



# Tampa Bay Regional Goods Movement Study



*An Action Strategy for Improving Freight Mobility*

# Commodities Flow: Using AGS to Track Goods Movement



by  
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&  
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Grimail Crawford, Inc.

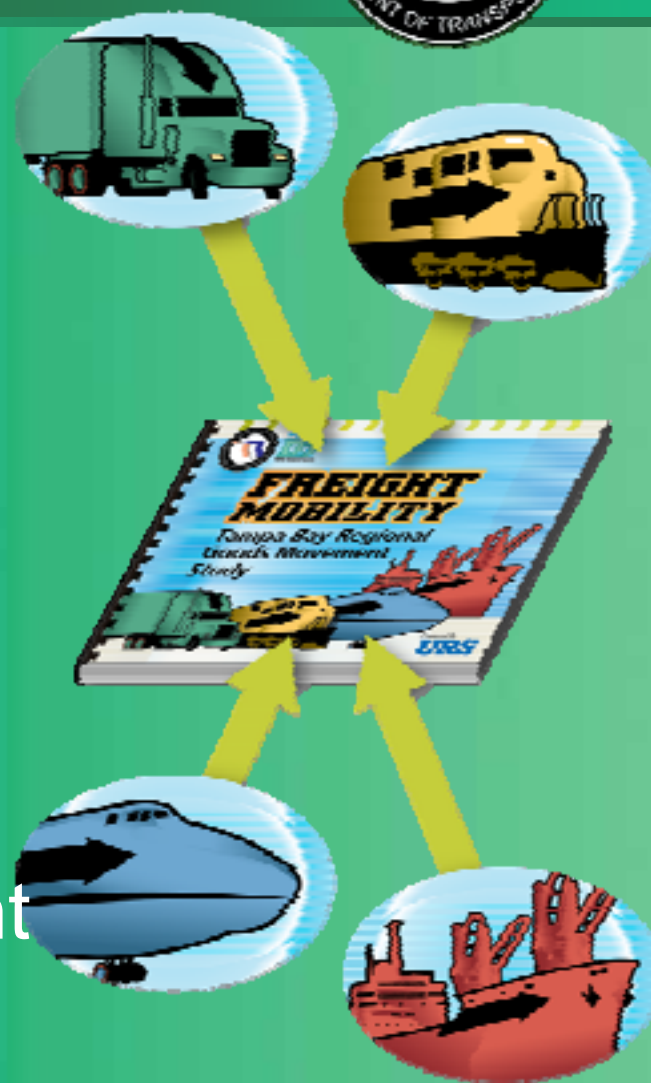
Transportation Track  
2009 ESRI Southeast Regional User Group  
(SERUG) Conference  
Tuesday, April 28, 2009

# About the Project



## Project Goals

- Enhance Freight Mobility
- Sustain and Stimulate the Economy
- Preserve Communities
- Create an Effective Freight Planning Framework



# Project Responsibilities



- **FDOT – Project Management**
- **URS – Lead Consultant**
- **RPG– Deputy PM**
- **GCI – GIS and Corridor Studies**
- **Other Team members –to be involved later**



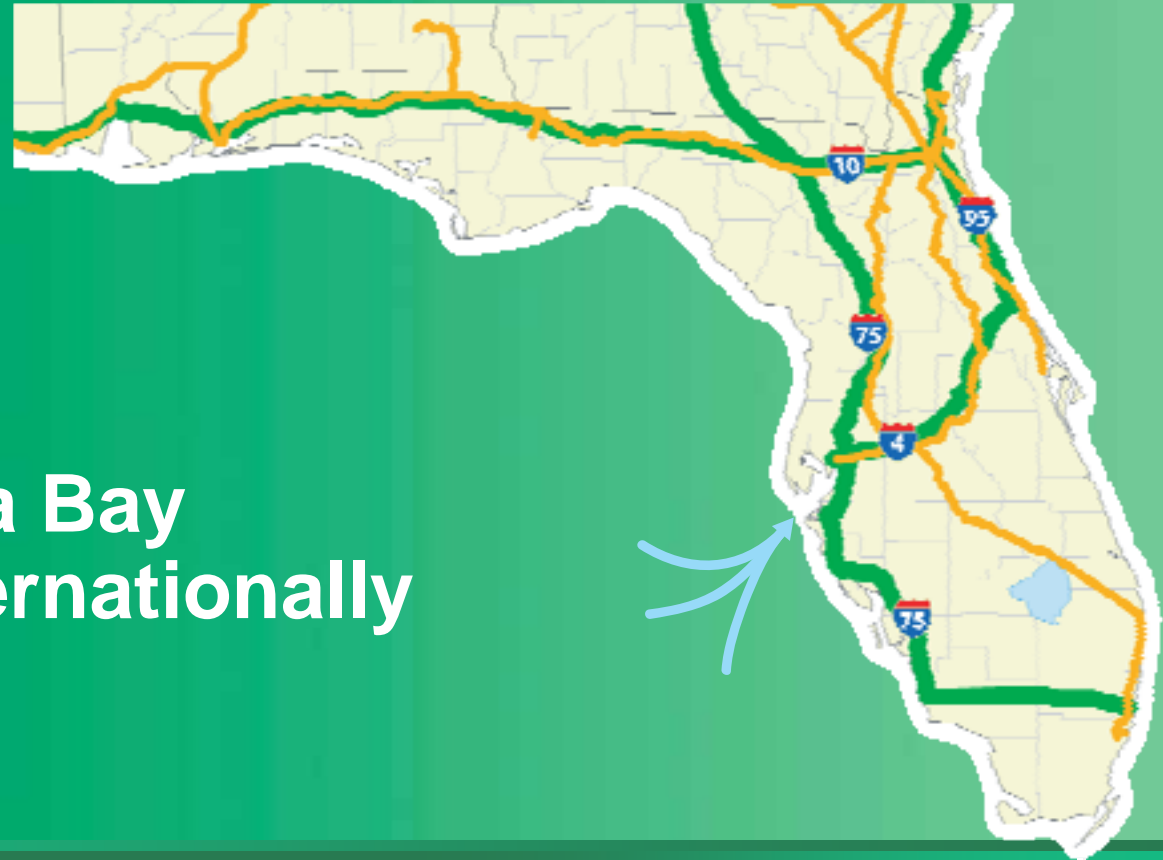
# Freight Facts



## Goods moving in and out of Tampa Bay

- Highway
- Rail
- Sea Lanes

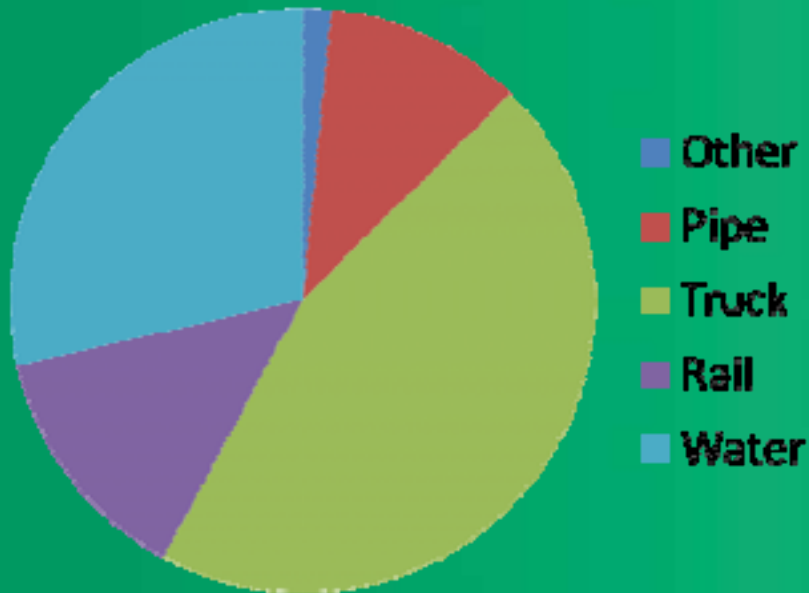
## Connecting Tampa Bay Nationally and Internationally



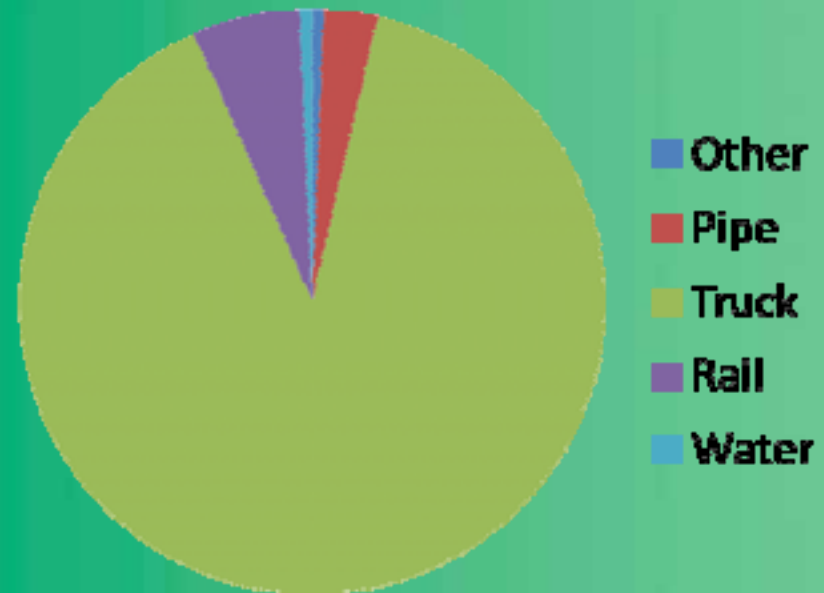
# Domestic Goods by Mode



## Tampa Bay Domestic Freight - Inbound (in tons)



## Tampa Bay Domestic Freight - Outbound (in tons)



# Florida Projected Average Daily Truck Traffic



# Transportation Project Funding

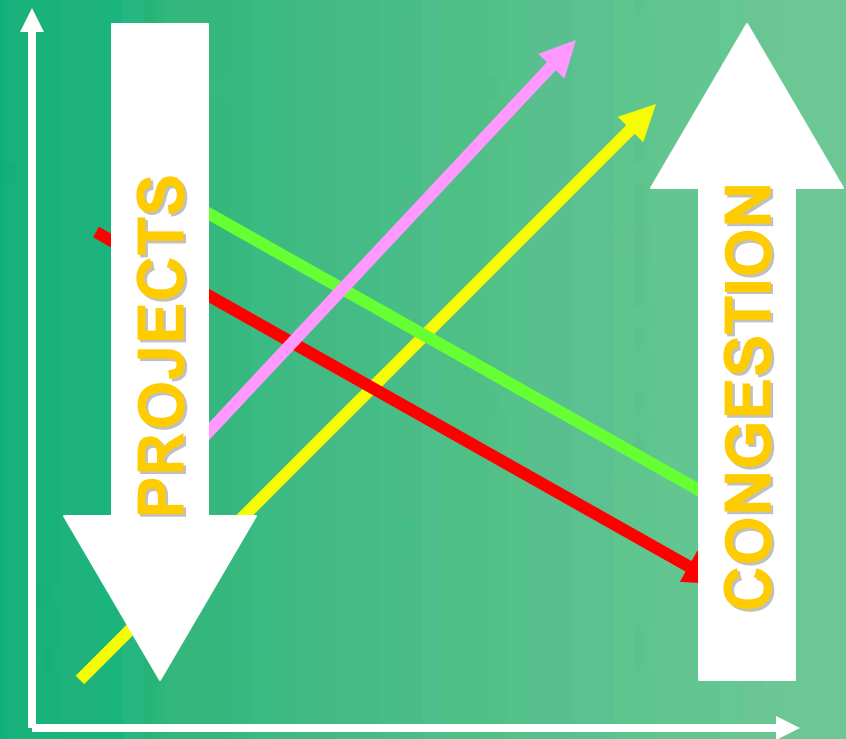


Cost of Fuel

Vehicle Miles Traveled

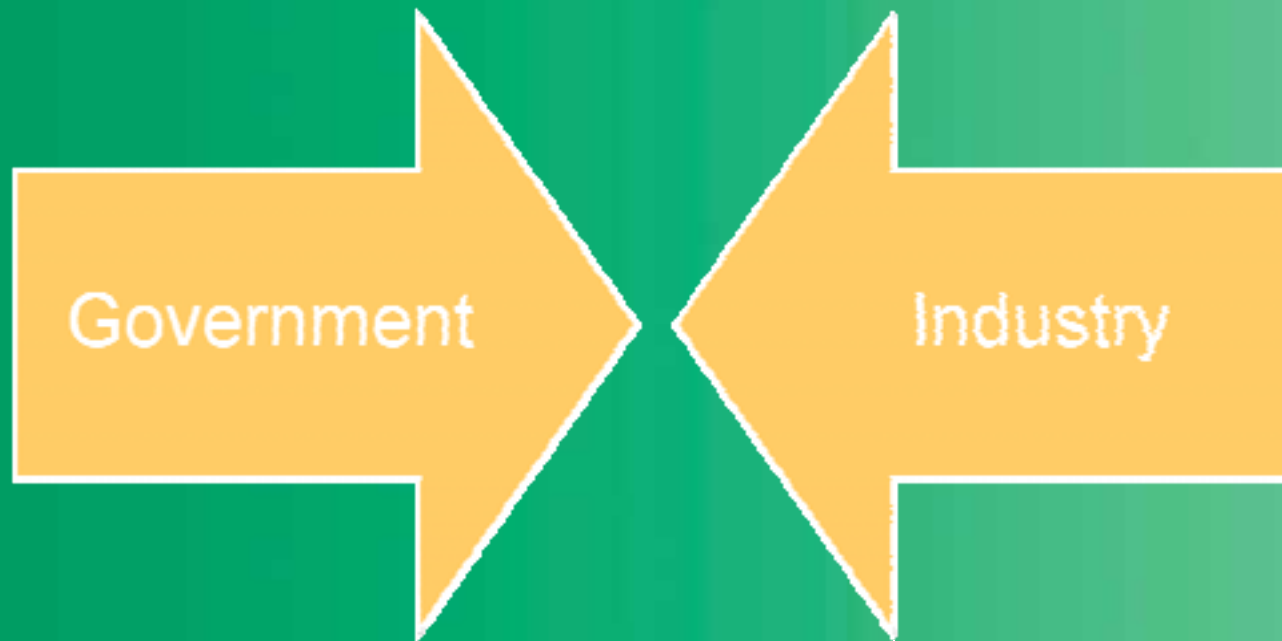
Fuel Tax Revenue

Cost of Construction





# Solutions???



# Goods Movement Database



- Framework for freight analysis in ESRI's Geodatabase format
- Includes standard base layers for any users
- Provides base for Internet mapping and data viewing
- Includes datasets for:
  - Roads
  - Rail
  - Freight Activity Centers
  - Planned Improvements
  - Land Use and Geography

# Database Content



- Data collected, created, and verified throughout various phases of the project
- Federal Highway Administration (FHA) Data
- FDOT Data
  - Central Office
  - District 7
- Local Data
  - MPOs
  - Property Appraisers
  - Counties

# GMAP – The Goods Movement Web Application



- Uses ArcGIS Server 9.3, C#, and .NET Framework 2.0
- Basic Information for Concept Development
- Data Entry password protected
- Allows users to analyze freight-related information
  - Proximity to Freight Corridors
  - Activity Center Square Footage
  - Find Address
  - Quick Maps

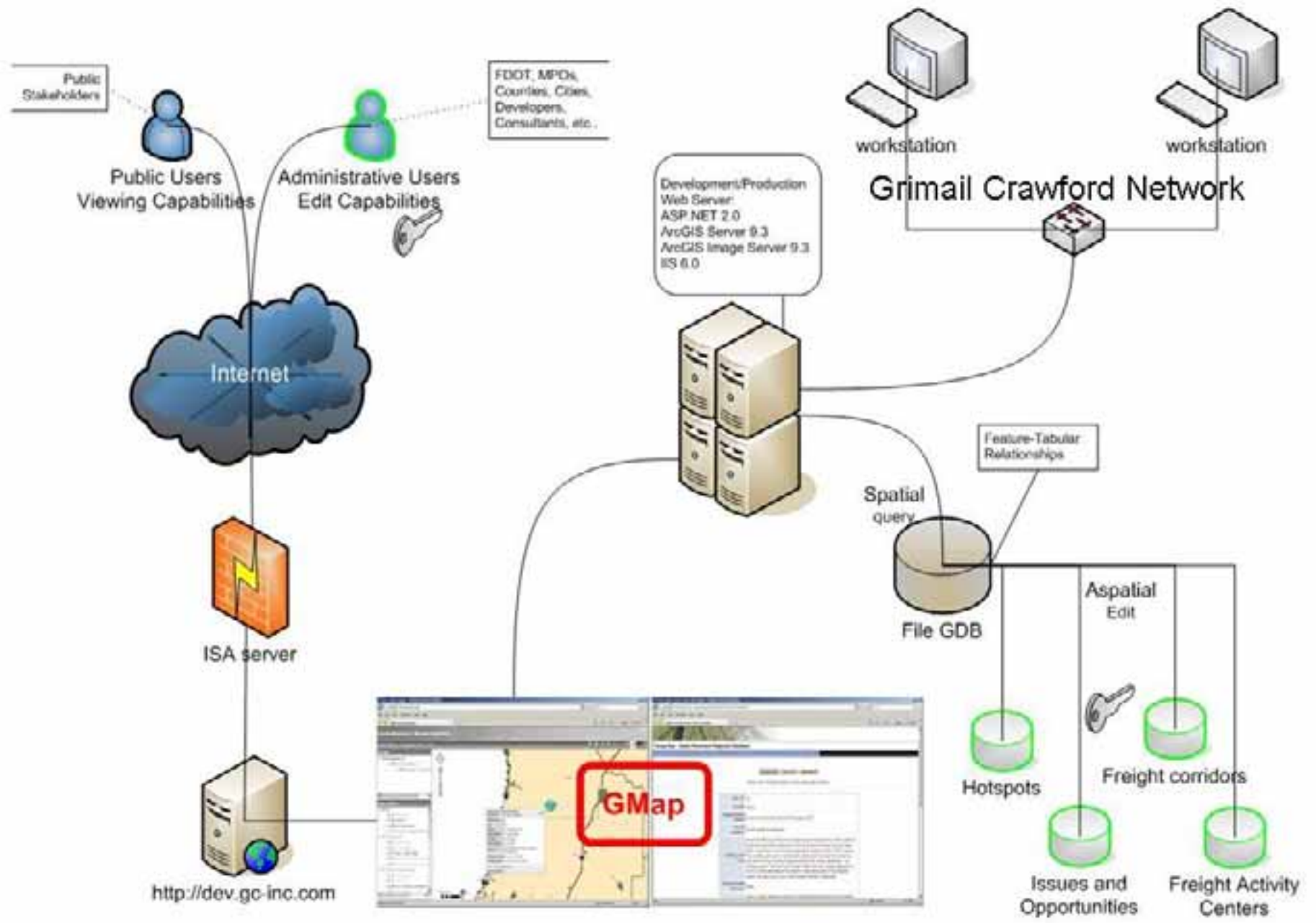


# Concept – ESRI's Developer Network



## Goals for Implementing ArcGIS Server through EDN

- Internal team data entry
- Data screening for Freight Providers and Goods Movement Advisory Committee
- Data screening for Corridor Studies
- Basis for future FDOT Web Service



# Application Views



## Map Viewer



## Data Viewer and Edit Functions

Tampa Bay - Goods Movement Regional Database

Freight Activity Centers

County	Freight Activity Center	General Location	View FAC	Edit	View
Clay	Business Research Airport (Emerging FAC)	US 41 south of Seaworld	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Clay	Florida Power of Red Land (Emerging)	461 (New County) west of US 19	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Herndon	North Brooksville Industrial Area (Emerging FAC)	461 at Brooksville on US 98	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Herndon	Katherine Road (Emerging)	Eastern Herndon County at SR 50 and Katherine Road	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Herndon	Herndon County Airport Industrial Area	South of Brooksville at SR 41 and CR 514	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	Island Point (Port of Tampa)	E of SR 60 W of Good St	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	Busch (Port of Tampa)	W of US 41 S of Cassway Blvd	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	Big Bend (Port of Tampa)	South Hillsborough County, north of Apollo Beach	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	Alafia River (Port of Tampa)	Along US 41 north of Alafia River	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	Southwest Tampa Industrial Area	Along Alafia River (SR 60) north between 246 Street and Drift Road	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	South 1-75 (Port of Tampa)	Brandon, east of I-75 and west of US 301	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>
Hillsborough	East Central Tampa Industrial Area	East Tampa 3074 ST and Hillsborough Ave.	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">View</a>

# Additional Functions



- 🌐 Link to Goods Movement Data Entry (read only)
- 🌐 Search by Freight Activity Center
- 🌐 Print Functions



# Detailed Information Page Example



Goods Movement - View List - Windows Internet Explorer

http://dev.gm-inc.com/goodsmovementbeta/PAClist.asp

Goods Movement - View List

### Tampa Bay - Goods Movement Regional Database

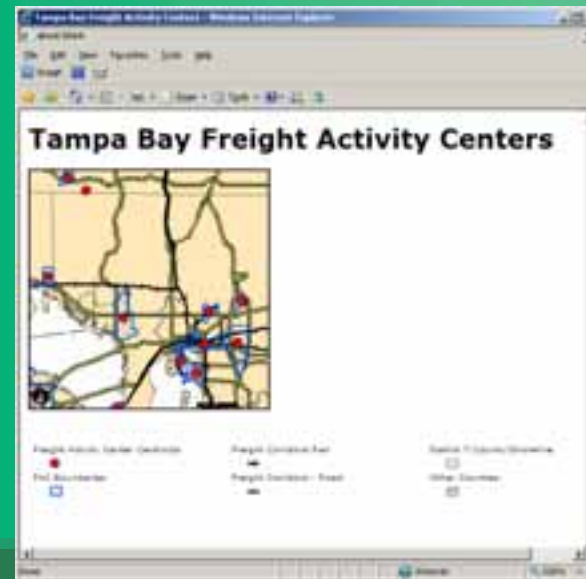
Map Viewer | Freight Hot Spots | **Freight Activity Centers** | Freight Roadway Corridors | Freight Rail Corridors | Database FAQs | Metadata

#### Freight Activity Centers

[Add Freight Activity Center](#)

County	Freight Activity Center	General Location	View FAC	Edit	Map
Citrus	Inverness Municipal Airport (Emerging FAC)	US 41 south of Inverness	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Citrus	Florida Power at Red Level (Emerging)	NE Citrus County west of US 19	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hernando	North Brooksville Industrial Area (Potential FAC)	NE of Brooksville on US 98	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hernando	Kettering Road (Emerging)	Eastern Hernando County at SR 50 and Kettering Road	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hernando	Hernando County airport Industrial Area	South of Brooksville at US 41 and CR 574	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	Hooker's Point (Port of Tampa)	S of SR 60 W of 22nd St	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	Rockport /Port Sutton/Pendola Point (Port of Tampa)	W of US 41 S of Causeway Blvd.	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	Big Bend/Port Redwing (Port of Tampa)	South Hillsborough County, north of Apollo Beach	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	Alafia River (Port of Tampa)	Along US 41 north of Alafia River	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	Southeast Tampa Industrial Area	Along Adamo Drive (SR 60) corridor between 24th Street and Orient Road.	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	South I-75 (Sabal Park industrial Area)	Brandon, west of I-75 and east of US 301	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>
Hillsborough	East Central Tampa Industrial Area	East Tampa 56TH ST and Hillsborough Ave.	<a href="#">View</a>	<a href="#">Edit</a>	<a href="#">Map</a>

# Search and Print Functions



# Additional Functionality



- 🌐 Links to FAQ's and Metadata
- 🌐 Contact link for password request





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### Starting Points

[Getting Started for Executives | Developers | IT](#)

[New Developments](#)  
[Technology Trends in GIS](#)

[Learn the Basics](#)  
[What is GIS?](#)

[Try ArcGIS Explorer](#)

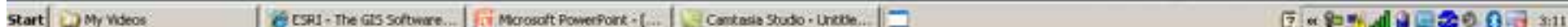
### Announcements

[Seamless Integration of ArcGIS and Virtual Earth](#)  
New agreement with Microsoft gives you fast and easy access to Virtual Earth services.

[Creating Effective Web Maps Seminar](#)  
Find out how to deploy Web applications that meet today's standards. Registration is free.



Stimulus Recovery Tracking: Call for

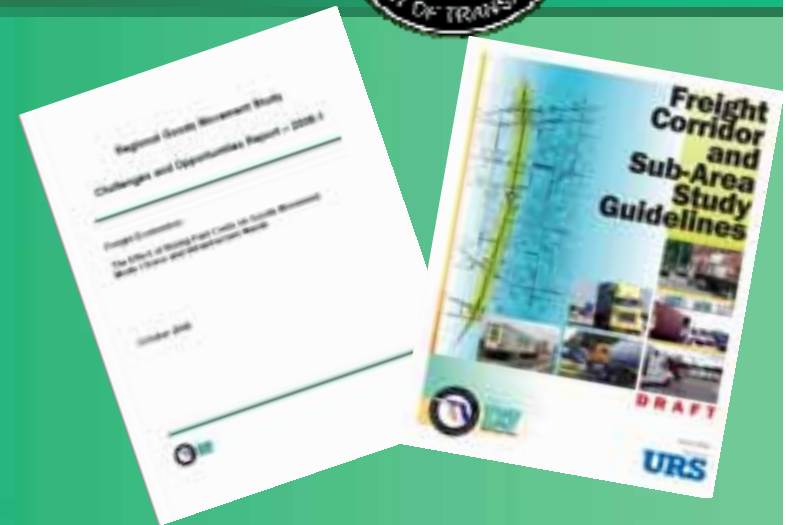


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# Study Status



- Defined Regional Freight Network
- Overview of Needs and Conditions
- White Papers in progress
- Study Screening and Guidelines in place and in testing
- Formation of Freight Providers and Goods Movement Advisory Committee Underway
- Database Complete –distribution pending
- Website up and under internal review



# Future Enhancements



- Issues and Opportunities Data Entry and Management
- Additional Query Tools (proximity analysis)
- Incorporation into full project website
- Training
- Roll-out through Department

# Questions or Comments?



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# THANKS!



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