1. EXECUTIVE SUMMARY

The Delta Regional Authority was created by Congress in 2000 to enhance economic development in parts of Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The DRA now serves 252 counties and parishes in one of the most impoverished parts of the country. This area is referred to in this report as the DRA region. The 2008 Farm Act was enacted into law on June 18, 2008, and it added 10 parishes in Louisiana and two counties in Mississippi to the DRA region. These 12 new counties and parishes are not included in the *DRA Multimodal Transportation Assets, Needs and Recommendations Report*; however, all future work will include the entire 252 county and parish region.

Despite a large number of economically distressed counties and parishes, the DRA region is a key player in the global movement of goods and people. As a logistics and distribution hub, the DRA region is vitally important to the nation's economy.

The DRA serves as a planner, an investment coordinator, and an advocate for the region. The DRA board consists of the governors of the eight states and Federal Co-Chairman Pete Johnson of Clarksdale, Mississippi, who was appointed by President Bush and confirmed by the U.S. Senate in 2001. The board and the DRA staff have worked hard to meet the congressional mandate that the authority compile a report containing multimodal transportation assets, needs, and recommendations.

The DRA region is the home of global air cargo facilities, 21 interstate highways, huge over-the-road trucking terminals, major rail lines, and rail intermodal complexes. This has resulted in the establishment of world-class warehouse and distribution facilities in the metropolitan areas of Memphis, Tennessee, Little Rock, Arkansas, Baton Rouge, Louisiana, New Orleans, Louisiana, and Jackson, Mississippi. The Mississippi River defines the region, meaning that river traffic is also a large component of the regional transportation system.

To keep pace with the global economy, additional multimodal transportation investments will be required across the region. The DRA region must have a system capable of moving goods in a reliable, efficient manner. Numerous infrastructure assets already exist and can be built upon to create an intermodal transportation system that will serve the region into the future while improving the economic prospects of those who call the Delta region home.

Table 1 compares the region's multimodal assets with the country as a whole. The region covers almost 148,000 square miles, representing about 4 percent of the U.S. landmass. With this as a benchmark, corresponding percentages for airports, highway miles, bridges, freight rail track miles, and intermodal facilities are outlined. Note the high percentage of port terminals and locks, which is due to the central role the DRA region plays in the nation's inland waterways

system. Because of the rural nature of the region, the percentage is low for passenger rail stations.

Table 1: Multimodal Assets Comparison – DRA Region and United States

Multimodal Assets	DRA	U.S.	Percent
Square Miles	147,585	3,537,441	4%
Aviation Facilities	993	20,323	5%
NPIAS Airports	192	3,431	6%
Highways Miles	230,395	4,000,000	6%
Bridges	44,538	594,101	7%
Public Port Authorities	48	360	13%
Locks	40	212	19%
Freight Rail Track Miles	9,674	140,490	7%
Intermodal Facilities	170	3,280	5%
Passenger Rail Stations	19	843	2%

Source: Federal Highway Administration, Federal Aviation Administration, U.S. Army Corps of Engineers, state Departments of Transportation, and Amtrak.

Once funding sources are identified, the DRA will complete a separate report identifying public transportation assets, needs, and recommendations.

During the past year, thousands of hours have been spent developing the *DRA Multimodal Transportation Assets, Needs and Recommendations Report*. There were 18 public meetings held across the region so federal, state, regional, and local officials could join those who operate multimodal facilities in offering input. Almost 600 people attended these meetings.

This report documents assets, needs, and recommendations in the areas of highways, bridges, intelligent transportation systems, freight rail, passenger rail, airports, public ports, and locks. The assets and needs documented in the enclosed CD can be viewed using Adobe Acrobat software. The CD also contains interactive maps of the region. Users can simply click on a transportation facility or owner name to determine the assets and needs for airports, ports, and rail stations.

The report determined that the region has about $202.5 billion in multimodal transportation needs.

This report represents the largest collection of multimodal assets and needs data for any region of the country. The DRA is grateful to the hundreds of people who contributed so the report can

present a comprehensive look at a region that serves as an important cog in the world transportation and distribution system.

1.1 Highway and Bridges

The highway system in the DRA region serves many functions, including commuting to jobs, moving freight and goods, intercity and Interstate business, personal travel, and recreational travel. There are approximately 230,395 miles of roadways and 44,538 bridges in the DRA region. Based on the needs analysis, the DRA region has over $26 billion in preservation needs, over $38 billion in modernization needs and over $107 billion in expansion needs for a total of $171 billion over the next 25 years. Each state DOT provided the DRA project team with a list of priority projects that are needed over the next five years.

There are 20 Mississippi River bridges in the DRA region, which were constructed between 1935 and 2003 and the average age is 44 years. There are four Ohio River bridges, which were constructed between 1929 and 1973 and the average age is 47 years. Over the next 25 years, many of the older bridges on the Mississippi and Ohio Rivers will need to be rehabilitated to ensure they can accommodate traffic safely over these natural river barriers. Based on the bridge needs assessment process, 11,175 of the 44,538 bridges (25 percent) in the DRA region are currently deficient but are fully operational. The total bridge needs in the DRA region total $20.1 billion.

1.2 Intermodal Facilities

There are 170 intermodal terminals in the DRA region that are maintained by both the public and the private sector. The public sector provides the basic infrastructure (roads, bridges, transfer facilities, traffic signals, etc.). The private sector provides most of the vehicles, terminals, and related infrastructure necessary for transportation services. Thus, the public and private sectors must work together to provide an efficient, reliable, and competitive intermodal transportation system in the DRA region.

1.3 Intelligent Transportation Systems

The ITS assets and needs included in the DRA assets inventory were gathered directly from the 14 ITS providers in the DRA region. ITS infrastructure needs include traffic management centers, fiber optic cable, dynamic message signs, inter-connected signal systems, closed circuit television cameras, highway advisory radio, toll free 511 service, and traffic information web sites. The ITS needs in the DRA region totals $408.1 million.

1.4 Freight Rail

Freight rail plays a critical role in the DRA transportation system. While this transportation mode is predominantly private, millions of tons of goods use rail to transport products to and from market. There are currently 9,674 miles of track in the DRA region and 7,228 miles are Class I, 190 miles are regional railroads (Class II) and 2,256 miles are local railroads (Class III). The DRA region is served by six Class I railroads and all six have rail yards in the DRA region, which allows for efficient intermodal operations. Memphis is a strategic location for freight rail in the DRA region. It is one of only three cities in the U.S. served by five Class 1 railroads.

Class I railroad companies intend to respond to future capacity constraints by adding track, building or lengthening mainline passing sidings (generally up to two-mile-long segments of parallel trackage), improving signal systems, and upgrading track to support increased traffic and heavier loads. These major railroads are expected to be able to meet approximately 80 percent of the infrastructure capacity needs over the next 20 years. However, Class I railroads will need federal financial and legislative assistance, as well as other public-private partnerships, to meet the remaining rail system needs in the DRA region.

There are approximately 45 local short-line railroad companies that serve the DRA region that operate over a relatively short distance and are independent of Class I railroads. Over the next 25 years, the freight rail needs in the DRA region total $2.2 billion and include improvements to tracks, signal systems, and intermodal facilities.

1.5 Passenger Rail

Amtrak is the only major passenger rail service provider in the DRA region. This rail system is vital to the growth and prosperity of the region. There are currently 18 Amtrak stations and over 1,000 miles of track in the DRA region that are used for passenger rail service. Based on 2007 ridership numbers, Amtrak provided service for over 389,000 people in the DRA region. In FY 2007, Amtrak achieved its fifth consecutive year of record ridership. The cities of Little Rock, Memphis, and New Orleans have transit authorities that offer a street car public transportation rail system that has both a historical significance and provides a valuable service to their communities. Today, Amtrak and the three light rail providers in the DRA region provide a viable transportation option to many residents. The passenger rail needs total $3.1 billion, which includes high speed rail improvements in the DRA region.

1.6 Air Transportation

Air transportation is an important transportation mode in the DRA region because these facilities transport people and cargo throughout the region and eventually the world. Aviation facilities provide quick response to critically ill residents accessing local and regional hospitals and trauma centers; provide recreational pilots access to hundreds of destinations; and provide

economic development opportunities to local and regional economies. There are a total of 993 public and private aviation facilities in the DRA region. There are 253 public airports and three public heliports in the DRA region. Of the 253 public airports located in the DRA region, 192 are included in the FAA *National Plan of Integrated Airport Systems* (NPIAS) and are therefore eligible for AIP federal funding. While every public air transportation facility serves a purpose, the 13 commercial airports that provide both passenger and freight service are vital to the quality of life and economy in the DRA region. The public air transportation needs in the DRA region total $1.5 billion.

1.7 Waterways

Water ports are an integral component of the DRA region's transportation system. There are 1,210 public and private port terminals and 48 public port authorities that operate 192 public port commodity terminals in the DRA region. Locks play a vital role in the waterborne transportation system, especially in the DRA region in which there are 40 locks along 19 waterways. The oldest lock is 95 years old, while the youngest is 16 years old. The average lock age in the DRA region is 44 years old and due to this there are many lock needs in the DRA region.

Addressing the needs for waterways, public ports, and locks on the U.S. Inland Waterway System in the DRA region is crucial. The responsibility for maintaining a navigable channel on these waterways rests with the USACE and maintaining proper channel depths is of utmost importance to allow for waterborne commerce to traverse to and from the public and private ports in the DRA region. The public port needs in the DRA region total $3.6 billion and the lock needs total $477.6 million.

1.8 Recommendations

Based on the multimodal needs identification process completed in the DRA region, the current level of funding for transportation is not expected to keep pace with the = needs identified in the DRA region. With the growing gap between multimodal transportation needs and anticipated revenues, key policies and initiatives to ensure this gap is narrowed rather than expanded must be identified quickly. In the future, it is anticipated that transportation systems will not be able to rely as heavily on motor fuels taxes due to vehicles becoming more fuel efficient and because motor fuels tax revenue is not keeping pace with inflation. The *National Surface Transportation Policy and Revenue Study Commission* released its report to Congress in January 2008. The Commission was required under Section 1909 in SAFETEA-LU to conduct a comprehensive study of the current and future needs of the surface transportation system; short-term sources of Highway Trust Fund revenues; new and alternative sources of revenue; and develop a conceptual plan to ensure that the surface transportation system will continue to serve the needs of the U.S. The recommendations from this report, as well as other strategic recommendations, are referenced in the *DRA Multimodal Transportation Assets, Needs and Recommendations Report*.

If multimodal transportation improvements are completed over the next 25-years, then the DRA region will be well positioned to increase its position in the global economy and contribute greatly to the U.S. economy. Preserving, maintaining, modernization and expanding the transportation system in the DRA region is crucial. If the system is not preserved, maintained, modernized, and expanded then safety, congestion relief, improved freight mobility, increased intermodal connectivity, economic development, and the other benefits will not be realized.