

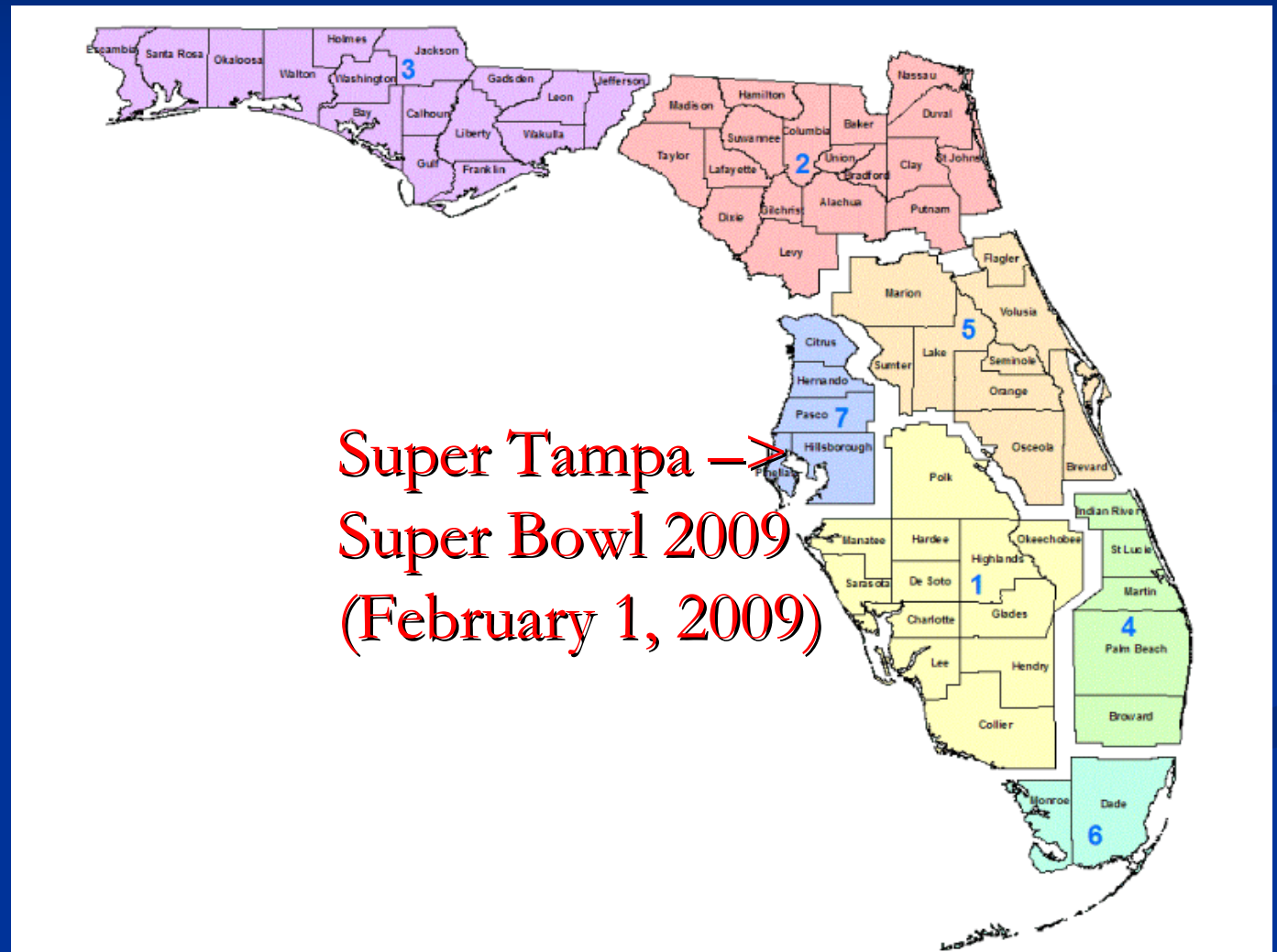
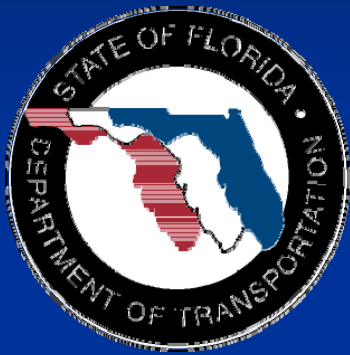
# Florida Department of Transportation D7 (Tampa Bay, Florida) Road Safety Assessments (RSA) Efforts



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District Safety Programs Engineer  
May 22, 2007

AASHTO/FHWA National RSA Peer Exchange

# Where is FDOT D7? (Tampa Bay, Florida)



**Super Tampa →  
Super Bowl 2009  
(February 1, 2009)**



# Overview

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- History
- District 7 Road Safety Assessments
- District 7 In-House
- Federal Highway Administration
- FHWA Florida Division & District
- County Efforts
- City Efforts
- District 7 RSA Database
- Future Challenges

District 7 Road Safety Assessment Efforts



# History

**HISTORY**

**D7 RSA**

**IN-HOUSE**

**FHWA**

**FHWA & D7**

**COUNTY**

**CITY**

**DATABASE**

**CHALLENGES**

- Road Safety Assessment established by FHWA as a proactive low cost way to improve the overall safety performance of roadways.
- FDOT District 7 Traffic Operations Safety Office initiates a Road Safety Assessment program in 2006.
  - 1<sup>st</sup> Road Safety Assessment Contract in FDOT history

District 7 Road Safety Assessment Efforts



# District 7 Road Safety Assessment Players

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- District 7 Traffic Operations Safety
  - Road Safety Assessment Contract
  - In House RSA Program
- FHWA Florida Division
  - Joint Effort with FDOT District 7
- Hillsborough, Pasco, Citrus and Hernando Counties
- City of Saint Petersburg

District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FDOT RSA Contract

HISTORY

D7 RSA

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CITY

DATABASE

CHALLENGES

- District 7 Road Safety Assessment Consultant Contract
  - TBE -- Prime
  - Synectics – Sub.
  - Kittleson – Sub.
- 1<sup>st</sup> Road Safety Assessment contract in FDOT history
  - District 7 Identifies 15 Locations
  - 2 Locations selected and studied in late 2006

District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FDOT RSA Contract

HISTORY

D7 RSA

IN-HOUSE

FHWA

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COUNTY

CITY

DATABASE

CHALLENGES

- TBE/Synectics completed Road Safety Assessment Findings Reports
  - Hillsborough Avenue at Kelly Road/Ambassador
  - Florida Avenue at Waters Avenue

Florida Department of Transportation - District 7 Road Safety Audit Report North Florida Avenue at Waters Avenue - Tampa		
Yield Sign Position	Northeast Corner	Consider relocating yield sign in advance of the intersection crossing.
Prohibition Trailing Hazard	Southwest Corner Along Park Quay-Walk, Northwest corner	Repair trailing hazards.
Scoreboard Right Turn Lane Signage	North Middle Ave - North Leg, Right Turn Lane	Consider placing scoreboard signage to identify mandatory right-turn lane.
Visibility of Center Traffic Separators	All Legs	Repair traffic separators and provide hazard markers.
Visibility of Center Traffic Separators	All Legs	Repair traffic separators and provide hazard markers.
Signal Heads - Visibility and Alignment	Waters Ave. - West Leg and East Leg	Consideration should be given to reviewing and adjusting the vertical alignment of the signal head and position of the utility wire to eliminate the signal head visibility obstruction. Consideration could be given to reorienting entry movements at this access.
Access Management	North Middle - South Leg, West Side	
Traffic Separator - Core Area Markings	Various Corners	Consideration should be given to a review of existing pavement markings at the intersection and installation or reapplication in accordance with available drawings and/or current marking standards.
Street Lighting Coverage	Northeast Corner	Consider relocating the intersection street lighting on the northeast corner.
Prohibition Pedestrian Access	Various Corners	Consider engineering locations of pedestrian push buttons.
200 Sign Position and Alignment	Waters Ave. - East Leg	Consideration should be given to reviewing the position of the sign.

Florida Department of Transportation - District 7  
Road Safety Audit REPORT  
Hillsborough Ave. at Kelly Road / Ambassador Drive

**Issue:** Street Name Sign Retro-reflectivity  
**Location:** Hillsborough Ave. at Kelly Road and at Ambassador Drive

None of the street name signs at this intersection were internally illuminated, all signs used retro-reflective sheeting materials. Some of the street name signs at the intersection, both those that were post and span wire mounted appear to have lost their retro-reflectivity, Fig. 7. It was clear that under certain lighting conditions, particularly at night, that signs were difficult for motorists to see.




Fig. 7

**Suggestion:** That the street name signs be checked and upgraded as needed to meet desired retro-reflectivity requirements.

**Issue:** Visibility of Plaza Access Road Signage

TBE  
SYNECTICS

RSA Date: Nov 14-15, 2006



# District 7 Road Safety Assessment In-House Efforts

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- District 7 Traffic Operations Safety Office
- Collaborated Effort
  - District 7 Maintenance
  - Hernando County Engineering
  - Hernando County Sheriff's Office
  - Citrus County Traffic Control
  - Citrus County Sheriff's Office
  - City of Inverness Public Works
  - City of Crystal River Public Works
  - Tindale-Oliver & Associates, Inc.
  - Hagen Consulting Services / University of Florida's T<sup>2</sup> Center (Safety Circuit Rider Program)

District 7 Road Safety Assessment Efforts





# District 7 Road Safety Assessment In-House Efforts

HISTORY

D7 RSA

IN-HOUSE

FHWA

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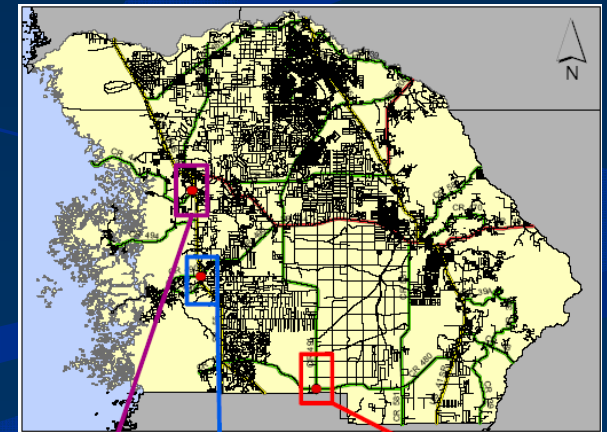
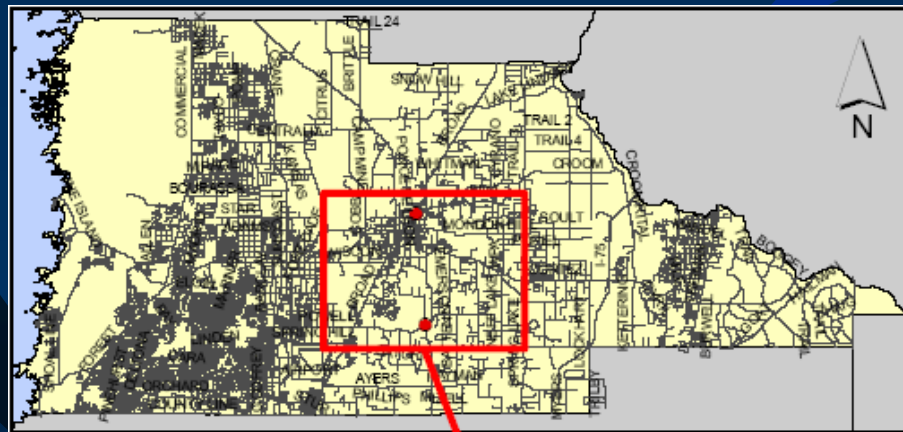
COUNTY

CITY

DATABASE

CHALLENGES

- Hagen Consulting Services leads pre-assessment training.
- Hernando and Citrus Counties
  - County staff selected review locations.



District 7 Road Safety Assessment Efforts



# District 7 Road Safety Assessment In-House Efforts

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- Top 5 Locations Reviewed February 2007
  - 2 locations in Hernando County
  - 3 locations in Citrus County



District 7 Road Safety Assessment Efforts



# District 7 Road Safety Assessment In-House Efforts

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

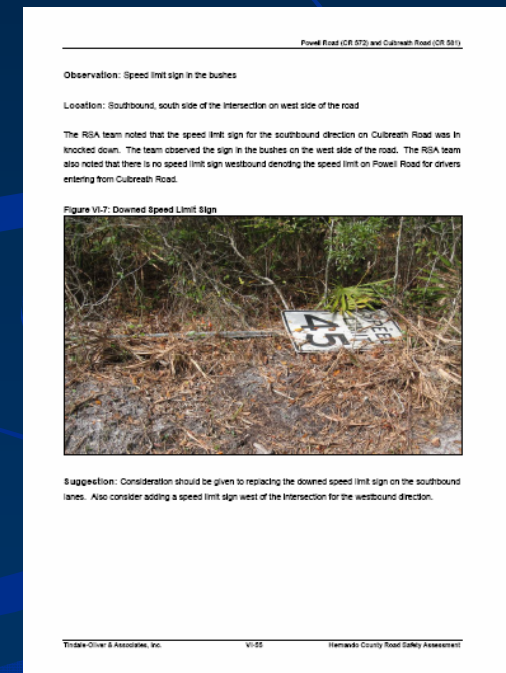
CITY

DATABASE

CHALLENGES

- Tindale-Oliver & Associates, Inc. compiles Road Safety Assessment Findings Reports

- CR 491 at CR 480
- Grover Cleveland at Pittsburgh Ave
- Paradise Point Rd at Cutler Spur Blvd
- CR 445 at Brockway Ln
- CR 572 at CR 581



District 7 Road Safety Assessment Efforts



# Federal Highway Administration Involvement in Tampa Bay Florida

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- Federal Highway Administration Road Safety Assessment initiative
- July 2006 Training Workshops
  - FHWA's Craig Allred Instructor
- 55 Members Trained From:
  - FDOT
  - Counties
  - Cities
  - Consultants

District 7 Road Safety Assessment Efforts



# Federal Highway Administration Involvement in Tampa Bay Florida

HISTORY

D7 RSA

IN-HOUSE

**FHWA**

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- Road Safety Assessment at 2 Locations
  - Busch Boulevard and 56<sup>th</sup> Street
  - Busch Boulevard and 40<sup>th</sup>
- Results given to design consultants for consideration in coming 3R project.

District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FHWA / FDOT Joint RSA

HISTORY

D7 RSA

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CITY

DATABASE

CHALLENGES

- Joint Federal Highway Administration Florida Division and District 7 Traffic Operations Safety Office Road Safety Assessment in March 2007
- Collaborated Effort
  - Federal Highway Administration Florida Division
  - District 7 Traffic Operations Safety
  - Pasco County Traffic Operations
  - Pasco County Sheriff's Office
  - City of New Port Richey
  - Tindale-Oliver & Associates, Inc.
  - Hagen Consulting Services / University of Florida's T<sup>2</sup> Center (Safety Circuit Rider Program)
  - URS Corporation

District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FHWA / FDOT Joint RSA

HISTORY

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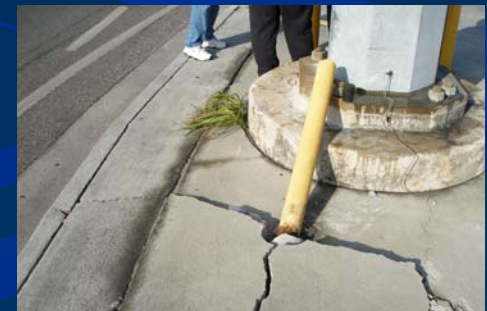
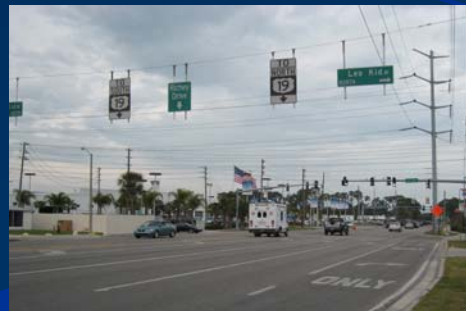
COUNTY

CITY

DATABASE

CHALLENGES

- Federal Highway Administration Florida Division approached FDOT seeking to promote Road Safety Assessment.
  - Local Roads Road Safety Assessment.
- District 7 selects Pasco County for 1<sup>st</sup> joint FHWA/FDOT local roads RSA.



District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FHWA / FDOT Joint RSA

HISTORY

D7 RSA

IN-HOUSE

FHWA

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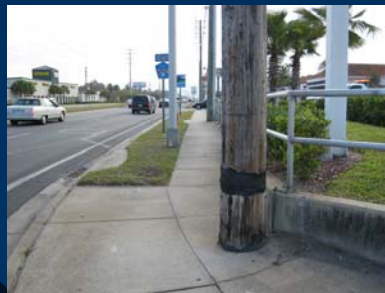
COUNTY

CITY

DATABASE

CHALLENGES

- Tindale-Oliver & Associates, Inc. develops Top 50 Candidate List.
- Pasco County staff selects 10 locations for review.
- Hagen Consulting Services leads pre-Assessment training.



District 7 Road Safety Assessment Efforts





# 1<sup>st</sup> FHWA / FDOT Joint RSA

HISTORY

D7 RSA

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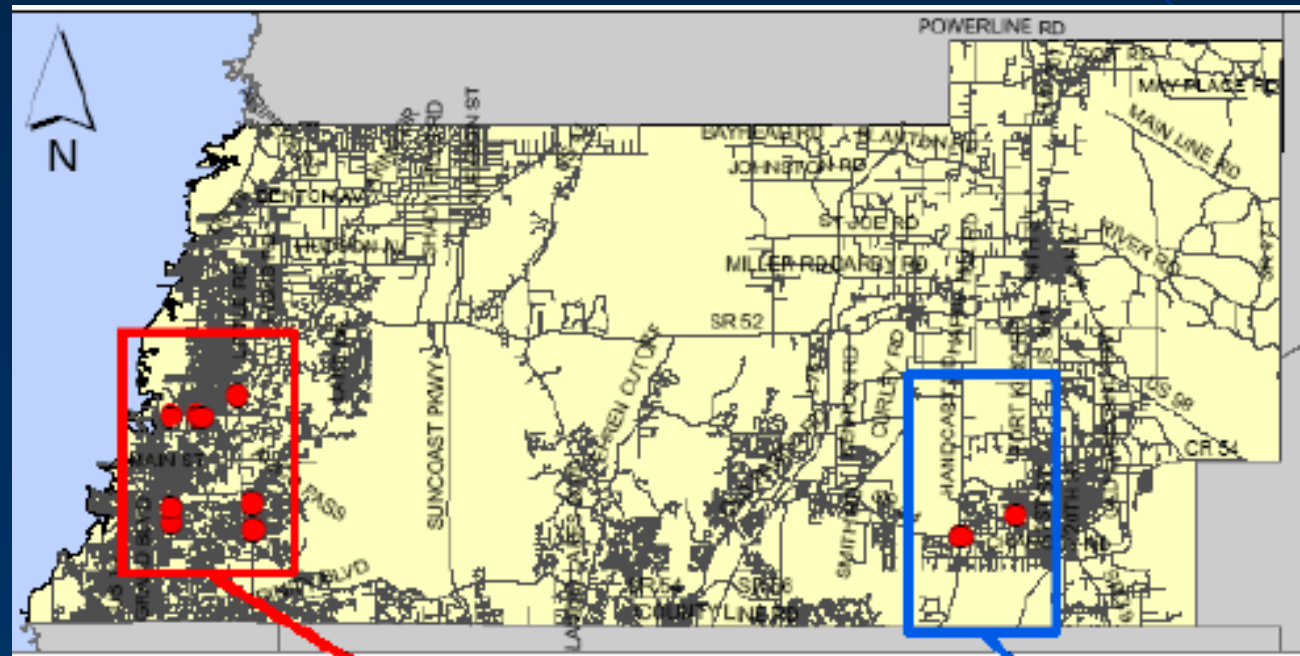
COUNTY

CITY

DATABASE

CHALLENGES

- Top 10 locations reviewed February 2007.



District 7 Road Safety Assessment Efforts



# 1<sup>st</sup> FHWA / FDOT Joint RSA

HISTORY

D7 RSA

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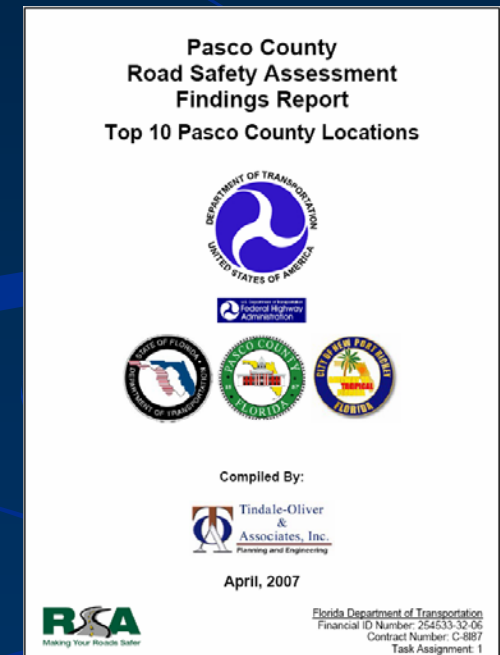
COUNTY

CITY

DATABASE

CHALLENGES

- Tindale-Oliver & Associates, Inc. compiles Road Safety Assessment Findings Report (172 pages).
  - CR 587 at Sterling
  - CR 1 at Embassy Blvd
  - CR 587 at CR 77
  - CR 587 at Leo Kidd Ave
  - CR 1 at Saint Lawrence Dr
  - SR 54 at CR 579
  - CR 518 at Madison St
  - Madison St at Cecelia Dr
  - CR 1 at Rancho del Rio Dr
  - SR 54 at Dean Dairy



District 7 Road Safety Assessment Efforts



# County Efforts in Tampa Bay

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- Hillsborough County Road Safety Assessment Program
- 4 Locations Identified
  - Waters Ave from Sheldon to Hanley
  - Victoria Street from Limona to Kings
  - Morris Bridge Road from I 75 to County Line
  - Linebaugh Avenue from Race Track to Countryway

District 7 Road Safety Assessment Efforts



# County Efforts in Tampa Bay

HISTORY

D7 RSA

IN-HOUSE

FHWA

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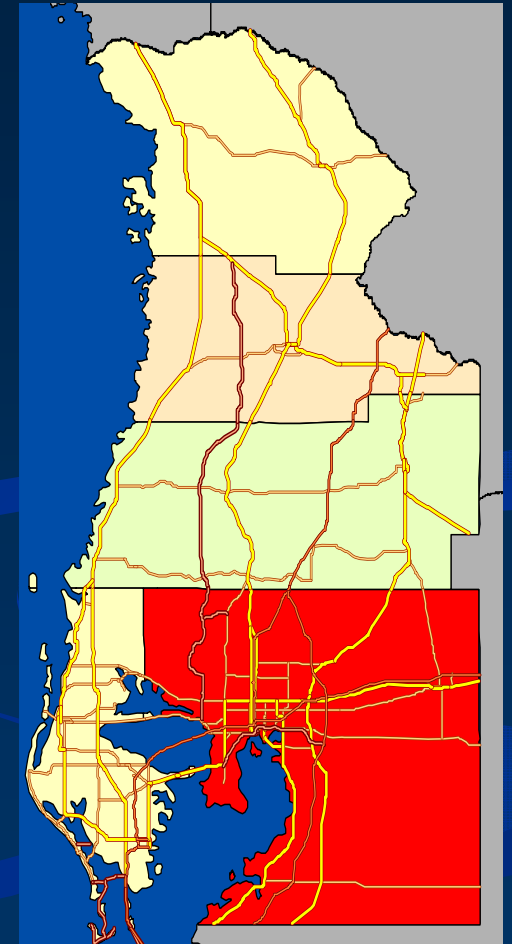
COUNTY

CITY

DATABASE

CHALLENGES

- County Staff Reviews Recommendations
  - Work Orders Issued if Not a Capital Investment Project
  - Added to Future Projects to be Funded if it Involves a Capital Investment Project



District 7 Road Safety Assessment Efforts



# City Efforts in Tampa Bay

HISTORY

D7 RSA

IN-HOUSE

FHWA

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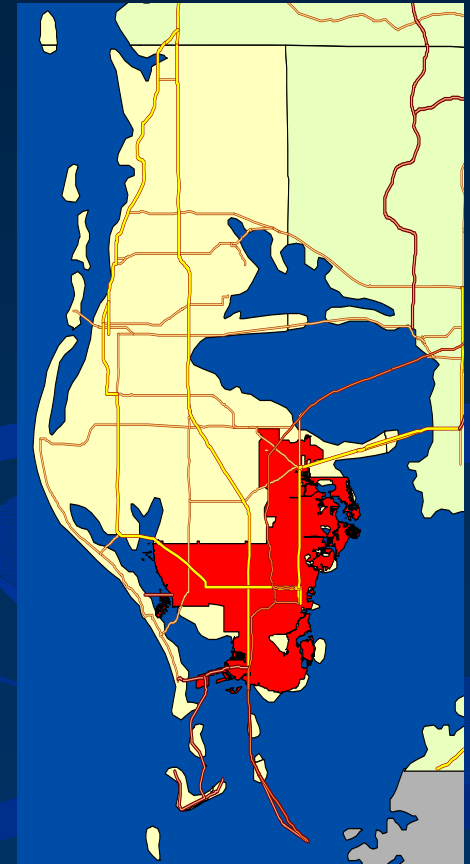
COUNTY

CITY

DATABASE

CHALLENGES

- City of Saint Petersburg
- 1 Location Identified
  - 38<sup>th</sup> Avenue N between 1<sup>st</sup> and 4<sup>th</sup> Street
- Short and Medium Range Recommendations Implemented



District 7 Road Safety Assessment Efforts



# All District 7 Study Locations

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

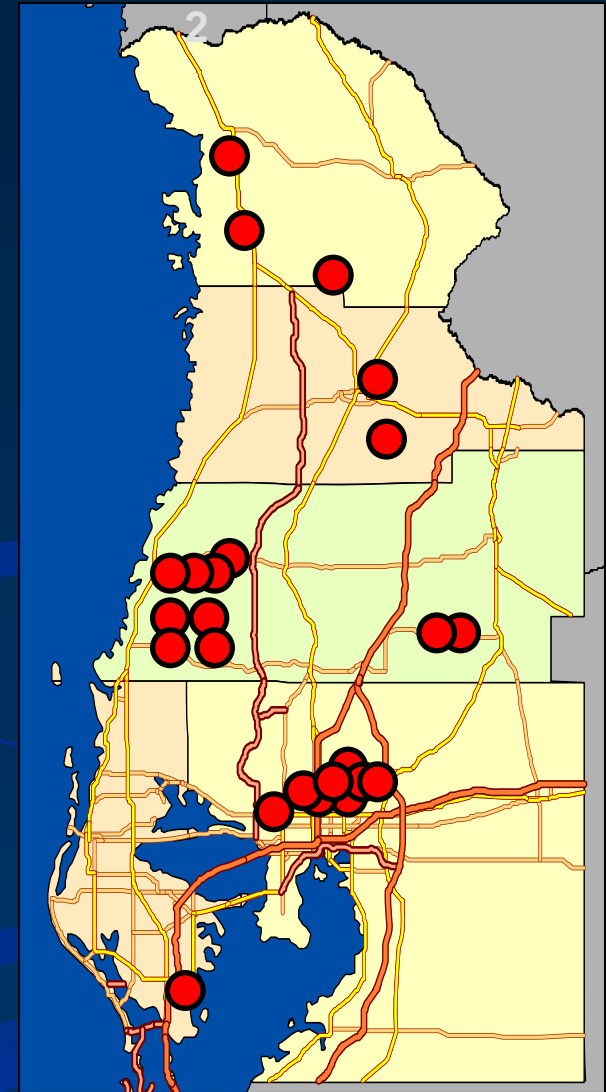
CITY

DATABASE

CHALLENGES

- 25 Road Safety Assessment Locations Since 2006 in District 7

- Citrus
- Hernando
- Pasco
- Pinellas
- Hillsborough



District 7 Road Safety Assessment Efforts



# RSA Challenges

HISTORY

D7 RSA

IN-HOUSE

FHWA

FHWA & D7

COUNTY

CITY

DATABASE

CHALLENGES

- Manpower
  - Many RSA Teams to Study
  - One Government Jurisdiction to Implement
- Resources
  - Funds for Improvements
- Liability
  - Public Records

District 7 Road Safety Assessment Efforts



# Questions?

**HISTORY**

**D7 RSA**

**IN-HOUSE**

**FHWA**

**FHWA & D7**

**COUNTY**

**CITY**

**DATABASE**

**CHALLENGES**



*District 7 Road Safety Assessment Efforts*