. The BNSF line from Kansas City to Memphis is the most congested in the region as showed in Figure 20.

Figure 20: Regional Rail Network and Service Levels



KCS Rail Lines

KCS's main line runs north/south through the region serving Kansas City on the north, New Orleans, Texas and Mexico to the south, as well as Joplin. The rail line runs parallel with and on both sides of the border between Missouri and Kansas. The KCS main line also provides direct services into an industrial park in Neosho, Missouri and currently supports manifest-boxcar and hopper cars to users in the industrial park. Intermodal services for users who use the KCS line are currently supported from their current intermodal terminal in Kansas City.

Missouri & Northern Arkansas (MNA) Railroad

The MNA is owned by Genesee and Wyoming, having their main line runs north/south through the region serving the Kansas City to Memphis lane and serves Carthage. In the northern portion of the region, the rail line runs parallel with U.S. Highway 71.

Arkansas & Missouri (AM) Railroad

The AM Railroad is a Class III line operating a 150 mile route from Monett, Missouri to Fort Smith, Arkansas.

FTZ and Carload Rail

None of the companies that were candidates for FTZ implementation use carload rail.

Regional Intermodal Facility

Many interviewees identified the desirability of a regional intermodal facility. Apparently this idea has been addressed previously with the conclusion that the level of regional intermodal activity is not sufficient to justify the development of such facility.

For reference, previous experience has shown that necessary prerequisites for a successful development include:

- A robust market and marketing plan. The minimum volume required depends upon the rail carrier. Generally the smaller the carrier, the smaller the minimum required. Marysville, Ohio was developed with a commitment for 15-20,000 inbound loads annually.

  Identifying a committed anchor customer with volume and credibility with other stakeholders is a critical step as is identifying both inbound and outbound cargo flows.

- A strong local champion. In this kind of circumstance, the local champion may be a private investor or political figure. Similar developments in Minot, North Dakota and Marysville, Ohio required the governors of those states to invest political capital in order to produce successful projects.

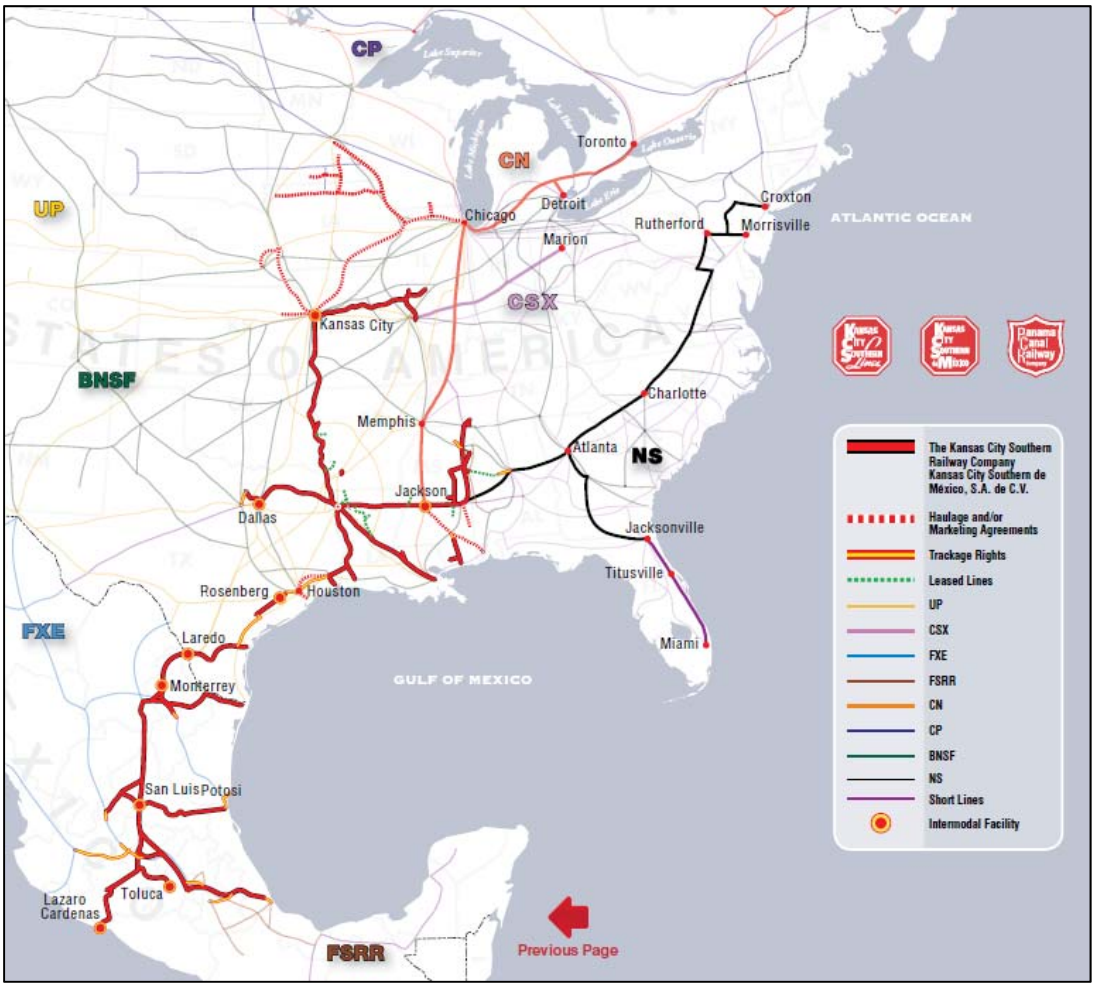
- A willing Class I railroad (UP, BNSF or KCS in this case). The rail carriers are interested in improving their network economics. This means they are not as much interested in shifting cargo from one terminal to another, as they are in developing new profitable traffic.

- Sufficient available capital for terminal investment. Intermodal terminal investments range from $2 million to $100 million. The key idea is to size the terminal properly on land in order to develop it efficiently.

The requirements are necessary but not sufficient. Each new intermodal development has unique local factors.

- Interviews identified the fact that an investor group working to create a private intermodal terminal and industrial park in Southwest Missouri. Services from this facility would be competitive between the study area, Canada, and Mexico. Provided the investor group has a competent business plan, MoDOT should support the creation of the facility and implementation of the new service offering with infrastructure to support the expected new volume of trucks arriving or departing this proposed facility.

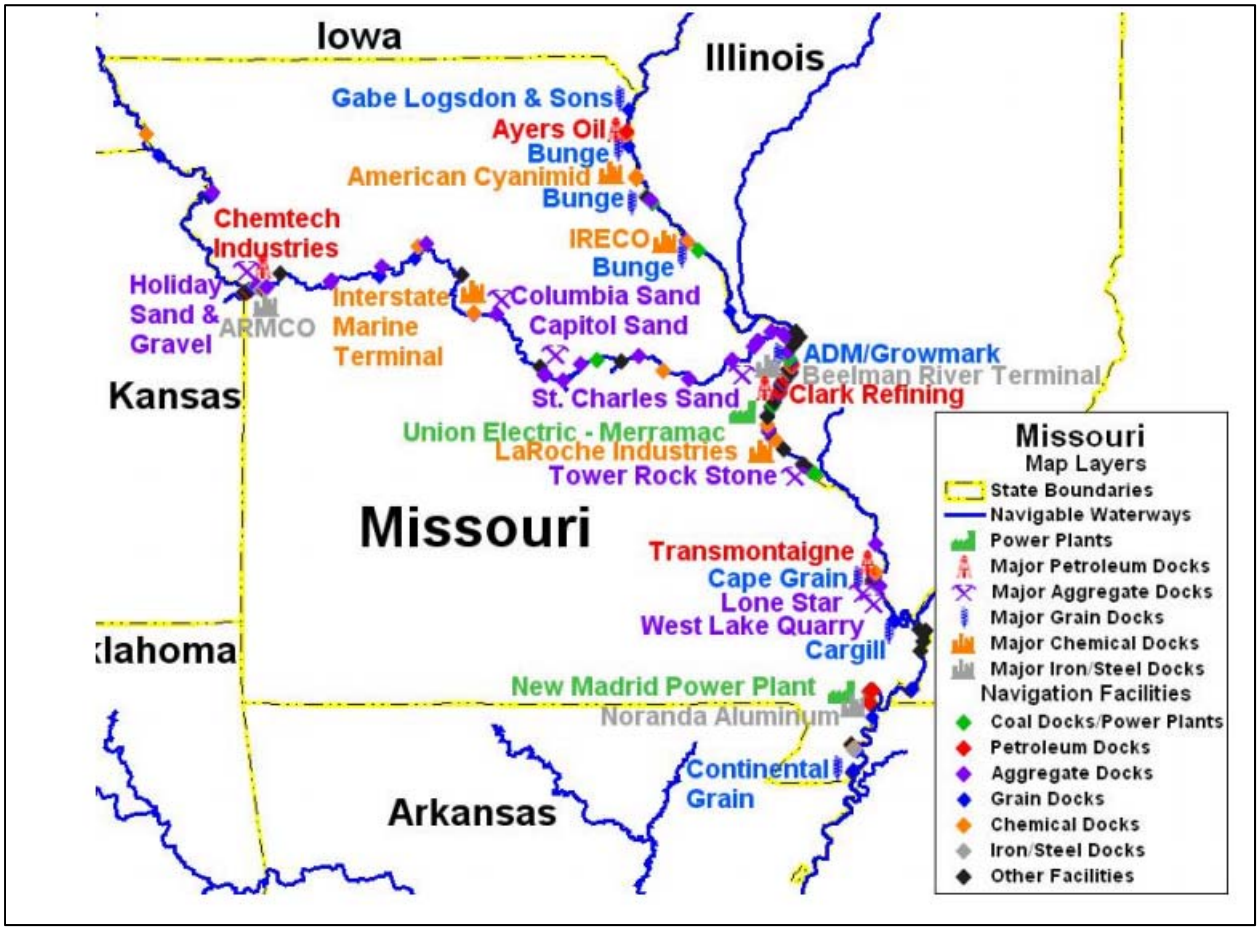
Figure 21: KCS Intermodal Franchise and Strategic Partners



Waterway Network

The region's access to Missouri's inland waterway system is via the Missouri River at Jefferson City, approximately 120 miles north or the Mississippi River at Memphis, approximately 230 miles southeast as illustrated in Figure 22 below. The predominate international focus of Missouri's inland waterway transportation system is moving grain to New Orleans.

Figure 22: Missouri Inland Waterway Business



In addition shippers in Southwest Missouri have the option to reach the Lower Mississippi inland waterway system from the Arkansas or White Rivers in Oklahoma and Arkansas.

FTZ and Inland Waterways

None of the companies that were candidates for FTZ implementation uses inland waterways.

MAP-21

This report should inform and its recommendations be included in the state freight plan required by The Federal Moving Ahead for Progress in the 21st Century Act (MAP-21), which was signed into law on July 6, 2012. MAP-21 is the first long-term highway authorization enacted since 2005. In this context, a key requirement is that an unfunded state freight plan is required to be completed to qualify for highway freight projects enjoying an increased share of Federal funding.

The plan needs to include at a minimum, the following elements:

- An identification of significant freight system trends, needs and issues with respect to the State;
- A description of the freight policies, strategies and performance measures that will guide the freight-related transportation investment decisions of the State;
- A description of how the plan will improve the ability of the State to meet the national freight goals established under section 167 of title 23 in the U.S. Code;
- Evidence of consideration of innovative technologies and operational strategies, including intelligent transportation systems, that improve the safety and efficiency of freight movement;
- In the case of routes on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment and timber vehicles) is projected to substantially deteriorate the condition of roadways, a description of improvements that may be required to reduce or impede the deterioration and
- An inventory of facilities with freight mobility issues, such as truck bottlenecks, within the State, and a description of the strategies the State is employing to address those freight mobility issues.

Intermodal Rail Service

There are five Class I rail carriers that operate and serve the Southwest Missouri market. Each of these has intermodal terminals in the region but not necessarily in Southwest Missouri. Therefore, each supply chain is constructed based on the most advantageous use of the rail carrier's network or based on the choice between economic shipping costs and predictable arrival of goods in Southwest Missouri. Intermodal rail service is the preferred choice for moving international goods loaded into TEU or FEU containers from the ocean port to an inland point where the goods are transferred to a truck for final delivery or drayage to the customers/receivers dock.

Most of the FTZ qualified companies interviewed have identified their use of rail intermodal services provided in St. Louis or Kansas City as critical to their operations. This service is provided by the large Class I railroads that serve the region; BNSF, UP, NS, CSX and KCS.

Table 1 presents typical intermodal terminal to terminal transit times. Intermodal departures from major cities, such as St. Louis or Kansas City are typically scheduled in the late afternoon or evening. Service levels are generally second day service to the East Coast and Southeast U.S. Third morning service is available to California.

Table 1: Intermodal Service

RR –Regional Terminal City	Metro	Transit Time (Hours)
BNSF Kansas City	Chicago	25-39
	Phoenix	54-70
	Los Angeles	57-71
	Stockton	66-82
NS Kansas City	Atlanta	44
	New York	44
KCS Kansas City	Dallas	113
	Lazaro Cardenas	187
BNSF St. Louis	Los Angeles	114
	Stockton	134-158
CSX St Louis	New York	43
	Worcester	54
	Montreal	109
NS St. Louis	Savannah	50
	Harrisburg	52
	Miami	107

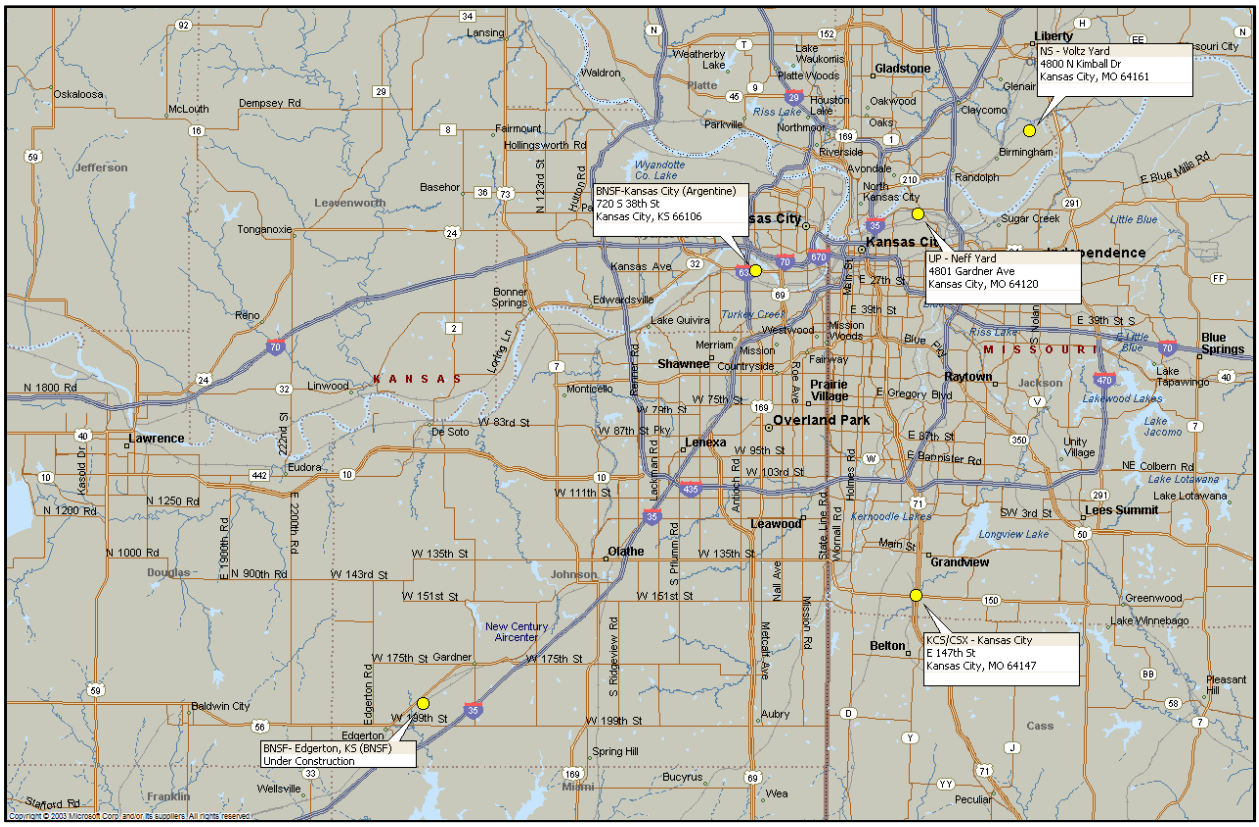
This table illustrates that intermodal service is not ubiquitous. In order to compete with motor carriers direct or dedicated train service is provided between specific city pairs, which differ from railroad to railroad.

Pacific Services

International containerized cargo moving between the study area and East Asia, Australia or the West Coast of South America will typically use the San Pedro Bay ports in California. Except in the extreme eastern portion of the study area, access to those ports would typically be via the BNSF or UP Intermodal Terminals at Kansas City.

These facilities as well as those of the KCS and NS are identified in Figure 23.

Figure 23: Kansas City Area Intermodal Rail Terminals



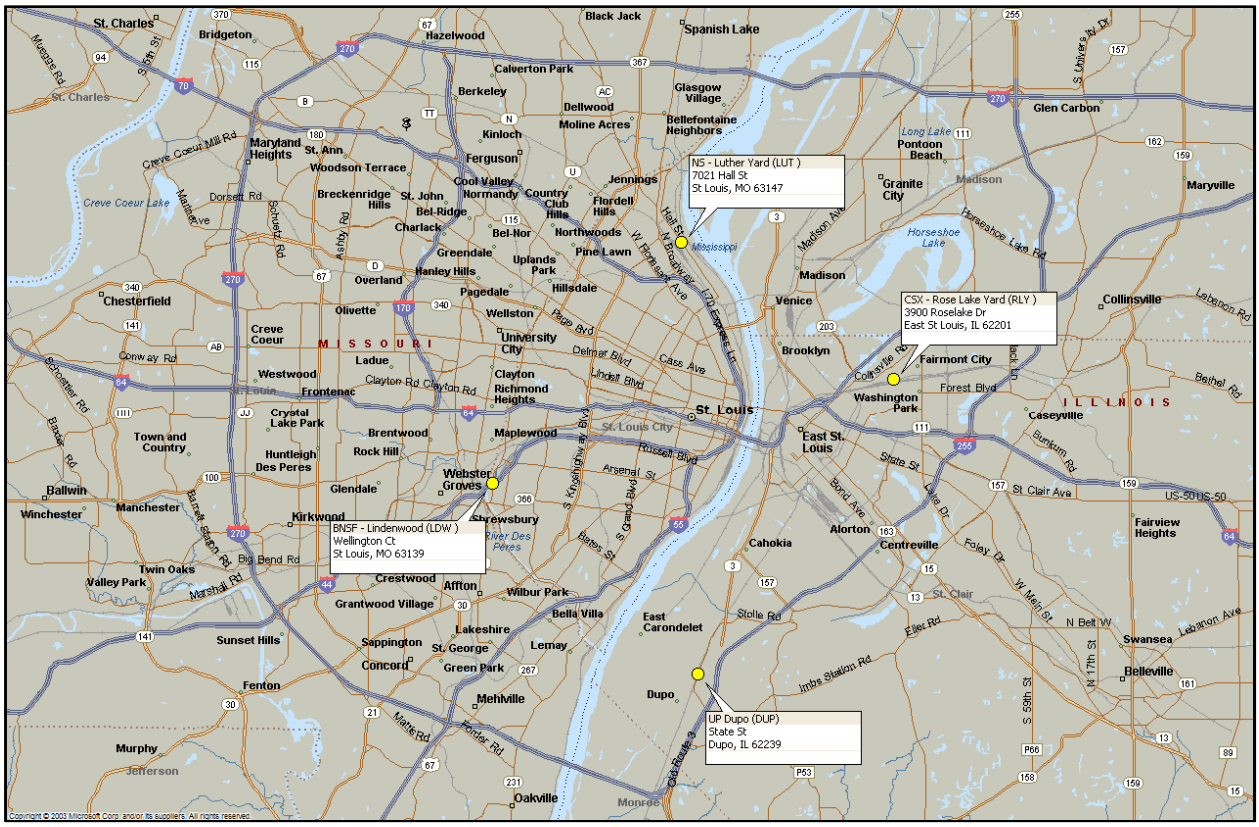
Service to Mexico or Canada

Cargo moving to Mexico would likely be lifted at the KCS intermodal terminal in Kansas City or a UP terminal in Kansas City or St. Louis. Cargo moving to Canada could be loaded at any Kansas City or St. Louis intermodal facilities and would typically move via Chicago.

Atlantic and Caribbean Service

International containerized cargo moving between the study area and Europe, Middle East, India, Caribbean or the East Coast of South America would likely use CSX or NS in East St. Louis, Missouri to access ports on the East or Gulf Coast of the U.S. These facilities as well as those of the UP and BNSF are identified in the following Figure 24. Shippers in the western portion of the study region may use NS in Kansas City to reach these points.

Figure 24: St. Louis Area Intermodal Rail Terminals



As illustrated in Figure 2: Radius for a driver beginning and ending his day in Springfield in Table 2, motor carriers can serve any of these facilities with about eight hours of driving time, which is within the hours of service rules that permit 11 hours of driving in a 14 hour work day.

Table 2: Distance and Drive Time between Springfield and Intermodal Rail Facilities

	Metro	Distance (Miles)	Truck Time (Hours)
CSXI - Rose Lake Yard (RLY)	St. Louis	221.8	4:03
BNSF - Lindenwood (LDW)	St. Louis	210	3:46
NS - Luther Yard (LUT)	E. St. Louis	221.4	4:02
UP - Dupo (DPO)	E. St. Louis	218	3:53
BNSF - Argentine (ARG)	Kansas City	176	3:54
UP - NEFF YARD (NEF)	Kansas City	172.3	3:54
KCS - CenterPoint-KCS Intermodal Center (CTR)	Kansas City	150.3	3:26
NS - Voltz Yard (VOL)	Kansas City	176	4:00
BNSF - Edgerton (under construction)	Kansas City	186	4:11

The following Table 3 presents the same information for Joplin based motor carriers and supports the same conclusion regarding reaching the intermodal facilities in a legal driver day. It also illustrates that the margin for congestion or other difficulty is much narrower for operations between Joplin and St. Louis than those between Joplin and Kansas City.

Table 3: Distance and Drive Time between Joplin and Intermodal Rail Facilities

RR –Terminal	Metro	Distance (Miles)	Truck Time (Hours)
CSXI - Rose Lake Yard (RLY)	St. Louis	289.8	5:06
BNSF - Lindenwood (LDW)	St. Louis	280	4:51
NS - Luther Yard (LUT)	E. St. Louis	290.4	5:06
UP - Dupo (DPO)	E. St. Louis	289	5:00
BNSF - Argentine (ARG)	Kansas City	155	3:21
UP - NEFF YARD (NEF)	Kansas City	161.6	3:30
KCS - CenterPoint-KCS Intermodal Center (CTR)	Kansas City	139	3:02
NS - Voltz Yard (VOL)	Kansas City	167	3:44
BNSF - Edgerton (under construction)	Kansas City	145	3:07

Moving Forward; Capitalizing on the FTZ Opportunities in Southwest Missouri

Creating an Educational and Effective FTZ Marketing Campaign

Managing change in the today's global trade environment requires vision and knowledge. Additionally, it can entail burdensome research in order to successfully follow the trends and drivers of how, where and why trade moves between regions and countries. Trade policies, trade agreements, changes in administrations and sourcing all impact how and where goods move, as well as how countries and regions compete. Discerning how these changes are impacting local economies is critical if a region wants to grow and remain competitive. However, there are also intangibles that must accompany economic growth and support trade, one key consideration that always fosters the growth of trade in a region or economy is the element of predictability.

Predictability is paramount in global supply chain execution. Therefore, locations or regions that fulfill this promise to importers, exporters, distributors, logistics service providers, FTZ users or operators will remain as a top tier location for expanding global trade. Southwest Missouri is home to a significant number of manufacturing and distribution companies. In order for the region to remain competitive and to continue to capture new manufacturing and distribution companies, it will be critical to retain its "edge" in fostering the growth of trade and economic development in Southwest Missouri. FTZ No. 225 must provide services and deliverables to the existing and prospective communities that are tailored to be "absolutely reliable." The global carrier, Maersk Line suggested this in their recent marketing message to users; "It's predictable. It's boring. And it's right on time." The marketing, outreach, sales and economic development agenda's across the 23 counties must be consistent, predictable and all focused on making the region of Southwest Missouri the most competitive region for manufacturing and distribution in the Midwest. For the Grantee and staff of FTZ No. 225, it is critical to:

Know the Market

What this means to the Grantee and Staff of FTZ No. 225 is the need to critically observe and react to market conditions that change the profile of users and operators in the region, which may positively or negatively impact overall regional FTZ transactions. These trends and market events also provide an opportunity for the Springfield FTZ Grantee to direct its marketing and sales efforts specifically on those sectors where vertical development and new jobs will be expanding. By observing trends and leveraging successes within specific sectors, the growth of the Springfield FTZ can be sustained and expanded to become a driving force for jobs creation in the region while having a positive impact on the regions overall competitive standing. Logistics, regulations, sourcing and labor conditions all have a role in the

competitiveness of the Southwest Missouri region, knowing the market and keeping abreast of market changes and demands is critical.

As new infrastructure is added in the region, including the promise of enhanced intermodal capacity and services of two major rail carriers, global sourcing or infrastructure changes impacting cargo routing, will be an even more critical need for the Springfield FTZ Grantee to understand. The Grantee will need to monitor trends that produce a competitive advantage or disadvantage for existing companies and key prospects. Southwest Missouri competes with companies in St. Louis, Kansas City, Chicago and Memphis, yet companies in Southwest Missouri also rely on rail and trucking services which extend into FTZ No. 225 from these same markets. Knowing the market in this context means that changes in capacity or infrastructure at these rail terminals will impact users in Southwest Missouri.

Therefore, the Grantee must be active with the state and each local economic development entity impacted by changes in infrastructure.

Know the Competition

The prospect of a new intermodal hub in Southwest Missouri creates a new competitive standing for companies in the region, but it also changes the approach of the marketing efforts. If/when the new rail terminal is formally announced, it will represent a new "corridor" of trade for the Grantee to compete for goods moving into the Midwest. Most of the current importers have arrivals from the gateway ports on the eastern or western seaboard. This trade is mostly west-east or east-west in flow, with rail carrier and trucking firms fulfilling the delivery of goods to companies in Southwest Missouri. The new intermodal terminal will represent a north-south corridor in support of a new sector of international trade entering the Midwest markets. These new trade lanes require new information, new marketing techniques and require new areas of expertise and knowledge if the region is to make the most of this opportunity by being pro-active and competitive.

Knowing and understanding the changes in competition will position the management and staff of the Springfield FTZ No. 225 to properly align and market the elements that can be controlled and leveraged as identified benefits to expand existing or new business opportunities in Southwest Missouri. While threats always exist to business growth, having a strategy and management system in place that identifies the areas of growth in terms of industry sectors and trade lanes provides the highest opportunity for expanding the reach and utilization of the Zone in Southwest Missouri.

Remain Current on Compliance

This recommendation is provided to reinforce the need to keep FTZ compliance as a critical area of focus for all users. The new Magnet Site emerging in the Neosho, Missouri region within FTZ No. 225 will require additional training and compliance activity by the Grantee. As the Zone expands and new companies are added, the Grantee must be prepared to support companies with compliance training which demonstrates and further solidifies its priority from a Zone and market standpoint. Compliance training must also extend to new employees who come to the Southwest Missouri labor market through the expansion of existing businesses or through the relocation of other businesses into the region. Knowing which companies are involved in internal expansion and which companies are relocating to the market is critical because it provides an excellent opportunity for the staff and management of Springfield FTZ No. 225 to increase the overall market competitiveness, offer FTZ benefits to prospective companies and provide growth in business and job opportunities for the residents within the region. A cooperative approach to economic development in the region will be essential. FTZ No. 225 representatives must be able to interact with the staff of companies who are expanding locally, not just in Southwest Missouri but at their corporate decision process levels, at the site selection meetings or local agency events, the representatives can present, market and explain the benefits of the FTZ program to prospect which will allow the FTZ project and business climate to expand within the region.

Understand the New Opportunities and Apply Consistent Long-term Marketing Strategy

This recommendation is focused on the aggressive development of a sales and marketing strategy that will add to the growth of FTZ No. 225. By targeting industry sectors where users or operators already have FTZ activities in Southwest Missouri; Zone management can use specific evidence of successes to sell the Zone benefits to other "verticals" in the same industry sectors. Vertical sales is focused on taking the experiences and benefits that one user or operator in a specific industry sector, such as appliance manufacturing, has utilized and identifying a similar company within the same industry sector; then presenting the Zone "story" to those prospects either in Missouri or at their headquarters.

This leads to the second half of the recommendation and that is "applying consistent long-term marketing strategy to these new opportunities." Springfield FTZ No. 225 must commit long-term marketing implementation dollars to this effort. Ongoing studies within the FTZ industry indicate that within those markets where Zones have applied consistent dollars to their marketing efforts, a higher level of Zone users have been utilized over other similar projects. Examples of this are as follows:

- Los Angeles FTZ No. 202 versus Long Beach FTZ No. 50: FTZ No. 202 has grown over 20% annually in terms of new users, fees to the grantee and number of sites. FTZ No. 50 has

maintained about the same level of activated users as when it was first approved in the 1970s. FTZ No. 202 spends $80,000-$150,000 per year on Zone marketing, while FTZ No. 50 spends less than $10,000 per year.

- Alliance TX FTZ No. 196 spends close to the same levels of marketing dollars per year (approximately $100,000+-) and is the largest General-Purpose Zone by value in the U.S. By contrast, the Dallas-based FTZ No. 168 spends less than $5,000 per year and has actually shrunk in terms of activated users over the last 5-10 years.
- Other examples include two Zones in Broward County, Florida and in Central Valley and Oakland, California. The dollars committed by one Zone in the same gateway market almost always results in more revenues for the Zone Grantee, more users, new employment opportunities and economic development success for the communities in which they are located.
- In the Phoenix gateway, a brand new Zone with over $100,000 annually allocated to marketing has landed 4 million square feet of newly activating Zone users; these are from green field developments. Whereas, the Phoenix Zone with no marketing budget has only added one million square feet and that is after the competing Zone with the budget was in existence for over 18 months.

There are very distinct industry sectors manufacturing in Mexico which are expected to continue expanding manufacturing and these industries shipments will soon be arriving by rail to Southwest Missouri. Based on this information, a sales and marketing "message" for FTZ No. 225 must capture "success stories" which are developed specific to each industry sector and include specific competitive marketing messages developed by the Zone staff. As new manufacturers arrive in Mexico, these "patterns" of opportunity based on industry sector or specific product must be fully explored, exploited and a corresponding message developed reflecting the benefits and enhancements available with a Zone operation. This will help position companies in Southwest Missouri to capture new opportunities for manufacturing and distribution supported by this new corridor of goods arriving from Mexico.

The addition of a full time marketing and development person for the Zone, active in the NAFTZ should be considered in order to maintain the momentum started by this project. When hired, this person should have direct, hands-on marketing training specific to FTZ benefits and incentives. IMSW is available to assist in this training under separate contract to provide training in-person with participation in real prospective company meetings, discussions, communications and conference calls. This will include instruction regarding how to utilize the FTZ Calculator tool and analyzing the data to provide prospective companies with a real snapshot of the costs/benefits of an FTZ on their operations.

Summary Recommendations for Marketing FTZ No 225:

- Increase marketing, business development efforts for FTZ No. 225 and add a fulltime marketing, business development employee as the FTZ project grows in order to continue expanding the efforts of the study.
- Interact with all local economic development entities to identify new FTZ prospects and present strategies to move current prospects to apply for FTZ designation.
- In order to separate the FTZ project from the Airport operation, develop a standalone FTZ No. 225 website as well as marketing collateral including letterhead, business cards, brochures, etc. This will allow the 23 counties and the communities local economic development entities access to the following information:
    - Web-based training and education resources for FAQ (frequently asked questions) on the web about FTZ.
    - A Data input sheet on the FTZ website so that prospects and interested parties can identify the data elements and details required to submit electronically to FTZ No. 225 for future evaluation.
    - Pictures of the FTZ staff with direct links to contact and information-future chat capability.
    - An overview of the FTZ No. 225.
    - Create a library of supporting documents and reference materials for prospects and users which is hosted on the FTZ website, i.e., presentations, collateral materials, education documents, etc.
    - Include links to websites such as the NAFTZ, FTZ Board, local CBP office and any other important agencies.
- Utilize the FTZ Calculator license to support the opportunity to identify prospects and demonstrate the value of the FTZ to companies who are engaged in international trade and logistics.
- Coordinate with Missouri State Economic Development to identify new Zone users in Southwest Missouri and new industrial park developments, Magnet Sites and new infrastructure occurring within Southwest Missouri that will foster new jobs creation and retention.
- Dedicate marketing to each of the economic development entities within the 23 counties served by FTZ No. 225; host individual educational and marketing seminars in conjunction with these entities for local business and prospect development.

- Develop a process for handling FTZ lead prospects to ensure that there is a timely and informative response to each contact. For companies that are interested but may not yet qualify, establish a protocol for managing follow-ups in a time appropriate manner.
- Establish a calendar of local, regional and trade events to foster FTZ No. 225 growth and to ensure that staff is engaged in best practices as well as current on global logistics.

Conclusions

In the broader context, this started as a project to identify FTZ prospects, their potential impact on jobs creation and infrastructure development in support of international goods movements. In the final analysis, the project is really focused on how to utilize the FTZ program as a catalyst for economic development in Southwest Missouri. Used to the full extent of the program and marketed successfully to existing companies, as presented in this project review, as a tool for recruiting and retaining business in the region. The FTZ and this project will be best measured in the number of jobs created also the resulting multiplier effect in Southwest Missouri.

Manufacturing is making a "comeback" in the U.S. and the FTZ No. 225 staff must be aggressive in portraying the Southwest Missouri region as a competitive region, a location where businesses can find labor, robust infrastructure and predictable logistics. The automotive industry is also recovering in the U.S. and with a "multiplier effect" of four times, i.e., four outside/indirect jobs created for each direct job created in the industry. This is a leading target industry for marketing, economic development efforts, as it already uses and embraces the FTZ program. "*The automotive cluster's ability to scale up employment is better than any other sector in South Carolina, in other words, employment multipliers in the automotive cluster are higher than in any other sector in the state. Of the industry classifications with the highest employment multipliers, the automotive industry represents eight of the top ten, including the top four." "These multipliers are more than 1.5 times higher than the industry average in South Carolina."* (Moore School of Business, The Economic Impact of South Carolina's Automotive Cluster, 2011).

Thus, the conclusion for this report is that the FTZ No. 225 must be the leading agency for economic development and industry recruiting in the region. Marketing, alignment of economic development messages and activities within the State; along with active participation in global recruiting of manufacturing are the key objectives and recommendations.

The success and future growth of the FTZ program in Southwest Missouri remains directly linked to the efforts to market, sell, develop and engage with prospects, as identified in this report, as well as recruiting to specific sectors of business to Southwest Missouri that utilize the FTZ as part of their overall competitive global manufacturing and distribution strategy. This marketing effort will require training a

full time marketing staff person budgeted for the Springfield FTZ and as a means to manage the FTZ in a separate “bucket’ from the airport. In many cases during the interviews conducted over the course of this study when the FTZ Grantee was identified as operating at Springfield-Branson National Airport, there was push back that the company did not have any air cargo in their logistics and that they did not want to operate at the airport. Misconceptions, right or wrong, can only be managed with a direct, focused and effective marketing effort by the Grantee in partnership with each individual economic development agency.

Alignment of efforts within the State of Missouri to capture new investments and industrial projects can also be accomplished by a focus on the new EB5 Visa provisions which supports investment by foreign nationals in projects within the U.S. that can produce new jobs through those new investments.

Getting to a place where Missouri and Southwest Missouri, leads the Midwest region in economic growth will not only create new industry clusters and jobs but will also result in creating additional requirements for an infrastructure system which was deemed satisfactory under the current conditions as discussed within this report. While MoDOT is in the business of building, maintaining the highway and road infrastructure in Southwest Missouri; in reality the network of roads and highways are the supporting cast for economic growth. This oversimplification however, resonates with users who strongly supported the infrastructure “as is” in Southwest Missouri. Senior managers at Wal-Mart years ago stated publically that their core business was logistics and if they did that well, the stores would flourish. In a like manner, Fred Smith, the founder of Federal Express identified their core business as managing information. If managed well, the packages and airplanes would arrive on time. These visionaries predicted success t through non-core business practices and competencies. MoDOT already has a very significant and active role in economic development. The infrastructure identified and the efforts supported by the interviews conducted during the course of this project suggest the region is positioned for new growth driven by the FTZ marketing initiative.

Project Task Summary

This project consisted of these four primary tasks. The Tasks requirements are outlined below along with the summary of actions, findings and deliverables are provided.

Task 1: *Identify characteristics for business in an FTZ that could see benefit in FTZ status. The selected team will work with MoDOT and the project partners to develop the criteria used to identify the business that might be interested in the FTZ status.*

- IMSW developed a "profile" to apply to companies in the 23 county region which was based on their import volumes (in ocean containers for a specific timeframe) and input from MERIC data files on employers in the region. Additional input was received from local economic development stakeholders who recommended companies that were to be considered as prospects for FTZ based on the local knowledge of their operations.
- IMSW produced and created a License for the Grantee for FTZ No. 225 to utilize in order to determine future interests and to qualify the cost-benefit returns to companies considering Application to the Zone program in Southwest Missouri.
- IMSW produced a document or "white paper" for use as a training and economic development support for prospects. This "leave behind" document contains highlights of the FTZ program, benefits and contacts at the Grantee's office.
- IMSW, included in this report a roster of qualified prospects for FTZ in the future based on initial response, stated interest or agreement to consider the FTZ option as part of a future business strategy.

Task 2: *Identify businesses in 23 counties which may apply for and be granted FTZ subarea status under Springfield FTZ using criteria developed in Task 1 and conducting interviews with companies.*

- IMSW created a set of interview questions to determine the interest of companies in Southwest Missouri who would benefit by using the FTZ as part of their global supply chain strategy.
- These interview questions are the elements used by IMSW and in the future, by the Grantee to evaluate prospects return on investment in the FTZ program. Using the FTZ Calculator, the prospect is able to evaluate the timing, costs, returns, savings and supply chain benefits that would accrue using the FTZ program as part of their overall business strategy.

- IMSW also, in response to MODOT, created a second set of interview questions that provided an opportunity for feedback and input on infrastructure, roads and highways that impede international freight flow.

Logistics Focus for Interviews for MO DOT FTZ Prospects

- What are the most common transportation obstacles/bottlenecks or challenges in the region?
- If you could have one improvement in Missouri's infrastructure-including highways or streets that would help your supply chain, what improvement would that be?
    - What rail, intermodal or other logistics services or transloading services should be added to the logistics assets in the region to make Missouri more competitive?
- If you use intermodal containers for inbound or outbound shipments, where do you access these from the rail terminals and how much additional costs are added to your supply chain as a result of the distance from your facility?
    - If you do not use intermodal containers for your inbound or outbound shipments, what are the reasons that you do not use containers for shipments to and from your facilities?
    - Empty container availability or where is the CY that supports shippers in the region?
- What is the frequency of shipments into and out of your facility?
    - Containerized or intermodal shipments.
    - Truck or less than truckload shipments.
    - Air or small package/express shipments.
- What additional benefits would be provided to your supply chain if the Springfield Airport opened up international flights, would that cargo capacity benefit your logistics in anyway? If so, what new volumes of cargo could be routed into or out of the airfield?

- IMSW identified companies in Southwest Missouri who met the qualification thresholds for FTZ and ascertained from the interviews the issues that must be overcome in order to move forward with an FTZ application. In some cases, companies did not meet the threshold but were included in the prospect list as their growth suggested that within a year or two, the company would meet the thresholds and this represents additional

economic development opportunities for FTZ No 225. In other cases, companies with complex supply chains who would require reconfiguration of their supply chains in order to gain full FTZ benefits were also included on the prospect roster, although these companies may take time to re-align their business strategies in order to fully gain the projected FTZ advantages.

The following roster represents the entirety of companies considered as prospects at the beginning of the project.

Name	City
3M	Springfield
Able Manufacturing & Assembly Llc	Joplin
Agile Manufacturing, Inc.	Anderson
Arlee Home Fashions	Pomona
Bass Pro Shops	Springfield
Cardinal Scale Manufacturing Company	Webb City
Carlisle Power Transmission Products Inc	Springfield
Caterpillar	Pomona
CNH Reman	Springfield
Damar Worldwide 4 Llc	Aurora
Design Hardware	Rogersville
Digital Monitoring Products	Springfield
Direct Resources International	Rogersville
Diversified Plastics	Nixa
Efco/Pella	Monett
Fag Bearings Corporation	Joplin
Fiocchi Of America Inc	Ozark
Fireworks Over America	Springfield
Flambeau Inc.	Neosho
Food Ingredient Solutions	Springfield
Gamo Usa Corp	Houston
Glanbia Nutritionals (Na) Inc	Springfield
Hale Fireworks Llc	Buffalo
Hale Fireworks Llc	Buffalo
Invensys Controls	Pomona
Jasper Industries	Joplin
John Deer Reman Springfield	Springfield
Johnson Control	
Kraft	
Kuat Innovations	Springfield

La-Z-Boy Midwest	Neosho
Leggett & Platt Inc.	Carthage
Lews/Do-Outdoors	Springfield
Lozier	Joplin
Marisol International Llc	Springfield
Modine Manufacturing Co	Joplin
Northstar Battery Company Llc	Springfield
Omni Reinforcements Llc	Springfield
O'Reilly Automotive Inc	Springfield
Outdoor Leisure Products Inc	Neosho
Precious Moments Company Inc.	Carthage
Premier Turbine	Neosho
Rbc Manufacturing Corporation	Lebanon
Reckitt - Benckiser (French's)	Springfield
Regal-Beloit Corporation	Springfield
Ridewell Corporation	Springfield
Rock-Tenn Company	Joplin
Schaeffler Group	Joplin
Schreiber Foods Inc	Carthage
Siemens Energy Inc	Springfield
Springfield Aluminum	Nixa
SRC Automotive	Springfield
Stamina Products Inc	Springfield
Standard Transportation Services Inc	Joplin
Sunbeam Products Distribution	Neosho
Teters Floral Products Inc	Bolivar
Thorco Industries	Lamar
Trouw Nutrition Usa Llc	Neosho
Tuthill	Springfield
Watts Radiant	Springfield

- Interviews were conducted in person and by telephone throughout the entire course of this project and changes in rosters have been made or amended in the prospect roster until the time this report was published by IMSW.
- During the course of this project, as IMSW interacted with economic development stakeholders in Southwest Missouri, new companies were added to the interview roster, and in some cases, these companies were included in the prospect roster submitted with this report.

Task 3: *Analyze the top tier of these companies product supply chain for opportunities to improve efficiency of the transportation element through improved options to reach international shipping hubs.*

- IMSW and partner in this aspect of the project (Tioga Group) conducted interviews with transportation stakeholders in Southwest Missouri as well as in the region in order to ascertain the "state of the road and highway infrastructure" also to gain insight into users input where infrastructure improvements would improve the flow of domestic and international goods into and out of Southwest Missouri
- IMSW and Tioga identified three road projects that are included in this report that are not on the Statewide Transportation Improvement Program (STIP). One of these submissions is the result of a new rail intermodal development in Kansas. BNSF is relocating their existing intermodal rail terminal to Edgerton, Kansas, and this will result in a change in logistics operations for drayage trucks that deliver or pick up from this new logistics center. IMSW and Tioga identified opportunities to improve access to this new logistics center from the major centers of Joplin/Neosho in the southwest region and from Springfield in the central area of Southwest Missouri.
- On a positive note to the report, during the course of conducting the logistics and FTZ interview questions, very few critical comments were made related to transportation infrastructure in the region. In fact, most users who move goods into and out of Southwest Missouri did not have any "issues" that needed to be included in this report.

Task 4: *Analyze the economic benefit/costs to FTZ region and Missouri for enhancement of the FTZ.*

- The economic benefits and costs related to identifying companies in Southwest Missouri who would use or benefit from the FTZ are just now starting to accrue. The immediate outcome which occurred during the course of this project is that a new "Magnet Site" Application is being developed in Neosho, Missouri, and a company has applied for and anticipates approval of their FTZ Application shortly after this project is completed. These two activities will represent new jobs that will result directly from the FTZ Applications and future new jobs as the Neosho, Missouri industrial site moves from concept to industrial park and in the future there is a prospect for new rail infrastructure to be developed at that location. Two companies in the Neosho, Missouri region are included in the FTZ prospect roster identified in Task 2 in this report.
- Economic development and enhanced marketing will ensure that these positive activities continue and that other companies as they begin to embrace FTZ benefits, will not only

add new jobs, increase area job multipliers but will also-retain companies in Southwest Missouri through the FTZ program.

- The recommendation to enhance the road infrastructure to access the new BNSF intermodal rail terminal in Edgerton, Kansas will result in improved efficiencies for transportation stakeholders in Southwest Missouri, while also improving the flow of international and domestic goods between the new rail terminal and users in Southwest Missouri.

General Sources

Data is from rail websites. Union Pacific regards this information as confidential. (Rail maps and intermodal locations referenced in figures and tables throughout report.)

Universal Cargo Management Services Incoterm Quick Reference Guide – Page 16

Details are available from the Federal Register, which has additional information regarding the suggested structure of State Rail Plan. The information is available at https://www.federalregister.gov/articles/2012/10/15/2012-25261/interim-guidance-on-state-freight-plans-and-state-freight-advisory-committees#h-12

http://www.modot.org/plansandprojects/construction_program/STIP2014-2018/index.htm

Specific Figures/Table Sources

Location information for intermodal terminals is available from several sources including the individual railroads, the Intermodal Association of North America, and Load Match. The Load Match information is available at http://www.loadmatch.com/directory/terminals.cfm?city=KAN Figure 14 and 15 (Pages 23 and 24)

Highways and Motor Carrier Services, Traffic count data is from MoDOT and available at http://www.modot.org/safety/documents/2011_Traffic_SW-District.pdf (Page 28)

http://www.ups.com/maps/results, to obtain the map the local zip code is required, 65801, Figures 3, 4, 9 and 10 (Pages 30, 33 and 34)

http://www.fedex.com/grd/maps/MapResult.do, to obtain the map the local zip code is required, 65801, Figures 5 and 6 (Page 31)

https://www.con-way.com/webapp/servicecenter_app/ServiceCenterInfo/ServiceCenterTransitTimeFull.jsp Figures 7 and 7 (Page 32)

http://bellavistaarkansas.org/bella-vista-bypass.html Figure 10 (Page 35)

Draper, Bill, "I-49 changes not yet reality through Arkansas " The Associated Press. Web. http://www.thetrucker.com/News/Stories/2012/12/13/I-49changesnotyetrealitythroughArkansas.aspx (Page 35)

City of Joplin and MoDOT begin work on Zora and North Main interchange" MODOT News Release, February 15, 2012. (Page 36)

http://www.modot.org/southwest/news_and_information/District8Release.shtml?action=displaySSI&newsId=151280 (Page 36)

http://www.thinksouthwestjohnsoncounty.com/uploads/media/LPKC_Flier_FINAL9.9.11_LR.pdf, Figure 15 (Page 39)

Existing Conditions Report, April 2012, Figure 17, Page 27. The report is available on the web at http://www.modot.org/othertransportation/rail/documents/TechMemo2-ExistingConditionsFINAL04-20-2012.pdf, Figures 16 and 17 (Pages 40 and 41)

The information portrayed was taken from the Missouri State Rail Plan, TECHNICAL MEMORANDUM #2, Figure 20 (Page 44)

The source of the map is KCS interactive intermodal brochure which is available on the web at:http://www.kcsouthern.com/en-us/Services/Documents/2012/Intermodal/Intermodal_Brochure_Interactive.pdf http://outreach.lrh.usace.army.mil/States/MO/graphics/modk99.bmp, Figure 21, (Page 46)

The mileages in the table are approximate and based on highways and speeds compatible with Class 8 truck operation. There are multiple routing choices for shippers in the region. The calculations were made using Microsoft Map Point, Table 2 and 3 (Page 52)