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## Florida Department of Transportation Research

# Analysis, Comparison, and Contrast of Two Primary Maintenance Contracting Techniques Used by the Florida Department of Transportation

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#### **Current Situation**

A common method of government contracting is seeking the lowest bid that meets project specifications. While this assures that money is saved upfront, it may not ensure other project values, such as delivery time, ability to address unforeseen situations, and durability of the contract's products. Alternative contracting methods based on performance measured by these values were first used by the Florida Department of Transportation (FDOT) in 2000. Since that

time, improvements based on experience have led to more widespread use. While managers have confidence in the effectiveness of AMC, it has never been formally studied.

#### **Research Objectives**

University of North Florida researchers compared an alternative contracting method, the asset maintenance contract (AMC), to a more traditional approach to maintenance contracting to examine the economy, efficiency, and effectiveness of AMCs.



We drive by them every day without noticing, but properly maintained shoulders and ditches are critical to driver safety and roadway integrity.

#### **Project Activities**

The study examined FDOT's AMC program from two points of view. First, researchers conducted interviews and a survey among targeted groups with expertise in FDOT's AMC program. Second, they examined outcomes of both AMC and traditional maintenance contracting methods – a process facilitated by FDOT's extensive record keeping.

Surveyed groups represented a wide range of administrators and employees who work with contracting: FDOT managers and staff; private consultants and contractors who had performed or bid a job in the AMC program; and out-of-state managers familiar with AMCs. Over 100 individuals responded to the survey. In general, the researchers found that contractors were more confident in AMC, while FDOT staff were more confident in traditional methods – possibly reflecting a continuing staff adjustment to the new procedures required by AMC.

Complementing the survey was an analysis of the outcomes produced by the contracting methods. Contracts were aggregated by district, creating two data pools – AMC and non-AMC contracts – for each of the eight FDOT districts, including the Turnpike Enterprise. Maintenance ratings, which are determined periodically for all roadways maintained by FDOT, were used to evaluate the outcome of maintenance contracts. Maintenance ratings across five years and all eight districts confirmed that AMC is a more efficient approach, yielding higher quality than other contracting methods. This examination also showed that the longer AMC is practiced, the more prominent its cost advantages become.

The researchers were able to provide other recommendations that could enhance the success of AMC, such as comprehensive cost and performance data, partnering between those experienced with AMC and those new to it, and clear, measurable, and unambiguous contracts.

### **Project Benefits**

Improving maintenance contracting processes helps assure the long-term integrity of Florida's transportation infrastructure with responsible stewardship of public funds.

For more information, please see dot.state.fl.us/research-center