### City of Palm Coast, Florida Agenda Item

Agenda Date: June 11, 2024

Department CONSTRUCTION MANAGEMENT Amount

& ENGINEERING

Division ENGINEERING Account #

Subject: PRESENTATION - RESIDENTIAL SPEED STUDY

Presenter: Carl Cote, Director of Stormwater & Engineering

#### Attachments:

1. Presentation

#### Background:

**Council Priority:** 

#### B. Safe and Reliable Services

In January Council directive was to perform a speed limit posting study on the City's residential and Central Business Districts (CBD) roadways. Staff requested an assessment of the completed design for central diversion medians (traffic calming device) at two (2) locations on Florida Park Drive, an all-way stop sign warrant for two (2) intersections along Florida Park Drive, and an all-way stop sign warrant at two (2) intersections along Cimmaron Drive.

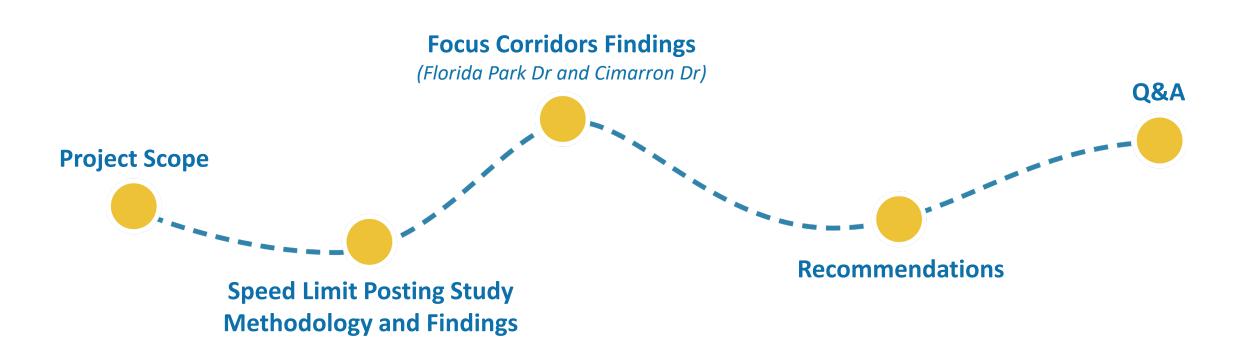
Staff will present speed limit posting study methodology, findings, and recommendations for Florida Park Drive. and Cimarron Drive.

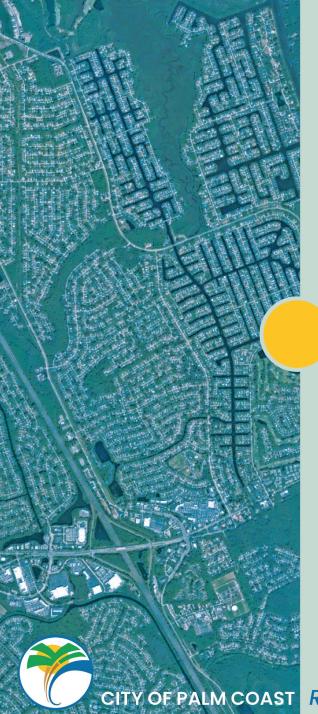
Recommended Action: FOR PRESENTATION ONLY





## **Agenda**





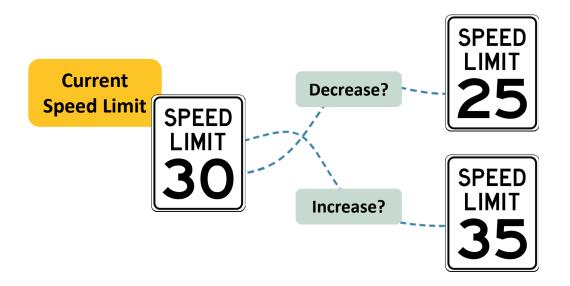
# Project Scope



#### **PROJECT SCOPE**

#### Speed Limit Posting Study

- Residential Streets
- Central Business District (CBD) Streets
- Focus Corridors
  - Florida Park Drive
  - Cimmaron Drive
- Recommendations



#### **GOVERNING STANDARD**

Florida Statute §316.189

"The maximum speed within any municipality is 30 miles per hour (statutory speed limit). With respect to residential districts, a municipality may set a maximum speed limit of 20 or 25 miles per hour on local streets and highways after an investigation determines that such a limit is reasonable."



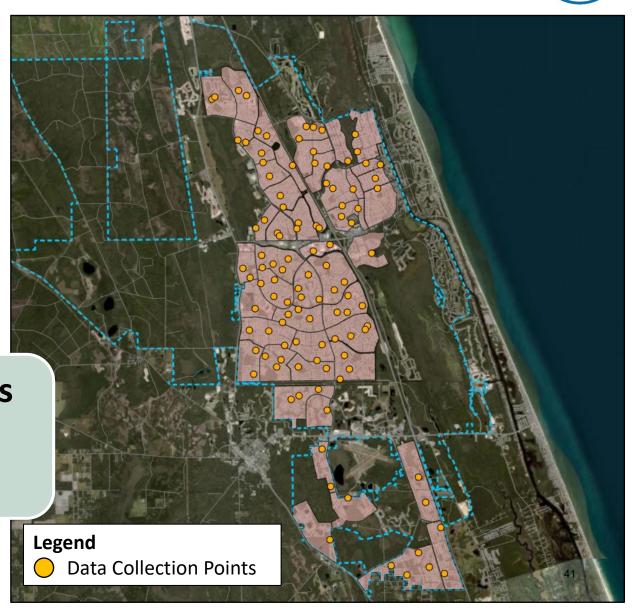




#### **SPEED LIMIT STUDY**

- FDOT Speed Zoning Manual
- Established speed zones
- Collected speed data at <u>109</u> <u>locations</u>
- Established 48 speed zones

**Key Performance Indicators** 85<sup>th</sup> percentile speed 10 MPH pace





# Speed Limit Posting Study Findings

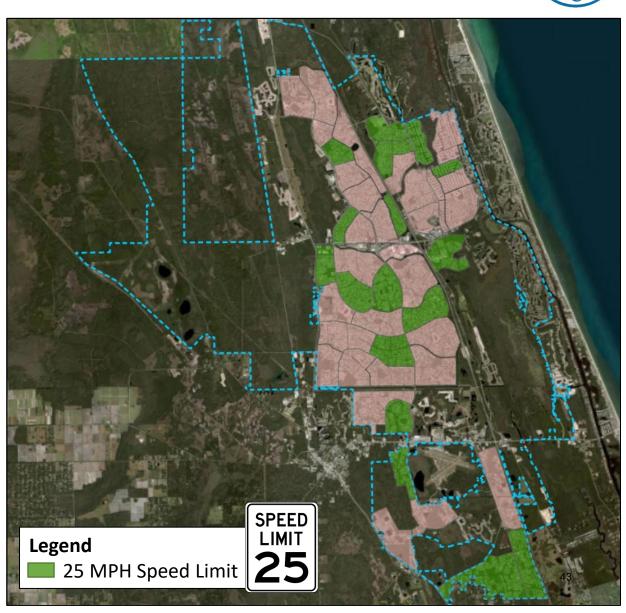


## SPEED LIMIT STUDY: FINDINGS

 17 speed zones meet the condition for a posted speed limit of 25 MPH

Road Type	Meets 25 MPH
Residential Collector	8 out of 42
Residential Local	51 out of 67

Residential Local Average Speed
30 MPH





# Findings on Focus Corridors

#### Florida Park Drive



#### **Speeds**

• Most people drive up to 37 MPH



#### **Crashes**

• 44 crashes (9 crashes per year)



#### **Traffic Calming**

Recommended (low impact on detours)



#### All Way Stop Control (AWSC)

Not warranted



#### **Florida Park Drive**

- All-Way Stop Control (AWSC) Warrants
- (1) Fleetwood Drive and (2) Foresthill Drive
- Existing Scenario
  - Fleetwood Dr and Foresthill Dr LOS B
- AWSC Condition
  - Fleetwood Dr and Foresthill Dr LOS B

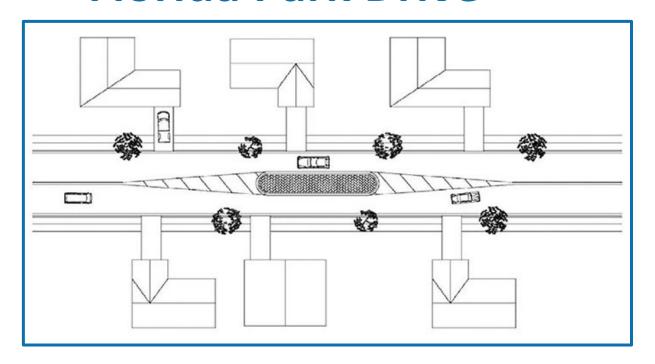
Warrants	Warranted? (Y/N)
A: Crash Experience	No
B: Sight Distance	No
C: Transition to Signal Control	No
D: 8-hour Volume	No
E: Other Considerations	No

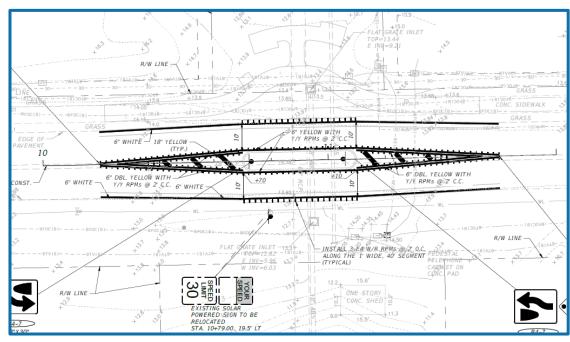


More than 50 bicyclists and 10 pedestrians along Florida Park Drive



#### Florida Park Drive





- Traffic Calming Treatment (Median Island)
- Estimated Construction Cost: +/-\$500,000
- Anticipated Speed Reduction: 2-3 MPH



#### **Cimmaron Drive**



#### **Speeds**

Most people drive up to 39 MPH



#### **Crashes**

• 10 crashes (2 crashes per year)



#### **Traffic Calming**

Highly recommended



#### All Way Stop Control (AWSC)

Not warranted



#### **Cimmaron Drive**

- All-Way Stop Control (AWSC) Warrants
- (1) Comanche Court and (2) Cochise Court
- Existing Conditions
  - Cochise Ct and Comanche Ct LOS A
- AWSC Condition
  - Cochise Ct and Comanche Ct LOS A

Warrants	Warranted? (Y/N)
A: Crash Experience	No
B: Sight Distance	No
C: Transition to Signal Control	No
D: 8-hour Volume	No
E: Other Considerations	No



More than 20 bicyclists and 50 pedestrians along Cimmaron Drive





## Recommendations



### **RECOMMENDATIONS**

#### **Residential Posted Speed Limit**

#### **Option 1**

Maintain 30 MPH on all roads and perform a Traffic Calming Plan

Cost: \$30k - \$50k for Traffic Calming Plan

#### **Option 2**

Set Residential Local roads to 25 MPH and maintain Residential Collectors roads at 30 MPH

Cost: \$1.6 million

#### **Option 3**

Option 2 plus install traffic calming treatment on Residential Collector roads

Cost: \$1.6 million + traffic calming treatments



#### **RECOMMENDATIONS**

#### **Cimmaron Drive**

- Traffic Calming Treatment (lane width reduction, speed humps, or raised intersections)
- Install speed reduction markings and raised pavement markers at curve (Figure 1)
- Dynamic speed display signs (Figure 2)

#### Florida Park Drive

• Traffic Calming Treatment (lane width reduction, speed humps, or raised intersections) (Figure 3)



Figure 2

Figure 1

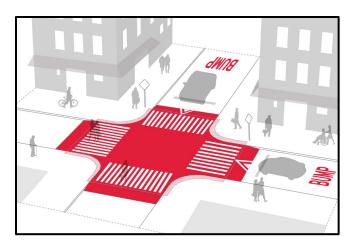


Figure 3