



# TRANSPORTATION SYMPOSIUM

2019

## Accessing the Statewide Soil Borings GIS Database

Larry Jones and Jared Causseaux

# FDOT GIS Soil Boring Database

- Purpose
- Background
- Who
- What it does
- How to find it

# Purpose

- Create a database on the FDOT website to make soil borings performed for projects available for quick and easy access.
- Soil boring locations and results are available to other FDOT offices, Consultants, University Researchers and the public.
- Make full geotechnical reports available to FDOT personnel via a secure environment.

# Background

- A previous attempt for UF to create a state-wide geotechnical database was spearheaded by Peter Lai in the 90's.
- Entering data into the Oracle database was not simple, and the need for qc was extensive.
- 4 District Geotechnical Offices (1/7, 2, 4/6 & 5) independently began their own active effort to keep soil boring results in their own GIS databases.
- A portion of District Five's database was available to the public through the FDOT website, whereas, the other three databases were only accessible internally to District personnel.

# District & Central Office Input

District	Geotechnical	GIS
1/7	<b>Keith Ellis</b> <b>Kisan Patel</b>	<b>Kyle Purvis</b>
2	<b>Jamie Rogers</b> <b>Jimmy Williams</b> <b>Rhonda Hale</b>	<b>Katrina Sadler</b>
3	<b>Gabe Camposagrado</b> <b>David Whittington</b>	
4/6	<b>Nitan Dave</b> <b>Michael Kim</b>	<b>Amber Hyer</b> <b>Thomas Gates</b>
5	<b>Kevin Hayden</b> <b>Frank Smith</b>	<b>Joe Duncan</b> <b>Lora Castelnovo</b>
Tpk	<b>Roger Gobin</b>	
CO	<b>Larry Jones</b> <b>David Horhota</b>	<b>Jared Causseaux</b> <b>Daniel Teaf</b> <b>Vaishali Sonawane</b>

# Soil Borings Application

- One map displays data from all Districts, however, the data displayed is reviewed and authorized by each District independently.
- Consultant data entry has been part of the Scope in most of these Districts using a District specific system.
- Consultants will transition to a common data entry spreadsheet with common column headings, but not every District will use every column.

# Soil Borings Application

- Soil info downloadable via PDF includes:
  - Location Plan
  - Soil Profiles
- PDF file created by Geotechnical Consultant is excerpt of the Report of Core Borings Sheets taken from the Geotechnical Report for Electronic Delivery

# Soil Borings Application

- Some of us would like to add:
  - Table of Lab Test Results
  - Locations of Extensive Rutting
  - Other various soils information
  - Links to sheets for the whole project rather than 1 sheet at a time.

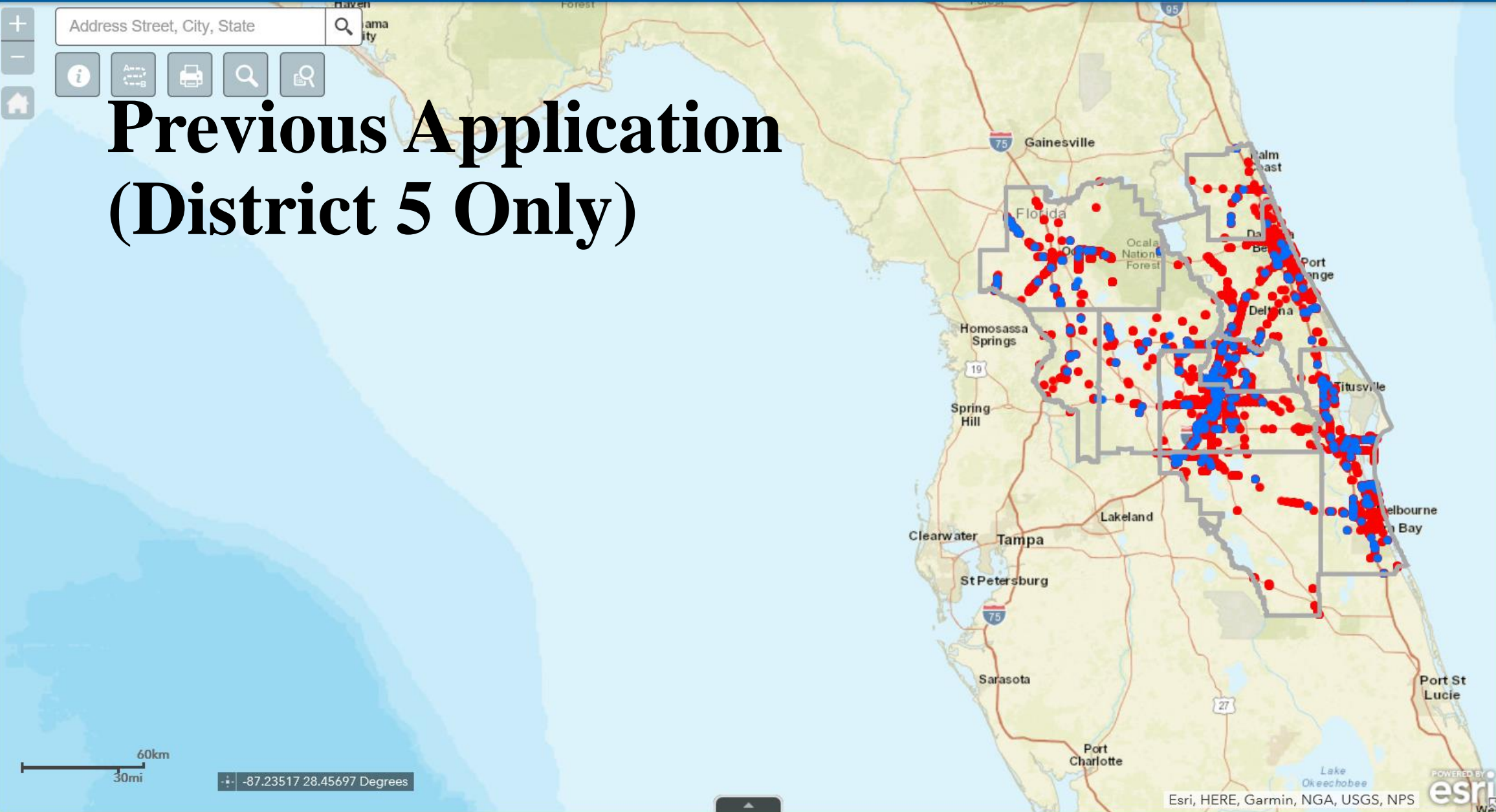




Address Street, City, State



# Previous Application (District 5 Only)

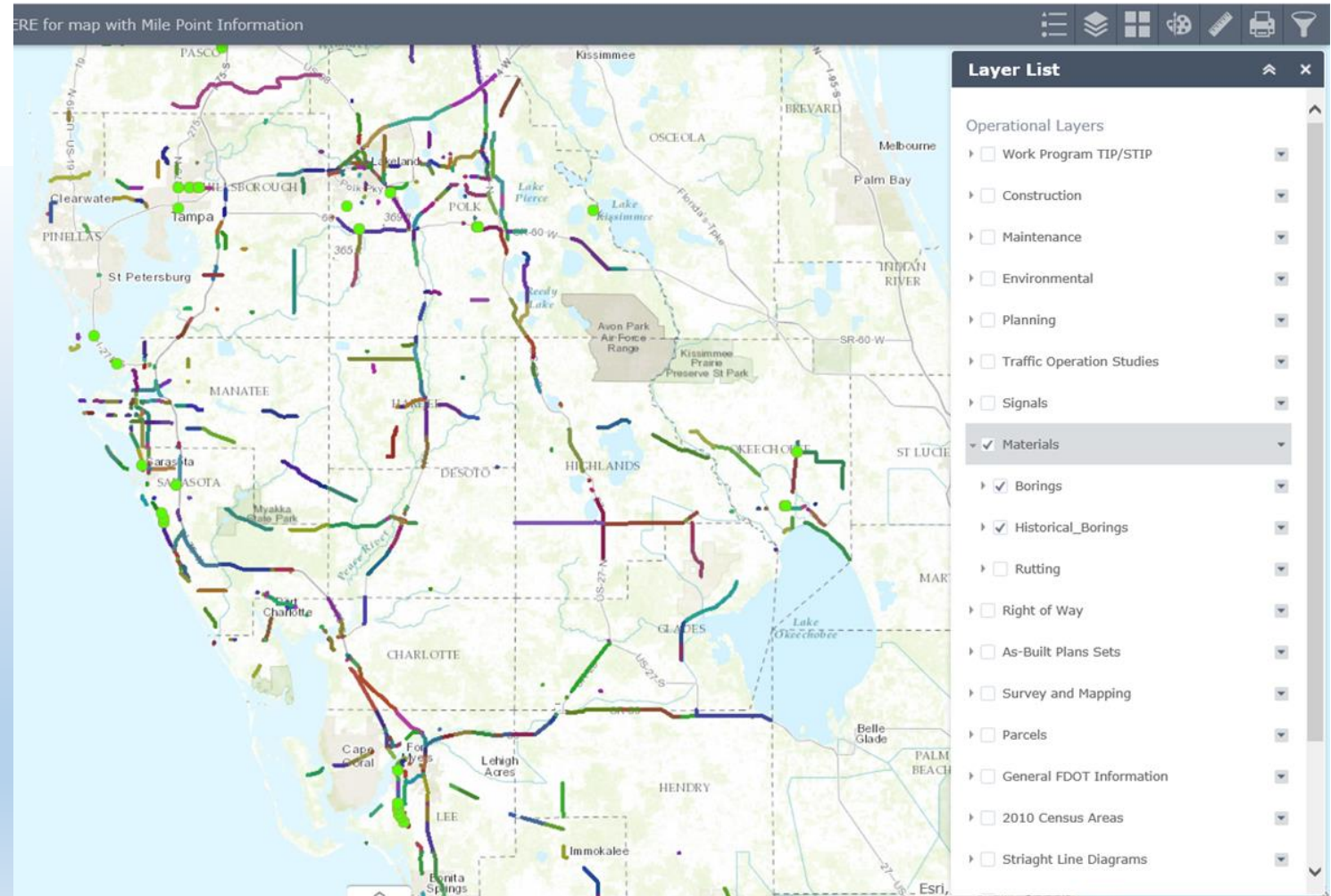


Esri, HERE, Garmin, NGA, USGS, NPS



# Districts 1 & 7 SharePoint

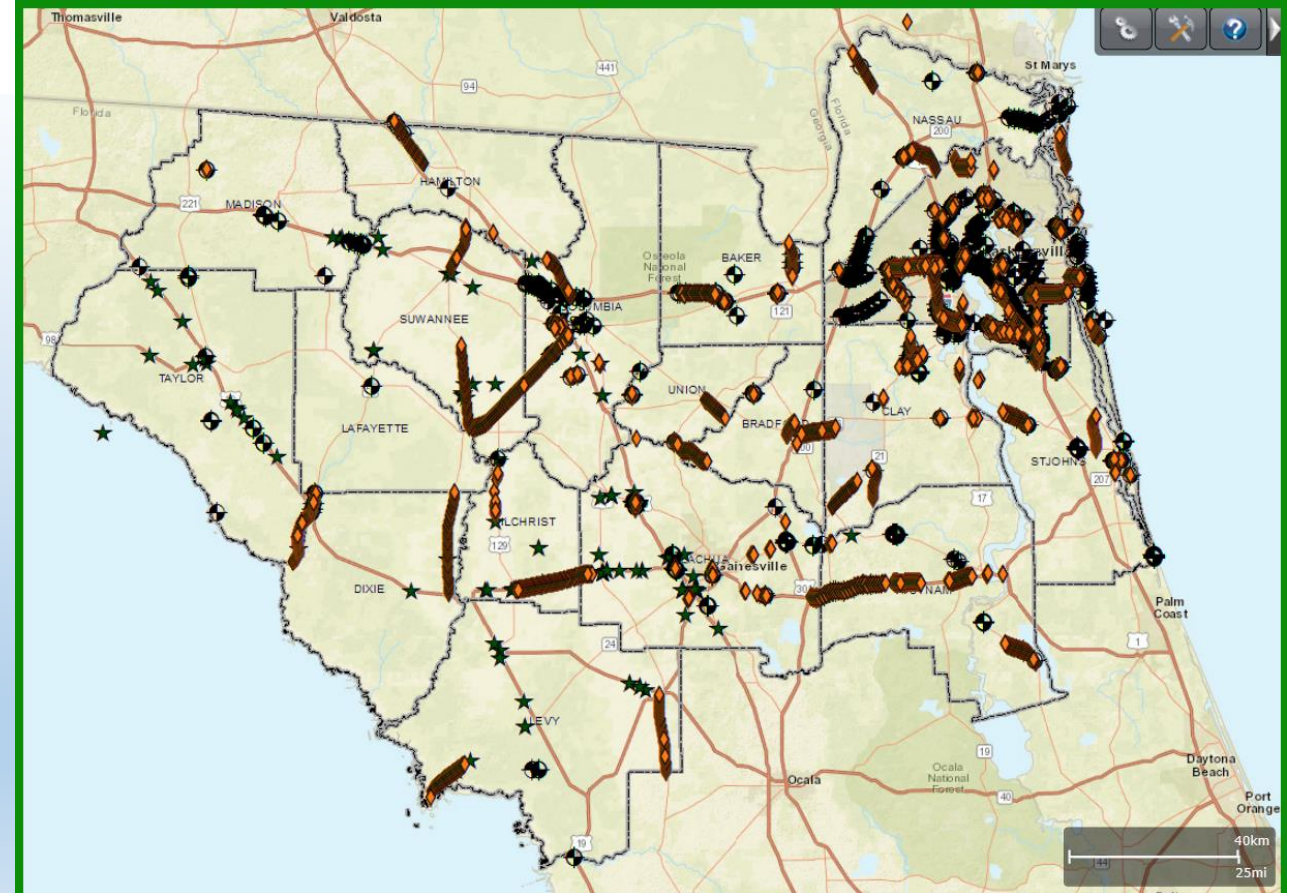
- Borings
- Historical Borings
- Rutting





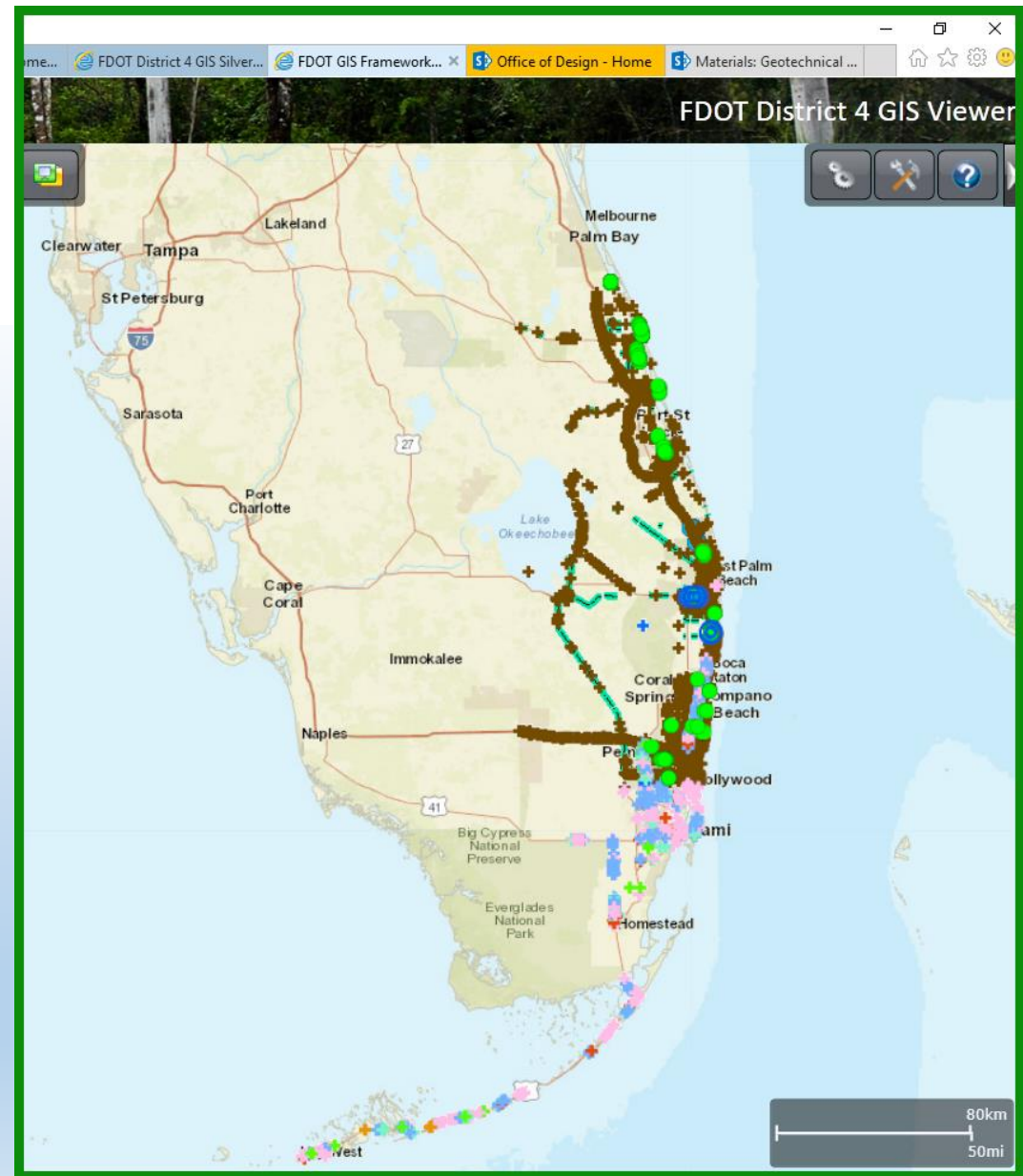
# District 2 SharePoint

- SPT Borings
- Auger Borings
- CPT Soundings
- Mapped Sinkholes
- Vibration Sensitive Roadways



# District 4 & 6 SharePoint

- SPT Borings
- Auger Borings
- Soundings
- Double Ring Infiltration
- Resilient Modulus
- Pavement Cores
- Corrosion Tests





# Accessing the New Database [www.fdot.gov]



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## Express Lanes move toward completion

A new toll gantry was installed on the \$89 million Express Lanes project along I-295 from I-95 to the Buckman Bridge. This is one of two Express Lanes projects expected to open this May 18 in Jacksonville. **More...**

1

2

3

4

5



# Accessing the New Database [www.fdot.gov]



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Accessing the  
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[[www.data.fdot.gov](http://www.data.fdot.gov)]



# FDOT Transportation Data

The **Transportation Data Portal** is a platform for locating data related to the core mission of the Florida Department of Transportation (FDOT). The department's primary statutory responsibility is to coordinate the planning and development of a safe, viable, and balanced state transportation system serving all regions of the state, and to assure the compatibility of all components, including multimodal facilities. This online resource can be used to explore and download open geospatial data; analyze and combine open datasets using maps; develop new web/mobile applications and more.

[Aerial Photography](#) | [Apps](#) | [GIS@FDOT](#) | [Open Data Hub](#) | [Traffic](#) | [More...](#)

## Other Resources

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**Bridge**

FDOT Bridge Inventory Information

**Construction**

Interactive Projects Map



# Accessing the New Database

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Welcome! GIS@FDOT is the portal for FDOT's organizational account for ArcGIS Online, which is a collaborative, cloud-based platform that allows members of an organization to use, create, and share maps, apps, and data with anyone. It provides a mechanism for data organization and management across districts and functional areas within the Department, eliminating the need for data duplication. This platform is also portable and all maps created will be compatible across desktops, tablets, and smart phones.



# Accessing the New Database

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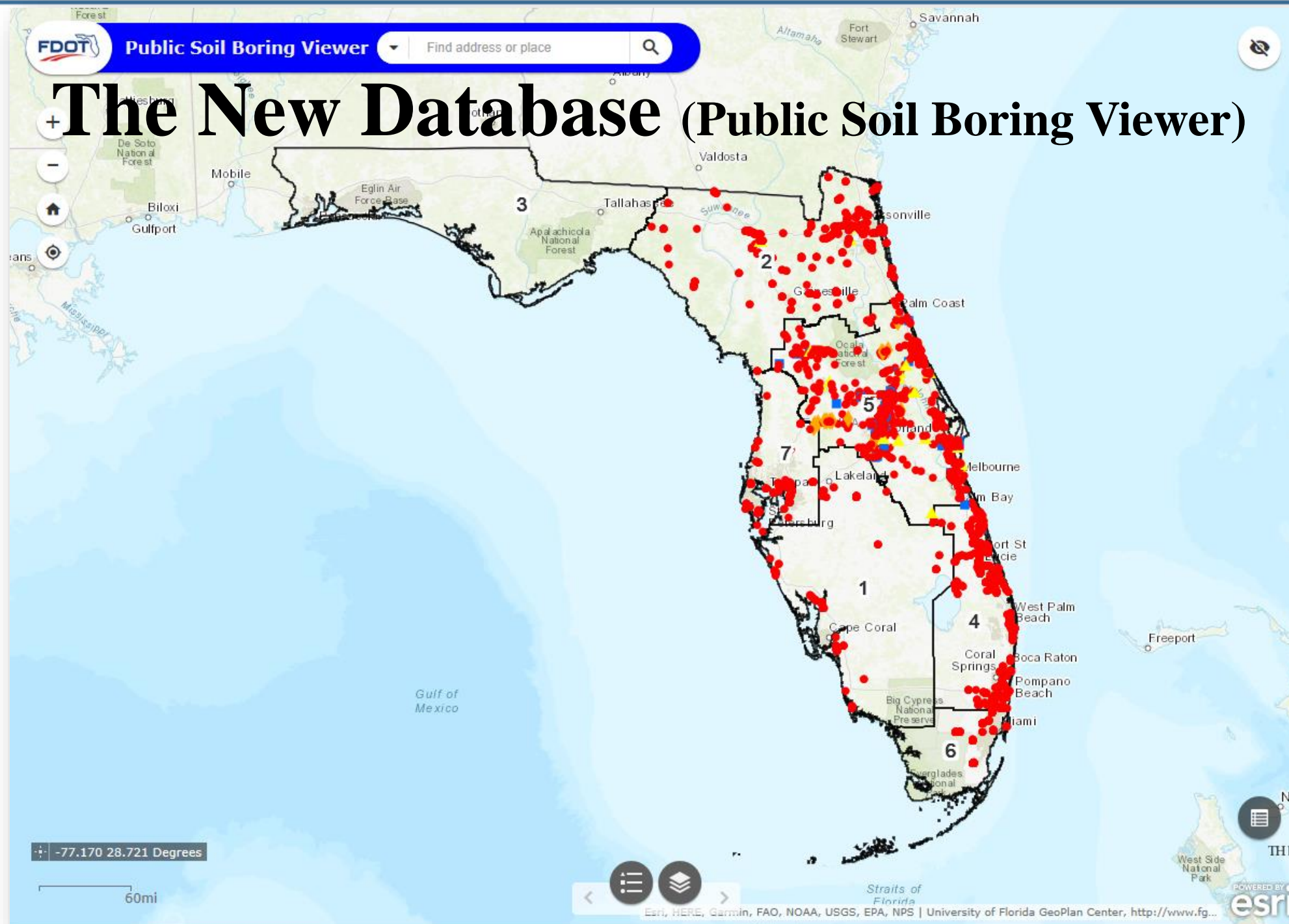


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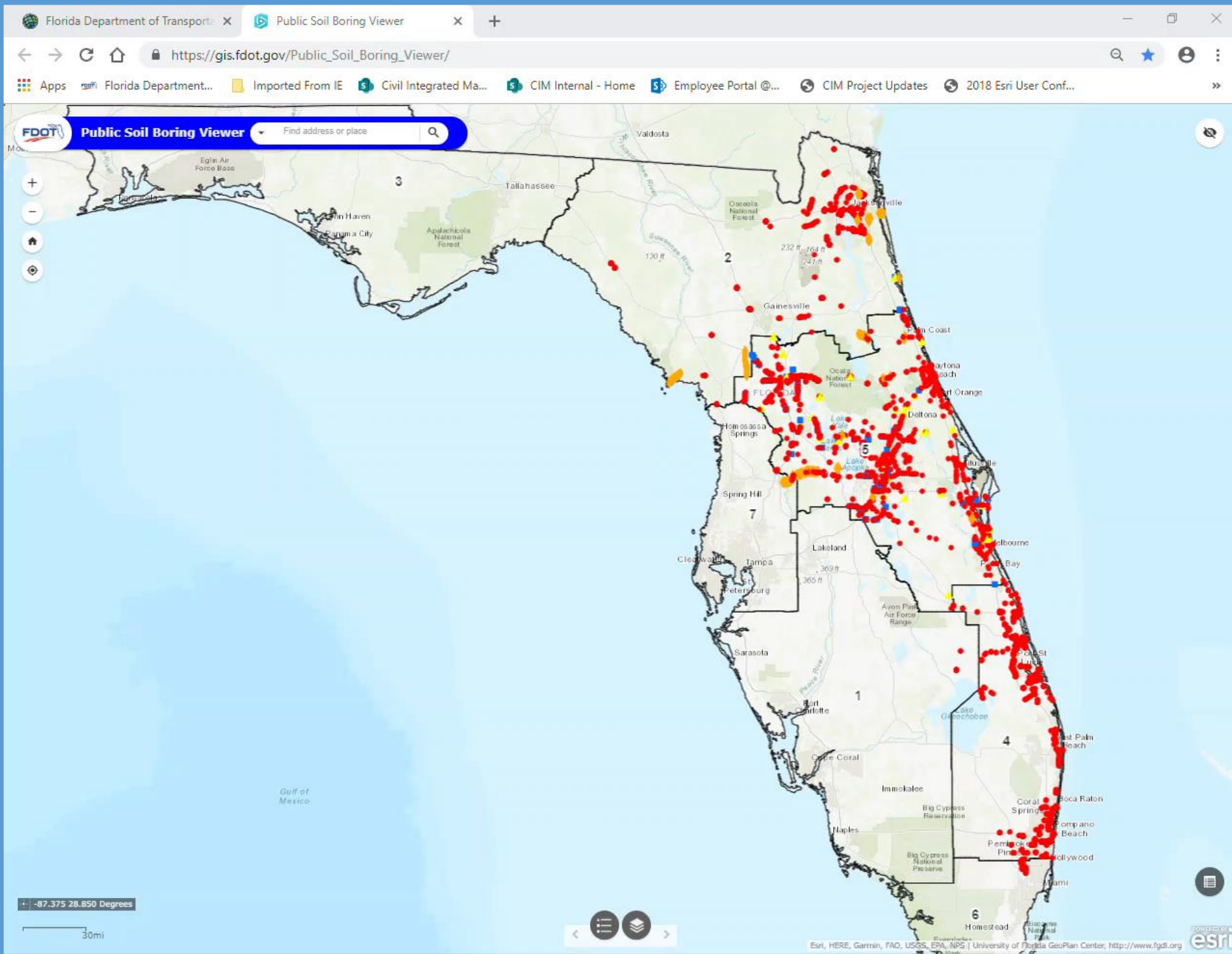


# The New Database (Public Soil Boring Viewer)



-77.170 28.721 Degrees

60mi



# Demo of Public Soil Boring Viewer

# Soil Boring Editors

Search

Q soil boring X Search

Content Groups

▼ Date Created

Today  
Yesterday  
Last 7 Days  
Last 30 Days  
Custom Range...

1 - 6 of 6

Sort by: Relevance ▼

T

**Turnpike Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: Nov 5, 2018 Last Updated: Nov 5, 2018 Viewable by: Organization  
Group created for Turnpike Soil Boring editing

D

**D5 Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: May 30, 2018 Last Updated: Nov 1, 2018 Viewable by: Group Members  
Group created for D5 Soil Boring editing.

D

**D3 Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: May 30, 2018 Last Updated: Nov 1, 2018 Viewable by: Organization  
Group created for D3 Soil Boring editing.

D

**D2 Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: Sep 10, 2018 Last Updated: Nov 1, 2018 Viewable by: Organization  
Group created for D2 Soil Boring editing.

D

**D1/D7 Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: Jul 31, 2018 Last Updated: Nov 1, 2018 Viewable by: Organization  
Group created for D3 Soil Boring editing

D

**D4/D6 Soil Boring Editing**  
Owner: [KNATCDT](#)  
Created: Jun 11, 2018 Last Updated: Nov 1, 2018 Viewable by: Organization  
Group created for D4 & D6 Soil Boring editing.

# Soil Boring Editors

	<h3>Admin_Boundaries</h3> <p>Feature Layer by KNATCDT</p> <p>Map &amp; Feature service of common, basemap boundary layers. Contact Daniel Teaf, 850-410-5468</p> <p>Updated: Apr 16, 2019   View Count: 10</p> <p>🌐 ★ ...</p>
	<h3>D5_Soil_Boring_Edits</h3> <p>Feature Layer by KNATCDT</p> <p>Feature service for the D5 Soil Boring application. This feature service is shared with the D5 Soil Boring Portal Group. Contact: Daniel Teaf - 850-410-5468</p> <p>Updated: Mar 22, 2019   View Count: 7</p> <p>👤 ★ ...</p>
	<h3>D5_Soil_Boring_Edits</h3> <p>Map Image Layer by KNATCDT</p> <p>Feature service for the D5 Soil Boring application. This feature service is shared with the D5 Soil Boring Portal Group. Contact: Daniel Teaf - 850-410-5468</p> <p>Updated: Mar 22, 2019   View Count: 1</p> <p>👤 ★ ...</p>

# What's Next

## Integration with EDMS

- An application (eDocs) that uses the abilities of a database to bring structure in storing business documents and other files.
- A uniform way to store and retrieve documents
- Replaces all other locations that hold documents - my documents, file shares, folders, thumb drives, filing cabinets, document storage sites, etc.