

**Florida Department of Transportation Research** Investigation of Economic Impacts of Florida's Highway Beautification Program BDV31-977-03

Public investment in landscape beautification projects is presumed to provide monetary benefits by attracting private investment and contributing to the economy. Recently, researchers at the University of Florida, Institute of Food and Agricultural Sciences, studied highway beautification expenditures in Florida to determine their regional economic impacts.

Landscaping of highway rights-of-way with appropriate trees, shrubs, flowers, and groundcover beautifies highways and enhances the driving experience of motorists. Well-planned and sustainable landscaping also provides other important safety, environmental, and economic functions by providing a safe recovery zone for errant vehicles, protecting roadsides and infrastructure from erosion, and reducing maintenance costs and hazards.

Activities related to highway beautification generate direct economic impacts in the form of increased revenues such as employment, income, and local and state government tax revenues. Spending for highway beautification also stimulates additional indirect and induced economic activity through economic multiplier effects. For example, indirect effects occur when landscaping contractors purchase materials and equipment from other Florida businesses, while induced effects occur when households of proprietors and employees of affected businesses purchase goods and services within Florida for personal consumption. The combined direct, indirect, and induced impacts of landscaping activities represent total economic impacts that occur over the period of the highway landscape project, typically 18-24 months.

Researchers estimated total economic impacts of FDOT's highway beautification expenditures using regional economic models constructed with Impact Analysis for Planning (IMPLAN) software. For the 2008-2013 study period, researchers found that expenditures in FDOT's seven districts and Florida's Turnpike Enterprise generated impacts of 2,112 full-



Landscaping serves many important safety, economic, and environmental functions. Above: Roadside flowers on the right-of-way of I-75 near Ocala, Fla.

and part-time job-years (i.e., one job for one year), \$245.2 million in revenue, \$147.6 million in valueadded contribution (e.g., value increase minus cost) to the Gross Domestic Product, \$110 million in labor income, \$32.6 million in other property income, and \$5 million in indirect business tax. They found that annual average economic impacts of highway beautification expenditures totaled \$46 million in output impacts and \$28 million in value-added impacts.

Florida's Turnpike Enterprise beautification expenditures generated the highest economic output impacts of \$51.4 million, 403 part- and full-time jobs, and \$30 million in value-added impacts. Combined, Florida's Turnpike Enterprise and Districts 4 and 6 accounted for 60 percent of total output impacts and 62 percent of total value-added impacts of highway beautification expenditures. The impact per dollar of highway beautification investment was \$1.53 in output, \$.92 in value added, \$.62 in labor income, and \$.03 in state and local taxes, while the employment impact was 13.2 jobs per million dollars of investment.

These findings will enable FDOT to determine the extent to which its investment in highway beautification projects will impact Florida's economy.

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