



The Florida Senate

Issue Brief 2012-223

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Committee on Transportation

HIGHWAY BEAUTIFICATION AND LANDSCAPING PROGRAM

Statement of the Issue

There are three co-equal tenets of the Florida Department of Transportation's mission¹ to provide a safe statewide transportation system:

- ensure the mobility of people and goods;
- enhance economic prosperity; and
- preserve the quality of our environment and communities.

As statutorily mandated preserving the quality of Florida's environment and communities, the Florida Department of Transportation (FDOT or department) seeks to conserve, protect, restore, and enhance Florida's natural resources and scenic beauty. Such endeavors are guided by the Legislature's requirement for the department to provide for the enhancement of environmental benefits, including air and water quality; to prevent roadside erosions; to conserve the natural roadside growth and scenery; and to provide for the implementation and maintenance of roadside conservation, enhancement, and stabilization programs.²

More specifically, s. 339.24, F.S., requires the department to plan a statewide beautification program for state transportation facilities. The statute limits the expenditure of program funds to those specifically appropriated by the Legislature. Consistent with s. 334.044(26), F.S., no less than 1.5 percent of the amount contracted for construction projects in each fiscal year is allocated to beautification programs. In Fiscal Year 2010, the department programmed \$29,757,657 (amounting to approximately 1.85 percent of construction funds) for highway beautification and landscaping projects.

The issue brief will identify federal and state laws relating to highway beautification and landscaping programs, report expenditures related to the programs and identify potential benefits to the State.

Discussion

Federal Laws

Federal policy established in 23 CFR 752 encourages highway beautification and landscaping. The regulation states:

Highway esthetics is a most important consideration in Federal highway program. Highways must not only blend with our natural, social, and cultural environment, but also provide pleasure and satisfaction in their use. Planning and development of the roadside should be concurrent with or closely follow that of the highway.

Authorization to use federal funds for landscaping and scenic enhancement along Federal-aid highways is found in 23 U.S.C. § 319 (2010). Specifically, it states:

The Secretary may approve as a part of the construction of Federal-aid highways the costs of

¹ Section 334.046(2), F.S.

² Section 334.044(26), F.S.

landscape and roadside development, including ... improvement of strips of land necessary for the restoration, preservation, and enhancement of scenic beauty adjacent to such highways.

Note: Contrary to the concept implied by its title, the U.S. Highway Beautification Act of 1965 (HBA) provides no requirements for highway landscaping or beautification aside from the requirement for vegetation management practices pertaining to outdoor advertising controls.

State Laws

Article II, Section 7(A) of the Constitution of the State of Florida establishes the State's policy to "conserve and protect its natural resources and scenic beauty" and the State has built upon the federal highway beautification effort.

A number of statutes relate to highway landscaping and beautification efforts.

- Section 336.045, F.S., provides for FDOT to adopt uniform minimum standards for design, construction and maintenance of all public streets, roads, highways, and other facilities used by the public for vehicular and pedestrian traffic. The department is directed to consider design approaches which provide for the appropriate aesthetics, and the landscape design and landscape materials around the facilities.
- Section 339.2405, F.S., established the Florida Highway Beautification Council within FDOT in 1987. The Council consists of seven members appointed by the Governor. The duties of the Council are to:
 - provide information to local governments regarding the state highway beautification grants program;
 - accept grant requests from local governments;
 - review grant requests for compliance with council rules;
 - establish rules for evaluating and prioritizing the grant requests. The rules must include, but are not limited to, an examination of each grant's aesthetic value, cost-effectiveness, level of local support, feasibility of installation and maintenance, and compliance with state and federal regulations. Rules adopted by the Council which it uses to evaluate grant applications must take into consideration the contributions made by the highway beautification project in preventing litter;
 - maintain a prioritized list of approved grant requests. The list must include recommended funding levels for each request and, if staged implementation is appropriate, funding requirements for each stage shall be provided;
 - assess the feasibility of planting and maintaining indigenous wildflowers and plants, instead of sod groundcovers, along the rights-of-way of state roads and highways;
 - at the request of the head of the department, review and make recommendations on any other highway beautification matters relating to the State Highway System; and
 - annually submit to the Secretary of FDOT a proposal recommending the level of grant funding.

Section 339.2405(10), F.S., provides the head of the department, after receiving recommendations from the Council, shall award grants to local governmental entities that have submitted grant requests for beautification of roads on the State Highway System and which requests are on the council's approved list. The grants shall be awarded in the order they appear on the Council's prioritized list and in accordance with available funding.

Since 1988, the Council has awarded more than 350 grants to local governments totaling more than \$25 million.

- Section 339.61(2), F.S., establishes legislative intent relating the Florida Strategic Intermodal System, the network of transportation facilities of statewide and interregional significance focused on the efficient movement of passengers and freight. Subsection (2) states:

...The Legislature further finds that our transportation system must be designed and operated in such a way that it preserves the abundance of natural and manmade amenities that have been so successful in attracting new residents, businesses, and tourists to this state....

Perhaps most significantly, in 1999, the Legislature enacted ch. 99-250, L.O.F., which amended s. 334.044(26), F.S., to establish a minimum percentage, based upon amounts contracted for construction projects, that the FDOT must annually spend for roadside beautification. According to the 1999 legislation, *at least* 1 percent of the amount contracted for construction projects must be annually spent on beautification programs in Fiscal Years 1999-2001. In subsequent years, the amount increased to *at least* 1.5 percent. Modifications were made to the law again during the 2007 and 2009 Sessions.

Presently, s. 334.044(26), F.S., provides for the enhancement of environmental benefits including air and water quality:

- to prevent roadside erosion,
- to conserve the natural roadside growth and scenery; and
- to provide for the implementation and maintenance of roadside conservation, enhancement, and stabilization programs.

No less than 1.5 percent of the amount contracted for roadway and bridge construction projects shall be allocated by the department for the purchase of plant materials, with, to the greatest extent practical, a minimum of 50 percent of these funds for large plant materials remaining funds for other plant materials. All such plant materials must be purchased from Florida commercial nursery stock in Florida. Lastly, the statute provides that the FDOT must develop grades and standards for landscaping materials purchased through this process.

In recent years, a little more than \$30 million has been allocated annually to highway beautification in Florida.

Allocating 1.5 Percent for Landscaping

The state budget has no line item or appropriation for highway landscape projects. To meet the 1.5 percent target defined in s. 334.044(26), F.S., FDOT Districts program and perform landscaping with the same budget used to program roadway and bridge construction. Districts are responsible for programming landscape projects at levels based on the total (100%) construction amount programmed. *The 1.5 percent target is a statewide target, not a target for individual Districts or individual roadway and bridge construction projects.* Consistent with the law, some Districts routinely program more or less than 1.5 percent, and many construction projects have no landscaping included. Decisions about programming landscape projects are often made based on requests from local governments, and their willingness and ability to be responsible for routine landscape maintenance. When there is a shortfall to revenues or a local government will not be able to accept responsibility for maintenance, funds are re-allocated to another project or program within the FDOT work program.

An automated system is used to establish targets for highway beautification equal to 1.5 percent of the amount contracted for roadway and bridge construction for each of the first three years of the tentative work program. The following is considered in reviewing District and Turnpike highway beautification targets:

- The 1.5 percent highway beautification target is a statewide measure. Each District and the Turnpike are expected to share in the programming of work to achieve this target. Exceptions to programming less than the 1.5 percent target may be granted if the statewide target is achieved in a given year or if the target will be met by averaging the first three years of the tentative work program.
- Districts may program highway beautification work above the 1.5 percent target. An exception or lowering of an established target may be granted if the statewide 1.5 percent target is still met, or if other Districts that are under programmed increase their allocation to meet the statewide target.

Allocations that are considered to count toward the 1.5 percent for roadside beautification include the total cost or bid price of landscape pay items. This includes the cost of plant materials, installation, and establishment.

Through the use of these pay items the department is able to assure that to the extent practical a minimum of 50 percent of the funds are used to purchase large plants with the remaining funds for the purchase of other plant materials. For contracts identified as stand-alone landscape contracts or projects, the total contract cost is used. Expenditures for the highway beautification grant program and landscape projects and/or expenditures performed by local agency agreements are included. Landscaping allocations included in lump sum and design build contracts are included, but the calculations of the percent used to purchase large plants are not available to the department. Grassing, sodding, and wildflowers are not included as landscaping costs for compliance with this statute, nor are the Preliminary Engineering, or the Construction, Engineering and Inspection (CEI) costs associated with landscaping.

Florida Department of Transportation Landscape Report

Three Year Average Consistent with 334.044, F.S.

Programming in Adopted Work Program as of Run DATE: July 11, 2011

District	Fiscal Year								
	2012			2013			2014		
	Highway Beautification Cost	Total Construction Cost	%	Highway Beautification Cost	Total Construction Cost	%	Highway Beautification Cost	Total Construction Cost	%
01	\$1,745,011	\$309,893,039	.56	\$453,180	\$119,104,329	.38	\$955,479	\$265,895,611	.36
02	\$5,058,645	\$357,025,147	1.42	\$2,292,654	\$293,884,058	.78	\$1,196,924	\$274,090,508	.44
03	\$3,798,029	\$232,925,084	1.63	\$2,042,022	\$178,120,714	1.15	\$2,682,209	\$279,238,036	.96
04	\$7,273,183	\$138,508,694	5.25	\$6,068,255	\$106,085,602	5.72	\$6,426,994	\$172,033,358	3.74
05	\$3,994,148	\$546,154,814	.73	\$5,225,456	\$207,143,090	2.52	\$3,387,000	\$212,782,284	1.59
06	\$7,146,119	\$182,703,720	3.91	\$4,558,166	\$134,803,778	3.38	\$10,096,778	\$117,599,925	8.59
07	\$5,098,397	\$287,093,213	1.78	\$8,564,943	\$517,301,963	1.66	\$2,983,712	\$149,456,822	2.00
08	\$3,659,900	\$187,240,619	1.95	\$1,760,850	\$84,929,398	2.07	\$3,247,505	\$427,475,803	.76
13				\$1,000,000	\$0	.00	\$1,000,000	\$0	.00
21	\$0	\$200,000	.00	\$0	\$1,000,000	.00			
60	\$0	\$40,000	.00						
63	\$0	\$1,350,273	.00						
65				\$0	\$2,246,102	.00	\$0	\$3,622,890	.00
TOTAL	\$37,773,432	\$2,243,134,603	1.68	\$31,965,525	\$1,643,619,035	1.94	\$31,976,600	\$1,901,195,238	1.68

Landscape Plans

Landscape projects are designed to complement and enhance the natural and man-made environment. This may include irrigation systems and site amenities such as street furniture and specialty pavement, fences, and lights. For consistency with s. 334.175, F.S., and for protection of public health, safety, and welfare, and personal safety of construction and maintenance workers, all landscape design plans prepared for or by the department, must be signed, sealed, and certified by the professional landscape architect in responsible charge of the project work. Such professional landscape architect must be duly registered in this state.

To the extent practical, plans consider the following elements:

- Conservation of natural roadside growth (vegetation) and scenery.
- Plants purchased from Florida based nurseries.
- Relocation of existing vegetation.
- Selective clearing and thinning of existing vegetation.
- Natural regeneration and succession of native plants.
- Large plants (plants equivalent or larger than those grown in 5 gallon containers) with combined value of 50 percent or more of the estimated value of all plants specified in the plans.

- Florida native plants with known provenance (original source of plant stock) to be as close to planting site as possible.
- Plant selection and placement that:
 - Improves safety.
 - Minimizes roadside maintenance requirements.
 - Minimizes soil erosion.
 - Avoids impacts to existing and proposed above and below ground utilities.
 - Provides shaded pedestrian, bicyclist, and transit facilities.
 - Reduces storm water runoff volume and velocity.
 - Promotes water conservation.
 - Minimizes impacts to natural areas.
- Reclaimed water for irrigation.
- Recycled and recyclable materials.
- Identification, extent, and treatment method of existing invasive exotic plants.

The concept of developing transportation projects with an eye towards their surroundings has been evolving in the transportation industry since the National Environmental Policy Act of 1969 required transportation agencies to consider the possible adverse effects of transportation projects on the environment. In 1998, the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) jointly generated the first working definition of context sensitive design (CSD) which has since been revised into an FHWA program entitled “Context Sensitive Solutions” (CSS) which is defined as:

Context Sensitive Solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions.³

Though Florida’s highway beautification and landscaping effort is only one component in the effort to improve the appearance of Florida roadsides, and an even smaller part of the FHWA’s CSS program, it may be the most economic, ecologic, and enduring means of meeting the CSS program objectives.

Potential Benefits

Based on a median value of \$30 million expended via the 1.5 percent landscaping provision each year, Florida receives the following economic benefits⁴:

- Creates 549 Florida jobs (direct, indirect, and induced)
- Generates labor income of \$25,510,401
- Output (Revenue) of \$63,621,632
- The Return on Investment (ROI) is slightly higher than 2 to 1

According to the Florida Nursery, Growers and Landscape Association (FNGLA), the 1.5 percent landscaping provision generates green industry jobs including landscape architects and designers, irrigation contractors and designers, landscape and roadside maintenance employees, production nurseries, and landscape contractors.

Although not easily quantified, the environmental benefits of landscaped areas (*e.g.*, oxygen production, pollution abatement, erosion control, etc.) should not be discounted. Additionally, studies⁵ indicate that the presence of trees and green space appear to positively influence both consumers’ attitudes about the character of a place, as well as the prices they are willing to pay for goods and services at proximal businesses.

³ Results of Joint AASHTO/FHWA Context Sensitive Solutions Strategic Planning Process Summary Report, March 2007

⁴Source: Dr. Alan Hodges, Food and Resource Economics Department, UF/IFAS (as provided by the Florida Nursery Growers and Landscape Association.)

⁵ *e.g.*, Center for Urban Horticulture, University of Washington College of Forest Resources, 2000. “Community Image: Roadside Settings and Public Perceptions.” Human Dimensions of the Urban Forest Fact Sheet No. 10.