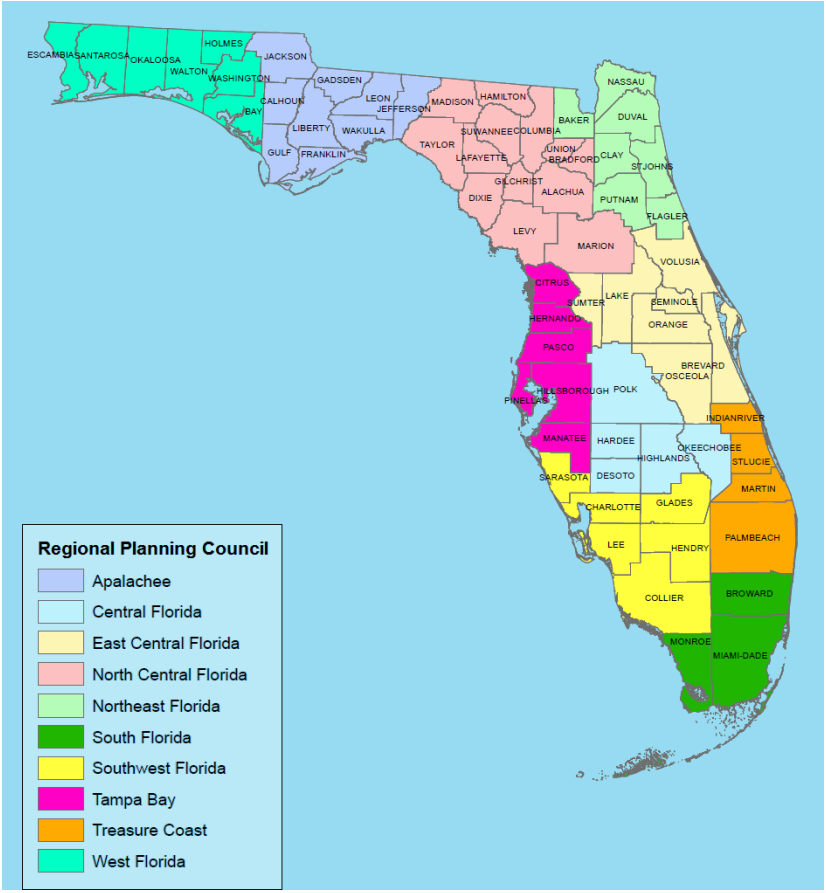
Economic Development District

Luis Nieves-Ruiz, AICP
Economic Development Program Manager
East Central Florida Regional Planning Council

Economic Development District

What is an Economic Development District?

- EDA designated organization that leads regional economic development efforts
- Three-year Partnership Planning Grant
- 10 EDDs in Florida



Economic Development District

EDD functions

- Promote EDA's priorities and programs
- Create and implement CEDS plan
- Provide economic technical assistance to local governments

E·D·A
U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

Economic Development District

EDD Priorities

EDD

- Long-term strategic planning
- Competitiveness
- Economic resiliency

Other Organizations

- Business attraction
- Individual business support
- Business incentives

Economic Development District

Comprehensive Economic Development Strategy

- Regional economic development plan
- Developed with Strategy Committee
- Goals and strategies to diversify economy
- Vital projects qualify for EDA grants

Economic Development District

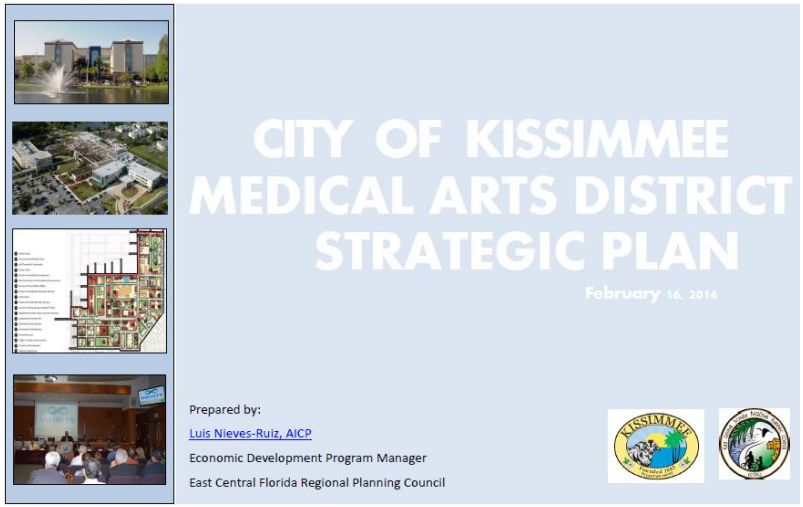
EDA Grants

- Public Works
- Economic Adjustment
- Florida Grants Awarded
  - 18 Grants
  - $20.6 million
- $18.25 ROI in East Central Florida

Economic Development District

Economic Technical Assistance

- Varies across different EDDs
- Assist with grant applications
- Develop economic strategic plans
- Prepare economic impact analyses



REMI

Economic Development District

Economic Development Districts Projects

- Luis Nieves-Ruiz, AICP- Industry Clusters and Economic Competitiveness
- Mike J. Busha, AICP- Preparing Brownfield Sites for Development
- PJ Smith- Transportation Planning and the Route Condition Tool

Industry Clusters and Economic Competitiveness

Luis Nieves-Ruiz, AICP
Economic Development Program Manager
East Central Florida Regional Planning Council
September 7, 2016

Industry Clusters and Competitiveness

How Florida sells its competitiveness

Industry Clusters and Competitiveness

While we are sleeping?

Industry Clusters and Competitiveness

What is competitiveness?

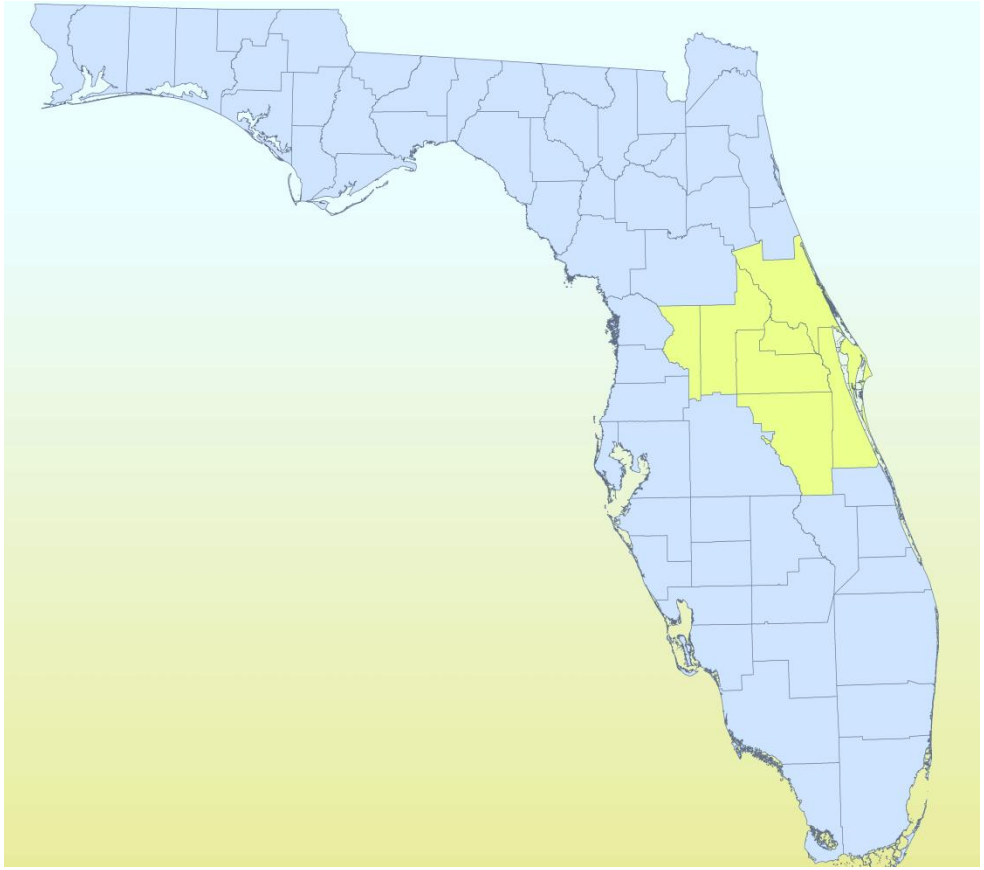
"…the ability of an economy to **attract** and **maintain** firms with stable or rising market shares in an activity while maintaining or **increasing standards of living** for those who participate in it." (Storper, 1997)

"…ultimately competitive regions and cities are places where both **companies** and **people** want to **locate** and **invest** in." (Kitson, Martin, and Tyler, 2004)

Industry Clusters and Competitiveness

Understanding Competitiveness

- Regions are source of national competitiveness
- Industry clusters are a measure of regional competitiveness



Industry Clusters and Competitiveness

What is an industry cluster?

- Agglomerations of interconnected companies
  - Producers
  - Suppliers
  - Related

Industry Clusters and Competitiveness

Identifying Industry Clusters

- Industry Specialization
- Business Concentration and Distribution
- Level of innovation

Industry Clusters and Competitiveness

Industry Concentration

- Location Quotient
- Local and Reference Economies Ratio
- LQ > 1

$$LQ_i = \frac{\frac{\text{Local Employment}_i}{\text{Total Local Employment}}}{\frac{\text{National Employment}_i}{\text{Total National Employment}}}$$

Industry Clusters and Competitiveness

Business Concentration and Distribution

- North American Industry Classification System (NAICS)
- Infogroup database
- Geocode and map businesses

Natural Resources and Mining

11 Agriculture, Forestry, Fishing & Hunting

114 Fishing, Hunting, and Trapping

1141 Fishing

114111 Finfish Fishing

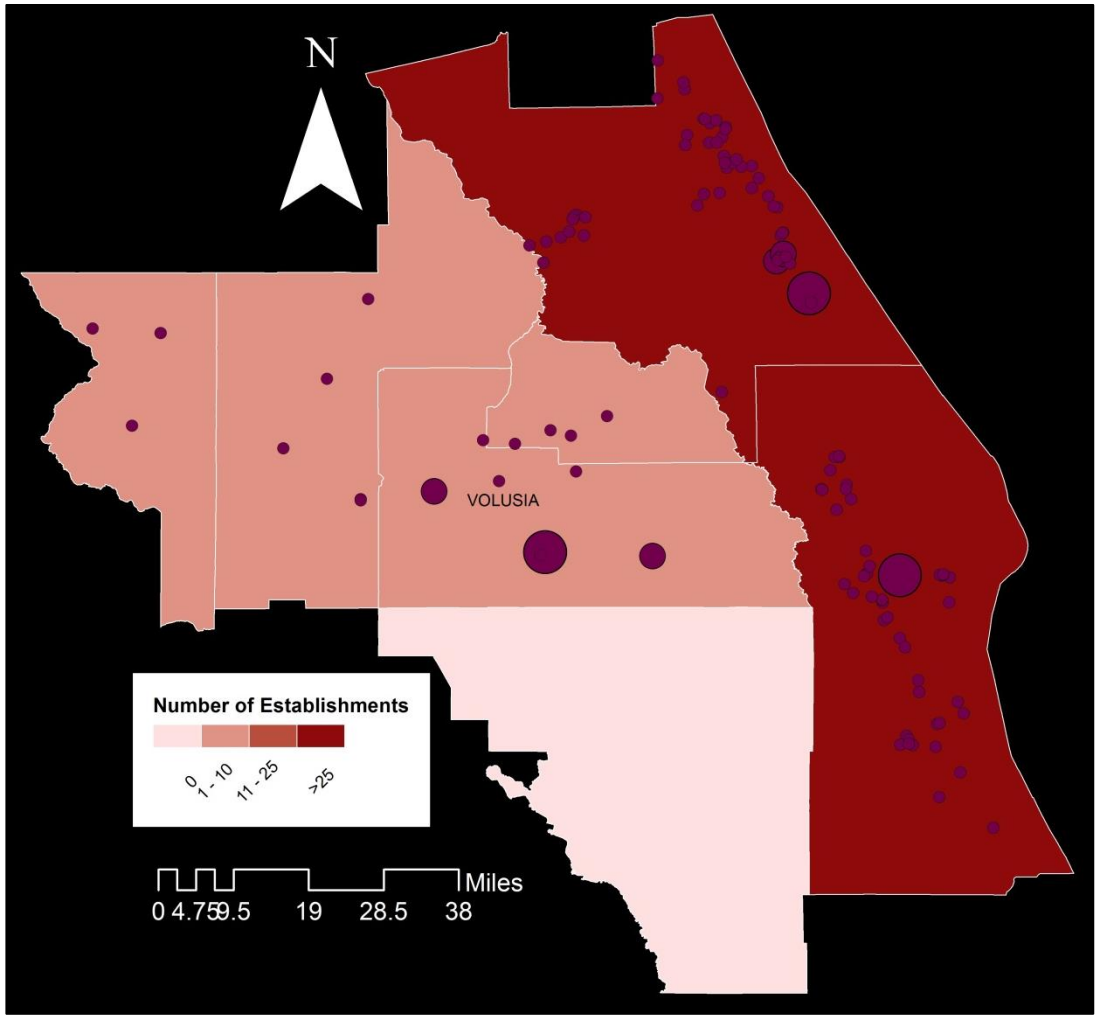
Industry Clusters and Competitiveness

Level of Innovation

- Innovation drives economic competitiveness
- Patent Analysis

Industry Clusters and Competitiveness

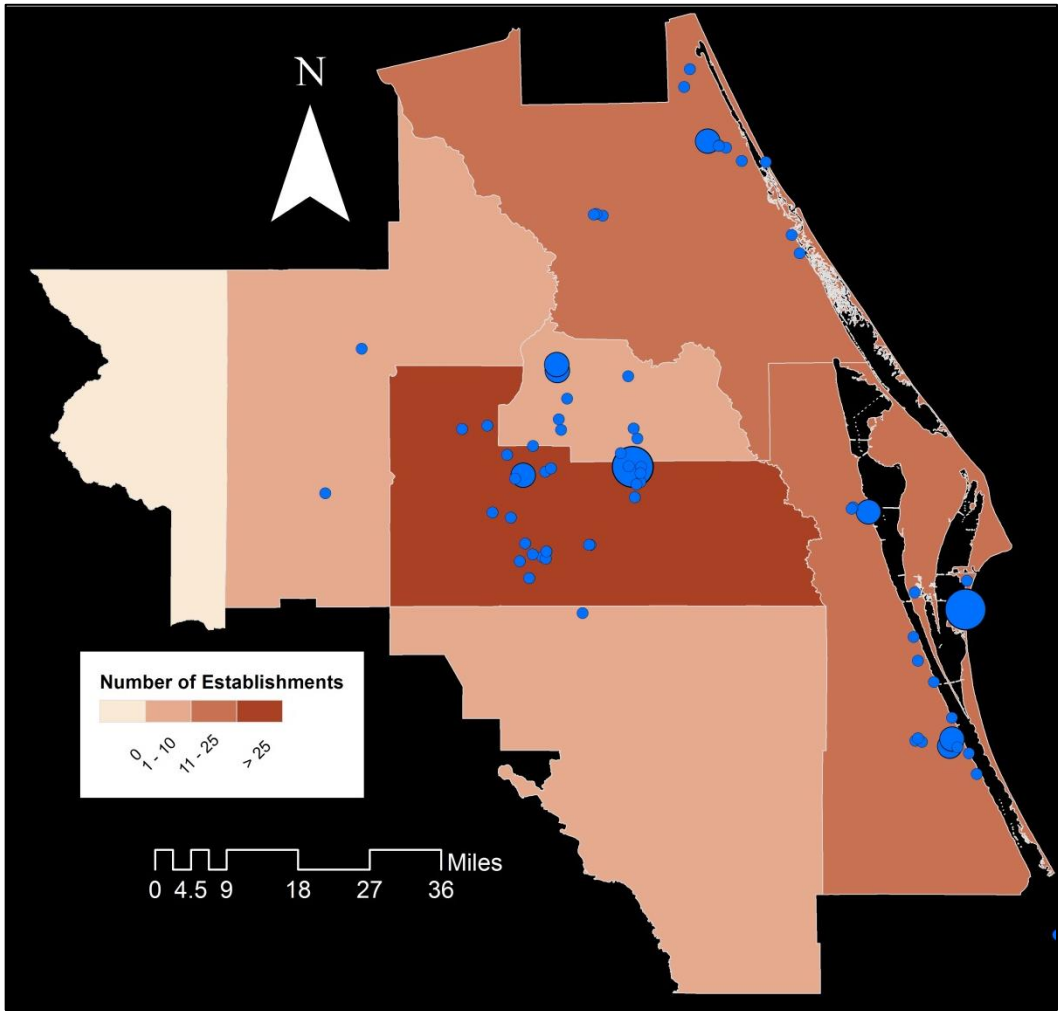
Boats and Other Vessels



- LQs Range
  1.6-16.83
- # Businesses
  125
- Patents
  222

Industry Clusters and Competitiveness

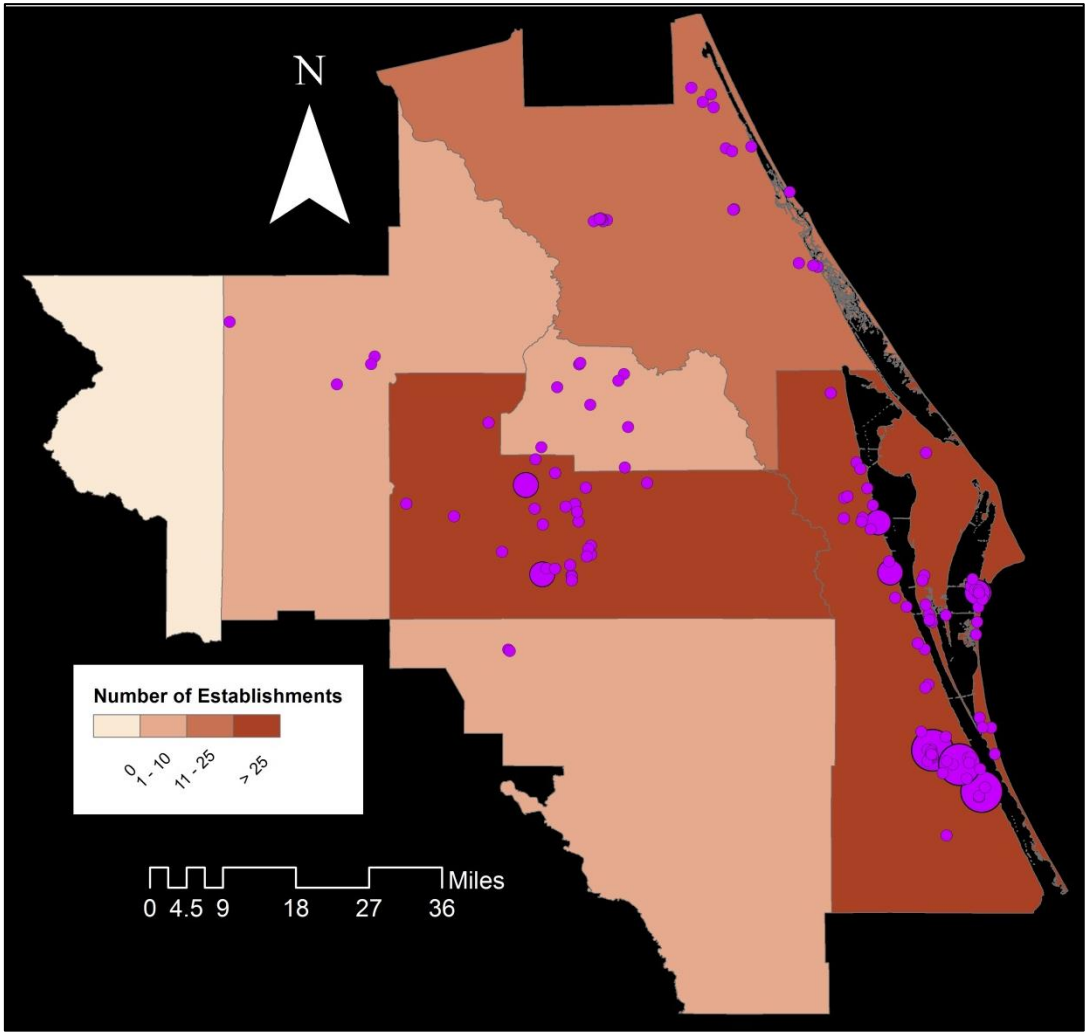
Turbine Technologies



- LQs Range
  1.29-1.81
- # Businesses
  74
- Patents
  599

Industry Clusters and Competitiveness

Avionics

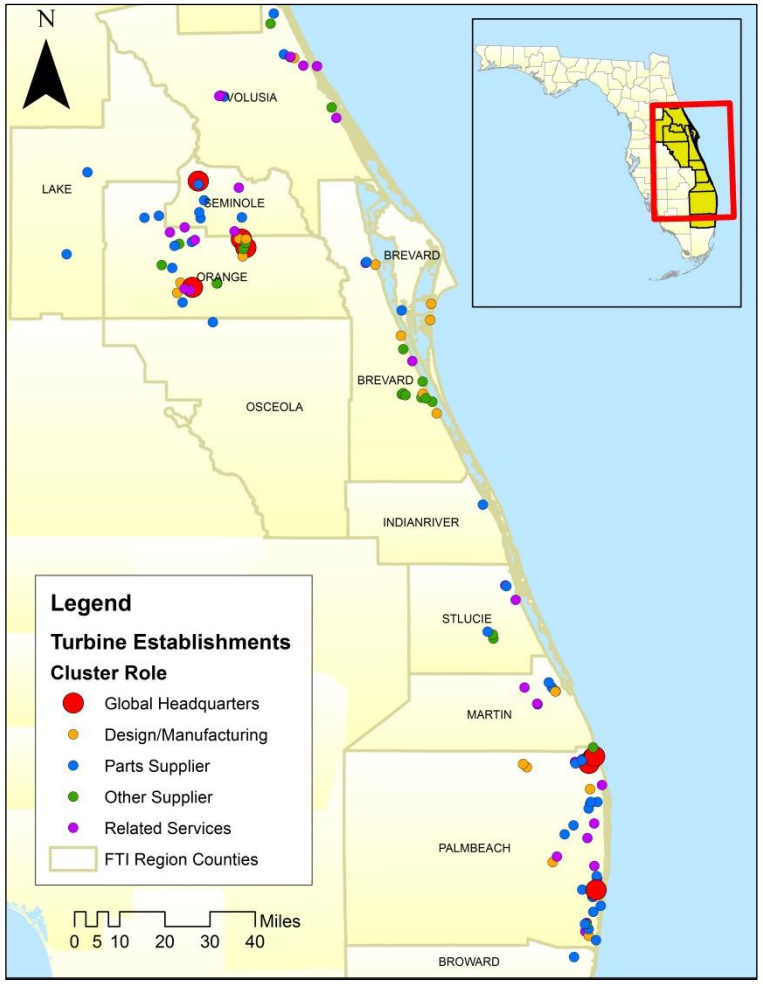


- LQs Range
  1.15-15.84
- # Businesses
  143
- Patents
  817

Industry Clusters and Competitiveness

Florida Turbine Initiative

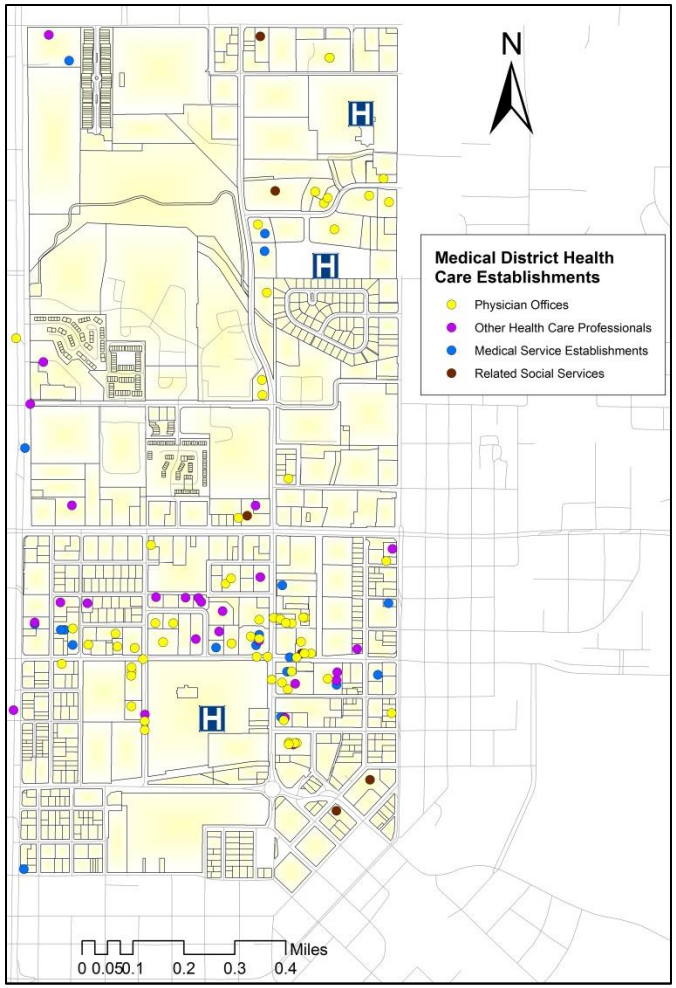
- Investing in Manufacturing Communities Partnership (IMCP) Application
- 10-County Industry Analysis



Industry Clusters and Competitiveness

Kissimmee Medical Arts District Strategic Plan

- Compare Kissimee against similar medical agglomerations
- Identify missing medical services



Industry Clusters and Competitiveness

Thank you for your participation!

Please submit comments to:

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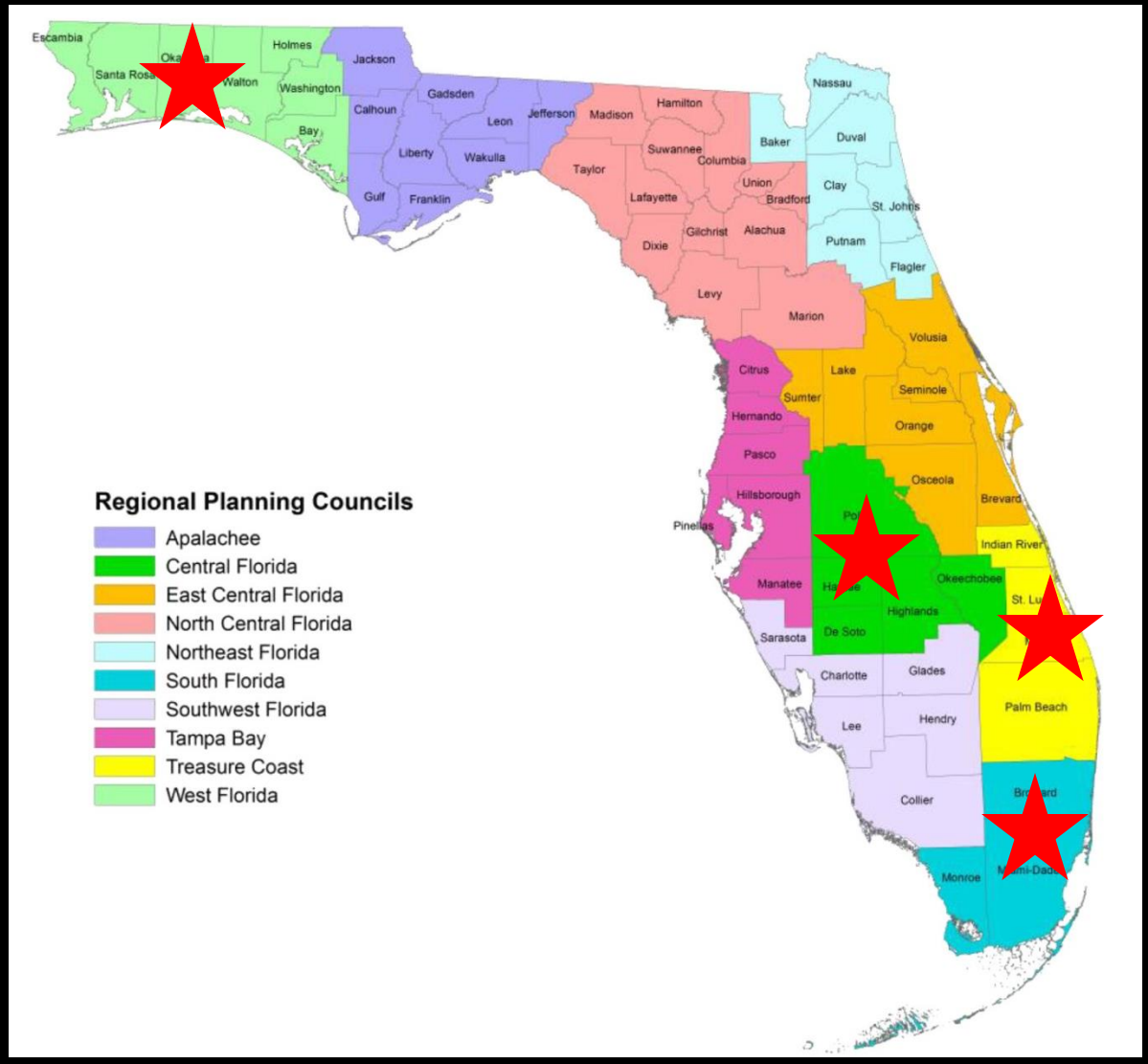
Connecting brownfields with community planning and visioning

FLORIDA APA ANNUAL CONFERENCE

SEPTEMBER 7, 2016

Treasure Coast Regional Planning Council

Brownfields Programs As An Economic Development and Community Planning Tool



Treasure Coast Brownfields Program

Overview

- Started in 2003
- Technical and Financial Assistance
- Encompasses Assessment and Cleanup
  - 2003: $200,000 petroleum assessment
  - 2005: $200,000 petroleum assessment
  - 2005: $1,100,000 RLF established
  - 2007: $400,000 petro/hazardous assessment
  - 2009: $450,000 ARRA RLF supplemental
  - 2011: $1,000,000 coalition assessment grant
  - 2013: $300,000 RLF supplemental
  - 2014 $400,000 RLF supplemental
  - 2015 $500,000 coalition assessment grant

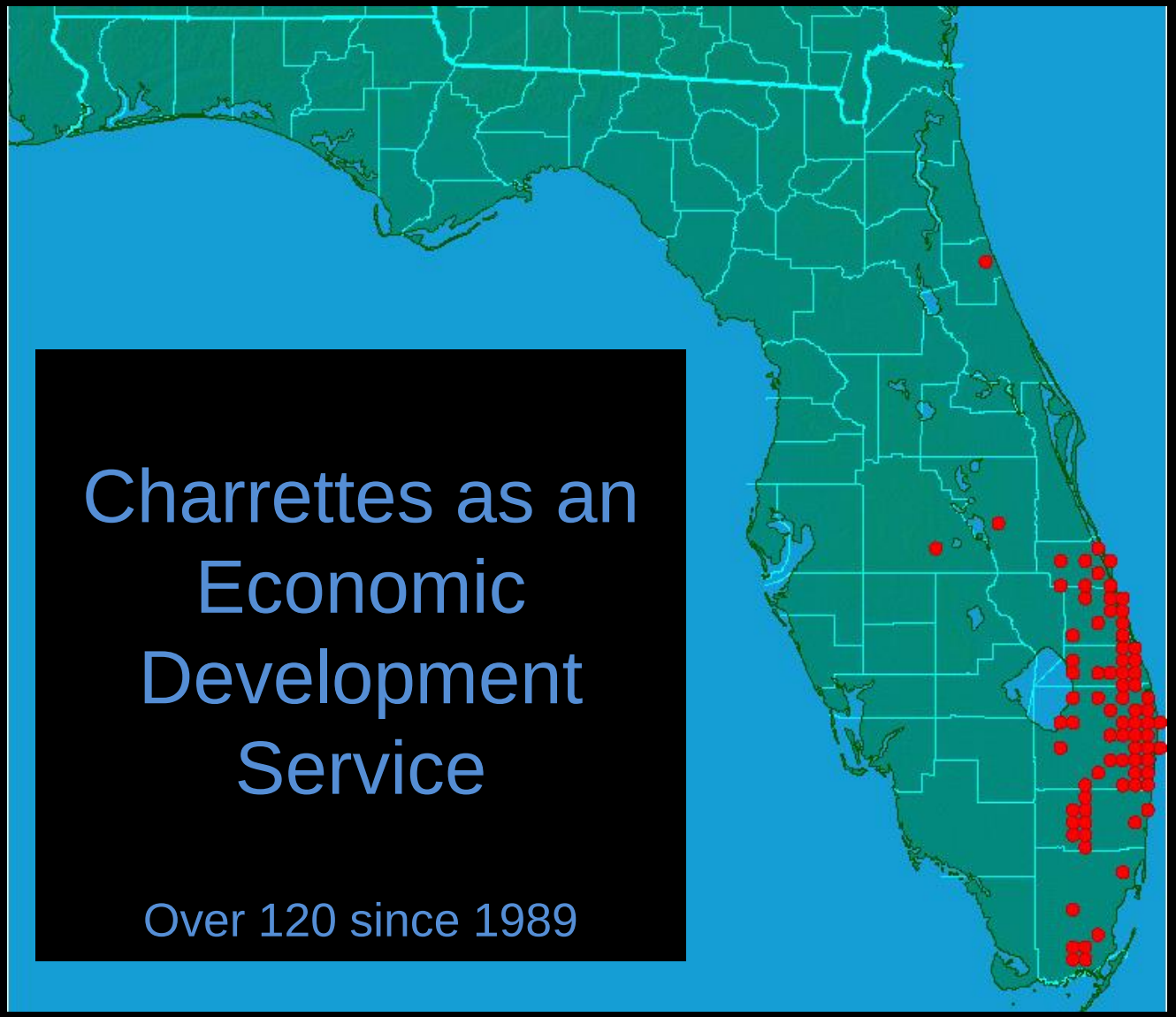
TOTAL $4.55 million

Brownfields Programs As An Economic Development and Community Planning Tool

- Environmental Assessment
- Clean Up Planning
- Sub-Grants and Loans
- Community Outreach

Community Planning and Visioning

Council Has A Long and Rich History of Community Planning and Visioning in the Public



Funding Meaningful Community Planning Efforts Has Always Been A Challenge

Have a Relationship

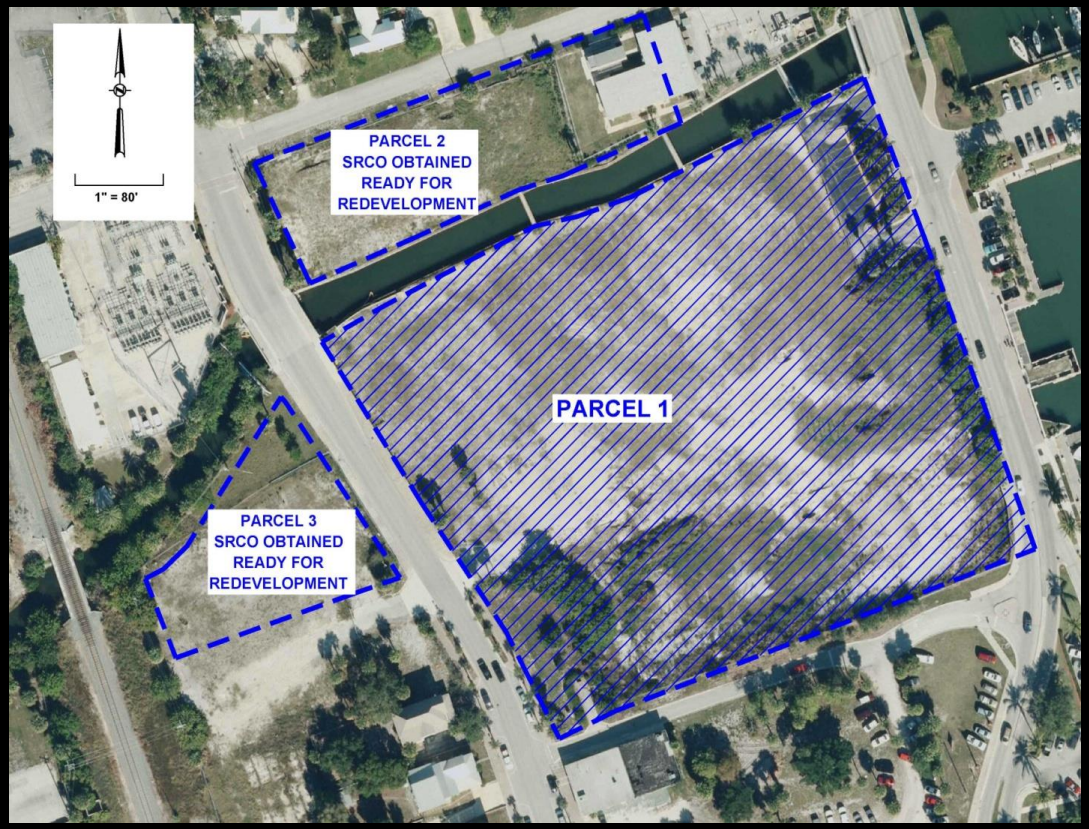
Connecting Brownfields Funding To Enable Community Transformation

City of Fort Pierce Downtown

H.D. King Power Plant Challenge

Former H.D. King Power Plant

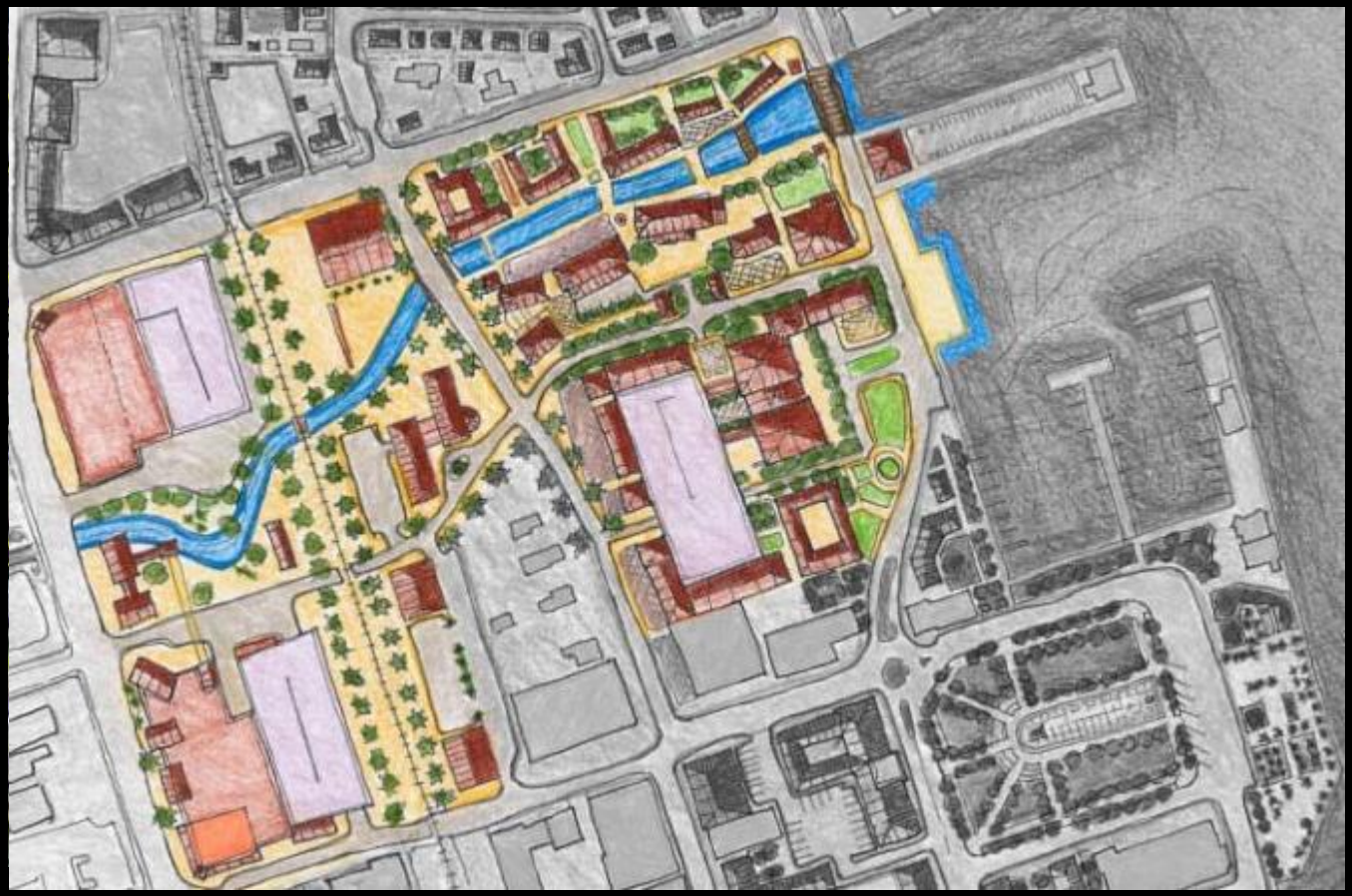
- 1912 to 2008 power generation facility
- 2009 Demolished
- Three separate parcels approx. 7 acres
- 2011 and 2012 City designated Brownfields Area
- 2012 FPRA executed 3 Brownfield Site Rehabilitation Agreements
- Funding Assistance from RPC $1,739,900



Now What ???

Fort Pierce Downtown Waterfront Charrette

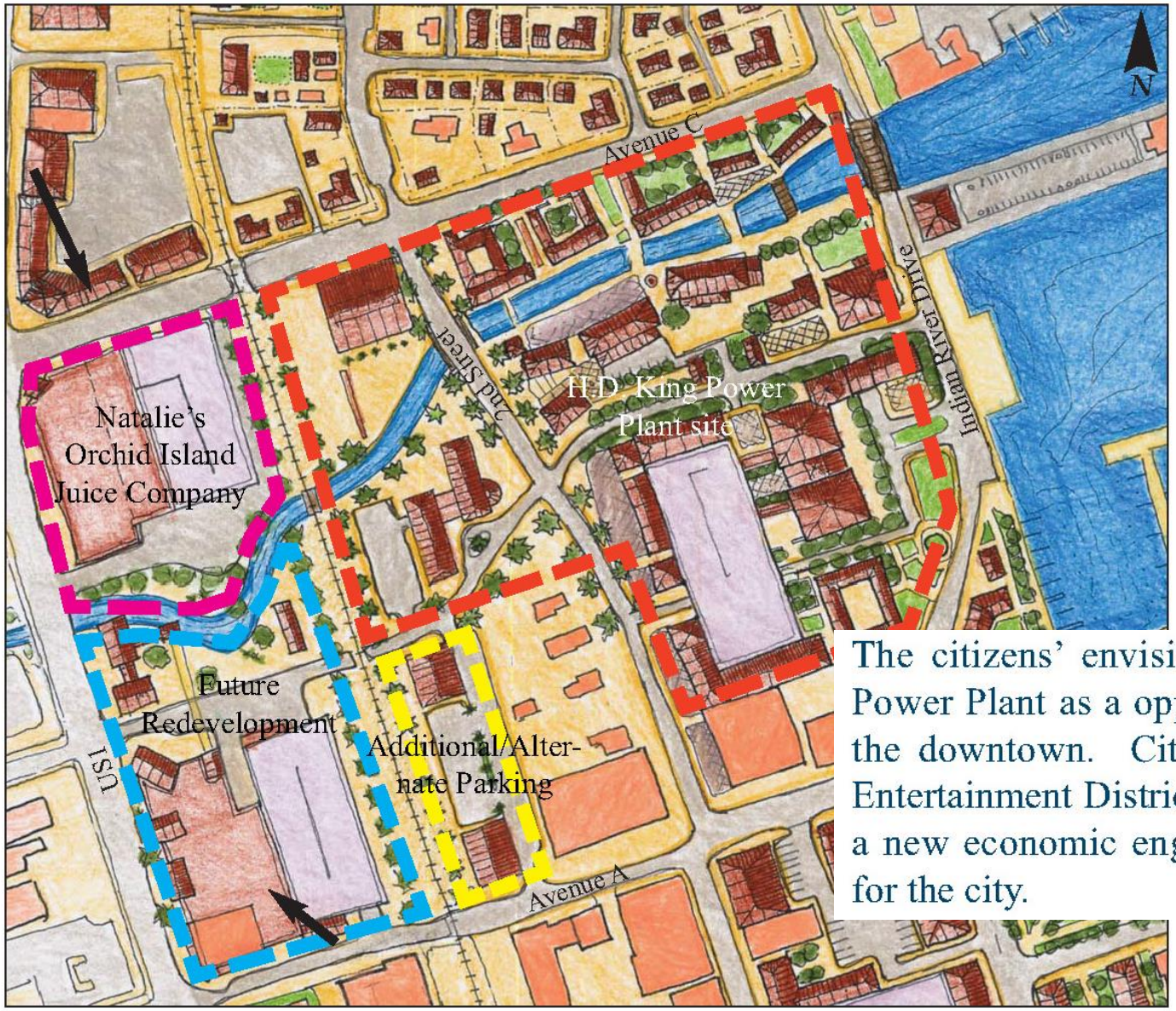
Former H.D. King Power Plant



A New Engine Powering the City

A New Destination Within the City

Former H.D. King Power Plant



The citizens' envision the H.D. King Power Plant as a opportunity to enrich the downtown. Citizens hope for an Entertainment District that will become a new economic engine and attraction for the city.

Citizens' Master Plan illustrating how redevelopment along US1 will draw people into the Entertainment District and downtown.

Former H.D. King Power Plant

Former H.D. King Power Plant

Fort Pierce Downtown Entertainment District

Work Completed To Date

- Environmental Site Assessments
  - Hazardous and Petroleum Substances
  - Soil and Groundwater impacts above FDEP cleanup target levels
- Removal Activities Parcels #2 & #3
  - Removed identified soil impacts
  - 2013 Site Rehabilitation Completion Orders
- 26,815+ tons contaminated soil removed

Photos Provided by Cardno

Former H.D. King Power Plant

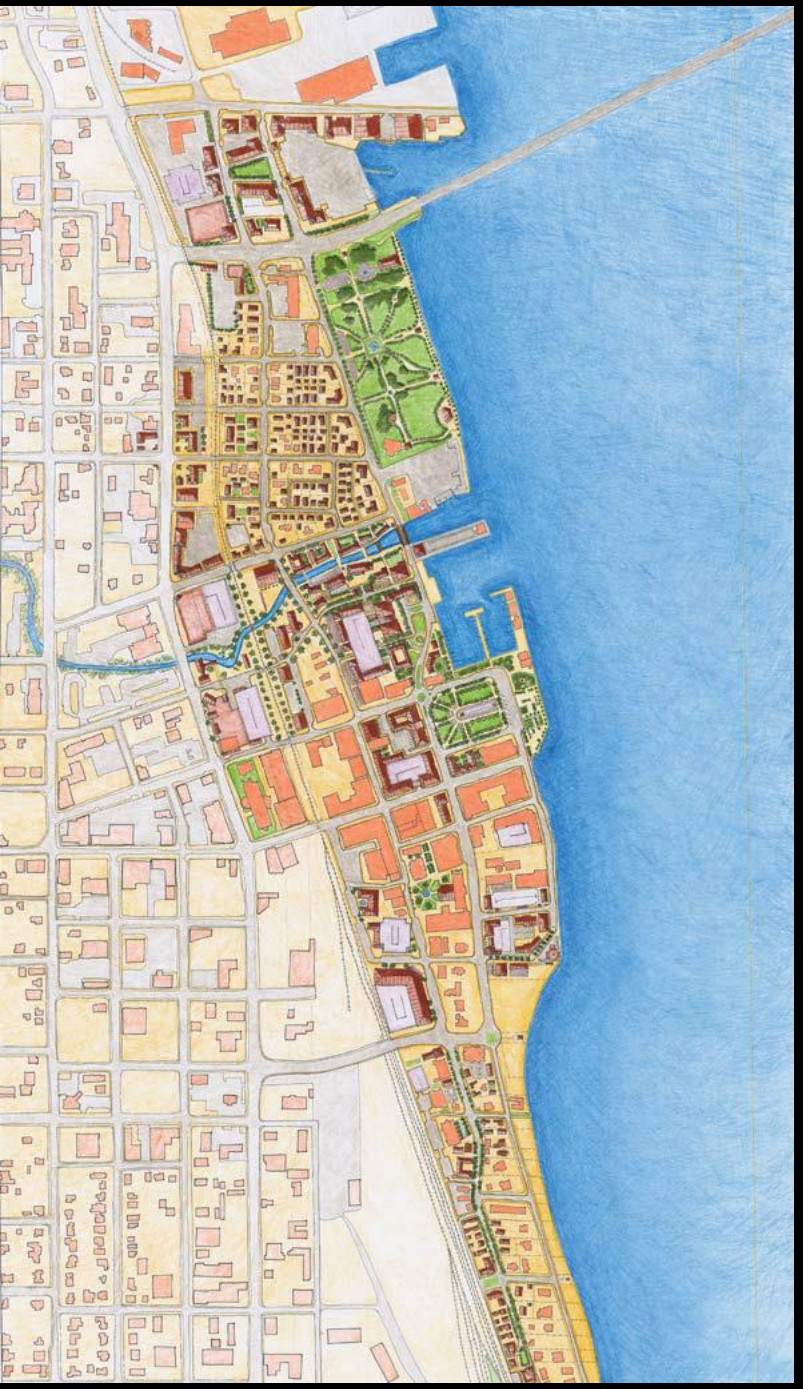
Advantage Fort Pierce → Earned $ 2,000,000 in Tax Credits

What Else EPA's Brownfields Program Can Do For Your Community

- Unleash Big Ideas
- Leverage Resources
- Build Momentum
- Engage People
- Transform Communities

…AND If You Don't Believe Me, Just Ask Eddie Van Halen

Questions/Comments



Contact Information

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mbusha@tcrpc.org

Scoring Our Streets

Transportation Planning and the Route Condition Tool

PJ Smith

Senior GIS Analyst / Urban Designer, ECFRPC

What is urban design?

The art and science of creating places that make sense.

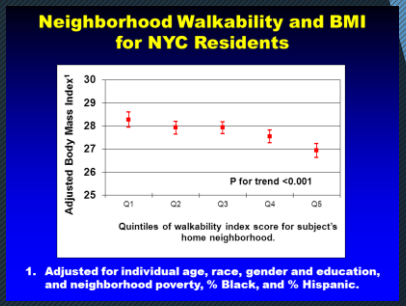
A critical component of this is the design and functionality of the street network.

Streets should…

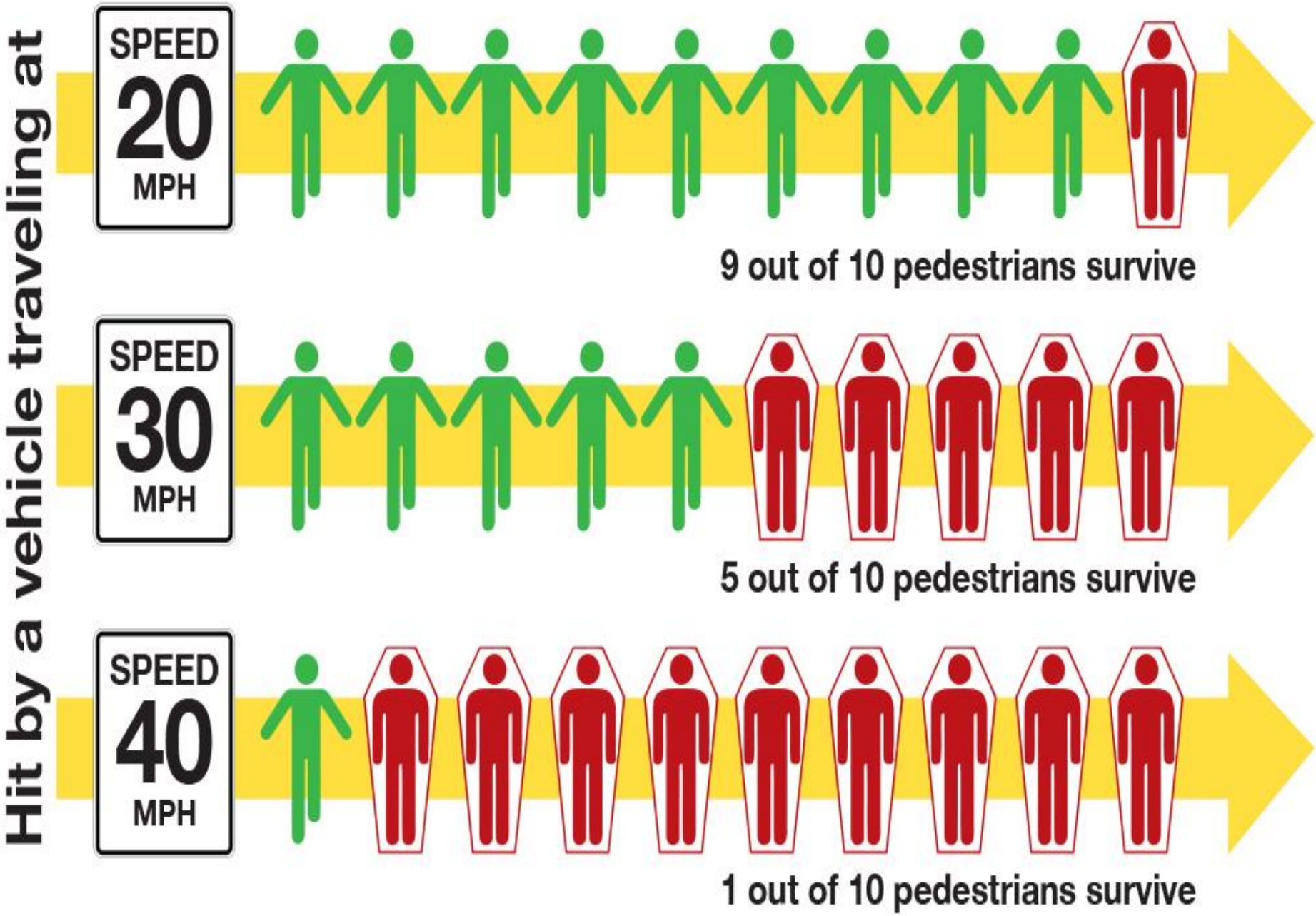
BE SAFE FOR ALL USERS

CREATE A SENSE OF PLACE

ALLOW FOR HEALTHY LIVING



Same volume


Hit by a vehicle traveling at
SPEED
20
MPH
9 out of 10 pedestrians survive
SPEED
30
MPH
5 out of 10 pedestrians survive
SPEED
40
MPH
1 out of 10 pedestrians survive

We need to **rethink** our transportation networks here.

Large metro areas, ranked by Pedestrian Danger Index

Rank	Metropolitan area	Total pedestrian deaths (2003–2012)	Annual pedestrian deaths per 100,000 (2008–2012)	Percent of people commuting by foot (2008–2012)	Pedestrian Danger Index (2008–2012)
1	Orlando-Kissimmee, FL	583	2.75	1.1	**244.28**
2	Tampa-St. Petersburg-Clearwater, FL	874	2.97	1.6	**190.13**
3	Jacksonville, FL	359	2.48	1.4	**182.71**
4	Miami-Fort Lauderdale-Pompano Beach, FL	1,539	2.58	1.8	**145.33**
5	Memphis, TN-MS-AR	239	1.72	1.3	**131.26**
6	Birmingham-Hoover, AL*	148	1.33	1.1	**125.60**
7	Houston-Sugar Land-Baytown, TX	1,034	1.70	1.4	**119.64**
8	Atlanta-Sandy Springs-Marietta, GA	839	1.59	1.3	**119.35**
9	Phoenix-Mesa-Scottsdale, AZ	840	1.86	1.6	**118.64**
10	Charlotte-Gastonia-Concord, NC-SC	254	1.65	1.5	**111.74**
11	Detroit-Warren-Livonia, MI	713	1.55	1.4	**111.63**
12	Dallas-Fort Worth-Arlington, TX	900	1.31	1.2	**107.54**
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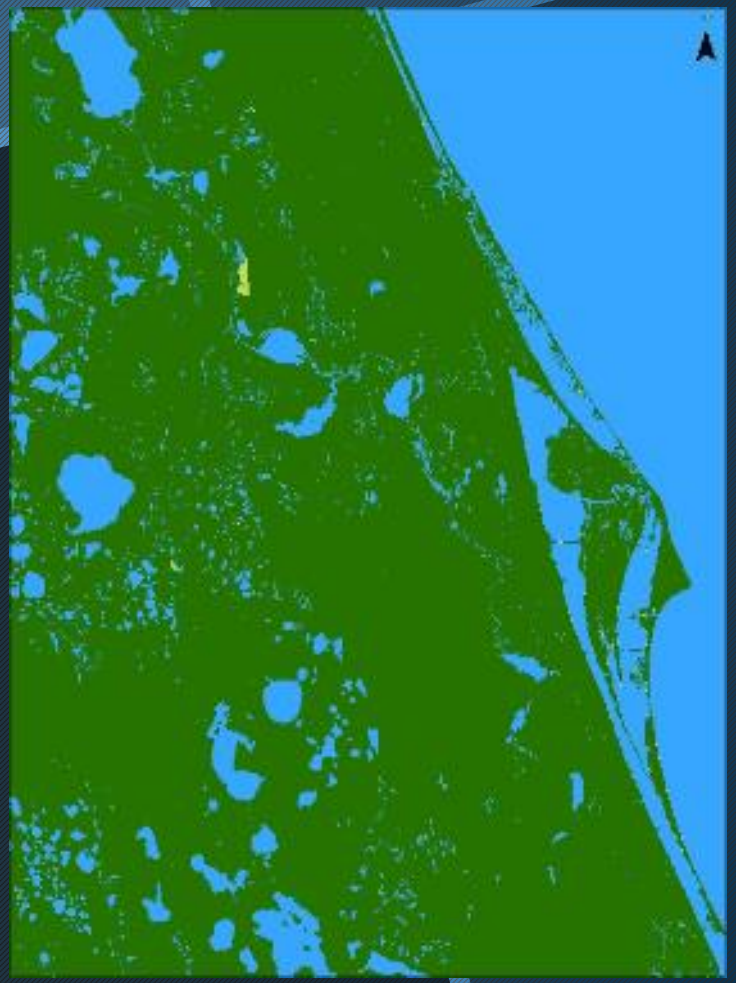
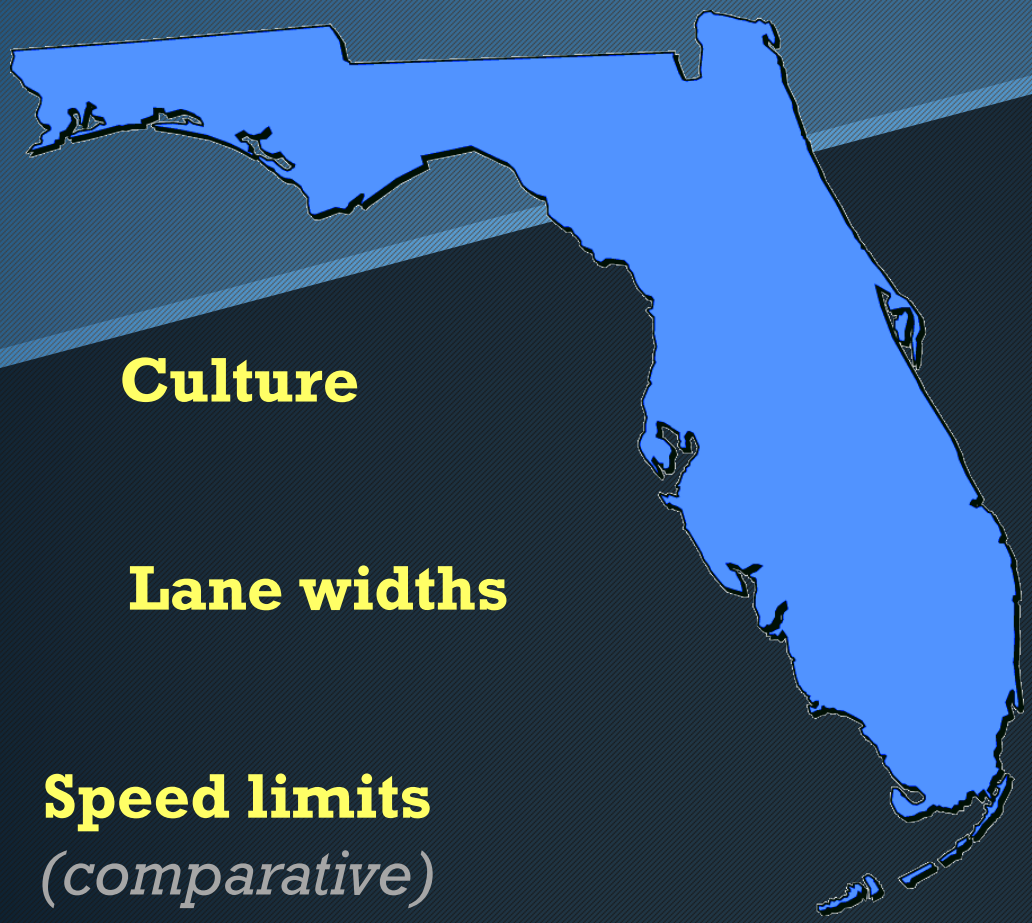


BECAUSE WE HAVE A DEEP-ROOTED PROBLEM



Improvement Prioritization Process

Culture

Sprawl

Lane widths

Property Contradiction

Speed limits
(comparative)

But it's not completely our fault.

Invention of the automobile
WW2
Interstate Highway Act (1950)
The New American Dream
…and a new way of planning cities

….
….

Assembly Line Neighborhoods Included

Large metro areas, ranked by Pedestrian Danger Index

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Leading up to 10/22/2008
Massive Sprawl → SF Res Loans →
Tax Base Increase → Developers
All maximizing revenues and

We moved so fast that we forgot the implications of what we were doing. Or just didn't care.

But what we know is that land development patterns and sprawl dictates (or so we thought) the inclusion of *terrible* **highways** in our cities.

Infrastructure/overhead costs ^^^^^^^^

And it's been happening long enough that people in our region think that this is

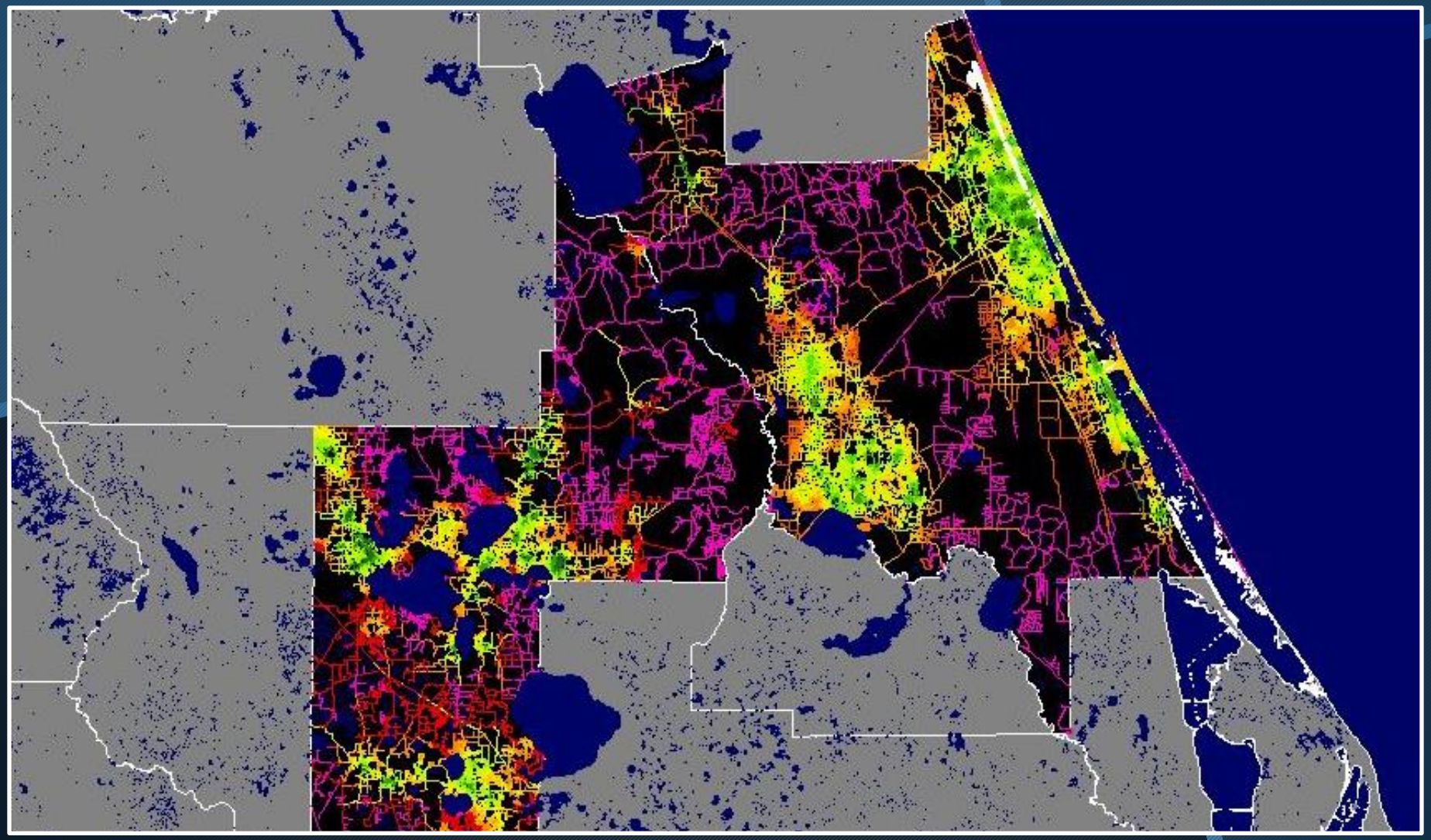
NORMAL

Or "socially normalized"

Like where I grew up…

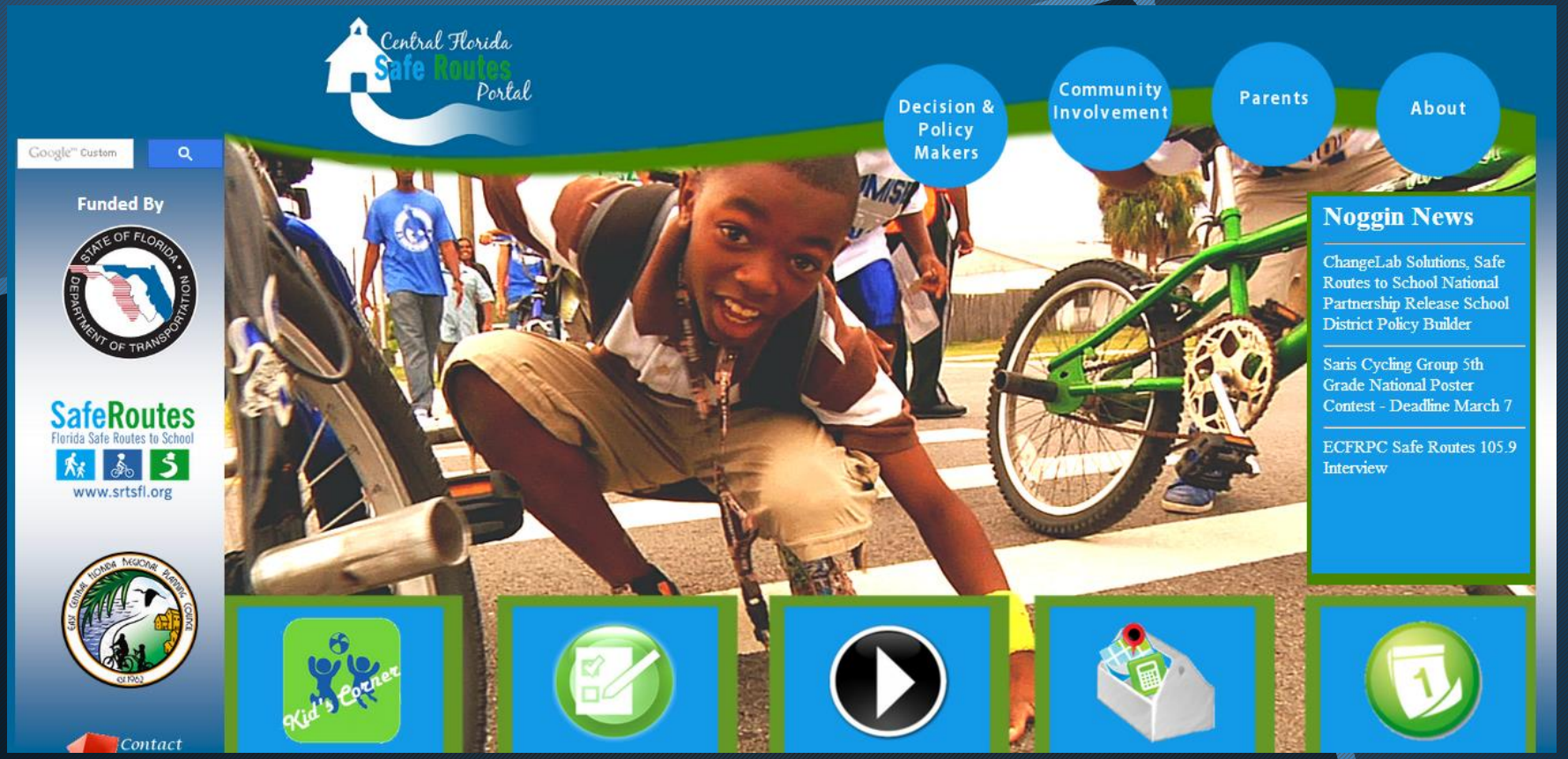
The ECFRPC Route Condition Tool

PJ Smith | ECFRPC | May 2016



Where did the process begin?

The development of our Safe Routes Portal included the **collection and development of data** focused on transportation safety and access for bicyclists and pedestrians.



What did the process lead to?

The creation of GIS Data Sets

PROXIMITY LAYERS

Community Features
Trail Systems
Schools (2-mile zone)
Bicycle Lanes
Crash Locations
ES School Zones
MS School Zones
HS School Zones
ADA Facilities
Transit Stops
Crossing Guards
Places of Interest
Commercial Hubs
High-Population Areas
Areas of Special Interest

STREET LAYERS

Road Width
Speed Limits
Median Width/Type
Shoulder Width/Type
AADT (Autos)
AADT (Trucks)
Sidewalks
Number of Lanes
Average Lane Width
Road Name
SIS Roadway
Inside Shoulder Width
Outside Shoulder Width
Paved Shoulders
Bicycle Lanes

But we could do more with this data….

We saw the data that we had collected as only the roots of our GIS capabilities.

All roadway data needed to be in

ONE shapefile, as attributes

What is the Route Condition Tool?

Utilizes Federal Highway Authority Roadway Safety Countermeasures and scores roadway segments on a **1-10 scale** based on five fundamental FDOT principles

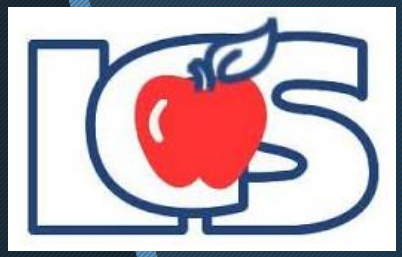
1. Reduce Speed of Motor Vehicles
2. Reduce Volume of Motor Vehicles
3. Reduce Exposure for Pedestrians and Bicyclists
4. Improve Access and Mobility
5. Improve Safety

*** Community Feature Proximity**

Technical advisory committee

Our project team put a team of local stakeholders and technical analysts to determine how to score each roadway feature.

For example, how badly do we mark down the score for a road with a 55 mph speed limit?



Scoring Categories

Category D: *Improve Access and Mobility*

Scoring Attribute	Total Weight	Scoring *(Raw Scores -100 to 100)*							
Sidewalks	22.5%	Both Sides	One Side	None (Urban)	None (Rural)				
		100	40	-100	0				
Traffic Signals	20.0%	Wi 0.10 Mi	Wi 0.25 Mi	Wi 0.50 Mi	Wi 1.00 Mi	Not wi 1 Mi	No Data		
		100	70	40	10	-20	0		
Paved Shoulders	15.0%	Yes (2)	Yes (1)	None	No Data				
		100	-20	0	0				
Prox. ADA Infrastructure	12.5% (0%)	Wi 0.25 Mi	Wi 0.50 Mi	n/wi 0.5 Mi	No Data				
		100	40	-100	0				
AADT	10.0%	< 5000	5000-10000	10001-20000	20001-30000	30001-40000	40001-50000	> 50000	No Data
		100	65	30	-5	-40	-75	-100	100
Prox. to Transit Stops	10.0%	wi 0.25 Mi	wi 0.50 Mi	o/s o.5 mi					
		100	80	-20					
Lighting	10.0%	Yes	No	No Data					
		100	0	0					

Table

CUMULATIVE

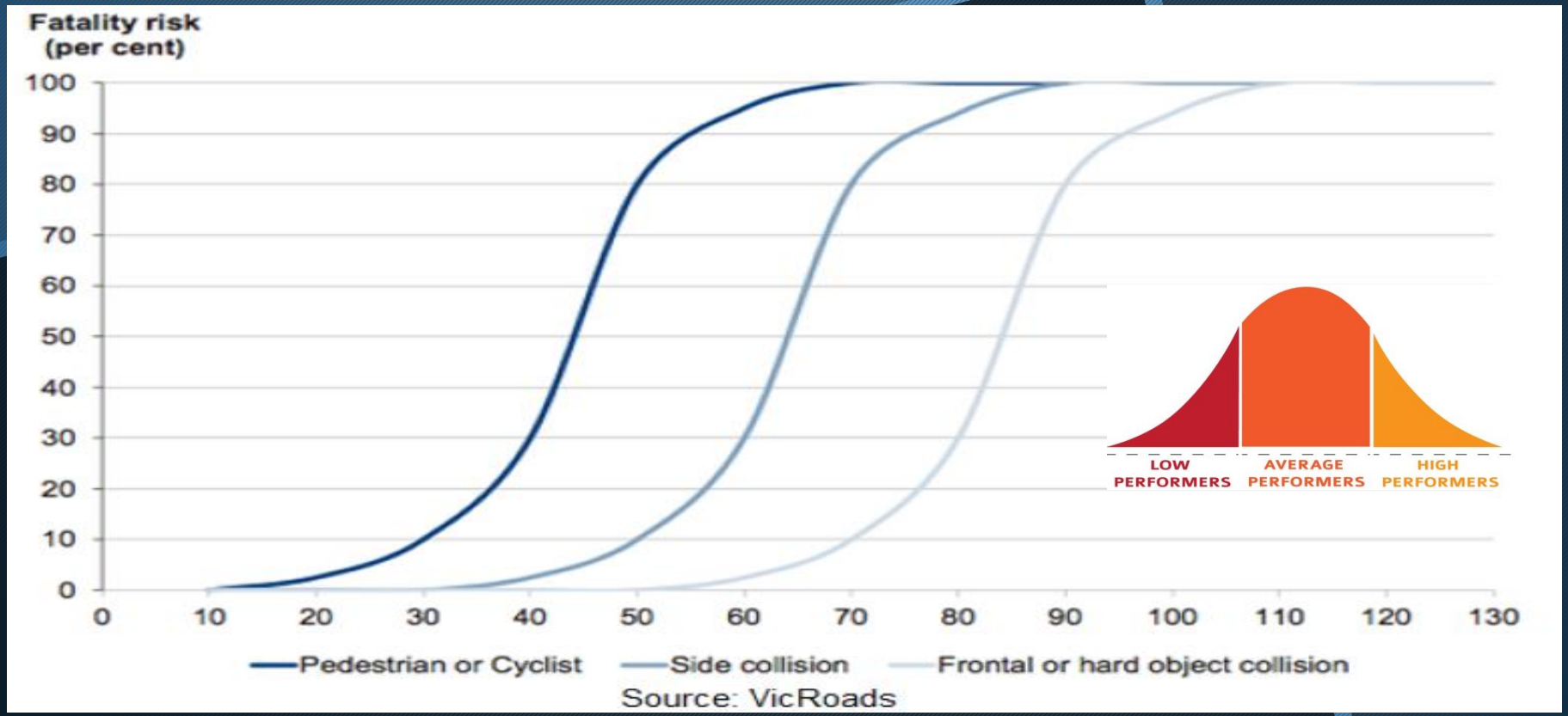
TRANSIT_ST	CROSS_GRD	TRAFF_SIG	MEDIAN_TP	LIGHTING	CROSSWALKS	A	B	C	D	E	F	G	H	J	K	L	N	P	S1	S2	S3	S4	S5	SCORE	REAL_SCORE
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	Paved	Data Not Available	No Data	-10	10	-2	0	10	60	-2	40	100	50	10	0	40	-34	86	64.7	28	44.	37.85	6
Outside 0.50 Miles	Outside 0.50 Miles	Within 1.00 Miles	None	Data Not Available	No Data	-10	10	10	0	30	20	-2	-10	100	0	10	0	-10	-31.75	39.5	0	-4.5	-5	-0.35	2
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.25 Miles	None	Data Not Available	No Data	-10	10	70	0	30	20	-2	-10	100	0	10	0	0	-27.25	39.5	0	30	25	13.45	3
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.50 Miles	Paved	Data Not Available	No Data	-10	10	40	0	30	20	-2	-10	100	50	-2	0	0	-29.5	39.5	8.75	6	32.	11.45	3
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.10 Miles	Paved	Data Not Available	No Data	-10	10	10	0	65	60	-2	-10	100	50	-2	0	0	-25	66.75	8.75	21.5	32.	20.9	4
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.50 Miles	Paved	Data Not Available	No Data	-75	10	40	0	65	20	-2	-10	100	50	0	0	-10	-14.5	58.75	8.75	-10	2.5	9.1	2
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.10 Miles	Paved	Data Not Available	No Data	-10	10	10	0	65	20	-2	-10	100	50	0	0	0	-25	58.75	8.75	24.5	32.	19.9	3
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	None	Data Not Available	No Data	-10	10	-2	0	10	60	-2	-10	100	0	0	0	0	-34	86	0	4	25	16.2	3
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	None	Data Not Available	No Data	-10	10	-2	0	10	60	-2	-10	100	0	0	0	0	-34	86	0	4	25	16.2	3
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	Paved	Data Not Available	No Data	-10	10	-2	0	10	60	-2	-10	100	0	0	0	0	-34	86	8.75	4	25	15.6	3
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	None	Data Not Available	No Data	-10	10	-2	0	10	60	-2	-10	100	0	10	0	-10	-34	39.5	0	-10.5	-5	-2.2	1
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.25 Miles	None	Data Not Available	No Data	-10	10	70	0	30	20	-2	-10	100	0	0	0	-10	-27.25	39.5	0	-7.5	-5	-0.05	2
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	Paved	Data Not Available	No Data	-75	10	-2	0	10	10	-2	-10	100	50	0	0	0	-19	94	8.75	4	32.	24.05	4
Outside 0.50 Miles	Outside 0.50 Miles	Outside 1.00 Miles	Paved	Data Not Available	No Data	-10	10	-2	0	30	20	-2	-10	100	50	-2	0	-10	-34	39.5	8.75	-28.5	2.5	-2.35	1
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.25 Miles	Paved	Data Not Available	No Data	-10	10	70	0	30	20	-2	-10	100	50	0	0	-10	-27.25	39.5	8.75	-7.5	2.5	3.2	2
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.50 Miles	None	Data Not Available	No Data	-75	10	40	0	30	-2	-2	-10	100	0	10	0	-10	-14.5	31.5	0	1.5	-5	2.7	2
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.50 Miles	None	Data Not Available	No Data	70	10	40	0	10	60	-2	40	100	0	0	0	40	72.5	86	56	25	37	55.3	8
Outside 0.50 Miles	Outside 0.50 Miles	Within 1.00 Miles	None	Data Not Available	No Data	10	10	10	0	10	60	-2	40	100	0	0	0	40	34.25	86	56	19	37	46.45	7
Outside 0.50 Miles	Outside 0.50 Miles	Within 1.00 Miles	Turn Lane	Data Not Available	No Data	-75	10	10	0	30	-2	-2	-10	100	-10	-2	0	-10	-16.75	31.5	-17.5	-22.5	-20	-9.05	1
Outside 0.50 Miles	Outside 0.50 Miles	Within 0.25 Miles	Paved	Data Not Available	No Data	70	10	70	0	10	60	-2	-10	100	50	0	0	-10	74.75	86	8.75	-0.5	2.5	34.3	5

RAW VALUES ⇨ CONVERTS TO SCORES

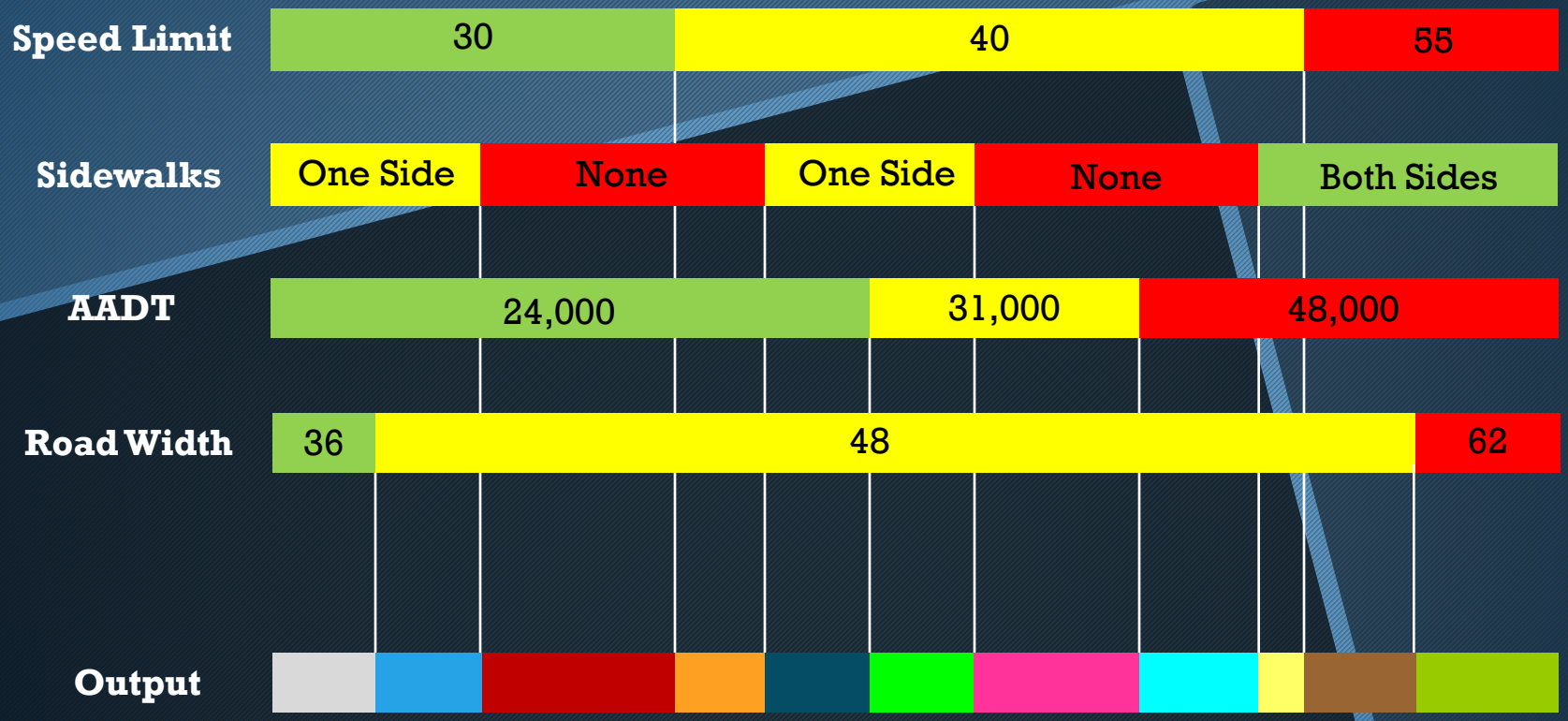
We score each roadway segment quality as a table attribute (example: speed limit) on a -100 to 100 scale. See the next slide as an example.

What determined the scores?

The ECFRPC hosted a group of professionals to guage the scoring (-100 to 100) on each roadway attribute, as well as the weighting of those scores, per category.

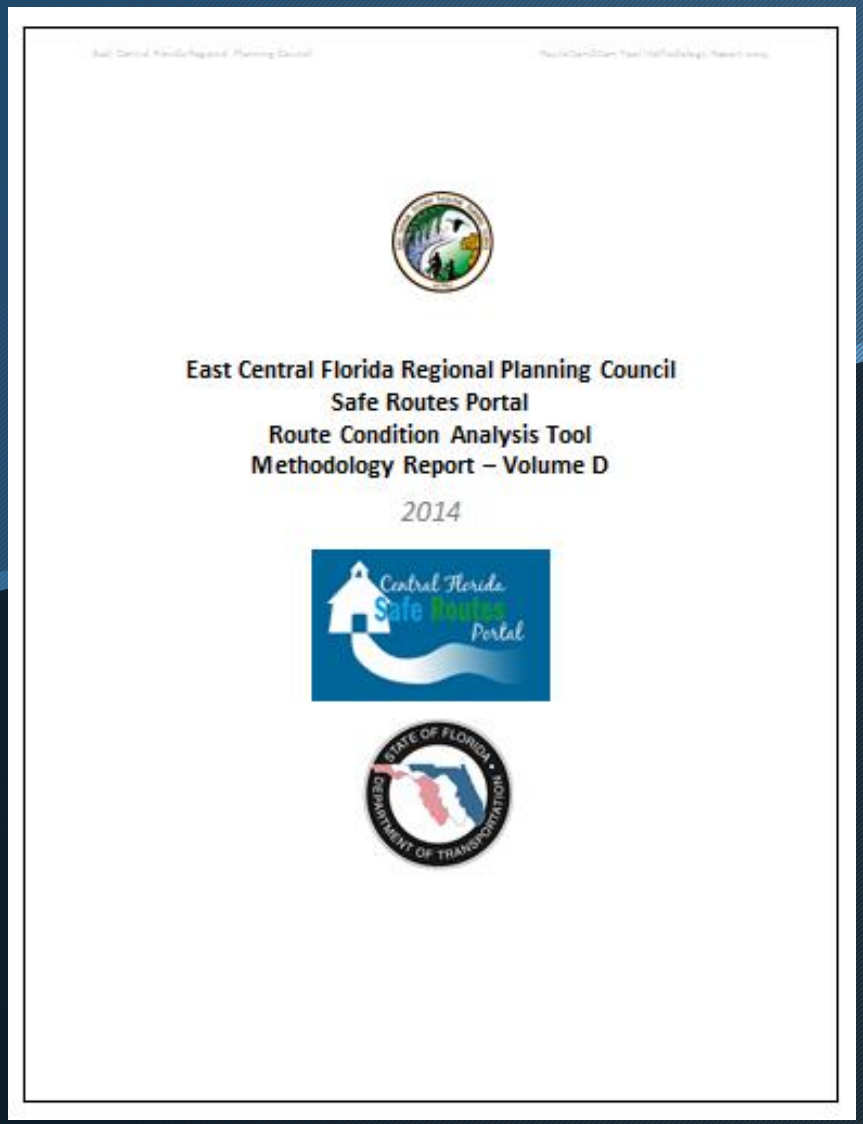


The Route Condition Tool is a comprehensive street layer



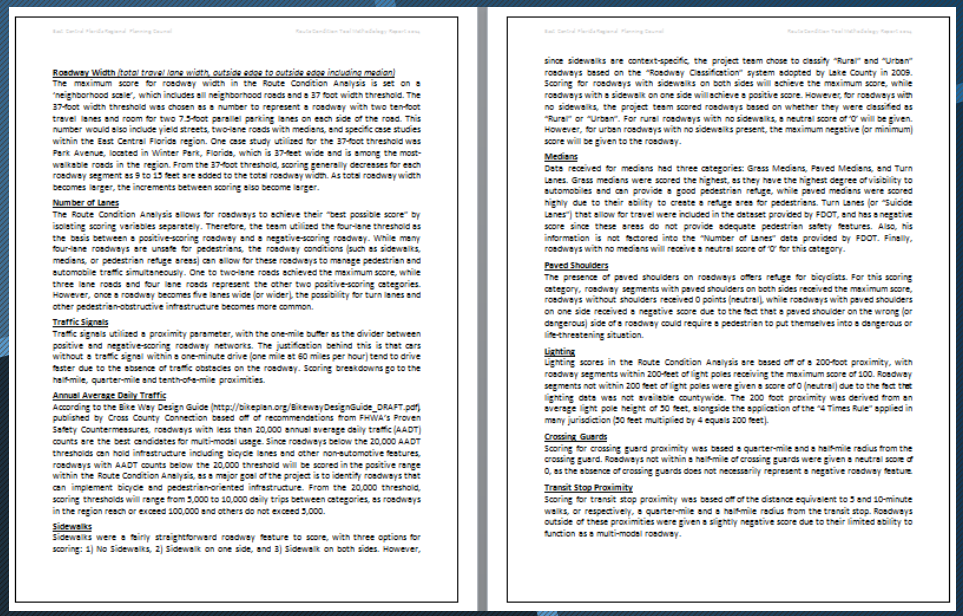
This depicts how each roadway record is unique.

Scoring Details (Methodology)



East Central Florida Regional Planning Council
Safe Routes Portal
Route Condition Analysis Tool
Methodology Report – Volume D

2014



Roadway Width *(total travel lane width, outside edge to outside edge including median)*
The maximum score for roadway width in the Route Condition Analysis is set on a 'neighborhood scale', which includes all neighborhood roads and a 37 foot width threshold. The 37-foot width threshold was chosen as a number to represent a roadway with two ten-foot travel lanes and room for two 7.5-foot parallel parking lanes on each side of the road. This number would also include yield streets, two-lane roads with medians, and specific case studies within the East Central Florida region. One case study utilized for the 37-foot threshold was Park Avenue, located in Winter Park, Florida, which is 37-feet wide and is among the most-walkable roads in the region. From the 37-foot threshold, scoring generally decreases for each roadway segment as 9 to 13 feet are added to the total roadway width. As total roadway width becomes larger, the increments between scoring also become larger.

Number of Lanes
The Route Condition Analysis allows for roadways to achieve their "best possible score" by isolating scoring variables separately. Therefore, the team utilized the four-lane threshold as the basis between a positive-scoring roadway and a negative-scoring roadway. While many four-lane roadways are unsafe for pedestrians, the roadway conditions (such as sidewalks, medians, or pedestrian refuge areas) can allow for these roadways to manage pedestrian and automobile traffic simultaneously. One to two-lane roads achieved the maximum score, while three lane roads and four lane roads represent the other two positive-scoring categories. However, once a roadway becomes five lanes wide (or wider), the possibility for turn lanes and other pedestrian-obstructive infrastructure becomes more common.

Traffic Signals
Traffic signals utilized a proximity parameter, with the one-mile buffer as the divider between positive and negative-scoring roadway networks. The justification behind this is that cars without a traffic signal within a one-minute drive (one mile at 60 miles per hour) tend to drive faster due to the absence of traffic obstacles on the roadway. Scoring breakdowns go to the half-mile, quarter-mile and tenth-of-a-mile proximities.

Annual Average Daily Traffic
According to the Bike Way Design Guide (http://bikeplan.org/BikewayDesignGuide_DRAFT.pdf) published by Cross County Connection based off of recommendations from FHWA's Proven Safety Countermeasures, roadways with less than 20,000 annual average daily traffic (AADT) counts are the best candidates for multi-modal usage. Since roadways below the 20,000 AADT thresholds can hold infrastructure including bicycle lanes and other non-automotive features, roadways with AADT counts below the 20,000 threshold will be scored in the positive range within the Route Condition Analysis, as a major goal of the project is to identify roadways that can implement bicycle and pedestrian-oriented infrastructure. From the 20,000 threshold, scoring thresholds will range from 5,000 to 10,000 daily trips between categories, as roadways in the region reach or exceed 100,000 and others do not exceed 5,000.

Sidewalks
Sidewalks were a fairly straightforward roadway feature to score, with three options for scoring: 1) No Sidewalks, 2) Sidewalk on one side, and 3) Sidewalk on both sides. However, since sidewalks are context-specific, the project team chose to classify "Rural" and "Urban" roadways based on the "Roadway Classification" system adopted by Lake County in 2009. Scoring for roadways with sidewalks on both sides will achieve the maximum score, while roadways with a sidewalk on one side will achieve a positive score. However, for roadways with no sidewalks, the project team scored roadways based on whether they were classified as "Rural" or "Urban". For rural roadways with no sidewalks, a neutral score of '0' will be given. However, for urban roadways with no sidewalks present, the maximum negative (or minimum) score will be given to the roadway.

Medians
Data received for medians had three categories: Grass Medians, Paved Medians, and Turn Lanes. Grass medians were scored the highest, as they have the highest degree of visibility to automobiles and can provide a good pedestrian refuge, while paved medians were scored highly due to their ability to create a refuge area for pedestrians. Turn Lanes (or "Suicide Lanes") that allow for travel were included in the dataset provided by FDOT, and has a negative score since these areas do not provide adequate pedestrian safety features. Also, his information is not factored into the "Number of Lanes" data provided by FDOT. Finally, roadways with no medians will receive a neutral score of '0' for this category.

Paved Shoulders
The presence of paved shoulders on roadways offers refuge for bicyclists. For this scoring category, roadway segments with paved shoulders on both sides received the maximum score, roadways without shoulders received 0 points (neutral), while roadways with paved shoulders on one side received a negative score due to the fact that a paved shoulder on the wrong (or dangerous) side of a roadway could require a pedestrian to put themselves into a dangerous or life-threatening situation.

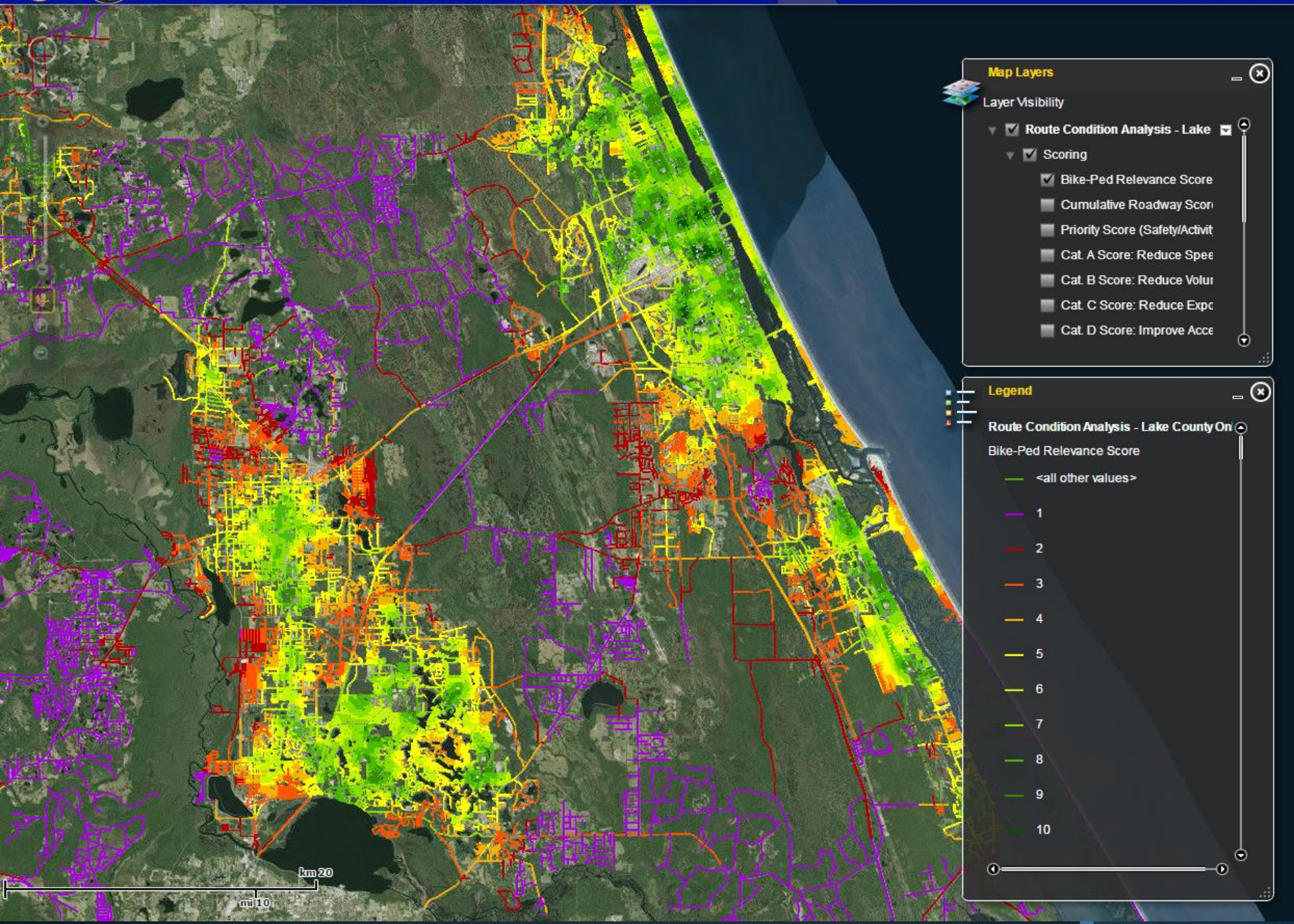
Lighting
Lighting scores in the Route Condition Analysis are based off of a 200-foot proximity, with roadway segments within 200-feet of light poles receiving the maximum score of 100. Roadway segments not within 200 feet of light poles were given a score of 0 (neutral) due to the fact that lighting data was not available countywide. The 200 foot proximity was derived from an average light pole height of 30 feet, alongside the application of the "4 Times Rule" applied in many jurisdiction (30 feet multiplied by 4 equals 200 feet).

Crossing Guards
Scoring for crossing guard proximity was based a quarter-mile and a half-mile radius from the crossing guard. Roadways not within a half-mile of crossing guards were given a neutral score of 0, as the absence of crossing guards does not necessarily represent a negative roadway feature.

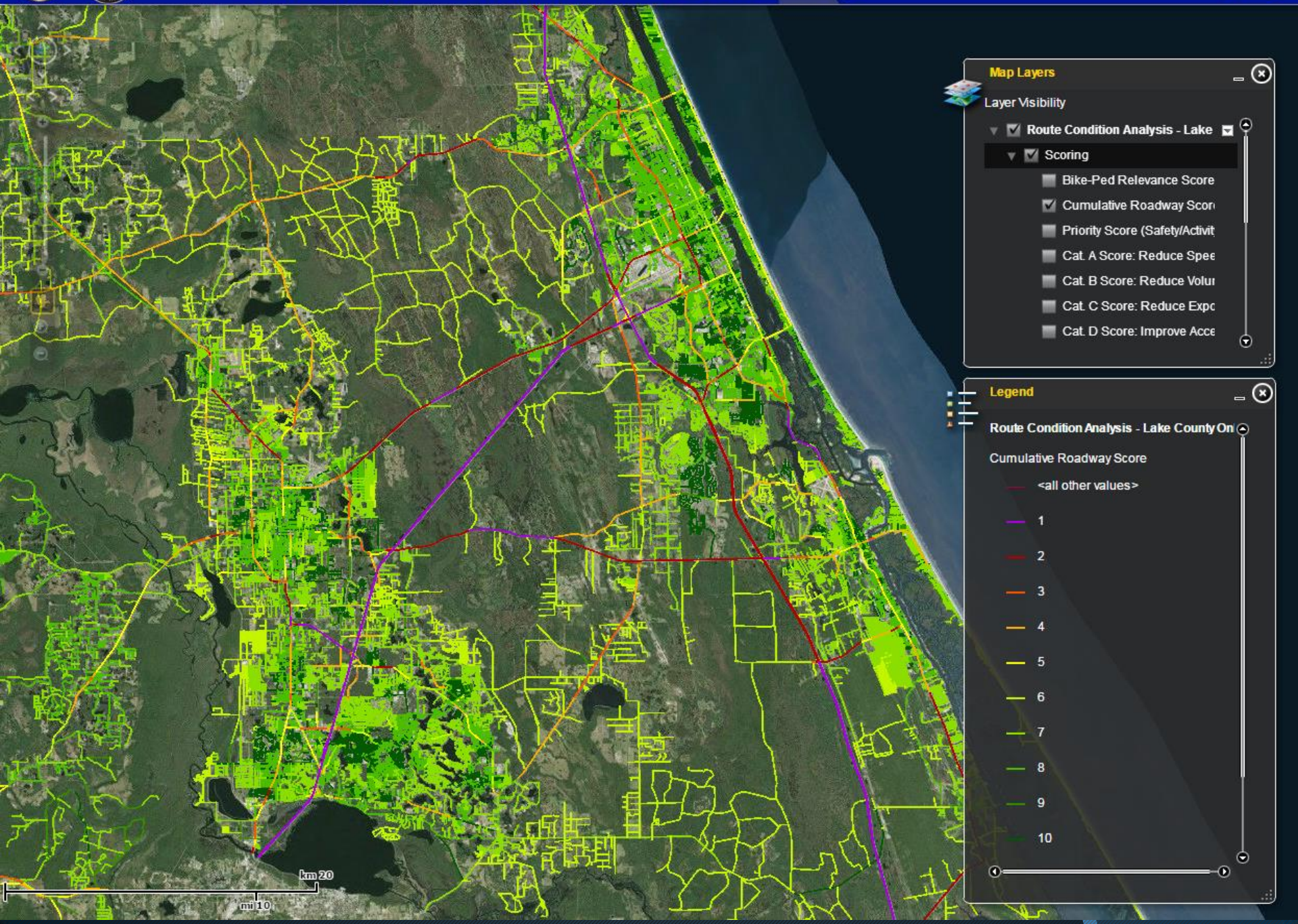
Transit Stop Proximity
Scoring for transit stop proximity was based off of the distance equivalent to 5 and 10-minute walks, or respectively, a quarter-mile and a half-mile radius from the transit stop. Roadways outside of these proximities were given a slightly negative score due to their limited ability to function as a multi-modal roadway.

The Methodology Report details the scoring decision-making process

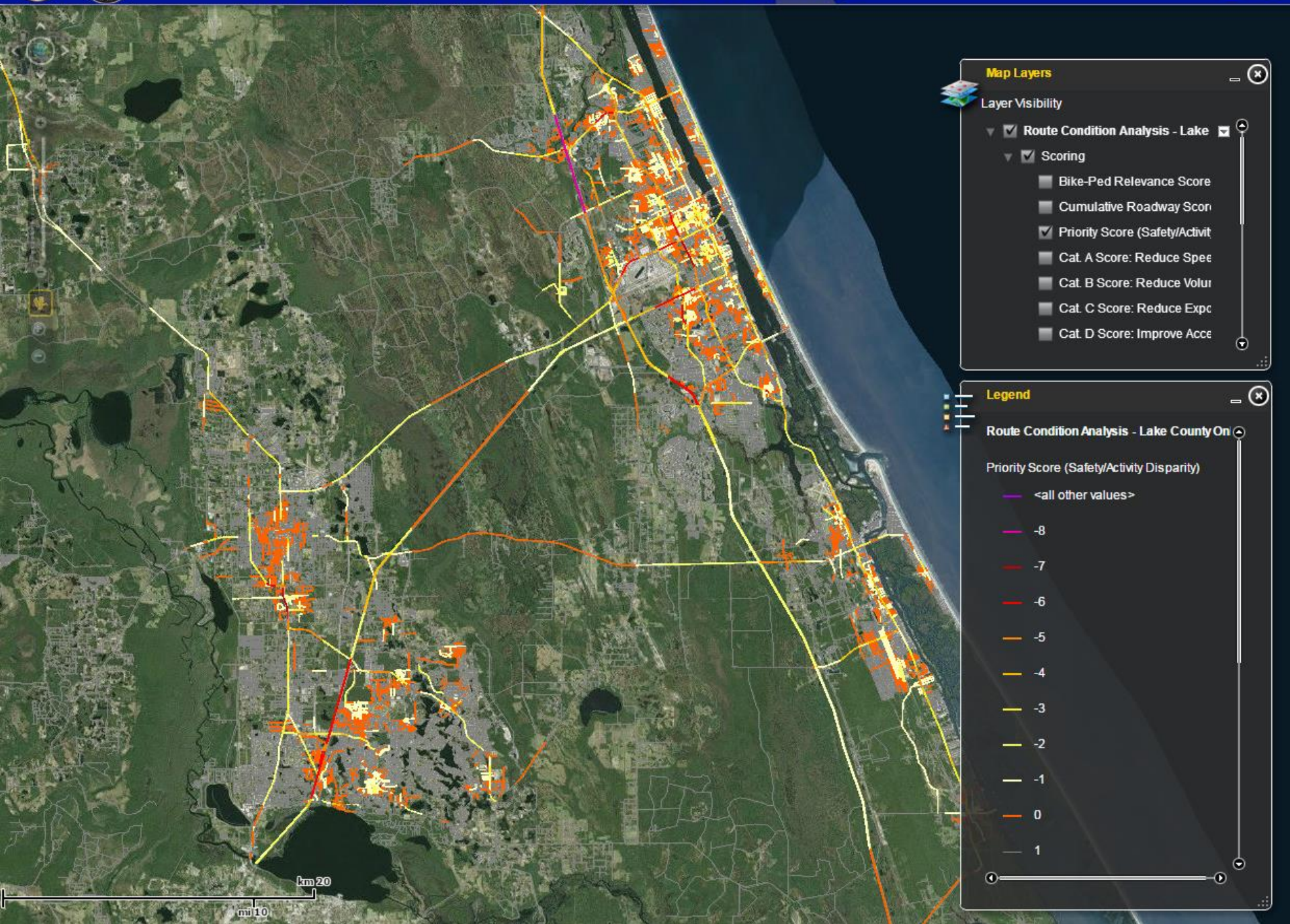
SRTS Route Condition Interactive Map



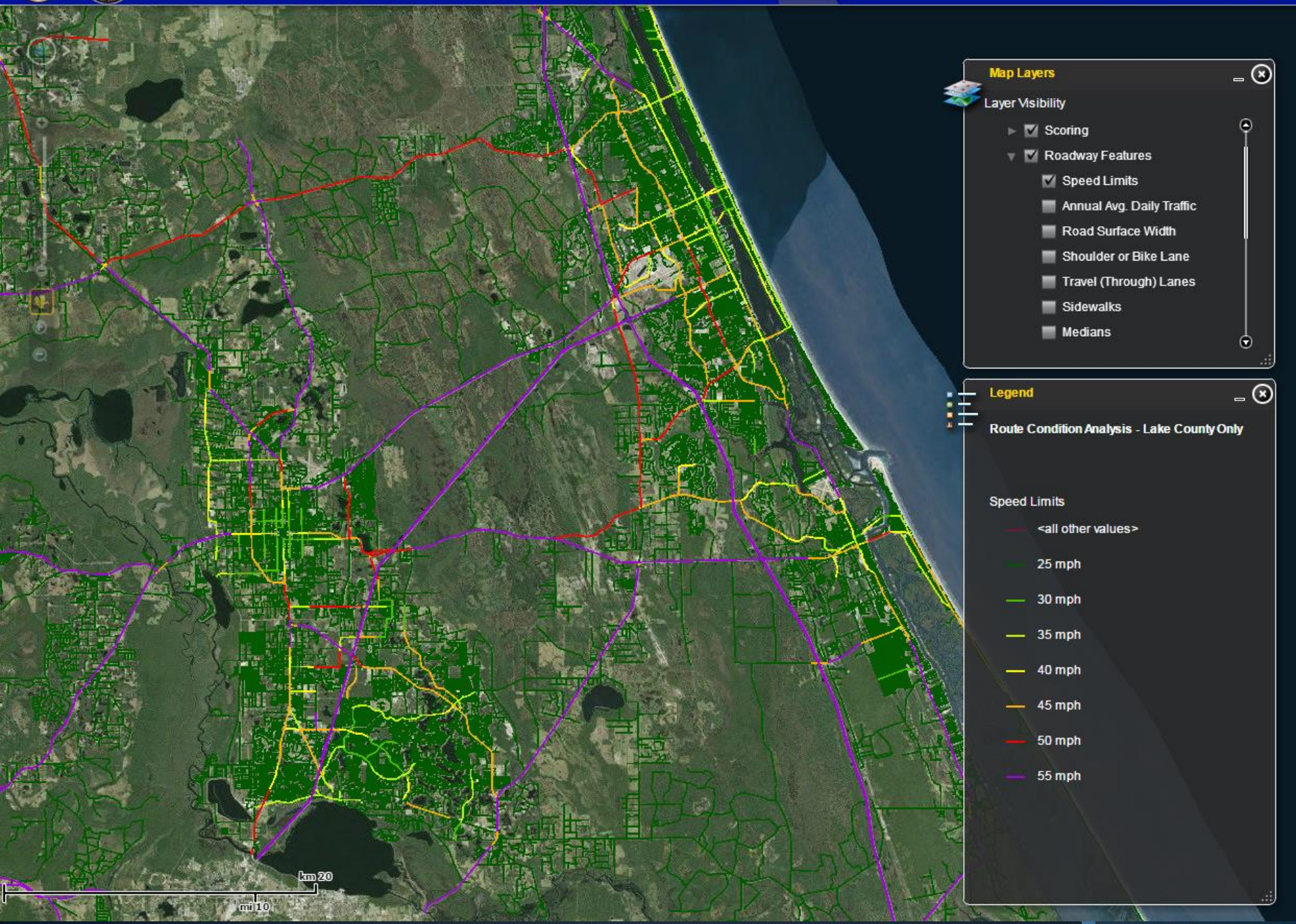
SRTS Route Condition Interactive Map



SRTS Route Condition Interactive Map



SRTS Route Condition Interactive Map



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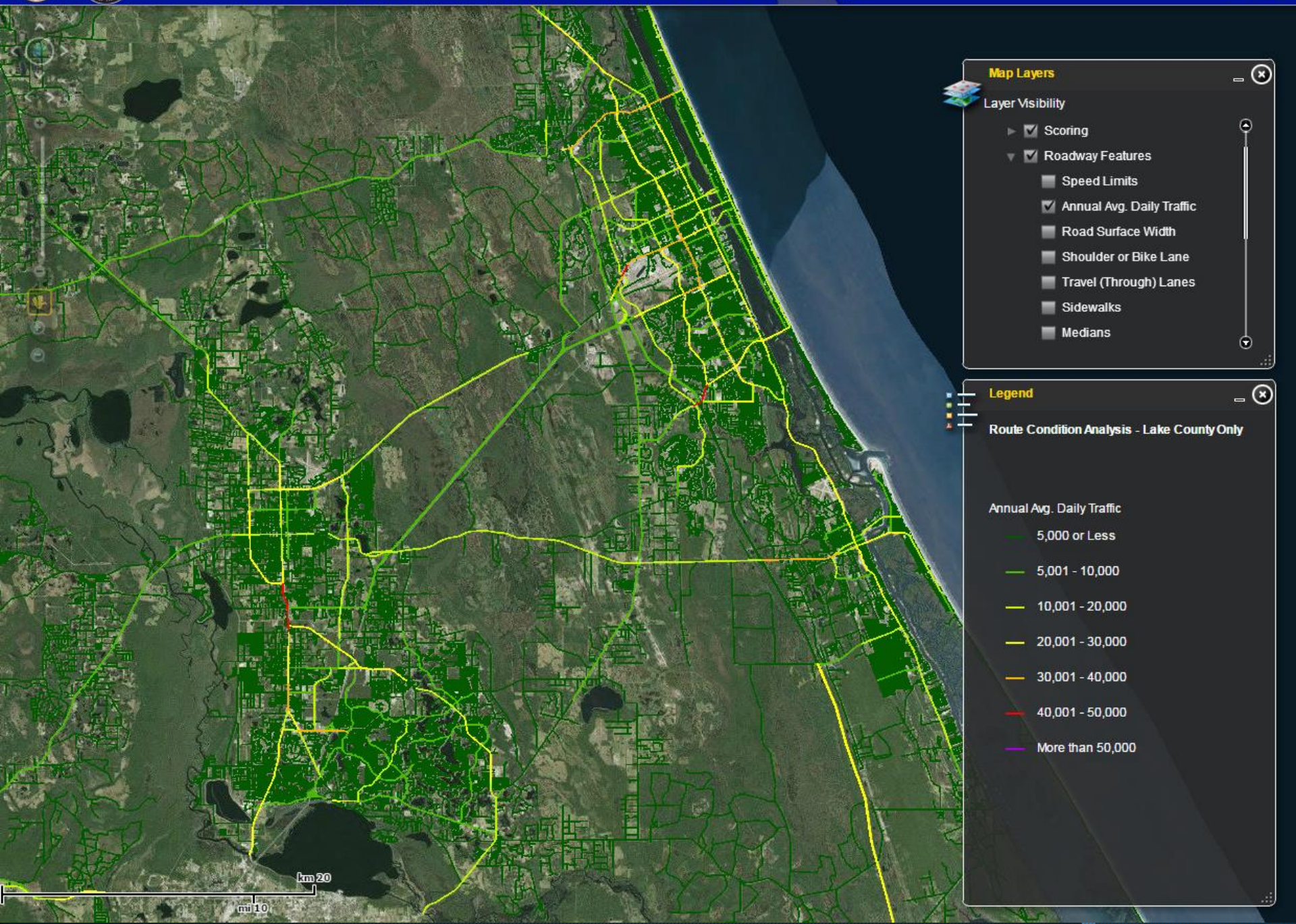

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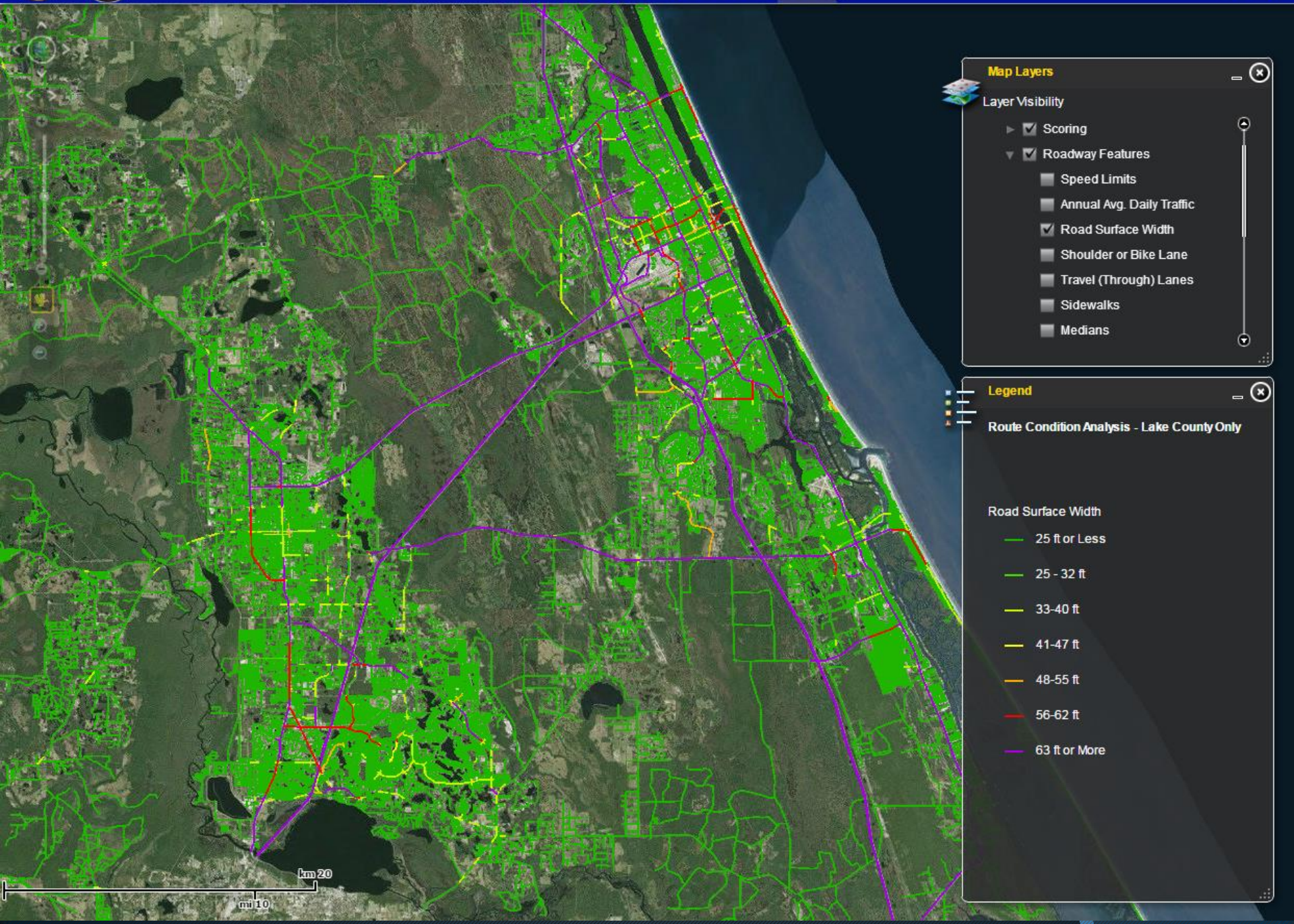
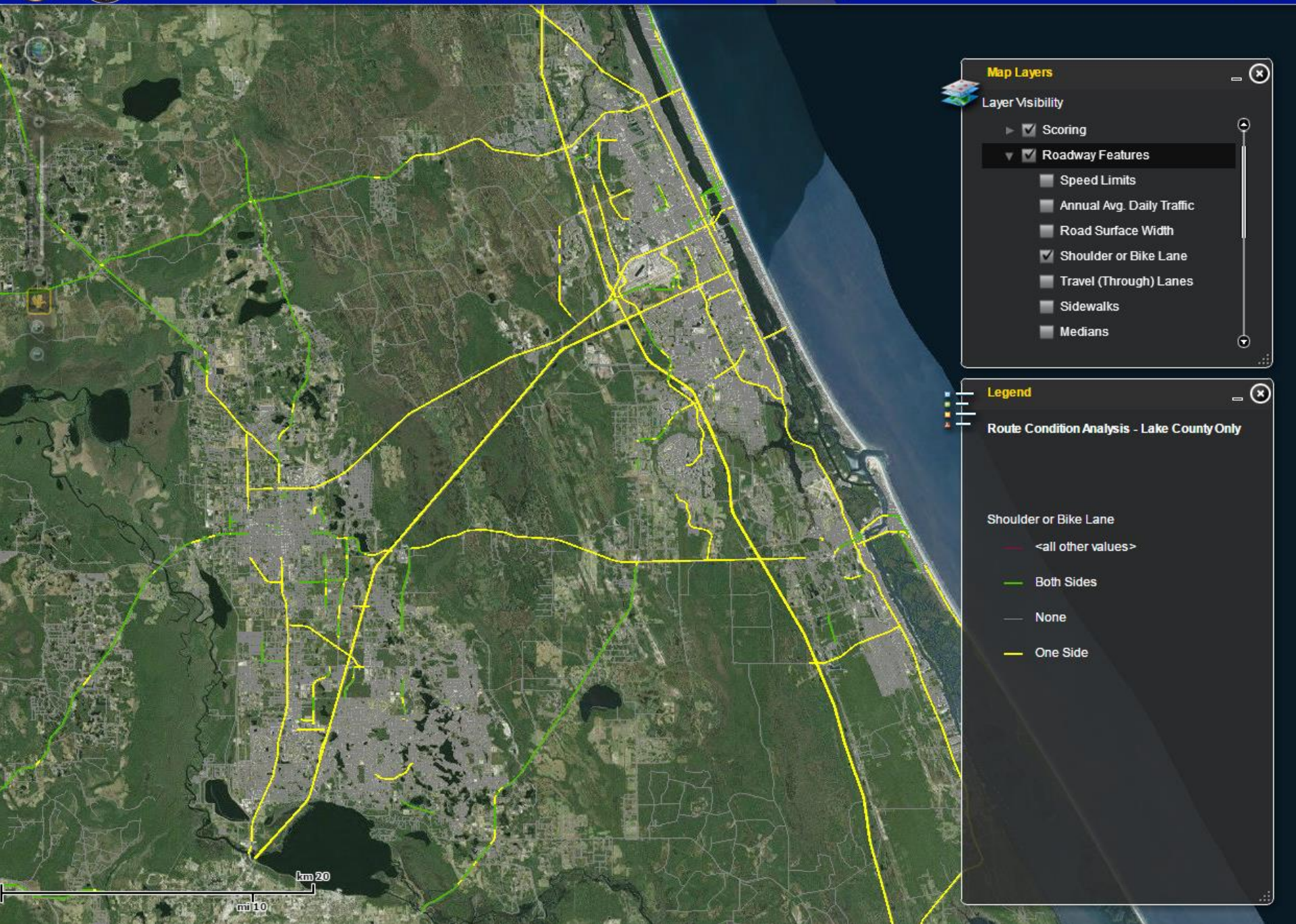


SRTS Route Condition Interactive Map



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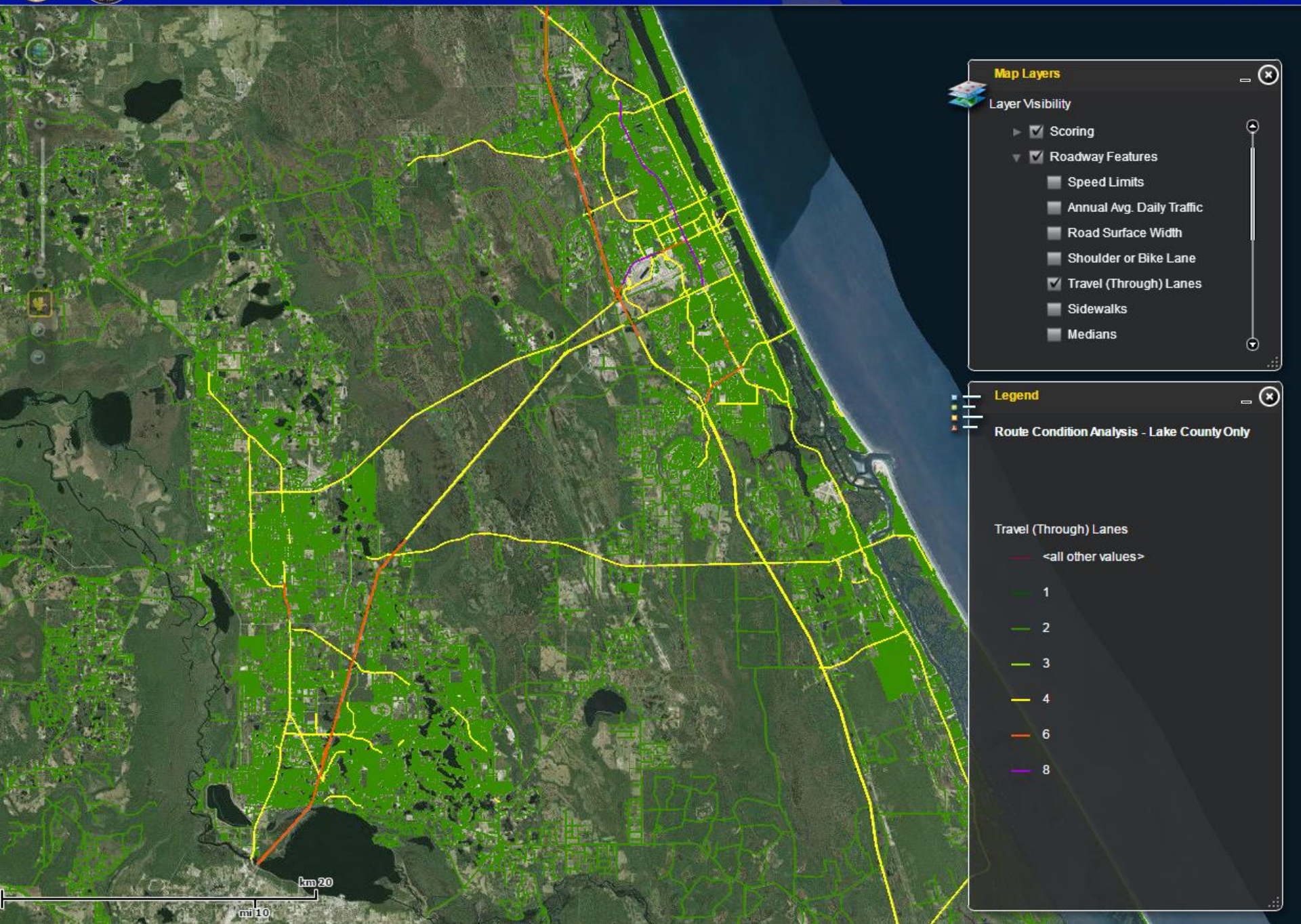

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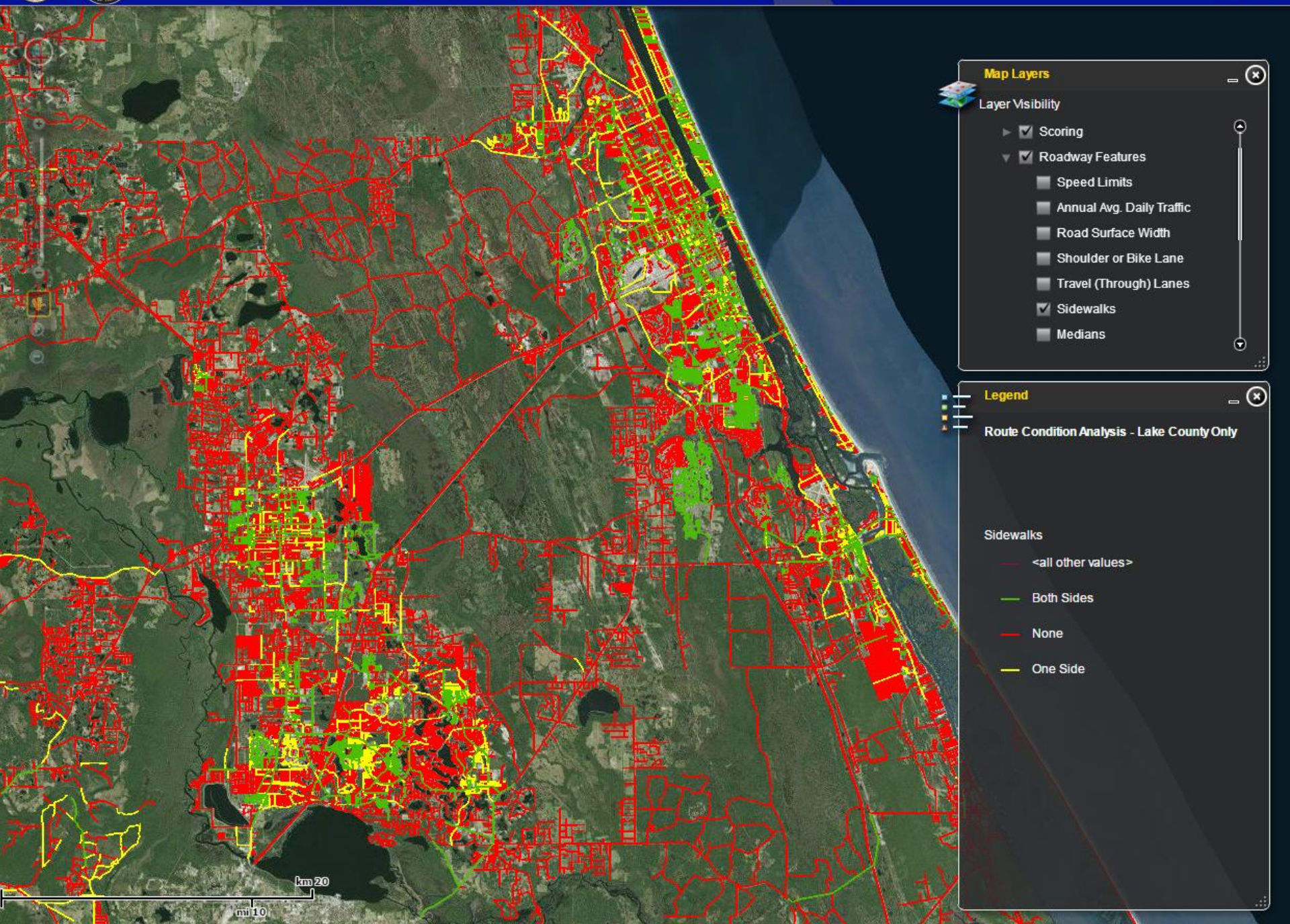

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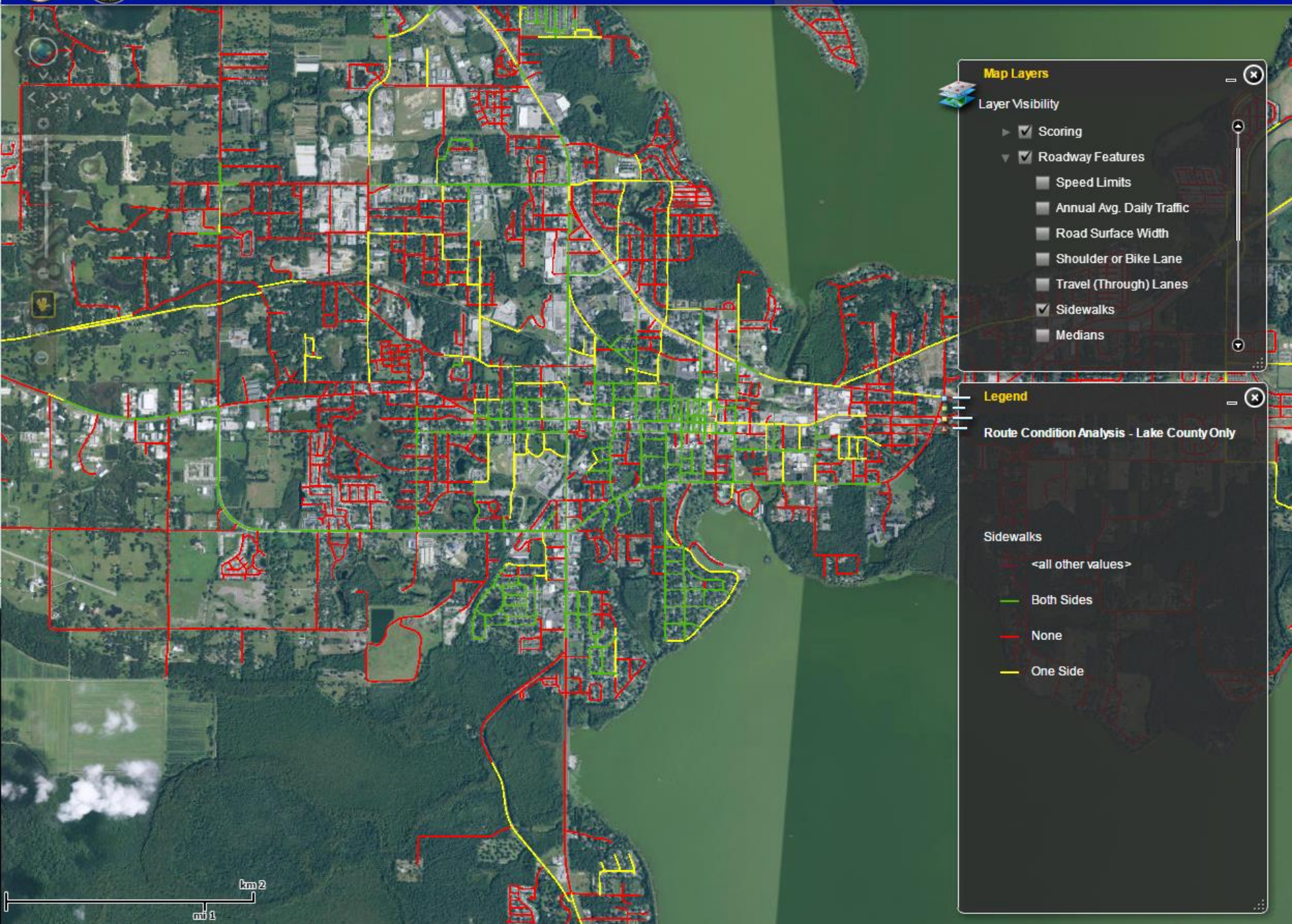
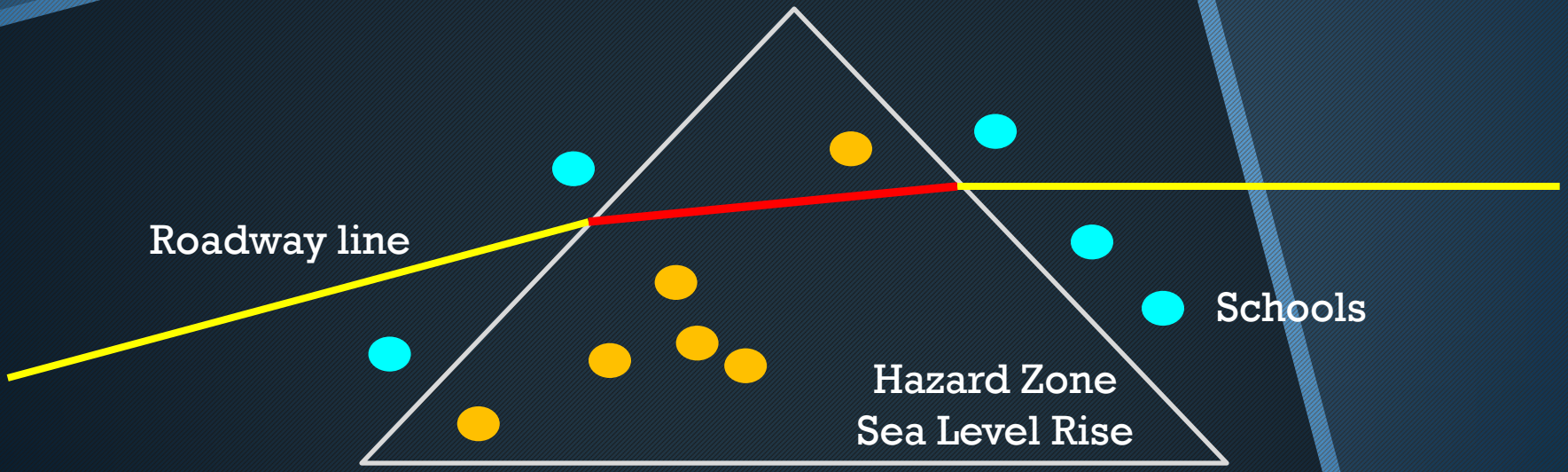


RCT: Uses

Mainly revolve around the use of …

THE GEOSPATIAL CROSS REFERENCE

to capture data



RCT: Uses

- Identify Hazardous Walking Conditions

STEP 3: FIND NEW HAZARDOUS CONDITIONS *(BELOW)*

C1

C1A: *Select* [INSERT SCRIPT]
C1A: *Insert* 'C1A' *in* "C1" IF *Selected*
C1B: *Select* "SPEED" < 30
C1B: *Insert* 'C1B' *in* "C1" IF *Selected*

C1X1: *Create Fields* "C1X1AQA" *and* "C1X1BQA" *and* "C1X2QA"
C1X1: *Query* ("SPEED" > 30 AND "SPEED" < 50) AND "C1" <> 'C1A' AND "C1" <> 'C1B'
C1X1: *Select* "PAVED_SHLD" = 'Both Sides'
C1X1: *Insert* 'PS' *in* "C1X1AQA" IF *Selected*
C1X1: *Select* "SIDEWALK" = 'Both Sides'
C1X1: *Insert* 'SW' *in* "C1X1BQA" IF *Selected*
C1X1: *Select* "C1X1AQA" = 'PS' OR "C1X1BQA" = 'SW'
C1X1: *Insert* 'QA BUFFER' *in* "C1X2QA" IF *Selected*
C1X1: *Select* "SIDEWALK" = 'One Side' OR "PAVED_SHLD" = 'One Side' OR "C1" = ''
C1X1: *Insert* 'QA BUFFER' *in* "C1X2QA" IF *Selected*
C1X2: *Select* "C1X2QA" = 'QA BUFFER'
C1X2: *Overlay Aerial and Earth for Ground QA (Uncurbed Only; 4 foot surface with 3 foot buffer required)*
C1X2: *Insert* 'C1X' *in* "C1" IF *Ground QA Failure*

C1Y1: *Create Fields* "C1Y1AQA" *and* "C1Y1BQA" *and* "C1Y2QA"
C1Y1: *Query* "SPEED" >= 50 AND "C1" <> 'C1A' AND "C1" <> 'C1B' AND "C1" <> 'C1X'
C1Y1: *Select* "PAVED_SHLD" = 'Both Sides'
C1Y1: *Insert* 'PS' *in* "C1Y1AQA" IF *Selected*

RCT: Uses

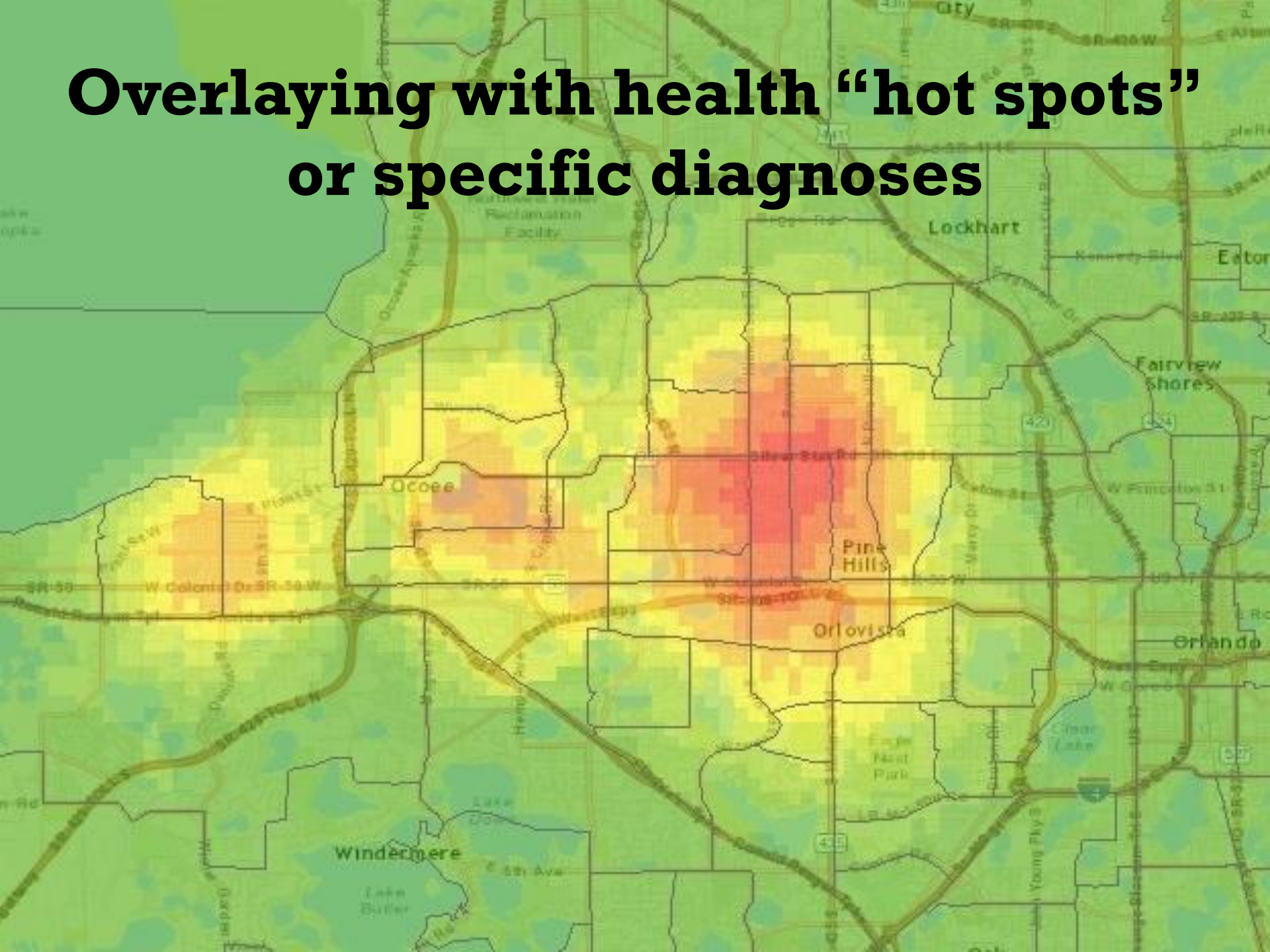
- Crash overlay and variable correlation based on roadway scoring. This allows for statistical analysis for roadway improvement needs

Score	# Crashes	% Crashes	Cumulative % of Crashes	Bottom Percentile of Score	CRASH INCIDENCE
1	4	2.04%	2.04%	0.23%	8.873114463
2	37	18.88%	20.92%	3.01%	6.949623703
3	27	13.78%	34.69%	5.45%	6.365849092
4	12	6.12%	40.82%	8.77%	4.654085123
5	8	4.08%	44.90%	12.32%	3.644314869
6	21	10.71%	55.61%	15.33%	3.627674162
7	20	10.20%	65.82%	45.65%	1.441759617
8	33	16.84%	82.65%	84.52%	0.977911278
9	14	7.14%	89.80%	92.01%	0.975936511
10	20	10.20%	100.00%	100% (96.51 mean)	0.9651

RCT: Uses

- Coast to Coast Trail --- Identification of secondary routes to trails and connection options.

Overlaying with health “hot spots” or specific diagnoses

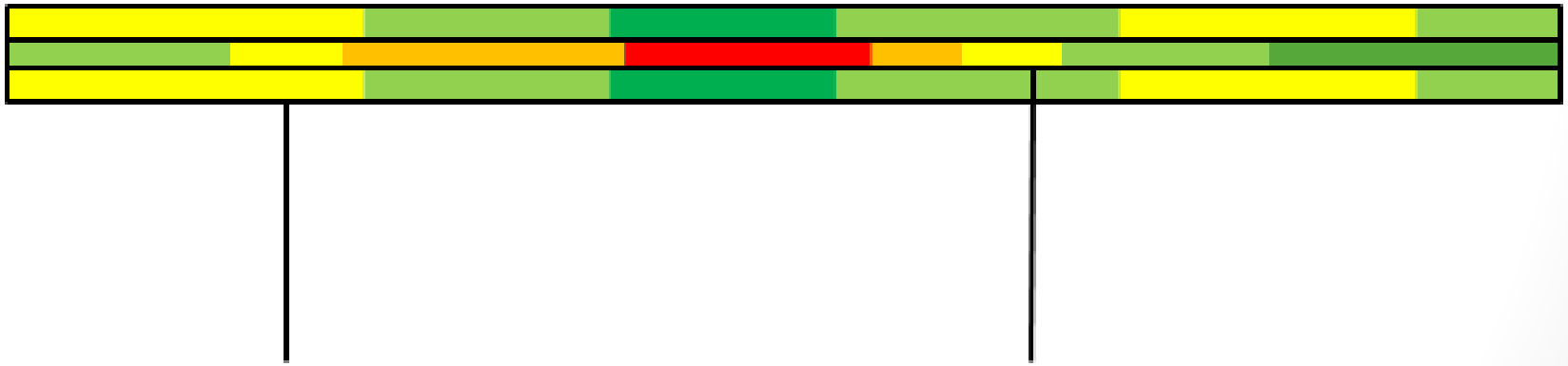


RCT: Uses & Next Steps

- **Developing redesign options for the lowest-scoring roadways**
- **Comparing the database with crash types** *(Mighk Wilson, MetroPlan)*
- Examining trends between concurrent attributes (ex: speed of **X** and width of **Y**). Relationship with **Z**
- Property value overlay: Document database changes and assess property value influence over time

The End Product: Uses

- Prioritization of transit and infrastructure projects
  - Corridor studies & master planning
  - Bird's eye view for key decision makers



PROXIMITY SCORE

Depicts usage of roadway based on the proximity of community assets and places of interest

ROADWAY SCORE

Determines the effectiveness of the roadway (on a 1-10 scale) based on PEDSAFE criteria.

RCT: Uses & Next Steps

- Specialized proximity scores (hot spotting). For example: Schools proximity score
- Prioritize projects "two birds with one stone" Volusia and Brevard – coastal resiliency, A1A
- Sea level rise, storm surge, floodplain overlay and (polyline) analysis. 2-birds-yadayada
- **The tool will continue to evolve and will never be a finished product**

Usage and Updates

- GIS Database, editable in excel or GIS

- Updates can occur internally to the County. Kickoff meeting for RCT to include public works, schools, planning, transportation, GIS

- **Capturing the "Digital World" and developing internal processes to make it as "live" as possible.**

- **Goal: To get all of Florida to use this database and communicate data-storing and update methods.**

Thank You!

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