Florida Department of Transportation Research

The Economic Cost of Traffic Congestion in Florida
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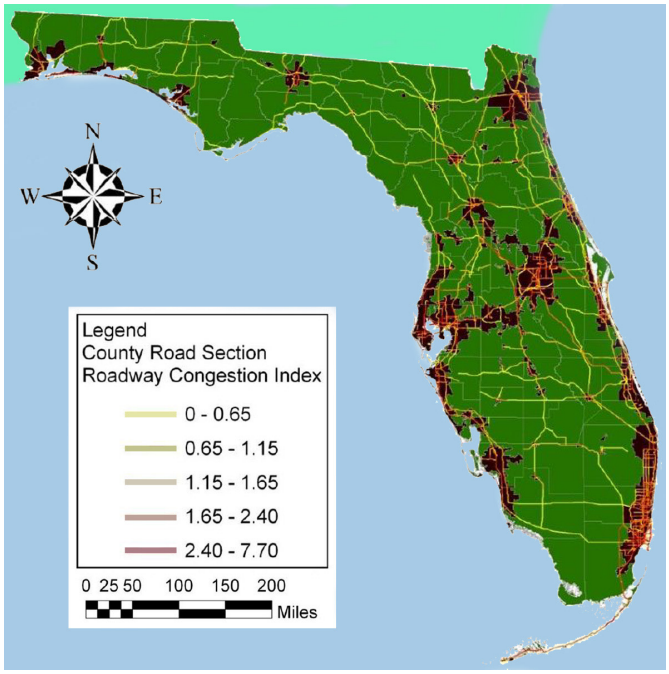
Congestion on Florida's roads is an annoyance, but it costs more than time. Estimates vary widely, but it is clear that traffic congestion costs billions of dollars a year. Congestion causes increased shipping costs, higher inventories, losses in productivity, wasted fuel, increased pollution, and more vehicle crashes.

The Texas Transportation Institute (TTI) produces an annual report of traffic congestion in major urban areas of the U.S. and applies national averages to estimate the costs associated with time losses and extra fuel consumption. The report includes cost estimates of seven urban areas in Florida but excludes small cities and rural areas from analysis.

Researchers at the Department of Urban and Regional Planning, University of Florida, recently examined Florida's traffic congestion problems to develop more precise and comprehensive traffic congestion cost data specific to Florida. They expanded the TTI method to include minor urban and rural areas, included state and local information, proposed a methodology to estimate the cost of unreliability, and analyzed the spatial implication of congestion costs.

Researchers found that traffic congestion is increasing in every county in Florida, as indicated by increases in average commute times and other measures. Researchers also found that congestion is significant in rural areas as well as urban areas, especially in rural areas near cities. In urban areas, congestion is a problem both in freeways and arterials, but in rural areas, congestion is concentrated in arterials.

Researchers recommended additional techniques to improve cost estimates of traffic congestion in the future, including: identifying direct measures of speeds and defining an objective measure of congestion;



This map, adapted from the report, shows Florida's major highways. Dark areas are roads with high congestion, which tend to cluster around urban areas.

improving the definition of the monetary value of time; estimating the impacts of delayed deliveries and precautionary inventories; estimating the impact to the labor market and agglomeration economies; measuring environmental damage and negative neighborhood effects; and identifying specific types and frequency of accidents associated with traffic congestion.

Researchers concluded that the ability to assess more accurately the cost of traffic congestion will inform decision making, provide a basis for evaluating the effects of public policies, and sensitize public opinion about the importance of solving traffic problems to reduce economic and social costs.

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For more information, visit http://www.dot.state.fl.us/research-center.