US 90 Ramp Metering
LADOTD

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April 22, 2015

What is a Ramp Meter

- Located at interstate on-ramps
- It looks and operates just like a traffic signal
- Short green + red time
- Typically one car per green indication

When Will Ramp Meters Operate

- Morning Commute: 6:30 to 9:00
- Afternoon Commute: 3:00 to 7:00
- Special Events and Incidents

Monitored from the Traffic Management Center

What's the point?

- Reduce congestion
- Provide a safe merge operation at the freeway entrance
- Improve travel time reliability of the corridor

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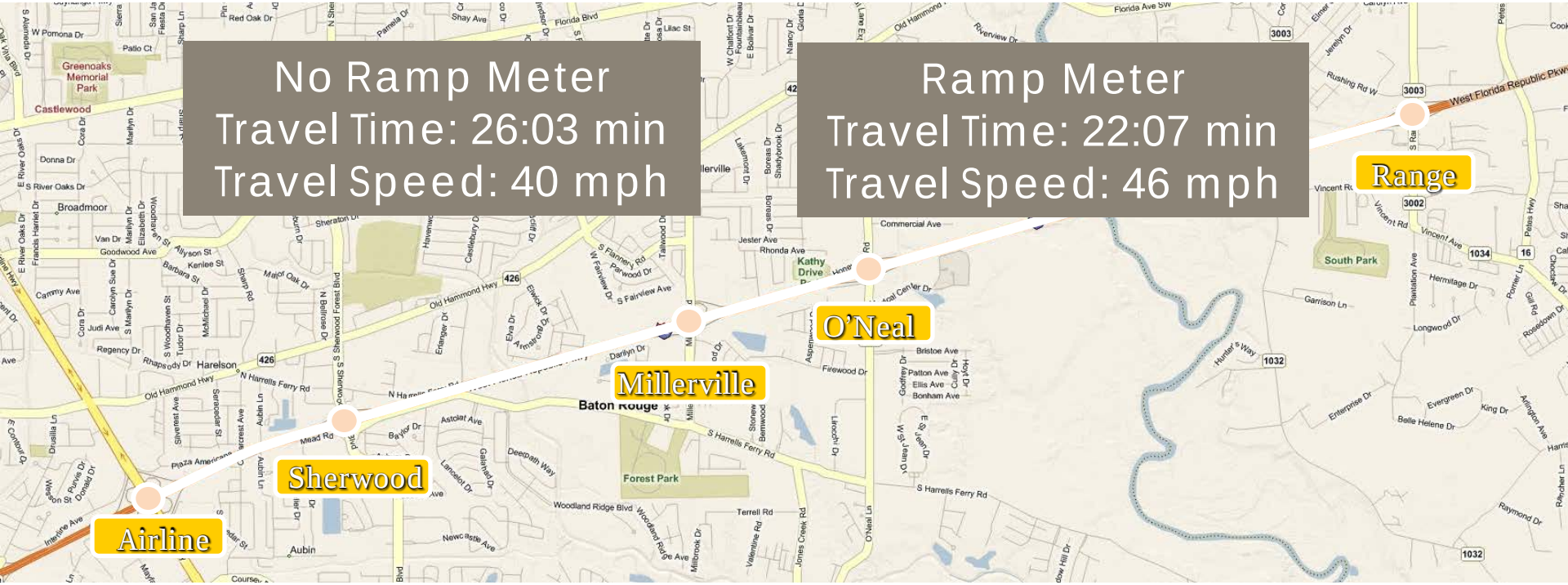
I-12 Ramp Meter Results
(A.M. Peak Period, Walker to Essen)



15% reduction in travel time

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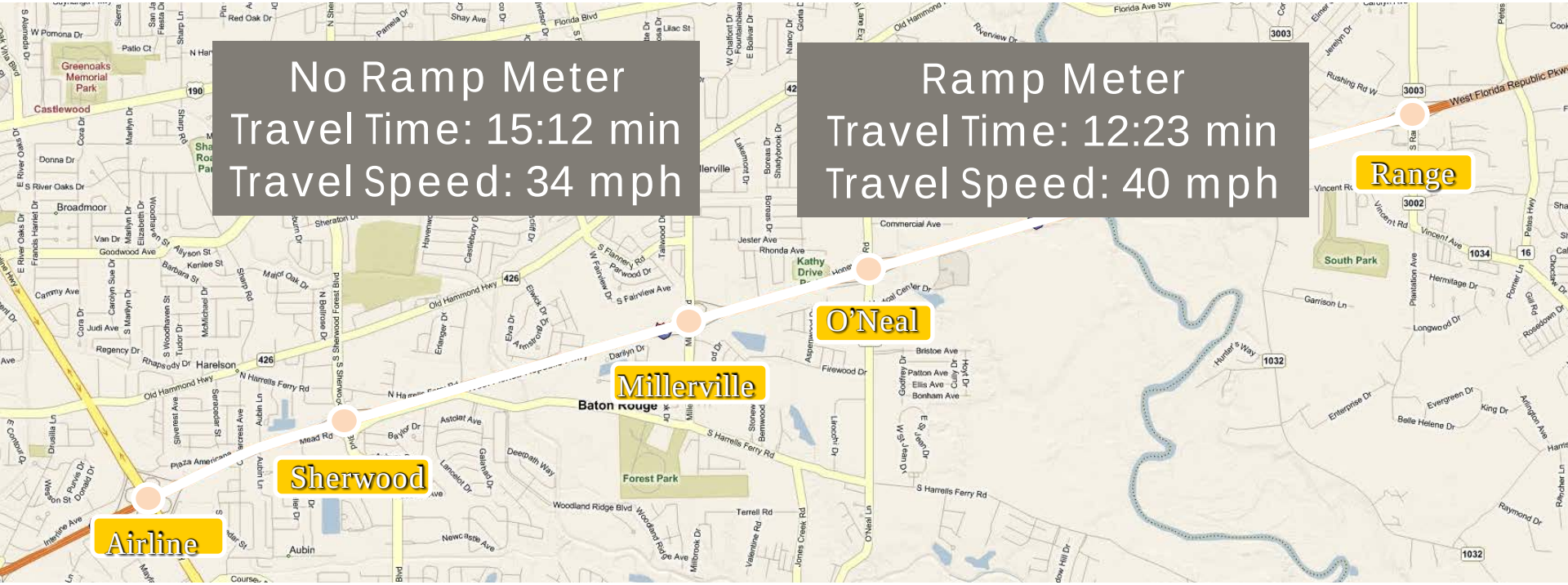
I-12 Ramp Meter Results
(P.M. Peak Period, Essen to O'Neal)



19% reduction in travel time

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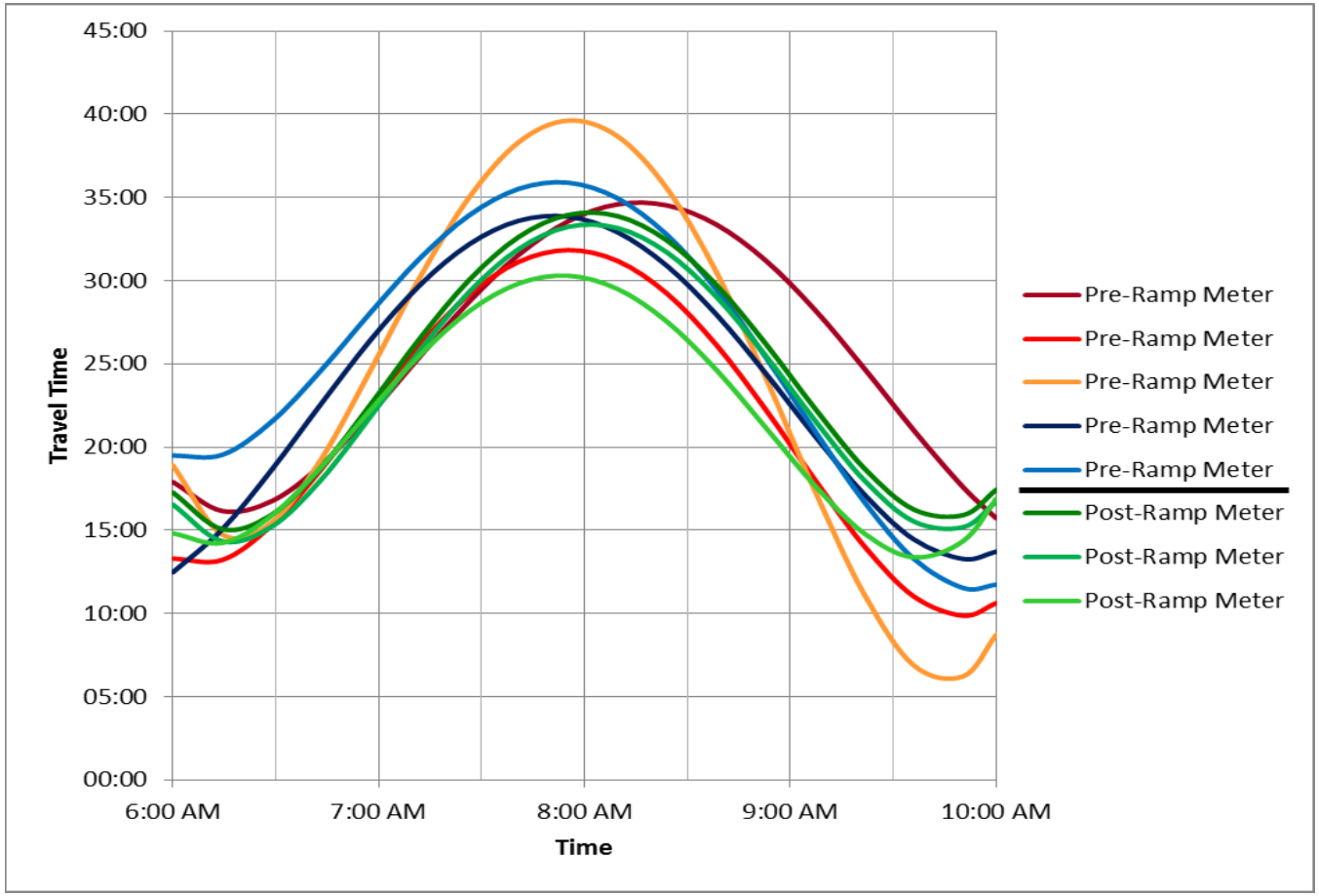
AM Field Measured Travel Times



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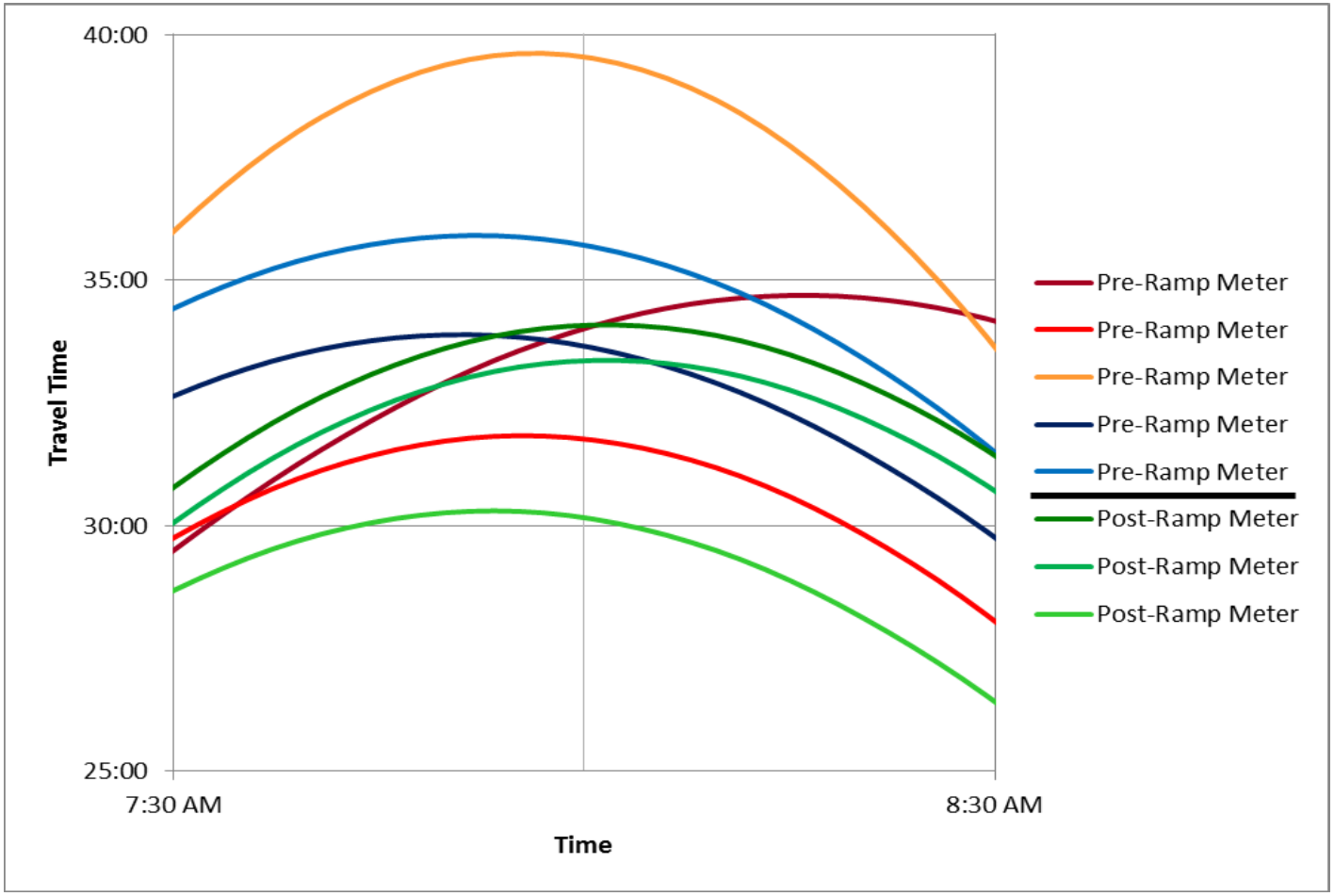
AM Field Measured Travel Times



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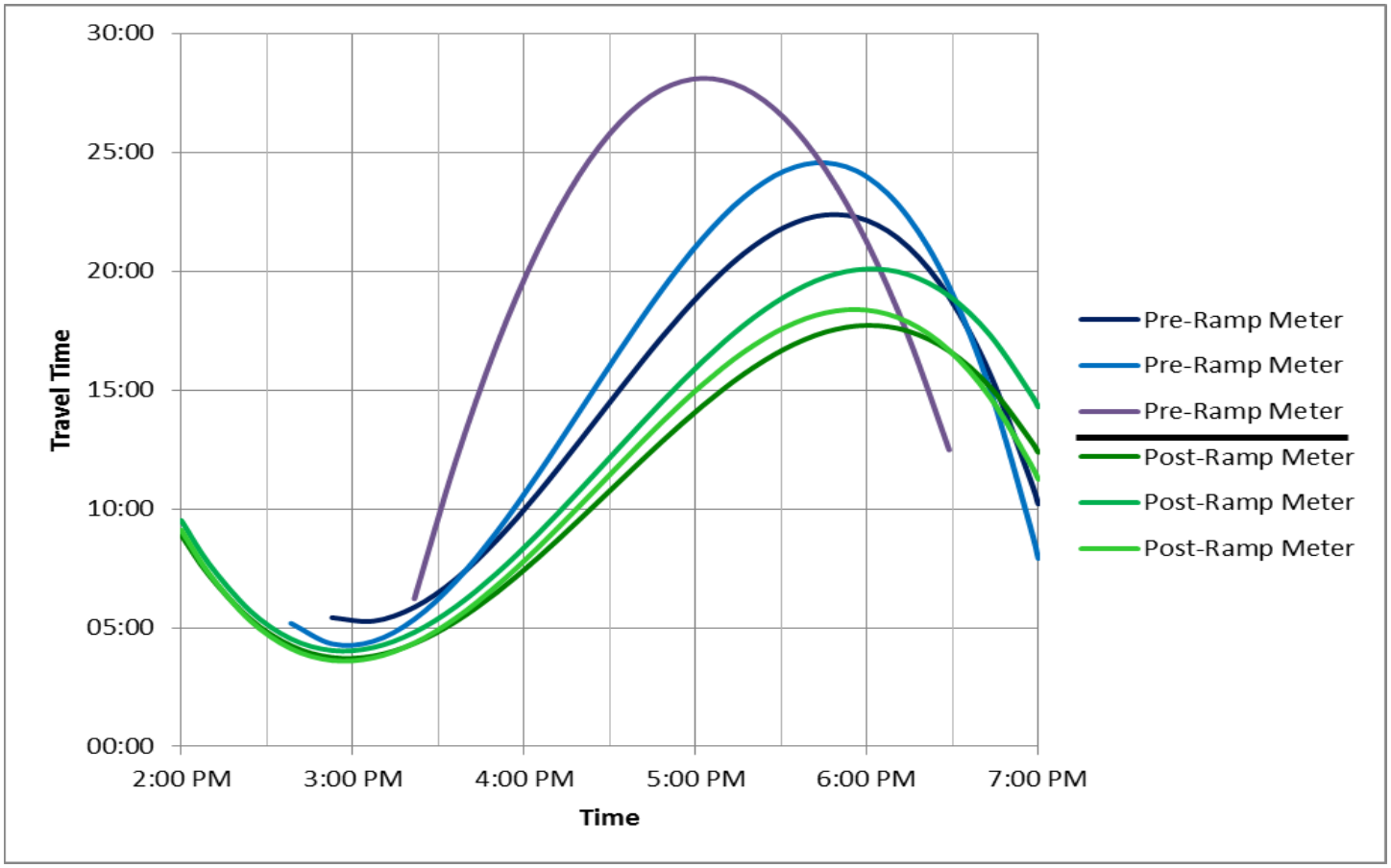
PM Field Measured Travel Times



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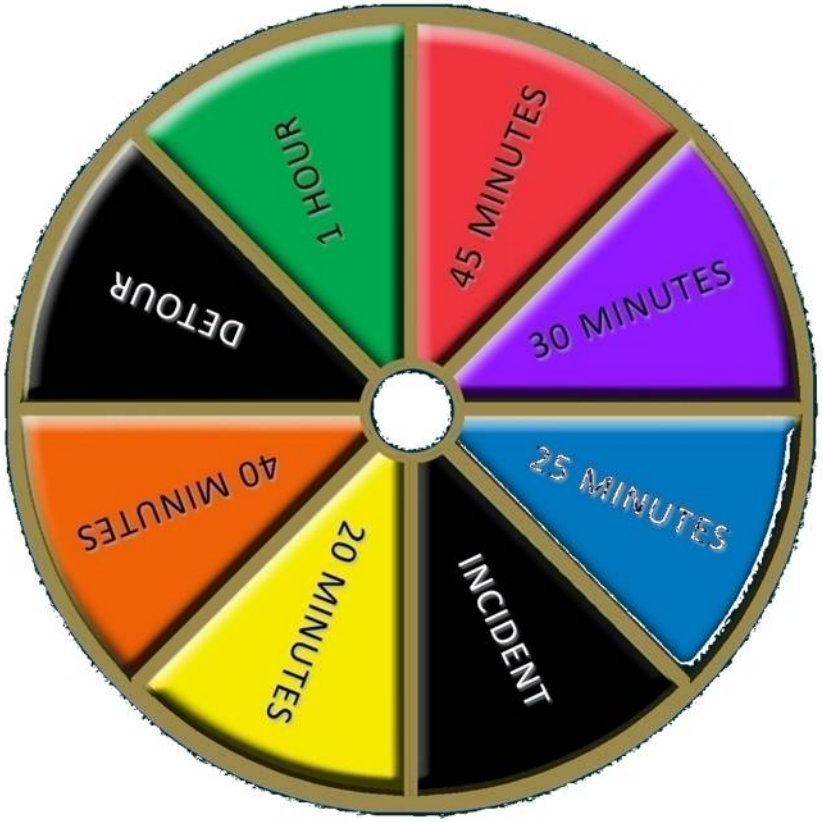
I-12 Ramp Meter Results

AM Westbound: Crashes reduced by 8.3%

PM Eastbound: Crashes reduced by 34.3%

Improved Reliability

"Do You Feel Lucky?"



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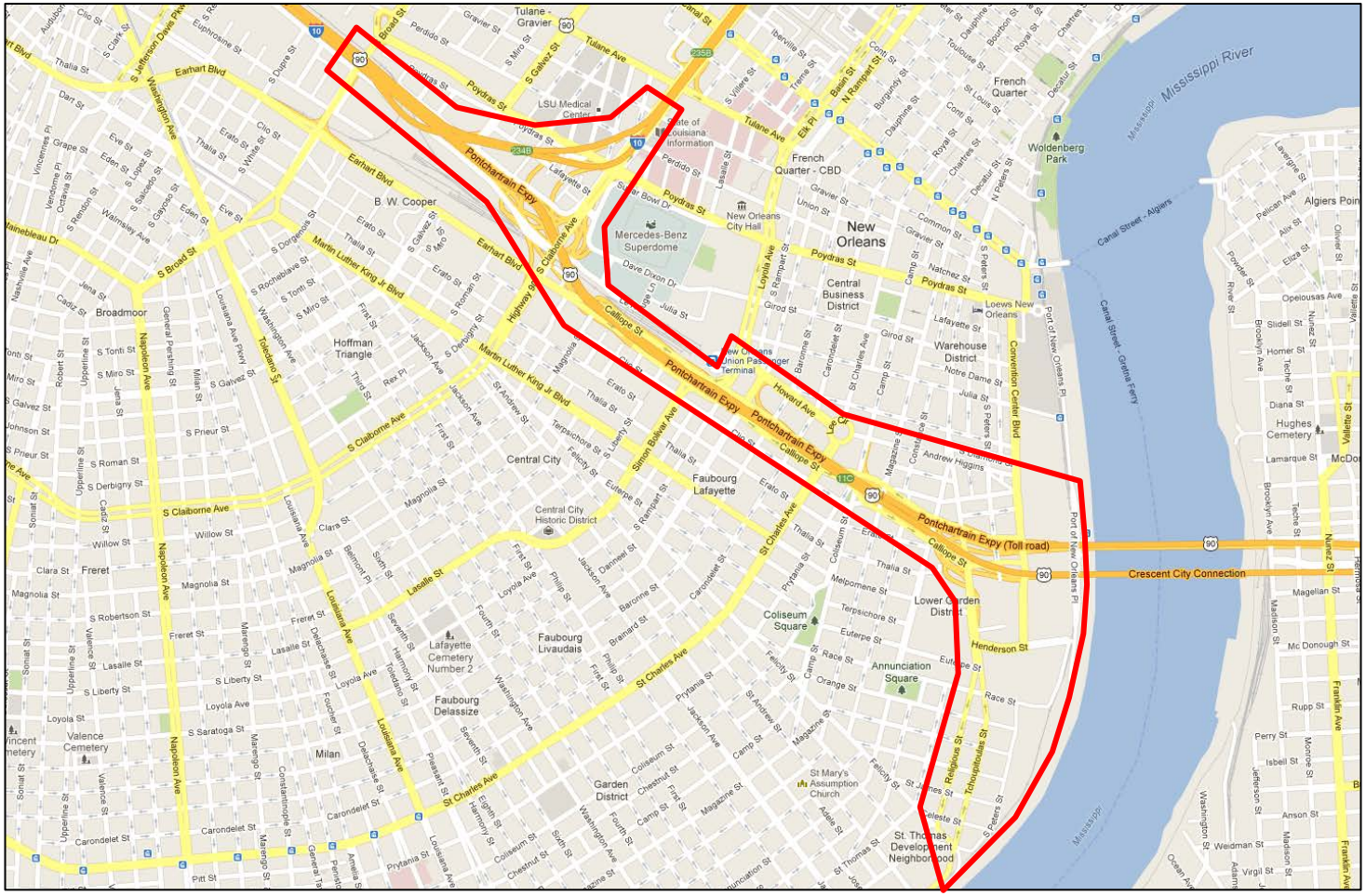
Study Area



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Proposed Improvements

Does it really work?
Results from US 90 Modeling

- Travel times reduced from 37.1 minutes to 14.4 minutes (61%)the morning
- Travel times reduced from 33.0 minutes to 12.2 minutes (63%)the evening
- The average stopped delay at each ramp meter was no more than one minute
- These results assume the Claiborne Ramp improvements shown in the next room

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Summary

- Reduce congestion
- Provide a safe merge operation at the freeway entrance
- Improve travel time reliability of the corridor

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