



The National I-10 Freight Corridor Study

11301 Olympic Blvd., #413, West Los Angeles, CA 90064 * 1-866-4-I-10-FWY * www.i10freightstudy.org

I-10 Study Moves Forward

The National I-10 Freight Corridor Study, which began in October 2001, is moving forward with analysis of multimodal transportation needs and development of a plan for improvements to the Interstate 10 (I-10) Corridor. I-10 extends coast to coast across eight states - California, Arizona, New Mexico, Texas, Louisiana, Mississippi, Alabama, and Florida - and includes 17 major urban areas. It is connected to key international ports - including the nation's largest container and bulk ports - and all of the U.S./Mexico border gateways.

Several study tasks have been completed. These include the identification of existing conditions, analysis of freight movement, identification of environmental and safety issues, gathering and analysis of international and domestic freight data, and a baseline review of current and planned Intelligent Transportation System (ITS) applications.

Meetings for elected and appointed officials and public open houses were held in 14 locations across the project area to help identify existing conditions and needed improvements. Summaries of these meetings appear on pages 4 and 5 of this newsletter.

Study Goals

To provide an efficient and reliable intermodal transportation system, including an improved highway system, for the movement of goods in international and domestic trade; and

To foster the development of multimodal freight transportation facilities.

Next steps in the feasibility study include identification of freight movement issues and development of improvement scenarios. A final report, including a recommended improvement plan, is scheduled for the spring of 2003.

This is the second in a series of three newsletters to be distributed during this project. Both this and the first newsletter may be accessed on the project web site, www.i10freightstudy.org, in the section on Project News.

Other project information and updates are also available on the web site, and a third newsletter will be mailed later this year.

To be added to the mailing list:

- Write: The National I-10 Freight Corridor Study
11301 Olympic Blvd., #413
West Los Angeles, California 90064
- Call: 1-866-4-I-10-FWY
(1-866-441-0399) or
- Log on: www.i10freightstudy.org
and send an e-mail requesting to be added to the mailing list.

El equipo que estudia el Corredor Nacional de la autopista Interestatal 10 (I-10) sigue analizando las necesidades de transportación multimodal y desarrollará un plan para mejorar la autopista I-10. El estudio se inició en octubre del 2001. Varias tareas del estudio han sido completadas. Reuniones con el público fueron conducidas en 14 localidades que traspasa el I-10 para comenzar a identificar condiciones actuales de la autopista y mejoramientos necesarios. Los próximos pasos del estudio incluyen identificar la situación referente a movimientos de carga además de desarrollar un escenario para mejoras en general. Esperamos completar un reporte final, que incluirá una recomendación para un plan, en la primavera del 2003.

Para mas información o para ser incluido en la lista de correspondencia, por favor mande su información a: 11301 Olympic Blvd., #413, West Los Angeles, CA 90064 o llame sin costo al (866) 441-0399. También puede visitar nuestro sitio en el Internet en www.i10freightstudy.org.

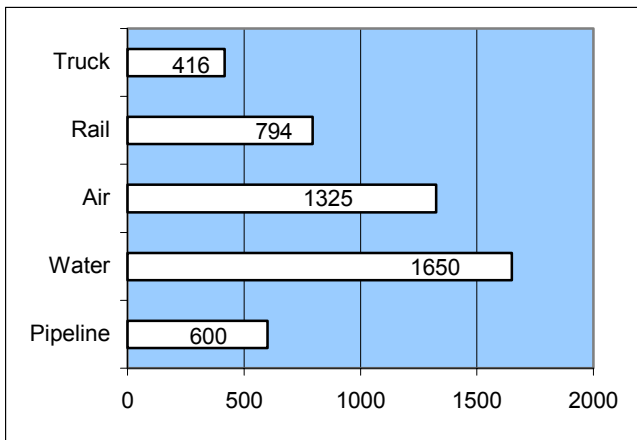
How Does Freight Move?

The decisions on how freight will be shipped is based on various factors. In general, different types of commodities tend to be transported by different modes. Some of the more important factors determining the type of mode selected to ship a given commodity are:

- > Weight and size of the goods
- > Distance goods will travel
- > Time sensitivity
- > Value of the goods

For example, commodities that are heavy, larger, shipped in bulk and/or less expensive tend to use rail while expensive or more time sensitive commodities, like mail or electronics, tend to use air transportation. The type of mode used is also dependent on the distance the cargo must travel. Shipments to and from international points beyond this hemisphere obviously tend to come by sea or air. For goods traveling more than 700 to 800 miles, rail tends to be more cost effective than trucks.

U.S. Average Shipment Distance (miles)



Beyond this broad picture the actual movement of given goods is considerably more complex. Goods can arrive by water and be loaded onto rail. At some point, many goods are loaded onto trucks to be transported to their destination or from their point of origin. There is not one comprehensive system which tracks freight movement in the United States. This study has collected and completed preliminary analysis of information available on the various transportation modes. Merging all the different types of information into an overall picture is a complicated task. The types of issues confronted range from assuring that the assumptions used in the analysis are valid to recognizing that the basic data may have certain biases. As an example, how the value of cargo is determined can change depending on the specific mode. As this study begins the development of recommendations, the data and analyses will be constantly revisited. Thus, some of the specifics, such as the information presented in the chart at the right or elsewhere in this newsletter, could be revised.

Pipelines are not included in the chart to the right, but they do carry significant amounts of tonnage in the U.S. (Only certain products, such as natural gas and crude oil, are suitable for movement via pipelines.) It is not uncommon, particularly in Texas, for a product to be transferred between pipelines and trucks at intermodal facilities.

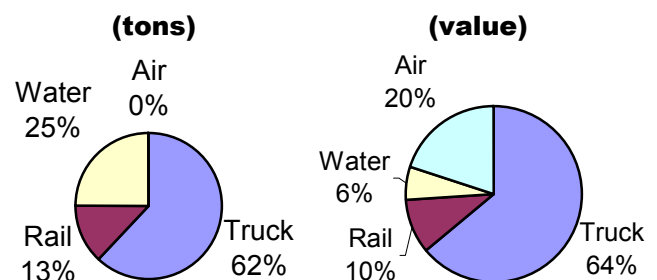
Though less than one percent of the cargo tonnage in the I-10 Corridor is carried by air, this cargo represents 20 percent of all the cargo in terms of value. There are a total of 34 airports that impact the I-10 Corridor with the top air cargo hubs being Los Angeles, Phoenix, Houston, and Miami. Air cargo through Dallas is also the source of freight movement along I-10 with goods generally moving on trucks to reach their final destinations.

While there are 17 ports along I-10, there are another 25 ports that have a direct influence on the I-10 corridor. The I-10 states are home to many of the nation's top bulk commodity and container ports. The percentage of goods moved by water in the I-10 region is substantially greater than the national average (25 percent of tonnage as compared to 4 percent nationally). In addition to ocean-going shipments, the Gulf States (Texas, Louisiana, Mississippi, Alabama, and Florida) use the Gulf Intracoastal Waterway to ship goods domestically, and some of the Gulf States also have an inland water system to ship goods to other regions in a state or the U.S.

Substantial volumes of goods are transported by rail. More than 55 percent of the total volume of the I-10 rail freight movements stay within the eight I-10 states. But, rail is an important link to states outside the I-10 region and particularly important in NAFTA trade. Rail is becoming increasingly more intermodal. As an example, goods may arrive at a port by container, the container is then loaded on rail, with a truck transporting the container from rail to the final destination. Or, the cargo may be separated at the rail facilities and loaded onto various trucks for transport.

Trucks are not only the work horses but also the glue of the freight movement system. A given product might be carried on numerous trucks as it moves from an origin point to its ultimate destination. Sooner or later, most freight is loaded onto a truck. As discussed, they carry goods from, to or between pipelines, airports, ports, and rail facilities. But,

Modal Split for I-10 Freight Movements (Domestic Flows In and Through I-10)



How Does Freight Move? (continued)

trucks are also used to transport freight directly from a manufacturing plant to a distribution center and then to a store. Because of their primary role in the overall movement of goods, trucks are the focus of much of The National I-10 Freight Corridor study.

Existing traffic volumes along I-10 vary considerably as does the percentage of trucks in terms of the overall traffic volume. While trucks account for a smaller percentage of the overall traffic in urban areas, the total number of trucks can still be quite high in the major I-10 corridor urban centers.

Within major urban centers along the I-10 route, particularly in Los Angeles/San Bernardino/Riverside, Phoenix, Tucson, El Paso, San Antonio, Houston, Baton Rouge, New Orleans, and Jacksonville, existing traffic already exceeds the capacity of the corridor. A considerable portion of this traffic, including the truck traffic, is local traffic. Along with city travelers and commuters in passenger vehicles, trucks are delivering goods between business points. As the suburbs develop, trucks deliver products to the homes, stores and businesses in these areas. Added to this local traffic is the movement of freight through the area or into and out of the area.

One interesting aspect of the data collected on existing conditions is the considerable flow of truck traffic between paired cities along I-10. The data shows considerable

movement of goods between Los Angeles - San Bernardino, Phoenix - Tucson, Las Cruces - El Paso, San Antonio - Houston, Baton Rouge - New Orleans, Gulfport - Mobile, and Jacksonville - Tallahassee.

Another interesting aspect is the role of private carriers. Companies who own their own trucking fleets are responsible for more than half of the tonnage transported by trucks. In addition, these private carriers tend to travel shorter, more regional routes than "for-hire" trucking companies.

Highest Average Daily Traffic Volumes on I-10 in Each State

Central Los Angeles	313,000
Central Phoenix	265,000
Las Cruces	34,000
West Houston	212,000
New Orleans	161,000
Gulfport	53,000
Mobile	86,000
Jacksonville	153,000

Highest Percentage of Truck Traffic on I-10 in Each State

Eastern Riverside County, CA	37%
Cochise County, AZ	50%
Luna County, NM	59%
West Texas	75%
Between New Orleans and Baton Rouge, LA	36%
Bay St. Louis, MS	26%
Mobile, AL	23%
Baker County, FL	40%

Above are for the I-10 highway only. Some auxiliary facilities have higher traffic volumes and percentages of trucks.

Where is it Going?

The eight states along the I-10 corridor are either the origin or destination point for almost 29 percent of the freight tonnage that is transported in the United States. In 2000, commodity flow for all modes in the eight states totaled nearly three billion tons, valued at more than \$2 trillion. The I-10 states are major "trading partners" with each other.

I-10 serves as the connecting route to other highways in the national highway system and the national intermodal freight network of ports, rail and air cargo services. It is a key link to other regions, though the major trading partners do vary by the type of transportation mode.

The transportation system in the I-10 states are the gateways to international trade. The ports link the U.S. with the Orient, Europe, South America and Mexico. The rail and highway systems within the corridor are particularly

important in trade with Mexico. Cross-border flows between the two countries are dominated by rail in California and New Mexico and by truck in Texas and Arizona. In 2000, Texas led the Mexico border states with more than 70 million tons of freight passing through the border gateways by truck or rail. Arizona followed with nearly nine million tons, and California had an additional 8.3 million tons. The type of infrastructure available on both the north and south sides of the border plays a role in the type of transport mode selected.

Major Trading Partners

Rail (In & Outbound)

Mountain States
Great Plains
Great Lakes
Mid-Appalachia
Mexico

Truck (In & Outbound)

South Atlantic
Great Lakes
NY/NJ/PA
Mountain
Mexico

A Look Toward Solutions

Because most of the traffic in the I-10 Corridor is concentrated in urban areas and between paired cities, suggested solutions must follow these same patterns. Strategies to alleviate congestion in urban areas, where traffic exceeds capacity of the roadway system, must be addressed first.

Recommended improvements in these urban areas could range from targeted improvements to increased capacity to corridor realignment. Between major paired cities, improvement recommendations could include truck only lanes, bypass routes, and additional lane miles. Truck only lanes and automatic highway systems may be recommended in rural areas. Increased use of various Intelligent Transportation System (ITS) technologies throughout the corridor could be cost-effective solutions.

One approach to reducing truck traffic in congested urban areas is the idea of "freight villages" or "inland ports." These multimodal freight transportation facilities would be located on the outskirts of urban areas and would help reduce inter-city congestion and overall corridor congestion.

I-10 Meetings are Successful

Meetings for elected and appointed officials and public open houses were held in 14 selected locations across eight states. Meeting attendees included city, county and state elected and appointed officials; representatives from economic development organizations; port and airport officials; representatives from railroad and trucking associations; university faculty; environmental agencies; public safety officials; and representatives from local community groups. At the meetings, the project team introduced the project and outlined the study goals. Meetings were well attended and generated considerable discussion. Attendees identified local plans, concerns, needed improvements and issues.

Common issues discussed at the meetings included:

- ✓ The I-10 Corridor is critical to the movement of goods and the regional and national economies, but there are associated impacts and a need for additional funding to address capacity needs and impacts;
- ✓ Focusing on multimodal aspects of freight transportation to increase efficiency, economy and reliability including the concept of “inland ports” or “freight villages;”
- ✓ Coordination of the National I-10 Freight Corridor Study with other recent and ongoing transportation studies;
- ✓ Prioritizing roadway maintenance along I-10 and alternative and connecting routes;
- ✓ Increasing the safety of local communities, motorists, and truckers;
- ✓ Increasing the number of rest areas or parking areas along the route for truckers;
- ✓ Inclusion of ports of entry, border interests and U.S. trade with Mexico; and
- ✓ Preservation of transportation corridors for future needs.

Other public comments are listed below by state. A more detailed summary of each meeting can be found on the National I-10 Freight Corridor Study web site, www.i10freightstudy.org in the section on Public Participation.

Public Comments

The following are brief summaries of the comments made by attendees of the meetings for elected and appointed officials and public open houses. All comments will be considered by the project team when developing improvement scenarios.

CALIFORNIA

- Need for additional funds to address multiple problems on the corridor
- California section has numerous areas where there is substantial residential development adjacent to highways and interstates which presents the need to examine truck routes adjacent to residential areas as opposed to increasing truck traffic through communities
- Encourage expansion of rail corridors parallel to I-10 while addressing current at-grade crossings in numerous areas and funding needs for rail bridges and/or underpasses
- Environmental issues and the need for higher standards for truck engines and brakes
- Need to consider private freight movement and its impact on agriculture
- Consider State Route 60 in study, since it is a similar alternate route, and the Alameda Corridor
- Suggested specific improvements included: new interchange between Hunts Avenue and Grove Street in San Bernardino; the 40 mile stretch through Yucaipa; connection from Calexico commercial port of entry to I-10; and truck-only lanes in various areas.

ARIZONA

- Need to raise awareness of continuing growth of cities along I-10 and how it will affect future traffic demands
- Environmental impacts of freight traffic through Native American reservations
- Trucks should use HOV lanes during off-peak hours and use bypass routes during periods of heavy traffic
- Emission controls for international trucks
- Need same speed limit on I-10 across various states
- Puerto Nuevo Tucson is a new strategic inland port adjacent to I-10
- Sahuarita Corridor is a proposed access-controlled roadway that would go around southern Tucson, linking I-10 to I-19
- Plans currently underway for passenger train from Tucson to Mexico
- Suggested improvements included: enhanced capacity; emergency access shoulders; permanent weigh stations; an ITS system along the entire corridor; improved connectivity; construction of new bypasses; DOT maintenance yards along I-10; toll facilities to deter truck traffic from certain roads; and better truck and vehicle separation.

NEW MEXICO

- Incorporate US 70 and I-25 into this study
- Consider population and location when creating truck routes
- Alternate routes and relocating truck terminals would decrease traffic in urban areas
- Incorporate feedback from trucking industry into this study
- Note the effect of weather on I-10, particularly dust storms and high winds which close I-10 as well as I-40 and affect the type of traffic which can safely use the highways
- Union Pacific is planning to substantially increase number of trains through Deming which intensifies need to address at-grade crossings through additional underpasses/overpasses
- Airport in Las Cruces is engine for future economic development
- New Mexico State Highway and Transportation Department Director Pete Rahn noted the national significance of this study and New Mexico's commitment to it
- Other specific improvements suggested included: increase access to Deming since Highway 26 heavily congested; implementation of restrictive truck weight limits to relieve damage to bridges; pre-passes for trucks at weigh stations to relieve congestion; and need to address segment between El Paso and Las Cruces where traffic substantially exceeds design capacity.

TEXAS

- Desire for frontage roads along I-10 in El Paso to reduce traffic, improve air quality, enhance safety, and encourage economic development
- Need to review Governor's proposed Trans-Texas Corridor
- Possible negative impact on freight traffic by proposed 55 mph speed limit
- New transportation facilities are being developed for cargo operations at the El Paso airport
- Flooding issues on I-10 near El Paso during heavy storms
- I-10 is the primary connector for many urban arteries
- Three international bridges on I-10
- Rail is the most cost-competitive land transportation for trips of 700 miles or more
- San Antonio is an ideal location for a combined facility for intermodal transportation
- State Representative Talmadge Heflin asked that the study consider the public policy issue of honoring states' rights versus federalization of the corridor
- Consider double bottom trucks; Sunday bans on truck travel; "truck only" lanes; and facilities only accepting deliveries at night
- Suggested improvements included: interchange realignment at various locations; additional on- and off-ramps; and toll facilities to divert truck traffic around larger cities.

MISSISSIPPI

- Rapid growth in air and bus travel
- Marked increase in cargo movement
- Need greater roadway linkage to the Port of Gulfport, increased use of the Gulf Intracoastal Waterway System, and another I-10 ramp system between Highway 49 and Cowan-Lorraine Road.
- Upcoming plans include the acquisition of the Gulfport/Hattiesburg Kansas City Southern Line railway by the State of Mississippi and the possibility of a cruise line beginning operations in Gulfport.

LOUISIANA

- Additional lanes are needed, but might not be feasible because of environmental concerns, specifically wetlands issues
- Eastbound I-10 reduces to one lane at the bridge in Baton Rouge, causing a bottleneck
- Rail traffic in New Orleans is increasing, causing delays as long as several days at the Mississippi River crossing
- Possibility of longer terminal hours to reduce delays at receiving facilities
- The Millennium Port is a key link to I-10
- The Louisiana Airport Authority is currently studying the feasibility of a cargo area in southeast Louisiana
- A coalition has been formed by Chambers of Commerce from various cities in the Gulf States to look at issues and support funding for needed projects
- Suggested improvements included: designing loops and bypasses around local areas, including Baton Rouge; changing tight loops; increasing the length of deceleration/acceleration lanes; adding "jump ramps" and ramp metering (lights); and adding service roads.

ALABAMA

- Increases in bus traffic, tourism, shipping, air cargo, commuter traffic, short and long-range cargo hauling and commercial ventures
- The Mobile Tunnel restricts the number of lanes available on I-10; current study underway for bypass
- New Federal Hour of Service rules pending for truckers imposes a maximum on-duty period of eight hours that may affect all commerce routes
- Current projects include: planned commercial/industrial parks; a landfill; intermodal plan to address issues surrounding cargo movement related to expansion and development of Alabama State Docks; new Hyundai Automobile Assembly plant; North/South connector route from I-10 to I-65; and capacity improvement initiative to reconfigure Davis Highway/Pensacola Interchange near I-59 and I-10.
- Suggested improvements include: freight-only slip ramps, truck only lanes, and increased use of the intracoastal waterway.

FLORIDA

- Congestion on I-10 and other roadways
- Lack of connector roads for nearby airports, seaports, and rail lines
- Lane expansion is needed for every major interstate and state highway, including the Fuller-Warren Bridge in Jacksonville
- Numerous interchanges on I-95 and I-10 in Jacksonville are problematic
- There are a number of environmentally sensitive areas along I-10 in Florida
- Rapid economic development has brought new warehouses and cargo movement facilities
- Continued increase of security at airports and seaports creates increased congestion
- Increased amount of air cargo in and out of Florida
- Suggestions include: better incident management tools; more aggressive use of the Intelligent Transportation System (ITS) and Commercial Vehicle Operation (CVO) technology; High Occupancy Vehicle (HOV), special use lanes, truck exclusive lanes, and flexible funding.

Upcoming Tasks

The next steps in the feasibility study include identification of issues relative to freight movement and development of improvement scenarios.

A detailed analysis of issues that may affect the efficiency and productivity of freight movement on the National I-10 Freight Corridor will be conducted. The analysis will include the following studies:

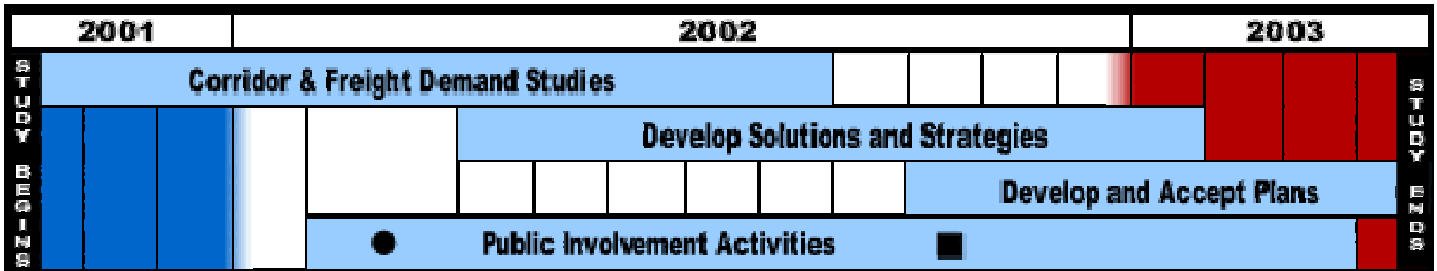
- Relationship of the I-10 corridor to other national corridors;
- Adequacy of the physical condition of the system;
- Impact of future demands and shifting load centers;
- Operational issues like Intelligent Transportation System (ITS) technology and improved access to ports and other intermodal facilities; and
- Regulatory, environmental and safety issues.

From this analysis, a possible list of improvement scenarios will be developed, evaluated and addressed. A minimum of three scenarios will be developed and each will include:

- Technical analysis of existing and future multimodal and intermodal system performance within the corridor;
- Complete analysis of operational solutions for the years 2008, 2013, and 2025;
- Benefit/cost analysis;
- Economic development impacts;
- Implementation plans; and
- Funding/financing feasibility analysis.

Once the scenarios are complete, final recommendations will be presented to the Technical Advisory Committee (TAC) and Steering Committee in the spring of 2003 and will then be available on the project web site, www.i10freightstudy.org.

Project Timeline



This newsletter was developed by Olivarri & Associates, Inc. with HNTB Corporation, Wilbur Smith Associates and Consensus Planning Group.