

U.S. DOT TIGER III GRANT AWARD

MISSISSIPPI RIVER BRIDGES

INCIDENT MANAGEMENT, FREIGHT MOVEMENT AND SECURITY PROJECT

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Mississippi Department of Transportation



Grant Application

for USDOT National Infrastructure Investments – TIGER Discretionary Grants

MISSISSIPPI RIVER BRIDGES

INCIDENT MANAGEMENT, FREIGHT MOVEMENT AND SECURITY PROJECT

OCTOBER 31, 2011



The Project Helps to Detect & Manage...



Traffic incidents on crossing highways



River incidents at four bridges

Project Benefits



Economic Competitiveness

Saves \$94,808,181 in travel time and freight and logistics costs, increases freight reliability.



Innovation

Uses advanced technologies to monitor highway and bridge marine incidents for more effective traveler and freight mobility.



Partnership

Creates an ongoing partnership among three states and freight entities with common interests in mobility and safety.



Livability

Demonstrates a commitment to improved accessibility and economic opportunity for the approximately 230,000 residents of the project area, all of which is designated an economically-distressed area (EDA).



Safety

Enhances safety by decreased response time to crashes and incidents; reduced congestion caused by incidents and reoccurring capacity bottlenecks; and active traffic demand management during times of restricted travel conditions.



Sustainability

Reduces greenhouse gas emissions and the nation's dependence on foreign oil and assists states in attainment of federal clean air standards; eliminates 86,636 tons of carbon dioxide emissions; reduces 24 tons of nitrogen oxides.



State of Good Repair

Allows agencies to better maintain and operate this critical infrastructure to provide users with real-time information needed to make informed travel decisions and facilitate mobility of people and freight in the region.

Bridge and Highway Detour Locations



Vicksburg Bridge from the eastern shore.



Approach to Helena Bridge



Bridge/Highway Locations

Bridge/ Route Served	County/ Parish Location*	Nearest Cities Served	Bridge Coordinates		Detour Miles via Next Bridge		U.S. Congressional District
			Latitude North	Longitude West	To the North	To the South	
Helena Bridge US 49	Coahoma, MS Phillips, AR	Helena, AR Lula, MS Clarksdale, MS	34° 29' 47"	90° 35' 14"	124	254	AR 1 st MS 2 nd
Greenville Bridge US 82	Washington, MS Chicot, AR	Greenville, MS Lake Village, AR	33° 17' 84"	91° 09' 15"	246	159	AR 4 th MS 2 nd
Vicksburg Bridge Interstate 20	Warren, MS Madison, LA	Vicksburg, MS Tallulah, LA	32° 18' 50"	90° 54' 22"	179	143	LA 5 th MS 2 nd
Natchez-Vidalia Bridge US 84	Adams, MS Concordia, LA	Natchez, MS Ridgecrest, LA Vidalia, LA Ferriday, LA	31° 33' 32"	91° 25' 10"	144	162	LA 5 th MS 3 rd

**All counties, parishes and cities are located in Economically Distressed Area as defined in section 301 of the Public Works and Economic Development Act of 1965.*

Bridges to receive ITS



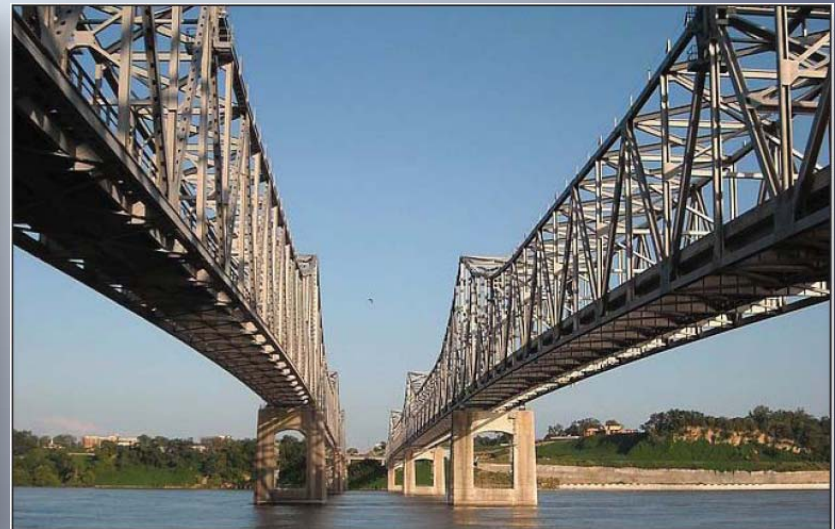
Helena Bridge



Vicksburg Bridge



Greenville Bridge



Natchez-Vidalia Bridge

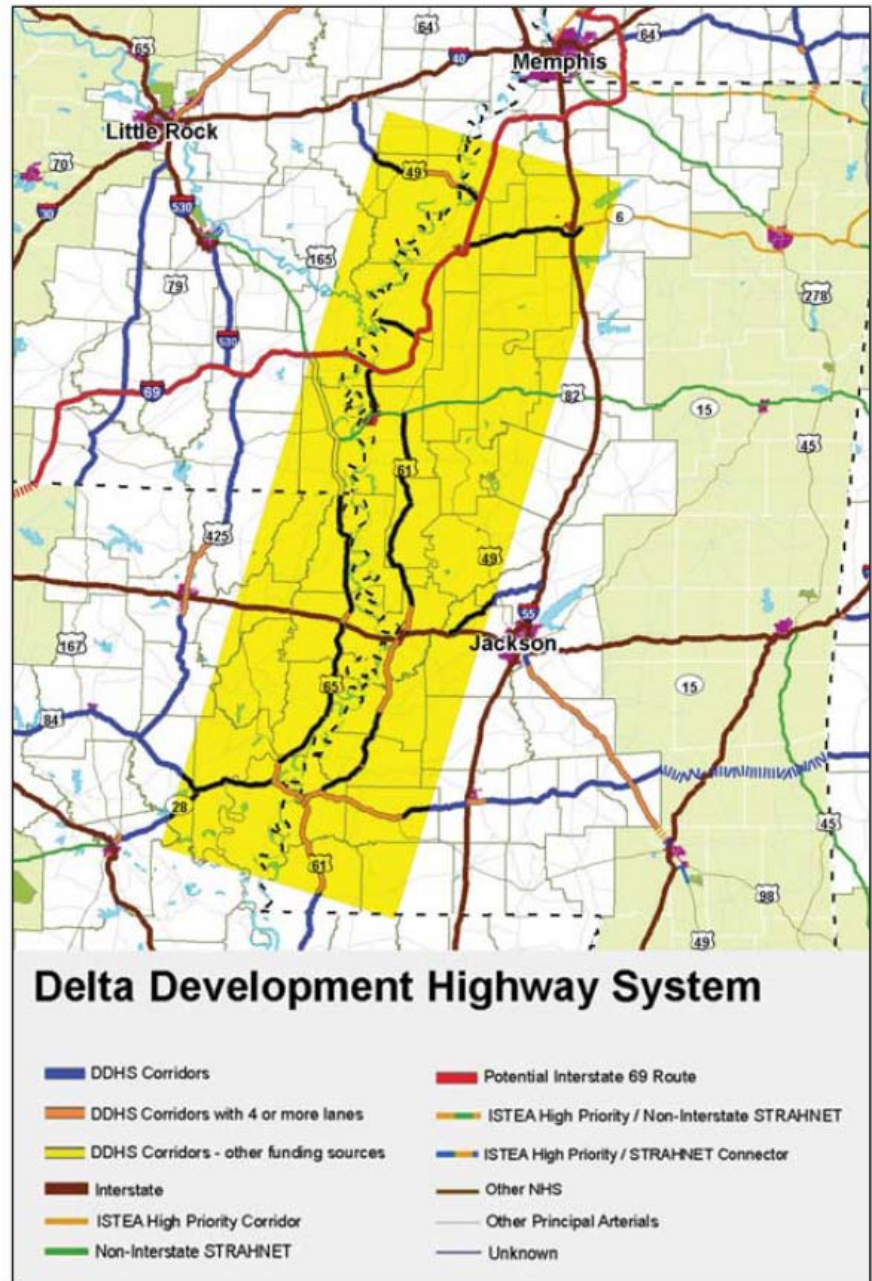


Project Cost by Bridge by State

GRANT FUNDS REQUESTED	TOTAL	
	Natchez-Vidalia Bridge	\$1,336,300
	Vicksburg Bridge	\$2,265,250
	Greenville Bridge	\$2,572,850
	Helena Bridge	\$2,343,800
	System-wide	\$1,296,500
	TOTAL	\$9,814,700
Private Partner Funds		\$919,750
TOTAL Project Cost		\$10,734,450

**The project
addresses
critical
land and water
transportation
corridors
in the
Delta Region**

Figure 6. Delta Development Highway System



The Mississippi River is a critical national marine highway corridor

Figure 7. America's Marine Highway Corridors



**Numerous ports
exist along the
Mississippi River
and are
impacted by
highway and
river incidents**

Figure 8. Port of Rosedale, Mississippi



Figure 9. Lake Providence Port, Louisiana



Figure 10. Natchez-Adams County Port, MS



Estimated Job Creations

Year	Quarter	Approximate Amount Spent	Direct On-Project Construction Jobs*	Direct On- Project O&M Jobs**
2012	1st quarter	\$114,700 (Design)	N/A	N/A
	2nd quarter	\$200,000 (Design)	N/A	N/A
	3rd quarter	\$200,000 (Design)	N/A	N/A
	4th quarter	\$0 (Prepare for bid)	N/A	N/A
2013	1st quarter	\$1,000,000	5	N/A
	2nd quarter	\$1,800,000	10	N/A
	3rd quarter	\$1,600,000	9	N/A
	4th quarter	\$1,600,000	9	N/A
2014	1st quarter	\$1,700,000	9	N/A
	2nd quarter	\$1,600,000	9	N/A
After Construction – Permanent Positions		N/A	N/A	4

Impacts on High Unemployment

Table 8 Unemployment Rates for Counties/Parishes in Project Area

Bridge	County	Unemployment Rate
US 49 Bridge at Helena, AR	Coahoma County, MS	13.7%
	Phillips County, AR	11.2%
US 78/278 Bridge at Greenville, MS	Washington County, MS	16.2%
	Chicot County, AR	12.0%
I-20 Bridge at Vicksburg, MS	Warren County, MS	11.0%
	Madison Parish, LA	11.0%
US 84 Bridge at Natchez, MS	Adams County, MS	10.7%
	Concordia Parish, LA	10.0%

Source: Bureau of Labor Statistics August 2011 Unemployment Data

High Benefit-Cost Ratios

Table 10. MS Bridges Benefit Cost Analysis (\$ - 20 year life cycle)

Long-Term Outcomes	Total Project
Economic Competitiveness	94,808,181
Safety	2,928,066
Sustainability	1,547,793
Total Benefits	99,284,041
Total Costs	9,814,700
BCA Score	10.1



Project Website

www.msrits.com

Mississippi River Bridges Incident Management, Freight Movement and Security Project

innovating the "**weakest link**" of our
Nation's critical links - improving
Mississippi River's rural crossings



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Mississippi River and River Crossings: An Interactive Network

The Mississippi River serves as a major north-south passageway for river cargo haulers and barges carrying millions of tons of materials, grain, freight and manufactured goods every year. Because of its broad width and wide flood plains, it is also a barrier to east-west ground transportation. The States of Tennessee, Mississippi, Arkansas and Louisiana are all keenly aware of the need to work together and have done so many times with regard to the Mississippi River and its affect on the individual states. The most recent flooding experienced in 2011 demonstrated both the power of the river and highlighted the need to work cooperatively for the safety and well-being of the citizens.

The number of roadway and rail crossings over the Mississippi River are limited and are all critical links in the national transportation network. There are only four major river crossings in Mississippi, all of which are US or Interstate Highway routes. All of these locations are critical parts of the region's transportation network, enabling interstate commerce and east-west travel that, if disrupted, creates strain on other parts of the network with significant economic, safety and mobility impacts. Available detours if these bridges are shut down due to major planned and unplanned incidents, such as traffic crashes, lane closures, flooding, or even if one is damaged by a passing barge, are very long. Further, any limitation of traffic capacity on any of these bridges affects the traffic volume on the adjacent bridges due to the diversion of traffic to those facilities. Therefore, the system of bridges is without question an interactive network.

In addressing the needs of this interactive network, this project was proposed to design and construct an active bridge monitoring system at the four Mississippi River crossings in Mississippi.

The locations include:

- US 49 bridge in Lula, Mississippi / Helena, Arkansas
- US 82 bridge in Greenville, Mississippi / Lake Village, Arkansas
- I-20 bridge in Vicksburg, Mississippi / Tallulah, Louisiana
- US 84 bridge in Natchez, Mississippi / Ferriday, Louisiana



Mississippi River bridge at Natchez, MS



Barge crosses under Mississippi River bridge at Greenville



Project Facebook Page

Mississippi River Intermodal Transportation and Security | Facebook - Microsoft Internet Explorer provided by Gresham, Smith and

http://www.facebook.com/pages/Mississippi-River-Intermodal-Transportation-and-Security/272711056092745#fb

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December 16, 2011 at 12:47pm

Mississippi River Intermodal Transportation and Security

MSRITS project receives funding through Tiger III Grant

www.msrits.com

In a press release yesterday, U.S. Transportation Secretary Ray LaHood announced the allotment of \$511 million in TIGER Discretionary Grant funds for a total of 46 transportation projects in 33 states and Puerto Rico. United States Representative Bennie G. Thompson announced, of those 46 transportation projects, The United States Department of Transportation has awarded \$9,814,700 in TIGER III Discretionary Grant funds for Mississippi projects.

Mississippi River Intermodal Transportation and Security

MSRITS project receives funding through Tiger III grant!

Great News

Like

Comment

December 16, 2011 at 12:46pm

Mississippi River Intermodal Transportation and Security

Next Steps

FHWA
Grant
Agreement

Partner
MOUs

Begin Final
Design



Estimated Project Schedule

- August 22, 2012 – Advertise Design
- November 15, 2012 – MDOT issues NTP
- March 1, 2013 – Final 100% Design Plans to MDOT
- April 3, 2013 - Advertise Construction
- April 3, 2013 – Advertise Systems Integration
- August 2014 - Construction completed
- August 2014 – Systems Integration Completed
- November 2014 – Project Closeout/Final Vouchers

A wide-angle photograph of a large cantilever bridge spanning a wide river. The bridge features a complex steel truss structure and is supported by several large, rectangular concrete piers. The river is calm, reflecting the bridge and the surrounding landscape. In the background, there are rolling hills covered in dense green forest. The sky is overcast and hazy. The text "Questions ?" is superimposed in the center of the image.

Questions ?