

September 13, 2011
LTRC Seminar Series:
Congestion Management



Baton Rouge–New Orleans
High-Speed Intercity
Passenger Rail



AGENDA

LTRC Seminar Series: Congestion Management Baton Rouge, Louisiana

- Project Background
- FRA HSIPR Program Overview
- Project Description
- Findings
- Next?



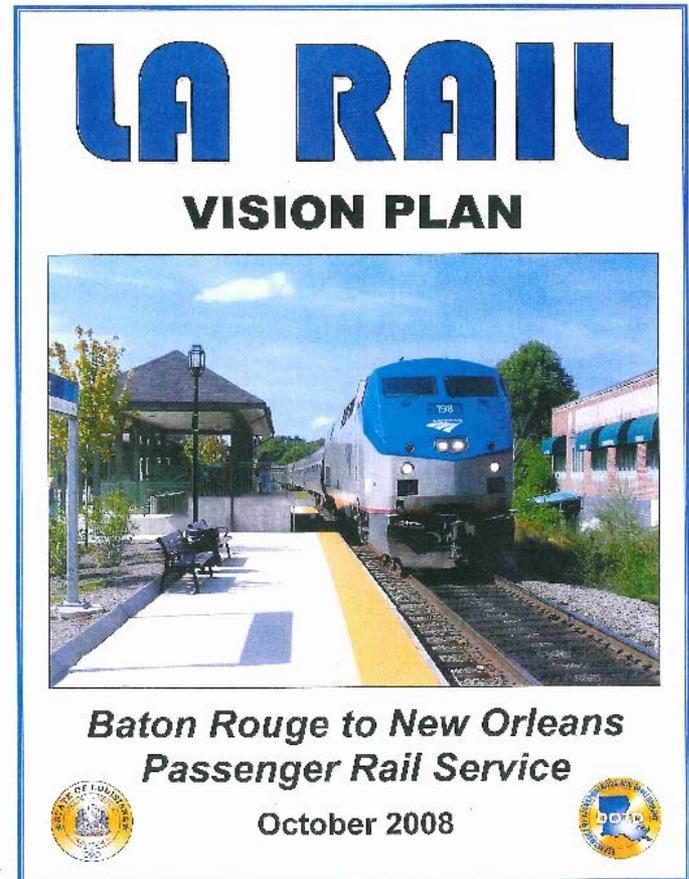


Project Background

- SHSRC Corridor Plan Houston – Atlanta
 - FRA Corridor Plan
 - Completed just after Hurricane Katrina
 - Developed baseline information for BR – NO
- Post – Katrina changes in southeast LA
 - Demographics: E. Baton Rouge & Ascension
 - Severe highway congestion

Project Background

- 2006 – 2007 LDOTD
- Vision Plan:
 - Recovery funds
 - Commuter rail focus





Project Background

- Economic downturn & changes in LA recovery priorities cancel BR – NO service
- Federal Rail Legislation
 - 2008 Passenger Rail Investment & Improvement Act (PRIIA)
 - 2009 American Reinvestment & Recovery Act (ARRA)
 - 100% Federal funding for capital costs!!
- Lack of state funds & available ARRA funds push the BR – NO project to HSIPR



FRA High-Speed Intercity Passenger Rail Program Overview

- FRA uses *incremental approach* to HSIPR:
 - Use of existing freight RRs - cooperation with host RRs – win/win for passenger & freight
 - Investment occurs in stages, not all at once
 - 20-year planning & implementation program is fairly standard
 - Train speed & frequency increase over time
- Must be on a designated High-Speed Rail Corridor

FRA HSI PR Program Overview



FRA HSI PR Program Overview



Gulf Coast High-Speed Rail Corridor

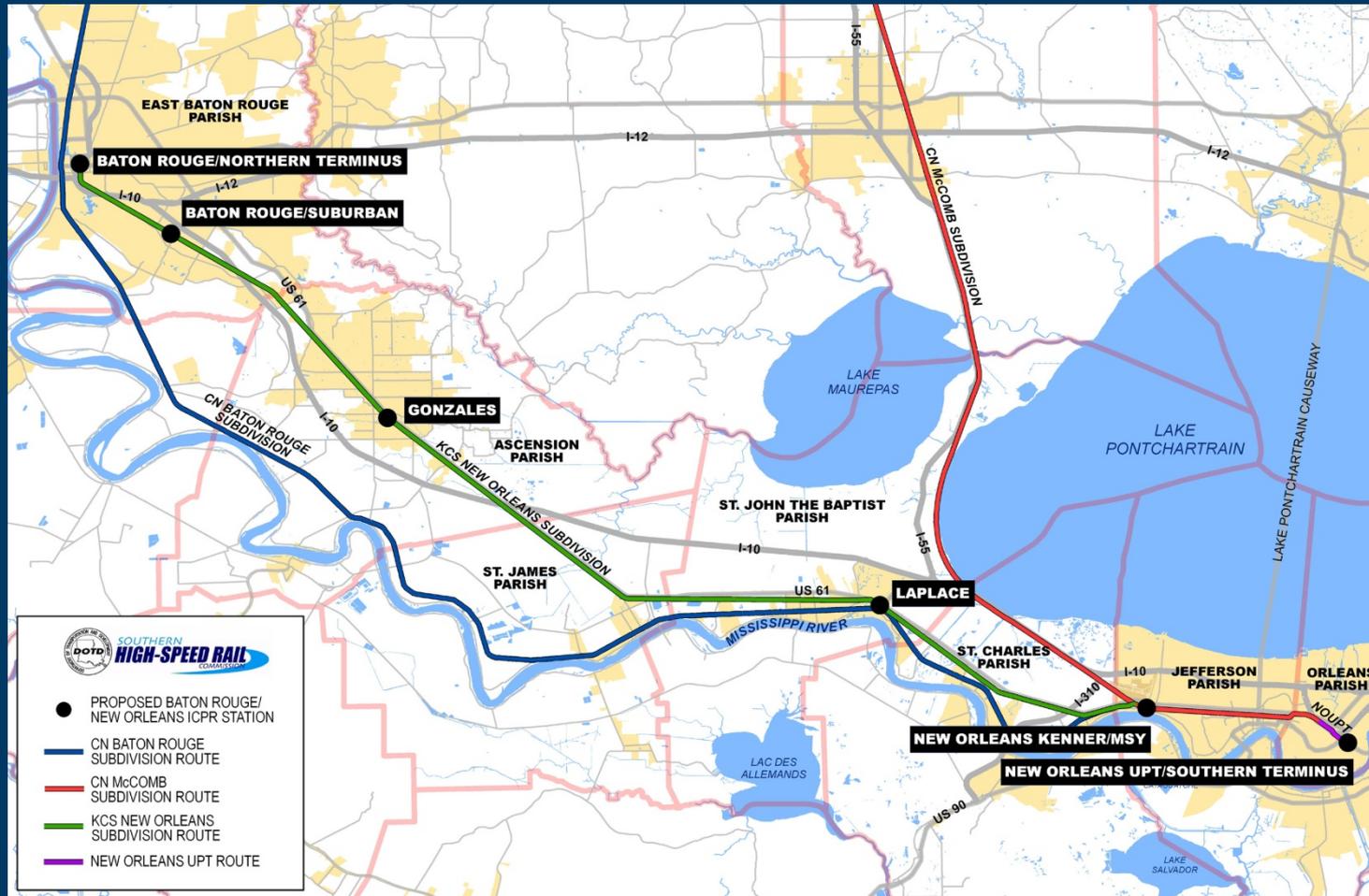


Project Description

- Goal: Start passenger rail service between Baton Rouge & New Orleans by 2013
 - Utilize existing freight rail tracks:
 - Kansas City Southern Railway (KCS) 67.5 miles
 - Canadian National Railroad (CN) 8.5 miles
 - NO Union Passenger Terminal (NOUPT) 3.7 miles
- Total 79.7 miles

Project Description

Proposed Stations & Stops





Project Description

Operating Goals

<u>Year</u>	<u>Max Speed</u>	<u>Avg Speed</u>	<u>Round Trips</u>	<u>Travel Time</u>
2013	79 mph	71 mph	4	1 hr 12 min
2018	90 mph	79 mph	6	1 hr 7 min
2023	110 mph	93 mph	8	1 hr 1 min



Project Description

Operating Goals

- Hurricane Evacuation
 - Louisiana-owned or dedicated trains in state (available) during an emergency evacuation
 - Three short-haul passenger rated corridors: NO - BR, NO - Hammond, NO – Hattiesburg
- Introduce a Second Transportation Mode to Corridor



Project Description

Summary of Improvements

- Corridor improvements needed to support passenger rail service:
 - Add capacity (i.e., new track) to the line
 - Raise track to add sub-base & ballast
 - Replace cross-ties
 - Straighten curves
 - Rebuild bridges
 - Upgrade signal system
 - Upgrade highway/rail at-grade crossings



Project Description

Major Improvements

- Construction of a new 2-mile bridge over the Bonnet Carré Spillway
- Realignment of track & installation of new switches and signal systems at East Bridge Junction (EBJ)
- Addition of a second main track into NOUPT

Project Description

New Bonnet Carré Bridge



Findings

Rolling Stock

- Trains will be propelled by diesel or diesel/electric locomotives
- Trains will consist of:
 - 1 Locomotive
 - 2 Passenger Coaches (bi-level)
 - 1 Passenger Coach equipped with a Cab Car



Findings

Order of Magnitude Capital Costs

• Site & Track Work	\$152,064,874
• Structural Work	129,719,162
• Signal Work	74,381,000
• Engineering	26,224,373
• Rolling Stock	57,900,000
• Station Platforms	<u>7,500,000</u>
TOTAL	\$447,789,409



Findings

Ridership Forecasts

<u>Year</u>	<u>Round Trips</u>	<u>Max Speed</u>	<u>Monthly Boardings</u>	<u>Annual Boardings</u>
2013	4	79 mph	39,000	461,000
2018	6	90 mph	55,000	644,200
2023	8	110 mph	75,000	886,400
2028	8	110 mph	103,000	1,205,900
2033	8	110 mph	120,000	1,418,600
2038	8	110 mph	135,000	1,542,850



Findings

Environmental Issues

- Service Level (Programmatic) EA
- No obvious physical fatal flaws or serious environmental issues have been identified
- East Bridge Junction is a point of contention
- New Orleans Gateway Environmental Impact Study (EIS)

Findings

Financial Issues

Baton Rouge - New Orleans Intercity Passenger Rail Preliminary Estimated Operating Expenses and Revenues

Factors	2013	2018	2023
	Four Round Trips	Six Round Trips	Eight Round Trips
Number of weekday trains	8	12	16
Maximum Speed (MPH)	79	90	110
Annual O & M Cost	\$15,424,000	\$19,463,000	\$21,854,000
Contingencies (20%)	\$3,084,800	\$3,892,600	\$4,370,800
Subtotal Costs	\$18,508,800	\$23,355,600	\$26,224,800
Estimated Ridership	461,000	644,200	886,400
Estimated Revenue	\$3,946,160	\$6,338,928	\$9,865,632
Estimated Deficit	\$14,562,640	\$17,016,672	\$16,359,168



Findings

Benefit / Cost

- At the median value (50/50), each dollar invested generates \$1.40 in benefits. The benefits include:
 - Transportation costs savings associated with more comfort & reliability
 - Lower vehicle operating costs
 - Reduced emissions
 - Value appreciation for residential & commercial property around the stations (SAP / TOD)



Findings

Institutional Issues

- Assumed LDOTD would be the program manager / responsible entity
- Many Stakeholders
 - Host railroads (KCS, CN, NOUPT)
 - Amtrak
 - State and Local Governments (legislature, mayors, city and parish councils)
 - Public



Next Steps?

- Return to a commuter rail focus
 - Lower capital & operating costs
 - More acceptable to host railroads
 - Better fit for the present corridor
 - Can be upgraded to HSIPR in future
- Find program manager / responsible entity
- Identify guaranteed operating deficit funds
 - Imperative for FRA, Amtrak & RR participation
 - Implement Act No. 858 for BR – NO corridor
 - Use TIF legislation to capture SAP / TOD benefits for project



Thank you for your attention and interest!





For More information

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