

CRISIS COALITION

Regional Projects Analysis

February 2, 2015

STUDY BACKGROUND

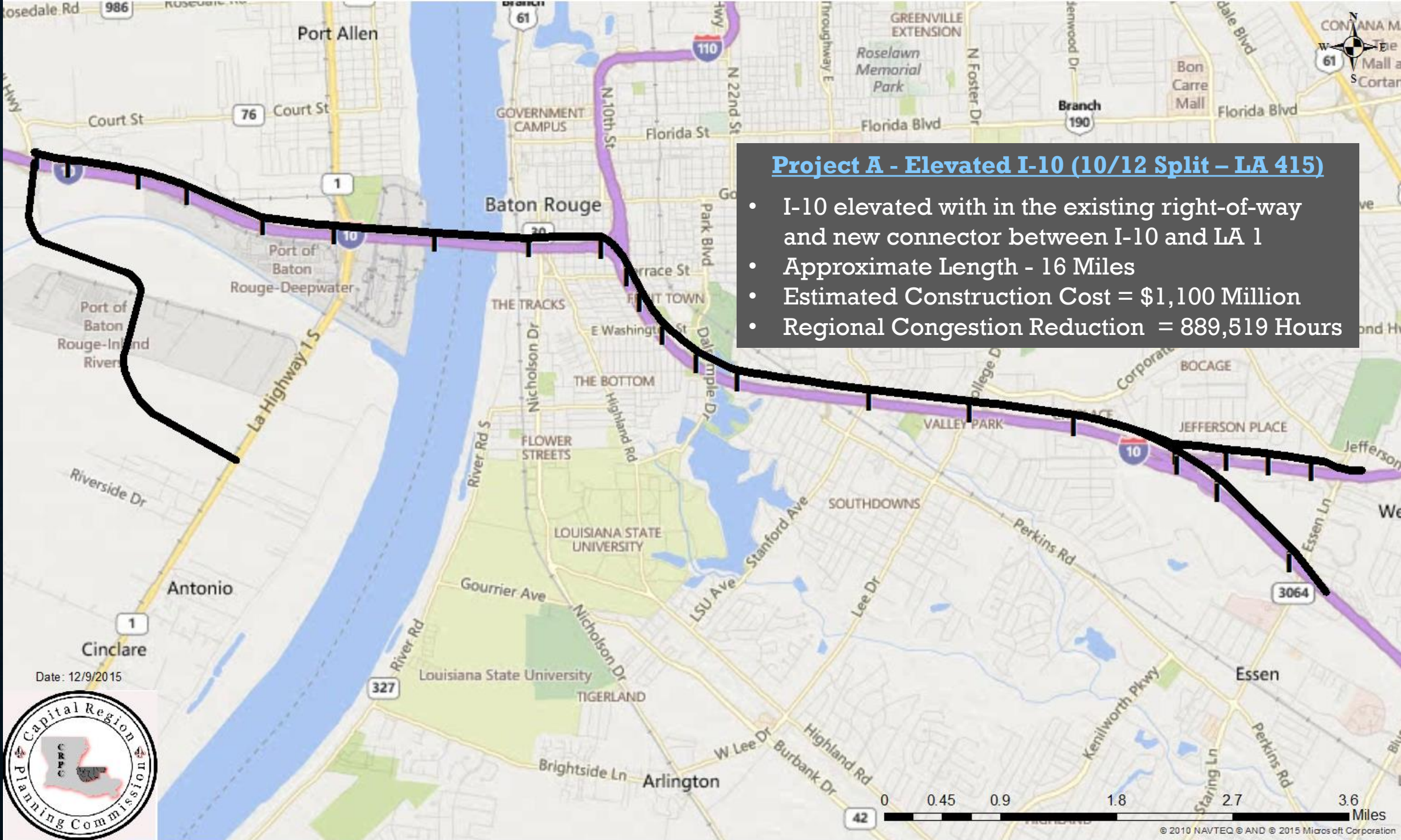
- Team of CRISIS Representatives, Parish Presidents and/or their Representatives, Legislators, and MPO Staff shortlisted 19 regional projects for analysis
- Consideration was given to all regional projects in the State Long Range Plan
- 1 project was subsequently eliminated
 - Project D (LA1 - LA 30 Connector EB) – LADOTD deemed unfeasible

DATA-DRIVEN METHODOLOGY

- 18 Major transportation projects analyzed
- Regional transportation model used for comparative analysis (2037)
- Key Metric – Daily reduction in regional Vehicle Hours of Travel (VHT)
- “Best Available” Cost estimates done in conjunction with DOTD
- Ratios of costs and benefits derived for comparison

ABOUT THE TRANSPORTATION MODEL

- TransCAD Software, used throughout the U.S. to model urban transportation networks
- BR Regional Model built and maintained by our MPO (CRPC) under the direction of LADOTD
- Model calibrated and validated to ensure it matches existing traffic conditions
- Population, employment and other socio-economic data variables drive the model
- Growth rates developed and applied to grow these data variables to design year - 2037



Project A - Elevated I-10 (10/12 Split - LA 415)

- I-10 elevated with in the existing right-of-way and new connector between I-10 and LA 1
- Approximate Length - 16 Miles
- Estimated Construction Cost = \$1,100 Million
- Regional Congestion Reduction = 889,519 Hours

Date: 12/9/2015

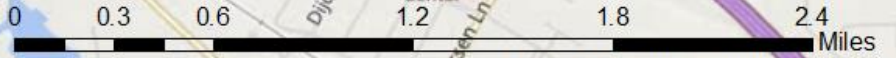


Project B - I 10 Widening (10/12 Split – Bridge)

- 1 Additional Lane from Bridge to the Split and improvement to problematic weavings
- Approximate Length - 8 Miles
- Estimated Construction Cost = \$350 Million
- Regional Congestion Reduction = 506,485 Hours



Date: 9/8/2015



Project C - I 10 Widening (10/12 Split - Bridge)

- 2 Additional Lane from Bridge to the Split
- Approximate Length - 8 Miles
- Estimated Construction Cost = \$500 Million
- Regional Congestion Reduction = 462,945 Hours



Date: 9/8/2015



Project E - BUMP

- Airline Hwy as Expressway from Pecue to I-10 in WBR
- Approximate Length - 25 Miles
- Estimated Construction Cost = \$775 Million
- Regional Congestion Reduction = 780,495 Hours

ROUGE

Date: 9/8/2015



Project F – South Bypass with LA 415

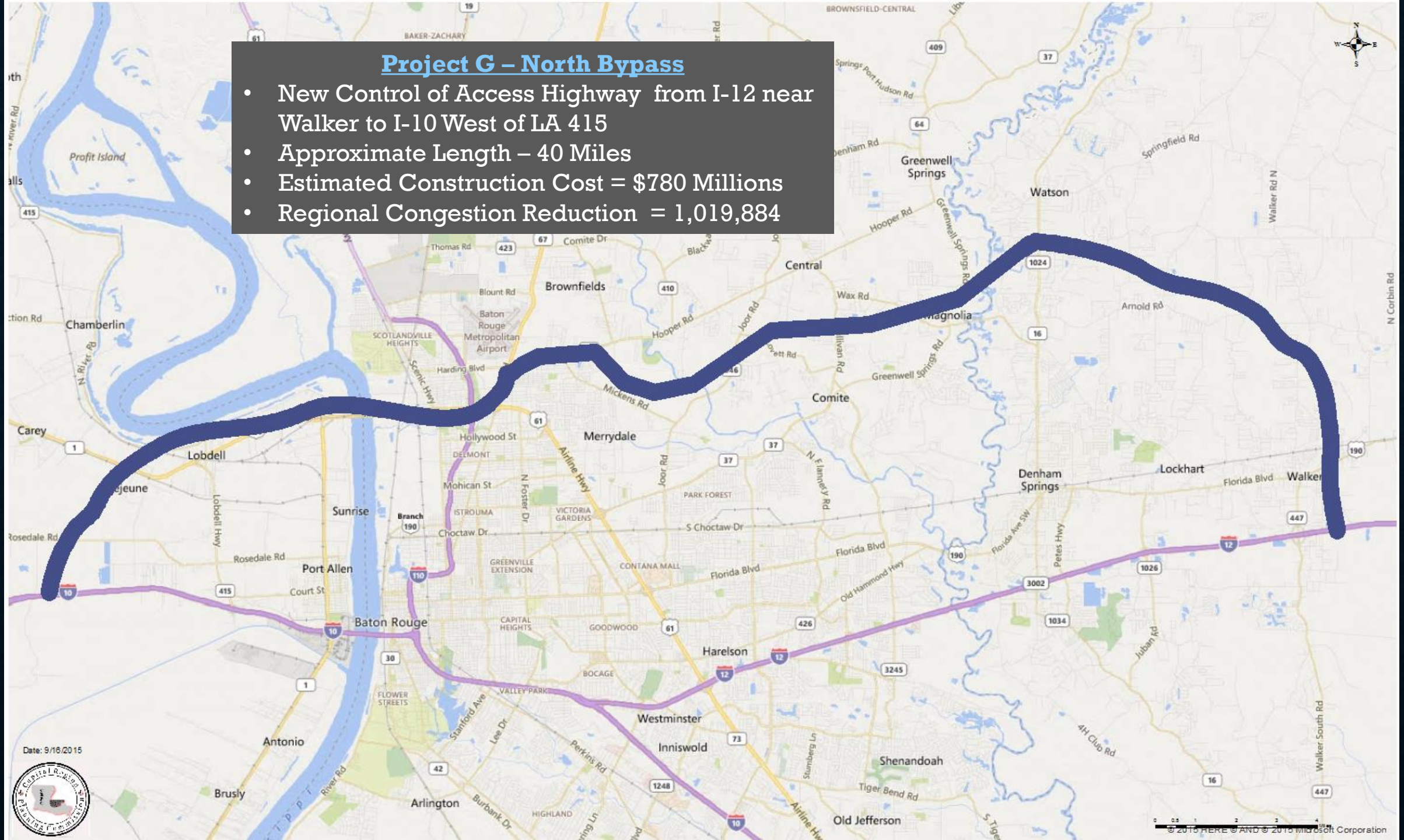
- New Roadway and MS River Bridge, and widening LA 30 to 4 Lanes to Gonzales
- Approximate Length – 43 Miles
- Estimated Construction Cost = \$1,110 Millions
- Regional Congestion Reduction = 1,457,959 Hours

Date: 9/9/2015



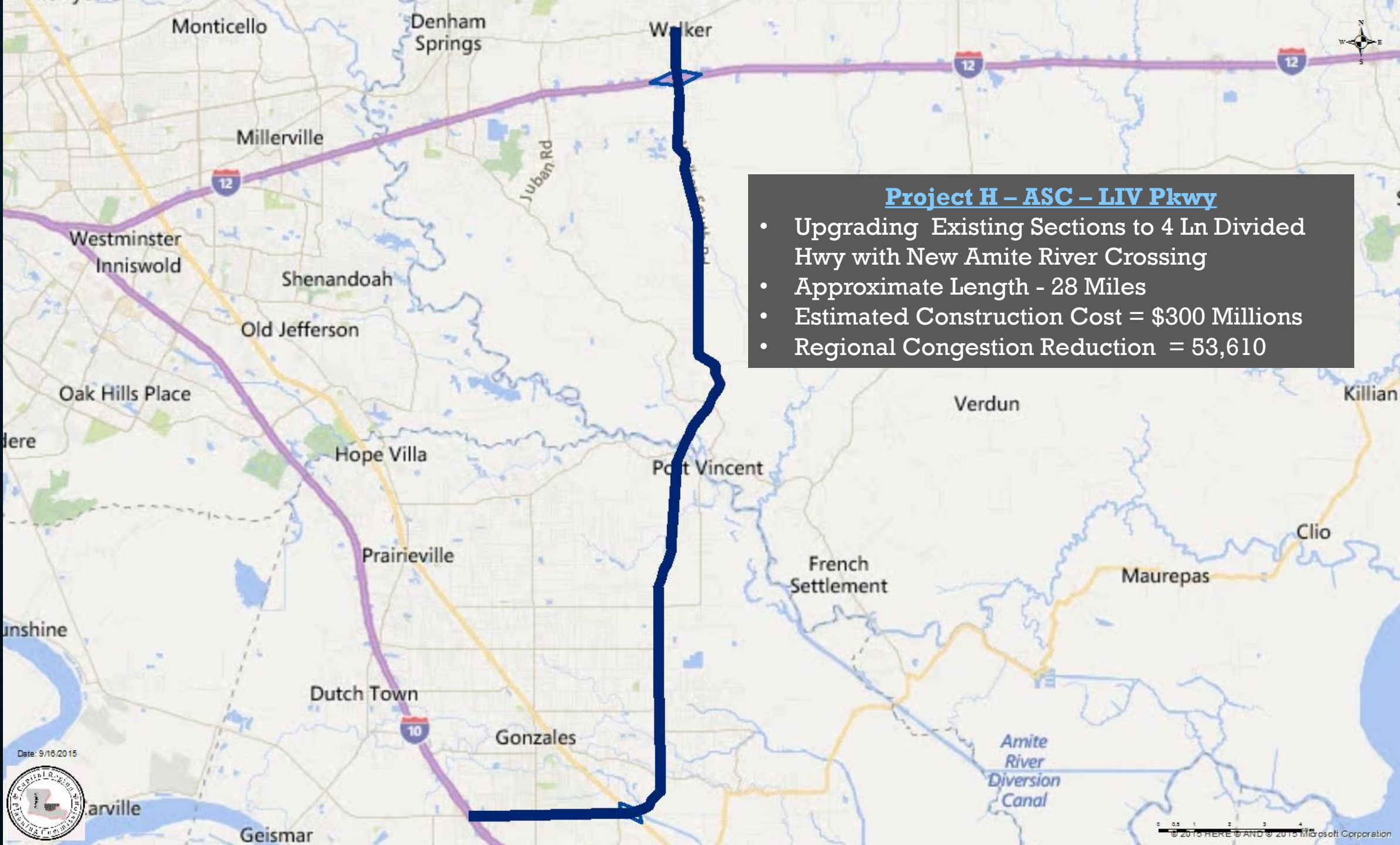
Project G – North Bypass

- New Control of Access Highway from I-12 near Walker to I-10 West of LA 415
- Approximate Length – 40 Miles
- Estimated Construction Cost = \$780 Millions
- Regional Congestion Reduction = 1,019,884



Date: 9/16/2015



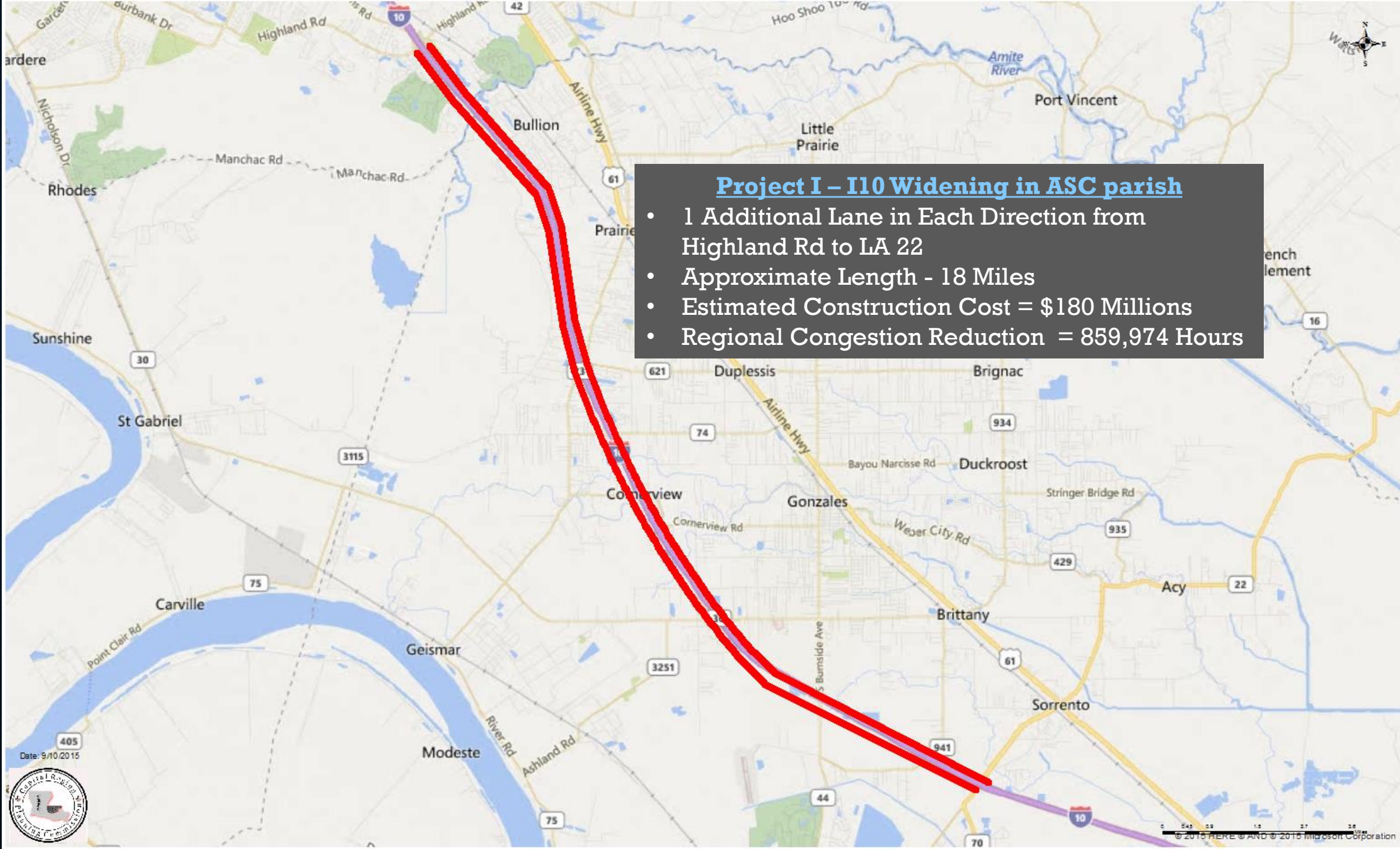


Project H – ASC – LIV Pkwy

- Upgrading Existing Sections to 4 Ln Divided Hwy with New Amite River Crossing
- Approximate Length - 28 Miles
- Estimated Construction Cost = \$300 Millions
- Regional Congestion Reduction = 53,610

Date: 9/16/2015





Project I – I10 Widening in ASC parish

- 1 Additional Lane in Each Direction from Highland Rd to LA 22
- Approximate Length - 18 Miles
- Estimated Construction Cost = \$180 Millions
- Regional Congestion Reduction = 859,974 Hours

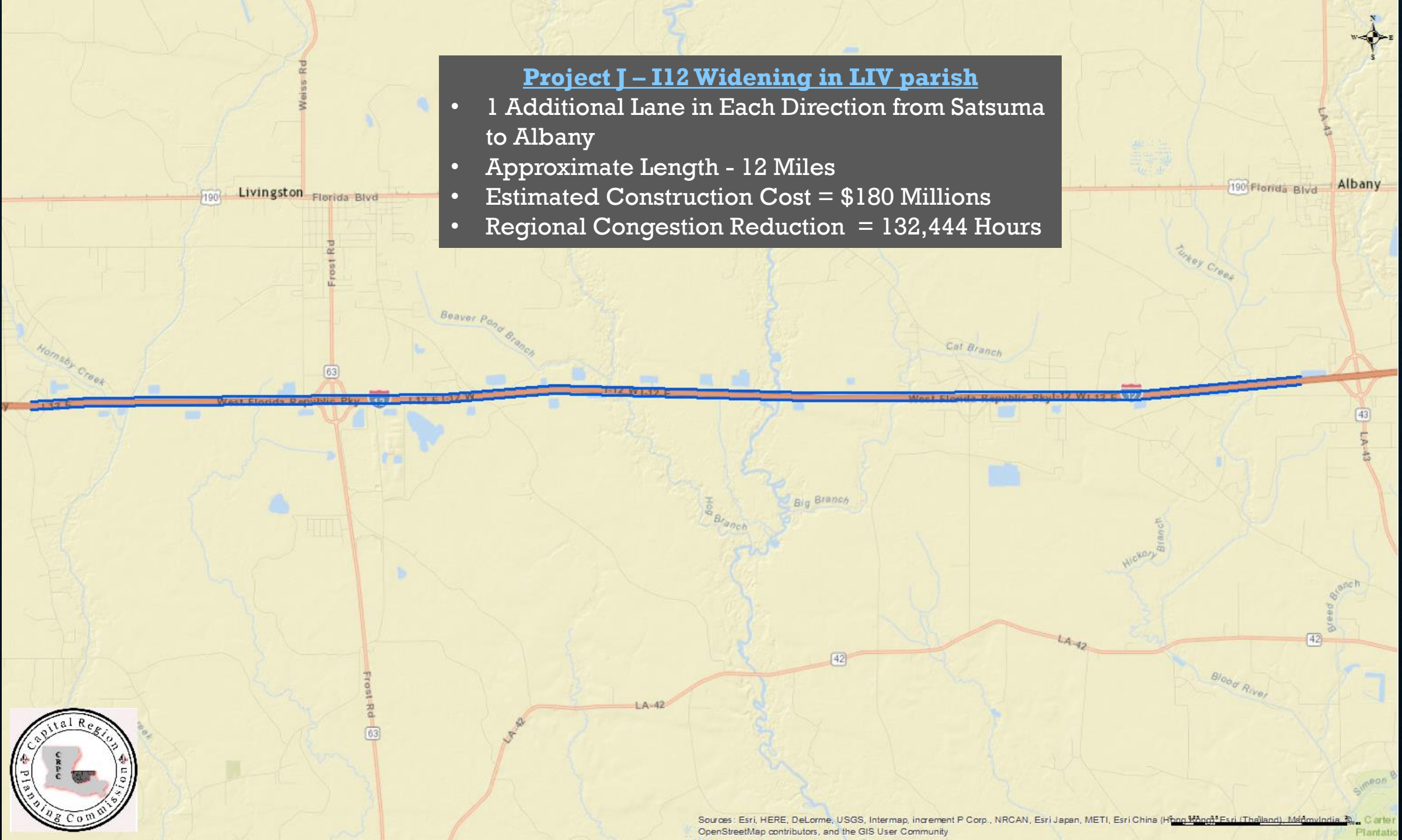
Date: 9/10/2015





Project J – I12 Widening in LIV parish

- 1 Additional Lane in Each Direction from Satsuma to Albany
- Approximate Length - 12 Miles
- Estimated Construction Cost = \$180 Millions
- Regional Congestion Reduction = 132,444 Hours

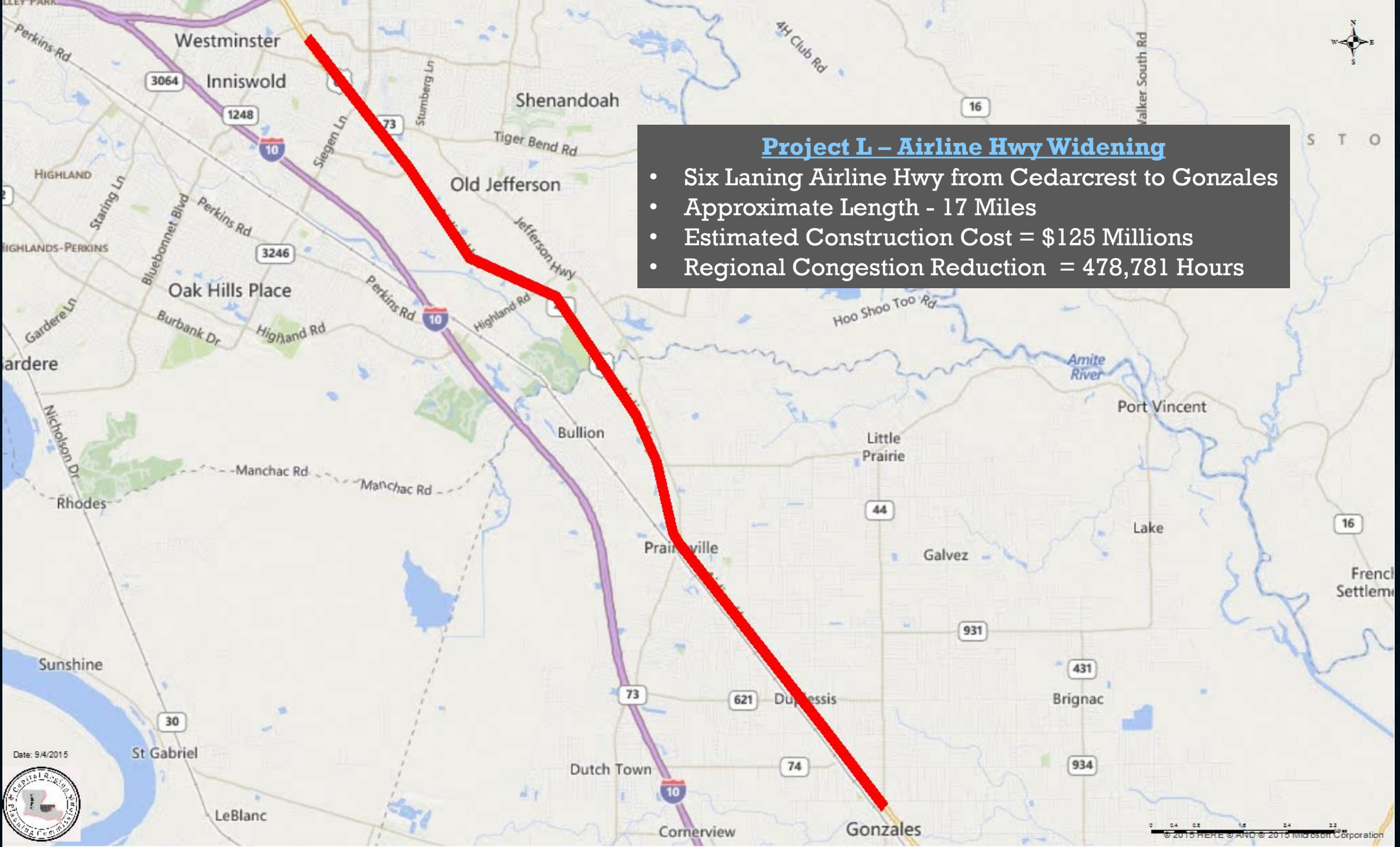


Project K – Hooper Rd Extension

- New Amite River Crossing Extending Hooper Rd to LA 16
- Approximate Length – 3 Miles
- Estimated Construction Cost = \$150 Millions
- Regional Congestion Reduction = Negligible Impact

Date: 9/8/2015



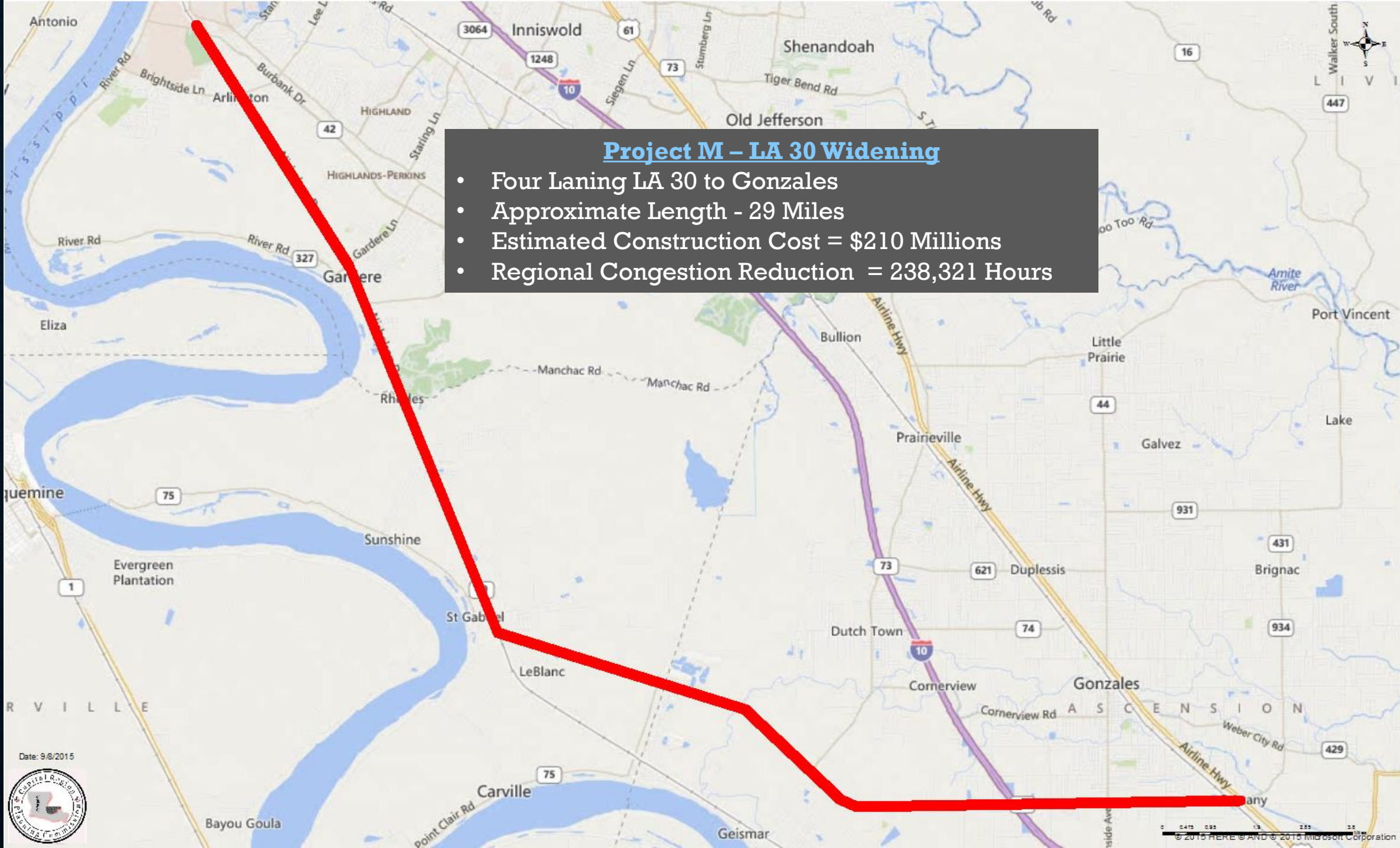


Project L – Airline Hwy Widening

- Six Laning Airline Hwy from Cedarcrest to Gonzales
- Approximate Length - 17 Miles
- Estimated Construction Cost = \$125 Millions
- Regional Congestion Reduction = 478,781 Hours

Date: 9/4/2015



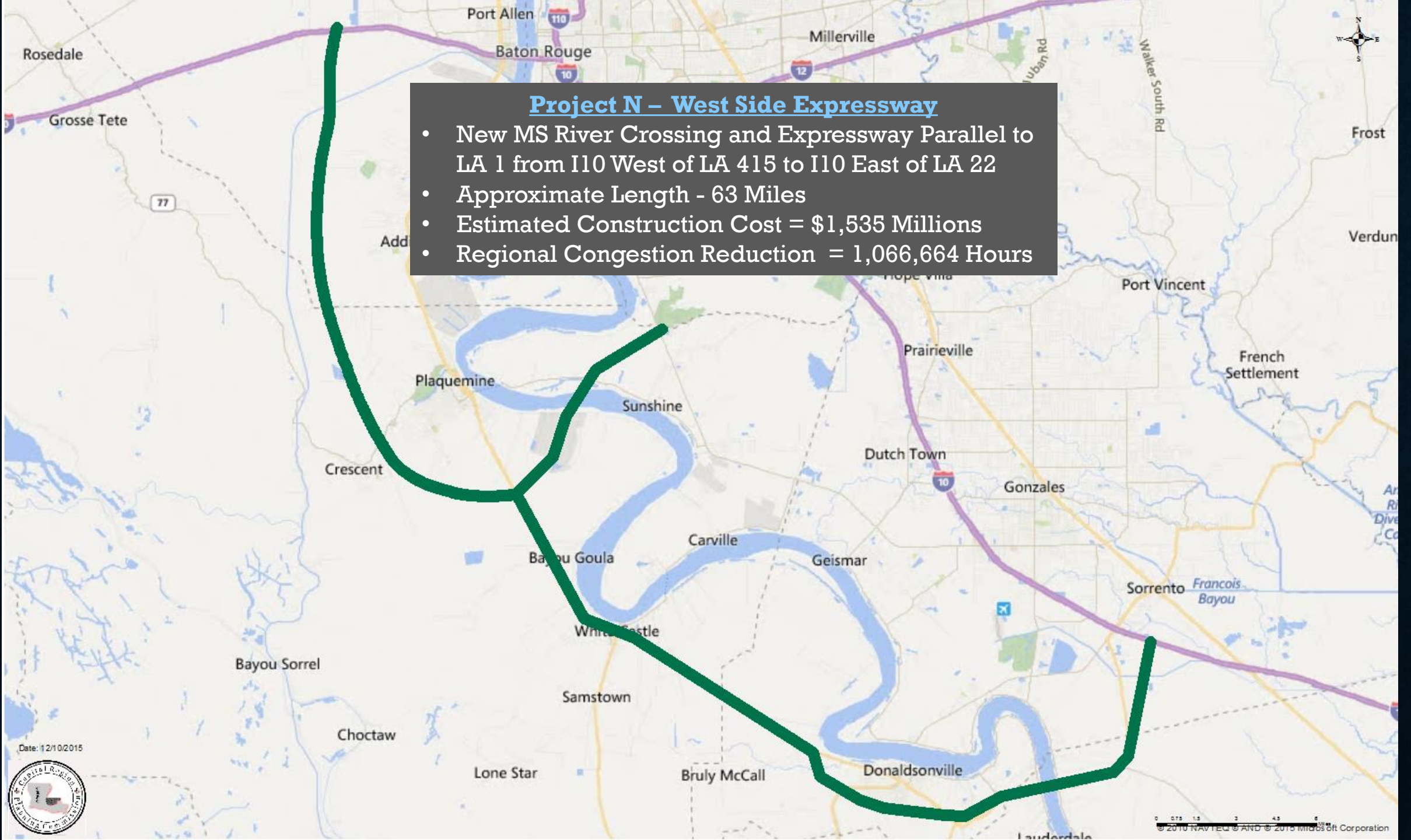


Date: 9/8/2015



Project N – West Side Expressway

- New MS River Crossing and Expressway Parallel to LA 1 from I10 West of LA 415 to I10 East of LA 22
- Approximate Length - 63 Miles
- Estimated Construction Cost = \$1,535 Millions
- Regional Congestion Reduction = 1,066,664 Hours

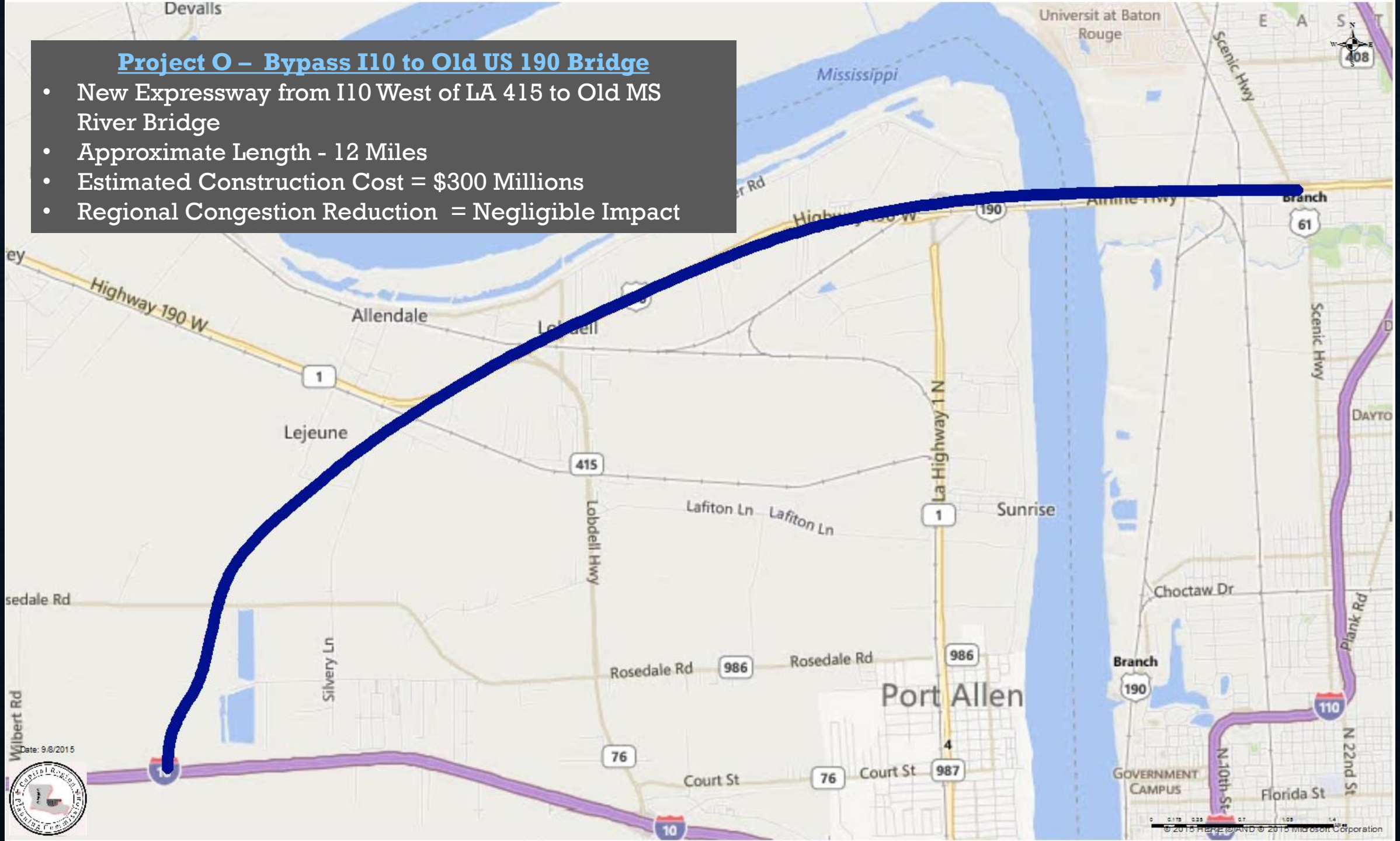


Date: 12/10/2015



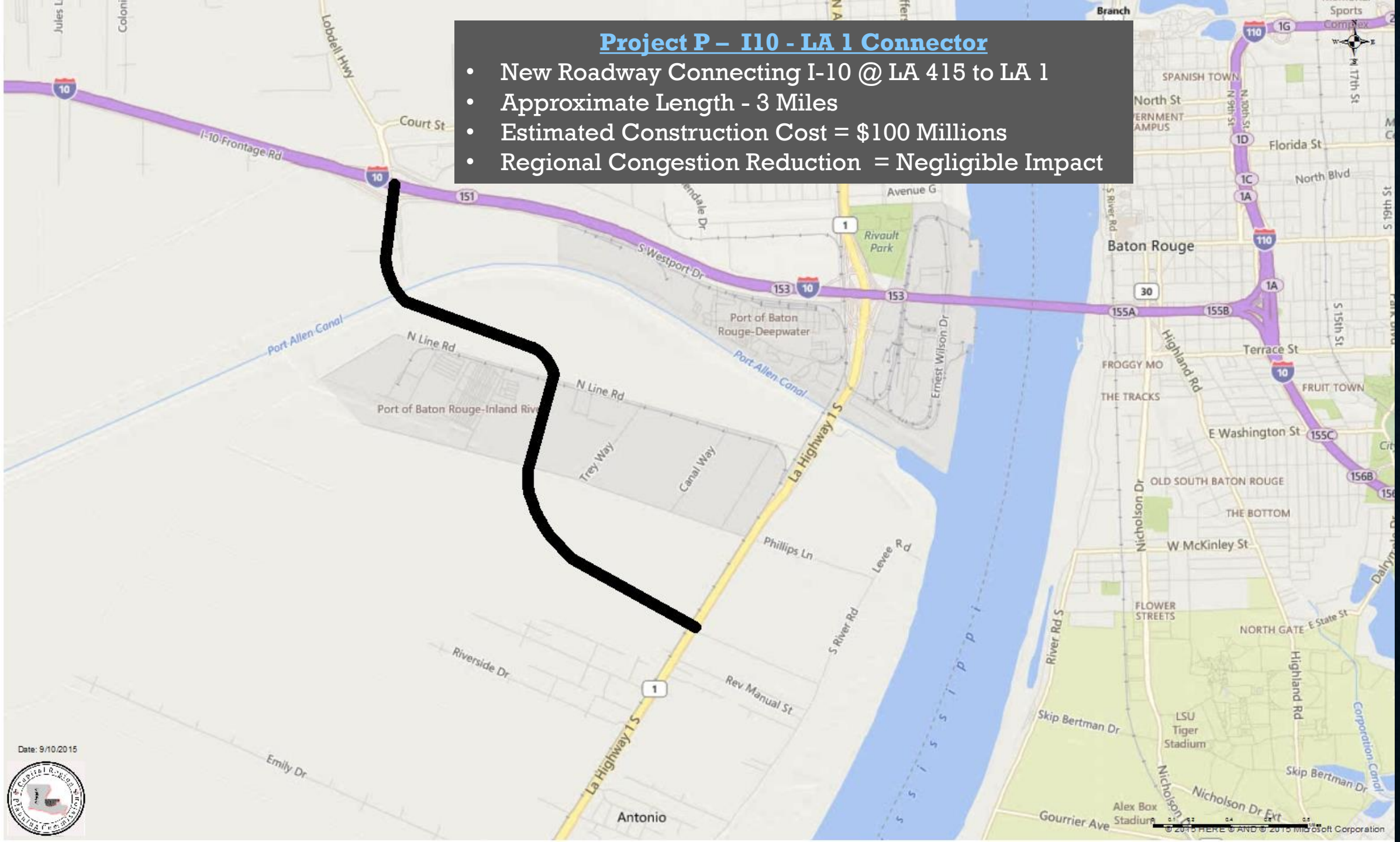
Project O – Bypass I10 to Old US 190 Bridge

- New Expressway from I10 West of LA 415 to Old MS River Bridge
- Approximate Length - 12 Miles
- Estimated Construction Cost = \$300 Millions
- Regional Congestion Reduction = Negligible Impact



Project P – I10 - LA 1 Connector

- New Roadway Connecting I-10 @ LA 415 to LA 1
- Approximate Length - 3 Miles
- Estimated Construction Cost = \$100 Millions
- Regional Congestion Reduction = Negligible Impact

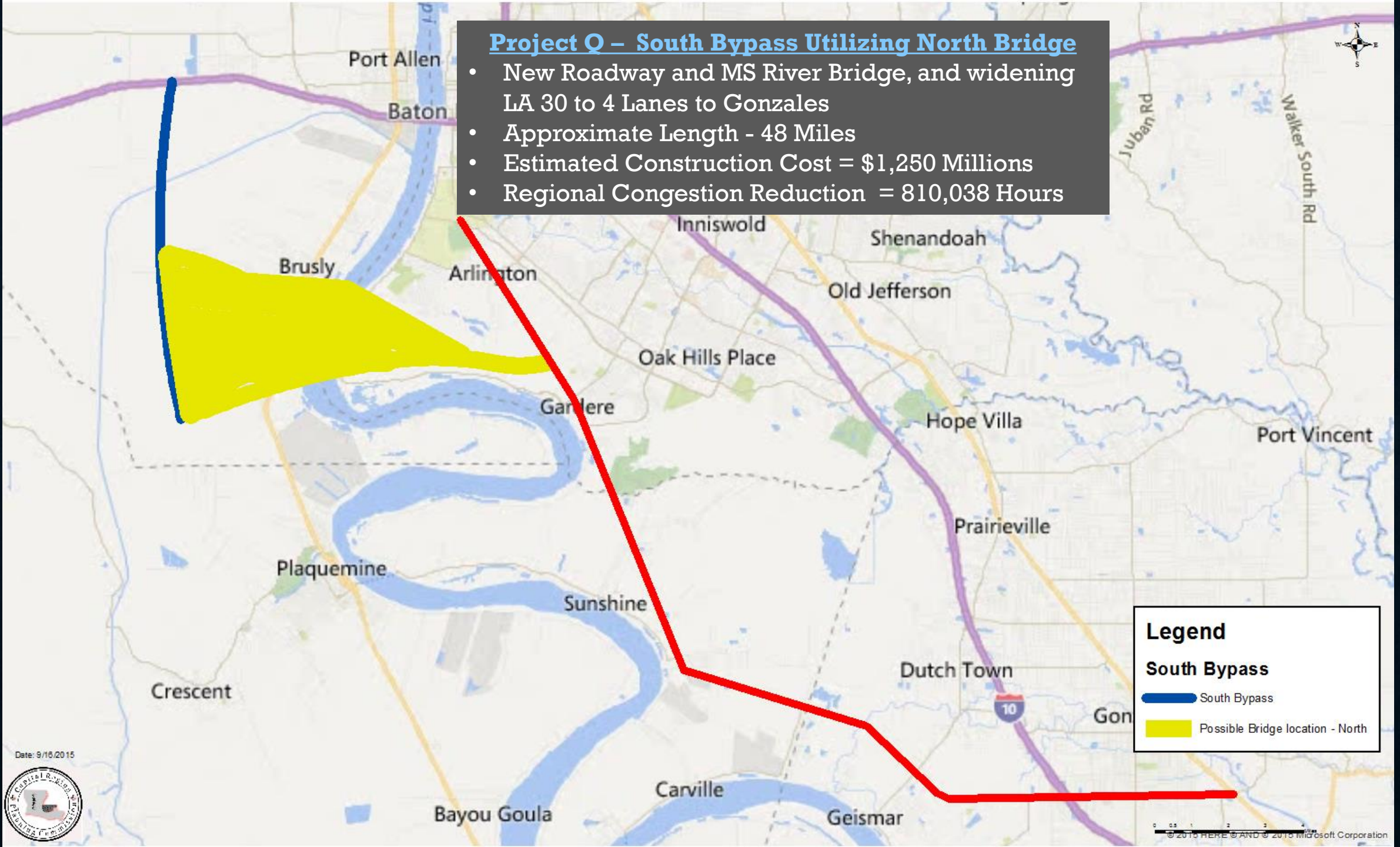


Date: 9/10/2015



Project Q – South Bypass Utilizing North Bridge

- New Roadway and MS River Bridge, and widening LA 30 to 4 Lanes to Gonzales
- Approximate Length - 48 Miles
- Estimated Construction Cost = \$1,250 Millions
- Regional Congestion Reduction = 810,038 Hours

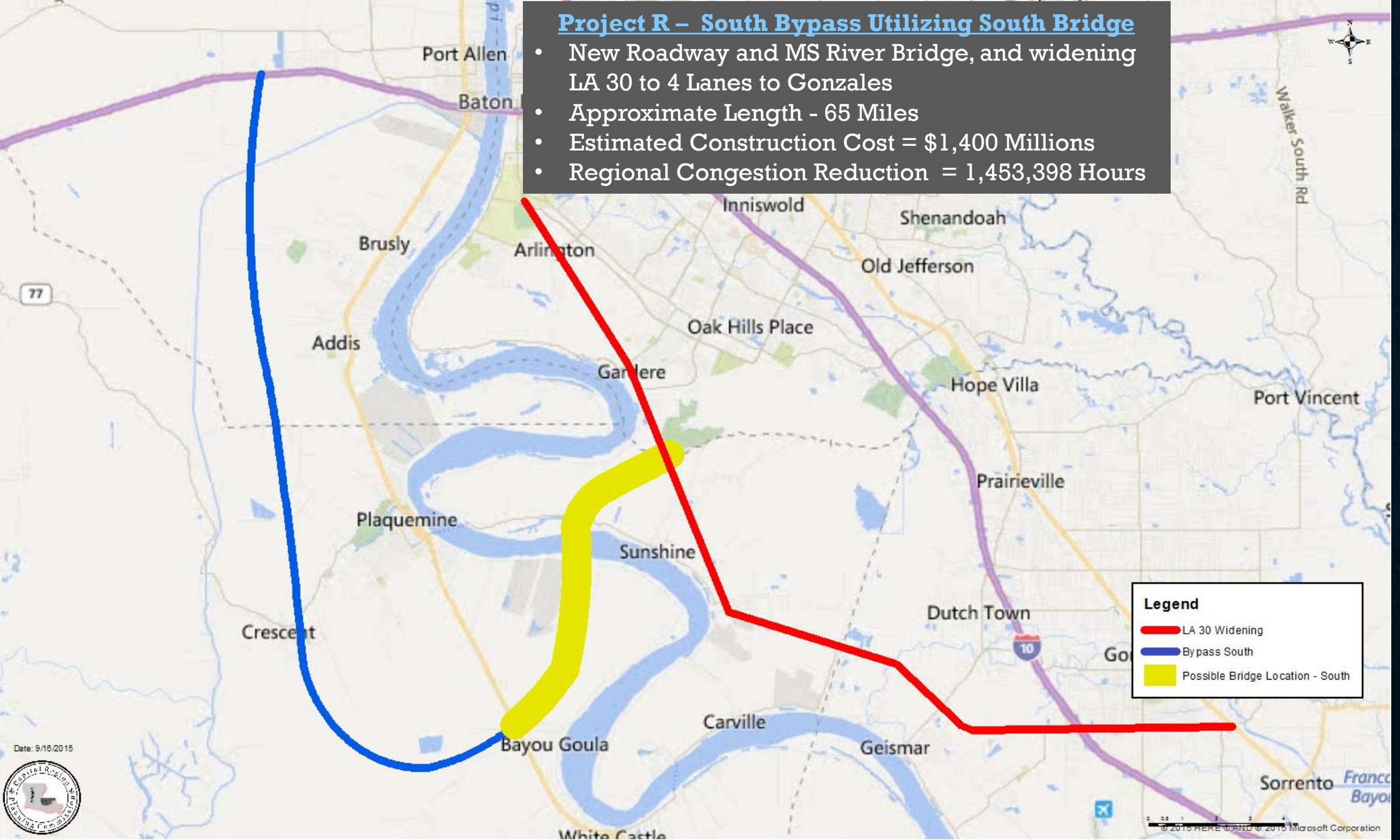


Date: 9/16/2015



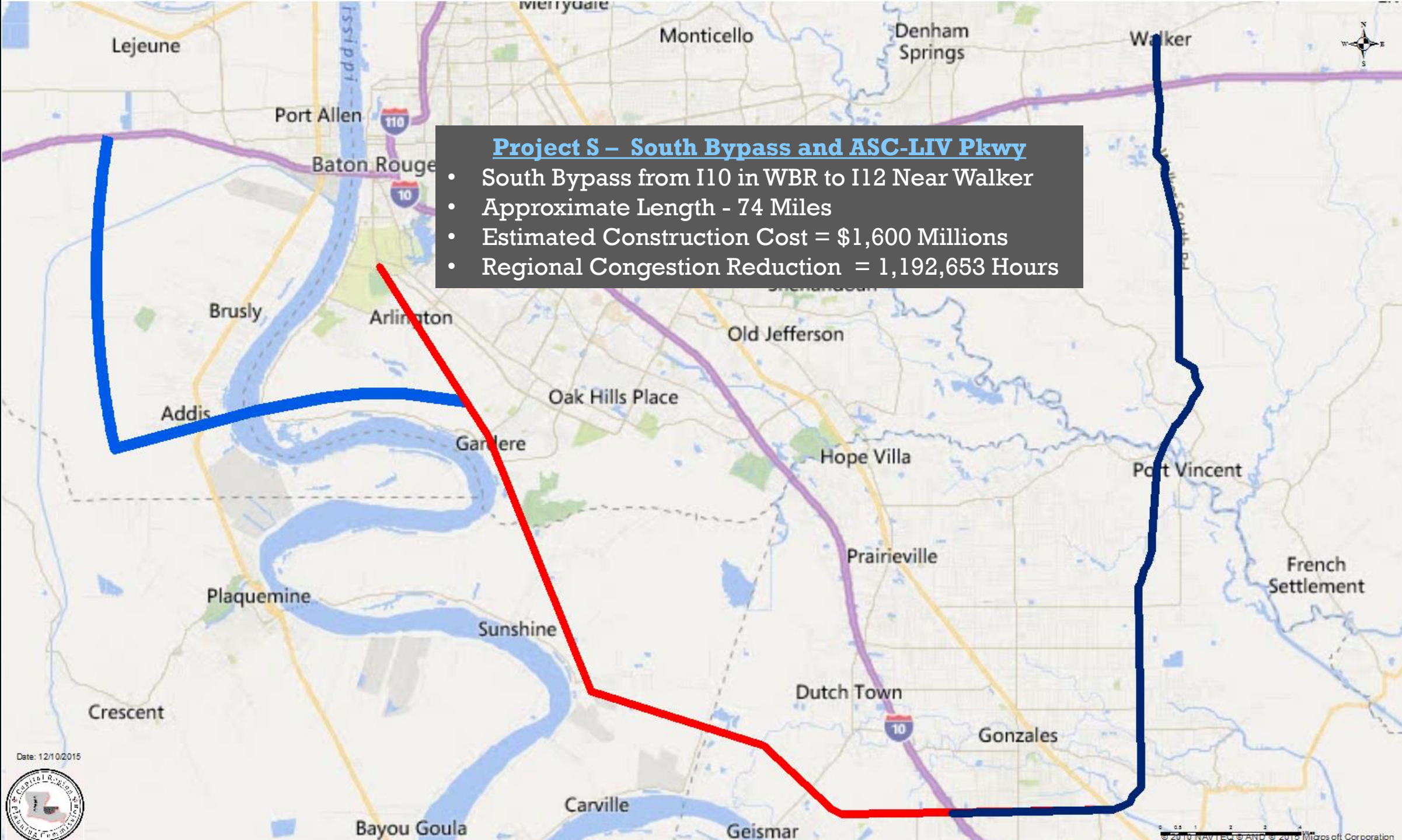
Project R – South Bypass Utilizing South Bridge

- New Roadway and MS River Bridge, and widening LA 30 to 4 Lanes to Gonzales
- Approximate Length - 65 Miles
- Estimated Construction Cost = \$1,400 Millions
- Regional Congestion Reduction = 1,453,398 Hours



Project S – South Bypass and ASC-LIV Pkwy

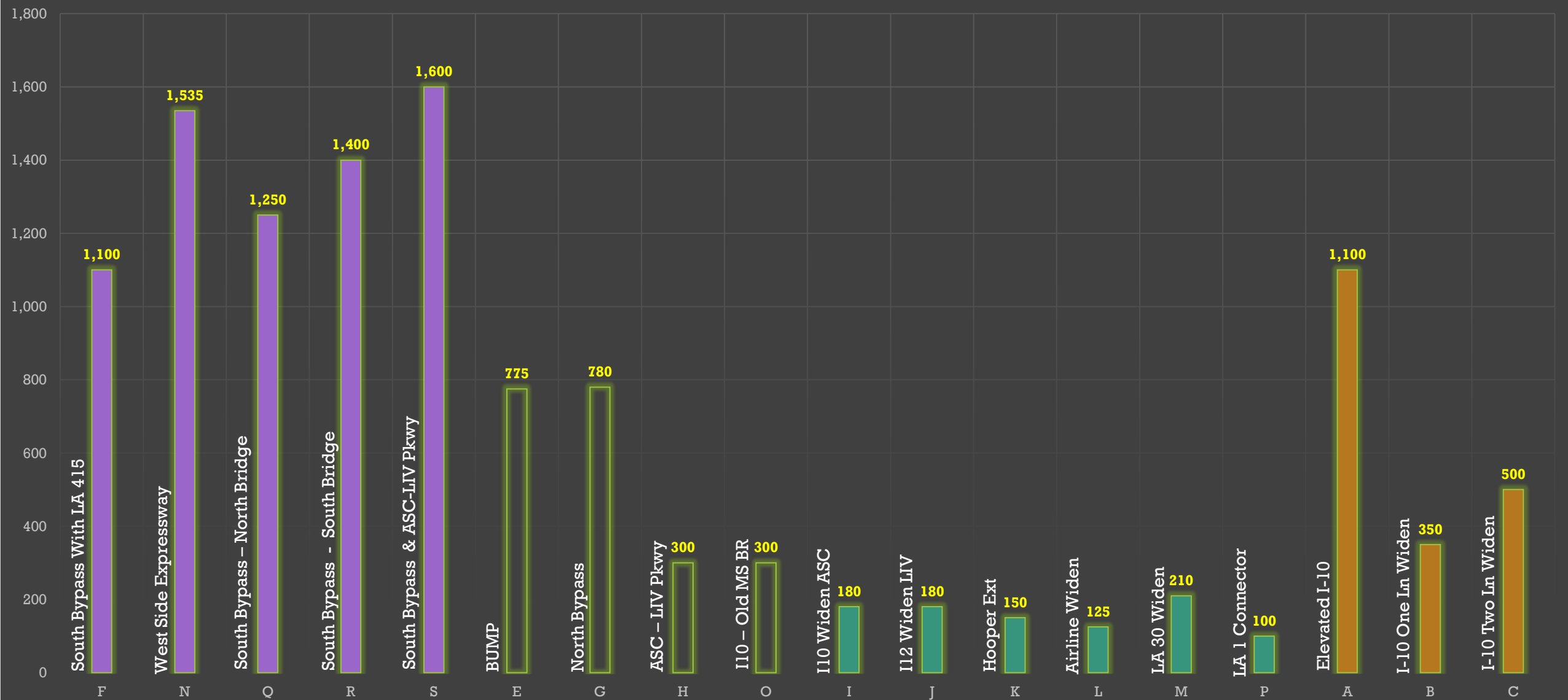
- South Bypass from I10 in WBR to I12 Near Walker
- Approximate Length - 74 Miles
- Estimated Construction Cost = \$1,600 Millions
- Regional Congestion Reduction = 1,192,653 Hours



Date: 12/10/2015



Total Projects Cost (Million \$)



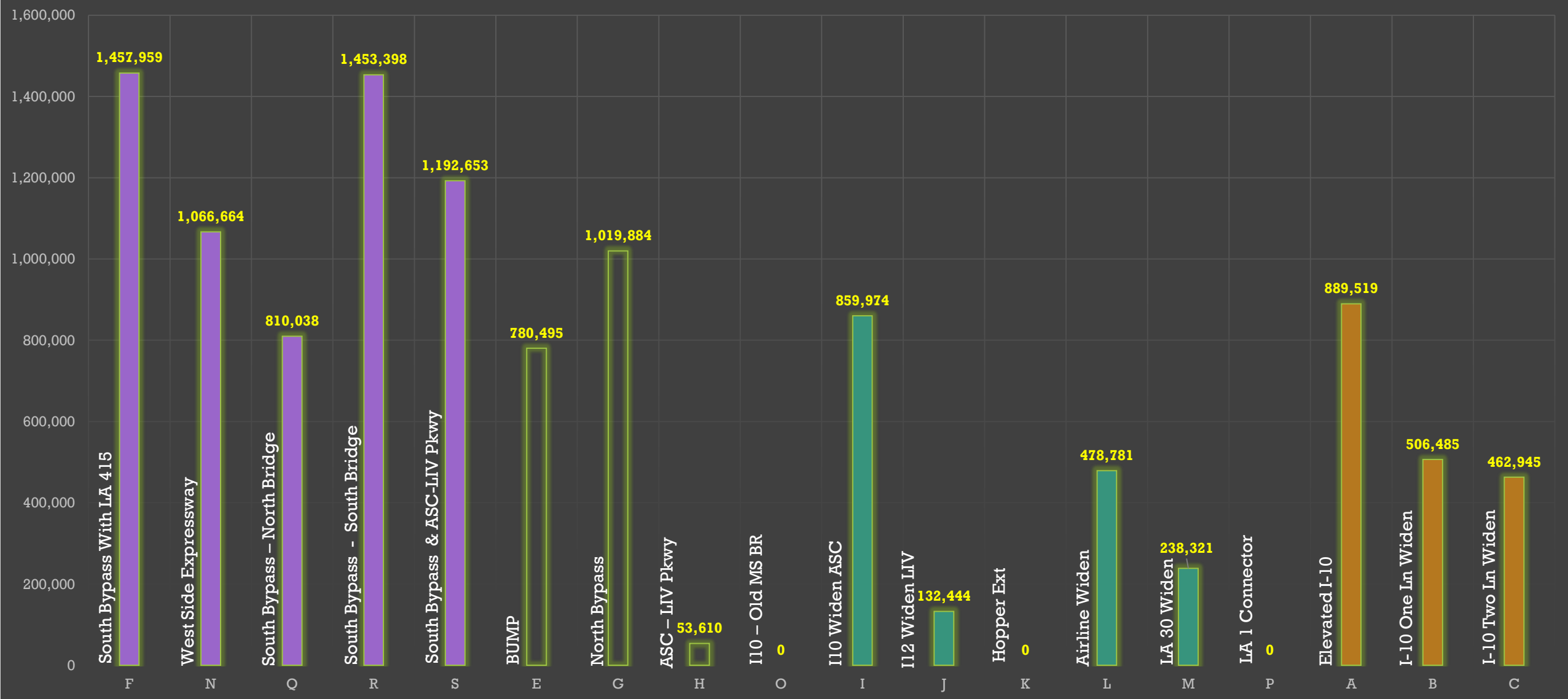
MS River Crossings

Other Regional (Large)

Other Regional (Small)

Urban Core

Total Hours Saved Annually



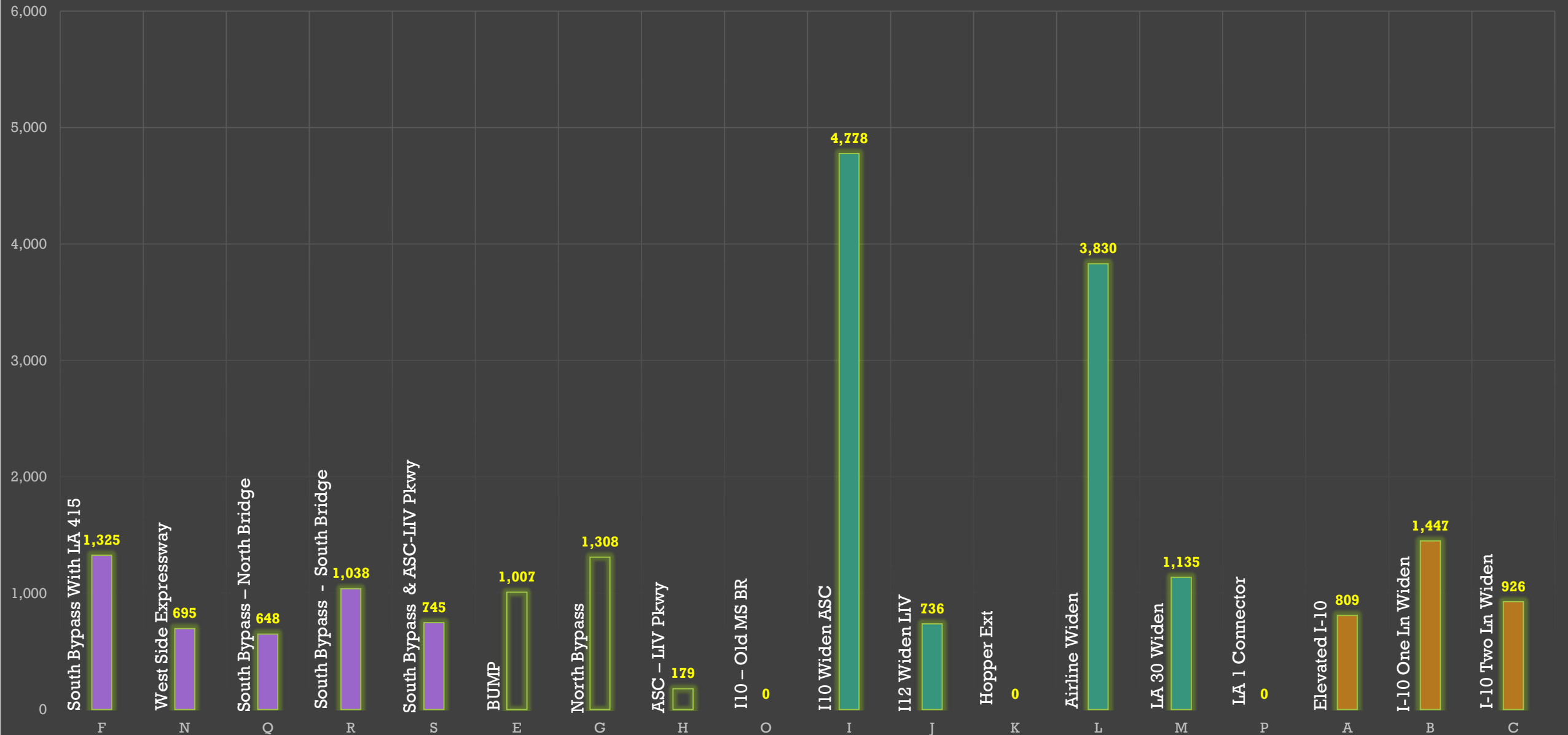
MS River Crossings

Other Regional (Large)

Other Regional (Small)

Urban Core

Annual Hours Saved Per Million Dollars Spent



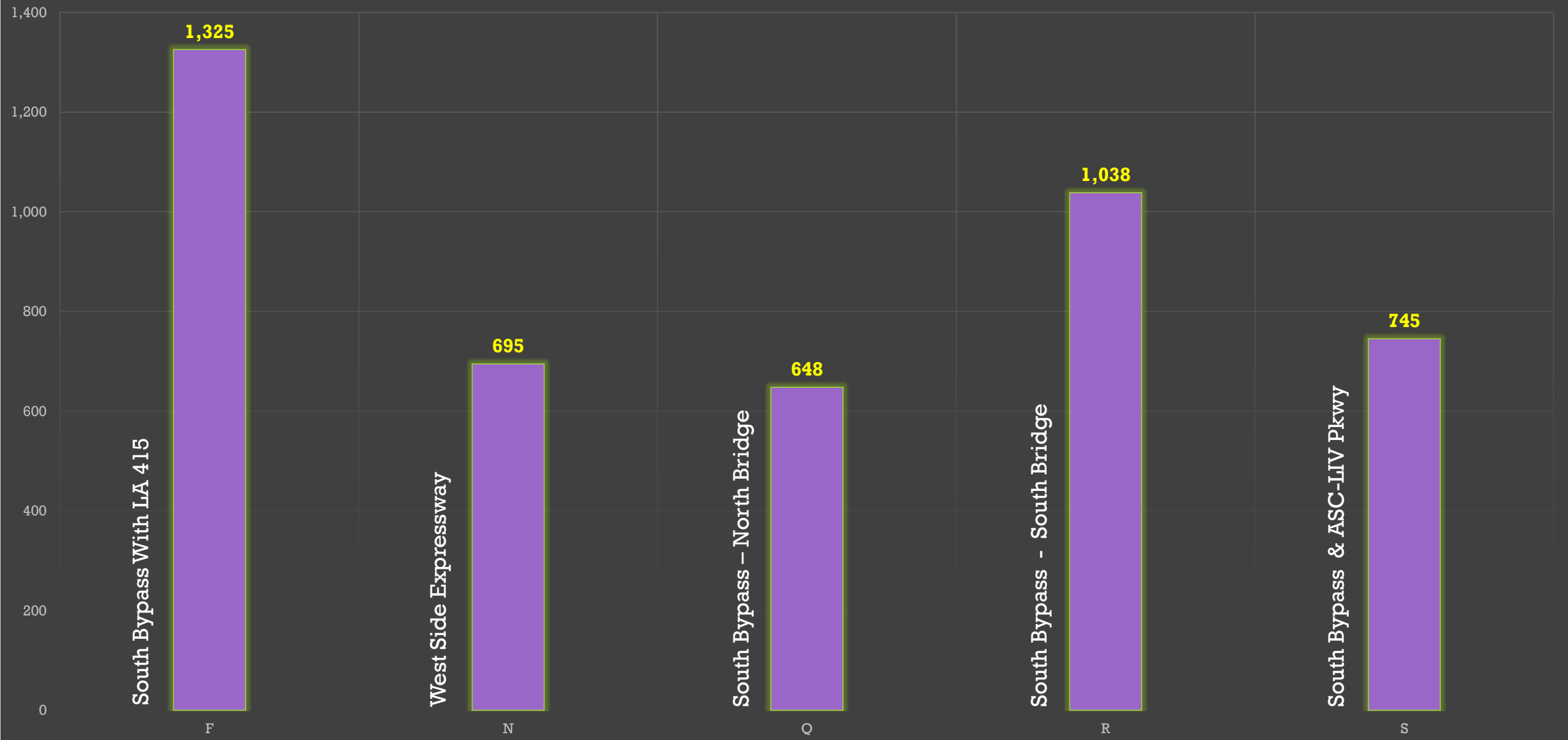
MS River Crossings

Other Regional (Large)

Other Regional (Small)

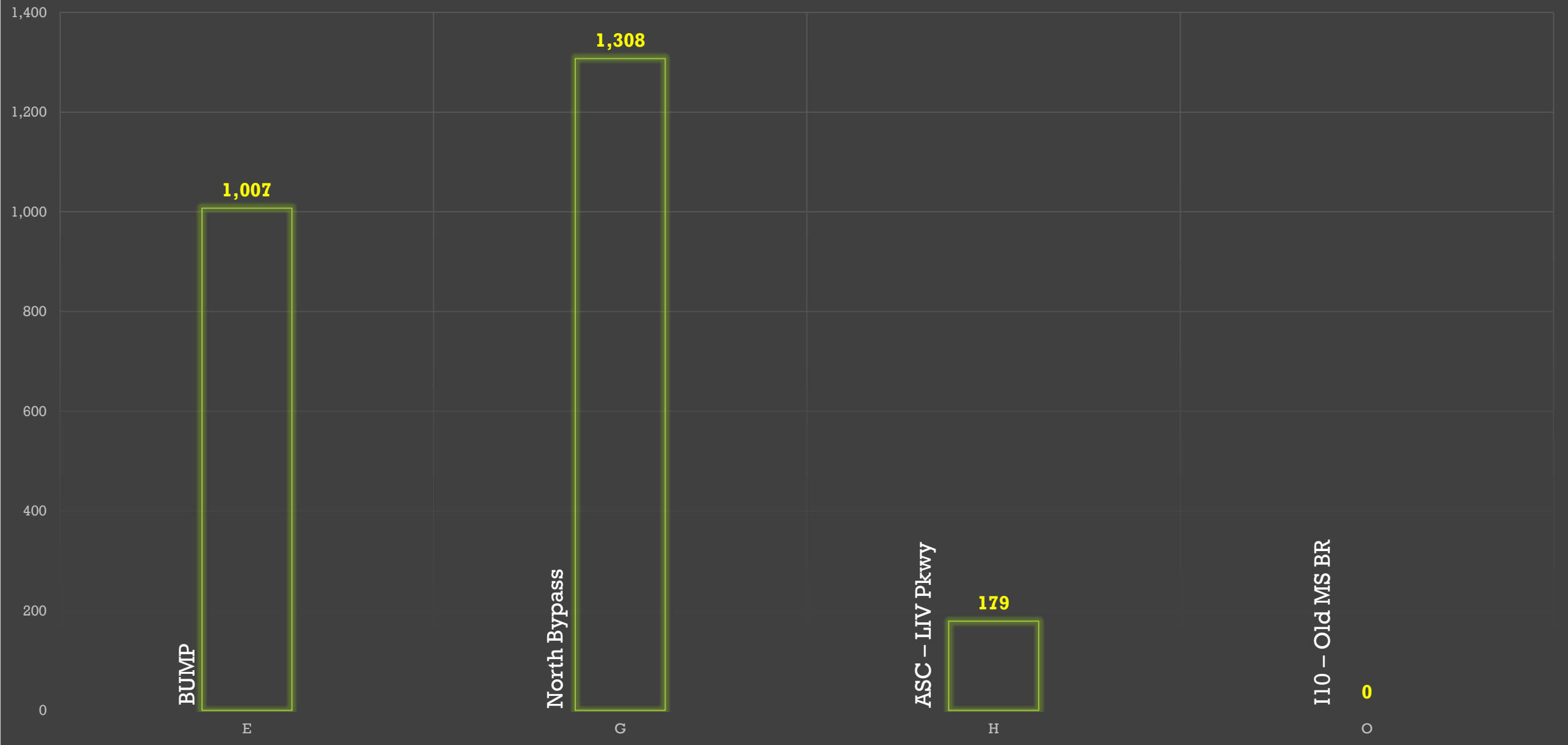
Urban Core

Annual Hours Saved Per Million Dollars Spent



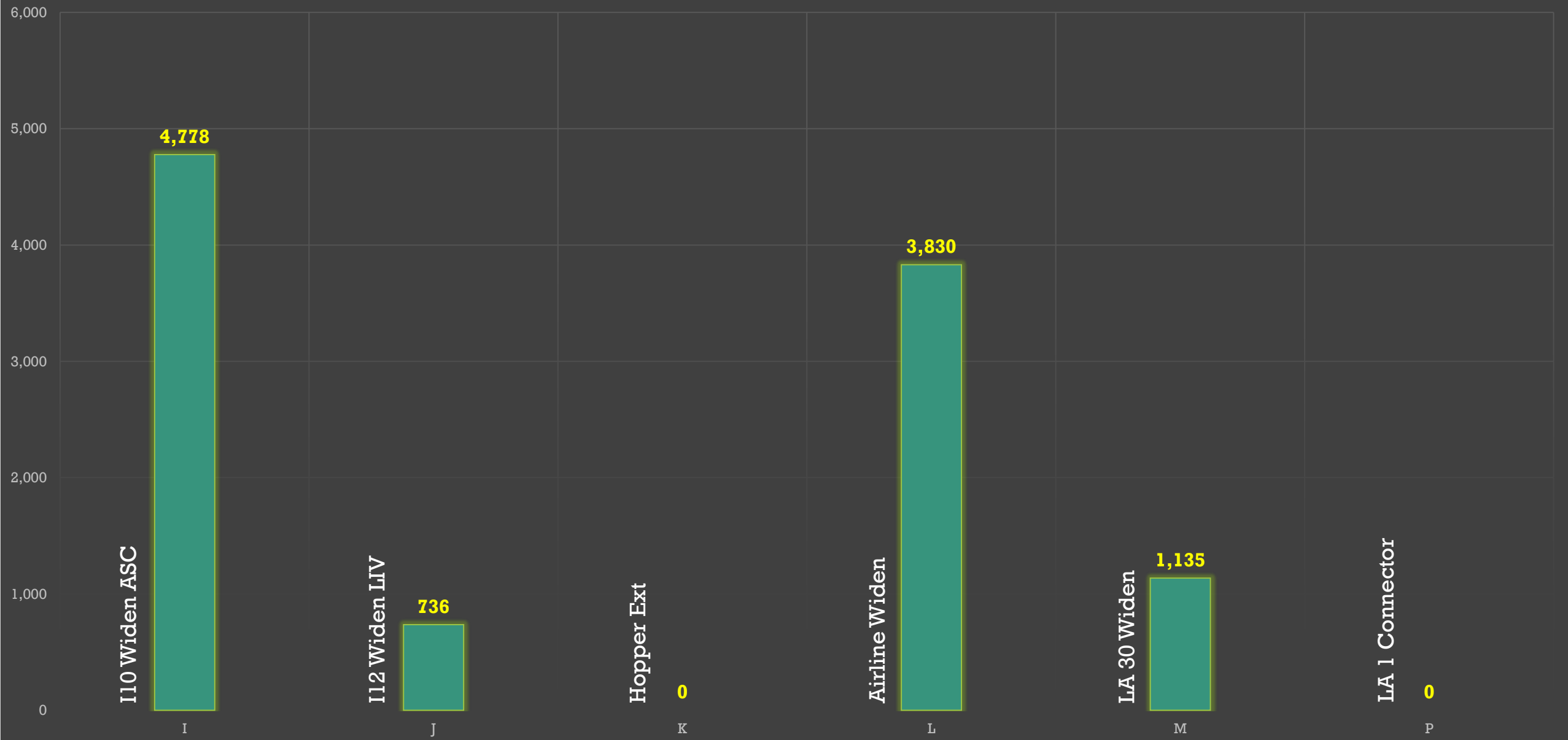
MS River Crossings

Annual Hours Saved Per Million Dollars Spent



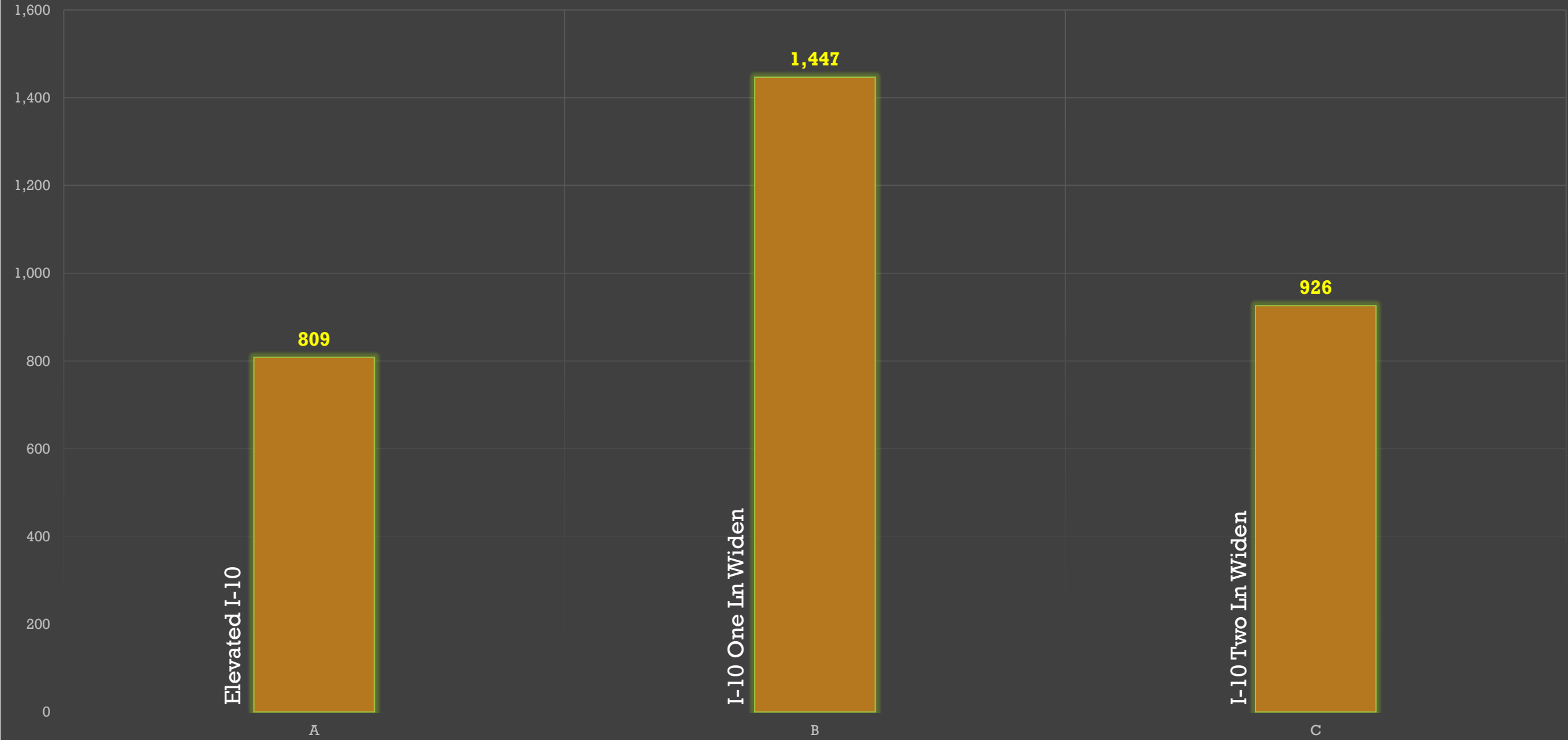
Other Regional (Large)

Annual Hours Saved Per Million Dollars Spent



Other Regional (Small)

Annual Hours Saved Per Million Dollars Spent

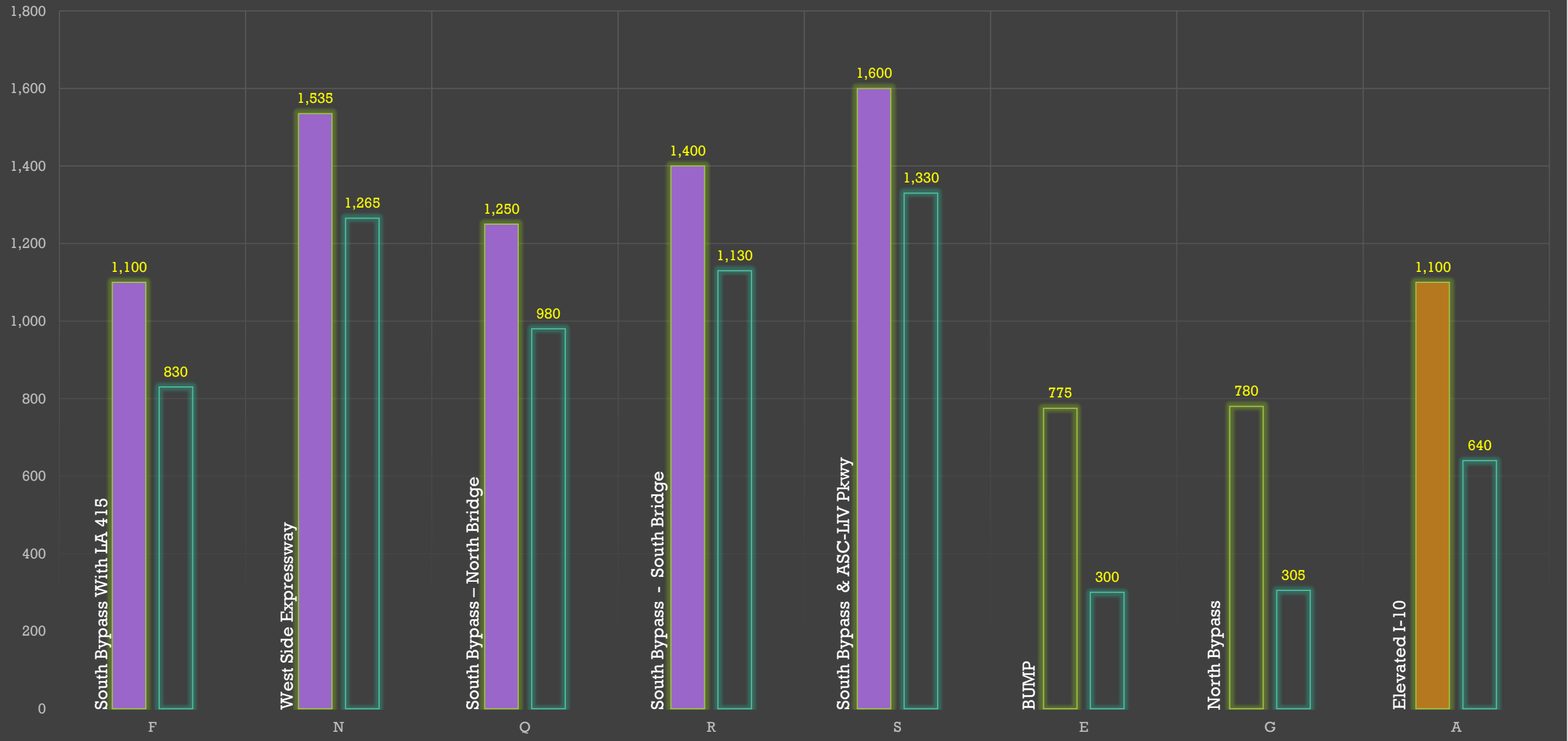


Urban Core

TOLLING ANALYSIS

- 8 Projects identified for potential use of tolls to help finance
- Tolling has 2 affects on our data
 - Public dollars needed for the project is reduced
 - Some amount of traffic is diverted due to additional cost to the driver
- Tolls seldom pay for 100% of the project cost – most feasible toll roads require 40% to 60% of the untolled cost

Untolled Vs Tolled Costs (Millions)

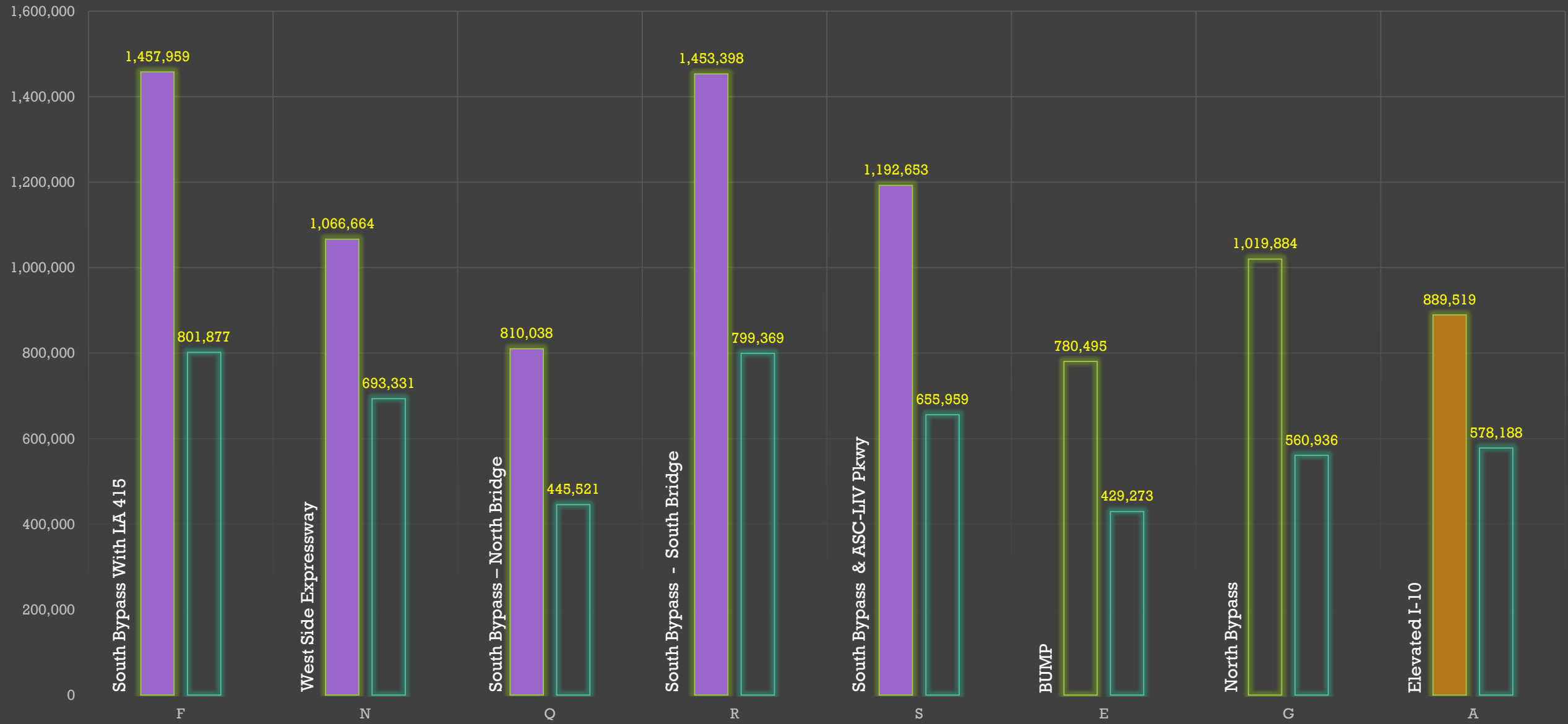


MS River Crossings

Other Regional (Large)

Urban Core

Untolled Vs Tolled - Annual Hours Saved

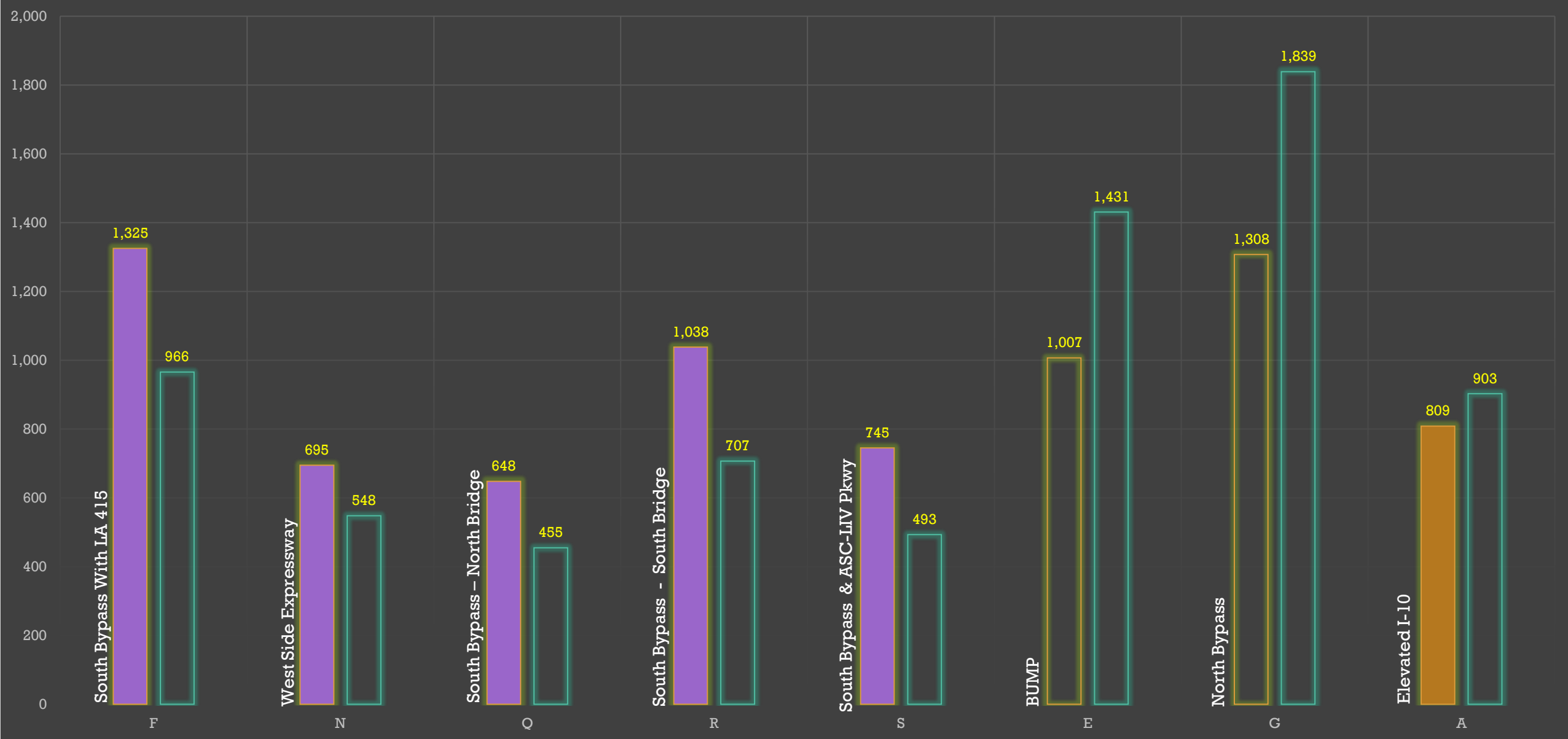


MS River Crossings

Other Regional (Large)

Urban Core

Untolled Vs Tolled - Annual Hours Saved Per Million Dollars Spent



MS River Crossings

Other Regional (Large)

Urban Core

GENERAL FINDINGS

- Multiple projects are needed for regional congestion relief
- Highest benefit projects involve crossing the Mississippi River (New bridge and increased use of old bridge)
- Best benefit/cost projects involve improving commute to Ascension Parish and one additional lane in both directions of I-10 through Baton Rouge
- Tolling can be a part of broader funding strategy – with project tolling revenue projections ranging from 25% to 60% of project cost

REGIONAL SOLUTION

- I-10 Widening Through Baton Rouge
 - Cost Range – 350 M
- Ascension Commuter Route (I-10 or Airline)
 - Cost Range: 125 M – 180 M
- New River Crossing South of I-10 Bridge (With LA 30 Widening)
 - Untolled Cost Range: 1,100 M – 1,600 M
 - Tolled Cost Range: 830 M – 1,330 M
- Increase Use of US 190 Bridge (BUMP or North Bypass)
 - Untolled Cost Range: 775 M – 780 M
 - Tolled Cost Range: 300 M – 305 M