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Presented by:

Kimley»Horn

Surveys, LiDAR and Maps: How Kimley-Horn Solved Project Collaboration and Asset Management Challenges

November 16, 2021

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Introduction

Erin Emmons, GISP
Associate Planner
Kimley-Horn

Overview

- Overview of things to consider when mixing multiple data collection approaches
- Online tools for engaging, collaborating, and informing project teams and the public
- Turning your partners/clients into believers (users)
- Lessons learned

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Tool Overview

- ArcGIS StoryMap
- ArcGIS Web AppBuilder
- ArcGIS Dashboards
- ArcGIS Collector/Field Maps
- ArcGIS Survey123
- Google Analytics

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City of Hollywood Bicycle Mobility Plan

Project Objective

- Community Outreach

Tools Used

- ArcGIS StoryMap
- ArcGIS Web AppBuilder
- Google Analytics

Challenges

- Reaching the public
- Documenting interactions

Lessons Learned

- Understanding Google Analytics reporting
- Leveraging social media

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City of Hollywood Bicycle Mobility Plan

City of Hollywood
Bicycle Mobility Plan

Project Overview

The City of Hollywood is preparing a citywide Bicycle Mobility Plan. The goal of the multi-faceted plan is to:

- Identify and prioritize specific bicycle mobility projects throughout the City;
- Advance Complete Streets principles in key commercial corridors to enhance safety and convenience for bicyclists;
- Maximize funding opportunities available for urban mobility improvements.

The City of Hollywood has a strong foundation for bicycle mobility. The City has a network of local streets that surround a vibrant, historic downtown, a successful Complete Streets project along Hollywood Boulevard in the expanded urban core, a Comprehensive Citywide Master Plan that supports bicycle mobility, and a world-famous oceanfront promenade, the Hollywood Beach Broadwalk, that is a favorite destination for bicyclists of all levels.

The City's Bicycle Mobility Plan will build on these strengths to create a connected network of safe bicycle facilities to provide mobility and recreation opportunities for both residents and visitors alike.

Activities

COMMUNITY ENGAGEMENT
Provide community input opportunities starting in August 2020.

CITY COMMISSION MEETINGS
Engage the City Commission throughout the plan, from vision to implementation.

EXISTING CONDITIONS INVENTORY
Conduct an inventory of existing multimodal transportation options within the City.

COST ESTIMATES & FUNDING
Prepare budget estimates to identify funding opportunities to projects.

PRIORITIZATION
Develop a prioritization process and apply it to the list of capital improvements.

RECOMMENDED PROJECTS
Adopt a strategic plan by March 2021 with a coordinated set of bicycle transportation project recommendations.

Your Input Matters!

An interactive Public Comment Map has been created to easily provide recommendations and feedback on the types of projects and bicycle mobility amenities you would like to see in the City of Hollywood. To provide your suggestions, simply select your type of recommendation and drop a pin in the location you would like to see improved.

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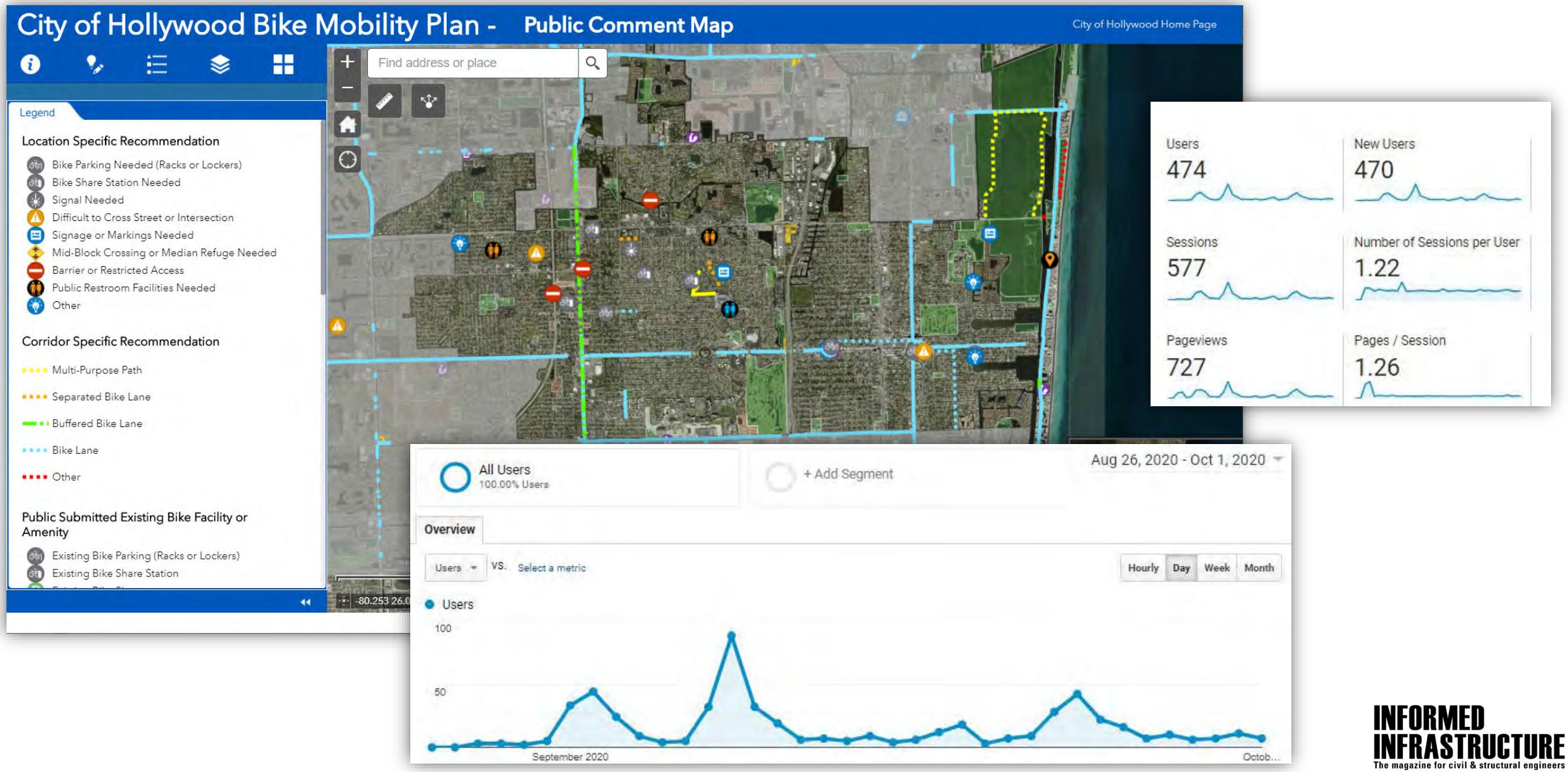
City of Hollywood Bicycle Mobility Plan



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FDOT District 4 – Agency Coordination

Project Objective

- Gather stakeholder and agency feedback for project scoping of state projects

Tools Used

- ArcGIS Web AppBuilder
- ArcGIS Survey123
- ArcGIS Dashboards

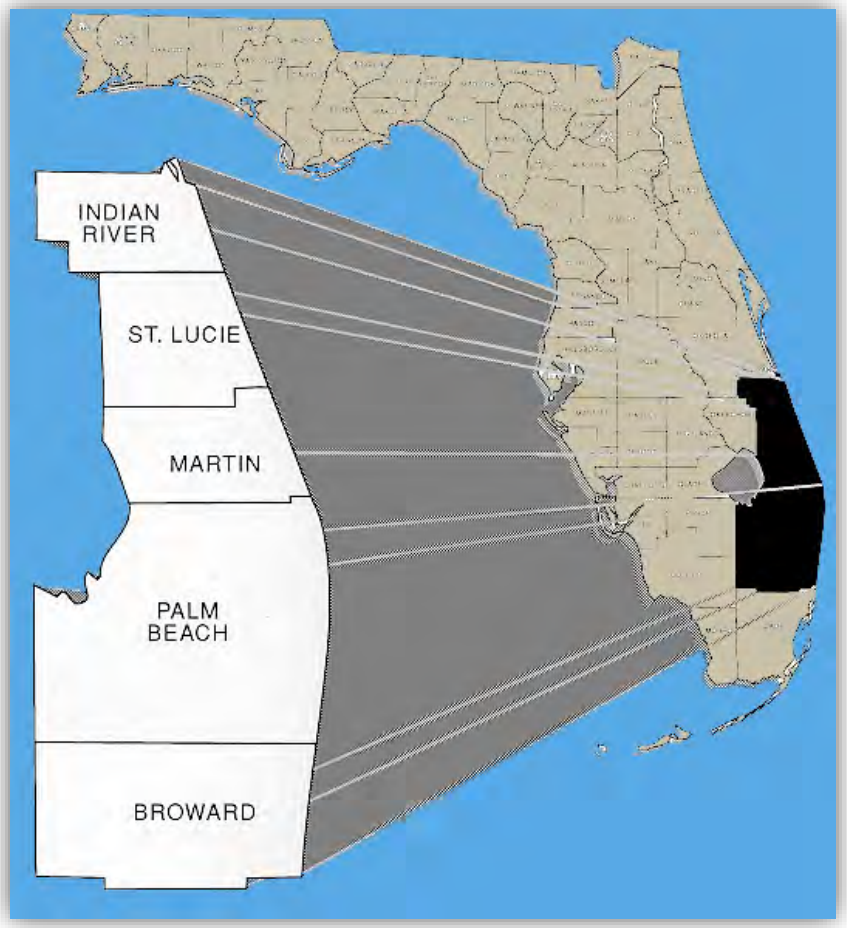
Challenges

- Overall outreach effort
- Organization and retrieval of summited comments
- Summarizing submitted information

Lessons Learned

- Simple is better

Agency Coordination	# of Agencies/ Departments
FDOT OMD	4
MPO/TPA/TPO	5
Transit Agencies	5
School Boards	5
Counties	5
Municipalities	81
Total Contacts	**105+**



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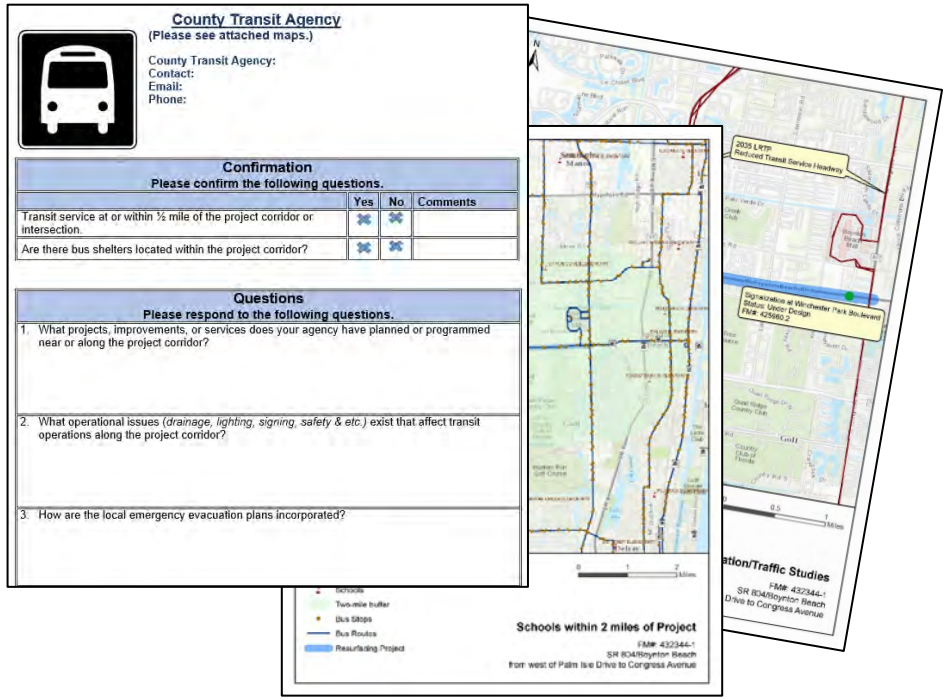
FDOT District 4 – Agency Coordination

Confirm contact list with FDOT Design PM

Agency Responded	Contacts	Email	Phone
County Transit Agency			
Palm Tran	Steve Anderson	sanderson@pbcgov.org	561.841.4246
MPO Bike/Ped Coordinator			
Palm Beach MPO	Valerie Neilson	VNeilson@PalmBeachMPO.org	561.684.4170
Planning Agency			
City of Boynton Beach (Planning & Zoning)	Amanda Parker	ParkerA@bbfl.us	561.742.6256
City of Delray Beach (Planning & Zoning)	Mark Stivers	stiversm@mydelraybeach.com	
Treasure Coast Regional Planning Council	Kim DeLaney	kdelaney@tcrpc.org	772.221.4060
MPO			
Palm Beach MPO	Valerie Neilson	VNeilson@PalmBeachMPO.org	561.684.4170
County School Board Agency			
Palm Beach County School Board	Michael Owens	Michael.Owens.1@palmbeachschools.org	561.882.1938
Local Government Agency			
City of Boynton Beach (Public Works & Engineering)	Jeffrey Livergood	livergoodj@bbfl.us	561.742.6201
City of Delray Beach (Public Works)	John Morgan	morgan@mydelraybeach.com	561.243.7294
Office of Modal Development			
FDOT District 4 Railroad Coordinator	Maurice Borrows	Maurice.borrows@dot.state.fl.us	954.777.4379
FDOT District 4 Freight Coordinator	Jeremy Upchurch	jeremy.upchurch@dot.state.fl.us	954.777.4279
FDOT District 4 Aviation Coordinator	Laurie McDermott	laurie.mcdermott@dot.state.fl.us	954-777-4497
FDOT District 4 Complete Streets Coordinator	Alexander Barr	Alexander.barr@dot.state.fl.us	954.777.4284

Develop hardcopy version of map series. Reviewer emails responses via **word document** questionnaire



County Transit Agency
(Please see attached maps.)

County Transit Agency:
Contact:
Email:
Phone:

Confirmation
Please confirm the following questions.

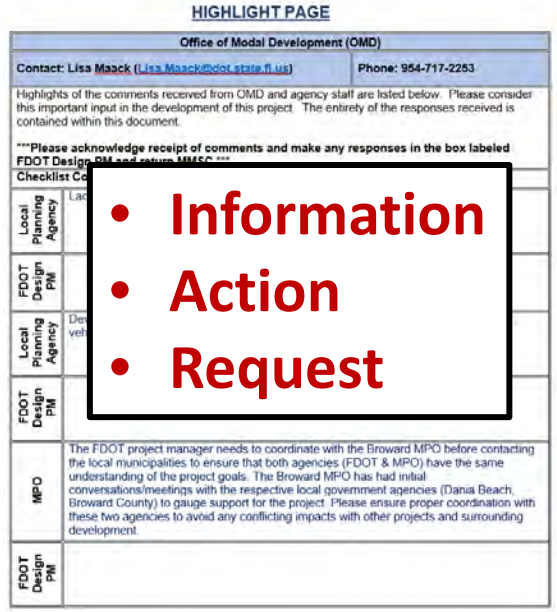
	Yes	No	Comments
Transit service at or within ½ mile of the project corridor or intersection.	✖	✖	
Are there bus shelters located within the project corridor?	✖	✖	

Questions
Please respond to the following questions.

1. What projects, improvements, or services does your agency have planned or programmed near or along the project corridor?
2. What operational issues (*drainage, lighting, signing, safety & etc.*) exist that affect transit operations along the project corridor?
3. How are the local emergency evacuation plans incorporated?

Schools within 2 miles of Project

Agency responses summarized and submitted to FDOT Design PM



HIGHLIGHT PAGE

Office of Modal Development (OMD)

Contact: Lisa Maack (Lisa.Maack@dot.state.fl.us) | Phone: 954-717-2253

Highlights of the comments received from OMD and agency staff are listed below. Please consider this important input in the development of this project. The entirety of the responses received is contained within this document.

***Please acknowledge receipt of comments and make any responses in the box labeled FDOT Design PM and return MMSC ***

Checklist Co

Local Planning Agency	
FDOT Design PM	
Local Planning Agency	
FDOT Design PM	
MPO	The FDOT project manager needs to coordinate with the Broward MPO before contacting the local municipalities to ensure that both agencies (FDOT & MPO) have the same understanding of the project goals. The Broward MPO has had initial conversations/meetings with the respective local government agencies (Dania Beach, Broward County) to gauge support for the project. Please ensure proper coordination with these two agencies to avoid any conflicting impacts with other projects and surrounding development.
FDOT Design PM	

- **Information**
- **Action**
- **Request**

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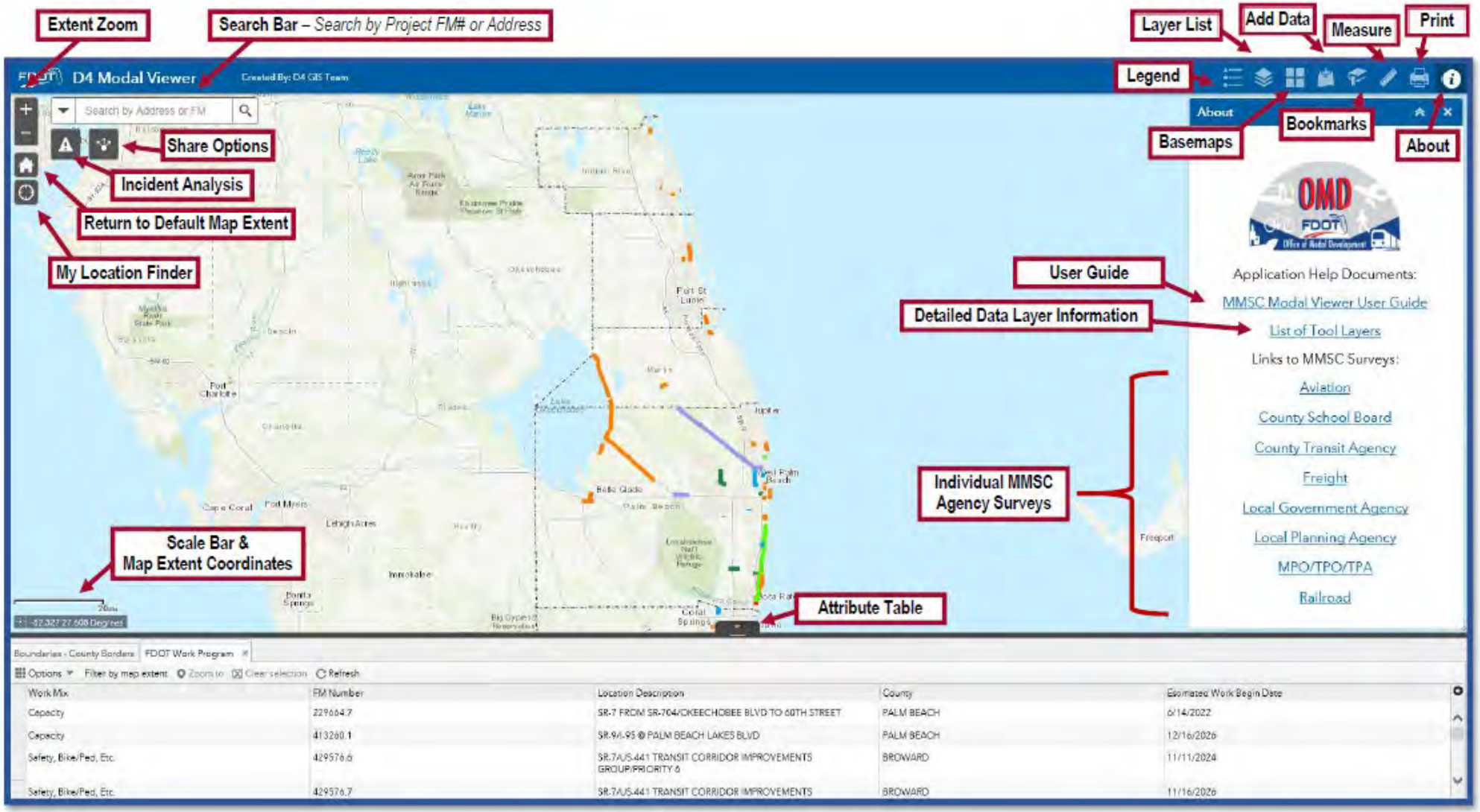
FDOT District 4 – Agency Coordination



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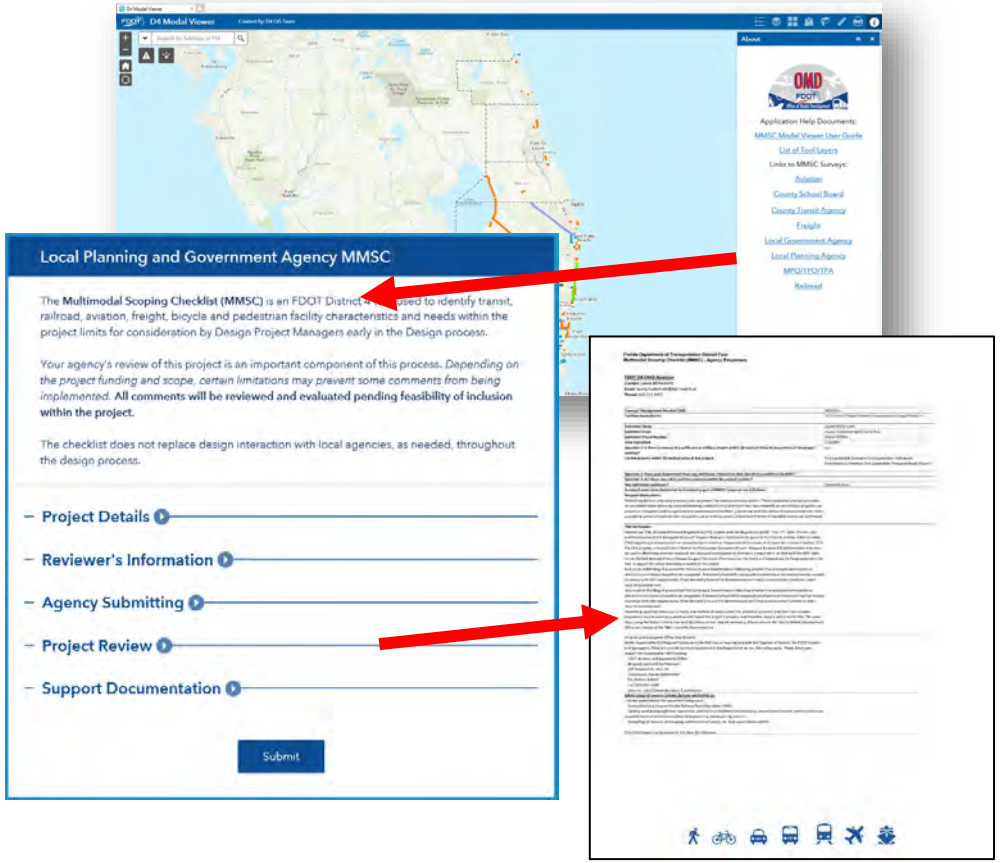
ArcGIS Survey123

Hardcopy maps series replaced.
Reviewer submits responses online through **Modal Viewer,** uses Web-based questionnaire



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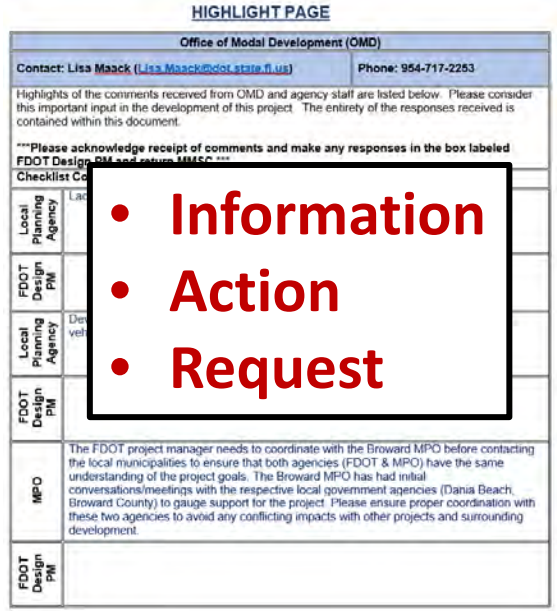

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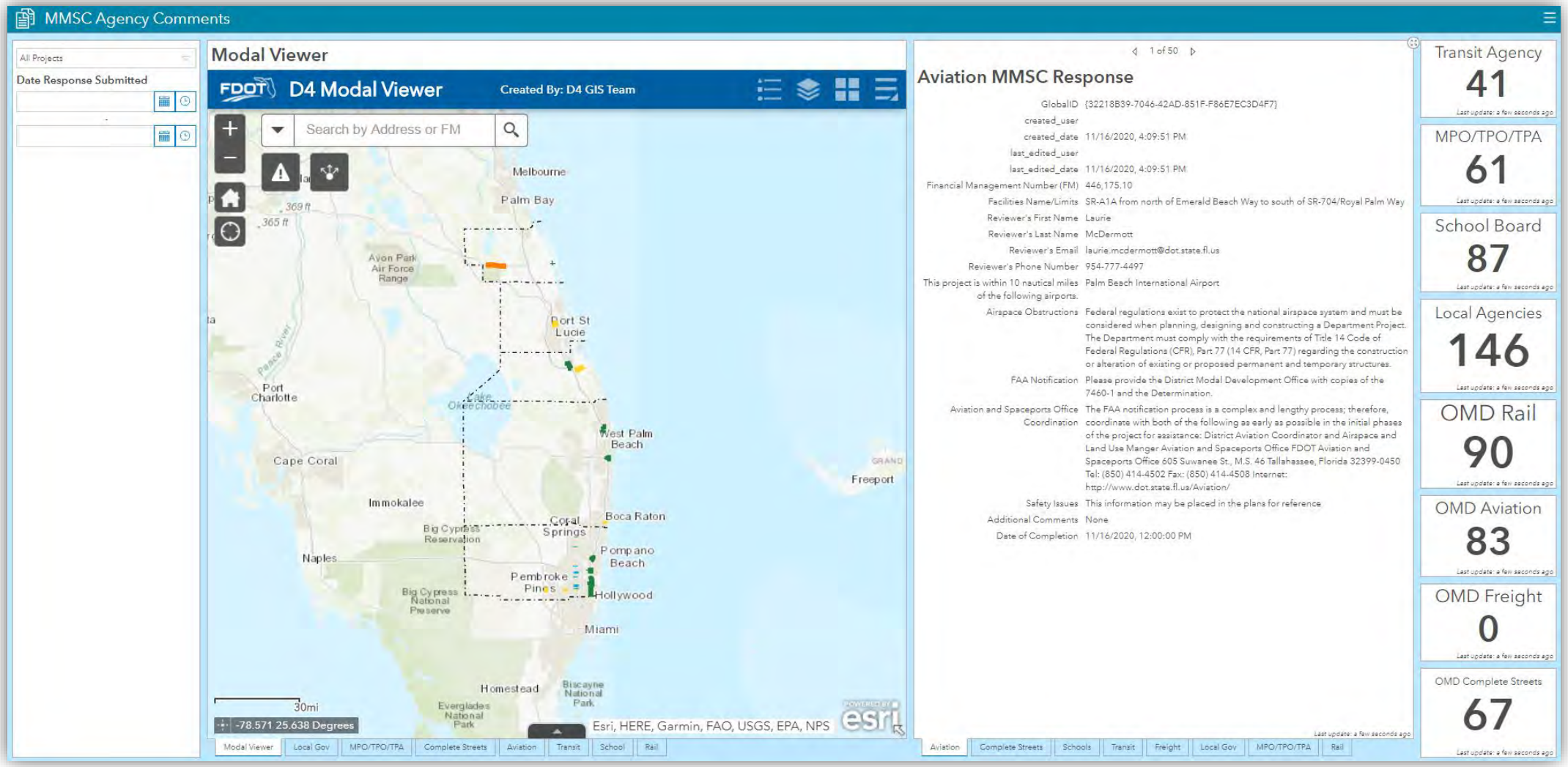


FDOT District 7 – Lighting Inventory

Project Objective

- Collect all streetlights along State Roadways

Tools Used

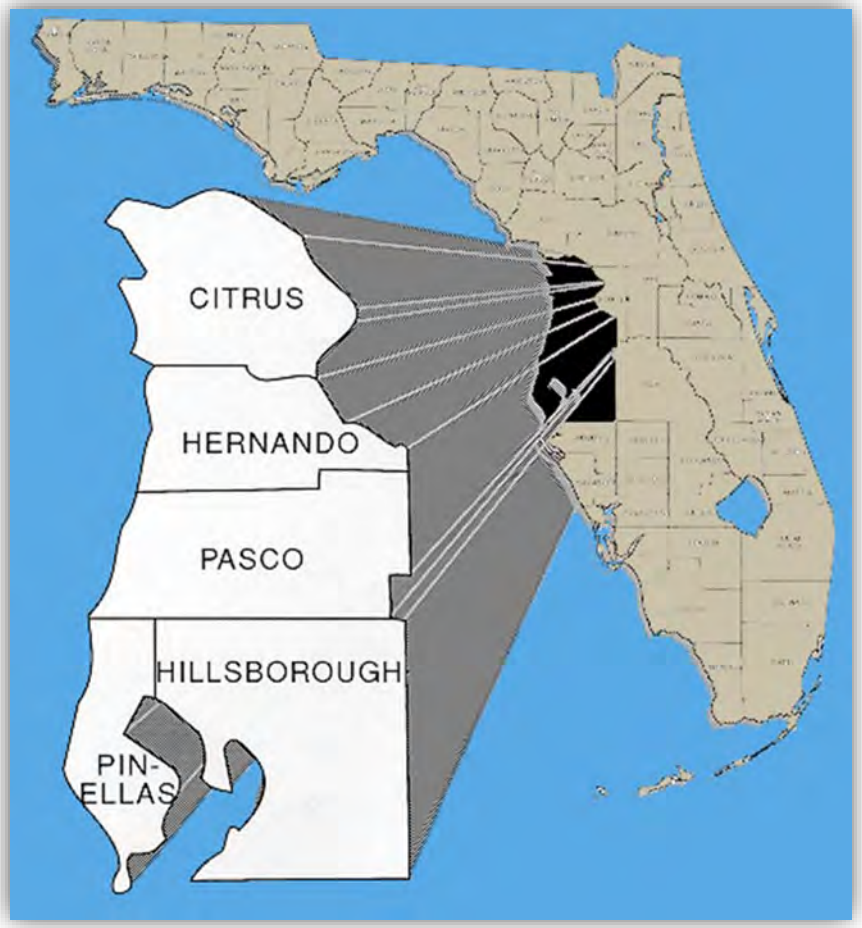
- LiDAR
- ArcGIS Survey123
- ArcGIS Collector
- ArcGIS Dashboards

Challenges

- Uniformed schema
- Stakeholder needs

Lessons Learned

- Calibration of equipment
- Schema standardization
- Training for collectors/QC process



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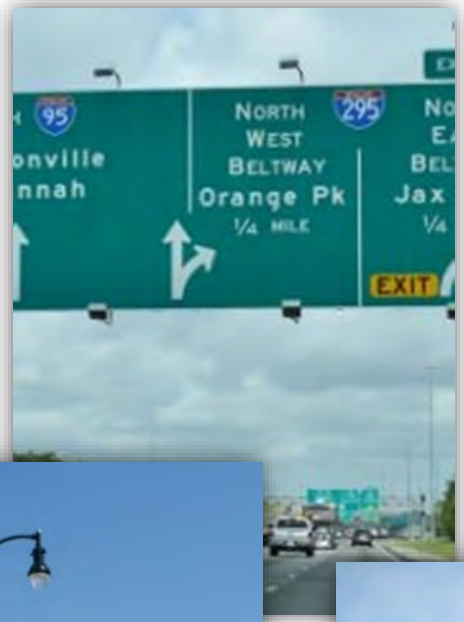
FDOT District 7 – Lighting Inventory



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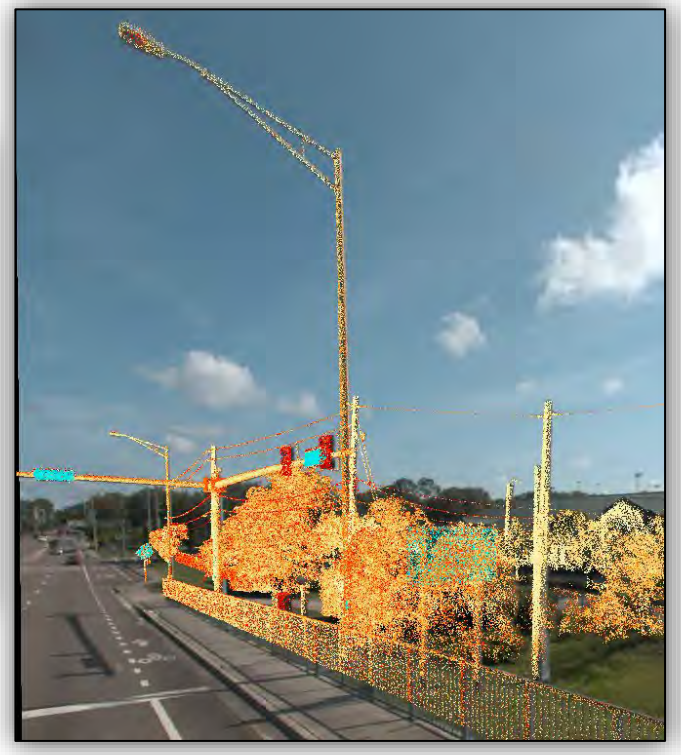
FDOT District 7 – Lighting Inventory



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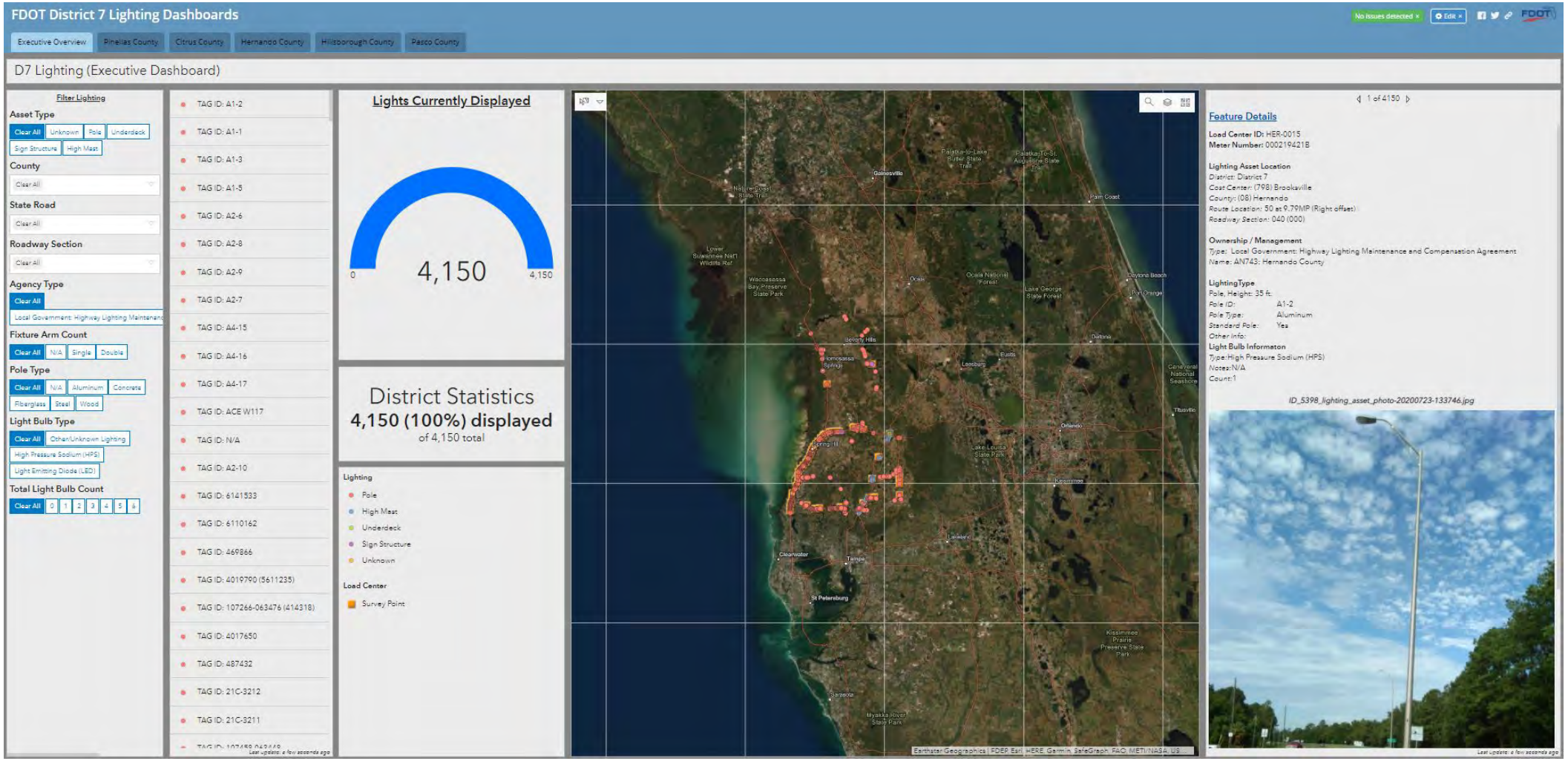
FDOT District 7 – Lighting Inventory



FDOT District 7 – Lighting Inventory

Asset Type

- Pole
- Underdesk
- Sign Structure
- High Mast

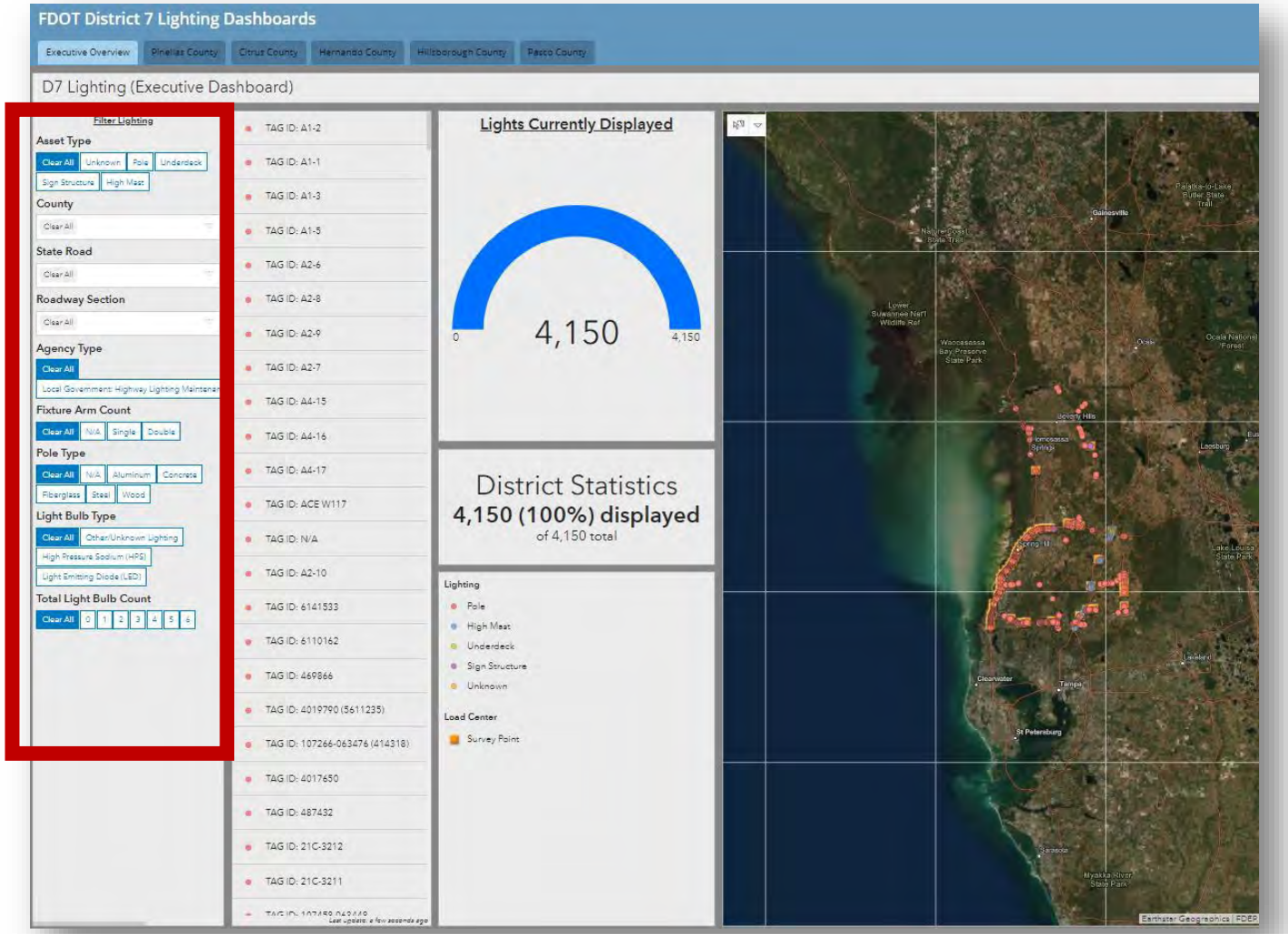
Pole Type

County

State Road

Agency Type

Light Bulb Type



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Town of Surfside - FEMA Reimbursement

Project Objective

- Document damage caused to dunes following emergency response following collapse

Tools Used

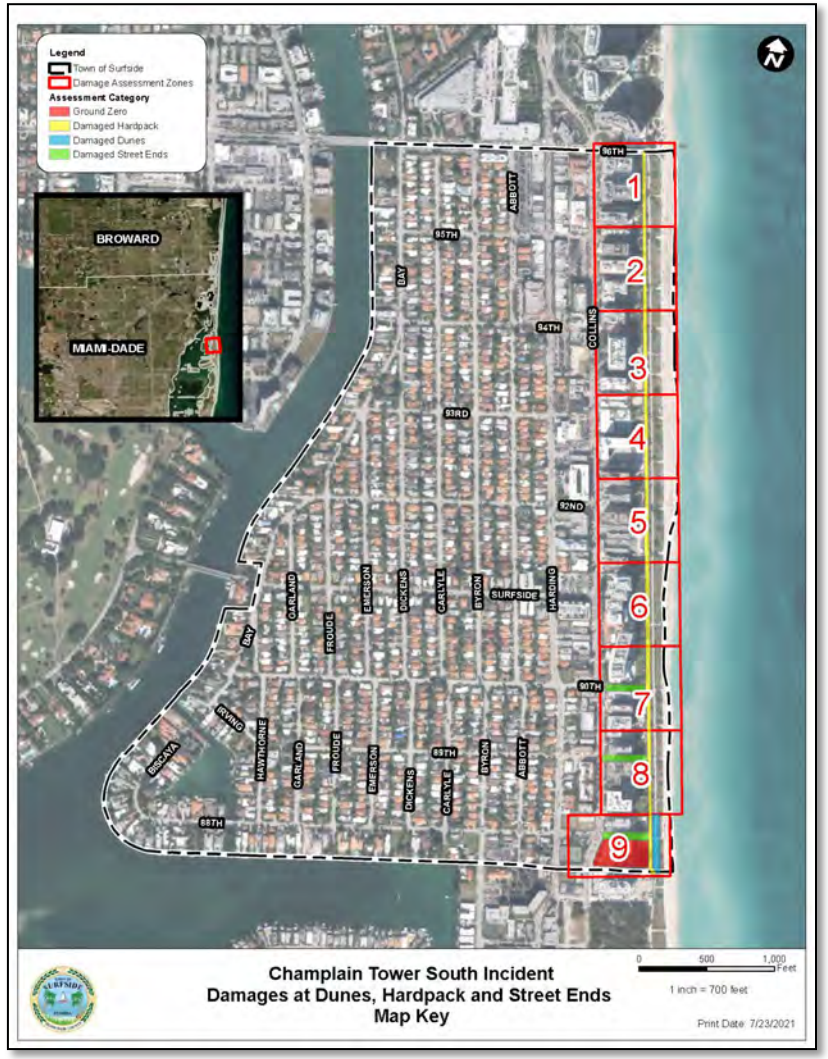
- ArcGIS Collector

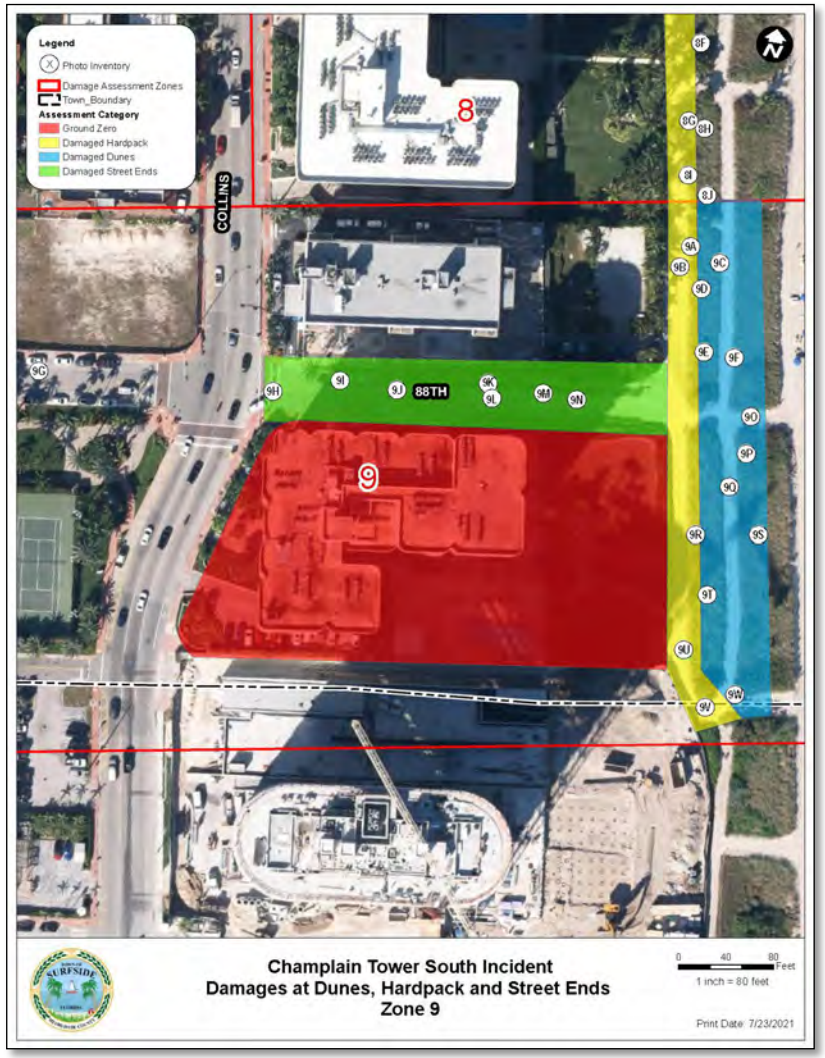
Challenges

- Turnaround time
- First time user

Lessons Learned

- Take the time to understand final deliverable and keep it simple for collection





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Town of Surfside – FEMA Reimbursement

Figure 13- 4A Potholes Photo 1

Figure 14- 4B Potholes Photo 1

Figure 15- 4C Potholes Photo 1

Figure 16- 4C Potholes Photo 2

Figure 65- 9J 88 ST Damages Photo 1

Figure 66- 9K 88 ST Damages Photo 1

Figure 67- 9L 88 ST Damages Photo 1

Figure 68- 9M 88 ST Damages Photo 1

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Closing

- Things to consider when mixing multiple data collection approaches
- Engaging, collaborating, and informing project teams and the public
- Turning your partners/clients into believers (users)
- Lessons learned

Questions and Answers with:

Erin Emmons, GISP
Associate Planner
Kimley-Horn

Todd Danielson
Editorial Director
Informed Infrastructure

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