

GREENER HIGHWAYS

The Concrete Alternative

Heavy trucks use between 0.8% and 6.9% less fuel when traveling on a concrete pavement versus an asphalt pavement. These fuel savings lead directly to a reduction in greenhouse gas emissions and air pollutants.

See reverse for specifics on savings and reductions for the I-385 Rehab Project in Laurens County, SC >>>



GREENER HIGHWAYS



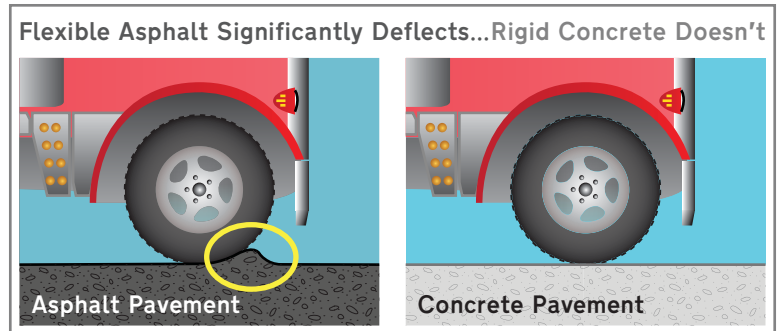
Fuel savings and reduced emissions translate into real opportunities for greening a segment of I-385 >>>

An Environmentally Friendly I-385

Highway agencies can realize significant economic and environmental benefits for the public during highway improvements with concrete pavements. Concrete's low pavement deflection reduces truck fuel consumption rates compared to asphalt surfaces. These reduced consumption rates translate into direct dollar savings as well as reductions in various engine pollutants.

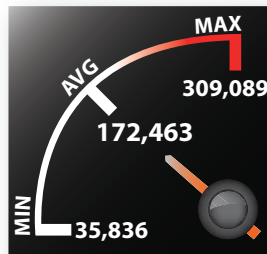
The results for the segment of I-385 in Laurens County, SC that is being rehabilitated from asphalt to concrete present a compelling case. The charts below show a range of annual fuel savings and reductions in pollutant emissions that will be achieved because this short section of I-385 is being switched to concrete.

The case study is based on results from a study performed by the National Research Council of Canada's (NRC's) Centre for Surface Transportation Technology (CSTT) in January 2006. The research concluded that trucks use up to 6.9% less fuel on rigid concrete pavements than flexible asphalt pavements, due to concrete's lower pavement deflection.

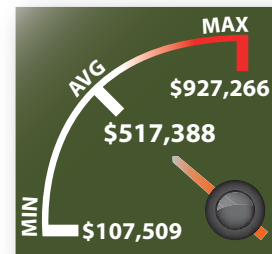


Annual Impact of Switching the 15 miles of the I-385 Rehab Project in Laurens Country, SC from Asphalt to Concrete

Economical Impact

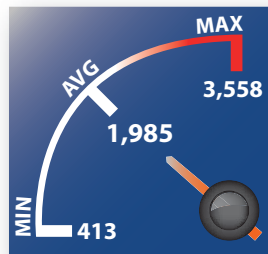


Fuel Savings (gallons/year)

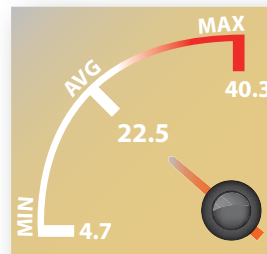


Dollar Savings (U.S. dollars/year)

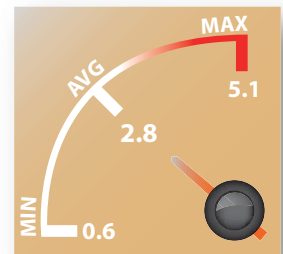
Environmental Impact



CO₂ Reductions (tons/year)



NO_x Reductions (tons/year)



SO₂ Reductions (tons/year)

References: EPA 420-F-05-001, February 2005. NRC-Canada, CSTT-HVC-TR-068, Taylor and Patten, January 2006.

Assumptions: Traffic volume of 25,000 vehicles per day with 18% trucks, truck fuel mileage of 5.5 miles/gallon, and a local diesel fuel price of \$3.00/gallon.