

8 FREIGHT TRANSPORTATION

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For most people, the idea of “transportation” means moving people by airplane, train, or personal vehicles. These activities only tell half the story. Transportation also includes the movement of products such as clothes and furniture as well as raw materials such as plastic, wood, and steel. Trucks, trains, ships and airplanes involved in cargo operations are vital components of the national and regional transportation system.

The benefits of freight transportation to the economy are enormous. Freight transportation increases the value of goods by moving them to locations where they are worth more and encourages competition and production by extending the limits of markets. Efficient, safe, and secure freight transportation helps form the foundation upon which our economic strength rests.

The shift of our economy from a manufacturing base to a broad range of services has many direct and indirect implications for transportation:

- Customers demand more flexible, reliable, timely service.
- Traffic growth is greatest for smaller shipments.
- Demand for traditional, high-volume transportation services will continue to grow but will account for a smaller portion of the industry’s revenues and volume.
- Deregulation of the transportation industry has facilitated the growth in multimodal solutions to improve freight mobility.

Deregulation of the transportation industry over the last twenty-five years has allowed carriers to optimize the transportation system by shifting from an inventory-based “manufacture-to-supply” logistics (“push” logistics) to replenishment-based “manufacture-to-order” logistics (“pull” logistics). “Pull” logistics relies less on expensive inventory and more on accurate information and timely transportation to match supply and demand. This optimization resulted in higher productivity with little or no excess capacity or redundancy. The *Journal of Commerce* estimates that American households have saved an average of \$1,000 annually since 1980 because of reductions in freight logistics costs. This benefit has come at a cost though. The transition has placed tremendous strains on the system in terms of demand and reliability. The USDOT estimates that by 2020 rail and truck freight will increase by 68% and 86%, respectively. These factors, taken as a whole, are creating a window of opportunity for the Texarkana region to develop a multi-modal transportation facility to provide warehousing, load transfer, and logistics combined with a free trade zone.



THE LOCAL FREIGHT SYSTEM

IH 30, US 59 and US 71 carry major inter-regional and inter-continental truck movements, and several trucking companies are located in the Texarkana area. Truck percentage data obtained from AHTD and TxDOT, truck trip records from the external travel survey and a survey of trucking interests in the Texarkana area were used to identify major truck movements and associated problems. There are several inter-modal facilities in the Texarkana MPO study area which include commercial airports, truck terminals, rail yards, pipeline terminals, an Amtrak station, a Greyhound bus terminal, and a public transit center.



The Union Pacific Railroad (UPRR) currently operates a low capacity facility at the downtown Texarkana yard. Evaluation of the development of a major trailer-on-flatcar (TOFC) and container-on-flatcar (COFC) facility is ongoing. Three possible locations for an inter-modal transfer facility have been identified in the Texarkana region.

Efficient, safe, and secure freight transportation can be developed into an economic strength for the Texarkana region. Improvements in the efficiency and reliability of freight transportation have been the engine of prosperity and competitive advantage for many communities. Texarkana has the opportunity to become a principle transportation hub for freight movement by taking advantage of its geographical location, the economic ties across North America, and the existence of four out of five of the major modes of transportation, combined with a local Free Trade Zone.

Improved access to the region's airport and industrial parks is needed to enhance the efficient movement of people and goods throughout the region. Among the inter-modal recommendations in the previous TUTS 2030 Plan (MTP) that are currently under construction are direct connectors from US 59 to IH 30, reconstruction of the IH 30/US 71 interchange, and grade separation structures on SH 245 to facilitate access to the Maxwell Industrial Park and the Texarkana Regional Airport. That MTP also supported the development of an Inter-modal Freight Transfer Facility as a key to continued regional economic development.

Water Transportation

For a number of years, efforts have been ongoing by the Arkansas Red River Commission (ARRC) to obtain funding to construct locks and dams along the Red River to allow for navigation of the Red River to Index, Fulton and Garland City, Arkansas. Bob Tullos, Executive Director of the Arkansas Red River Commission, has been spearheading this effort to bring navigation of the Red River to Miller County. Navigation on the Red River currently exists to Shreveport, Louisiana. It is desirable that navigation of the Red River be extended into Arkansas and to the Texas state line. Extending navigation in the future to the west to Lake Texoma would provide the Dallas and Fort Worth area with an opportunity to have an inland waterway. Mr. Tullos provided the following information on future milestones in the Red River navigation effort:

- February 2009: Revised Draft Report from U.S. Army Corps of Engineers (USACE) submitted to Baylor University for review.
- April 2009: Final Independent Technical Review (ITR) of Revised Draft Report conducted by agency or department of USACE.
- June-July 2009: ITR Certification to answer questions raised by ITR.
- August-October 2009: External Peer Review (EPR) Initiation of Draft Report which is review of documents by an outside group.
- October 2009: Revised Draft Report submitted to HQUSACE (Headquarters, U.S. Army Corps of Engineers).
- October 2009: NEPA public review of Draft Report.
- January 2010: Final Draft Report submitted to HQUSACE.
- March 2010: Chief Engineer of USACE and Civil Works Review Board (a part of USACE) will make a recommendation to construct or not construct the project to build locks and dams for navigation of the Red River into Arkansas. If the recommendation is to construct the project, the project will be sent to the U.S. Congress for project authorization and for appropriation of funds for project construction.

Inter-Modal Facility

On April 1, 1998, the Arkansas State Highway Commission authorized the preparation of an inter-modal transportation study of the existing freight transportation system in Columbia, Hempstead, Howard, Lafayette, Little River, Miller, Nevada and Sevier Counties in Arkansas, Bowie and Cass Counties in Texas, and northern Caddo and Bossier Parishes in Louisiana. In February 2001, the Ark-La-Tex Freight Transportation Study was completed. A summary of the Major Findings section from that study is presented in **Table 8.1**.

On October 21, 2003, during a meeting of the MPO's Freight Transportation Focus Group related to the development of the MTP, representatives of the business community expressed a need for the development of an inter-modal facility in the Texarkana area. On May 26, 2004, a meeting of business representatives was held to further discuss the issue and a decision was made to request that AHTD conduct a detailed study (as was recommended in the 2001 Freight Transportation Study) for establishing an inter-modal facility. The Texarkana Chamber of Commerce and the City of Texarkana, AR each sent a letter to AHTD requesting that such a study be initiated. On July 7, 2004 the Arkansas State Highway Commission approved Minute Order 2004-102 authorizing a study to determine the potential for an inter-modal facility that would enhance freight storage and distribution capabilities for the Texarkana regional area. The detailed study is expected to be completed in 2005.



Source: fhwa.dot.gov/freightplanning

TABLE 8.1
MAJOR FINDINGS FROM SUMMARY REPORT, FEBRUARY, 2001
ARK-LA-TEX FREIGHT TRANSPORTATION STUDY

General Observations

- ✓ The Ark-La-Tex region is strategically located to national marketplaces and to existing Canada/United States/Mexico trade corridors and should be exploited in future industrial recruiting programs.
- ✓ Exporting is now an important component of the Ark-La-Tex economy and could become a catalyst for economic development of the region.
- ✓ The availability of cost effective freight shipping and receiving options could be key to the continued strong performance of the primary manufacturing activities, namely, wood related operations, fabricated metal production, food items and related goods. Providing shipping alternatives that are flexible and affordable will also be important in recruiting new industrial activities.
- ✓ A significant freight transportation asset of the Ark-La-Tex area is the presence of both Class I and Class III railroad service and ready access to the Interstate Highway System. Air freight service is available and there are major natural gas, oil and product pipelines in the area.
- ✓ Respondents to a freight survey conducted for the study area indicated that:
 - General freight and dry bulk are the region's primary type of freight shipments.
 - The most often used mode for shipping and receiving is truck transportation.
 - Most inbound products are obtained locally or from adjacent states while most outbound products are shipped to markets beyond the Ark-La-Tex region.
- ✓ Analysis of the freight survey and a review of major economic activities indicated the likely need for a multi-purpose cargo terminal supported by rail and truck freight modes as well as additional warehousing, freight consolidation and distribution services.
- ✓ A public slackwater harbor on the Red River near the Texarkana area could be a positive addition to the existing freight transportation system. Water transportation is very cost effective when shipping certain types of bulk commodities and river harbors are good locations for basic industries and for import/export shipments.
- ✓ A possible approach in providing enhanced transportation facilities and services and for further industrial growth could be a regional transportation center/manufacturing complex. A regional inter-modal authority, as allowed under Act 690 of 1997, is one option to provide for area freight transportation needs.
- ✓ Research of national shipping and marketing patterns revealed the following trends that may affect future delivery of freight transportation service in the Ark-La-Tex area:
 - Utilization of warehouses as product assembly points that include activities such as adding parts to semi-finished goods, sorting, wrapping and repackaging, and direct product mailing.

- Escalation of internet (e-commerce) retail/wholesale business will require the trucking industry to improve response time.
- Increased use of containerized freight service (inter-modal rail/truck shipments) for both domestic and overseas shipments.
- Greater tendency to outsource product handling to third party specialists.
- An inclination by industry to seek sites where all needed infrastructure and facilities are in place.

Transportation Related Impacts/Benefits

- Lower freight bills, especially for long haul shipments through a combination of rail/water/truck inter-modal services
- Freight loading and unloading efficiencies
- Inventory cost savings

Economic Related Impacts/Benefits

- Jobs, wages, and income from sales
- Increased tax revenues
- Stronger regional economic alliance
- New market areas for regional products
- Catalyst for attracting new business activities

Regional Transportation centers can also help promote growth and development. For example, warehousing and packaging services could be offered to support existing manufacturing activities. Also, export services could be provided to assist shippers in developing foreign markets for their products.

Next Steps/Key Issues

To further assess the possible advantages and disadvantages of a regional freight transportation center for the Ark-La-Tex area the following should be considered.

- ✓ A detailed study by freight logistics/financial experts to verify and refine the results of this study.
- ✓ Identification of feasible sites. The site selection process should be based on traditional location factors with special consideration given to the availability of fiber optics, access to interstate 30 and regional railroad lines, and proximity to the Red River and existing industries.

- ✓ A Master Site Plan showing proposed locations for roads, rail spur lines, utilities, and transportation support facilities (i.e., warehousing, loading docks, transit sheds, truck terminals).
- ✓ A Regional Inter-modal Authority could possibly be organized under Arkansas' Act 690. This Act has provisions for funding, construction and operation of inter-modal freight facilities.
- ✓ A targeted industrial recruitment program could be advantageous to identifying likely industry that could benefit from a regional transportation center.
- ✓ Federal, state and local incentives programs to help relocate and recruit industrial and distribution firms should be identified.
- ✓ A detailed feasibility study of container services should be conducted. The study should take into consideration likely usage and cost.
- ✓ A shipping "niche" must be identified. Two possible ventures are export/customs services and freight sorting, labeling and packaging services.
- ✓ Conference/class room facilities for meetings and training should be considered when developing the Master Site Plan. These facilities could be a valuable recruiting tool for industries requiring ongoing instructional programs for their workers.
- ✓ In cooperation with local, regional and state economic development groups, a marketing program which would detail the many advantages that the Ark-La-Tex region has to offer businesses could be beneficial in promoting a regional transportation complex.

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