



VILLAGE OF PALMETTO BAY (PART 1)

VILLAGE WIDE TRAFFIC STUDIES UPDATE

PUBLIC MEETING JANUARY 7, 2019





TONIGHT'S TOPICS

- TRAFFIC INCREASE IN SOUTH DADE
- OVERALL TRAFFIC CALMING PLAN
- WHAT HAVE WE ACCOMPLISHED TO DATE?
- WHAT IS PROPOSED FOR THIS CURRENT BUDGET YEAR?
- PRIORITIES RANKING ON TRAFFIC CALMING PROPOSALS
- UPDATE ON ONGOING TRAFFIC STUDIES
- SW 168TH STREET IMPROVEMENTS (PHASE 1))
- OLD CUTLER ROAD PROPOSALS
- PROPOSED SYNCHRO VILLAGE-WIDE MODEL ESTABLISHING LEVEL OF SERVICE REQUIREMENT
- FUNDING CAPABILITIES OF THE VILLAGE
- ENFORCEMENT/SIGNAGE
- GRANTS/ JOINT USE AGREEMENT FUNDING
- QUESTIONS

TRAFFIC INCREASE IN SOUTH DADE

- Florida is second in the nation in population growth
- Nearly 900 people move to Florida daily
- South Florida growth rate is between 1% to 3% annually
- Miami-Dade county growth rate is 1.4% annually
- Current development trends are south and west of our Village
- Proposed zoning changes from the County will concentrate growth along the transit corridor

Station No	Growth Rate				
	5-year Historical	10-year Historical	SERPM (2005 to 2035)	Average Growth Rate	Recommended ^(*) Growth Rate
87-1114	2.56%	0.17%	-0.20%	-0.01%	0.50%
87-2562	-0.34%	-0.57%			
87-2563	-0.17%	-1.10%			
Average	0.68%	-0.50%			

(*) Some growth rates are negatives, we recommended 0.5% to create a conservative estimate

- » Count Station no. 87-1114, located on SR 994/Quail Roost Dr., west of US-1 on SW 186th Street
- » Count Station no. 87-2562, located on SR 5/US-1 S Dixie Hwy SB, south of SW 174th Street
- » Count Station no. 87-2563, located on SR 5/US-1 S Dixie Hwy NB, south of SW 174th Street

OBJECTIVES OF TRAFFIC CALMING PLAN

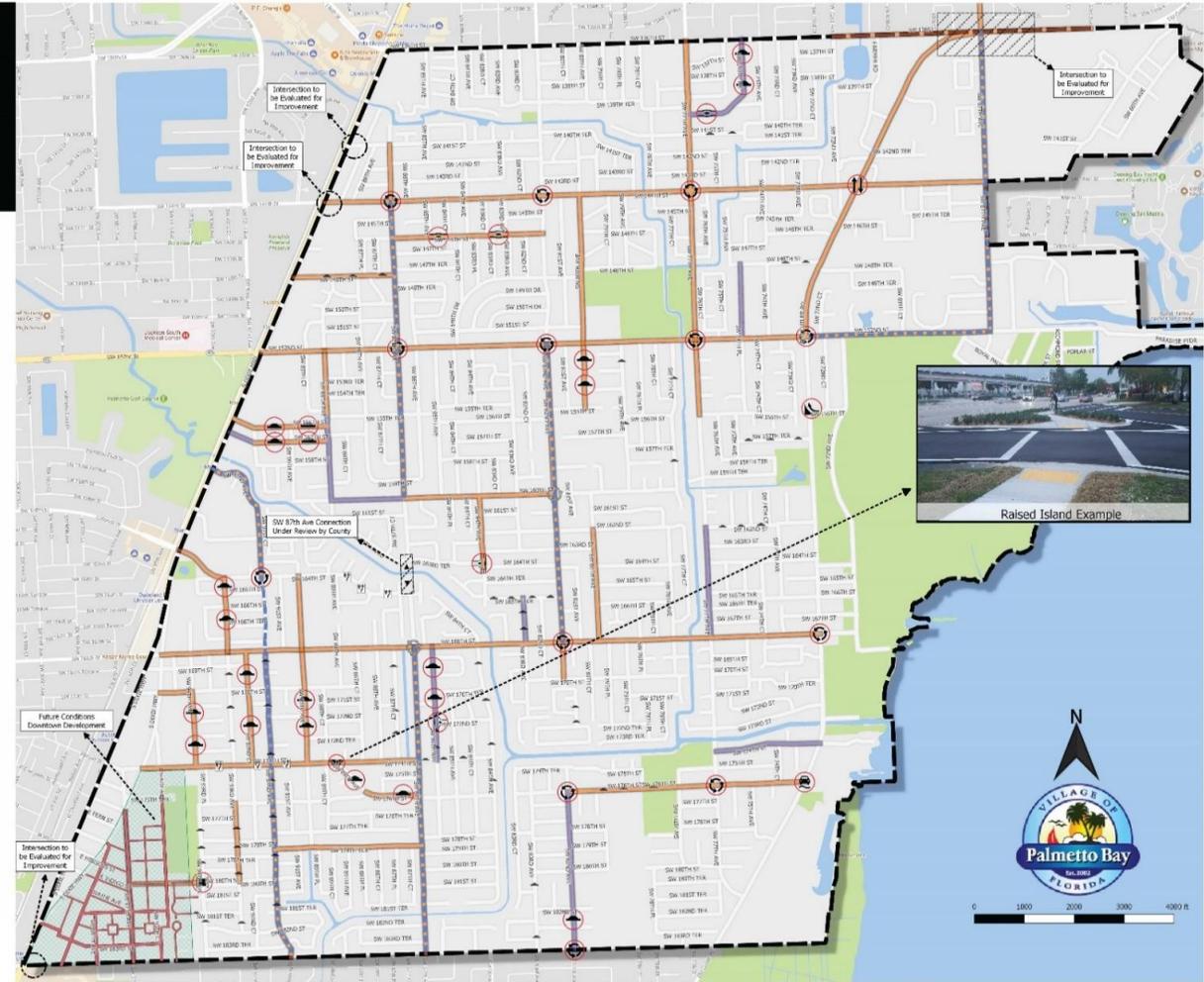
- Provide safer streets for all users
- Reduce traffic volumes from residential streets
- Reduce traffic speeds
- Improve pedestrian safety
- Improve bicycle safety
- Add value to all neighborhoods
- Protect and preserve quality of life

Recommendations

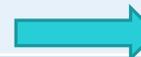
Recommended Traffic Calming Devices

Legend

- Town Boundary
- Proposed Improvements**
 - ▲ Speed Hump
 - Traffic Circle
 - ▬ Midblock Median
 - ⇄ Reversible Lane
 - ⚡ Turbo Lane
 - ⤴ Right Turn Only
 - ⊕ Raised Intersection
 - ⊕ Intersection Median
 - ⊕ Raised Island
- Existing Conditions**
 - Speed Bump/Table
 - ▬ Median
 - Traffic Circle
- Criteria Compliance**
 - Eligible Segments (>2.5 Points)
 - To be Considered (2.0 to 2.5 Points)



PRIORITIES ON TRAFFIC CALMING

Street Location		Recommendation
SW 140 th . Drive	Between SW 77 and 74 th . Court	Midblock Median 
SW 74 th . Court	Between SW 140 dr. and SW 136 th . St	Speed humps
SW 144 th . Street	At 87 th . Ave	Roundabout
SW 144 th . Street	At 82 nd . Ave	Roundabout 
SW 144 th . Street	At 77 th . Ave	Roundabout
SW 144 th . Street	At Old Cutler Road	Reversible lane
SW 146 th . Street	Between SW 87 Ave and SW 82 Ave	Midblock Median
SW 152 nd . Street	At SW 87 th . Ave	Roundabout
SW 152 nd . Street	At SW 82 nd . Ave	Roundabout
SW 152 nd . Street	At SW 77 th . Ave	Roundabout
SW 152 nd . Street	At Old Cutler Road	Roundabout 
SW 80 th . Ave.	Between SW 152 St and SW 155 St	Speed humps
SW 156 th . Street	Between S Dixie and 89 th . Ave	Speed Humps
SW 157 th .. Street	Between S Dixie and 89 th . Ave	Speed Humps



WHAT HAS BEEN ACCOMPLISHED AND PROPOSED?

Commenced/Completed Projects

1	Agreement with Miami-Dade County allowing reduced traffic calming standards and reduced speed limits
2	Installation of over 55 speed tables in village
3	Traffic circle on 82 Ave. and 168 St.
4	Bicycle lane on 82 nd . Ave
5	Reduced speed limits at 42 locations
6	Installation of strictly enforced signage
7	Pilot programs and studies
8	Right turn only at SW 155 and Old Cutler Road
9	Park and Ride facility at St. Richards

Proposed Items in Current Budget

1	Numerous traffic studies and approvals
2	Traffic circle at SW 87 th . Ave and SW 144 th . Street
3	Additional speed tables in certain specified locations
4	Continued reconstruction of Franjo Road into a Main Street
5	Continued construction of safe street to schools sidewalk initiative
6	Installation of crosswalks in numerous locations
7	Additional traffic calming as per prioritized list
8	Installation of signage on main corridors
9	SW 148 street improvements

TRAFFIC STUDY UPDATE — SW 168TH STREET

» **Model**

- » Data Collection
- » Synchro

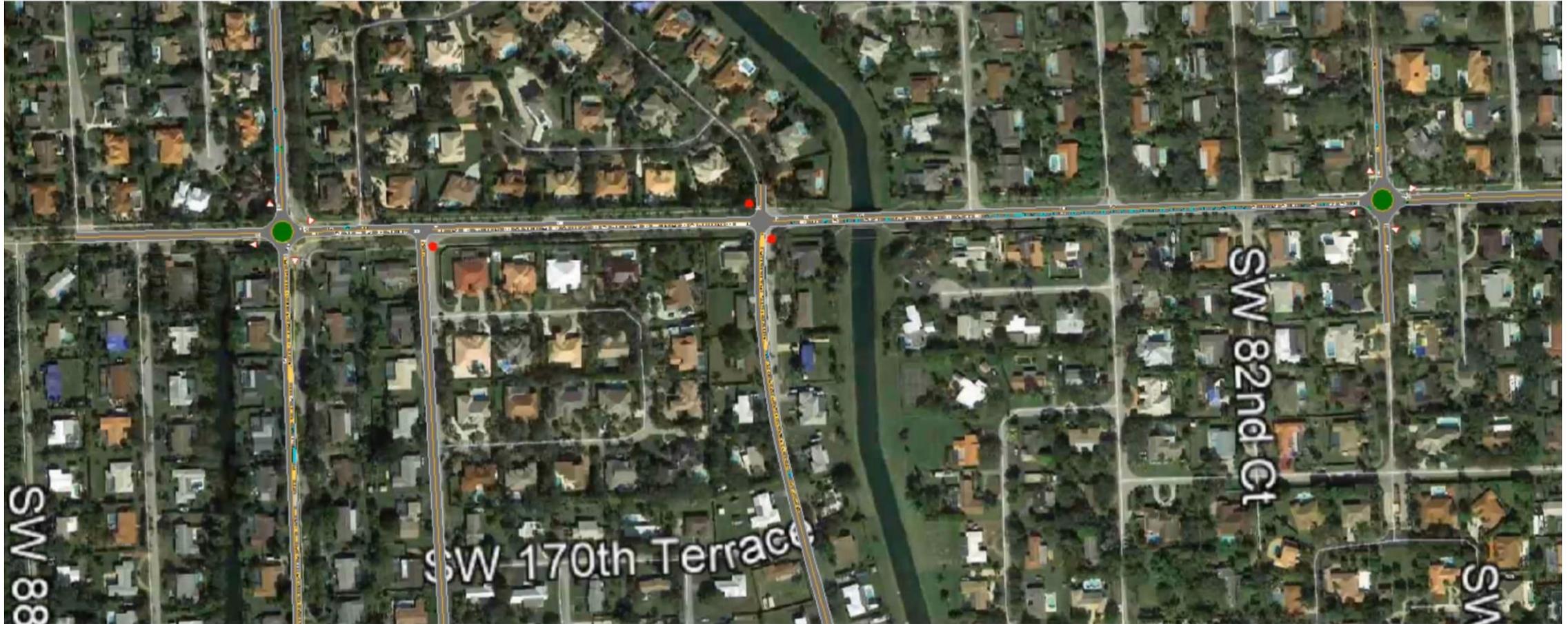
» **Benefits**

- » Shorter queues along SW 168th Street at SW 87th Avenue & 82nd Avenue
- » Improved traffic flow along SW 168th Street and discouraging using neighboring streets.
- » Improved quality of life for residential areas

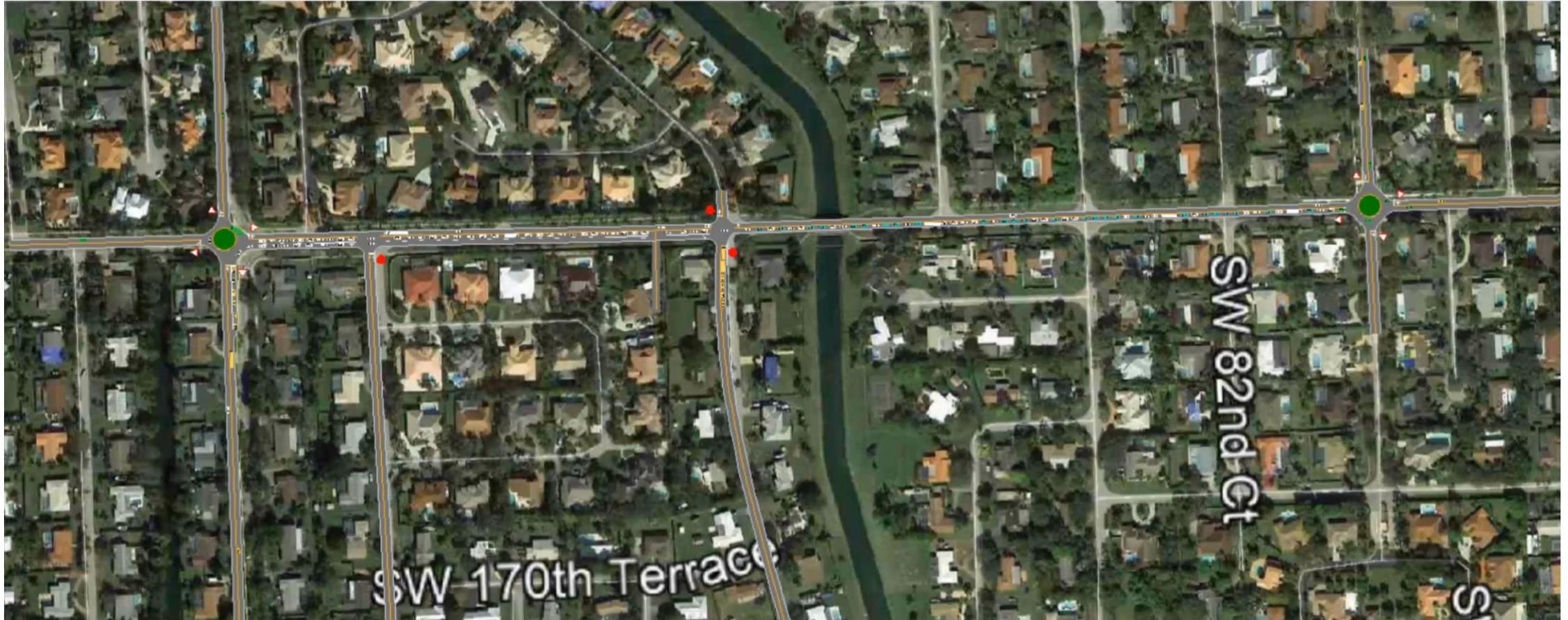
» **Video Model**

- » Existing
- » Proposed

MALBROOK — EXISTING CONDITIONS



MALBROOK — PROPOSED IMPROVEMENTS



Model shows that a new dedicated right turn lane from SW 87th Ave. along with a merge lane along SW 168th Street, reduces cut-through traffic by more than 70%.

TRAFFIC STUDY UPDATE – OLD CUTLER ROAD

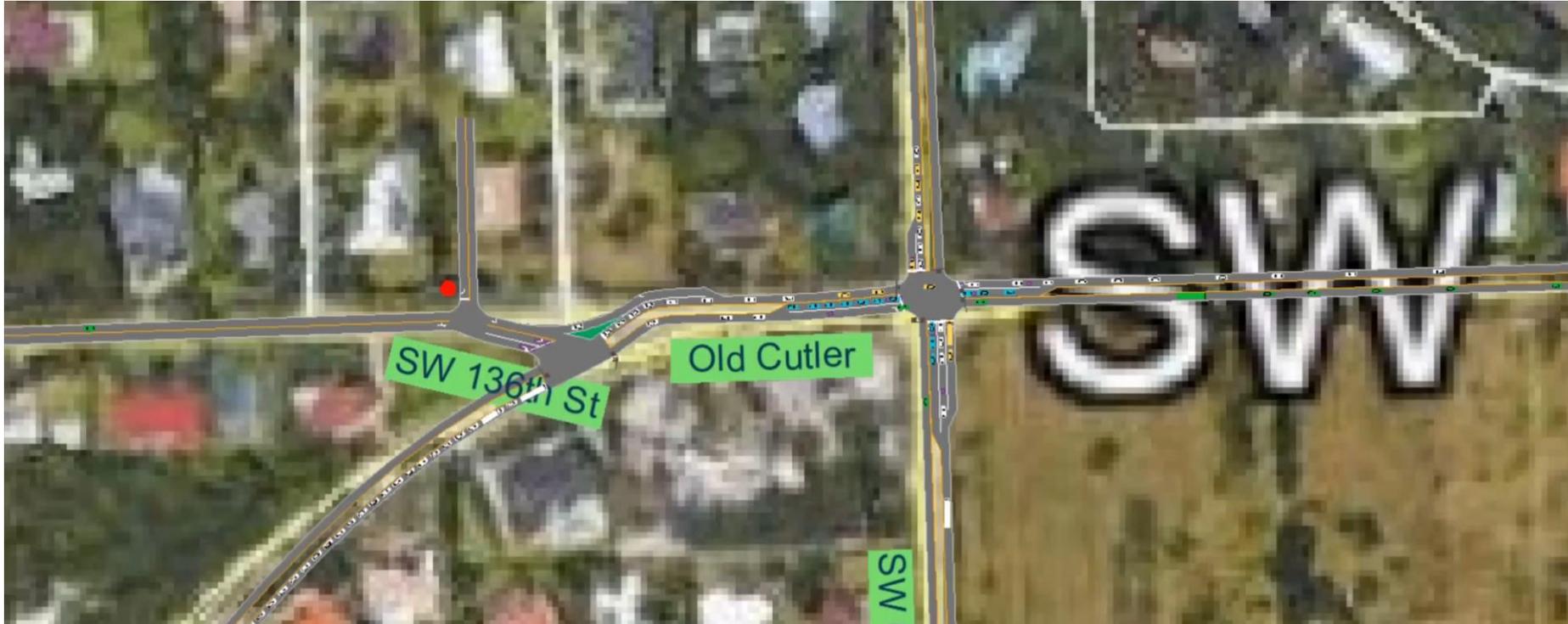
- » **Model**
 - » Data Collection
 - » Synchro
- » **Benefits**
 - » Converting three traffic signals to Roundabouts
 - » Improved traffic flow
 - » 50% decrease in travel time
- » **Video Models**
 - » Existing
 - » Proposed



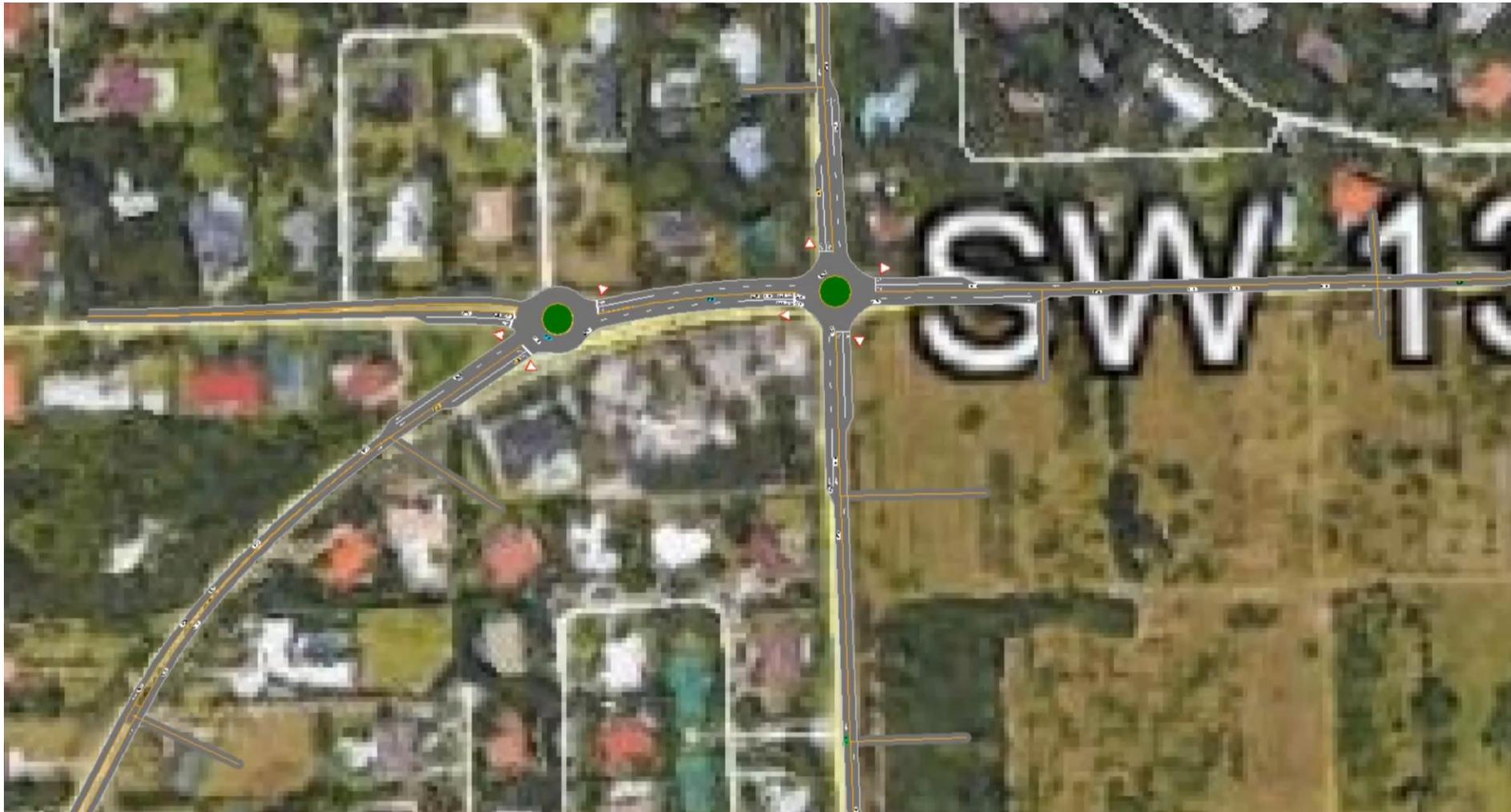
“Roundabouts reduce crashes by 51%, and injury crashes by 73%”

- Synthesis of Highway Practice 264, NCHRP 1998

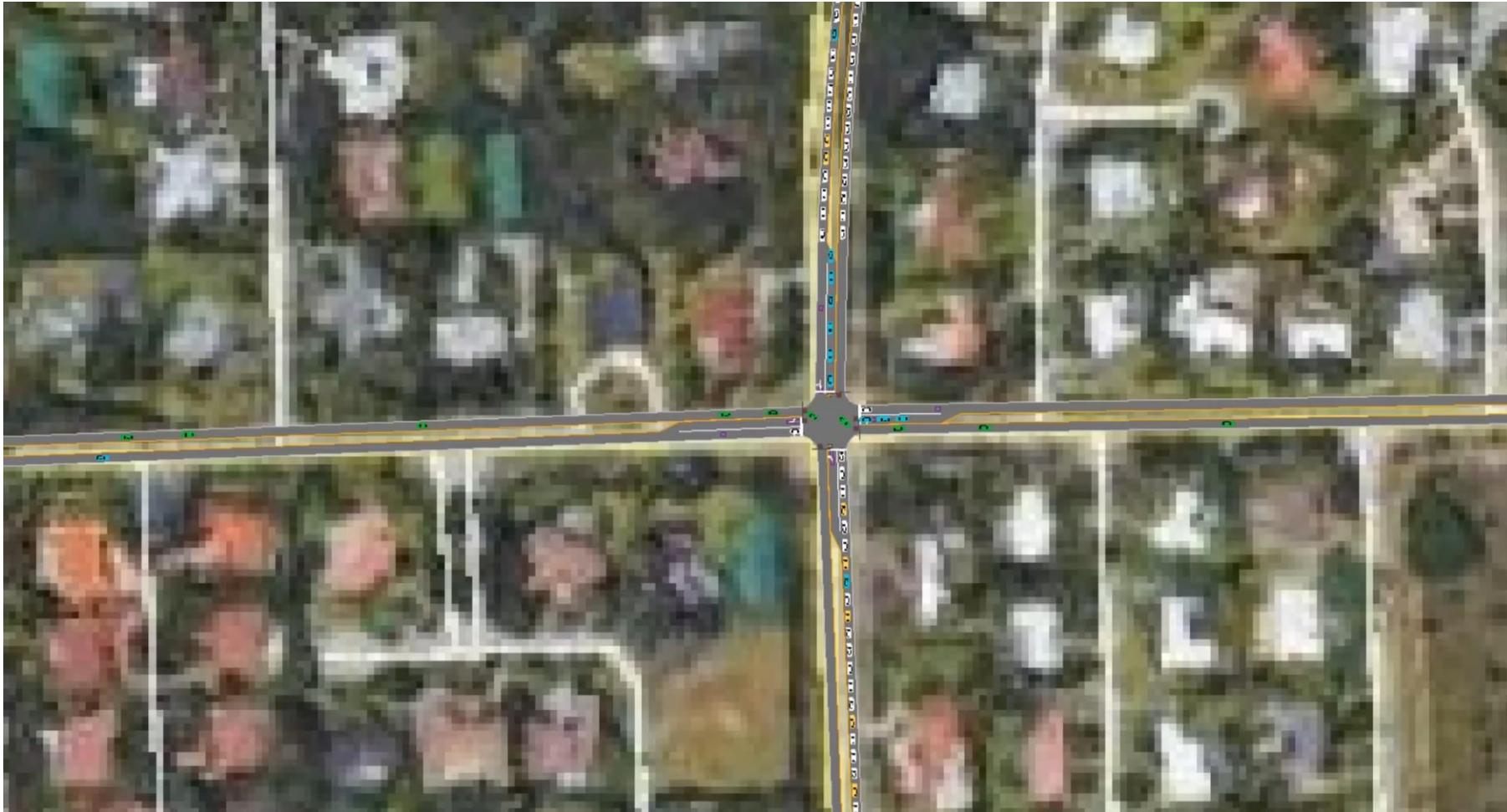
OLD CUTLER ROAD & SW 136TH STREET – EXISTING CONDITIONS



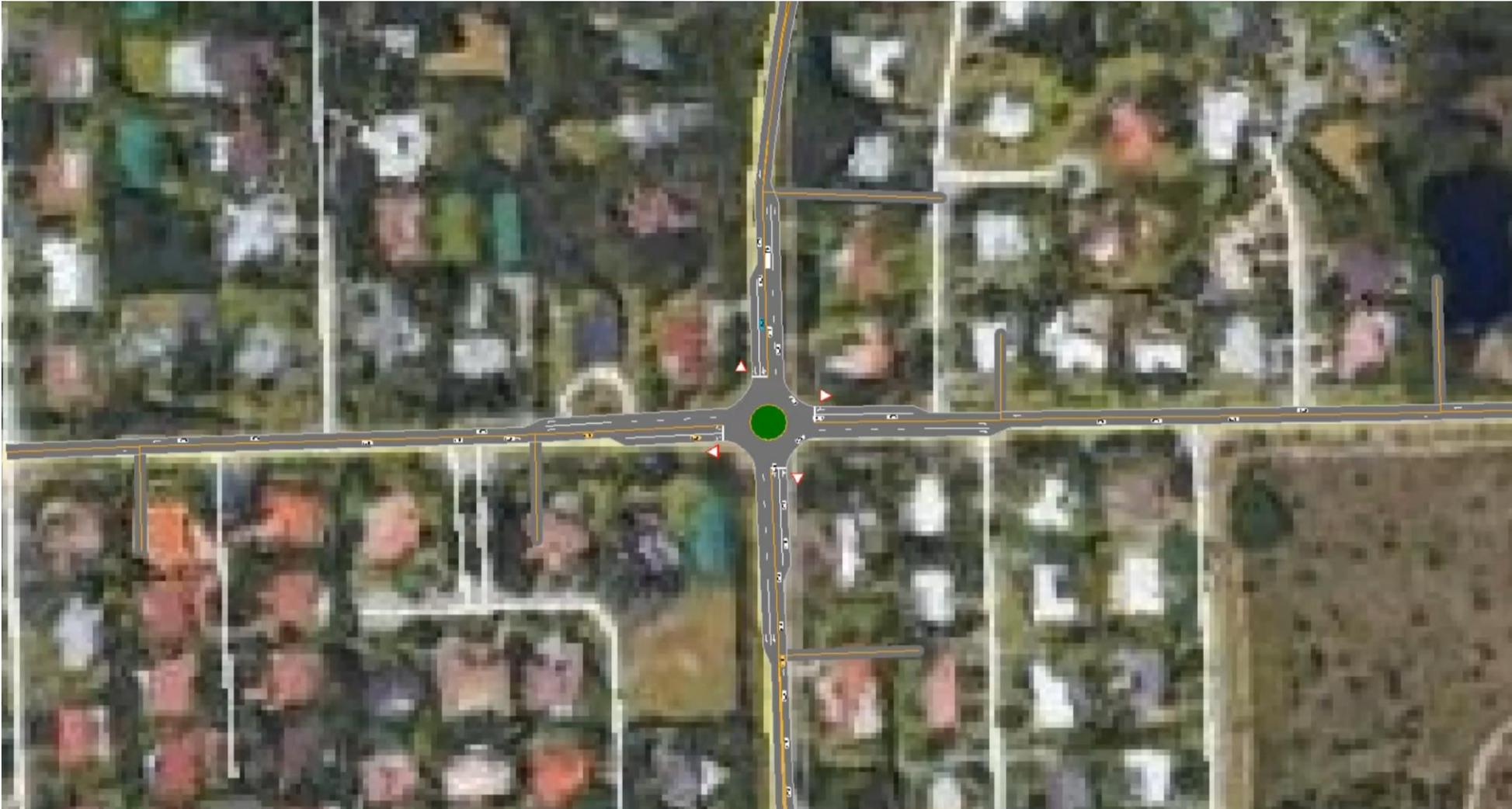
OLD CUTLER ROAD & SW 136TH STREET – PROPOSED IMPROVEMENTS



OLD CUTLER ROAD & SW 152ND STREET – EXISTING CONDITIONS



OLD CUTLER ROAD & SW 152ND STREET – PROPOSED IMPROVEMENTS



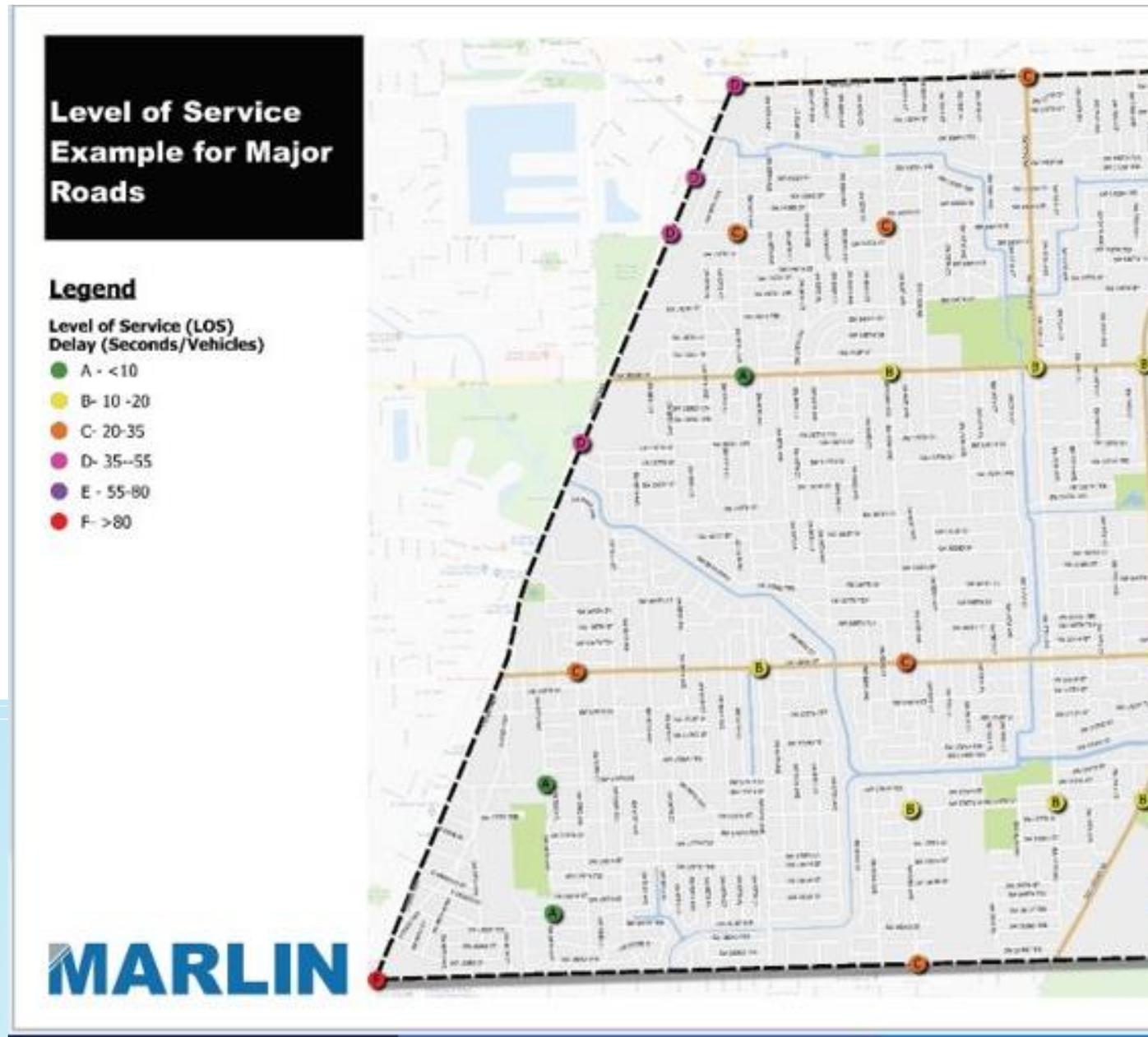
MOBILITY HUBS & TRANSIT INFRASTRUCTURE PLAN

- Marlin Engineering will study the village for connectivity options to the transitway under a study commissioned by the TPO
- The goal is improving accessibility and connectivity to the transit way
- The study will address and plan for our circulators and future transportation modes
- Options will be presented to the Village Council for consideration



PROPOSED SYNCHRO VILLAGE-WIDE TRAFFIC MODEL

- Provides real time effects of any future development
- Provides key intersection improvements needed to accommodate future development
- Provides the Village with real time data to check outside traffic consultant's conclusions



DOWNTOWN REDEVELOPMENT TRAFFIC UPDATE STUDY

- Original study and recommendations commissioned in 2014
- Update will look at growth in region over the last 5 years
- Current update is 60% completed
- Will upgrade and revise necessary improvements to corridor
- Will provide maximum capacity for area in terms of commercial and residential uses based on roadway capacity





VILLAGE OF PALMETTO BAY (PART 2)

VILLAGE WIDE TRAFFIC STUDIES UPDATE

PUBLIC MEETING JANUARY 7, 2019



VILLAGE OF PALMETTO BAY POTENTIAL FUNDING

Budgeted Figures	
Citizens Independent Transportation Trust (CITT) Local Proceeds	\$ 750,000
CITT – Allocation for Transit Operations	\$ 250,000
Traffic Impact Fee (recently-adopted)	To de determined
General Funds (ad-valorem or property taxes)	\$ 100,000

Grants and Joint Use Agreement (JUA) Project Funding	
Total Grants & JUA's (awarded since 2003)	\$ 30,000,000+
Total Grants (awarded since 2014)	\$ 14,000,000+
Joint Use Agreements (funded since 2014)	\$ 3,000,000+
Future Commitments	\$ 5,000,000+

TRAFFIC ENFORCEMENT AND SIGNAGE

- Purchased radar speed signs
- Added “Strictly Enforced” signs on speed limit poles.
- Purchased a full matrix Message Board



- Authorized additional overtime for traffic enforcement (CITE* program)
- Purchased license plate readers
- Smart Lighting System to be Installed



* Comprehensive Improvised Traffic Enforcement

TRANSIT OPTIONS

- Extend Park and Ride contract at St. Richards
- Obtain Park and Ride facility next to transitway
- Begin On-Demand services
- Explore autonomous vehicle pilot program



Ridership attributed to the park & ride facility is 11.5 times Higher than regular route boardings since it was first introduced in July 2018

*Park & Ride Total Boardings: 6,526
Regular Route Boardings: 563*



QUESTIONS?