

# SUSTAINABILITY SUBJECT BRIEF



## What is Sustainability?

Sustainability is the ability to **meet the needs of the present without compromising the ability of future generations to meet their own needs**. Often, sustainability is referred to as the three-legged stool or triple bottom line, which holistically represent the different facets of sustainability: environmental, economic, and societal. Operational efficiency may also be considered a facet of sustainability.

## What are the Benefits?

Applying sustainable practices at FDOT, both through internal practices and through the way FDOT implements projects, can:

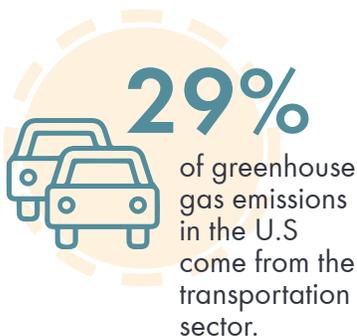
- Reduce environmental impacts
- Increase efficiency in operations
- Realize economic outcomes
- Improve community relations

## What is FDOT's Role in Sustainability?

FDOT's role in sustainability includes managing resources efficiently, using recycled products, and identifying ways to reduce the impacts of transportation on the environment. Actions that lead to sustainability support the Department's mission and the goals of the Florida Transportation Plan, which include transportation solutions that strengthen Florida's economy, enhance Florida's communities, and enhance Florida's environment.



## How Do Transportation and Sustainability Work Together?



How we move around has a direct impact on our environment and the sustainability of our state.

This is largely driven by air travel, freight and goods movement, and the use of single-occupancy vehicles. Advanced technology in cars reduces air quality emissions. Through innovations in vehicle technology, the state of Florida has attained the EPA's air quality standards.

Multimodal transportation options, like walking, biking, and taking transit, can help improve air quality and reduce congestion. Transit options move more people with less energy consumed than single-occupancy vehicles. FDOT's Complete Streets program is one way to approach expanding multimodal transportation options in communities.

Other practices employed by FDOT are contributing to improved environmental sustainability in Florida, documented on the following page.

# How is FDOT Advancing Sustainability?

The sustainability of Florida's environment and natural resources is at the forefront FDOT's decisions. This means more than just conserving water and energy, reducing emissions, and avoiding and mitigating impacts on conservation lands. It means proactively taking steps to enhance and restore natural systems, so they are preserved for future generations. FDOT follows sustainability practices in the following ways.

## Conserving Resources

- FDOT's office building use environmentally sustainable practices like automatic light switches and timed A/C and heating. The agency's buildings and rest stops also use automatic toilets and faucets to conserve water.
- FDOT has built several LEED-certified service plazas along Florida's Turnpike to provide energy-efficient rest areas. These plazas use solar energy to power the facilities and reduce energy consumption through efficient lighting and appliances.
- FDOT encourages carpooling and vanpooling through various programs across the state.
- FDOT supports the use of electric vehicles (EV) by providing EV charging stations along major highways.
- FDOT has partnered with the Center for Urban Transportation Research to track and evaluate performance and cost implications of alternative fuel buses and infrastructure.
- FDOT plants native plants for landscaping along highways to reduce water consumption.

## Mitigating Environmental Impacts

### FDOT'S WILDFLOWER PROGRAM

locates and manages plant communities on roadsides and in the transportation right of way to reduce mowing and to benefit pollinators

**\$1 MILLION**  
DEDICATED IN  
2019-2020

### FDOT'S MITIGATION PROGRAM

mitigates environmental impacts from road construction through regional, long-range planning led by the state's water management districts.

Created by the State Legislature **1996**  
**DISTRICTS MUST DEVELOP A MITIGATION PLAN** to be approved by each District's Governing Board

## Incorporating Sustainability in Planning

- FDOT's Aviation Office developed the Airport Sustainability Guidebook to lead Florida's airports into a successful and sustainable future. To do so, this Guidebook was developed with a standardized methodology and guidance for developing an effective sustainability plan and implementing sustainability initiatives.

## Reduce, Reuse, Recycle

**FDOT RECYCLES MATERIALS IN ROAD, BRIDGE, AND OTHER CONSTRUCTION PROJECTS.**

**100%**

all crushed concrete produced in Florida as aggregate in new concrete and asphalt pavements or in base layers.

**75% BY 2020**

of waste generated by FDOT must be reused.

**90%**

of waste tires generated in 2010 in Florida found as fill materials, energy generation, artificial reefs, and road construction.

Ground rubber tire (GRT) is used in concrete mixtures for paving concrete to solve flexibility and thermal expansion issue improving the quality of concrete and lowering construction costs.



## Reducing Air Quality Impacts

- FDOT partners with various agencies including DEP, EPA, FHWA, FTA, TRB, AASHTO, to conduct clean air initiatives and comply with air quality standards. Currently, all of Florida meets the EPA targets for air quality.

## Where Can I Learn More?

**Federal Highway Administration** - [FHWA's Office of Planning, Environment, and Realty \(HEP\)](#) provides policy, legislation, research, program guidance, technical assistance, and training courses.

**U.S. Department of Energy** - The [Office of Energy Efficiency and Renewable Energy](#) conducts research in making transportation cleaner and more efficient.

**American Association of State Highway and Transportation Officials Center for Environmental Excellence** - [The Center for Environmental Excellence](#) promotes environmental stewardship and provides resources to transportation professionals.

**Florida Department of Environmental Protection** - The [DEP](#) is the state's lead agency for environmental management and stewardship.



Office of Policy Planning  
✉ [planning@dot.state.fl.us](mailto:planning@dot.state.fl.us)  
☎ 850.414.4800

*Improve Safety. Enhance Mobility. Inspire Innovation.*