



POLICY BOARD MEETING

Martin County Administrative Building Commission Chambers
2401 SE Monterey Road
Stuart, FL 34996
www.martinmpo.com
(772) 221-1498

Monday, December 11, 2023 @ 9:00 AM

AGENDA

<u>ITEM</u>	<u>ACTION</u>
1. CALL TO ORDER	
2. PRAYER – Pastor Jim Harp	
3. PLEDGE OF ALLEGIANCE	
4. ROLL CALL	
5. APPROVE AGENDA	APPROVE
6. APPROVE MINUTES <ul style="list-style-type: none">• MPO Board Meeting – October 23, 2023	APPROVE
7. COMMENTS FROM THE PUBLIC (PLEASE LIMIT YOUR COMMENTS TO THREE MINUTES; COMPLETE CARD TO COMMENT)	
8. AGENDA ITEMS	
A. FY24 – FY28 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) - AMENDMENT #2	APPROVE
B. UNIFIED PLANNING WORK PROGRAM (UPWP) REVISION #3	APPROVE
C. US-1 AT SW PALM CITY ROAD INTERSECTION FEASIBILITY STUDY	APPROVE
D. TRANSPORTATION SAFETY PERFORMANCE TARGETS - 2024	APPROVE

- E. 2023 COMMUNITY CHARACTERISTICS DRAFT REPORT APPROVE
- F. NE ALICE STREET REALIGNMENT PRESENTATION INFORMATION
- G. FEDERAL HIGHWAY ADMINISTRATION (FHWA) ADJUSTED URBAN BOUNDARY UPDATE PRESENTATION INFORMATION
- H. STATE ROAD 710 (SR-710) UPDATE
- 9. COMMENTS FROM COMMITTEE MEMBERS
- 10. COMMENTS FROM BOARD MEMBERS
- 11. COMMENTS FROM FDOT
- 12. NOTES
 - Transit Development Plan (TDP) Survey - Progress Update
- 13. NEXT MEETING
MPO Board Meeting – February 26, 2024
- 14. ADJOURN

The Martin MPO solicits public participation without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require special accommodations under the Americans with Disabilities Act or persons who require language translation services (free of charge) should contact Ricardo Vazquez, Senior Planner (Title VI/Non-discrimination Contact) at (772) 223-7983 or rvazquez@martin.fl.us in advance of the meeting. Hearing-impaired individuals are requested to telephone the Florida Relay System at #711.



**MARTIN METROPOLITAN PLANNING ORGANIZATION
POLICY BOARD MEETING**
Martin County Administrative Building Commission Chambers
2401 SE Monterey Road
Stuart, FL 34996
www.martinmpo.com
(772) 221-1498

Monday, October 23, 2023 @ 9:00 am

MINUTES

- 1. **CALL TO ORDER** – MPO Chair Troy McDonald called the meeting to order at 9:03 a.m.
- 2. **PRAYER** - Pastor Jim Harp, Stuart Alliance Church led the Invocation.
- 3. **PLEDGE OF ALLEGIANCE** – MPO Chair Troy McDonald led the Pledge of Allegiance.
- 4. **ROLL CALL** – Anthony O’Neill-Butler, MPO Administrative Assistant, called roll.

PRESENT:

Troy McDonald, Chair
Doug Smith, Vice Chair
Commissioner Harold Jenkins
Commissioner Christopher Collins
Council Member Susan Gibbs-Thomas

REPRESENTING:

City of Stuart Commission
Martin County Board of County Commission
Martin County Board of County Commission
City of Stuart Commission
Village of Indiantown Council

EXCUSED ABSENCE:

Commissioner Sarah Heard
Commissioner Stacey Hetherington
Commissioner James Campo

Martin County Board of County Commission
Martin County Board of County Commission
Town of Sewall’s Point Commission

Staff in Attendance:

Beth Beltran, MPO Administrator
Ricardo Vazquez, Senior Planner
Lucine Martens, Planner
Anthony O’Neill-Butler, Administrative Assistant

Others in Attendance:

Steve Braun, FDOT
James Brown, FDOT-FTE
Kelly Budhu, FDOT-D4
Sabrina Aubery, FDOT-D4

Jessica Rubio, FDOT-D4
Mark Madgar, FDOT-D4
Cesar Martinez, FDOT-D4
John Krane, FDOT-D4
Katie Kehres, FDOT-D4
Kris Kehres, FDOT-D4
Ronald Kareiva, FDOT-D4
Damaris Williams, FDOT-D4
Stewart Robertson, Kimley-Horn & Associates
Jim Harp, Stuart Alliance Church
Ronald Rose, Jensen Beach Chamber of Commerce
Shawn Levihan, Daddec Consulting
Paul Carballo, Metric Engineering
Mario Tapia, Metric Engineering
Forrest Yingling
Cheryl Swink
Kelly Budhu
Laverne Williams

A quorum was present for the meeting.

5. APPROVE AGENDA

A motion to approve the Agenda was made by Commissioner Doug Smith and seconded by Commissioner Harold Jenkins, the motion passed unanimously.

6. APPROVE MINUTES

MPO Policy Board Meeting – September 18, 2023

A motion to approve the MPO Policy Board Minutes of September 18, 2023, was made by Council Member Susan Gibbs-Thomas and was seconded by Commissioner Doug Smith. The motion passed unanimously.

7. PUBLIC COMMENTS

Ronald Rose, President of the Jensen Beach Chamber of Commerce, wanted to begin an ongoing discussion regarding a beautification project for US-1 between Bridge Road and the County line. Mr. Rose was curious as to what grants may be available for such a project and spoke to the project's potential to improve safety on this stretch of roadway.

8. AGENDA ITEMS

A. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FY25 – FY29 DRAFT TENTATIVE WORK PROGRAM

Beth Beltran, MPO Administrator, introduced Steve Braun, Secretary of FDOT-District Four, who presented and sought approval of the FY25-FY29 Draft Tentative Work Program

for Martin County. After FDOT receives approval from the MPO Board, FDOT-District Four will submit the Tentative Work Program for approval by the Legislature. The Work Program returns to the MPO in the spring as the basis for the coming year's Transportation Improvement Program (TIP). Mr. Braun spoke about the importance of safety during his presentation. Mr. Braun also highlighted the significant increase in costs over the prior fiscal year and the challenges that have been introduced.

Council Member Susan Gibbs-Thomas expressed how encouraged she was by the commitment to safety and the high priority for the State Road (SR) 710 project. Council Member Gibbs-Thomas further stated that time is lives on that road.

Commissioner Doug Smith inquired about the timeline concerning the right-of-way acquisition for the SR-710 Project and whether it was a funding or timing issue. Secretary Braun informed him that the timeline is affected directly by the design phase. The \$43 million has funded the programming of the design and the future right-of-way acquisition, but the purchase of right-of-way remains underfunded. FDOT will be looking at other options to address the funding shortfall. Commissioner Smith further inquired about the 20 projects funded directly by the Governor and the Legislature and wondered whether the SR-710 project could be elevated to the same level as these other 20 projects that the Legislature has prioritized and, if so, what process would the Board need to take to be on the same importance level. Commissioner Smith and Council Member Gibbs-Thomas emphasized the number of deaths that are happening every year on SR-710, especially considering FDOT's focus on safety.

Commissioner Smith then asked for a presentation on the Monterey Road Grade Separation project. Secretary Braun informed him that they had just hired a consultant for this project and that the Board should see something soon.

Commissioner Smith commented on the traffic signalization at US-1 and Constitution Boulevard and the necessity to keep it a priority.

Commissioner Smith finally inquired about the realignment of Alice Street with Wright Boulevard to which Ms. Beltran informed him that there would be a presentation at the next MPO Board meeting regarding the project.

Chair Troy McDonald echoed Commissioner Smith's sentiments regarding Alice Street and the FEC Railroad, citing the amount of traffic from Port St. Lucie that comes down Greenriver Parkway and the challenges that has raised. Chair McDonald further stated that he believes it would be safer to have Wright Boulevard and Alice Street combined into one which would also allow residents to get off Alice Street much more efficiently. Chair McDonald also echoed Commissioner Smith's comments on the Monterey Road grade separation. Chair McDonald asked about the timeline for the Willoughby Boulevard Extension. Secretary Braun advised him that the PD&E would likely take longer than three years, probably closer to five years. Secretary Braun also advised that there would be an upcoming presentation regarding the Monterey Road and FEC Railroad grade separation.

A motion to approve the Florida Department of Transportation (FDOT) FY25 – FY29 Draft Tentative Work Program was made by Council Member Susan Gibbs-Thomas and was seconded by Commissioner Doug Smith. The motion passed unanimously.

B. FLORIDA TURNPIKE ENTERPRISE FY25 – FY29 DRAFT TENTATIVE WORK PROGRAM

Beth Beltran, MPO Administrator, introduced James Brown, MPO Liaison for the Florida Turnpike, who presented the Turnpike's Tentative Work Program for FY25-FY29. Included in the Work Program are projects such as the widening of the Turnpike through Martin County, and a project to improve traffic operations for north-south through trips that provide a connection between Interstate 95 (I-95) and Florida's Turnpike near the existing I-95/Bridge Road Interchange. Mr. Brown also noted that the Turnpike has over \$40 million allocated for Martin County projects such as widening and interchange improvements.

Commissioner Doug Smith asked when they would receive an update on the interchange between the Turnpike and I-95 as he does not want the project to advance too far without input. Mr. Brown advised him that the project is in the PD&E stage and that he would get with his team to get an update.

A motion to approve the Florida Turnpike Enterprise FY25 – FY29 Draft Tentative Work Program was made by Council Member Susan Gibbs-Thomas and was seconded by Commissioner Doug Smith. The motion passed unanimously.

C. APPORTIONMENT PLAN

Beth Beltran presented the Draft Apportionment Plan. At the September 18, 2023, MPO Policy Board meeting, the Board gave staff direction to move forward with developing the Apportionment Plan, and to include an additional Board member from the Martin County Board of County Commissioners. The reasons for adding the fifth County Commissioner are developments impacting northern Martin County and recent updates to the 2045 Treasure Coast Regional Planning Model Version 5 (TCRPM5) requested by the St. Lucie Transportation Planning Organization (TPO) showing increases in traffic volume on CR-714/SR-714 (SW Martin Highway) and CR-609 (SW Allapattah Road). Adding the fifth County Commissioner will ensure that all areas of Martin County are included in the MPO's transportation planning process. MPO staff recommends approval for this item.

A motion to approve the Apportionment Plan was made by Commissioner Doug Smith and was seconded by Commissioner Harold Jenkins. The motion passed unanimously.

D. DRAFT 2045 REGIONAL LONG RANGE TRANSPORTATION PLAN (RLRTP)

Beth Beltran introduced Stewart Robertson with Kimley-Horn & Associates who presented the Draft RLRTP. Mr. Robertson spoke about the effort of all three MPOs in the region and how the RLRTP will identify and prioritize the three counties' separate Long Range Transportation Plans (LRTP).

Commissioner Doug Smith asked why Village Parkway and its connection to Martin County was not included in the Regional Roadway Network. Mr. Robertson advised that the best

way to accomplish this would be to work with the City of Port St. Lucie to have them add a southern Village Parkway connection to their comprehensive plan so the Martin County section would have something to connect to. Commissioner Smith stated that it is already labeled on the St. Lucie side, and it should be shown on the Martin County side as Martin County is pushing for the connection. Chair Troy McDonald added that he agreed with Commissioner Smith and stressed the importance of this connection.

Council Member Susan Gibbs-Thomas raised her concerns regarding the Tier 1 ranking system and the “top ten” slide that did not include the SR-710 projects. Ms. Beltran advised that this slide does not accurately portray the new tiering system as there are no “top ten” Tier 1 projects. Commissioner Doug Smith added that this slide should be deleted from the document and the presentation.

A motion to approve the Draft 2045 Regional Long Range Transportation Plan (RLRTP) was made by Commissioner Doug Smith and seconded by Council Member Susan Gibbs-Thomas with the comments that Village Parkway should be considered to be added as a regional roadway, that Slide B was to be deleted, and that if there are any further changes to this document, it be brought back to the Martin MPO Policy Board. The motion passed unanimously.

E. DEVELOPMENT REVIEW INTERACTIVE MAP SCOPE OF SERVICES

Beth Beltran introduced Ricardo Vazquez, MPO Senior Planner, who sought approval for the Scope of Services to continue to update and maintain the Development Review Interactive Map. This task corresponds with Task 3 of the FY23-FY24 Unified Planning Work Program (UPWP). The Martin MPO will be updating this map biannually.

A motion to approve the Development Review Interactive Map Scope of Services was made by Commissioner Harold Jenkins and was seconded by Commissioner Doug Smith. The motion passed unanimously.

F. CR-713/SW HIGH MEADOW AVE PD&E STUDY PRESENTATION

Beth Beltran introduced Damaris Williams with FDOT and Paul Carballo with Metric Engineering who presented the CR-713/SW High Meadow Avenue PD&E Study. The purpose of the CR-713/SW High Meadow Avenue Widening PD&E Study is to improve traffic capacity and safety issues currently present from I-95 to CR-714/SW Martin Highway. CR-713 serves as a key roadway that connects to I-95 interchange ramps to allow users to enter and exit Palm City. During the presentation, Mr. Carballo spoke about the high amount of rear-end collisions due to congestion and how this could result in an “F” level of service with a projected 69% increase by 2050. The project schedule will span two years and will include three public meetings, which are currently postponed, however, Mr. Carballo stressed the importance of the public's input. He noted that the design phase is funded for FY26, and the right-of-way phase is funded for FY28. Construction currently remains unfunded.

Beth Beltran added that the project’s Public Involvement includes coming back to the MPO Advisory Committees and Policy Board.

G. STATE ROAD (SR) - 710 UPDATE

Beth Beltran introduced Ron Kareiva from FDOT who provided an update on the SR-710 project. Mr. Kareiva began by updating the Board on the interim improvements and short-term improvements on SR-710. Regarding the long-term interim improvements, the relocation of the SR-710 and SR-714 intersection has its design and right-of-way phases funded. Part of this will also include the reevaluation of the previous PD&E study which has already started. Regarding short-term improvements, a work order has been signed for signage and marking improvements. Mr. Kareiva noted that the Feasibility Study is finished, and the documentation is being finalized.

Commissioner Doug Smith asked about the PD&E study and was curious if they were still able to use the old PD&E study. Mr. Kareiva advised him that while we can use the older PD&E study, some of the information would need to be reevaluated and that this process was running concurrently with the design phase and, once the design has been finalized, they can begin the process of purchasing right-of-way.

Council Member Susan Gibbs-Thomas inquired about a start date for the improvements to the Clementsville community. Mr. Kareiva stated that it should be starting sometime in the final months of 2023 and that he will check and get back with the Board.

Forrest Yingling provided his input as a public citizen regarding the turn lane and the issue with the narrowness considering the high amount of traffic from Sebring. Mr. Yuengling also noted the guardrails that were installed and the difficulties it has made for traffic enforcement. Mr. Yingling then cited FDOT's prior presentations and was curious why so much funding had been spent on the widening of SR-76 when that road did not have, in his opinion, the same high death toll that SR-710 has. Chair Troy McDonald thanked him for his input and stressed the aggressive work the Board is doing to get this done. Council Member Gibbs-Thomas stated how much she appreciates the community and their efforts as they come out and attend these meetings and hold the Board accountable.

9. COMMENTS FROM ADVISORY COMMITTEE MEMBERS – None

10. COMMENTS FROM BOARD MEMBERS – Commissioner Doug Smith moved to ask Beth Beltran, MPO Administrator, to draft a letter to the County Commission relative to asking the delegation that any type of Legislative ask also include funding for right-of-way acquisition the SR-710 widening project. Seconded by Council Member Susan Gibbs-Thomas. The motion passed unanimously.

11. COMMENTS FROM FDOT - None

12. NOTES

- Lucine Martens spoke on the Transit Development Plan (TDP) Survey and encouraged all in attendance to participate and share it with 5 other people.

13. NEXT MEETING

MPO Board Meeting – December 11, 2023

ADJOURNMENT: 10:38 AM

Approved by:

Troy McDonald, Chair

Date

Prepared by:

Anthony O'Neill-Butler, Administrative Assistant

Date

Minutes Approved on December 11, 2023

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**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 5
WORDING: FY24–FY28 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) – AMENDMENT #2		
REQUESTED BY: FDOT	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: FY24- FY28 TIP Amendment #2

BACKGROUND

The Florida Department of Transportation (FDOT) has requested an amendment to the FY24 – FY28 Transportation Improvement Program (TIP). This amendment is required because one project is being deleted from the FDOT Work Program, two new projects are being added, and one project is being given additional funding.

The project that is being deleted is the landscaping project on SW Martin Highway, from SW Warfield Boulevard to SW Allapattah Road (FM# 450944-1). This project has been deleted from the Work Program and needs to be reflected in the currently adopted TIP. The project has been deleted due to the Scenic Highway Grant not being approved.

The two new projects being added to the TIP are the SR-710 Widening from Martin/Okeechobee County Line to SW FP&L Access Road (FM# 453333-1) and another SR-710 Widening project, from FP&L Access Road to SW Allapattah Road (FM# 453333-2). Both projects have been funded for Preliminary Engineering (design) in FY24.

The last project in this amendment is the US-1 Resurfacing Project from SW Fischer St. to North of Decker Ave (FM# 447649-1). FDOT is increasing the funding for this project, from \$4,622,291 to \$7,072,805 and moving the construction phase to FY25.

ISSUES

At the MPO Board meeting, MPO staff will present the FY24 – FY28 TIP Amendment #2.

RECOMMENDED ACTION

- Approve FY24 – FY28 TIP Amendment #2
- Approve FY24 – FY28 TIP Amendment #2 with comments

AGENDA ITEM 8A

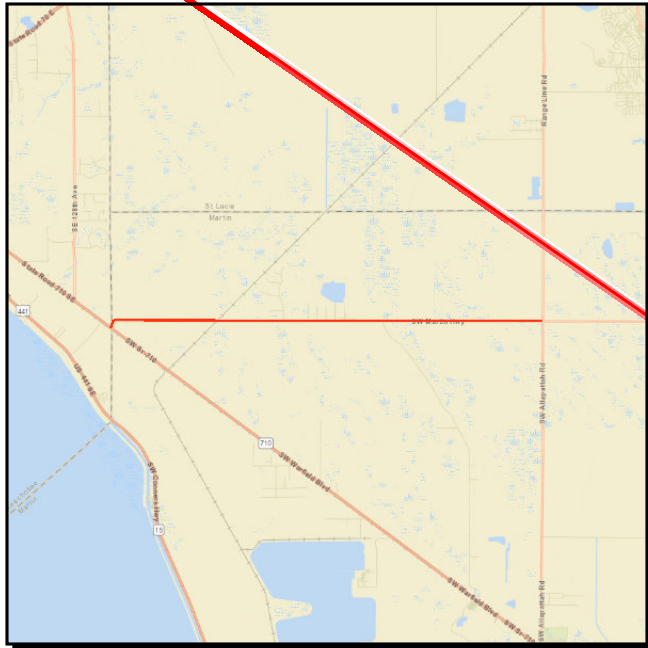
APPROVAL

MPO

ATTACHMENTS

- FM# 450944-1 TIP Page
- FM# 453333-1 TIP Page
- FM# 453333-2 TIP Page
- FM# 447649-1 TIP Page

4509441 SR-714/SW MARTIN HWY FR SR-710/SW WARFIELD BLV TO CR-609/ALLAPATTAH RD Non-SIS



Project Description: MARTIN GRADE SCENIC HIGHWAY FHWA/ NATIONAL SCENIC BYWAY PROGRAM GRANT

Work Summary: LANDSCAPING **From:** SR-710
To: CR-609

Lead Agency: Managed by FDOT **Length:** 12.194

Phase	Fund Source	2023/24	2024/25	2025/26	2026/27	2027/28	Total
CST	SA	474,000	0	0	0	0	474,000
CST	LF	126,000	0	0	0	0	126,000
Total		600,000	0	0	0	0	600,000

Prior Year Cost: 0
Future Year Cost: 600,000
Total Project Cost: 600,000

4533331 SR-710/SW WARFIELD BLVD FR FPL ACCESS RD TO CR-609/ SW ALLAPATTAH RD SIS



Project Description: RECONSTRUCT SR 710 FROM 2 LANE TO 4 LANE DIVIDED HIGHWAY
2024 MPO PRIORITY #1

Work Summary: ADD LANES & RECONSTRUCT
From: SW FP&L ACCESS ROAD
To: CR-609/ALLAPATAH ROAD

Lead Agency: Managed by FDOT **Length:** 5.201

Phase	Fund Source	2023/24	2024/25	2025/26	2026/27	2027/28	Total
PE	ACNP	285,000	0	0	0	0	285,000
PE	SA	150,000	0	0	0	0	150,000
Total		435,000	0	0	0	0	435,000

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 435,000

4533332

SR-710 FROM MARTIN/OKEECHOBEE CO LINE TO SW FP&L ACCESS ROAD SIS



Project Description: RECONSTRUCT SR 710 FR 2 LANE TO 4 LANE DIVIDED HIGHWAY
2024 MPO PRIORITY #1

Work Summary: ADD LANES & RECONSTRUCT **From:** MARTIN/OKEECHOBEE CO LINE

To: SW FP&L ACCESS ROAD

Lead Agency: Managed by FDOT **Length:** 9.812

Phase	Fund Source	2023/24	2024/25	2025/26	2026/27	2027/28	Total
PE	ACNP	580,000	0	0	0	0	580,000
Total		580,000	0	0	0	0	580,000

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 580,000

4476491

SR-5/US-1 FROM NORTH OF SE FISCHER ST. TO NORTH OF SE DECKER AVE

Non-SIS



Project Description:

Work Summary: RESURFACING From: NORTH OF SE FISCHER ST.

To: NORTH OF SE DECKER AVE

Lead Agency: FDOT Length: 1.724

Phase	Fund Source	2023/24	2024/25	2025/26	2026/27	2027/28	Total
PE	DIH	14,965	0	0	0	0	14,965
CST	DIH	0	75,430	0	0	0	75,430
CST	SA	0	1,062,023	0	0	0	1,062,023
CST	DDR	0	5,856,272	0	0	0	5,856,272
CST	DS	0	64,115	0	0	0	64,115
Total		14,965	7,057,840	0	0	0	7,072,805

Prior Year Cost: 850,692
 Future Year Cost: 7,072,805
 Total Project Cost: 7,923,497



**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 1
WORDING: FY22/23 – FY23/24 UNIFIED PLANNING WORK PROGRAM (UPWP) REVISION 3		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: FY22/23-FY23/24 UPWP Revision 3

BACKGROUND

The MPO is required to develop a Unified Planning Work Program (UPWP) document identifying the planning activities budgeted for a two-year time period. Funding received by each MPO is awarded in accordance with a distribution formula developed by the Florida Department of Transportation (FDOT) and approved by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and may be expended only in accordance with an approved UPWP.

The Martin MPO Board approved the FY22/23-FY23/24 UPWP on May 9, 2022. Revisions to the UPWP fall into two categories: modifications and amendments, requiring different actions by the FDOT. Modifications are revisions that do not change the approved FHWA/FTA budget, do not change the scope of an FHWA/FTA work task(s); and do not add or delete a work task. Amendments are revisions that change the approved FHWA/FTA budget, change the scope of an FHWA/FTA work task(s); or add or delete a work task(s). This Revision #3 is a Modification.

ISSUES

At the MPO Board meeting, staff will discuss FY22/23-FY23/24 UPWP Revision #3. Within Task 6 – Transportation Systems Planning, staff is requesting that the Complete Streets: Vision Zero Study be removed from the UPWP, and the \$60,000 that was allocated toward consultant services line item be reallocated towards the “MPO staff salaries, fringe benefits, and other deductions” line item. Monies will be used to fund staff time to help develop the 2050 Long Range Transportation Plan (LRTP), update the Urban Area Boundary and Functional Classification system, and provide additional public involvement on planning-related tasks. These actions do not change the overall budget of the MPO’s adopted FY22/23-FY23/24 UPWP.

RECOMMENDED ACTION

- a. Approve Revision 3 of the FY22/23-FY23/24 UPWP
- b. Approve Revision 3 of the FY22/23-FY23/24 UPWP, with comments

AGENDA ITEM 8B

FISCAL IMPACT

\$0

APPROVAL

MPO

ATTACHMENTS

- a. UPWP Revision Form for Revision 3 – Modification #2
- b. Cost Analysis Certification for Revision 3
- c. UPWP Task Sheet - Original and Proposed (UPWP Pg. 48)
- d. UPWP Summary Budget Table(s) - Original and Proposed (UPWP Pg. 57, 58)



**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 7
WORDING: US-1 AT SW PALM CITY ROAD INTERSECTION FEASIBILITY STUDY		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: US-1 at Palm City Road Intersection Feasibility Study

BACKGROUND

At the December 2022 MPO Board meeting, a scope of services was approved for the US-1 @ SW Palm City Road Intersection Feasibility Study with The Corradino Group, Inc. as the consultant. The intent of this study is to improve safety and mobility for all modes at the US-1/SW Palm City Road intersection, as well as manage speeds along SW Palm City Road. The scope of services includes gathering input from the public and relevant stakeholders to recommend an alternative to eliminate the uncontrolled right turn from southbound US-1 onto southbound SW Palm City Road and deter traffic from using SW Palm City Road.

An initial Public Workshop was held on March 8, 2023, to present the existing conditions and gather feedback from the public. At the second Public Workshop held on August 23, 2023, six alternatives were presented to the public to gather feedback and identify a preferred alternative from the public’s perspective. Finally, an agenda item for this project was scheduled on the August 28, 2023, City of Stuart Commission meeting to identify a preferred alternative to move forward through the final stages of the project scope. At this meeting, the Stuart Commission recommended to move forward with Alternative 5. This was also the public’s preferred alternative. The City Commission also recommended that the project be added to the Martin MPO’s List of Project Priorities, and to include traffic calming improvements along Palm City Road.

At the September 2023 MPO Policy Board meeting, the Board approved Alternative 5 and requested that the conceptual design for this alternative move forward, and that cost estimates for the complete street improvements be included in the study.

ISSUES

At the December 2023 Policy Board meeting, the consultant will present the Final Draft of the US-1 at SW Palm City Road Intersection Feasibility Study.

AGENDA ITEM 8C

RECOMMENDED ACTION

- a. Approval of the US-1 at Palm City Road Intersection Feasibility Study
- b. Approval of the US-1 at Palm City Road Intersection Feasibility Study with comments.

APPROVAL

MPO

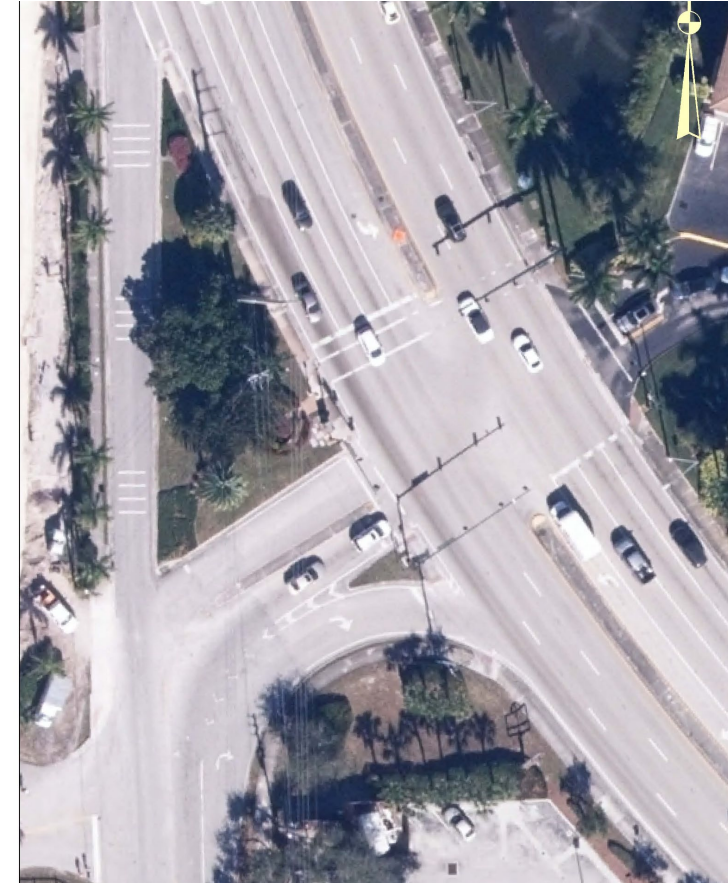
ATTACHMENTS

- PowerPoint Presentation
- US-1 at Palm City Road Intersection Feasibility Study - Final Report

US 1 /SR 5/FEDERAL HIGHWAY at SW PALM CITY ROAD FEASIBILITY STUDY



MPO MEETING – DECEMBER 11, 2023





PRESENTATION OUTLINE



- Project Advisory Committee Members
- Project Information
 - Schedule
 - Goals & Objectives
 - Study Area
- Selected Alternative
- Q & A





PROJECT ADVISORY COMMITTEE MEMBERS



- City of Stuart City Manager
- Florida Department of Transportation Representative
- Martin County Public Works Director
- Martin County Engineer
- Martin County Traffic Engineering Manager
- City of Stuart Public Works Director
- City of Stuart Utilities & Engineering Director
- Stuart/Martin Chamber President
- Treasure Coast Regional Planning Council Executive Director
- Royal Palm Financial Center Representative
- CubeSmart (MacArthur Holdings, LLC) Representative
- Publix Representative
- Mayor's Citizen Representative



PROJECT SCHEDULE KEY DATES/DELIVERABLES



- ✓ PAC Meetings – February 15, 2023; August 1, 2023
- ✓ Public Workshops – March 8, 2023; August 23, 2023
- ✓ Existing Conditions Technical Memorandum – March 17, 2023
- ✓ Stuart Commission Meeting – August 28, 2023
- ✓ CAC and TAC Meetings – September 6, 2023
- ✓ BPAC Meeting – September 11, 2023
- ✓ MPO Meeting – September 18, 2023
- ✓ Alternatives Technical Memorandum – October 5, 2023
- ✓ Other Meetings (CAC, BPAC, TAC, MPO) – November/December 2023
- 🎯 Final Report – December 11, 2023



GOALS & OBJECTIVES



- ▶ Improve safety and mobility for all modes at the intersection of US-1 and SW Palm City Road.
- ▶ Manage speeds along SW Palm City Road
- ▶ Reduce traffic volumes along SW Palm City Road



PROJECT OVERVIEW STUDY AREA





PROJECT OVERVIEW STUDY AREA



Google Earth
Image © 2023 Maxar Technologies

SELECTED ALTERNATIVE

Elimination of Free-Flow Right-Turn & Replace w/ Green Space

Construct Raised Crosswalk w/ Signing

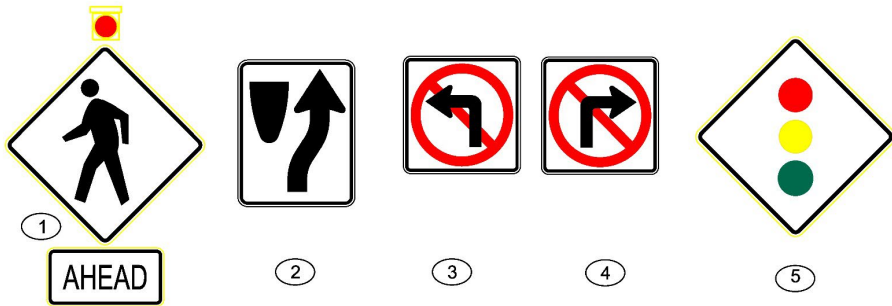
Construct Realigned SB Travel Lane

Construct Right-Turn Lane w/ Deceleration Lane

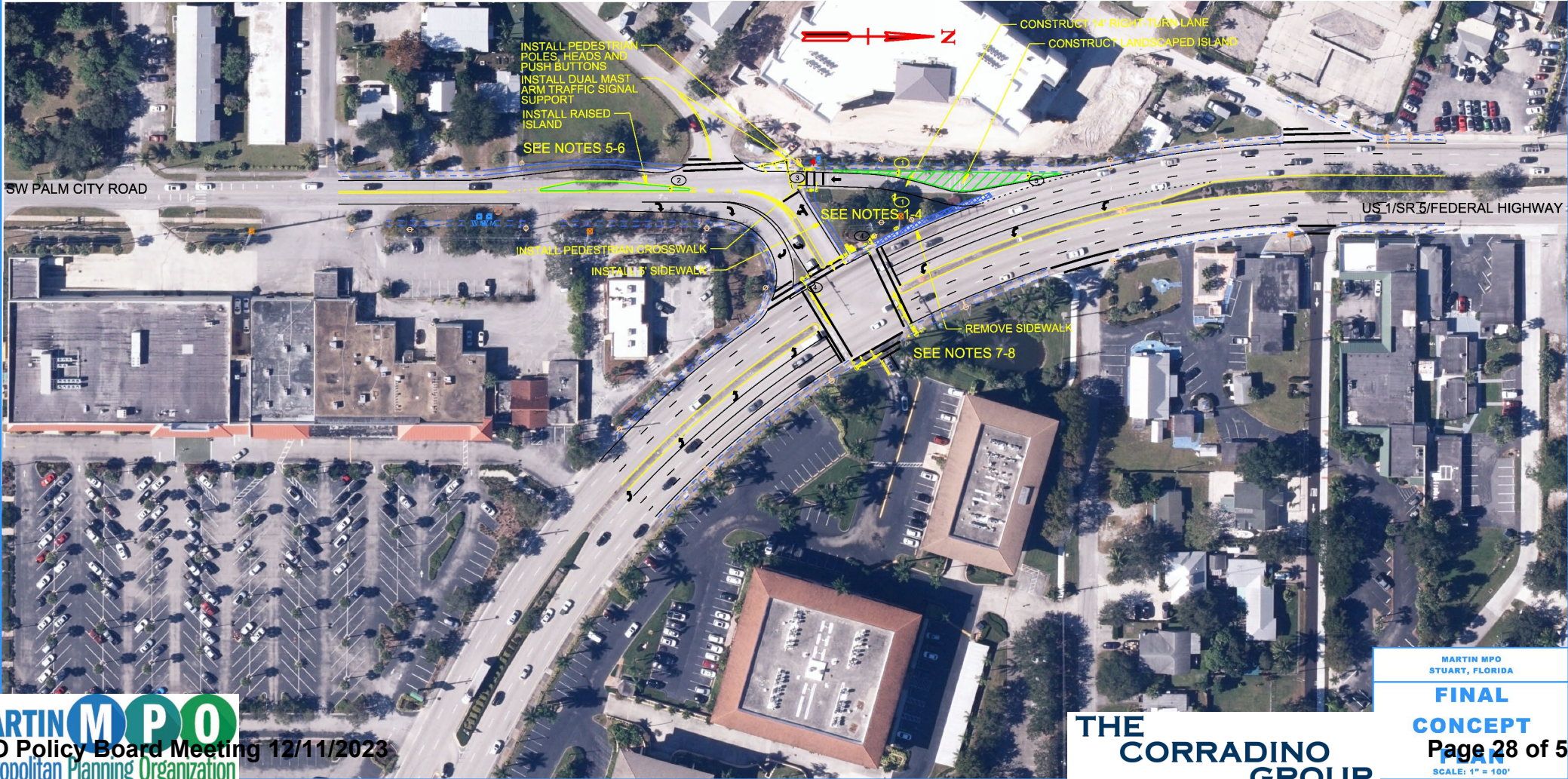
Modify Sidewalk to Maintain Access to Ewing Triangle

Construct Sidewalk

Construct Raised Island



1. CONSTRUCT 14' RIGHT TURN LANE WITH CURB AND GUTTER, A 5' SIDEWALK AND TRAFFIC SIGNAL.
2. INSTALL PEDESTRIAN CROSSING ACROSS SOUTHBOUND RIGHT TURN LANE WITH PEDESTRIAN HEADS AND PUSH BUTTONS.
3. REMOVE EXISTING FREE-FLOW LANE AND REPLACE WITH LANDSCAPED ISLAND (GREEN HATCH AREA).
4. REMOVE THE SEGMENT OF SIDEWALK ALONG US-1 AND EWING TRIANGLE (BLUE HATCH AREA).
5. CONSTRUCT RAISED ISLAND AND 12' SOUTHBOUND TRAVEL LANE WITH A LANE SHIFT.
6. CONSTRUCT 5' SIDEWALK ON WEST SECTION OF LANE SHIFT ALONG SW PALM CITY ROAD.
7. ALL PAVEMENT MARKINGS SHALL BE REAPPLIED WITHIN THE STUDY AREA SHOWN.
8. INSTALL CROSSWALK ACROSS SOUTHERN LEG OF US-1 AND SW PALM CITY ROAD INTERSECTION.



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OPINION OF PROBABLE COST



EST. (PDC) CONSTRUCTION COST (INTERSECTION IMPROVEMENTS): \$2,644,172.00

EST. (PDC) PROJECT COST (SW PALM CITY RD – TO 400’ NORTH OF SW INDIAN GROVE): \$ 826,266.00

EST. (PDC) PROJECT COST (400’ NORTH OF SW INDIAN GROVE TO 500’ NORTH OF SW MONTEREY): \$2,006,646.00

TOTAL (PDC¹): \$5,477,084.00

TOTAL (2026-2030²): \$6,846,355.00

¹ Present Day Cost

² Year of Expenditure (from 2045 LRTP)



Q & A



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US 1 AT SW PALM CITY ROAD FEASIBILITY STUDY FINAL REPORT



**US 1/SR 5/Federal Highway at SW Palm City Road
Multimodal Intersection Improvement Feasibility Study**

Stuart, Florida

FINAL REPORT

Prepared For:
Martin MPO

Prepared By:
The Corradino Group
Franklin, TN

December 2023

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- Attachment B: Alternatives Evaluation Technical Memorandum
- Attachment C: MPO Board Presentation on September 18, 2023
- Attachment D: Opinion of Probable Cost

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Introduction

The US 1/SR 5/Federal Highway at SW Palm City Road Multimodal Intersection Improvement Feasibility Study (US 1 at SW Palm City Road Feasibility Study) is identified for completion in the Martin MPO’s FY22/23 – FY 23/24 Unified Planning Work Program. This Final Report includes the final documentation for the selected alternative along with the *Existing Conditions Technical Memorandum* and *Alternatives Evaluation Technical Memorandum*.

As noted with each of the Technical Memorandums prepared for this project, the *Existing Conditions Technical Memorandum* contains information on the data collected, the initial evaluations, the existing traffic operations, and documentation on the input from the initial Project Advisory Committee (PAC) meeting and first Public Workshop. The *Existing Conditions Technical Memorandum* is included as **Attachment A**.

The *Alternatives Evaluation Technical Memorandum* (see **Attachment B**) contains the developed conceptual alternatives, the results of in-depth evaluation of the conceptual alternatives that were presented to the PAC, at the second Public Workshop, to the various MPO committees (BPAC, CAC, and TAC) and to the MPO Board to generate a consensus on the preferred alternative.

This Final Report contains the documentation and results of the selected preferred alternative. This information includes the concept plan, cost estimate, identified impacts, and other associated data resulting from the preferred alternative.



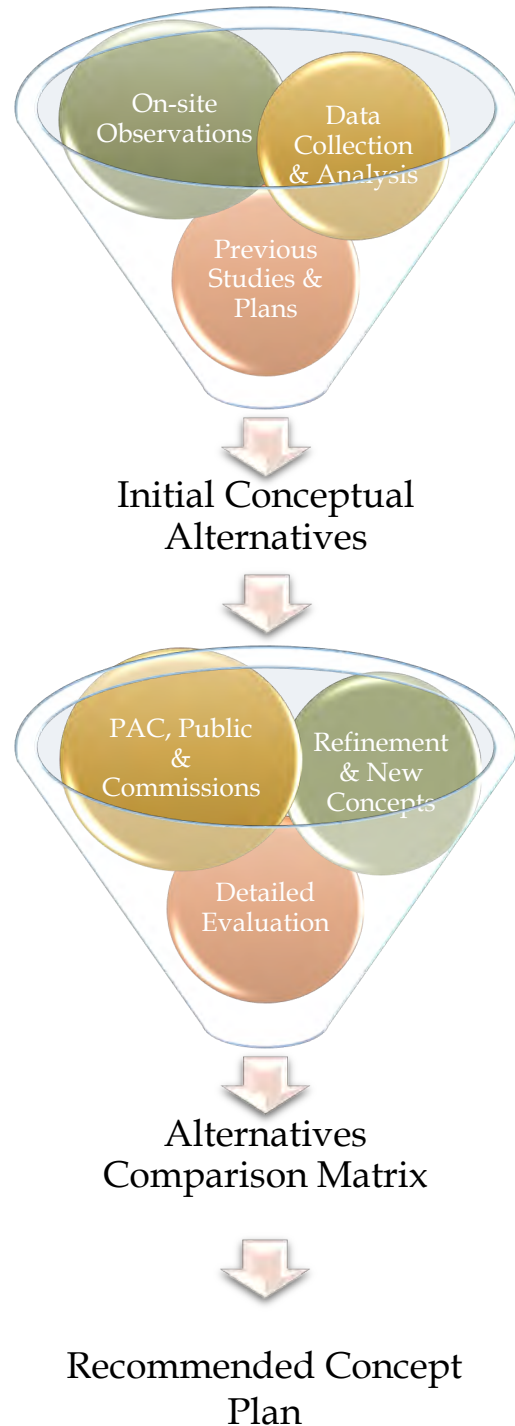
Conceptual Alternatives

After the initial PAC meeting and the first Public Workshop, the initial presented concepts were refined based on the feedback received and were developed to a level for presentation at the committee meeting and the MPO Board. As shown in the *Alternatives Evaluation Technical Memorandum*, each of the refined concepts were evaluated for traffic operations, physical impacts, cost implications and overall attainment of the study’s goal and objectives.

The goals and objectives of the study include:

- Improve safety and mobility for all modes at the US 1 and SW Palm City Road intersection.
- Improve mobility for all modes at the US 1 and SW Palm City Road intersection.
- Manage vehicular speeds along SW Palm City Road.
- Manage vehicular volumes along SW Palm City Road.

The five refined conceptual alternatives are shown on the following pages. Specific details for each alternative can be found in **Attachment B: Alternatives Evaluation Technical Memorandum** and **Attachment C: MPO Board Presentation on September 18, 2023**.



ALTERNATIVE 1:

As shown in **Figure 1**, this alternative eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection via a newly constructed southbound right turn lane.

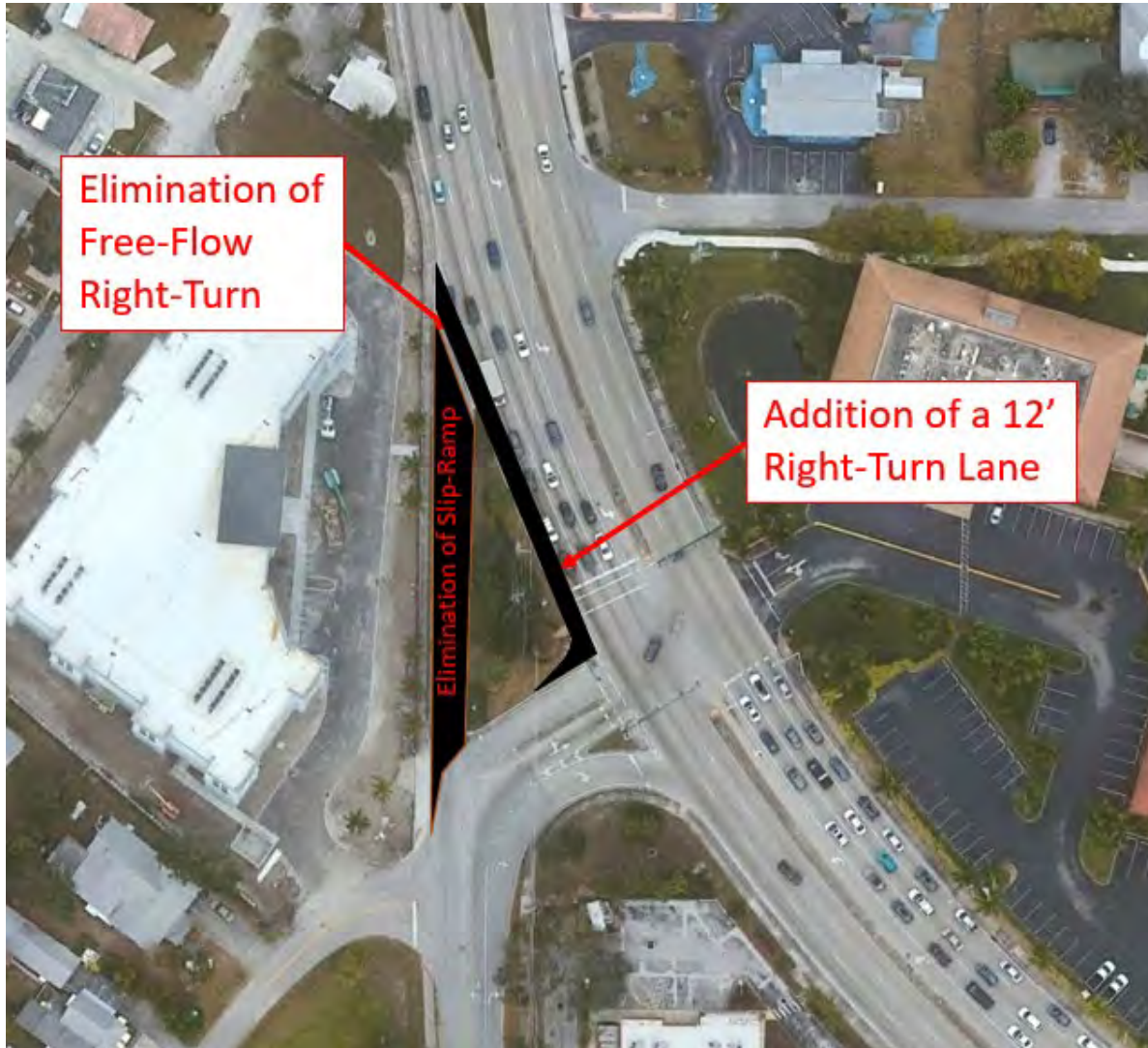


Figure 1:
Alternative 1

ALTERNATIVE 2:

As shown in **Figure 2**, this alternative is similar to Alternative 1 as it also eliminates the free-flow right-turn lane and allows for the southbound US 1 right-turn movement at the intersection via a newly constructed southbound right-turn lane. The difference is Alternative 2 has a raised channelization island at the connection to SW Palm City Road.



PRELIMINARY MULTIMODAL PROJECT RECOMMENDATIONS
AND CORRIDOR-WIDE STRATEGIES

14. US 1 at Palm City Road



Figure 2:
Alternative 2

ALTERNATIVE 3:

As shown in **Figure 3**, like the previous alternatives, this alternatives also includes the elimination of the uncontrolled right-turn from southbound US 1 onto southbound SW Palm City Road. However, instead of constructing a southbound right-turn lane, the radius on the northwest corner of the intersection is proposed to be improved. Also, a raised island with horizontal lane deflections are proposed on SW Palm City Road, just south of the intersection.



Figure 3:
Alternative 3

ALTERNATIVE 4:

As shown in **Figure 4**, this alternative eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection via a new realigned right-turn lane through the Ewing Triangle and includes construction of additional pedestrian facilities.

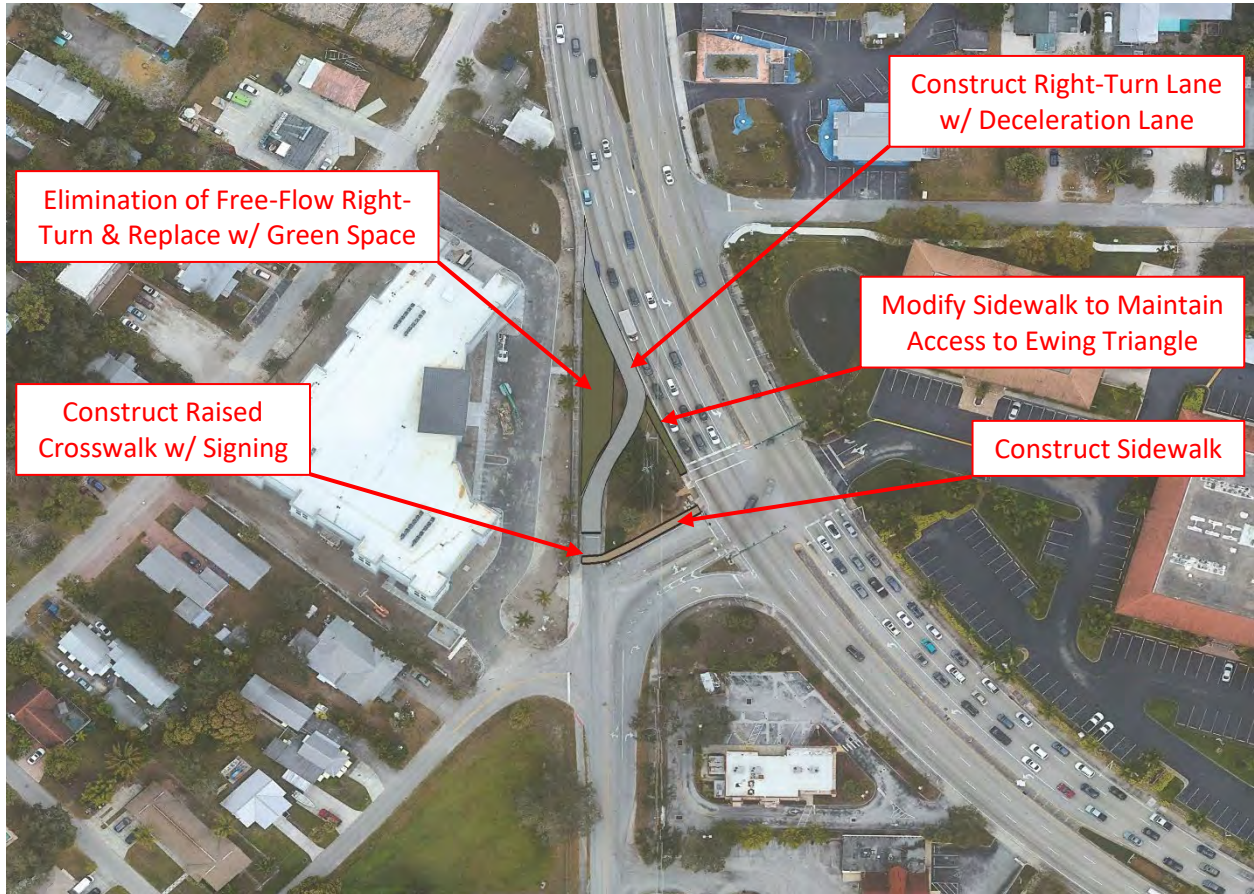


Figure 4:
Alternative 4

ALTERNATIVE 5:

As shown in **Figure 5**, this alternative eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection via a new realigned right turn lane through the Ewing Triangle and includes construction of additional pedestrian facilities. Additionally, to the south of the intersection, there is a raised island proposed to create horizontal deflection for southbound traffic on SW Palm City Road.

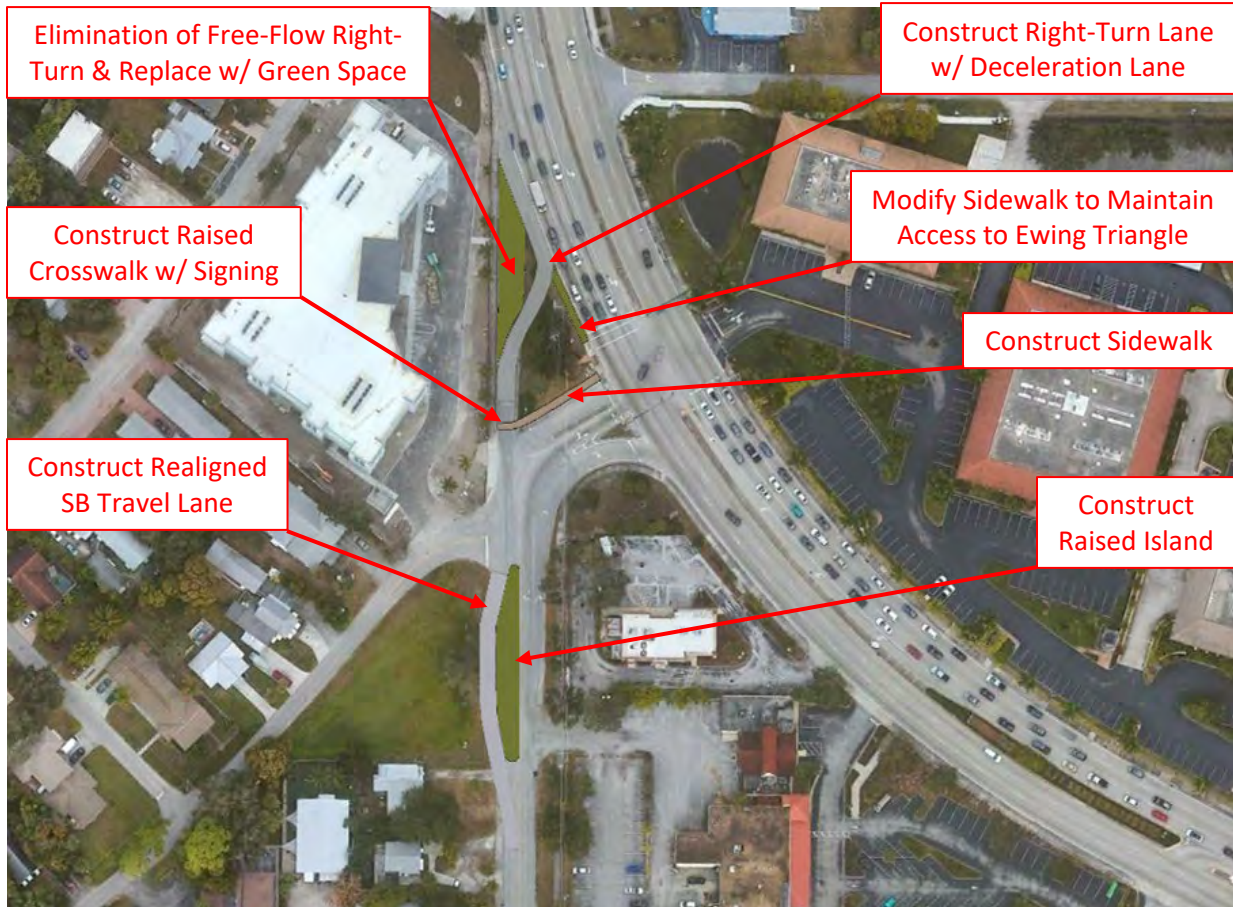


Figure 5:
Alternative 5

TRAFFIC CALMING ALTERNATIVE:

Figure 6 shows the recommended addition and/or modification to the traffic calming devices along SW Palm City Road between US 1 intersection and SW Monterey Road.

Note: This alternative was developed and presented in the MPO *Complete Streets: Access to Transit Study*.

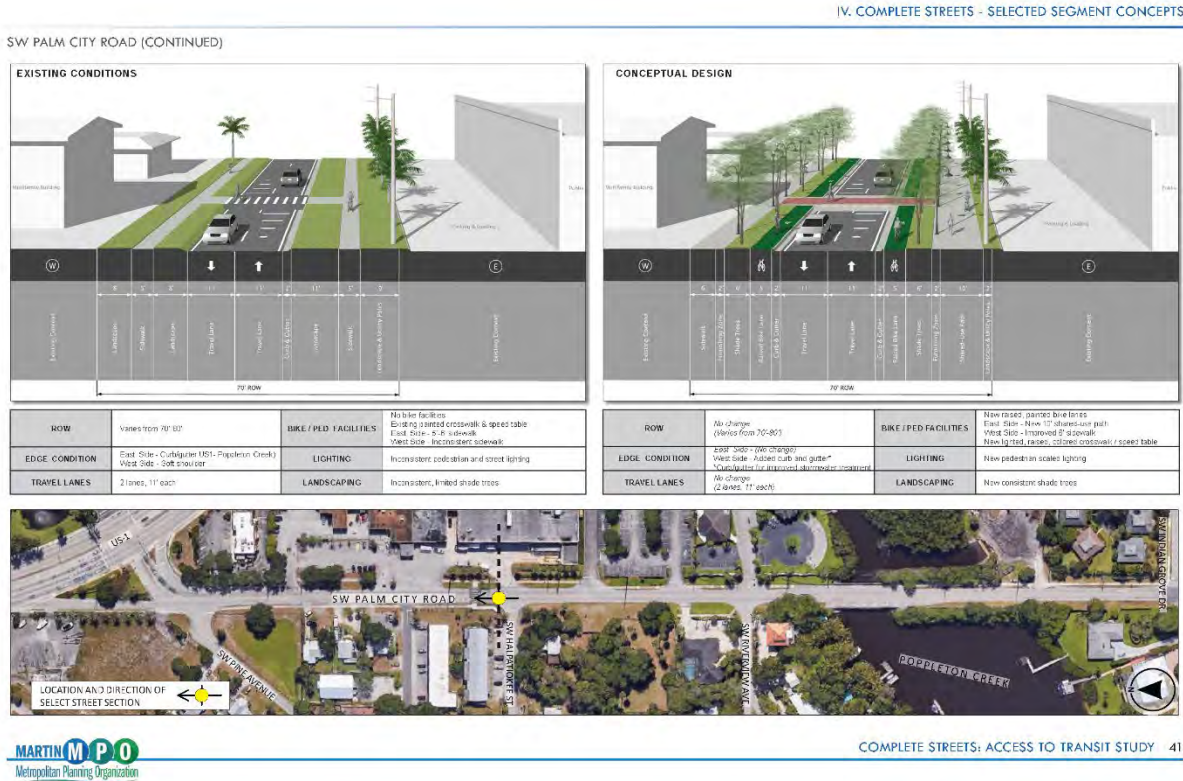


Figure 6:
Traffic Calming Alternative
SW Palm City Road

Public, Committees and MPO Board Recommendation

The alternatives shown in the previous section were presented to the PAC, at a second Public Workshop, and to the various MPO committees (Bicycle & Pedestrian Advisory Committee (BPAC), Citizens' Advisory Committee (CAC), and Technical Advisory Committee (TAC)) along with the MPO Board. The goal of each of the meetings was to determine a Preferred Alternative to move forward into the final stages of the study. This section provides details and the resulting recommendation from each of these meetings.

PROJECT ADVISORY COMMITTEE (PAC)

The second PAC meeting was held on August 1, 2023. The alternatives were presented to and discussed with the PAC. Through the discussion, several general comments were provided by various PAC members. Some of this feedback included:

- On any alternative considered, but especially on Alternative 3, there needs to be consideration for delivery trucks for the commercial businesses and Publix, as the delivery access is located on SW Palm City Road.
- Overall cost is a concern. This is especially true for Alternative 3 due to the raised island configuration. Additionally, any alternative significantly impacting the Ewing Triangle could incur significant utility related cost.
- Concern for the proposed raised crosswalk at the southern end of the new southbound turn lane for Alternatives 4 and 5.
- Committee members have heard from residents that they do not want any alternative that would cause cut through traffic on the local neighborhood streets.
- Consider including the Traffic Calming Alternative in combination with the selected alternative to help address the speeding along SW Palm City Road.

The PAC preferred alternatives were Alternatives 1 and 2.

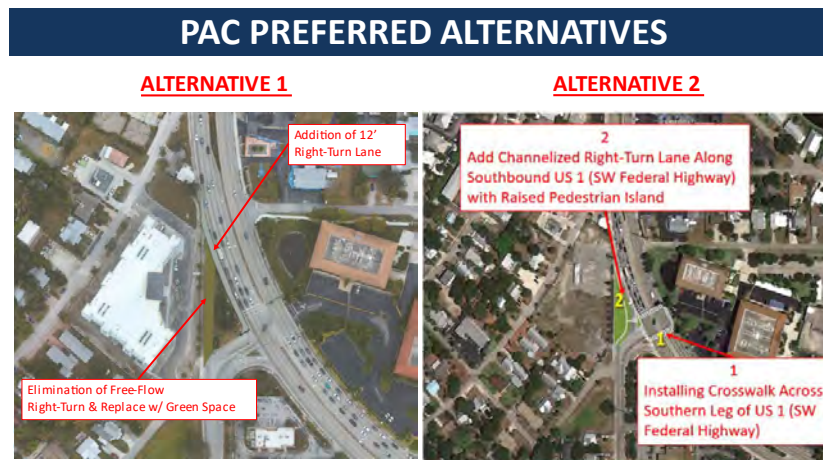


Figure 7:
PAC Preferred Alternative

PUBLIC WORKSHOP #2

The second Public Workshop was held on August 23, 2023. There were over 80 individuals that signed in and several others that did not as an unofficial headcount was approximately 100 attendees.

The meeting agenda and format included a handout with the presented alternatives, a presentation of the study background and presented alternatives and then time for the attendees to visit the stations set up for each alternative to ask questions and rank by preference each of the alternatives. Additionally, comment cards were provided to each attendee to get their thoughts and opinions related to the study and the alternatives.



Some of the comments and feedback received from the workshop are included below:

- There needs to be more enforcement for speeding along SW Palm City Road and for the prohibition of trucks utilizing SW Palm City Road.
- There needs to be some consideration for improvements to the intersection of SW Palm City Road and SW Monterey Road.
- The traffic calming alternative is a positive alternative to help address the concerns along SW Palm City Road.
- Provide a multiuse path and pedestrian improvements along SW Palm City Road.
- Is there a way to control traffic using the new right-turn lane with a traffic signal?
- All of these proposed concepts are really just band-aids and don't address the real problem.

To identify a preferred concept for the attendees, the project team utilized a “ranking” system that allowed each attendee an opportunity to rank, by use of colored dots, their most to least desired alternative. Additionally, for the Traffic Calming Alternative, each attendee could place a gold star on the board if they would like to have this alternative combined with the preferred alternative of the workshop attendees. The results of the ranking are shown in **Table 1**.

Table 1
Public Workshop #2
Alternative’s Rankings

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Yes/Acceptable	10	0	30	33	39
Maybe	6	3	12	10	4
No/Doubtful	28	37	19	10	7

Based on the rankings shown in **Table 1**, the preferred alternative by the attendees at Public Workshop #2 was Alternative 5.

As previously mentioned, the attendees also had the opportunity to provide feedback on their desire for the inclusion of the Traffic Calming Alternative into the overall preferred alternative. Overwhelming, 57 of the 60 responses preferred the inclusion of the Traffic Calming Alternative into the overall preferred alternative.



Figure 8:
Public Workshop #2 Input

The preferred alternative from Public Workshop #2 was Alternative 5 with the inclusion of the Traffic Calming Alternative.

CITY OF STUART COMMISSION

On August 28, 2023, the proposed alternatives for the study were presented to the City of Stuart Commission. Prior to the Commission’s discussion and decision on a preferred alternative, public comments were allowed in reference to the ongoing study. These comments included:

- We can do whatever construction or modifications, but we need to do something to change driver behavior.
- The problem is traffic and trucks cutting through on SW Palm City Road to get to SW Monterey Road and avoid the traffic congestion on US 1.
- The Commission should ask the MPO to get this project on FDOT’s radar and on a high priority list. Additionally, the preferred alternative should include the traffic calming alternative as part of the project.

After hearing the public comments, the Commission discussed the project and which alternative would be preferred from the City’s standpoint to address the issues and concerns of the citizens and satisfy the goals and objectives of the study. Mayor McDonald stated, “This is the first time we have come close to a consensus for improvements related to these issues with this intersection and SW Palm City Road.”

After all discussion was completed, a motion was made to recommend Alternative 5 with the Traffic Calming Alternative for the MPO to put on the priority project list. The motion was unanimously approved 5 – 0.

BPAC, CAC and TAC

On September 6 and 11, 2023, the proposed alternatives for the study were presented to the BPAC, CAC and TAC. As with each of the other meetings, several comments were noted during the discussion and a recommended/preferred alternative was identified by the committee.

Some of the comments included:

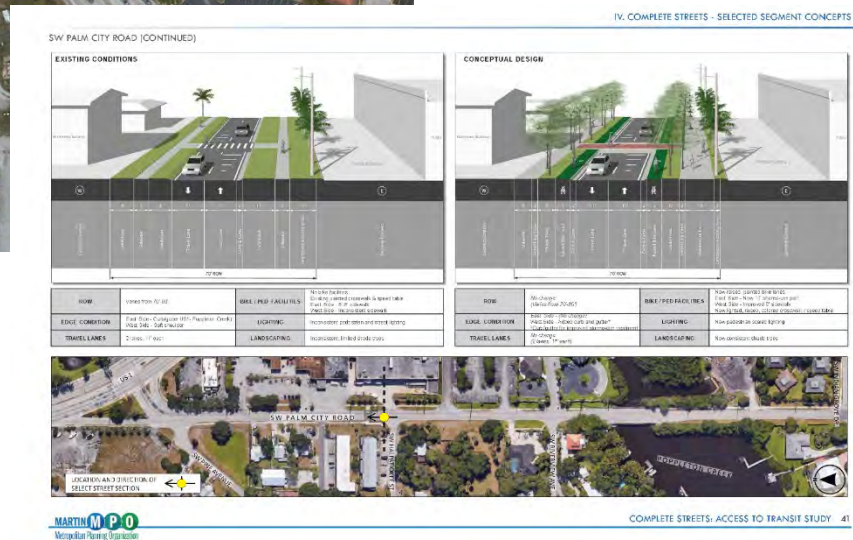
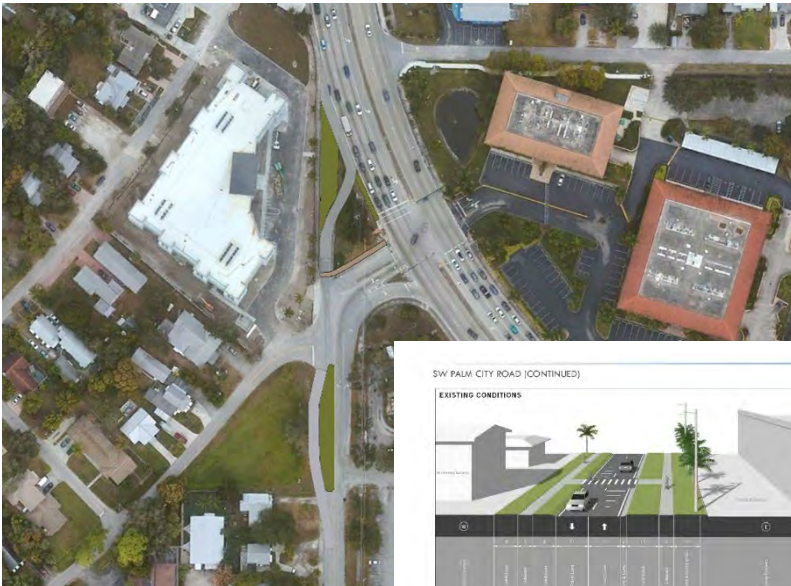
- No matter what is done at the intersection or along SW Palm City Road, if traffic is diverted from SW Palm City Road, then it will make traffic congestion worse on the major routes of US 1, Kanner Highway and SW Monterey Road.
- Traffic control at the connection of the right-turn lane with SW Palm City Road is critical. This needs to be closely evaluated and consideration given to coordinated signalization with the main intersection of US-1 and SW Palm City Road.
- With whichever alternative, the crosswalks at the intersection of US and SW Palm City Road should be included in the concept.
- The preferred alternative should include the Traffic Calming Alternative.

The preferred alternative by the committees was Alternative 5 with the inclusion of the Traffic Calming Alternative and crosswalks at US-1 and SW Palm City Road. Additionally, it was recommended the project be put on the priority list of projects for the MPO.

MPO BOARD

On September 18, 2023, the project team presented the “study-to-date” and the proposed alternatives to the MPO Board for consideration of a preferred alternative. During the presentation, the preferences and recommendations of the public, committees and the City of Stuart were discussed with the Board.

The MPO Board had a lengthy discussion about the pro-cons of each alternative, the cost associated with the project, and consideration of the recommended/preferred alternative from the previous bodies. The direction provided by the MPO Board for moving the study and preferred alternative forward was to advance Alternative 5 and provided cost estimates for the inclusion of the Traffic Calming Alternative.

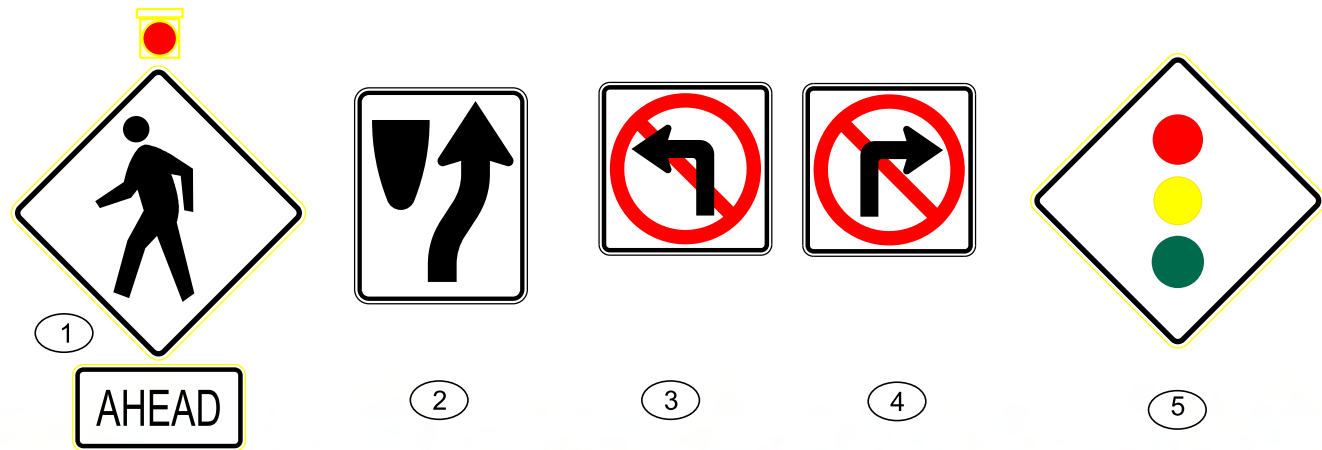


Concept Development

With the recommendation and direction from the various groups and the ultimately the MPO Board, Alternative 5 along with the Traffic Calming Alternative were advanced into the final stages of the study. This final task of the study included the development of the final concept drawing and detailed Opinion of Probable Cost for the preferred alternative. The final concept drawing is shown on the next page as **Figure 9**.

For the Opinion of Probable Cost, the FDOT unit cost database was used for the average unit cost of the potential construction components. With this being a concept plan and not an actual field survey based design, some assumptions were made for the calculation of quantities and the specific components of the improvement. The Opinion of Probable Cost also allocated allowances for design, maintenance of traffic, mobilization and construction engineering inspection. The improvements at the intersection of US 1 and SW Palm City Road were evaluated using aerial imagery, field review observations, and available GIS data, to develop the Opinion of Probable Cost. The data used for the development of the Opinion of Probable Cost was obtained from the Historical Item Average Cost Reports available via the FDOT website ([Historical Item Average Costs Reports \(fdot.gov\)](https://www.fdot.gov/historical-item-average-cost-reports)).

For the Traffic Calming Alternative, being that this was not part of the actual study area and not part of the study scope, the concept and cost associated with the modifications were extracted from the MPO's *Complete Streets: Access to Transit Study* and the MPO's *2045 Long Range Transportation Plan (LRTP)*. The only contained data for a segment of SW Palm City Road from US-1 to 400 feet north of SW Indian Grove Drive. As a method of including the full segment of SW Palm City Road, a basic per linear foot of improvement cost was calculated and then applied to the remaining length of the roadway to be improved.



1. CONSTRUCT 14' RIGHT TURN LANE WITH CURB AND GUTTER, A 5' SIDEWALK AND TRAFFIC SIGNAL.
2. INSTALL PEDESTRIAN CROSSING ACROSS SOUTHBOUND RIGHT TURN LANE WITH PEDESTRIAN HEADS AND PUSH BUTTONS.
3. REMOVE EXISTING FREE-FLOW LANE AND REPLACE WITH LANDSCAPED ISLAND (GREEN HATCH AREA).
4. REMOVE THE SEGMENT OF SIDEWALK ALONG US-1 AND EWING TRIANGLE (BLUE HATCH AREA).
5. CONSTRUCT RAISED ISLAND AND 12' SOUTHBOUND TRAVEL LANE WITH A LANE SHIFT.
6. CONSTRUCT 5' SIDEWALK ON WEST SECTION OF LANE SHIFT ALONG SW PALM CITY ROAD.
7. ALL PAVEMENT MARKINGS SHALL BE REAPPLIED WITHIN THE STUDY AREA SHOWN.
8. INSTALL CROSSWALK ACROSS SOUTHERN LEG OF US-1 AND SW PALM CITY ROAD INTERSECTION.



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Table 2 shows the Opinion of Probable Cost for Alternative 5, including current year (2023) and a horizon span of 2026-2030. To account for a future cost, a factor of 1.25 was applied to the base year 2023 cost. This factor was used in order to be consistent with the data provided in the *2045 Long Range Transportation Plan*.

**Table 2
Opinion of Probable Cost
Alternative 5 Plus Traffic Calming Alternative**

ALTERNATIVE	LIMITS	Opinion of Probable Cost
Alternative 5	Intersection of US-1 and SW Palm City Road	\$2,644,172.00
Traffic Calming Alternative	US-1 to 400' North of SW Indian Grove Drive	\$826,266.00
Traffic Calming Alternative	400' North of SW Indian Grove Drive to 500' North of SW Monterey Road	\$2,006,646.00
PRESENT DAY COST		\$5,477,084.00
2026-2030 COST (utilizing the 1.25 factor from LRTP)		\$6,846,355.00

The estimated quantities and FDOT based unit cost sheet used for the determination of the Opinion of Probable Cost is included as **Attachment D**.

ATTACHMENTS

ATTACHMENT A

EXISTING CONDITIONS
TECHNICAL MEMORANDUM

US 1 AT SW PALM CITY ROAD FEASIBILITY STUDY EXISTING CONDITIONS



**US 1/SR 5/Federal Highway at SW Palm City Road
Multimodal Intersection Improvement Feasibility Study**

Stuart, Florida

**EXISTING CONDITIONS
TECHNICAL MEMORANDUM**

Prepared For:
Martin MPO

Prepared By:
The Corradino Group
Franklin, TN

June 2023

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Introduction

The US 1/SR 5/Federal Highway at SW Palm City Road Multimodal Intersection Improvement Feasibility Study (US 1 at SW Palm City Road Feasibility Study) is identified for completion in the Martin MPO's FY22/23 – FY 23/24 Unified Planning Work Program. This Existing Conditions Report contains information on the data collected, the initial evaluations, the existing traffic operations, and documentation on the input from the initial Project Advisory Committee (PAC) meeting and first Public Workshop.

Project Information

The study area is located at City of Stuart, Martin County, Florida. The intent of the study is to improve safety and mobility for all modes at the US 1 at SW Palm City Road intersection, as well as manage speeds along SW Palm City Road. The scope of services includes identifying and evaluating conceptual alternatives and gathering input from the public and relevant stakeholders to recommend an alternative to eliminate the uncontrolled right turn from southbound US 1 onto southbound SW Palm City Road and deter traffic from using SW Palm City Road.



Traffic Data Collection

Corradino collected and reviewed available FDOT and Martin County traffic data in the immediate vicinity of the study intersection. Florida Traffic Online site provides online access to the Florida Department of Transportation’s (FDOT) Traffic Information. The traffic information accessible through this site is released annually. Initial traffic data was collected through this online website to provide an overview of the traffic characteristics and movements in and around the study area. This site provided traffic data on AADT, AM Peak, and PM Peak periods. **Figure 1** shows the map for AADTs in the study area. **Table 1** shows the summary of peak hour periods.



Figure 1 Study Area AADTs

Table 1
Study Area Peak Hour

ID (Portable Traffic Monitoring Site)	Road Name	Direction	AM Peak Hour	PM Peak Hour
898509	SW Palm City Road	Northbound	7:45-8:45	4:30-5:30
		Southbound	7:30-8:30	4:30-5:30
		Combined	7:45-8:45	4:30-5:30
895003	S Kanner Highway	Northbound	8:00-9:00	3:00-4:00
		Southbound	7:15-8:15	4:30-5:30
		Combined	7:45-8:45	4:30-5:30
895006	US 1	Northbound/Westbound	8:45-9:45	4:30-5:30
		Southbound/Eastbound	7:15-8:15	12:00-1:00
		Combined	8:00-9:00	4:30-5:30
895030	S Colorado Avenue	Data not available		

The table shows that the AM and PM Peak period varies between 7:45 AM – 9:00 AM and 4:30 PM - 5:30 PM, respectively. The peak period data for the midday period was not available as part of the portable traffic monitoring site. Therefore, traffic data collected by Martin County Traffic Division near the SW Palm City Road slip ramp from January 18, 2023 through January 23, 2023 was reviewed and consulted to obtain an understanding of the peak traffic periods in the specific area of the US 1 and SW Palm City Road intersection.

Based on the collected traffic data and on-site observations, it was determined a considerable amount of traffic travels on the southbound slip ramp between 12:00 PM and 3:00 PM. Based on this information, Corradino identified the AM and Midday/PM traffic movement count periods to be 7:00 AM – 9:00 AM, and 12:00 PM – 6:00 PM, respectively. Once the count periods were identified, turning movement counts were collected at each of the study area intersections listed below:

- US 1 and SW Palm City Road
- US 1 and S Kanner Highway/S Colorado Avenue
- S Kanner Highway and SW Monterey Road

Additionally, Corradino collected average daily traffic (ADT) counts with speed data at the following locations:

- Slip ramp from US 1 to SW Palm City Road – southbound free-flow movement
- SW Palm City Road – just south of SW Riverview Street

General Data Collection

In addition to the traffic data, Corradino collected and analyzed relevant data from available sources, including outreach partner agencies for traffic signal timings, land use, crash history, transit operations, bicycle and pedestrian traffic & infrastructure, activity data and programmed projects. As part of programmed projects, the following studies and plans were collected:

- FDOT Resurfacing Project (FM 446110-1)
- FDOT Right Turn Lane Project (FM 446257-1)
- The Intersection Operations Study – City of Stuart, prepared by FDOT (June 2014)
- Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies (June 2015)
- Martin MPO Bicycle, Pedestrian & Trails Master Plan (November 2017)
- Martin MPO Complete Streets: Access to Transit Study (June 2020)
- City of Stuart Federal Highway Master Plan (August 2021)



Field Review

Corradino conducted a field review of the intersection and the study area. The field review was conducted on January 30, 2023, and January 31, 2023, during the AM, Midday and PM Peak periods. During the site visit, Corradino gathered data on intersection sight distance, constraints or potential conflicts related to utilities, geometrics, property/ROW, visible ground features, buildings, etc.

In this visit, traffic operations, pedestrian activities, and heavy vehicle movements in the study area were also monitored closely and notes were taken. Some of the key observations from the site visit are provided below:

- Vehicles utilizing the free flow right-turn (slip ramp) from US 1 to SW Palm City Road continue through at or above the posted speed limit.
- The free-flow (slip ramp) right-turn volume doesn't appear to be heavily impacted by congestion levels along US 1. Throughout the day, a significant percentage of vehicles utilize the slip ramp even when US 1 appears to not be overly congested.
- There is some pedestrian activity along US 1 in the vicinity of the US 1 and SW Palm City Road intersection. Pedestrians appear to traverse to/from the immediate adjacent residential areas to the Publix shopping center area. Several pedestrians were observed crossing the slip ramp.
- There are rumble strips on the slip-ramp, however, they appear to be significantly worn down and are not effective in slowing traffic speeds.
- There is a brick wall/monument located in the triangular island. The monument has a plaque stating:
 - "Ewing Triangle – Officially designated by the Stuart Commissions on Nov. 9, 1987 to commemorate the outstanding public services and dedication to conservation policies by George S. Ewing. This plaque installed by the Men's Garden Club of Martin County."



- There are a variety of utilities located within the Ewing Triangle and throughout the intersection area. These utilities will conflict with the various intersection modification concepts.
- With any modification to the US 1 curb line on the west side of the intersection, the traffic signal will be impacted and may require a significant modification or total rebuild.
- During the PM period, there is a significant southbound queue on SW Palm City Road at SR 714 (SW Monterey Road).
- Overall, the signal operation at US 1 and SW Palm City Road appears to function acceptably during non-peak periods.

Multimodal Evaluation

Sidewalks/Crosswalks

Sidewalks are available along SW Palm City Road and US 1 in the study area. However, there are no physical barriers to protect pedestrians. Physical barriers have the added benefit of providing speed reduction and further enhancing the safety of all roadway users when the barrier is on-street parking, etc. that creates a buffer zone between the pedestrians and vehicular traffic. There are no facilities (e.g., bike lanes, shared use path) existing for bicyclists in the vicinity of the intersection of SW Palm City Road and US 1.

In the study intersection, marked crosswalks are provided on the north, east and west legs of the intersection. During this site visit, these crosswalks were worn out not highly visible to the users. Additionally, a marked crosswalk is located along US 1 for crossing the slip ramp to SW Palm City Road.

Public Transit

Marty On The Move is a public transit system operated by Martin County Public Transit. *Marty on the Move* (the 2020-2029 Transit Development Plan) is consistent with the requirements of the State of Florida Public Transit Block Grant Program. There are two Marty bus routes with stops on US 1 in Stuart. The US 1 and SW Palm City Road study area intersection is located on Route 1 that runs the length of US 1 from SE Cove Road to the south to the Treasure Coast Connector which operates in St. Lucie County to the north. However, there are no stops within the functional area of the study intersection. The nearest stops on US 1 are located south of the study intersection near the interaction with S Kanner Highway/S Colorado Avenue.

Bicycles and Pedestrian Counts

To understand the bicycle and pedestrian movement at the intersection of SW Palm City Road slip ramp and US 1, bicycle and pedestrian movement counts were collected from Martin County Traffic Division. The following graphic (**Figure 2**) depicts the count from January 18th through January 23rd. The graphic also shows the amount of traffic taking a right from US 1 onto the SW Palm City Road slip ramp. It is evident from the figure that a substantial number of bicyclists and pedestrians travel northbound and southbound while crossing the slip ramp.

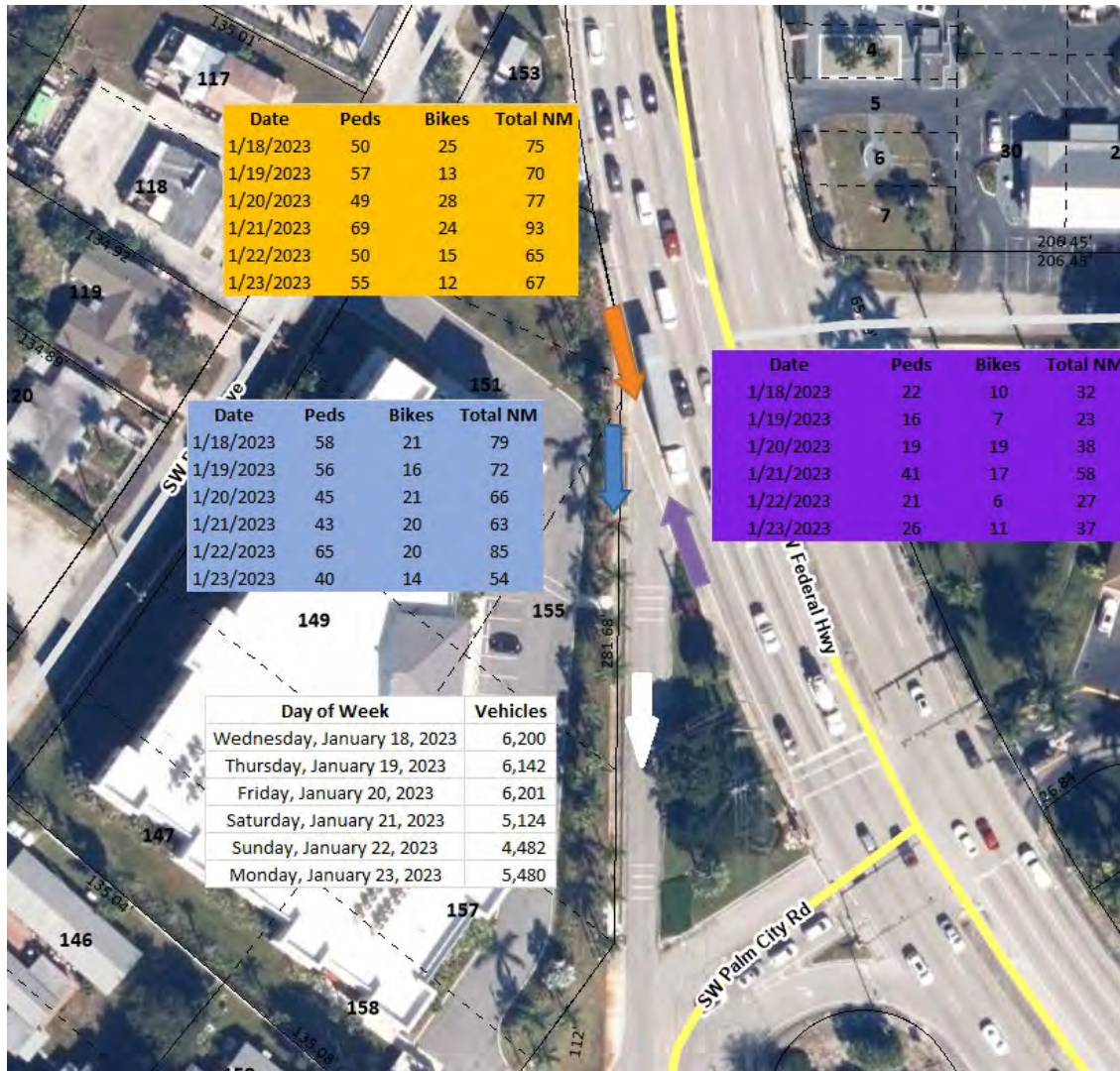


Figure 2 Bicycle and Pedestrian Movements and Counts

Literature Review

A thorough review of the recent state and local plans and studies related to the bicycle and pedestrian traffic was conducted to better understand the potential future improvements in the study area. After careful evaluation, the following reports were found to relate to the study area and details related to the study are provided:

- Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies (June 2015)
- Martin MPO Bicycle, Pedestrian & Trails Master Plan (November 2017)
- Martin MPO Complete Streets: Access to Transit (June 2020)
- City of Stuart Federal Highway Master Plan (August 2021)

Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies (June 2015)

This study identified potential multimodal infrastructure projects and strategies designed to support the overall goal of increasing mobility options along the US 1 Corridor. The summary of the recommended improvements is outlined in **Table 2** and **Figure 3**.



Figure 3 Study Area Multimodal Recommendations
(Source: Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies, June 2015)

Table 2
Study Area Recommended Multimodal Projects
 (Source: Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies, June 2015)

ID	Location	Description
1	Intersection south leg	Consider installing a crosswalk across the southern leg of US 1; would require pulling the northbound US 1 stop bars back to the median nose.
2	Southbound right-turn slip lane	The southbound “slip lane” from US 1 onto SW Palm City Road allows for high-speed right turn movements and reduces the likelihood that drivers will yield to non-motorized users traveling along the west side of US 1. Drivers that do stop/slow in the outside lane to yield may create rear-end and sideswipe crash risks. This high-speed movement may also contribute to speeding along SW Palm City Road, a known cut-through route from southbound US 1 to westbound SR 714 (SW Monterey Road). Evaluate closing the southbound slip-lane and reconstructing the existing island to accommodate a channelized right turn lane along southbound US 1 with a raised pedestrian island. Design of the right turn lane and smaller, right turn island should be done in such a way as to avoid relocation of the electric transmission pole. Access to the property between SW Palm City Road and SW Bryant Ave may be provided by a driveway in the right turn lane.

Martin MPO Bicycle, Pedestrian & Trails Master Plan (November 2017)

The Master Plan builds from the non-motorized transportation foundation set by the 2040 Long Range Transportation Plan (LRTP), known as Moving Martin Forward, and prior plans and studies including the Bicycle and Pedestrian Action Plan. This study recommends building a bike lane on SW Palm City Road (**Figure 4**). The project length extends from US 1 to SW Monterey Road. The following guidance is provided for this recommended bike lane:

- A portion of a roadway designated through pavement markings and striping for exclusive or preferential use by bicyclists, typically 4 or 5 feet wide.
- Route, way-finding signage, and pavement markings to guide bicyclists and raise driver awareness at key locations.
- Can be enhanced by green pavement marking, which will increase visibility.

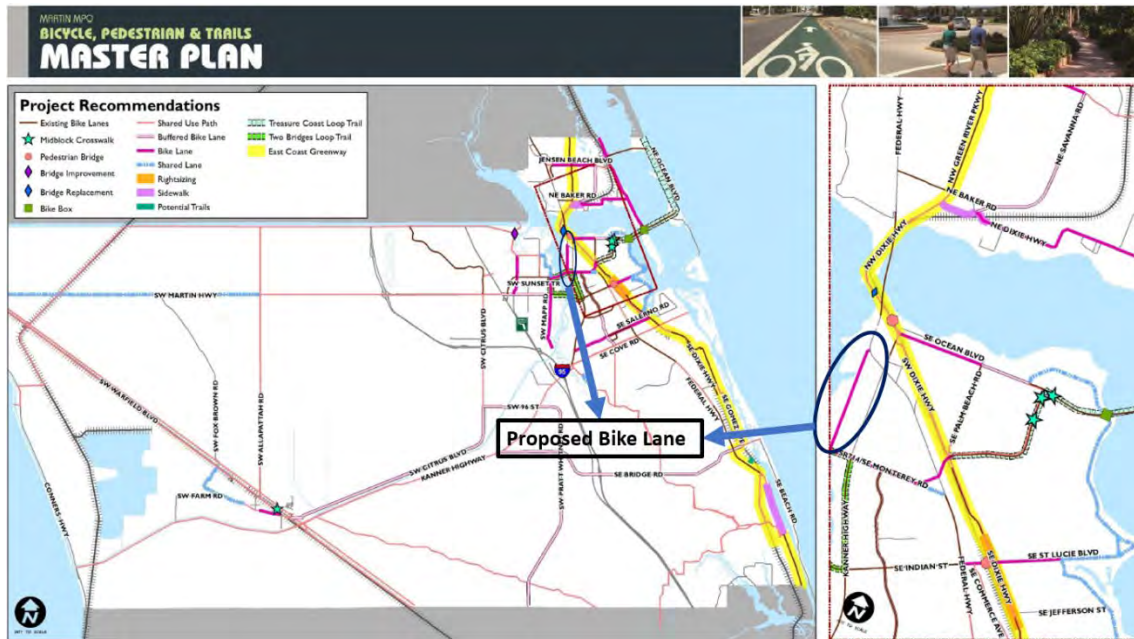


Figure 4 Proposed Bike Lane on SW Palm City Road
 (Source: Martin MPO Bicycle, Pedestrian & Trails Master Plan, November 2017)

Martin MPO Complete Streets: Access to Transit (June 2020)

The purpose of the MPO’s Complete Streets: Access to Transit Study is to improve efficiency, effectiveness and safety for transit users; enhance safety, functionality, and quality of life; and expand the economic benefits to the community. As a representative Tier One segment in the study, the conceptual design recommendations for SW Palm City Road included:

- Installing curb and gutter on the west side of the roadway for improved stormwater treatment.
- Installing new raised, painted bike lanes.
- Installing a new 10’ shared-use path on the east side of the roadway.
- Improving the sidewalk connectivity with a 6’ sidewalk on the west side of the roadway.
- Installing new lighted, raised, colored crosswalk/speed tables.
- Installing new pedestrian scaled lighting.
- Installing new consistent shade trees.

The conceptual design from the study is shown in **Figure 5**.

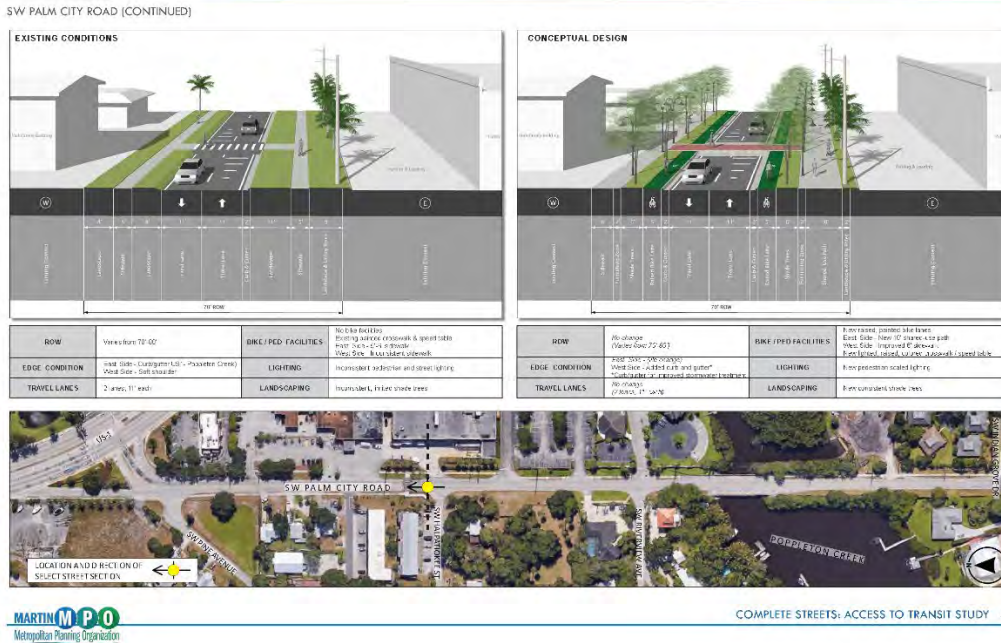


Figure 5 Complete Streets Concept on SW Palm City Road
(Source: Martin MPO Complete Streets: Access to Transit, June 2020)

City of Stuart Federal Highway Master Plan (August 2021)

In coordination with the City of Stuart and with funding from the Department of Economic Opportunity the developed Master Plan provides clear design recommendations for detailed urban design and redevelopment scenarios along the Federal Highway corridor in Stuart. Through this study, it has been noted that there are inconsistencies between the assigned Future Land Use (FLU) designations and Zoning categories and the desired community vision and national and regional market trends. For this reason, the study recommends investigating the assignment of land to Commercial FLU and B-1 Zoning through much of the corridor. This redevelopment plan illustrates concepts for the Publix shopping center at the SW corner of US 1 and Kanner Highway.

Publix redevelopment plan proposes a shift in land uses favoring in-town residential. In addition, this plan recommends rebuilding Publix in an urban multi-story format. An obvious benefit to the multi-story store and structured parking is that far less land is consumed with asphalt. This creates other redevelopment opportunities and can make bicycle and pedestrian access safer and more inviting which is essential for those who might be transit dependent. In addition, the removal of surface parking greatly reduces heat gain and can enable more robust landscaping.

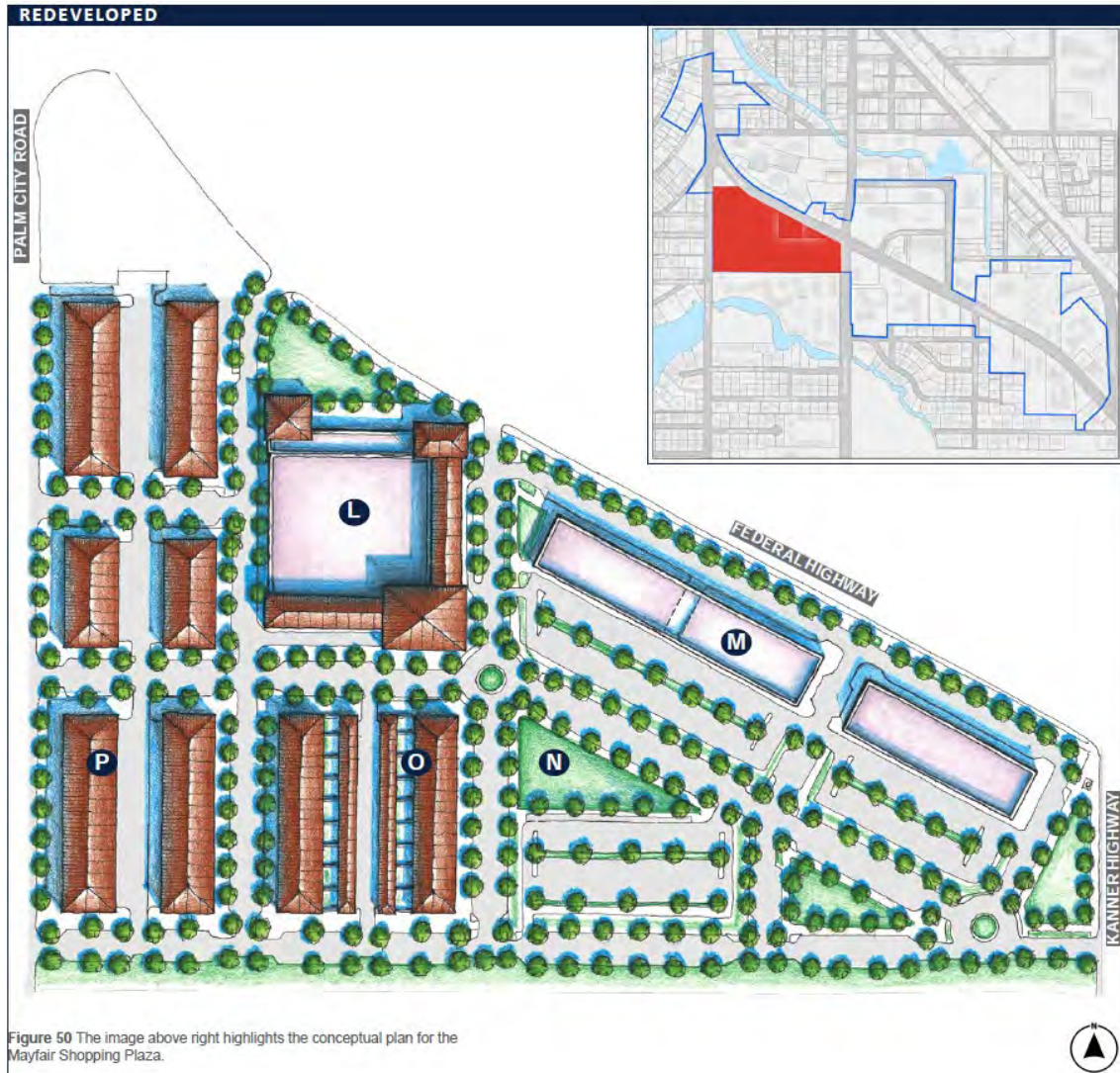


Figure 50 The image above right highlights the conceptual plan for the Mayfair Shopping Plaza.

Figure 6 Publix Redevelopment Plan
(Source: City of Stuart Federal Highway Master Plan, August 2021)

Crash History

Crash data for the study area was collected from Signal Four Analytics website for years 2018 through January 2023. The crash data included crashes that occurred on US 1 (between SW St Lucie Crescent and Publix North Access) and SW Palm City Road (between US 1 and SW Halpatiokee Street). Details of every crash was provided with different crash category: event, driver, vehicle etc. At first, crashes were compiled together using the crash report number. After that, crashes were separated for SW Palm City Road and the intersection of US 1 and SW Palm City Road. The summary of crash history is provided in **Table 3**. **Figure 7** shows the crashes for the study area in a map.

Table 3
Study Area Crash History

Intersection of US 1 & SW Palm City Road				
Collision Type	Injury	No Injury	Serious Injury	Total
Rear End	9	30	0	39
Sideswipe	0	13	0	13
Left Turn	4	0	0	4
Others	4	3	1	8
Total	17	46	1	64
Palm City Road				
Collision Type	Injury	No Injury	Serious Injury	Total
Head On	1	0	0	1
Left Turn	0	2	0	2
Off Road	2	2	0	4
Other	0	1	0	1
Rear End	0	6	0	6
Sideswipe	0	1	0	1
Total	3	12	0	15

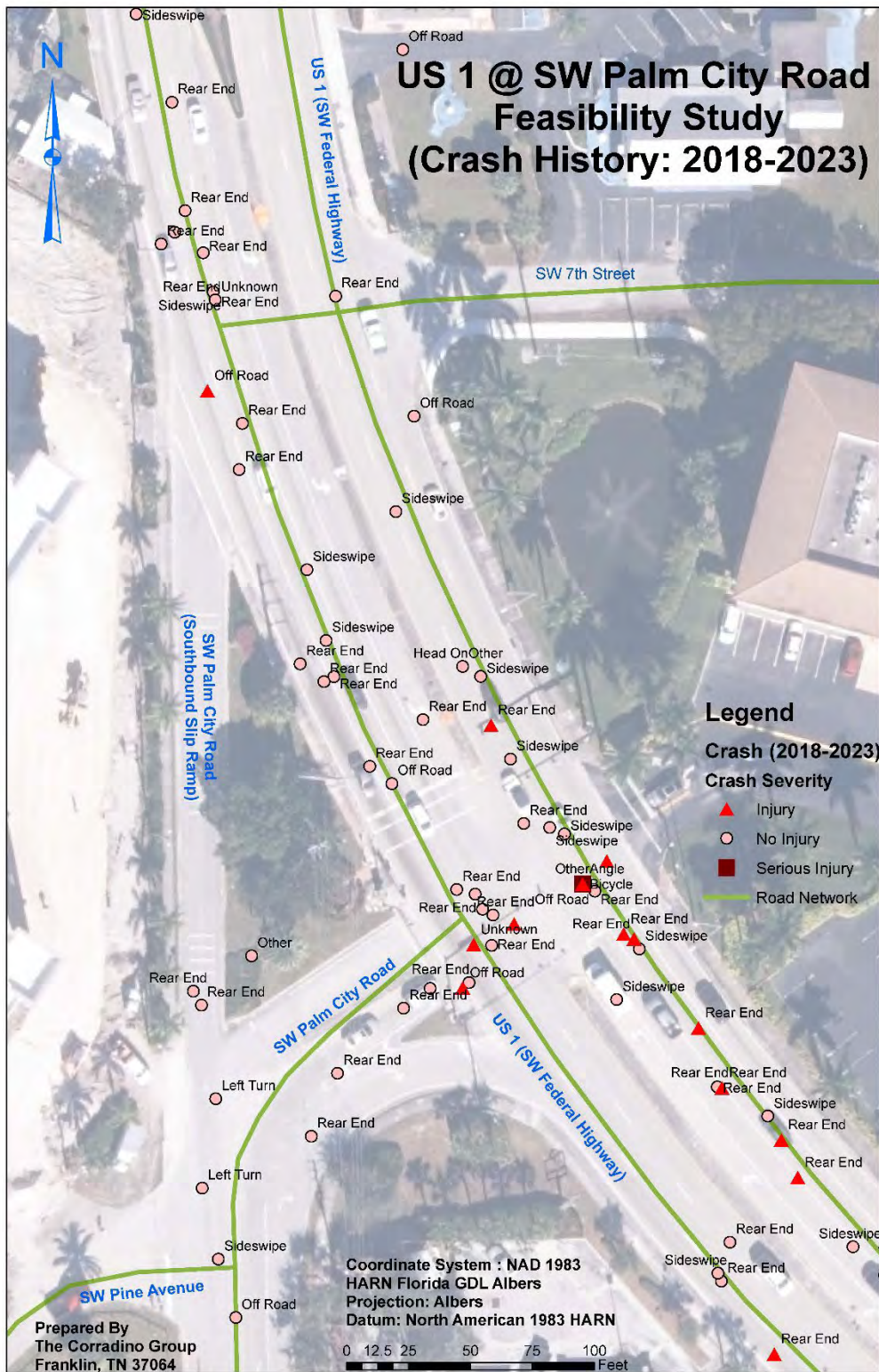


Figure 7 Study Area Crash Diagram

At the intersection of US 1 and SW Palm City Road, most of the crashes are non-injury crashes. The governing crash collision types are rear-end and sideswipe. On the corridor of SW Palm City Road, the crashes are mostly due to rear-end collisions and road departure.

There are a total of 3 non-motorist crashes in the study area. Two of them are bicycle injury crashes and one is related to a pedestrian serious injury crash. According to the crash data, one pedestrian and one bicycle crash occurred on the intersection of US 1 and Palm City Road. Another bicycle crash occurred at the intersection of US 1 and SW McPherson Street.

Existing Traffic Operations

Traffic counts were collected on Tuesday, February 28, 2023, during the AM and Midday/PM peak periods while school was in full session. The AM and Midday/PM period was from 7:00 AM – 9:00 AM and 12:00 PM - 6:00 PM, respectively. The turning movement count sheets are included in **Appendix A**.

Operational analysis of the roadway network in the study area was conducted using the latest version of Synchro Traffic Analysis Software. The operational analysis resulted in a Level of Service (LOS) for each intersection during the AM and Midday/PM peak periods.

The LOS is based on the industry standard outlined in the *Highway Capacity Manual 2010*. The LOS results range from an “A” to an “F” with “A” being the best and “F” the worst. For intersections, the LOS is based on the volume-to-capacity ratio and amount of delay experienced by each movement. As shown in **Table 4**, for unsignalized intersections, the LOS is reported for critical turning movements based on delay and volume-to-capacity (v/c) ratio, and for signalized intersection the LOS is reported for each approach and for the overall intersection based on delay.

The LOS for the existing traffic volumes at the study intersections is shown in **Table 5** and **Appendix B** contains the LOS reports.

Table 4
LOS Ranges

LOS	Control Delay/Vehicle (s/veh)	
	Unsignalized	Signalized
A	0 – 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Table 5
Existing Conditions LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	90.6	349	0.85	F	102.7	#587	0.92
	Eastbound Approach	F	90.6	-	-	F	102.7	-	-
	Westbound Through/Left-Turn	F	94.1	29	0.17	F	95.6	66	0.52
	Westbound Right-Turn	F	84.8	0	0.03	F	90.2	0	0.17
	Westbound Approach	F	91.2	-	-	F	93.3	-	-
	Northbound Left-Turn	E	79.0	m54	0.51	F	84.3	m41	0.54
	Northbound Through	E	59.2	m149	0.52	E	64.4	m581	0.79
	Northbound Through/Right-Turn	E	59.4	-	-	E	64.8	-	-
	Northbound Approach	E	59.9	-	-	E	64.9	-	-
	Southbound Left-Turn	D	42.8	106	0.21	E	74.1	15	0.05
	Southbound Through	C	22.0	819	0.77	C	25.5	484	0.59
	Southbound Through/Right-Turn	C	23.7	-	-	C	26.4	-	-
	Southbound Approach	C	23.1	-	-	C	25.9	-	-
	Overall Intersection	D	39.7	-	-	D	54.9	-	-
US 1 and SR 76/Kanner Highway	US 1 Eastbound Left-Turn	E	60.0	m246	0.62	E	64.4	245	0.41
	US 1 Eastbound Through	F	527.9	#1408	2.10	F	256.2	#929	1.37
	US 1 Eastbound Through /Right-Turn	F	563.0	-	-	F	262.9	-	-
	US 1 Eastbound Approach	F	498.0	-	-	F	241.5	-	-
	US 1 Westbound Left-Turn	F	179.8	#318	1.06	F	99.2	#440	0.91
	US 1 Westbound Through	F	384.8	#534	1.61	F	305.5	#1012	1.60
	US 1 Westbound Through /Right-Turn	F	401.6	-	-	F	311.9	-	-
	US 1 Westbound Approach	F	358.5	-	-	F	278.0	-	-
	Northbound Left-Turn	D	35.3	m255	0.56	E	59.9	#687	1.09
	Northbound Through	C	30.0	m270	0.51	D	39.4	283	0.44
	Northbound Right-Turn	-	-	m102	0.38	-	-	53	0.29
	Northbound Approach	C	32.6	-	-	D	51.8	-	-
	Southbound Left-Turn	F	85.5	166	0.67	F	117.3	#309	0.97
	Southbound Through	E	75.9	188	0.64	E	72.7	337	0.74
	Southbound Right-Turn	E	68.7	0	0.20	E	65.4	89	0.36
	Southbound Approach	E	77.2	-	-	E	79.5	-	-
Overall Intersection	F	310.8	-	-	F	184.9	-	-	
SR 76/S Kanner Highway and	Eastbound Left-Turn	F	94.3	#721	1.18	F	112.9	#397	1.02
	Eastbound Through	D	49.3	633	0.87	D	41.8	396	0.59
	Eastbound Right-Turn	C	35.0	55	0.26	C	34.5	0	0.12

SW Monterey Road	Eastbound Approach	E	67.1	-	-	E	68.4	-	-
	Westbound Left-Turn	F	92.1	#186	0.83	F	83.9	196	0.75
	Westbound Through	F	84.6	380	0.83	E	63.6	600	0.89
	Westbound Through/Right-Turn	F	84.9	-	-	E	63.3	-	-
	Westbound Approach	F	86.8	-	-	E	67.9	-	-
	Northbound Left-Turn	F	101.4	#391	0.94	F	125.5	#516	1.04
	Northbound Through	F	89.0	#425	0.99	F	81.1	#505	0.96
	Northbound Thru/Right-Turn	F	105.8	-	-	F	93.9	-	-
	Northbound Approach	F	96.0	-	-	F	93.7	-	-
	Southbound Left-Turn	E	64.9	m125	0.69	E	65.3	234	0.61
	Southbound Through	E	74.7	m218	0.98	E	69.2	#514	0.95
	Southbound Right-Turn	A	8.7	m34	0.31	D	51.3	493	0.70
	Southbound Approach	E	60.0	-	-	E	62.5	-	-
	Overall Intersection	E	74.8	-	-	E	73.3	-	-
SW Palm City Road and SW Pine Avenue	Eastbound Approach	C	16.2	3	0.02	C	18.4	3	0.03
	Westbound Approach	C	19.5	13	0.16	D	25.4	28	0.27

m = Volume for 95th percentile queue is metered by upstream signal

= 95th Percentile volume exceeds capacity, queue maybe longer

US 1 and SW Palm City Road

- Overall, the intersection operates at LOS D with an acceptable delay.
- All movements on eastbound approach of SW Palm City Road and Westbound Driveway approach operate at LOS F. This situation is common for low volume minor roads approaching high volume major roads. However, eastbound SW Palm City Road left-turn/thru movement has a 95th percentile queue length of 587 feet in the PM period that leads to traffic backing up beyond SW Indianola Street.
- The northbound US 1 approach movements operate at LOS E and/or worse. In the PM peak period, the northbound through movement has a 95th percentile queue length of 581 feet that leads to traffic backing up to the south access at the nearby Publix located on the west side of US 1.
- The southbound approach movements operate under LOS D or better with the exception of the southbound left-turn movement that operates at LOS E in the PM peak period. Despite having a LOS C, surprisingly, the southbound through movement has a 95th percentile queue length of 819 feet in the AM peak period.

US 1 @ SR 76/S. Kanner Highway

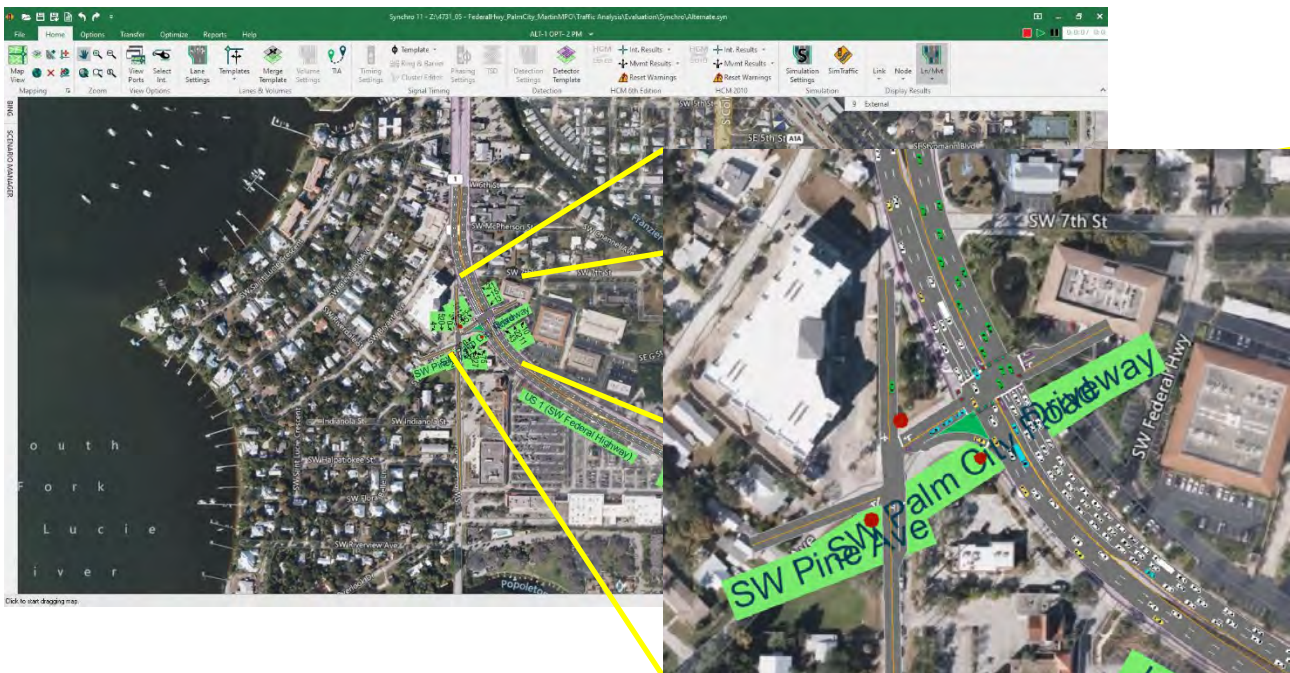
- Overall, the intersection operates at LOS F both in the AM peak and PM peak periods with a delay of 310.8 seconds and 184.9 seconds, respectively.
- The eastbound approach movements operate at LOS E or worse. Notably, in the AM peak period the eastbound through movement has a 95th percentile queue length of 1,408 feet that leads to traffic backing up upstream to the intersection of US 1 and SW Palm City Road. Also, in the

AM peak period, both eastbound through and shared through/right-turn movements have a delay of 527.9 seconds and 563.0 seconds, respectively.

- The US 1 westbound approach movements operate at LOS E or worse. In the PM peak period, the westbound through has a 95th percentile queue length of 1,012 feet. The 95th percentile queue for the US 1 westbound left-turn volume exceeds capacity both in the AM peak and PM peak periods.
- The northbound approach movements operate at LOS D or better except northbound left-turn movement that operates at LOS E in the PM peak period with a 95th queue length of 687 feet which exceeds existing turn lane capacity.
- The southbound approach movements operate at LOS E or worse. In the PM peak period, the southbound left-turn 95th percentile volume exceeds existing turn lane capacity.

SR 76/S Kanner Highway @ SW Monterey Road

- Overall, the intersection operates at LOS E in the AM Peak and PM peak periods.
- The eastbound through and right-turn movement operates at LOS D or better. However, the eastbound left-turn movement 95th percentile volume exceeds capacity both in the AM peak and PM peak periods. Also, the eastbound through movement has a 95th percentile queue length of 600 feet.
- The westbound approach movements operate at LOS E or worse both in the AM peak and PM peak periods. The westbound through has a 95th percentile queue length of 600 feet in the PM peak period.
- The northbound approach movements operate at LOS E or worse both in the AM peak and PM peak periods. The westbound through has a 95th percentile queue length of 600 feet in the PM peak period. The northbound left-turn movement 95th percentile volume exceeds capacity both in the AM peak and PM peak periods.
- The southbound approach, through, and left-turn movements operate at LOS E in the AM peak and PM peak periods.



Speed Analysis on SW Palm City Road

As previously noted, 24-hour speed data is collected on two locations on SW Palm City Road. Data analysis results are shown in **Table 6**, **Figure 8**, and **Figure 9**. As shown in the table, 10 mph Pace Speed, Average Speed and 85th Percentile Speed on both locations on SW Palm City Road are above the posted speed limit of 25 mph thus indicating a speeding problem.

Table 6
Speed Analysis on SW Palm City Road

Location	Direction	10 mph Pace Speed		Average Speed (mph)	85 th Percentile Speed (mph)	ADT
		Range (mph)	% Of Vehicle			
1- SW Palm City Road Slip Ramp- North of SW Pine Avenue	Southbound	24-33	66.9%	28	34	6,080
2- SW Palm City Road- South of SW Riverview Street	Bi-directional	27-36	75.8%	31	36	10,375
	Northbound	25-34	81.6%	30	34	3,740
	Southbound	28-37	73.2%	32	37	6,635

At Location 1- SW Palm City Road slip ramp, during every hour throughout the day, the % of traffic travelling above the posted speed limit (PSL) is inversely proportional to the total amount of traffic travelling within the same time period. Additionally, the percentage is even higher in the early AM and late PM periods.

However, at Location 2- south of SW Riverview Street, the percentage of traffic travelling above the posted speed limit is generally constant during each hour throughout the day.

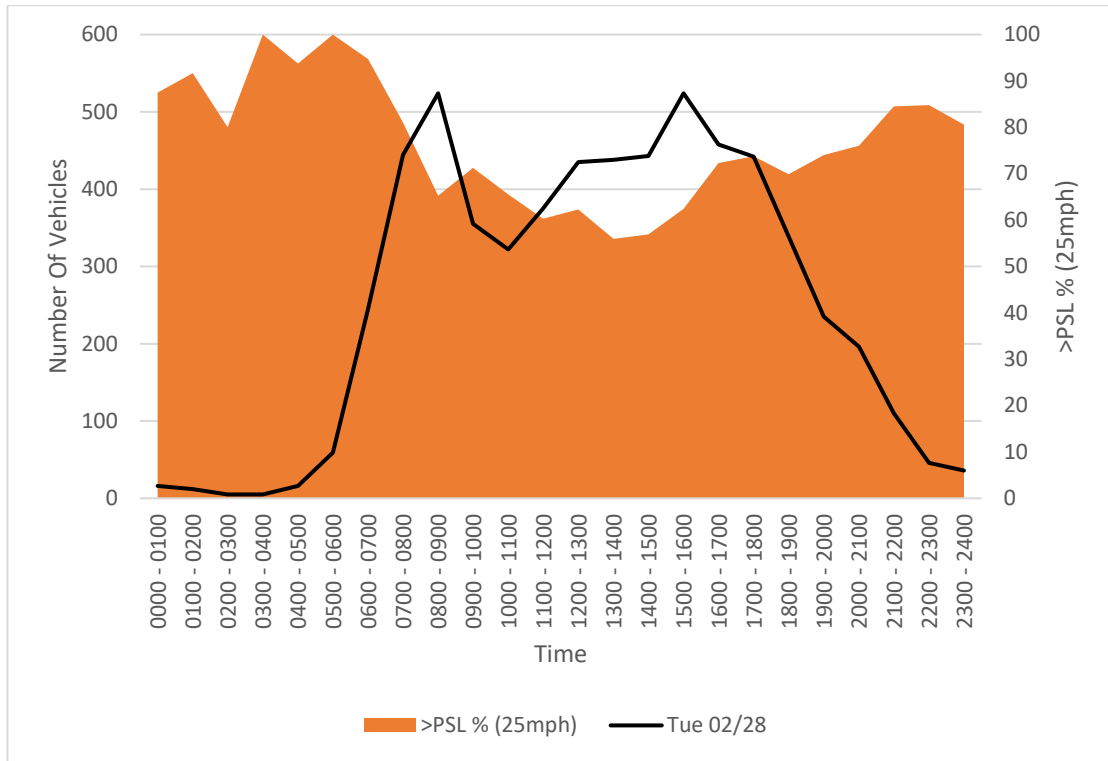


Figure 8 Number of Vehicles VS % PSL VS Time Graph (Location 1)

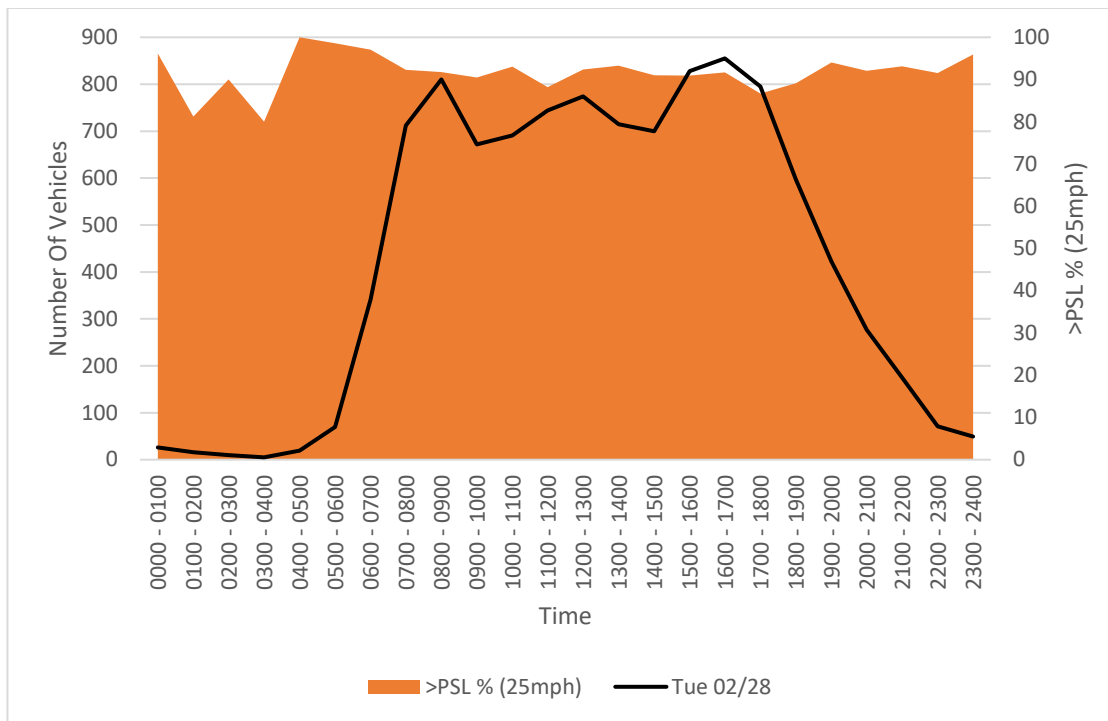


Figure 9 Number of Vehicles VS % PSL VS Time Graph (Location 2)

Meetings

Project Advisory Committee (PAC) Meeting

First PAC meeting was held on February 15, 2023, at 3:00 PM local time. This was an online meeting executed through Microsoft Teams. In total, 15 representatives from Martin MPO, City of Stuart Public Works, Martin County Public Works, Treasure Coast Regional Planning Council, FDOT, Cube Smart, and The Corradino Group attended the meeting. Corradino prepared a presentation for the meeting that included Introductions, Project Overview, Project Scope & Schedule, Overview of Data Collected, Initial Review & High-Level Ideas/Concepts, PAC Member Input and Next Steps for the project. A copy of the presentation along with the Meeting Minutes are included in **Appendix C**.

Public Workshop

The first Public Workshop was held on March 8, 2023, from 4:30 PM to 6:30 PM local time. This was an in-person meeting that took place at City of Stuart City Hall, Stuart, FL. The Workshop Flyer and neighborhood street signs were circulated in advance of the meeting to gain attendance. There was a total of 79 individuals that signed in for the Public Workshop. The prime objective of the Public Workshop was to get input from the community.

Corradino described the Workshop Format and provided a general Project Overview (e.g., study area, goals & objectives, and scope). Once the initial information was shared, there were breakout stations for the citizens to view and discuss the conceptual layouts, the data, the existing condition. Comment cards were provided so that each individual could write about their ideas in detail. A representative from Project Team (either the MPO or The Corradino Group) was present at each of the stations to help people understand the alternatives and answer their questions. This was a very interactive workshop with input from the attendees. Numerous comments from community people were received through comment cards, sketches on aerial photos, etc. A copy of the presentation from the workshop along with the details of comments are attached in **Appendix D**.



APPENDIX A
TRAFFIC DATA

 [Click here for Map](#)

Peak Hour Turning Movement Count

Stuart, FL



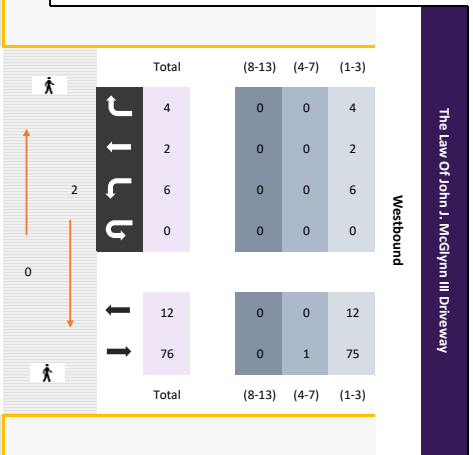
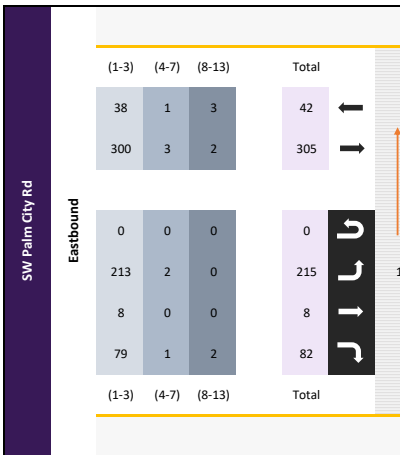
www.marrtraffic.com

Tuesday, February 28, 2023	
Period	0700 - 0900
Peak Hour	0800 - 0900

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0800 - 0815	4	289	1	1	295	10	560	0	2	572	55	2	23	0	80	0	0	3	0	3	950
0815 - 0830	13	295	3	0	311	16	553	1	2	572	48	2	14	0	64	1	1	0	0	2	949
0830 - 0845	10	309	6	1	326	16	513	0	1	530	58	3	27	0	88	4	0	0	0	4	948
0845 - 0900	12	271	2	0	285	14	589	0	2	605	54	1	18	0	73	1	1	1	0	3	966
Total	39	1164	12	2	1217	56	2215	1	7	2279	215	8	82	0	305	6	2	4	0	12	3813
Approach %	3.20	95.65	0.99	0.16	-	2.46	97.19	0.04	0.31	-	70.49	2.62	26.89	0.00	-	50.00	16.67	33.33	0.00	-	
PHF	0.75	0.94	0.50	0.50	0.93	0.88	0.94	0.25	0.88	0.94	0.93	0.67	0.76	0.00	0.87	0.38	0.50	0.33	0.00	0.75	0.99

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0800 - 0815	2	274	1	1	278	10	545	0	2	557	54	2	21	0	77	0	0	3	0	3	915
0815 - 0830	12	276	3	0	291	16	537	1	2	556	48	2	14	0	64	1	1	0	0	2	913
0830 - 0845	10	292	6	1	309	16	492	0	1	509	58	3	27	0	88	4	0	0	0	4	910
0845 - 0900	11	254	2	0	267	13	555	0	2	570	53	1	17	0	71	1	1	1	0	3	911
Total	35	1096	12	2	1145	55	2129	1	7	2192	213	8	79	0	300	6	2	4	0	12	3649
Approach %	3.06	95.72	1.05	0.17	-	2.51	97.13	0.05	0.32	-	71.00	2.67	26.33	0.00	-	50.00	16.67	33.33	0.00	-	
PHF	0.73	0.94	0.50	0.50	0.93	0.86	0.96	0.25	0.88	0.96	0.92	0.67	0.73	0.00	0.85	0.38	0.50	0.33	0.00	0.75	1.00

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0800 - 0815	0	10	0	0	10	0	10	0	0	10	1	0	1	0	2	0	0	0	0	0	22
0815 - 0830	0	13	0	0	13	0	13	0	0	13	0	0	0	0	0	0	0	0	0	0	26
0830 - 0845	0	15	0	0	15	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	30
0845 - 0900	1	12	0	0	13	1	24	0	0	25	1	0	0	0	1	0	0	0	0	0	39
Total	1	50	0	0	51	1	62	0	0	63	2	0	1	0	3	0	0	0	0	0	117
Approach %	1.96	98.04	0.00	0.00	-	1.59	98.41	0.00	0.00	-	66.67	0.00	33.33	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.25	0.83	0.00	0.00	0.85	0.25	0.65	0.00	0.00	0.63	0.50	0.00	0.25	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.75

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0800 - 0815	2	5	0	0	7	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	13
0815 - 0830	1	6	0	0	7	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	10
0830 - 0845	0	2	0	0	2	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	8
0845 - 0900	0	5	0	0	5	0	10	0	0	10	0	0	1	0	1	0	0	0	0	0	16
Total	3	18	0	0	21	0	24	0	0	24	0	0	2	0	2	0	0	0	0	0	47
Approach %	14.29	85.71	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	100.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.38	0.75	0.00	0.00	0.75	0.00	0.60	0.00	0.00	0.60	0.00	0.00	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.73

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

 [Click here for Map](#)

Peak Hour Turning Movement Count

Stuart, FL



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Tuesday, February 28, 2023	
Period	1200 - 1800
Peak Hour	1530 - 1630

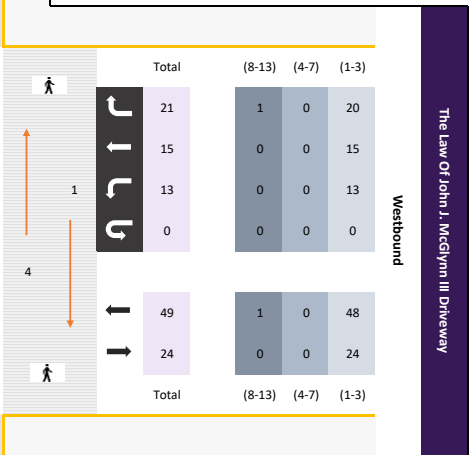
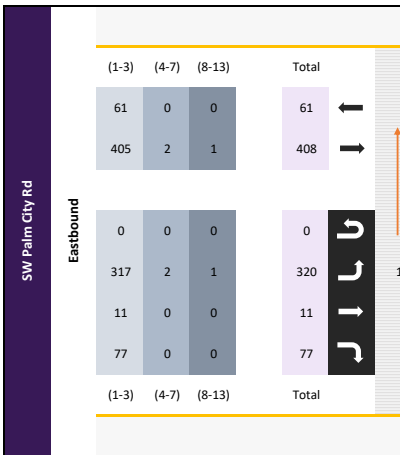
* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Int Total
1530 - 1545	7	576	3	1	587	0	347	0	4	351	69	4	15	0	88	5	3	3	0	11	11
1545 - 1600	10	551	1	2	564	0	392	0	2	394	75	1	21	0	97	1	1	4	0	6	10
1600 - 1615	12	540	3	1	556	0	345	2	10	357	79	4	18	0	101	5	6	9	0	20	10
1615 - 1630	14	544	3	1	562	3	329	1	5	338	97	2	23	0	122	2	5	5	0	12	10
Total	43	2211	10	5	2269	3	1413	3	21	1440	320	11	77	0	408	13	15	21	0	49	4166
Approach %	1.90	97.44	0.44	0.22	-	0.21	98.13	0.21	1.46	-	78.43	2.70	18.87	0.00	-	26.53	30.61	42.86	0.00	-	-
PHF	0.77	0.96	0.83	0.63	0.97	0.25	0.90	0.38	0.53	0.91	0.82	0.69	0.84	0.00	0.84	0.65	0.63	0.58	0.00	0.61	0.98

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Int Total
1530 - 1545	7	566	3	1	577	0	327	0	4	331	69	4	15	0	88	5	3	3	0	11	11
1545 - 1600	10	538	1	2	551	0	375	0	2	377	75	1	21	0	97	1	1	4	0	6	10
1600 - 1615	12	527	3	1	543	0	339	2	10	351	76	4	18	0	98	5	6	8	0	19	10
1615 - 1630	14	533	3	1	551	3	317	1	5	326	97	2	23	0	122	2	5	5	0	12	10
Total	43	2164	10	5	2222	3	1358	3	21	1385	317	11	77	0	405	13	15	20	0	48	4060
Approach %	1.94	97.39	0.45	0.23	-	0.22	98.05	0.22	1.52	-	78.27	2.72	19.01	0.00	-	27.08	31.25	41.67	0.00	-	-
PHF	0.77	0.96	0.83	0.63	0.96	0.25	0.91	0.38	0.53	0.92	0.82	0.69	0.84	0.00	0.83	0.65	0.63	0.63	0.00	0.63	0.98

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Int Total
1530 - 1545	0	10	0	0	10	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	9	0	0	9	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0
1600 - 1615	0	13	0	0	13	0	5	0	0	5	2	0	0	0	2	0	0	0	0	0	0
1615 - 1630	0	10	0	0	10	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0
Total	0	42	0	0	42	0	46	0	0	46	2	0	0	0	2	0	0	0	0	0	90
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
PHF	0.00	0.81	0.00	0.00	0.81	0.00	0.72	0.00	0.00	0.72	0.25	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.87

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Int Total
1530 - 1545	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1615	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	3
1615 - 1630	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	0	0	5	0	9	0	0	9	1	0	0	0	1	0	0	1	0	1	16
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	100.00	0.00	0.00	0.00	-	0.00	0.00	100.00	0.00	-	-
PHF	0.00	0.31	0.00	0.00	0.31	0.00	0.56	0.00	0.00	0.56	0.25	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.25	0.80

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Int Total
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Classified Turn Movement Count || All vehicles



Stuart, FL

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Site 1 of 3
 US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0700 - 0715	3	249	0	0	252	2	572	0	0	574	39	0	16	0	55	0	0	0	0	0	881
0715 - 0730	7	242	1	1	251	1	578	0	1	580	43	1	16	0	60	1	0	0	0	1	892
0730 - 0745	15	322	0	0	337	1	482	0	0	483	43	2	13	0	58	0	0	0	0	0	878
0745 - 0800	1	328	0	0	329	4	380	0	1	385	75	1	24	0	100	1	0	0	0	1	815
Hourly Total	26	1141	1	1	1169	8	2012	0	2	2022	200	4	69	0	273	2	0	0	0	2	3466
0800 - 0815	4	289	1	1	295	10	560	0	2	572	55	2	23	0	80	0	0	3	0	3	950
0815 - 0830	13	295	3	0	311	16	553	1	2	572	48	2	14	0	64	1	1	0	0	2	949
0830 - 0845	10	309	6	1	326	16	513	0	1	530	58	3	27	0	88	4	0	0	0	4	948
0845 - 0900	12	271	2	0	285	14	589	0	2	605	54	1	18	0	73	1	1	1	0	3	966
Hourly Total	39	1164	12	2	1217	56	2215	1	7	2279	215	8	82	0	305	6	2	4	0	12	3813
Grand Total	65	2305	13	3	2386	64	4227	1	9	4301	415	12	151	0	578	8	2	4	0	14	7279
Approach %	2.72	96.61	0.54	0.13	-	1.49	98.28	0.02	0.21	-	71.80	2.08	26.12	0.00	-	57.14	14.29	28.57	0.00	-	
Intersection %	0.89	31.67	0.18	0.04	32.78	0.88	58.07	0.01	0.12	59.09	5.70	0.16	2.07	0.00	7.94	0.11	0.03	0.05	0.00	0.19	
PHF	0.75	0.94	0.50	0.50	0.93	0.88	0.94	0.25	0.88	0.94	0.93	0.67	0.76	0.00	0.87	0.38	0.50	0.33	0.00	0.75	0.99

1200 - 1800 (Weekday 6h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
1200 - 1215	13	393	4	4	414	3	398	0	6	407	62	1	22	0	85	3	2	6	0	11	917
1215 - 1230	9	435	5	4	453	3	388	1	5	397	71	5	23	0	99	3	2	4	0	9	958
1230 - 1245	4	400	2	2	408	4	402	0	2	408	67	2	26	0	95	0	2	0	0	2	913
1245 - 1300	11	393	5	0	409	5	362	0	6	373	48	3	23	0	74	1	4	5	0	10	866
Hourly Total	37	1621	16	10	1684	15	1550	1	19	1585	248	11	94	0	353	7	10	15	0	32	3654
1300 - 1315	9	449	2	1	461	3	395	0	3	401	58	2	21	0	81	3	1	5	0	9	952
1315 - 1330	18	379	4	5	406	7	383	1	6	397	53	3	22	0	78	3	0	0	0	3	884
1330 - 1345	11	433	5	1	450	3	324	1	2	330	48	0	19	0	67	3	0	3	0	6	853
1345 - 1400	6	422	3	3	434	7	418	0	4	429	49	1	20	0	70	5	0	2	0	7	940
Hourly Total	44	1683	14	10	1751	20	1520	2	15	1557	208	6	82	0	296	14	1	10	0	25	3629
1400 - 1415	11	402	1	2	416	6	369	1	2	378	47	1	25	0	73	9	1	4	0	14	881
1415 - 1430	6	474	4	0	484	6	425	2	3	436	51	3	25	0	79	2	0	3	0	5	1004
1430 - 1445	6	498	4	0	508	5	421	1	3	430	58	2	17	0	77	3	2	3	0	8	1023
1445 - 1500	5	448	4	2	459	4	361	3	1	369	52	2	22	0	76	4	3	1	0	8	912
Hourly Total	28	1822	13	4	1867	21	1576	7	9	1613	208	8	89	0	305	18	6	11	0	35	3820
1500 - 1515	2	533	1	0	536	3	377	0	2	382	69	3	12	1	85	2	1	3	0	6	1009
1515 - 1530	13	489	1	3	506	1	384	0	4	389	52	5	23	0	80	4	3	2	0	9	984
1530 - 1545	7	576	3	1	587	0	347	0	4	351	69	4	15	0	88	5	3	3	0	11	1037
1545 - 1600	10	551	1	2	564	0	392	0	2	394	75	1	21	0	97	1	1	4	0	6	1061
Hourly Total	32	2149	6	6	2193	4	1500	0	12	1516	265	13	71	1	350	12	8	12	0	32	4091
1600 - 1615	12	540	3	1	556	0	345	2	10	357	79	4	18	0	101	5	6	9	0	20	1034
1615 - 1630	14	544	3	1	562	3	329	1	5	338	97	2	23	0	122	2	5	5	0	12	1034
1630 - 1645	5	597	0	1	603	1	320	0	3	324	80	1	14	0	95	1	2	5	0	8	1030
1645 - 1700	6	540	1	0	547	1	316	0	9	326	81	2	17	0	100	1	2	6	0	9	982
Hourly Total	37	2221	7	3	2268	5	1310	3	27	1345	337	9	72	0	418	9	15	25	0	49	4080
1700 - 1715	6	591	2	0	599	0	315	0	5	320	90	3	10	0	103	4	0	11	0	15	1037
1715 - 1730	13	555	1	1	570	0	343	0	2	345	81	1	10	0	92	3	3	6	0	12	1019
1730 - 1745	8	607	0	3	618	2	381	1	5	389	75	0	14	0	89	3	4	5	0	12	1108
1745 - 1800	5	430	0	0	435	1	303	0	6	310	80	0	12	0	92	0	0	1	0	1	838
Hourly Total	32	2183	3	4	2222	3	1342	1	18	1364	326	4	46	0	376	10	7	23	0	40	4002
Grand Total	210	11679	59	37	11985	68	8798	14	100	8980	1592	51	454	1	2098	70	47	96	0	213	23276
Approach %	1.75	97.45	0.49	0.31	-	0.76	97.97	0.16	1.11	-	75.88	2.43	21.64	0.05	-	32.86	22.07	45.07	0.00	-	
Intersection %	0.90	50.18	0.25	0.16	51.49	0.29	37.80	0.06	0.43	38.58	6.84	0.22	1.95	0.00	9.01	0.30	0.20	0.41	0.00	0.92	
PHF	0.77	0.96	0.83	0.63	0.97	0.25	0.90	0.38	0.53	0.91	0.82	0.69	0.84	0.00	0.84	0.65	0.63	0.58	0.00	0.61	0.98

Classified Turn Movement Count || Passenger Vehicles (1-3)



Stuart, FL

www.marrtraffic.com

Site 1 of 3
 US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)
 Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0700 - 0715	3	228	0	0	231	2	564	0	0	566	37	0	15	0	52	0	0	0	0	0	849
0715 - 0730	5	224	1	1	231	1	564	0	0	565	43	1	16	0	60	1	0	0	0	1	857
0730 - 0745	13	307	0	0	320	1	470	0	0	471	43	2	13	0	58	0	0	0	0	0	849
0745 - 0800	0	308	0	0	308	4	368	0	1	373	74	1	23	0	98	1	0	0	0	1	780
Hourly Total	21	1067	1	1	1090	8	1966	0	1	1975	197	4	67	0	268	2	0	0	0	2	3335
0800 - 0815	2	274	1	1	278	10	545	0	2	557	54	2	21	0	77	0	0	3	0	3	915
0815 - 0830	12	276	3	0	291	16	537	1	2	556	48	2	14	0	64	1	1	0	0	2	913
0830 - 0845	10	292	6	1	309	16	492	0	1	509	58	3	27	0	88	4	0	0	0	4	910
0845 - 0900	11	254	2	0	267	13	555	0	2	570	53	1	17	0	71	1	1	1	0	3	911
Hourly Total	35	1096	12	2	1145	55	2129	1	7	2192	213	8	79	0	300	6	2	4	0	12	3649
Grand Total	56	2163	13	3	2235	63	4095	1	8	4167	410	12	146	0	568	8	2	4	0	14	6984
Approach %	2.51	96.78	0.58	0.13	-	1.51	98.27	0.02	0.19	-	72.18	2.11	25.70	0.00	-	57.14	14.29	28.57	0.00	-	
Intersection %	0.80	30.97	0.19	0.04	32.00	0.90	58.63	0.01	0.11	59.66	5.87	0.17	2.09	0.00	8.13	0.11	0.03	0.06	0.00	0.20	

1200 - 1800 (Weekday 6h Session) (02-28-2023)
 Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
1200 - 1215	13	374	4	4	395	3	376	0	6	385	62	1	22	0	85	3	2	6	0	11	876
1215 - 1230	9	421	5	4	439	3	372	1	5	381	70	5	23	0	98	3	2	4	0	9	927
1230 - 1245	4	382	2	2	390	4	385	0	2	391	67	2	25	0	94	0	2	0	0	2	877
1245 - 1300	11	374	5	0	390	5	351	0	6	362	47	3	22	0	72	1	4	5	0	10	834
Hourly Total	37	1551	16	10	1614	15	1484	1	19	1519	246	11	92	0	349	7	10	15	0	32	3514
1300 - 1315	9	431	2	1	443	3	380	0	3	386	58	2	21	0	81	3	1	5	0	9	919
1315 - 1330	17	366	4	5	392	7	371	1	6	385	52	3	21	0	76	3	0	0	0	3	856
1330 - 1345	11	414	5	1	431	3	317	1	2	323	46	0	18	0	64	3	0	3	0	6	824
1345 - 1400	6	403	3	3	415	6	398	0	4	408	47	1	18	0	66	5	0	2	0	7	896
Hourly Total	43	1614	14	10	1681	19	1466	2	15	1502	203	6	78	0	287	14	1	10	0	25	3495
1400 - 1415	11	388	1	2	402	6	352	1	2	361	46	1	24	0	71	8	1	4	0	13	847
1415 - 1430	6	466	4	0	476	6	411	2	3	422	51	3	23	0	77	2	0	3	0	5	980
1430 - 1445	5	478	4	0	487	5	397	1	3	406	57	2	17	0	76	3	2	3	0	8	977
1445 - 1500	5	429	4	2	440	4	348	3	1	356	51	2	22	0	75	4	3	1	0	8	879
Hourly Total	27	1761	13	4	1805	21	1508	7	9	1545	205	8	86	0	299	17	6	11	0	34	3683
1500 - 1515	2	519	1	0	522	3	367	0	2	372	67	3	12	0	82	2	1	3	0	6	982
1515 - 1530	13	479	1	3	496	1	369	0	4	374	51	5	23	0	79	4	3	2	0	9	958
1530 - 1545	7	566	3	1	577	0	327	0	4	331	69	4	15	0	88	5	3	3	0	11	1007
1545 - 1600	10	538	1	2	551	0	375	0	2	377	75	1	21	0	97	1	1	4	0	6	1031
Hourly Total	32	2102	6	6	2146	4	1438	0	12	1454	262	13	71	0	346	12	8	12	0	32	3978
1600 - 1615	12	527	3	1	543	0	339	2	10	351	76	4	18	0	98	5	6	8	0	19	1011
1615 - 1630	14	533	3	1	551	3	317	1	5	326	97	2	23	0	122	2	5	5	0	12	1011
1630 - 1645	5	588	0	1	594	1	307	0	3	311	79	1	14	0	94	1	2	5	0	8	1007
1645 - 1700	5	532	1	0	538	1	307	0	9	317	81	2	17	0	100	1	2	6	0	9	964
Hourly Total	36	2180	7	3	2226	5	1270	3	27	1305	333	9	72	0	414	9	15	24	0	48	3993
1700 - 1715	6	587	2	0	595	0	310	0	5	315	89	3	10	0	102	4	0	11	0	15	1027
1715 - 1730	13	548	1	1	563	0	335	0	2	337	81	1	10	0	92	3	3	6	0	12	1004
1730 - 1745	8	598	0	3	609	2	378	1	5	386	74	0	14	0	88	3	4	5	0	12	1095
1745 - 1800	5	423	0	0	428	1	292	0	6	299	80	0	12	0	92	0	0	1	0	1	820
Hourly Total	32	2156	3	4	2195	3	1315	1	18	1337	324	4	46	0	374	10	7	23	0	40	3946
Grand Total	207	11364	59	37	11667	67	8481	14	100	8662	1573	51	445	0	2069	69	47	95	0	211	22609
Approach %	1.77	97.40	0.51	0.32	-	0.77	97.91	0.16	1.15	-	76.03	2.46	21.51	0.00	-	32.70	22.27	45.02	0.00	-	
Intersection %	0.92	50.26	0.26	0.16	51.60	0.30	37.51	0.06	0.44	38.31	6.96	0.23	1.97	0.00	9.15	0.31	0.21	0.42	0.00	0.93	

Classified Turn Movement Count || Single Unit Trucks (4-7)



Stuart, FL

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Site 1 of 3
 US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)
 Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0700 - 0715	0	15	0	0	15	0	6	0	0	6	1	0	1	0	2	0	0	0	0	0	23
0715 - 0730	2	14	0	0	16	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	25
0730 - 0745	2	12	0	0	14	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	22
0745 - 0800	1	16	0	0	17	0	10	0	0	10	1	0	0	0	1	0	0	0	0	0	28
Hourly Total	5	57	0	0	62	0	33	0	0	33	2	0	1	0	3	0	0	0	0	0	98
0800 - 0815	0	10	0	0	10	0	10	0	0	10	1	0	1	0	2	0	0	0	0	0	22
0815 - 0830	0	13	0	0	13	0	13	0	0	13	0	0	0	0	0	0	0	0	0	0	26
0830 - 0845	0	15	0	0	15	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	30
0845 - 0900	1	12	0	0	13	1	24	0	0	25	1	0	0	0	1	0	0	0	0	0	39
Hourly Total	1	50	0	0	51	1	62	0	0	63	2	0	1	0	3	0	0	0	0	0	117
Grand Total	6	107	0	0	113	1	95	0	0	96	4	0	2	0	6	0	0	0	0	0	215
Approach %	5.31	94.69	0.00	0.00	-	1.04	98.96	0.00	0.00	-	66.67	0.00	33.33	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	2.79	49.77	0.00	0.00	52.56	0.47	44.19	0.00	0.00	44.65	1.86	0.00	0.93	0.00	2.79	0.00	0.00	0.00	0.00	0.00	

1200 - 1800 (Weekday 6h Session) (02-28-2023)
 Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
1200 - 1215	0	16	0	0	16	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	33
1215 - 1230	0	10	0	0	10	0	10	0	0	10	1	0	0	0	1	0	0	0	0	0	21
1230 - 1245	0	15	0	0	15	0	13	0	0	13	0	0	1	0	1	0	0	0	0	0	29
1245 - 1300	0	16	0	0	16	0	8	0	0	8	1	0	0	0	1	0	0	0	0	0	25
Hourly Total	0	57	0	0	57	0	48	0	0	48	2	0	1	0	3	0	0	0	0	0	108
1300 - 1315	0	15	0	0	15	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	27
1315 - 1330	1	11	0	0	12	0	11	0	0	11	1	0	1	0	2	0	0	0	0	0	25
1330 - 1345	0	14	0	0	14	0	5	0	0	5	1	0	1	0	2	0	0	0	0	0	21
1345 - 1400	0	17	0	0	17	1	16	0	0	17	2	0	2	0	4	0	0	0	0	0	38
Hourly Total	1	57	0	0	58	1	44	0	0	45	4	0	4	0	8	0	0	0	0	0	111
1400 - 1415	0	10	0	0	10	0	13	0	0	13	1	0	1	0	2	1	0	0	0	1	26
1415 - 1430	0	7	0	0	7	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	16
1430 - 1445	1	15	0	0	16	0	18	0	0	18	0	0	0	0	0	0	0	0	0	0	34
1445 - 1500	0	16	0	0	16	0	10	0	0	10	1	0	0	0	1	0	0	0	0	0	27
Hourly Total	1	48	0	0	49	0	50	0	0	50	2	0	1	0	3	1	0	0	0	1	103
1500 - 1515	0	11	0	0	11	0	9	0	0	9	2	0	0	1	3	0	0	0	0	0	23
1515 - 1530	0	9	0	0	9	0	13	0	0	13	0	0	0	0	0	0	0	0	0	0	22
1530 - 1545	0	10	0	0	10	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	26
1545 - 1600	0	9	0	0	9	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	25
Hourly Total	0	39	0	0	39	0	54	0	0	54	2	0	0	1	3	0	0	0	0	0	96
1600 - 1615	0	13	0	0	13	0	5	0	0	5	2	0	0	0	2	0	0	0	0	0	20
1615 - 1630	0	10	0	0	10	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	19
1630 - 1645	0	7	0	0	7	0	8	0	0	8	1	0	0	0	1	0	0	0	0	0	16
1645 - 1700	1	5	0	0	6	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	13
Hourly Total	1	35	0	0	36	0	29	0	0	29	3	0	0	0	3	0	0	0	0	0	68
1700 - 1715	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	6
1715 - 1730	0	5	0	0	5	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	12
1730 - 1745	0	7	0	0	7	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	10
1745 - 1800	0	5	0	0	5	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	12
Hourly Total	0	20	0	0	20	0	19	0	0	19	1	0	0	0	1	0	0	0	0	0	40
Grand Total	3	256	0	0	259	1	244	0	0	245	14	0	6	1	21	1	0	0	0	1	526
Approach %	1.16	98.84	0.00	0.00	-	0.41	99.59	0.00	0.00	-	66.67	0.00	28.57	4.76	-	100.00	0.00	0.00	0.00	-	
Intersection %	0.57	48.67	0.00	0.00	49.24	0.19	46.39	0.00	0.00	46.58	2.66	0.00	1.14	0.19	3.99	0.19	0.00	0.00	0.00	0.19	

Classified Turn Movement Count || Combination Trucks (8-13)



Stuart, FL

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Site 1 of 3
 US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)
 Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0700 - 0715	0	6	0	0	6	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	9
0715 - 0730	0	4	0	0	4	0	5	0	1	6	0	0	0	0	0	0	0	0	0	0	10
0730 - 0745	0	3	0	0	3	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	7
0745 - 0800	0	4	0	0	4	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	7
Hourly Total	0	17	0	0	17	0	13	0	1	14	1	0	1	0	2	0	0	0	0	0	33
0800 - 0815	2	5	0	0	7	0	5	0	0	5	0	0	1	0	1	0	0	0	0	0	13
0815 - 0830	1	6	0	0	7	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	10
0830 - 0845	0	2	0	0	2	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	8
0845 - 0900	0	5	0	0	5	0	10	0	0	10	0	0	1	0	1	0	0	0	0	0	16
Hourly Total	3	18	0	0	21	0	24	0	0	24	0	0	2	0	2	0	0	0	0	0	47
Grand Total	3	35	0	0	38	0	37	0	1	38	1	0	3	0	4	0	0	0	0	0	80
Approach %	7.89	92.11	0.00	0.00	-	0.00	97.37	0.00	2.63	-	25.00	0.00	75.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	3.75	43.75	0.00	0.00	47.50	0.00	46.25	0.00	1.25	47.50	1.25	0.00	3.75	0.00	5.00	0.00	0.00	0.00	0.00	0.00	

1200 - 1800 (Weekday 6h Session) (02-28-2023)
 Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
1200 - 1215	0	3	0	0	3	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	8
1215 - 1230	0	4	0	0	4	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	10
1230 - 1245	0	3	0	0	3	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	7
1245 - 1300	0	3	0	0	3	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	7
Hourly Total	0	13	0	0	13	0	18	0	0	18	0	0	1	0	1	0	0	0	0	0	32
1300 - 1315	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	6
1315 - 1330	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1330 - 1345	0	5	0	0	5	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	8
1345 - 1400	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	6
Hourly Total	0	12	0	0	12	0	10	0	0	10	1	0	0	0	1	0	0	0	0	0	23
1400 - 1415	0	4	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	8
1415 - 1430	0	1	0	0	1	0	5	0	0	5	0	0	2	0	2	0	0	0	0	0	8
1430 - 1445	0	5	0	0	5	0	6	0	0	6	1	0	0	0	1	0	0	0	0	0	12
1445 - 1500	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	6
Hourly Total	0	13	0	0	13	0	18	0	0	18	1	0	2	0	3	0	0	0	0	0	34
1500 - 1515	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
1515 - 1530	0	1	0	0	1	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	4
1530 - 1545	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
1545 - 1600	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5
Hourly Total	0	8	0	0	8	0	8	0	0	8	1	0	0	0	1	0	0	0	0	0	17
1600 - 1615	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	3
1615 - 1630	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
1630 - 1645	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	6
1645 - 1700	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	5
Hourly Total	0	5	0	0	5	0	11	0	0	11	1	0	0	0	1	0	0	1	0	1	18
1700 - 1715	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
1715 - 1730	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1730 - 1745	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1745 - 1800	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	6
Hourly Total	0	7	0	0	7	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	15
Grand Total	0	58	0	0	58	0	73	0	0	73	4	0	3	0	7	0	0	1	0	1	139
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	57.14	0.00	42.86	0.00	-	0.00	0.00	100.00	0.00	-	
Intersection %	0.00	41.73	0.00	0.00	41.73	0.00	52.52	0.00	0.00	52.52	2.88	0.00	2.16	0.00	5.04	0.00	0.00	0.72	0.00	0.72	

Classified Turn Movement Count || Bikes



Stuart, FL

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Site 1 of 3

US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	US-1 SW Federal Hwy (South)					US-1 SW Federal Hwy (North)					SW Palm City Rd					The Law Of John J. McGlynn III Driveway					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
1200 - 1215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1215 - 1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1230 - 1245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1245 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1315 - 1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1330 - 1345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1345 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1700 - 1715	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Grand Total	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
Intersection %	0.00	50.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Count | All vehicles

Stuart, FL



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Site 1 of 3

US-1 SW Federal Hwy (South)
 US-1 SW Federal Hwy (North)
 SW Palm City Rd
 The Law Of John J. McGlynn III Driveway

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.193312°, -80.256652°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Pedestrians

TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total
	US-1 SW Federal Hwy (South)			US-1 SW Federal Hwy (North)			SW Palm City Rd			The Law Of John J. McGlynn III Driveway				
	EB 1a	WB 1b	App Total	EB 1c	WB 1d	App Total	NB 1e	SB 1f	App Total	NB 1g	SB 1h	App Total		
0700 - 0715	0	0	0	0	0	0	0	1	1	0	0	0	0	1
0715 - 0730	0	0	0	0	0	0	0	3	1	4	0	0	0	4
0730 - 0745	0	0	0	0	0	0	0	1	1	2	0	0	0	2
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	4	3	7	0	0	0	7
0800 - 0815	0	0	0	0	0	0	0	1	1	2	0	0	0	2
0815 - 0830	0	0	0	0	1	0	1	0	0	0	0	1	1	2
0830 - 0845	0	0	0	0	1	0	1	0	1	1	0	1	1	3
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	2	0	2	1	2	3	0	2	2	7
Grand Total	0	0	0	0	2	0	2	5	5	10	0	2	2	14
Approach %	0.00	0.00	-	100.00	0.00	-	50.00	50.00	-	0.00	100.00	-	-	-
Intersection %	0.00	0.00	0.00	14.29	0.00	14.29	35.71	35.71	71.43	0.00	14.29	14.29	-	-

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Pedestrians

TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total
	US-1 SW Federal Hwy (South)			US-1 SW Federal Hwy (North)			SW Palm City Rd			The Law Of John J. McGlynn III Driveway				
	EB 1a	WB 1b	App Total	EB 1c	WB 1d	App Total	NB 1e	SB 1f	App Total	NB 1g	SB 1h	App Total		
1200 - 1215	0	0	0	0	0	0	0	1	2	3	0	0	0	3
1215 - 1230	0	0	0	0	0	0	0	1	1	2	0	0	0	2
1230 - 1245	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1245 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	2	3	5	0	0	0	5
1300 - 1315	0	0	0	0	0	0	0	1	0	1	0	2	2	3
1315 - 1330	0	1	1	0	0	0	0	0	1	1	0	0	0	2
1330 - 1345	0	0	0	0	0	0	0	2	1	3	0	0	0	3
1345 - 1400	0	0	0	0	0	0	0	2	1	3	0	0	0	3
Hourly Total	0	1	1	0	0	0	0	5	3	8	0	2	2	11
1400 - 1415	0	0	0	0	0	1	1	0	4	4	0	0	0	5
1415 - 1430	0	0	0	0	0	0	0	0	2	2	0	0	0	2
1430 - 1445	1	0	1	1	0	0	0	2	0	2	1	0	0	4
1445 - 1500	0	0	0	0	0	0	0	1	4	5	0	0	0	5
Hourly Total	1	0	1	1	0	1	1	3	10	13	1	0	1	16
1500 - 1515	0	0	0	0	0	0	0	2	3	5	1	0	0	6
1515 - 1530	0	0	0	0	0	0	0	3	0	3	0	0	0	3
1530 - 1545	0	0	0	0	0	0	0	0	1	1	0	0	0	1
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	5	4	9	1	0	1	10
1600 - 1615	0	0	0	0	0	0	0	0	3	3	2	0	0	5
1615 - 1630	0	0	0	0	0	0	0	1	1	2	2	1	3	5
1630 - 1645	1	0	1	1	0	0	0	1	0	1	0	0	0	2
1645 - 1700	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Hourly Total	1	0	1	1	0	1	1	2	4	6	4	1	5	13
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	1	1	1
1715 - 1730	0	0	0	0	0	0	0	0	2	2	1	0	1	3
1730 - 1745	0	0	0	0	0	0	0	0	0	0	1	1	2	2
1745 - 1800	0	1	1	1	0	0	0	0	1	1	0	1	1	3
Hourly Total	0	1	1	1	0	0	0	0	3	3	2	3	5	9
Grand Total	2	2	4	0	2	2	17	27	44	8	6	14	64	64
Approach %	50.00	50.00	-	0.00	100.00	-	38.64	61.36	-	57.14	42.86	-	-	-
Intersection %	3.13	3.13	6.25	0.00	3.13	3.13	26.56	42.19	68.75	12.50	9.38	21.88	-	-

Start Date: 2/28/2023	US-1 SW Federal Hwy (South)			US-1 SW Federal Hwy (North)			SW Palm City Rd			Law Of John J. McGlynn III Drive			Total
Time	Northbound		NBR	Southbound		SBR	Eastbound		EBR	Westbound		WBR	
	NBL	NBT		SBL	SBT		EBL	EBT		WBL	WBT		
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	3	249	0	2	572	0	39	0	16	0	0	0	882
07:15 AM - 07:30 AM	7	242	1	1	578	0	43	1	16	1	0	0	896
07:30 AM - 07:45 AM	15	322	0	1	482	0	43	2	13	0	0	0	880
07:45 AM - 08:00 AM	1	328	0	4	380	0	75	1	24	1	0	0	815
08:00 AM - 08:15 AM	4	289	1	10	560	0	55	2	23	0	0	3	952
08:15 AM - 08:30 AM	13	295	3	16	553	1	48	2	14	1	1	0	951
08:30 AM - 08:45 AM	10	309	6	16	513	0	58	3	27	4	0	0	951
08:45 AM - 09:00 AM	12	271	2	14	589	0	54	1	18	1	1	1	966
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	13	393	4	3	398	0	62	1	22	3	2	6	920
12:15 PM - 12:30 PM	9	435	5	3	388	1	71	5	23	3	2	4	960
12:30 PM - 12:45 PM	4	400	2	4	402	0	67	2	26	0	2	0	913
12:45 PM - 01:00 PM	11	393	5	5	362	0	48	3	23	1	4	5	866
01:00 PM - 01:15 PM	9	449	2	3	395	0	58	2	21	3	1	5	955
01:15 PM - 01:30 PM	18	379	4	7	383	1	53	3	22	3	0	0	886
01:30 PM - 01:45 PM	11	433	5	3	324	1	48	0	19	3	0	3	856
01:45 PM - 02:00 PM	6	422	3	7	418	0	49	1	20	5	0	2	943
02:00 PM - 02:15 PM	11	402	1	6	369	1	47	1	25	9	1	4	886
02:15 PM - 02:30 PM	6	474	4	6	425	2	51	3	25	2	0	3	1006
02:30 PM - 02:45 PM	6	498	4	5	421	1	58	2	17	3	2	3	1027
02:45 PM - 03:00 PM	5	448	4	4	361	3	52	2	22	4	3	1	917
03:00 PM - 03:15 PM	2	533	1	3	377	0	69	3	12	2	1	3	1015
03:15 PM - 03:30 PM	13	489	1	1	384	0	52	5	23	4	3	2	987
03:30 PM - 03:45 PM	7	576	3	0	347	0	69	4	15	5	3	3	1038
03:45 PM - 04:00 PM	10	551	1	0	392	0	75	1	21	1	1	4	1061
04:00 PM - 04:15 PM	12	540	3	0	345	2	79	4	18	5	6	9	1039
04:15 PM - 04:30 PM	14	544	3	3	329	1	97	2	23	2	5	5	1039
04:30 PM - 04:45 PM	5	597	0	1	320	0	80	1	14	1	2	5	1032
04:45 PM - 05:00 PM	6	540	1	1	316	0	81	2	17	1	2	6	983
05:00 PM - 05:15 PM	6	591	2	0	315	0	90	3	10	4	0	11	1038
05:15 PM - 05:30 PM	13	555	1	0	343	0	81	1	10	3	3	6	1022
05:30 PM - 05:45 PM	8	607	0	2	381	1	75	0	14	3	4	5	1110
05:45 PM - 06:00 PM	5	430	0	1	303	0	80	0	12	0	0	1	841
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

 [Click here for Map](#)

Peak Hour Turning Movement Count

Stuart, FL



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Tuesday, February 28, 2023	
Period	0700 - 0900
Peak Hour	0800 - 0900

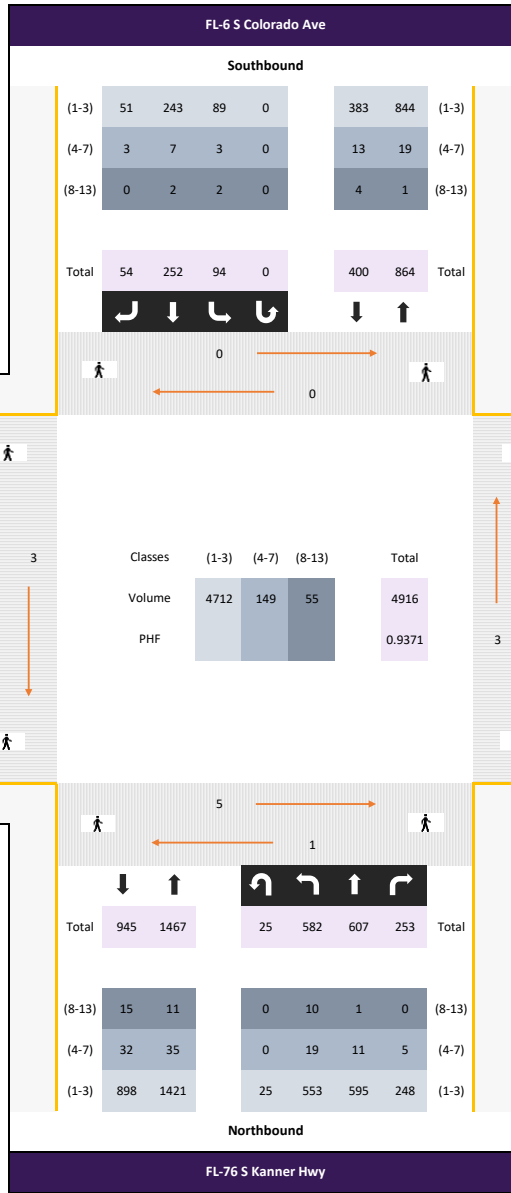
* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



Eastbound

(1-3)	(4-7)	(8-13)	Total
1224	53	21	1298
2112	61	26	2199

(1-3)	(4-7)	(8-13)	Total
9	0	0	9
186	4	0	190
1408	37	16	1461
509	20	10	539

Westbound

Total	(8-13)	(4-7)	(1-3)
67	0	4	63
653	11	31	611
129	3	5	121
1	0	0	1

Total	(8-13)	(4-7)	(1-3)
850	14	40	796
1809	18	45	1746

Classes

(1-3)	(4-7)	(8-13)	Total
4712	149	55	4916

PHF

(1-3)	(4-7)	(8-13)	Total
			0.9371

Northbound

Total	945	1467	25	582	607	253	Total
(8-13)	15	11	0	10	1	0	(8-13)
(4-7)	32	35	0	19	11	5	(4-7)
(1-3)	898	1421	25	553	595	248	(1-3)

All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0800 - 0815	151	143	50	2	346	28	67	11	0	106	37	341	112	3	493	30	117	15	1	163	1108
0815 - 0830	109	123	60	7	299	21	85	10	0	116	40	350	153	4	547	39	197	15	0	251	1213
0830 - 0845	165	150	65	8	388	21	49	13	0	83	55	398	155	1	609	26	188	18	0	232	1312
0845 - 0900	157	193	78	8	436	24	51	20	0	95	58	372	119	1	550	34	151	19	0	204	1285
Total	582	609	253	25	1469	94	252	54	0	400	190	1461	539	9	2199	129	653	67	1	850	4918
Approach %	39.62	41.46	17.22	1.70	-	23.50	63.00	13.50	0.00	-	8.64	66.44	24.51	0.41	-	15.18	76.82	7.88	0.12	-	
PHF	0.88	0.79	0.81	0.78	0.84	0.84	0.74	0.68	0.00	0.86	0.82	0.92	0.87	0.56	0.90	0.83	0.83	0.88	0.25	0.85	0.94

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0800 - 0815	141	138	49	2	330	26	64	10	0	100	36	334	107	3	480	29	109	14	1	153	1063
0815 - 0830	103	123	58	7	291	20	82	9	0	111	40	331	147	4	522	36	180	15	0	231	1155
0830 - 0845	160	145	64	8	377	21	48	13	0	82	55	387	145	1	588	25	178	16	0	219	1266
0845 - 0900	149	189	77	8	423	22	49	19	0	90	55	356	110	1	522	31	144	18	0	193	1228
Total	553	595	248	25	1421	89	243	51	0	383	186	1408	509	9	2112	121	611	63	1	796	4712
Approach %	38.92	41.87	17.45	1.76	-	23.24	63.45	13.32	0.00	-	8.81	66.67	24.10	0.43	-	15.20	76.76	7.91	0.13	-	
PHF	0.86	0.79	0.81	0.78	0.84	0.86	0.74	0.67	0.00	0.86	0.85	0.91	0.87	0.56	0.90	0.84	0.85	0.88	0.25	0.86	0.93

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0800 - 0815	5	4	1	0	10	1	3	1	0	5	1	4	1	0	6	1	5	1	0	7	28
0815 - 0830	4	0	2	0	6	1	2	1	0	4	0	15	4	0	19	2	13	0	0	15	44
0830 - 0845	4	5	1	0	10	0	1	0	0	1	0	7	7	0	14	0	8	2	0	10	35
0845 - 0900	6	2	1	0	9	1	1	1	0	3	3	11	8	0	22	2	5	1	0	8	42
Total	19	11	5	0	35	3	7	3	0	13	4	37	20	0	61	5	31	4	0	40	149
Approach %	54.29	31.43	14.29	0.00	-	23.08	53.85	23.08	0.00	-	6.56	60.66	32.79	0.00	-	12.50	77.50	10.00	0.00	-	
PHF	0.79	0.55	0.63	0.00	0.88	0.75	0.58	0.75	0.00	0.65	0.33	0.62	0.63	0.00	0.69	0.63	0.60	0.50	0.00	0.67	0.85

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0800 - 0815	5	0	0	0	5	1	0	0	0	1	0	3	4	0	7	0	3	0	0	3	16
0815 - 0830	2	0	0	0	2	0	1	0	0	1	0	4	2	0	6	1	4	0	0	5	14
0830 - 0845	1	0	0	0	1	0	0	0	0	0	0	4	3	0	7	1	2	0	0	3	11
0845 - 0900	2	1	0	0	3	1	1	0	0	2	0	5	1	0	6	1	2	0	0	3	14
Total	10	1	0	0	11	2	2	0	0	4	0	16	10	0	26	3	11	0	0	14	55
Approach %	90.91	9.09	0.00	0.00	-	50.00	50.00	0.00	0.00	-	0.00	61.54	38.46	0.00	-	21.43	78.57	0.00	0.00	-	
PHF	0.50	0.25	0.00	0.00	0.55	0.50	0.50	0.00	0.00	0.50	0.00	0.80	0.63	0.00	0.93	0.75	0.69	0.00	0.00	0.70	0.86

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0800 - 0815	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845 - 0900	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50

 [Click here for Map](#)

Peak Hour Turning Movement Count

Stuart, FL



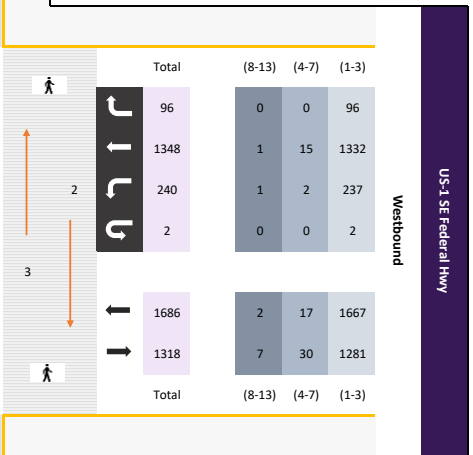
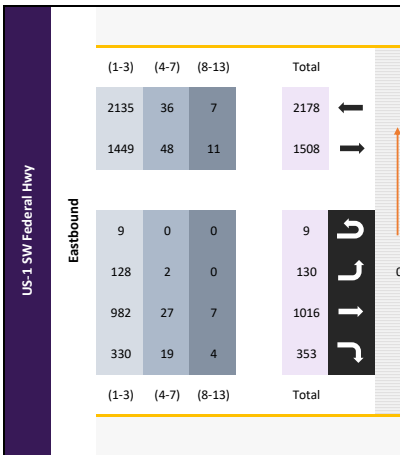
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Tuesday, February 28, 2023	
Period	1200 - 1800
Peak Hour	1530 - 1630

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1530 - 1545	151	112	41	2	306	24	99	30	0	153	33	265	102	1	401	63	368	27	0	458	1318
1545 - 1600	181	144	48	5	378	36	118	25	0	179	37	228	91	2	358	61	336	26	0	423	1338
1600 - 1615	180	91	47	6	324	40	137	38	0	215	29	232	71	1	333	60	313	24	2	399	1271
1615 - 1630	178	107	31	3	319	33	119	38	0	190	31	291	89	5	416	56	332	19	0	407	1332
Total	690	454	167	16	1327	133	473	131	0	737	130	1016	353	9	1508	240	1349	96	2	1687	5259
Approach %	52.00	34.21	12.58	1.21	-	18.05	64.18	17.77	0.00	-	8.62	67.37	23.41	0.60	-	14.23	79.96	5.69	0.12	-	
PHF	0.95	0.79	0.87	0.67	0.88	0.83	0.86	0.86	0.00	0.86	0.88	0.87	0.87	0.45	0.91	0.95	0.92	0.89	0.25	0.92	0.98

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1530 - 1545	147	111	40	2	300	24	99	30	0	153	33	252	95	1	381	62	364	27	0	453	1287
1545 - 1600	173	141	47	5	366	36	116	25	0	177	36	220	82	2	340	61	333	26	0	420	1303
1600 - 1615	174	90	46	6	316	40	137	34	0	211	28	226	67	1	322	59	306	24	2	391	1240
1615 - 1630	175	107	31	3	316	33	118	36	0	187	31	284	86	5	406	55	329	19	0	403	1312
Total	669	449	164	16	1298	133	470	125	0	728	128	982	330	9	1449	237	1332	96	2	1667	5142
Approach %	51.54	34.59	12.63	1.23	-	18.27	64.56	17.17	0.00	-	8.83	67.77	22.77	0.62	-	14.22	79.90	5.76	0.12	-	
PHF	0.96	0.80	0.87	0.67	0.89	0.83	0.86	0.87	0.00	0.86	0.89	0.86	0.87	0.45	0.89	0.96	0.91	0.89	0.25	0.92	0.98

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1530 - 1545	4	1	1	0	6	0	0	0	0	0	0	11	4	0	15	0	4	0	0	4	25
1545 - 1600	4	2	1	0	7	0	1	0	0	1	1	7	9	0	17	0	3	0	0	3	28
1600 - 1615	4	1	1	0	6	0	0	4	0	4	1	4	4	0	9	1	6	0	0	7	26
1615 - 1630	3	0	0	0	3	0	1	2	0	3	0	5	2	0	7	1	2	0	0	3	16
Total	15	4	3	0	22	0	2	6	0	8	2	27	19	0	48	2	15	0	0	17	95
Approach %	68.18	18.18	13.64	0.00	-	0.00	25.00	75.00	0.00	-	4.17	56.25	39.58	0.00	-	11.76	88.24	0.00	0.00	-	
PHF	0.94	0.50	0.75	0.00	0.79	0.00	0.50	0.38	0.00	0.50	0.50	0.61	0.53	0.00	0.71	0.50	0.63	0.00	0.00	0.61	0.85

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5	1	0	0	0	1	6
1545 - 1600	4	1	0	0	5	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	7
1600 - 1615	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	5
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
Total	6	1	0	0	7	0	1	0	0	1	0	7	4	0	11	1	1	0	0	2	21
Approach %	85.71	14.29	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	63.64	36.36	0.00	-	50.00	50.00	0.00	0.00	-	
PHF	0.38	0.25	0.00	0.00	0.35	0.00	0.25	0.00	0.00	0.25	0.00	0.88	0.33	0.00	0.55	0.25	0.25	0.00	0.00	0.50	0.75

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.25

Classified Turn Movement Count || All vehicles



Stuart, FL

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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.191137°, -80.253079°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0700 - 0715	132	85	36	5	258	8	37	10	0	55	18	313	183	1	515	26	118	3	1	148	976
0715 - 0730	115	98	28	7	248	8	38	5	0	51	32	436	162	3	633	23	131	11	0	165	1097
0730 - 0745	147	165	49	6	367	18	59	11	0	88	31	326	126	2	485	31	159	6	1	197	1137
0745 - 0800	150	137	64	4	355	23	54	8	1	86	44	308	105	0	457	29	177	15	0	221	1119
Hourly Total	544	485	177	22	1228	57	188	34	1	280	125	1383	576	6	2090	109	585	35	2	731	4329
0800 - 0815	151	143	50	2	346	28	67	11	0	106	37	341	112	3	493	30	117	15	1	163	1108
0815 - 0830	109	123	60	7	299	21	85	10	0	116	40	350	153	4	547	39	197	15	0	251	1213
0830 - 0845	165	150	65	8	388	21	49	13	0	83	55	398	155	1	609	26	188	18	0	232	1312
0845 - 0900	157	193	78	8	436	24	51	20	0	95	58	372	119	1	550	34	151	19	0	204	1285
Hourly Total	582	609	253	25	1469	94	252	54	0	400	190	1461	539	9	2199	129	653	67	1	850	4918
Grand Total	1126	1094	430	47	2697	151	440	88	1	680	315	2844	1115	15	4289	238	1238	102	3	1581	9247
Approach %	41.75	40.56	15.94	1.74	-	22.21	64.71	12.94	0.15	-	7.34	66.31	26.00	0.35	-	15.05	78.30	6.45	0.19	-	
Intersection %	12.18	11.83	4.65	0.51	29.17	1.63	4.76	0.95	0.01	7.35	3.41	30.76	12.06	0.16	46.38	2.57	13.39	1.10	0.03	17.10	
PHF	0.88	0.79	0.81	0.78	0.84	0.84	0.74	0.68	0.00	0.86	0.82	0.92	0.87	0.56	0.90	0.83	0.83	0.88	0.25	0.85	0.94

1200 - 1800 (Weekday 6h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1200 - 1215	136	101	35	5	277	40	106	32	1	179	31	267	95	3	396	66	243	25	1	335	1187
1215 - 1230	113	131	51	6	301	39	84	35	1	159	50	288	130	7	475	61	282	24	1	368	1303
1230 - 1245	130	102	57	10	299	50	65	35	0	150	32	297	97	2	428	39	257	22	1	319	1196
1245 - 1300	123	138	46	2	309	30	78	38	0	146	56	255	103	3	417	47	258	25	1	331	1203
Hourly Total	502	472	189	23	1186	159	333	140	2	634	169	1107	425	15	1716	213	1040	96	4	1353	4889
1300 - 1315	117	109	58	6	290	34	64	33	1	132	44	279	103	3	429	54	291	27	0	372	1223
1315 - 1330	145	115	55	5	320	34	91	22	0	147	36	232	120	5	393	36	268	35	1	340	1200
1330 - 1345	124	95	37	3	259	25	92	21	1	139	49	255	97	6	407	39	273	16	0	328	1133
1345 - 1400	155	97	52	4	308	41	91	28	0	160	42	290	117	2	451	43	279	21	1	344	1263
Hourly Total	541	416	202	18	1177	134	338	104	2	578	171	1056	437	16	1680	172	1111	99	2	1384	4819
1400 - 1415	134	107	37	3	281	34	77	32	0	143	44	275	106	1	426	51	227	16	0	294	1144
1415 - 1430	130	102	38	2	272	33	88	31	0	152	31	289	114	3	437	60	302	28	2	392	1253
1430 - 1445	153	116	49	1	319	37	110	34	0	181	33	321	121	3	478	29	318	18	0	365	1343
1445 - 1500	153	125	50	1	329	34	106	26	0	166	51	239	117	3	410	52	277	12	0	341	1246
Hourly Total	570	450	174	7	1201	138	381	123	0	642	159	1124	458	10	1751	192	1124	74	2	1392	4986
1500 - 1515	177	94	39	2	312	28	98	43	0	169	20	240	105	1	366	38	305	18	1	362	1209
1515 - 1530	153	88	49	4	294	33	99	43	0	175	36	261	84	3	384	53	299	17	1	370	1223
1530 - 1545	151	112	41	2	306	24	99	30	0	153	33	265	102	1	401	63	368	27	0	458	1318
1545 - 1600	181	144	48	5	378	36	118	25	0	179	37	228	91	2	358	61	336	26	0	423	1338
Hourly Total	662	438	177	13	1290	121	414	141	0	676	126	994	382	7	1509	215	1308	88	2	1613	5088
1600 - 1615	180	91	47	6	324	40	137	38	0	215	29	232	71	1	333	60	313	24	2	399	1271
1615 - 1630	178	107	31	3	319	33	119	38	0	190	31	291	89	5	416	56	332	19	0	407	1332
1630 - 1645	215	137	27	4	383	58	104	32	0	194	27	199	92	4	322	61	307	16	0	384	1283
1645 - 1700	206	93	36	5	340	33	135	29	0	197	27	213	81	3	324	61	288	15	0	364	1225
Hourly Total	779	428	141	18	1366	164	495	137	0	796	114	935	333	13	1395	238	1240	74	2	1554	5111
1700 - 1715	172	90	48	6	316	24	135	32	0	191	20	214	108	6	348	50	350	10	0	410	1265
1715 - 1730	176	123	40	3	342	26	130	36	0	192	22	231	93	3	349	63	379	17	0	459	1342
1730 - 1745	204	111	35	5	355	16	107	34	0	157	25	216	103	3	347	53	323	7	0	383	1242
1745 - 1800	152	92	38	7	289	31	113	15	0	159	26	206	111	5	348	28	236	15	0	279	1075
Hourly Total	704	416	161	21	1302	97	485	117	0	699	93	867	415	17	1392	194	1288	49	0	1531	4924
Grand Total	3758	2620	1044	100	7522	813	2446	762	4	4025	832	6083	2450	78	9443	1224	7111	480	12	8827	29817
Approach %	49.96	34.83	13.88	1.33	-	20.20	60.77	18.93	0.10	-	8.81	64.42	25.95	0.83	-	13.87	80.56	5.44	0.14	-	
Intersection %	12.60	8.79	3.50	0.34	25.23	2.73	8.20	2.56	0.01	13.50	2.79	20.40	8.22	0.26	31.67	4.11	23.85	1.61	0.04	29.60	
PHF	0.95	0.79	0.87	0.67	0.88	0.83	0.86	0.86	0.00	0.86	0.88	0.87	0.87	0.45	0.91	0.95	0.92	0.89	0.25	0.92	0.98

Classified Turn Movement Count || Passenger Vehicles (1-3)



Stuart, FL

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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.191137°, -80.253079°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0700 - 0715	130	83	35	4	252	7	34	8	0	49	18	309	178	1	506	23	112	2	1	138	945
0715 - 0730	108	98	28	7	241	8	37	5	0	50	32	428	159	3	622	20	115	11	0	146	1059
0730 - 0745	138	163	47	6	354	18	58	11	0	87	31	315	125	2	473	30	147	5	1	183	1097
0745 - 0800	141	134	61	4	340	22	54	8	1	85	44	296	101	0	441	26	162	13	0	201	1067
Hourly Total	517	478	171	21	1187	55	183	32	1	271	125	1348	563	6	2042	99	536	31	2	668	4168
0800 - 0815	141	138	49	2	330	26	64	10	0	100	36	334	107	3	480	29	109	14	1	153	1063
0815 - 0830	103	123	58	7	291	20	82	9	0	111	40	331	147	4	522	36	180	15	0	231	1155
0830 - 0845	160	145	64	8	377	21	48	13	0	82	55	387	145	1	588	25	178	16	0	219	1266
0845 - 0900	149	189	77	8	423	22	49	19	0	90	55	356	110	1	522	31	144	18	0	193	1228
Hourly Total	553	595	248	25	1421	89	243	51	0	383	186	1408	509	9	2112	121	611	63	1	796	4712
Grand Total	1070	1073	419	46	2608	144	426	83	1	654	311	2756	1072	15	4154	220	1147	94	3	1464	8880
Approach %	41.03	41.14	16.07	1.76	-	22.02	65.14	12.69	0.15	-	7.49	66.35	25.81	0.36	-	15.03	78.35	6.42	0.20	-	
Intersection %	12.05	12.08	4.72	0.52	29.37	1.62	4.80	0.93	0.01	7.36	3.50	31.04	12.07	0.17	46.78	2.48	12.92	1.06	0.03	16.49	

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1200 - 1215	126	97	33	5	261	39	102	31	1	173	31	258	86	3	378	64	230	25	1	320	1132
1215 - 1230	112	126	50	6	294	39	84	34	1	158	49	284	119	7	459	57	273	23	1	354	1265
1230 - 1245	121	99	56	9	285	50	64	35	0	149	31	286	89	2	408	37	246	22	1	306	1148
1245 - 1300	117	132	43	2	294	30	73	37	0	140	56	247	97	2	402	46	251	25	1	323	1159
Hourly Total	476	454	182	22	1134	158	323	137	2	620	167	1075	391	14	1647	204	1000	95	4	1303	4704
1300 - 1315	111	107	57	6	281	34	63	31	1	129	43	274	95	3	415	50	279	26	0	355	1180
1315 - 1330	138	113	53	5	309	34	90	22	0	146	36	229	112	5	382	35	261	35	1	332	1169
1330 - 1345	116	95	37	3	251	25	91	21	1	138	49	250	91	6	396	36	266	15	0	317	1102
1345 - 1400	146	94	50	4	294	41	90	28	0	159	42	276	108	2	428	41	267	21	1	330	1211
Hourly Total	511	409	197	18	1135	134	334	102	2	572	170	1029	406	16	1621	162	1073	97	2	1334	4662
1400 - 1415	129	105	37	3	274	33	76	32	0	141	43	261	101	1	406	49	221	16	0	286	1107
1415 - 1430	125	101	33	2	261	33	88	31	0	152	30	278	108	2	418	56	298	28	2	384	1215
1430 - 1445	146	115	48	1	310	37	108	34	0	179	33	307	115	3	458	29	304	18	0	351	1298
1445 - 1500	147	122	48	1	318	34	104	25	0	163	51	230	112	3	396	51	265	12	0	328	1205
Hourly Total	547	443	166	7	1163	137	376	122	0	635	157	1076	436	9	1678	185	1088	74	2	1349	4825
1500 - 1515	167	93	38	2	300	28	98	43	0	169	19	233	101	1	354	38	298	18	1	355	1178
1515 - 1530	150	85	46	4	285	32	95	43	0	170	36	255	80	3	374	52	293	17	1	363	1192
1530 - 1545	147	111	40	2	300	24	99	30	0	153	33	252	95	1	381	62	364	27	0	453	1287
1545 - 1600	173	141	47	5	366	36	116	25	0	177	36	220	82	2	340	61	333	26	0	420	1303
Hourly Total	637	430	171	13	1251	120	408	141	0	669	124	960	358	7	1449	213	1288	88	2	1591	4960
1600 - 1615	174	90	46	6	316	40	137	34	0	211	28	226	67	1	322	59	306	24	2	391	1240
1615 - 1630	175	107	31	3	316	33	118	36	0	187	31	284	86	5	406	55	329	19	0	403	1312
1630 - 1645	215	137	27	4	383	54	102	32	0	188	27	193	89	4	313	61	304	16	0	381	1265
1645 - 1700	203	91	36	5	335	33	133	29	0	195	27	208	76	3	314	61	279	15	0	355	1199
Hourly Total	767	425	140	18	1350	160	490	131	0	781	113	911	318	13	1355	236	1218	74	2	1530	5016
1700 - 1715	171	89	45	6	311	23	135	32	0	190	20	209	106	6	341	50	348	10	0	408	1250
1715 - 1730	173	122	39	3	337	26	129	36	0	191	22	225	90	3	340	63	373	17	0	453	1321
1730 - 1745	199	109	33	5	346	16	106	33	0	155	25	213	101	3	342	52	322	7	0	381	1224
1745 - 1800	148	91	38	7	284	31	111	15	0	157	26	202	109	5	342	27	234	15	0	276	1059
Hourly Total	691	411	155	21	1278	96	481	116	0	693	93	849	406	17	1365	192	1277	49	0	1518	4854
Grand Total	3629	2572	1011	99	7311	805	2412	749	4	3970	824	5900	2315	76	9115	1192	6944	477	12	8625	29021
Approach %	49.64	35.18	13.83	1.35	-	20.28	60.76	18.87	0.10	-	9.04	64.73	25.40	0.83	-	13.82	80.51	5.53	0.14	-	
Intersection %	12.50	8.86	3.48	0.34	25.19	2.77	8.31	2.58	0.01	13.68	2.84	20.33	7.98	0.26	31.41	4.11	23.93	1.64	0.04	29.72	

Classified Turn Movement Count || Single Unit Trucks (4-7)



Stuart, FL

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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.191137°, -80.253079°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0700 - 0715	1	2	0	1	4	0	3	2	0	5	0	4	2	0	6	2	2	0	0	4	19
0715 - 0730	5	0	0	0	5	0	0	0	0	0	0	7	1	0	8	2	14	0	0	16	29
0730 - 0745	8	2	2	0	12	0	0	0	0	0	0	7	0	0	7	1	10	1	0	12	31
0745 - 0800	6	0	2	0	8	1	0	0	0	1	0	9	4	0	13	3	13	0	0	16	38
Hourly Total	20	4	4	1	29	1	3	2	0	6	0	27	7	0	34	8	39	1	0	48	117
0800 - 0815	5	4	1	0	10	1	3	1	0	5	1	4	1	0	6	1	5	1	0	7	28
0815 - 0830	4	0	2	0	6	1	2	1	0	4	0	15	4	0	19	2	13	0	0	15	44
0830 - 0845	4	5	1	0	10	0	1	0	0	1	0	7	7	0	14	0	8	2	0	10	35
0845 - 0900	6	2	1	0	9	1	1	1	0	3	3	11	8	0	22	2	5	1	0	8	42
Hourly Total	19	11	5	0	35	3	7	3	0	13	4	37	20	0	61	5	31	4	0	40	149
Grand Total	39	15	9	1	64	4	10	5	0	19	4	64	27	0	95	13	70	5	0	88	266
Approach %	60.94	23.44	14.06	1.56	-	21.05	52.63	26.32	0.00	-	4.21	67.37	28.42	0.00	-	14.77	79.55	5.68	0.00	-	
Intersection %	14.66	5.64	3.38	0.38	24.06	1.50	3.76	1.88	0.00	7.14	1.50	24.06	10.15	0.00	35.71	4.89	26.32	1.88	0.00	33.08	

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1200 - 1215	9	2	0	0	11	1	3	1	0	5	0	6	7	0	13	2	11	0	0	13	42
1215 - 1230	1	5	0	0	6	0	0	1	0	1	0	4	7	0	11	2	6	1	0	9	27
1230 - 1245	8	3	0	1	12	0	1	0	0	1	1	9	5	0	15	2	8	0	0	10	38
1245 - 1300	3	5	3	0	11	0	3	1	0	4	0	6	4	1	11	1	7	0	0	8	34
Hourly Total	21	15	3	1	40	1	7	3	0	11	1	25	23	1	50	7	32	1	0	40	141
1300 - 1315	6	2	1	0	9	0	1	2	0	3	1	5	6	0	12	4	9	0	0	13	37
1315 - 1330	6	1	1	0	8	0	1	0	0	1	0	2	6	0	8	1	6	0	0	7	24
1330 - 1345	6	0	0	0	6	0	1	0	0	1	0	5	5	0	10	2	4	0	0	6	23
1345 - 1400	9	3	2	0	14	0	1	0	0	1	0	14	5	0	19	2	10	0	0	12	46
Hourly Total	27	6	4	0	37	0	4	2	0	6	1	26	22	0	49	9	29	0	0	38	130
1400 - 1415	3	1	0	0	4	1	1	0	0	2	1	11	3	0	15	2	4	0	0	6	27
1415 - 1430	4	1	5	0	10	0	0	0	0	0	0	7	4	1	12	4	4	0	0	8	30
1430 - 1445	7	1	1	0	9	0	1	0	0	1	0	11	5	0	16	0	8	0	0	8	34
1445 - 1500	5	3	2	0	10	0	2	1	0	3	0	6	4	0	10	1	11	0	0	12	35
Hourly Total	19	6	8	0	33	1	4	1	0	6	1	35	16	1	53	7	27	0	0	34	126
1500 - 1515	9	1	1	0	11	0	0	0	0	0	0	7	4	0	11	0	5	0	0	5	27
1515 - 1530	3	2	2	0	7	1	3	0	0	4	0	5	4	0	9	0	5	0	0	5	25
1530 - 1545	4	1	1	0	6	0	0	0	0	0	0	11	4	0	15	0	4	0	0	4	25
1545 - 1600	4	2	1	0	7	0	1	0	0	1	1	7	9	0	17	0	3	0	0	3	28
Hourly Total	20	6	5	0	31	1	4	0	0	5	1	30	21	0	52	0	17	0	0	17	105
1600 - 1615	4	1	1	0	6	0	0	4	0	4	1	4	4	0	9	1	6	0	0	7	26
1615 - 1630	3	0	0	0	3	0	1	2	0	3	0	5	2	0	7	1	2	0	0	3	16
1630 - 1645	0	0	0	0	0	3	1	0	0	4	0	2	3	0	5	0	3	0	0	3	12
1645 - 1700	2	1	0	0	3	0	2	0	0	2	0	5	3	0	8	0	8	0	0	8	21
Hourly Total	9	2	1	0	12	3	4	6	0	13	1	16	12	0	29	2	19	0	0	21	75
1700 - 1715	1	1	1	0	3	1	0	0	0	1	0	3	0	0	3	0	1	0	0	1	8
1715 - 1730	2	1	0	0	3	0	1	0	0	1	0	5	2	0	7	0	4	0	0	4	15
1730 - 1745	4	2	1	0	7	0	1	1	0	2	0	2	2	0	4	0	1	0	0	1	14
1745 - 1800	2	1	0	0	3	0	1	0	0	1	0	3	2	0	5	1	2	0	0	3	12
Hourly Total	9	5	2	0	16	1	3	1	0	5	0	13	6	0	19	1	8	0	0	9	49
Grand Total	105	40	23	1	169	7	26	13	0	46	5	145	100	2	252	26	132	1	0	159	626
Approach %	62.13	23.67	13.61	0.59	-	15.22	56.52	28.26	0.00	-	1.98	57.54	39.68	0.79	-	16.35	83.02	0.63	0.00	-	
Intersection %	16.77	6.39	3.67	0.16	27.00	1.12	4.15	2.08	0.00	7.35	0.80	23.16	15.97	0.32	40.26	4.15	21.09	0.16	0.00	25.40	

Classified Turn Movement Count || Combination Trucks (8-13)



Stuart, FL

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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

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0700 - 0900 (Weekday 2h Session) (02-28-2023)

Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0700 - 0715	1	0	1	0	2	1	0	0	0	1	0	0	3	0	3	0	4	1	0	5	11
0715 - 0730	2	0	0	0	2	0	1	0	0	1	0	1	2	0	3	1	2	0	0	3	9
0730 - 0745	1	0	0	0	1	0	1	0	0	1	0	4	1	0	5	0	2	0	0	2	9
0745 - 0800	3	1	1	0	5	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3	11
Hourly Total	7	1	2	0	10	1	2	0	0	3	0	8	6	0	14	1	10	2	0	13	40
0800 - 0815	5	0	0	0	5	1	0	0	0	1	0	3	4	0	7	0	3	0	0	3	16
0815 - 0830	2	0	0	0	2	0	1	0	0	1	0	4	2	0	6	1	4	0	0	5	14
0830 - 0845	1	0	0	0	1	0	0	0	0	0	0	4	3	0	7	1	2	0	0	3	11
0845 - 0900	2	1	0	0	3	1	1	0	0	2	0	5	1	0	6	1	2	0	0	3	14
Hourly Total	10	1	0	0	11	2	2	0	0	4	0	16	10	0	26	3	11	0	0	14	55
Grand Total	17	2	2	0	21	3	4	0	0	7	0	24	16	0	40	4	21	2	0	27	95
Approach %	80.95	9.52	9.52	0.00	-	42.86	57.14	0.00	0.00	-	0.00	60.00	40.00	0.00	-	14.81	77.78	7.41	0.00	-	
Intersection %	17.89	2.11	2.11	0.00	22.11	3.16	4.21	0.00	0.00	7.37	0.00	25.26	16.84	0.00	42.11	4.21	22.11	2.11	0.00	28.42	

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1200 - 1215	1	2	2	0	5	0	1	0	0	1	0	3	2	0	5	0	2	0	0	2	13
1215 - 1230	0	0	1	0	1	0	0	0	0	0	1	0	4	0	5	2	3	0	0	5	11
1230 - 1245	1	0	1	0	2	0	0	0	0	0	0	2	3	0	5	0	3	0	0	3	10
1245 - 1300	3	0	0	0	3	0	2	0	0	2	0	2	2	0	4	0	0	0	0	0	9
Hourly Total	5	2	4	0	11	0	3	0	0	3	1	7	11	0	19	2	8	0	0	10	43
1300 - 1315	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	3	1	0	4	6
1315 - 1330	1	1	1	0	3	0	0	0	0	0	0	1	2	0	3	0	1	0	0	1	7
1330 - 1345	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	1	3	0	0	4	7
1345 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	2	0	0	2	6
Hourly Total	3	1	1	0	5	0	0	0	0	0	0	1	9	0	10	1	9	1	0	11	26
1400 - 1415	2	1	0	0	3	0	0	0	0	0	0	3	2	0	5	0	2	0	0	2	10
1415 - 1430	1	0	0	0	1	0	0	0	0	0	1	4	2	0	7	0	0	0	0	0	8
1430 - 1445	0	0	0	0	0	0	1	0	0	1	0	3	1	0	4	0	6	0	0	6	11
1445 - 1500	1	0	0	0	1	0	0	0	0	0	0	3	1	0	4	0	1	0	0	1	6
Hourly Total	4	1	0	0	5	0	1	0	0	1	1	13	6	0	20	0	9	0	0	9	35
1500 - 1515	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	4
1515 - 1530	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	5
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5	1	0	0	0	1	6
1545 - 1600	4	1	0	0	5	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	7
Hourly Total	5	2	1	0	8	0	1	0	0	1	1	4	3	0	8	2	3	0	0	5	22
1600 - 1615	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	5
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
1630 - 1645	0	0	0	0	0	1	1	0	0	2	0	4	0	0	4	0	0	0	0	0	6
1645 - 1700	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	5
Hourly Total	3	1	0	0	4	1	1	0	0	2	0	8	3	0	11	0	2	0	0	2	19
1700 - 1715	0	0	2	0	2	0	0	0	0	0	0	2	2	0	4	0	1	0	0	1	7
1715 - 1730	1	0	1	0	2	0	0	0	0	0	0	1	1	0	2	0	2	0	0	2	6
1730 - 1745	1	0	1	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
1745 - 1800	2	0	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
Hourly Total	4	0	4	0	8	0	1	0	0	1	0	5	3	0	8	1	3	0	0	4	21
Grand Total	24	7	10	0	41	1	7	0	0	8	3	38	35	0	76	6	34	1	0	41	166
Approach %	58.54	17.07	24.39	0.00	-	12.50	87.50	0.00	0.00	-	3.95	50.00	46.05	0.00	-	14.63	82.93	2.44	0.00	-	
Intersection %	14.46	4.22	6.02	0.00	24.70	0.60	4.22	0.00	0.00	4.82	1.81	22.89	21.08	0.00	45.78	3.61	20.48	0.60	0.00	24.70	

Classified Turn Movement Count || Bikes



Stuart, FL

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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.191137°, -80.253079°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0745 - 0800	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Hourly Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	2		
0800 - 0815	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0845 - 0900	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Hourly Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Grand Total	0	4	0	0	4	0	0	0	0	0	0	0	0	0	1	0	1	0	2	6	
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	50.00	0.00	50.00	0.00	-	
Intersection %	0.00	66.67	0.00	0.00	66.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.67	0.00	16.67	0.00	33.33		

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy					FL-6 S Colorado Ave					US-1 SW Federal Hwy					US-1 SE Federal Hwy					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1200 - 1215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1215 - 1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1230 - 1245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1245 - 1300	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Hourly Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
1300 - 1315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1315 - 1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1330 - 1345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
1345 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1515 - 1530	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	4
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	50.00	50.00	0.00	-	
Intersection %	0.00	25.00	0.00	0.00	25.00	0.00	25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	25.00	0.00	50.00	

Pedestrian Count || All vehicles

Stuart, FL



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Site 2 of 3

FL-76 S Kanner Hwy
 FL-6 S Colorado Ave
 US-1 SW Federal Hwy
 US-1 SE Federal Hwy

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.191137°, -80.253079°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Pedestrians

TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total	
	FL-76 S Kanner Hwy			FL-6 S Colorado Ave			US-1 SW Federal Hwy			US-1 SE Federal Hwy					
	EB 2a	WB 2b	App Total	EB 2c	WB 2d	App Total	NB 2e	SB 2f	App Total	NB 2g	SB 2h	App Total			
0700 - 0715	0	2	2	0	0	0	0	1	0	1	0	1	0	1	4
0715 - 0730	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
0730 - 0745	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
0745 - 0800	0	0	0	0	0	0	0	2	0	2	0	2	2	0	4
Hourly Total	0	2	2	0	0	0	0	6	0	6	0	6	2	1	11
0800 - 0815	1	0	1	0	0	0	0	0	1	1	0	1	1	0	3
0815 - 0830	1	0	1	0	0	0	0	3	0	3	0	3	0	0	4
0830 - 0845	1	1	2	0	0	0	0	0	0	0	0	0	0	0	2
0845 - 0900	2	0	2	0	0	0	0	1	2	3	2	3	2	0	7
Hourly Total	5	1	6	0	0	0	0	4	3	7	3	7	3	0	16
Grand Total	5	3	8	0	0	0	0	10	3	13	5	13	5	1	27
Approach %	62.50	37.50	-	0.00	0.00	-	76.92	23.08	-	83.33	16.67	-	-	-	-
Intersection %	18.52	11.11	29.63	0.00	0.00	0.00	37.04	11.11	0.00	48.15	18.52	3.70	-	-	22.22

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Pedestrians

TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total	
	FL-76 S Kanner Hwy			FL-6 S Colorado Ave			US-1 SW Federal Hwy			US-1 SE Federal Hwy					
	EB 2a	WB 2b	App Total	EB 2c	WB 2d	App Total	NB 2e	SB 2f	App Total	NB 2g	SB 2h	App Total			
1200 - 1215	2	1	3	0	0	0	0	0	0	0	0	0	0	0	3
1215 - 1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1230 - 1245	1	2	3	0	0	0	0	0	2	2	1	0	0	1	6
1245 - 1300	0	1	1	0	0	0	0	3	2	5	0	0	0	0	6
Hourly Total	3	4	7	0	0	0	0	3	4	7	1	0	0	1	15
1300 - 1315	1	1	2	0	0	0	0	2	0	2	1	1	1	2	6
1315 - 1330	0	1	1	0	0	0	0	2	0	2	1	0	0	1	4
1330 - 1345	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1345 - 1400	1	0	1	0	0	0	0	2	1	3	0	0	0	0	4
Hourly Total	3	2	5	0	0	0	0	6	1	7	2	1	1	3	15
1400 - 1415	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1415 - 1430	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	2	1	3	0	0	0	0	1	1	2	0	0	0	0	5
1500 - 1515	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
1515 - 1530	0	2	2	0	0	0	0	0	0	0	3	0	0	3	5
1530 - 1545	1	3	4	0	0	0	0	0	0	0	1	0	0	1	5
1545 - 1600	0	1	1	0	0	0	0	0	0	0	0	1	1	1	2
Hourly Total	1	6	7	0	0	0	0	2	0	2	4	1	1	5	14
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	3	0	3	0	0	0	0	0	4	4	2	1	1	3	10
1630 - 1645	0	1	1	0	0	0	0	0	1	1	1	1	1	2	4
1645 - 1700	1	1	2	0	0	0	0	0	0	0	1	0	0	1	3
Hourly Total	4	2	6	0	0	0	0	0	5	5	4	2	2	6	17
1700 - 1715	2	4	6	0	0	0	0	0	1	1	0	3	3	3	10
1715 - 1730	0	2	2	0	0	0	0	1	1	2	0	0	0	0	4
1730 - 1745	0	0	0	0	0	0	0	0	1	1	1	1	1	2	3
1745 - 1800	1	0	1	1	1	0	1	0	0	0	0	1	1	1	3
Hourly Total	3	6	9	1	1	0	1	1	3	4	1	5	4	1	20
Grand Total	16	21	37	1	0	0	1	13	14	27	12	9	21	-	86
Approach %	43.24	56.76	-	100.00	0.00	-	48.15	51.85	-	57.14	42.86	-	-	-	-
Intersection %	18.60	24.42	43.02	1.16	0.00	1.16	15.12	16.28	0.00	31.40	13.95	10.47	24.42	-	24.42

Time	FL-76 S Kanner Hwy Northbound			FL-6 S Colorado Ave Southbound			US-1 SW Federal Hwy Eastbound			US-1 SE Federal Hwy Westbound			Total
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	132	85	36	8	37	10	18	313	183	26	118	3	980
07:15 AM - 07:30 AM	115	98	28	8	38	5	32	436	162	23	131	11	1099
07:30 AM - 07:45 AM	147	165	49	18	59	11	31	326	126	31	159	6	1138
07:45 AM - 08:00 AM	150	137	64	23	54	8	44	308	105	29	177	15	1123
08:00 AM - 08:15 AM	151	143	50	28	67	11	37	341	112	30	117	15	1111
08:15 AM - 08:30 AM	109	123	60	21	85	10	40	350	153	39	197	15	1217
08:30 AM - 08:45 AM	165	150	65	21	49	13	55	398	155	26	188	18	1314
08:45 AM - 09:00 AM	157	193	78	24	51	20	58	372	119	34	151	19	1292
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	136	101	35	40	106	32	31	267	95	66	243	25	1190
12:15 PM - 12:30 PM	113	131	51	39	84	35	50	288	130	61	282	24	1303
12:30 PM - 12:45 PM	130	102	57	50	65	35	32	297	97	39	257	22	1202
12:45 PM - 01:00 PM	123	138	46	30	78	38	56	255	103	47	258	25	1209
01:00 PM - 01:15 PM	117	109	58	34	64	33	44	279	103	54	291	27	1229
01:15 PM - 01:30 PM	145	115	55	34	91	22	36	232	120	36	268	35	1204
01:30 PM - 01:45 PM	124	95	37	25	92	21	49	255	97	39	273	16	1134
01:45 PM - 02:00 PM	155	97	52	41	91	28	42	290	117	43	279	21	1267
02:00 PM - 02:15 PM	134	107	37	34	77	32	44	275	106	51	227	16	1146
02:15 PM - 02:30 PM	130	102	38	33	88	31	31	289	114	60	302	28	1255
02:30 PM - 02:45 PM	153	116	49	37	110	34	33	321	121	29	318	18	1343
02:45 PM - 03:00 PM	153	125	50	34	106	26	51	239	117	52	277	12	1247
03:00 PM - 03:15 PM	177	94	39	28	98	43	20	240	105	38	305	18	1211
03:15 PM - 03:30 PM	153	88	49	33	99	43	36	261	84	53	299	17	1228
03:30 PM - 03:45 PM	151	112	41	24	99	30	33	265	102	63	368	27	1323
03:45 PM - 04:00 PM	181	144	48	36	118	25	37	228	91	61	336	26	1340
04:00 PM - 04:15 PM	180	91	47	40	137	38	29	232	71	60	313	24	1271
04:15 PM - 04:30 PM	178	107	31	33	119	38	31	291	89	56	332	19	1342
04:30 PM - 04:45 PM	215	137	27	58	104	32	27	199	92	61	307	16	1287
04:45 PM - 05:00 PM	206	93	36	33	135	29	27	213	81	61	288	15	1228
05:00 PM - 05:15 PM	172	90	48	24	135	32	20	214	108	50	350	10	1275
05:15 PM - 05:30 PM	176	123	40	26	130	36	22	231	93	63	379	17	1346
05:30 PM - 05:45 PM	204	111	35	16	107	34	25	216	103	53	323	7	1245
05:45 PM - 06:00 PM	152	92	38	31	113	15	26	206	111	28	236	15	1078
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

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Peak Hour Turning Movement Count

Stuart, FL



www.marrtraffic.com

Tuesday, February 28, 2023	
Period	0700 - 0900
Peak Hour	0745 - 0845

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0745 - 0800	54	189	49	6	298	48	184	63	5	300	213	215	36	0	464	67	119	9	0	195	1257
0800 - 0815	47	128	38	5	218	45	135	53	7	240	209	273	64	0	546	58	103	11	0	172	1176
0815 - 0830	53	163	28	4	248	51	168	46	5	270	193	236	27	0	456	39	132	21	0	192	1166
0830 - 0845	49	167	49	7	272	35	169	43	1	248	192	237	23	0	452	43	141	20	0	204	1176
Total	203	647	164	22	1036	179	656	205	18	1058	807	961	150	0	1918	207	495	61	0	763	4775
Approach %	19.59	62.45	15.83	2.12	-	16.92	62.00	19.38	1.70	-	42.08	50.10	7.82	0.00	-	27.13	64.88	7.99	0.00	-	-
PHF	0.94	0.86	0.84	0.79	0.87	0.88	0.89	0.81	0.64	0.88	0.95	0.88	0.59	0.00	0.88	0.77	0.88	0.73	0.00	0.94	0.95

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0745 - 0800	53	182	48	6	289	47	180	59	5	291	206	201	36	0	443	64	117	7	0	188	1211
0800 - 0815	46	122	37	4	209	43	130	50	7	230	203	264	64	0	531	55	97	10	0	162	1132
0815 - 0830	51	152	25	3	231	51	164	41	5	261	189	226	27	0	442	36	125	20	0	181	1115
0830 - 0845	49	162	46	7	264	33	164	38	1	236	185	225	23	0	433	40	133	19	0	192	1125
Total	199	618	156	20	993	174	638	188	18	1018	783	916	150	0	1849	195	472	56	0	723	4583
Approach %	20.04	62.24	15.71	2.01	-	17.09	62.67	18.47	1.77	-	42.35	49.54	8.11	0.00	-	26.97	65.28	7.75	0.00	-	-
PHF	0.94	0.85	0.81	0.71	0.86	0.85	0.89	0.80	0.64	0.87	0.95	0.87	0.59	0.00	0.87	0.76	0.89	0.70	0.00	0.94	0.95

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0745 - 0800	0	6	1	0	7	1	3	3	0	7	5	9	0	0	14	2	1	2	0	5	33
0800 - 0815	1	4	1	1	7	2	3	2	0	7	3	6	0	0	9	1	6	1	0	8	31
0815 - 0830	0	7	1	1	9	0	1	4	0	5	4	3	0	0	7	0	5	1	0	6	27
0830 - 0845	0	4	1	0	5	2	2	3	0	7	6	7	0	0	13	2	6	0	0	8	33
Total	1	21	4	2	28	5	9	12	0	26	18	25	0	0	43	5	18	4	0	27	124
Approach %	3.57	75.00	14.29	7.14	-	19.23	34.62	46.15	0.00	-	41.86	58.14	0.00	0.00	-	18.52	66.67	14.81	0.00	-	-
PHF	0.25	0.75	1.00	0.50	0.78	0.63	0.75	0.75	0.00	0.93	0.75	0.69	0.00	0.00	0.77	0.63	0.75	0.50	0.00	0.84	0.94

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0745 - 0800	1	1	0	0	2	0	1	1	0	2	2	4	0	0	6	1	1	0	0	2	12
0800 - 0815	0	2	0	0	2	0	2	1	0	3	3	2	0	0	5	2	0	0	0	2	12
0815 - 0830	2	2	2	0	6	0	3	1	0	4	0	6	0	0	6	3	2	0	0	5	21
0830 - 0845	0	1	2	0	3	0	3	2	0	5	1	5	0	0	6	1	2	1	0	4	18
Total	3	6	4	0	13	0	9	5	0	14	6	17	0	0	23	7	5	1	0	13	63
Approach %	23.08	46.15	30.77	0.00	-	0.00	64.29	35.71	0.00	-	26.09	73.91	0.00	0.00	-	53.85	38.46	7.69	0.00	-	-
PHF	0.38	0.75	0.50	0.00	0.54	0.00	0.75	0.63	0.00	0.70	0.50	0.71	0.00	0.00	0.96	0.58	0.63	0.25	0.00	0.65	0.75

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
0815 - 0830	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
PHF	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.42

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Peak Hour Turning Movement Count

Stuart, FL



www.marrtraffic.com

Tuesday, February 28, 2023	
Period	1200 - 1800
Peak Hour	1515 - 1615

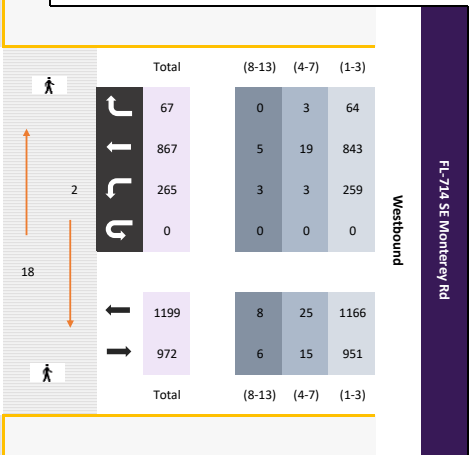
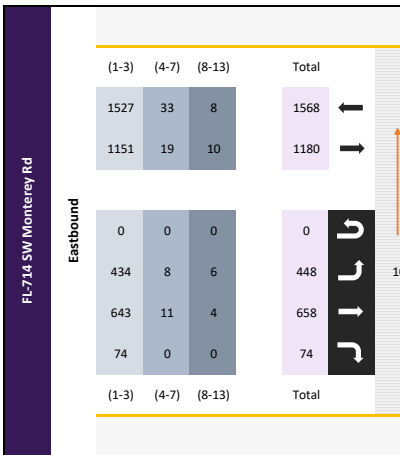
* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	
1515 - 1530	64	196	36	9	305	43	160	111	8	322	118	174	12	0	304	75	214	20	0	309	1240
1530 - 1545	72	218	43	4	337	33	181	110	6	330	94	162	21	0	277	57	223	17	0	297	1241
1545 - 1600	50	163	39	4	256	38	175	119	6	338	124	171	20	0	315	66	220	20	0	306	1215
1600 - 1615	63	222	49	5	339	33	182	112	3	330	112	151	21	0	284	67	211	10	0	288	1241
Total	249	799	167	22	1237	147	698	452	23	1320	448	658	74	0	1180	265	868	67	0	1200	4937
Approach %	20.13	64.59	13.50	1.78	-	11.14	52.88	34.24	1.74	-	37.97	55.76	6.27	0.00	-	22.08	72.33	5.58	0.00	-	-
PHF	0.86	0.90	0.85	0.61	0.91	0.85	0.96	0.95	0.72	0.98	0.90	0.95	0.88	0.00	0.94	0.88	0.97	0.84	0.00	0.97	0.99

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	
1515 - 1530	64	192	35	9	300	42	156	107	8	313	113	168	12	0	293	73	206	19	0	298	1204
1530 - 1545	72	213	41	4	330	33	179	105	6	323	90	162	21	0	273	55	218	15	0	288	1214
1545 - 1600	50	159	38	4	251	37	168	114	6	325	120	169	20	0	309	64	210	20	0	294	1179
1600 - 1615	62	218	49	5	334	33	176	110	3	322	111	144	21	0	276	67	209	10	0	286	1218
Total	248	782	163	22	1215	145	679	436	23	1283	434	643	74	0	1151	259	843	64	0	1166	4815
Approach %	20.41	64.36	13.42	1.81	-	11.30	52.92	33.98	1.79	-	37.71	55.86	6.43	0.00	-	22.21	72.30	5.49	0.00	-	-
PHF	0.86	0.90	0.83	0.61	0.91	0.86	0.95	0.96	0.72	0.99	0.90	0.95	0.88	0.00	0.93	0.89	0.97	0.80	0.00	0.98	0.99

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	
1515 - 1530	0	4	1	0	5	1	3	3	0	7	4	6	0	0	10	1	7	1	0	9	31
1530 - 1545	0	5	1	0	6	0	2	3	0	5	2	0	0	0	2	0	4	2	0	6	19
1545 - 1600	0	2	1	0	3	0	5	5	0	10	2	1	0	0	3	2	6	0	0	8	24
1600 - 1615	1	4	0	0	5	0	5	2	0	7	0	4	0	0	4	0	2	0	0	2	18
Total	1	15	3	0	19	1	15	13	0	29	8	11	0	0	19	3	19	3	0	25	92
Approach %	5.26	78.95	15.79	0.00	-	3.45	51.72	44.83	0.00	-	42.11	57.89	0.00	0.00	-	12.00	76.00	12.00	0.00	-	-
PHF	0.25	0.75	0.75	0.00	0.79	0.25	0.75	0.65	0.00	0.73	0.50	0.46	0.00	0.00	0.48	0.38	0.68	0.38	0.00	0.69	0.74

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	
1515 - 1530	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1	1	0	0	2	4
1530 - 1545	0	0	1	0	1	0	0	2	0	2	2	0	0	0	2	2	1	0	0	3	8
1545 - 1600	0	2	0	0	2	1	2	0	0	3	2	1	0	0	3	0	3	0	0	3	11
1600 - 1615	0	0	0	0	0	0	1	0	0	1	1	3	0	0	4	0	0	0	0	0	5
Total	0	2	1	0	3	1	3	3	0	7	6	4	0	0	10	3	5	0	0	8	28
Approach %	0.00	66.67	33.33	0.00	-	14.29	42.86	42.86	0.00	-	60.00	40.00	0.00	0.00	-	37.50	62.50	0.00	0.00	-	-
PHF	0.00	0.25	0.25	0.00	0.38	0.25	0.38	0.38	0.00	0.58	0.75	0.33	0.00	0.00	0.63	0.38	0.42	0.00	0.00	0.67	0.64

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	
1515 - 1530	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Approach %	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	-
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.50

Classified Turn Movement Count || All vehicles



Stuart, FL

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Site 3 of 3
 FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0700 - 0715	35	103	27	2	167	44	211	28	2	285	136	189	32	0	357	44	96	15	0	155	964
0715 - 0730	35	139	29	5	208	26	204	23	0	253	142	234	35	0	411	46	96	10	0	152	1024
0730 - 0745	36	140	37	1	214	26	194	25	3	248	187	266	46	0	499	49	105	23	0	177	1138
0745 - 0800	54	189	49	6	298	48	184	63	5	300	213	215	36	0	464	67	119	9	0	195	1257
Hourly Total	160	571	142	14	887	144	793	139	10	1086	678	904	149	0	1731	206	416	57	0	679	4383
0800 - 0815	47	128	38	5	218	45	135	53	7	240	209	273	64	0	546	58	103	11	0	172	1176
0815 - 0830	53	163	28	4	248	51	168	46	5	270	193	236	27	0	456	39	132	21	0	192	1166
0830 - 0845	49	167	49	7	272	35	169	43	1	248	192	237	23	0	452	43	141	20	0	204	1176
0845 - 0900	31	142	46	2	221	44	163	47	4	258	209	238	21	0	468	45	124	11	0	180	1127
Hourly Total	180	600	161	18	959	175	635	189	17	1016	803	984	135	0	1922	185	500	63	0	748	4645
Grand Total	340	1171	303	32	1846	319	1428	328	27	2102	1481	1888	284	0	3653	391	916	120	0	1427	9028
Approach %	18.42	63.43	16.41	1.73	-	15.18	67.94	15.60	1.28	-	40.54	51.68	7.77	0.00	-	27.40	64.19	8.41	0.00	-	
Intersection %	3.77	12.97	3.36	0.35	20.45	3.53	15.82	3.63	0.30	23.28	16.40	20.91	3.15	0.00	40.46	4.33	10.15	1.33	0.00	15.81	
PHF	0.94	0.86	0.84	0.79	0.87	0.88	0.89	0.81	0.64	0.88	0.95	0.88	0.59	0.00	0.88	0.77	0.88	0.73	0.00	0.94	0.95

1200 - 1800 (Weekday 6h Session) (02-28-2023)

All vehicles

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1200 - 1215	41	146	44	5	236	45	159	78	12	294	102	163	24	0	289	60	180	23	0	263	1082
1215 - 1230	36	158	39	7	240	51	162	78	10	301	118	154	20	0	292	63	195	26	0	284	1117
1230 - 1245	40	157	42	6	245	49	160	79	5	293	138	158	17	0	313	55	194	22	0	271	1122
1245 - 1300	43	126	33	7	209	45	144	75	8	272	132	189	20	0	341	45	172	24	0	241	1063
Hourly Total	160	587	158	25	930	190	625	310	35	1160	490	664	81	0	1235	223	741	95	0	1059	4384
1300 - 1315	44	155	41	4	244	47	142	64	8	261	115	170	17	0	302	54	191	19	0	264	1071
1315 - 1330	37	152	47	4	240	48	168	85	7	308	136	180	25	0	341	67	173	19	0	259	1148
1330 - 1345	38	132	42	6	218	47	132	78	8	265	109	157	20	0	286	58	208	26	0	292	1061
1345 - 1400	42	163	48	5	258	39	160	87	7	293	147	156	18	0	321	60	149	14	0	223	1095
Hourly Total	161	602	178	19	960	181	602	314	30	1127	507	663	80	0	1250	239	721	78	0	1038	4375
1400 - 1415	44	141	47	2	234	42	160	83	16	301	103	176	18	0	297	49	170	28	0	247	1079
1415 - 1430	40	153	42	7	242	42	156	73	9	280	134	157	22	0	313	60	196	23	0	279	1114
1430 - 1445	35	159	42	7	243	45	149	77	8	279	124	183	30	0	337	57	223	24	0	304	1163
1445 - 1500	42	136	33	3	214	37	171	100	4	312	125	200	27	0	352	49	221	17	0	287	1165
Hourly Total	161	589	164	19	933	166	636	333	37	1172	486	716	97	0	1299	215	810	92	0	1117	4521
1500 - 1515	57	158	41	2	258	50	175	112	9	346	110	179	18	0	307	54	206	17	0	277	1188
1515 - 1530	64	196	36	9	305	43	160	111	8	322	118	174	12	0	304	75	214	20	0	309	1240
1530 - 1545	72	218	43	4	337	33	181	110	6	330	94	162	21	0	277	57	223	17	0	297	1241
1545 - 1600	50	163	39	4	256	38	175	119	6	338	124	171	20	0	315	66	220	20	0	306	1215
Hourly Total	243	735	159	19	1156	164	691	452	29	1336	446	686	71	0	1203	252	863	74	0	1189	4884
1600 - 1615	63	222	49	5	339	33	182	112	3	330	112	151	21	0	284	67	211	10	0	288	1241
1615 - 1630	69	222	44	5	340	36	212	121	5	374	106	144	13	0	263	39	205	15	0	259	1236
1630 - 1645	62	175	34	3	274	34	191	112	9	346	128	162	19	0	309	51	228	11	0	290	1219
1645 - 1700	68	199	59	3	329	31	160	140	7	338	119	152	13	0	284	51	221	11	0	283	1234
Hourly Total	262	818	186	16	1282	134	745	485	24	1388	465	609	66	0	1140	208	865	47	0	1120	4930
1700 - 1715	60	170	41	6	277	41	183	157	8	389	108	154	30	0	292	47	226	12	0	285	1243
1715 - 1730	74	215	53	0	342	39	195	144	10	388	127	142	12	0	281	45	186	9	0	240	1251
1730 - 1745	60	198	48	3	309	45	169	130	7	351	111	128	19	0	258	63	220	11	0	294	1212
1745 - 1800	51	174	36	4	265	33	162	102	10	307	124	164	24	0	312	44	225	13	0	282	1166
Hourly Total	245	757	178	13	1193	158	709	533	35	1435	470	588	85	0	1143	199	857	45	0	1101	4872
Grand Total	1232	4088	1023	111	6454	993	4008	2427	190	7618	2864	3926	480	0	7270	1336	4857	431	0	6624	27966
Approach %	19.09	63.34	15.85	1.72	-	13.03	52.61	31.86	2.49	-	39.39	54.00	6.60	0.00	-	20.17	73.32	6.51	0.00	-	
Intersection %	4.41	14.62	3.66	0.40	23.08	3.55	14.33	8.68	0.68	27.24	10.24	14.04	1.72	0.00	26.00	4.78	17.37	1.54	0.00	23.69	
PHF	0.86	0.90	0.85	0.61	0.91	0.85	0.96	0.95	0.72	0.98	0.90	0.95	0.88	0.00	0.94	0.88	0.97	0.84	0.00	0.97	0.99

Classified Turn Movement Count || Passenger Vehicles (1-3)



Stuart, FL

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Site 3 of 3

FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0700 - 0715	33	99	26	2	160	42	206	26	2	276	133	180	30	0	343	44	88	14	0	146	925
0715 - 0730	34	135	24	5	198	26	199	20	0	245	139	231	35	0	405	42	85	9	0	136	984
0730 - 0745	31	135	35	1	202	26	189	23	3	241	181	258	46	0	485	47	101	23	0	171	1099
0745 - 0800	53	182	48	6	289	47	180	59	5	291	206	201	36	0	443	64	117	7	0	188	1211
Hourly Total	151	551	133	14	849	141	774	128	10	1053	659	870	147	0	1676	197	391	53	0	641	4219
0800 - 0815	46	122	37	4	209	43	130	50	7	230	203	264	64	0	531	55	97	10	0	162	1132
0815 - 0830	51	152	25	3	231	51	164	41	5	261	189	226	27	0	442	36	125	20	0	181	1115
0830 - 0845	49	162	46	7	264	33	164	38	1	236	185	225	23	0	433	40	133	19	0	192	1125
0845 - 0900	31	141	44	2	218	42	153	42	4	241	205	230	21	0	456	45	117	10	0	172	1087
Hourly Total	177	577	152	16	922	169	611	171	17	968	782	945	135	0	1862	176	472	59	0	707	4459
Grand Total	328	1128	285	30	1771	310	1385	299	27	2021	1441	1815	282	0	3538	373	863	112	0	1348	8678
Approach %	18.52	63.69	16.09	1.69	-	15.34	68.53	14.79	1.34	-	40.73	51.30	7.97	0.00	-	27.67	64.02	8.31	0.00	-	-
Intersection %	3.78	13.00	3.28	0.35	20.41	3.57	15.96	3.45	0.31	23.29	16.61	20.91	3.25	0.00	40.77	4.30	9.94	1.29	0.00	15.53	-

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Passenger Vehicles (1-3)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1200 - 1215	40	141	43	5	229	43	150	74	12	279	94	157	24	0	275	57	174	23	0	254	1037
1215 - 1230	36	153	36	6	231	51	153	72	10	286	115	152	20	0	287	62	188	26	0	276	1080
1230 - 1245	39	147	42	6	234	49	151	75	5	280	132	154	17	0	303	52	185	21	0	258	1075
1245 - 1300	42	120	31	7	200	44	135	71	8	258	126	182	20	0	328	45	162	22	0	229	1015
Hourly Total	157	561	152	24	894	187	589	292	35	1103	467	645	81	0	1193	216	709	92	0	1017	4207
1300 - 1315	44	151	36	4	235	47	134	60	8	249	110	166	17	0	293	52	178	19	0	249	1026
1315 - 1330	36	146	44	4	230	46	161	80	7	294	128	175	24	0	327	62	168	19	0	249	1100
1330 - 1345	38	125	41	6	210	47	125	75	8	255	104	146	20	0	270	58	202	26	0	286	1021
1345 - 1400	41	157	48	5	251	39	152	83	7	281	145	149	18	0	312	59	145	14	0	218	1062
Hourly Total	159	579	169	19	926	179	572	298	30	1079	487	636	79	0	1202	231	693	78	0	1002	4209
1400 - 1415	44	137	45	2	228	42	157	75	16	290	101	171	17	0	289	48	151	27	0	226	1033
1415 - 1430	40	149	39	7	235	42	154	69	9	274	129	152	22	0	303	56	189	22	0	267	1079
1430 - 1445	35	154	40	7	236	43	145	74	8	270	122	173	30	0	325	54	211	24	0	289	1120
1445 - 1500	42	127	33	3	205	37	170	90	4	301	120	193	26	0	339	48	213	17	0	278	1123
Hourly Total	161	567	157	19	904	164	626	308	37	1135	472	689	95	0	1256	206	764	90	0	1060	4355
1500 - 1515	56	150	40	2	248	49	171	108	9	337	108	174	18	0	300	52	202	17	0	271	1156
1515 - 1530	64	192	35	9	300	42	156	107	8	313	113	168	12	0	293	73	206	19	0	298	1204
1530 - 1545	72	213	41	4	330	33	179	105	6	323	90	162	21	0	273	55	218	15	0	288	1214
1545 - 1600	50	159	38	4	251	37	168	114	6	325	120	169	20	0	309	64	210	20	0	294	1179
Hourly Total	242	714	154	19	1129	161	674	434	29	1298	431	673	71	0	1175	244	836	71	0	1151	4753
1600 - 1615	62	218	49	5	334	33	176	110	3	322	111	144	21	0	276	67	209	10	0	286	1218
1615 - 1630	68	220	43	5	336	36	209	116	5	366	106	143	13	0	262	36	201	15	0	252	1216
1630 - 1645	62	173	33	3	271	34	188	109	9	340	128	156	19	0	303	49	223	11	0	283	1197
1645 - 1700	66	195	59	3	323	31	158	136	7	332	116	146	13	0	275	50	217	11	0	278	1208
Hourly Total	258	806	184	16	1264	134	731	471	24	1360	461	589	66	0	1116	202	850	47	0	1099	4839
1700 - 1715	60	168	41	6	275	41	181	153	8	383	107	152	30	0	289	47	226	12	0	285	1232
1715 - 1730	73	209	53	0	335	39	192	141	10	382	126	138	12	0	276	44	184	9	0	237	1230
1730 - 1745	59	195	48	3	305	42	168	127	7	344	107	127	18	0	252	59	219	11	0	289	1190
1745 - 1800	50	170	36	4	260	32	161	102	10	305	121	162	24	0	307	42	224	13	0	279	1151
Hourly Total	242	742	178	13	1175	154	702	523	35	1414	461	579	84	0	1124	192	853	45	0	1090	4803
Grand Total	1219	3969	994	110	6292	979	3894	2326	190	7389	2779	3811	476	0	7066	1291	4705	423	0	6419	27166
Approach %	19.37	63.08	15.80	1.75	-	13.25	52.70	31.48	2.57	-	39.33	53.93	6.74	0.00	-	20.11	73.30	6.59	0.00	-	-
Intersection %	4.49	14.61	3.66	0.40	23.16	3.60	14.33	8.56	0.70	27.20	10.23	14.03	1.75	0.00	26.01	4.75	17.32	1.56	0.00	23.63	-

Classified Turn Movement Count || Single Unit Trucks (4-7)



Stuart, FL

www.marrtraffic.com

Site 3 of 3

FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0700 - 0715	2	2	1	0	5	2	4	2	0	8	3	4	2	0	9	0	6	1	0	7	29
0715 - 0730	0	3	4	0	7	0	3	2	0	5	3	0	0	0	3	2	7	1	0	10	25
0730 - 0745	1	1	2	0	4	0	2	1	0	3	4	7	0	0	11	2	3	0	0	5	23
0745 - 0800	0	6	1	0	7	1	3	3	0	7	5	9	0	0	14	2	1	2	0	5	33
Hourly Total	3	12	8	0	23	3	12	8	0	23	15	20	2	0	37	6	17	4	0	27	110
0800 - 0815	1	4	1	1	7	2	3	2	0	7	3	6	0	0	9	1	6	1	0	8	31
0815 - 0830	0	7	1	1	9	0	1	4	0	5	4	3	0	0	7	0	5	1	0	6	27
0830 - 0845	0	4	1	0	5	2	2	3	0	7	6	7	0	0	13	2	6	0	0	8	33
0845 - 0900	0	1	1	0	2	2	8	4	0	14	3	5	0	0	8	0	4	1	0	5	29
Hourly Total	1	16	4	2	23	6	14	13	0	33	16	21	0	0	37	3	21	3	0	27	120
Grand Total	4	28	12	2	46	9	26	21	0	56	31	41	2	0	74	9	38	7	0	54	230
Approach %	8.70	60.87	26.09	4.35	-	16.07	46.43	37.50	0.00	-	41.89	55.41	2.70	0.00	-	16.67	70.37	12.96	0.00	-	
Intersection %	1.74	12.17	5.22	0.87	20.00	3.91	11.30	9.13	0.00	24.35	13.48	17.83	0.87	0.00	32.17	3.91	16.52	3.04	0.00	23.48	

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Single Unit Trucks (4-7)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1200 - 1215	0	4	1	0	5	1	7	4	0	12	6	3	0	0	9	3	4	0	0	7	33
1215 - 1230	0	4	1	1	6	0	5	3	0	8	3	2	0	0	5	1	3	0	0	4	23
1230 - 1245	1	8	0	0	9	0	6	3	0	9	4	3	0	0	7	3	6	1	0	10	35
1245 - 1300	1	4	2	0	7	1	7	4	0	12	4	6	0	0	10	0	7	2	0	9	38
Hourly Total	2	20	4	1	27	2	25	14	0	41	17	14	0	0	31	7	20	3	0	30	129
1300 - 1315	0	3	5	0	8	0	8	2	0	10	5	2	0	0	7	2	9	0	0	11	36
1315 - 1330	1	6	3	0	10	1	6	4	0	11	5	5	1	0	11	5	4	0	0	9	41
1330 - 1345	0	7	1	0	8	0	7	2	0	9	4	9	0	0	13	0	5	0	0	5	35
1345 - 1400	1	6	0	0	7	0	6	2	0	8	2	6	0	0	8	1	2	0	0	3	26
Hourly Total	2	22	9	0	33	1	27	10	0	38	16	22	1	0	39	8	20	0	0	28	138
1400 - 1415	0	4	2	0	6	0	1	8	0	9	1	3	1	0	5	1	15	1	0	17	37
1415 - 1430	0	3	3	0	6	0	1	3	0	4	4	5	0	0	9	2	7	1	0	10	29
1430 - 1445	0	5	2	0	7	2	3	3	0	8	2	6	0	0	8	3	5	0	0	8	31
1445 - 1500	0	7	0	0	7	0	1	8	0	9	5	6	1	0	12	1	6	0	0	7	35
Hourly Total	0	19	7	0	26	2	6	22	0	30	12	20	2	0	34	7	33	2	0	42	132
1500 - 1515	1	7	1	0	9	1	4	4	0	9	2	4	0	0	6	2	2	0	0	4	28
1515 - 1530	0	4	1	0	5	1	3	3	0	7	4	6	0	0	10	1	7	1	0	9	31
1530 - 1545	0	5	1	0	6	0	2	3	0	5	2	0	0	0	2	0	4	2	0	6	19
1545 - 1600	0	2	1	0	3	0	5	5	0	10	2	1	0	0	3	2	6	0	0	8	24
Hourly Total	1	18	4	0	23	2	14	15	0	31	10	11	0	0	21	5	19	3	0	27	102
1600 - 1615	1	4	0	0	5	0	5	2	0	7	0	4	0	0	4	0	2	0	0	2	18
1615 - 1630	1	2	0	0	3	0	2	5	0	7	0	1	0	0	1	2	4	0	0	6	17
1630 - 1645	0	2	0	0	2	0	3	2	0	5	0	5	0	0	5	2	4	0	0	6	18
1645 - 1700	2	2	0	0	4	0	1	4	0	5	2	6	0	0	8	1	2	0	0	3	20
Hourly Total	4	10	0	0	14	0	11	13	0	24	2	16	0	0	18	5	12	0	0	17	73
1700 - 1715	0	2	0	0	2	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	5
1715 - 1730	1	3	0	0	4	0	2	2	0	4	0	3	0	0	3	1	1	0	0	2	13
1730 - 1745	1	2	0	0	3	3	1	3	0	7	2	1	1	0	4	4	1	0	0	5	19
1745 - 1800	1	4	0	0	5	1	1	0	0	2	3	2	0	0	5	2	0	0	0	2	14
Hourly Total	3	11	0	0	14	4	5	7	0	16	5	6	1	0	12	7	2	0	0	9	51
Grand Total	12	100	24	1	137	11	88	81	0	180	62	89	4	0	155	39	106	8	0	153	625
Approach %	8.76	72.99	17.52	0.73	-	6.11	48.89	45.00	0.00	-	40.00	57.42	2.58	0.00	-	25.49	69.28	5.23	0.00	-	
Intersection %	1.92	16.00	3.84	0.16	21.92	1.76	14.08	12.96	0.00	28.80	9.92	14.24	0.64	0.00	24.80	6.24	16.96	1.28	0.00	24.48	

Classified Turn Movement Count || Combination Trucks (8-13)



Stuart, FL

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Site 3 of 3
 FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)
 Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total				
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd									
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total					
0700 - 0715	0	2	0	0	2	0	1	0	0	1	0	5	0	0	5	0	2	0	0	2	0	1	0	0	1
0715 - 0730	1	1	1	0	3	0	1	1	0	2	0	3	0	0	3	2	4	0	0	6	0	1	0	0	1
0730 - 0745	4	2	0	0	6	0	3	1	0	4	2	1	0	0	3	0	1	0	0	1	0	1	0	0	1
0745 - 0800	1	1	0	0	2	0	1	1	0	2	2	4	0	0	6	1	1	0	0	2	0	1	0	0	1
Hourly Total	6	6	1	0	13	0	6	3	0	9	4	13	0	0	17	3	8	0	0	11	0	1	0	0	1
0800 - 0815	0	2	0	0	2	0	2	1	0	3	3	2	0	0	5	2	0	0	0	2	0	1	0	0	1
0815 - 0830	2	2	2	0	6	0	3	1	0	4	0	6	0	0	6	3	2	0	0	5	0	1	0	0	1
0830 - 0845	0	1	2	0	3	0	3	2	0	5	1	5	0	0	6	1	2	1	0	4	0	1	0	0	1
0845 - 0900	0	0	1	0	1	0	2	1	0	3	1	3	0	0	4	0	3	0	0	3	0	1	0	0	1
Hourly Total	2	5	5	0	12	0	10	5	0	15	5	16	0	0	21	6	7	1	0	14	0	1	0	0	1
Grand Total	8	11	6	0	25	0	16	8	0	24	9	29	0	0	38	9	15	1	0	25	0	1	0	0	1
Approach %	32.00	44.00	24.00	0.00	-	0.00	66.67	33.33	0.00	-	23.68	76.32	0.00	0.00	-	36.00	60.00	4.00	0.00	-	0.00	0.00	0.00	0.00	-
Intersection %	7.14	9.82	5.36	0.00	22.32	0.00	14.29	7.14	0.00	21.43	8.04	25.89	0.00	0.00	33.93	8.04	13.39	0.89	0.00	22.32	0.00	0.00	0.00	0.00	0.00

1200 - 1800 (Weekday 6h Session) (02-28-2023)
 Combination Trucks (8-13)

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total				
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd									
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total					
1200 - 1215	1	1	0	0	2	1	2	0	0	3	2	3	0	0	5	0	2	0	0	2	0	1	0	0	1
1215 - 1230	0	1	2	0	3	0	4	3	0	7	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1
1230 - 1245	0	1	0	0	1	0	3	1	0	4	2	1	0	0	3	0	3	0	0	3	0	1	0	0	1
1245 - 1300	0	2	0	0	2	0	2	0	0	2	2	1	0	0	3	0	3	0	0	3	0	1	0	0	1
Hourly Total	1	5	2	0	8	1	11	4	0	16	6	5	0	0	11	0	12	0	0	12	0	1	0	0	1
1300 - 1315	0	1	0	0	1	0	0	2	0	2	0	2	0	0	2	0	4	0	0	4	0	1	0	0	1
1315 - 1330	0	0	0	0	0	1	1	1	0	3	3	0	0	0	3	0	1	0	0	1	0	1	0	0	1
1330 - 1345	0	0	0	0	0	0	0	1	0	1	1	2	0	0	3	0	1	0	0	1	0	1	0	0	1
1345 - 1400	0	0	0	0	0	0	2	2	0	4	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1
Hourly Total	0	1	0	0	1	1	3	6	0	10	4	5	0	0	9	0	8	0	0	8	0	1	0	0	1
1400 - 1415	0	0	0	0	0	0	2	0	0	2	1	2	0	0	3	0	3	0	0	3	0	1	0	0	1
1415 - 1430	0	1	0	0	1	0	1	1	0	2	1	0	0	0	1	2	0	0	0	2	0	1	0	0	1
1430 - 1445	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	0	6	0	0	6	0	1	0	0	1
1445 - 1500	0	2	0	0	2	0	0	2	0	2	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1
Hourly Total	0	3	0	0	3	0	4	3	0	7	2	7	0	0	9	2	10	0	0	12	0	1	0	0	1
1500 - 1515	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1
1515 - 1530	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1	1	0	0	2	0	1	0	0	1
1530 - 1545	0	0	1	0	1	0	0	2	0	2	2	0	0	0	2	2	1	0	0	3	0	1	0	0	1
1545 - 1600	0	2	0	0	2	1	2	0	0	3	2	1	0	0	3	0	3	0	0	3	0	1	0	0	1
Hourly Total	0	3	1	0	4	1	2	3	0	6	5	2	0	0	7	3	7	0	0	10	0	1	0	0	1
1600 - 1615	0	0	0	0	0	0	1	0	0	1	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1
1615 - 1630	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1
1630 - 1645	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1
1645 - 1700	0	2	0	0	2	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1
Hourly Total	0	2	2	0	4	0	3	1	0	4	2	4	0	0	6	1	3	0	0	4	0	1	0	0	1
1700 - 1715	0	0	0	0	0	0	1	2	0	3	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1
1715 - 1730	0	3	0	0	3	0	1	1	0	2	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1
1730 - 1745	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
Hourly Total	0	4	0	0	4	0	2	3	0	5	4	3	0	0	7	0	2	0	0	2	0	1	0	0	1
Grand Total	1	18	5	0	24	3	25	20	0	48	23	26	0	0	49	6	42	0	0	48	0	1	0	0	1
Approach %	4.17	75.00	20.83	0.00	-	6.25	52.08	41.67	0.00	-	46.94	53.06	0.00	0.00	-	12.50	87.50	0.00	0.00	-	0.00	0.00	0.00	0.00	-
Intersection %	0.59	10.65	2.96	0.00	14.20	1.78	14.79	11.83	0.00	28.40	13.61	15.38	0.00	0.00	28.99	3.55	24.85	0.00	0.00	28.40	0.00	0.00	0.00	0.00	0.00

Classified Turn Movement Count || Bikes



Stuart, FL

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Site 3 of 3
 FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date
 Tuesday, February 28, 2023

Weather
 Fair
 70°F

Lat/Long
 27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total					
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd										
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total						
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0730 - 0745	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0815 - 0830	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Grand Total	0	4	0	0	4	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	8
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-						
Intersection %	0.00	50.00	0.00	0.00	50.00	0.00	12.50	0.00	0.00	12.50	0.00	37.50	0.00	0.00	37.50	0.00	0.00	0.00	0.00	0.00						

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Bikes

TIME	Northbound					Southbound					Eastbound					Westbound					Int Total					
	FL-76 S Kanner Hwy (South)					FL-76 S Kanner Hwy (North)					FL-714 SW Monterey Rd					FL-714 SE Monterey Rd										
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total						
1200 - 1215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1215 - 1230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1230 - 1245	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1245 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1300 - 1315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1315 - 1330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1330 - 1345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1345 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-						
Intersection %	0.00	16.67	0.00	0.00	16.67	0.00	16.67	0.00	0.00	16.67	0.00	0.00	0.00	0.00	0.00	0.00	66.67	0.00	0.00	66.67						

Pedestrian Count || All vehicles

Stuart, FL



www.marrtraffic.com

Site 3 of 3

FL-76 S Kanner Hwy (South)
 FL-76 S Kanner Hwy (North)
 FL-714 SW Monterey Rd
 FL-714 SE Monterey Rd

Date

Tuesday, February 28, 2023

Weather

Fair
 70°F

Lat/Long

27.175706°, -80.253004°

0700 - 0900 (Weekday 2h Session) (02-28-2023)

Pedestrians

TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total
	FL-76 S Kanner Hwy (South)			FL-76 S Kanner Hwy (North)			FL-714 SW Monterey Rd			FL-714 SE Monterey Rd				
	EB 3a	WB 3b	App Total	EB 3c	WB 3d	App Total	NB 3e	SB 3f	App Total	NB 3g	SB 3h	App Total		
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	
0715 - 0730	0	0	0	0	0	0	0	1	0	0	1	0	1	
0730 - 0745	1	0	1	0	1	1	1	1	1	0	2	0	4	
0745 - 0800	4	0	4	1	0	1	0	4	1	1	4	1	11	
Hourly Total	5	0	5	1	1	2	2	5	7	1	1	2	16	
0800 - 0815	5	0	5	2	0	2	0	3	3	2	5	7	17	
0815 - 0830	1	1	2	2	0	2	0	0	0	0	0	0	4	
0830 - 0845	0	0	0	0	1	1	0	0	1	1	0	1	2	
0845 - 0900	2	0	2	0	0	2	0	3	3	0	0	3	5	
Hourly Total	8	1	9	4	1	5	0	6	6	3	5	8	28	
Grand Total	13	1	14	5	2	7	2	11	13	4	6	10	44	
Approach %	92.86	7.14	-	71.43	28.57	-	15.38	84.62	-	40.00	60.00	-	-	
Intersection %	29.55	2.27	31.82	11.36	4.55	15.91	4.55	25.00	29.55	9.09	13.64	22.73	-	

1200 - 1800 (Weekday 6h Session) (02-28-2023)

Pedestrians






















TIME	Northbound			Southbound			Eastbound			Westbound			App Total	Int Total
	FL-76 S Kanner Hwy (South)			FL-76 S Kanner Hwy (North)			FL-714 SW Monterey Rd			FL-714 SE Monterey Rd				
	EB 3a	WB 3b	App Total	EB 3c	WB 3d	App Total	NB 3e	SB 3f	App Total	NB 3g	SB 3h	App Total		
1200 - 1215	1	1	2	0	0	0	1	0	1	0	1	1	4	
1215 - 1230	0	0	0	0	0	0	0	0	0	0	4	1	5	
1230 - 1245	0	1	1	0	0	0	0	1	1	0	0	0	2	
1245 - 1300	0	0	0	0	0	0	1	0	1	0	0	0	1	
Hourly Total	1	2	3	0	0	0	2	1	3	4	2	6	12	
1300 - 1315	0	0	0	1	2	3	0	0	0	1	0	1	4	
1315 - 1330	0	0	0	0	0	0	0	0	0	0	0	0	0	
1330 - 1345	0	0	0	0	0	0	1	0	1	0	0	0	1	
1345 - 1400	0	0	0	0	1	1	0	0	0	0	0	0	1	
Hourly Total	0	0	0	1	3	4	1	0	1	1	0	1	6	
1400 - 1415	0	0	0	3	0	3	0	0	0	0	0	0	3	
1415 - 1430	0	1	1	0	1	1	2	0	2	1	1	2	6	
1430 - 1445	0	1	1	1	0	2	0	0	0	2	0	2	5	
1445 - 1500	0	0	0	1	0	1	0	0	0	0	1	1	2	
Hourly Total	0	2	2	4	3	7	2	0	2	3	2	5	16	
1500 - 1515	0	0	0	0	0	0	1	0	1	0	3	3	4	
1515 - 1530	0	19	19	1	7	8	9	0	9	12	2	14	50	
1530 - 1545	0	1	1	0	2	2	1	0	1	3	0	3	7	
1545 - 1600	0	0	0	1	1	2	0	0	0	0	0	0	2	
Hourly Total	0	20	20	2	10	12	11	0	11	15	5	20	63	
1600 - 1615	0	0	0	0	5	5	0	0	0	3	0	3	8	
1615 - 1630	0	0	0	0	0	0	0	0	0	2	1	3	3	
1630 - 1645	0	1	1	2	1	3	4	0	4	1	0	1	9	
1645 - 1700	0	1	1	1	0	0	0	0	0	0	1	1	2	
Hourly Total	0	2	2	2	6	8	4	0	4	6	2	8	22	
1700 - 1715	2	0	2	0	2	2	0	0	0	2	1	3	7	
1715 - 1730	0	2	2	0	2	2	2	0	2	1	1	2	8	
1730 - 1745	0	0	0	1	0	1	0	2	2	1	0	1	4	
1745 - 1800	0	0	0	1	3	4	1	0	1	0	0	0	5	
Hourly Total	2	2	4	2	7	9	3	2	5	4	2	6	24	
Grand Total	3	28	31	11	29	40	23	3	26	33	13	46	143	
Approach %	9.68	90.32	-	27.50	72.50	-	88.46	11.54	-	71.74	28.26	-	-	
Intersection %	2.10	19.58	21.68	7.69	20.28	27.97	16.08	2.10	18.18	23.08	9.09	32.17	-	

Start Date: 2/28/2023	FL-76 S Kanner Hwy (South)			FL-76 S Kanner Hwy (North)			FL-714 SW Monterey Rd			FL-714 SE Monterey Rd			Total
Time	Northbound		NBR	Southbound		SBR	Eastbound		EBR	Westbound		WBR	
	NBL	NBT		SBL	SBT		EBL	EBT		WBL	WBT		
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	35	103	27	44	211	28	136	189	32	44	96	15	964
07:15 AM - 07:30 AM	35	139	29	26	204	23	142	234	35	46	96	10	1025
07:30 AM - 07:45 AM	36	140	37	26	194	25	187	266	46	49	105	23	1142
07:45 AM - 08:00 AM	54	189	49	48	184	63	213	215	36	67	119	9	1268
08:00 AM - 08:15 AM	47	128	38	45	135	53	209	273	64	58	103	11	1193
08:15 AM - 08:30 AM	53	163	28	51	168	46	193	236	27	39	132	21	1170
08:30 AM - 08:45 AM	49	167	49	35	169	43	192	237	23	43	141	20	1178
08:45 AM - 09:00 AM	31	142	46	44	163	47	209	238	21	45	124	11	1132
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	41	146	44	45	159	78	102	163	24	60	180	23	1086
12:15 PM - 12:30 PM	36	158	39	51	162	78	118	154	20	63	195	26	1122
12:30 PM - 12:45 PM	40	157	42	49	160	79	138	158	17	55	194	22	1124
12:45 PM - 01:00 PM	43	126	33	45	144	75	132	189	20	45	172	24	1064
01:00 PM - 01:15 PM	44	155	41	47	142	64	115	170	17	54	191	19	1075
01:15 PM - 01:30 PM	37	152	47	48	168	85	136	180	25	67	173	19	1148
01:30 PM - 01:45 PM	38	132	42	47	132	78	109	157	20	58	208	26	1062
01:45 PM - 02:00 PM	42	163	48	39	160	87	147	156	18	60	149	14	1096
02:00 PM - 02:15 PM	44	141	47	42	160	83	103	176	18	49	170	28	1082
02:15 PM - 02:30 PM	40	153	42	42	156	73	134	157	22	60	196	23	1120
02:30 PM - 02:45 PM	35	159	42	45	149	77	124	183	30	57	223	24	1168
02:45 PM - 03:00 PM	42	136	33	37	171	100	125	200	27	49	221	17	1167
03:00 PM - 03:15 PM	57	158	41	50	175	112	110	179	18	54	206	17	1192
03:15 PM - 03:30 PM	64	196	36	43	160	111	118	174	12	75	214	20	1290
03:30 PM - 03:45 PM	72	218	43	33	181	110	94	162	21	57	223	17	1248
03:45 PM - 04:00 PM	50	163	39	38	175	119	124	171	20	66	220	20	1217
04:00 PM - 04:15 PM	63	222	49	33	182	112	112	151	21	67	211	10	1249
04:15 PM - 04:30 PM	69	222	44	36	212	121	106	144	13	39	205	15	1239
04:30 PM - 04:45 PM	62	175	34	34	191	112	128	162	19	51	228	11	1228
04:45 PM - 05:00 PM	68	199	59	31	160	140	119	152	13	51	221	11	1236
05:00 PM - 05:15 PM	60	170	41	41	183	157	108	154	30	47	226	12	1250
05:15 PM - 05:30 PM	74	215	53	39	195	144	127	142	12	45	186	9	1259
05:30 PM - 05:45 PM	60	198	48	45	169	130	111	128	19	63	220	11	1216
05:45 PM - 06:00 PM	51	174	36	33	162	102	124	164	24	44	225	13	1171
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX B
TRAFFIC OPERATIONAL ANALYSIS

HCM 2010 Signalized Intersection Summary
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway






























03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	8	82	6	2	4	39	1164	12	56	2215	1
Future Volume (veh/h)	215	8	82	6	2	4	39	1164	12	56	2215	1
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1900	1827	1827	1900
Adj Flow Rate, veh/h	247	9	0	8	3	5	42	1252	13	60	2356	1
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	273	10	252	16	6	20	64	1973	20	492	3264	1
Arrive On Green	0.16	0.16	0.00	0.01	0.01	0.01	0.01	0.13	0.13	0.28	0.63	0.63
Sat Flow, veh/h	1682	61	1553	1282	481	1553	1740	5090	53	1740	5149	2
Grp Volume(v), veh/h	256	0	0	11	0	5	42	818	447	60	1521	836
Grp Sat Flow(s),veh/h/ln	1743	0	1553	1763	0	1553	1740	1663	1818	1740	1663	1827
Q Serve(g_s), s	23.1	0.0	0.0	1.0	0.0	0.5	3.8	37.4	37.4	4.1	49.4	49.4
Cycle Q Clear(g_c), s	23.1	0.0	0.0	1.0	0.0	0.5	3.8	37.4	37.4	4.1	49.4	49.4
Prop In Lane	0.96		1.00	0.73		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	283	0	252	22	0	20	64	1289	705	492	2107	1158
V/C Ratio(X)	0.91	0.00	0.00	0.49	0.00	0.25	0.65	0.63	0.63	0.12	0.72	0.72
Avail Cap(c_a), veh/h	339	0	302	69	0	61	88	1787	977	492	2107	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	0.0	0.0	78.5	0.0	78.2	78.0	59.0	59.0	42.7	19.8	19.8
Incr Delay (d2), s/veh	24.8	0.0	0.0	15.6	0.0	6.5	1.0	0.2	0.4	0.1	2.2	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	0.0	0.0	0.6	0.0	0.3	1.9	17.3	18.9	2.0	23.2	26.1
LnGrp Delay(d),s/veh	90.6	0.0	0.0	94.1	0.0	84.8	79.0	59.2	59.4	42.8	22.0	23.7
LnGrp LOS	F			F		F	E	E	E	D	C	C
Approach Vol, veh/h		256			16			1307			2417	
Approach Delay, s/veh		90.6			91.2			59.9			23.1	
Approach LOS		F			F			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	107.6		8.7	51.4	68.0		31.8				
Change Period (Y+Rc), s	5.9	* 6.2		* 6.7	6.2	* 6		5.9				
Max Green Setting (Gmax), s	8.1	* 90		* 6.3	11.8	* 86		31.1				
Max Q Clear Time (g_c+I1), s	5.8	51.4		3.0	6.1	39.4		25.1				
Green Ext Time (p_c), s	0.0	35.5		0.0	0.0	22.7		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			39.7									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (veh/h)	190	1461	539	129	653	67	582	609	253	94	252	54
Future Volume (veh/h)	190	1461	539	129	653	67	582	609	253	94	252	54
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	211	1623	599	152	768	79	693	725	0	109	293	63
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	350	798	285	138	460	47	1378	1582	708	131	427	191
Arrive On Green	0.20	0.22	0.22	0.08	0.10	0.10	0.41	0.46	0.00	0.08	0.12	0.12
Sat Flow, veh/h	1740	3627	1297	1740	4599	470	3375	3471	1553	1740	3471	1553
Grp Volume(v), veh/h	211	1484	738	152	554	293	693	725	0	109	293	63
Grp Sat Flow(s),veh/h/ln	1740	1663	1598	1740	1663	1744	1688	1736	1553	1740	1736	1553
Q Serve(g_s), s	17.6	35.2	35.2	12.7	16.0	16.0	24.5	23.0	0.0	9.9	12.9	5.9
Cycle Q Clear(g_c), s	17.6	35.2	35.2	12.7	16.0	16.0	24.5	23.0	0.0	9.9	12.9	5.9
Prop In Lane	1.00		0.81	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	732	352	138	333	174	1378	1582	708	131	427	191
V/C Ratio(X)	0.60	2.03	2.10	1.10	1.67	1.68	0.50	0.46	0.00	0.83	0.69	0.33
Avail Cap(c_a), veh/h	353	732	352	138	333	174	1378	1582	708	397	1529	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	62.4	62.4	73.7	72.0	72.0	35.2	29.9	0.0	73.0	67.2	64.1
Incr Delay (d2), s/veh	2.0	465.5	500.6	106.1	312.8	329.6	0.0	0.1	0.0	12.5	8.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	63.4	64.4	10.2	21.8	23.7	11.4	11.0	0.0	5.2	6.7	2.8
LnGrp Delay(d),s/veh	60.0	527.9	563.0	179.8	384.8	401.6	35.3	30.0	0.0	85.5	75.9	68.7
LnGrp LOS	E	F	F	F	F	F	D	C		F	E	E
Approach Vol, veh/h		2433			999			1418			465	
Approach Delay, s/veh		498.0			358.5			32.6			77.2	
Approach LOS		F			F			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	71.8	26.2	39.0	23.0	18.6	79.4	20.0	42.0				
Change Period (Y+Rc), s	6.5	6.5	6.8	* 7	6.5	6.5	7.3	6.8				
Max Green Setting (Gmax), s	14.5	70.5	32.5	* 16	36.5	48.5	12.7	35.2				
Max Q Clear Time (g_c+I1), s	26.5	14.9	19.6	18.0	11.9	25.0	14.7	37.2				
Green Ext Time (p_c), s	0.0	4.7	0.7	0.0	0.3	8.8	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			310.8									
HCM 2010 LOS			F									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: S Kanner Highway & SW Monterey Road

03/07/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	807	958	150	207	495	61	203	647	164	179	656	205
Future Volume (veh/h)	807	958	150	207	495	61	203	647	164	179	656	205
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	917	1089	170	220	527	65	233	744	189	203	745	233
Adj No. of Lanes	2	2	1	2	2	0	1	3	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	898	1342	600	261	616	76	253	775	195	300	782	763
Arrive On Green	0.27	0.39	0.39	0.08	0.20	0.20	0.15	0.20	0.20	0.17	0.23	0.23
Sat Flow, veh/h	3375	3471	1553	3375	3112	383	1740	3976	999	1740	3471	1553
Grp Volume(v), veh/h	917	1089	170	220	293	299	233	621	312	203	745	233
Grp Sat Flow(s),veh/h/ln	1688	1736	1553	1688	1736	1759	1740	1663	1651	1740	1736	1553
Q Serve(g_s), s	42.6	44.9	12.1	10.3	26.1	26.3	21.1	29.6	30.0	17.5	33.9	5.2
Cycle Q Clear(g_c), s	42.6	44.9	12.1	10.3	26.1	26.3	21.1	29.6	30.0	17.5	33.9	5.2
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	898	1342	600	261	344	348	253	648	322	300	782	763
V/C Ratio(X)	1.02	0.81	0.28	0.84	0.85	0.86	0.92	0.96	0.97	0.68	0.95	0.31
Avail Cap(c_a), veh/h	898	1342	600	281	394	399	270	648	322	318	785	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.53	0.53	0.53
Uniform Delay (d), s/veh	58.7	43.9	33.8	72.9	61.9	62.0	67.4	63.7	63.9	62.0	61.1	8.6
Incr Delay (d2), s/veh	35.6	5.4	1.2	19.3	22.7	23.0	34.0	25.2	41.9	2.8	13.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.3	22.5	5.4	5.5	14.7	15.0	12.6	15.9	17.4	8.6	17.7	2.9
LnGrp Delay(d),s/veh	94.3	49.3	35.0	92.1	84.6	84.9	101.4	89.0	105.8	64.9	74.7	8.7
LnGrp LOS	F	D	C	F	F	F	F	F	F	E	E	A
Approach Vol, veh/h		2176			812			1166			1181	
Approach Delay, s/veh		67.1			86.8			96.0			60.0	
Approach LOS		E			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	49.3	38.4	34.4	38.0	19.1	68.6	29.5	42.9				
Change Period (Y+Rc), s	* 6.7	* 6.7	6.8	* 6.8	* 6.7	* 6.7	* 6.2	6.8				
Max Green Setting (Gmax), s	* 36	* 36	29.2	* 31	* 13	* 59	* 25	36.2				
Max Q Clear Time (g_c+I1), s	44.6	28.3	19.5	32.0	12.3	46.9	23.1	35.9				
Green Ext Time (p_c), s	0.0	3.4	0.4	0.0	0.1	9.2	0.2	0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			74.8									
HCM 2010 LOS			E									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻	↻		↻	
Traffic Vol, veh/h	0	4	2	38	4	0	2	220	81	0	520	4
Future Vol, veh/h	0	4	2	38	4	0	2	220	81	0	520	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	2	41	4	0	2	239	88	0	565	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	898	567	813	812	-	569	0	0	327	0	0
Stage 1	-	567	-	243	243	-	-	-	-	-	-	-
Stage 2	-	331	-	570	569	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	279	523	297	313	0	1003	-	-	1233	-	-
Stage 1	0	507	-	761	705	0	-	-	-	-	-	-
Stage 2	0	645	-	506	506	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	278	523	292	312	-	1003	-	-	1233	-	-
Mov Cap-2 Maneuver	-	278	-	292	312	-	-	-	-	-	-	-
Stage 1	-	507	-	759	704	-	-	-	-	-	-	-
Stage 2	-	644	-	500	506	-	-	-	-	-	-	-

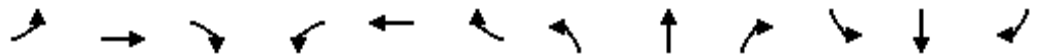
Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.2		19.5		0.1		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	329	294	1233	-
HCM Lane V/C Ratio	0.002	-	-	0.02	0.155	-	-
HCM Control Delay (s)	8.6	0	-	16.2	19.5	0	-
HCM Lane LOS	A	A	-	C	C	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↑↑↑		↗	↑↑↑	
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2215	1
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2215	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	11	11	11	11	11
Storage Length (ft)	150		75	20		20	275		0	245		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			40			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Fr _t			0.850			0.850		0.998				
Fl _t Protected		0.954			0.965		0.950			0.950		
Satd. Flow (prot)	0	1743	1553	0	1763	1553	1620	4812	0	1678	4821	0
Fl _t Permitted		0.954			0.965		0.950			0.950		
Satd. Flow (perm)	0	1743	1553	0	1763	1553	1620	4812	0	1678	4821	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			143		1				
Link Speed (mph)		25			25			35				35
Link Distance (ft)		174			186			1408				706
Travel Time (s)		4.7			5.1			27.4				13.8
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2356	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	256	94	0	11	5	42	1265	0	60	2357	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			0			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	

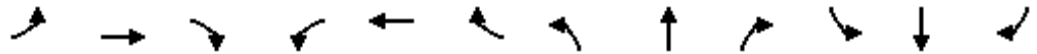
Existing AM SW Palm City Road @ US-1 Intersection Feasibility Study 9:25 am 02/08/2023
TCG

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Detector Phase	8	8	8	4	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	7.0	10.0		4.0	10.0	
Minimum Split (s)	10.7	10.7	10.7	10.7	10.7	10.7	12.9	24.0		10.2	24.0	
Total Split (s)	37.0	37.0	37.0	13.0	13.0	13.0	14.0	92.0		18.0	96.0	
Total Split (%)	23.1%	23.1%	23.1%	8.1%	8.1%	8.1%	8.8%	57.5%		11.3%	60.0%	
Maximum Green (s)	31.1	31.1	31.1	6.3	6.3	6.3	8.1	86.0		11.8	90.0	
Yellow Time (s)	3.7	3.7	3.7	3.4	3.4	3.4	3.7	4.0		3.7	4.0	
All-Red Time (s)	2.2	2.2	2.2	3.3	3.3	3.3	2.2	2.0		2.5	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	3.5	3.5	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)								5.0			5.0	
Flash Dont Walk (s)								13.0			13.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)		27.6	27.6		6.0	6.0	8.1	81.3		27.8	101.2	
Actuated g/C Ratio		0.17	0.17		0.04	0.04	0.05	0.51		0.17	0.63	
v/c Ratio		0.85	0.24		0.17	0.03	0.51	0.52		0.21	0.77	
Control Delay		89.0	1.9		80.2	0.2	102.5	39.3		58.0	26.1	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		89.0	1.9		80.2	0.2	102.5	39.3		58.0	26.1	
LOS		F	A		F	A	F	D		E	C	
Approach Delay		65.6			55.3			41.4			26.9	
Approach LOS		E			E			D			C	
Queue Length 50th (ft)		260	0		11	0	42	462		51	746	
Queue Length 95th (ft)		349	0		29	0	m54	m149		106	819	
Internal Link Dist (ft)		94			106			1328			626	
Turn Bay Length (ft)			75			20	275			245		
Base Capacity (vph)		338	421		69	198	85	2835		302	3050	
Starvation Cap Reductn		0	0		0	0	0	0		0	0	
Spillback Cap Reductn		0	0		0	0	0	0		0	0	
Storage Cap Reductn		0	0		0	0	0	0		0	0	
Reduced v/c Ratio		0.76	0.22		0.16	0.03	0.49	0.45		0.20	0.77	

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	22 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	35.0
Intersection Capacity Utilization:	75.5%
Intersection LOS:	C
ICU Level of Service:	D

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.






























Splits and Phases: 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway



Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (vph)	190	1461	539	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	539	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	11	11	11	10	10	10
Storage Length (ft)	450		0	250		0	446		0	150		110
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	102			55			93			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	1.00	1.00	0.95	1.00
Frt		0.960			0.986				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	4628	0	1620	4754	0	3255	3355	1501	1620	3240	1449
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1678	4628	0	1620	4754	0	3255	3355	1501	1620	3240	1449
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			9				280			120
Link Speed (mph)		35			35			40				30
Link Distance (ft)		1408			558			5595				775
Travel Time (s)		27.4			10.9			95.4				17.6
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	211	1623	599	152	768	79	693	725	301	109	293	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	211	2222	0	152	847	0	693	725	301	109	293	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			22				22
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm

Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases										6		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	10.0	10.0	8.0	10.0	10.0
Minimum Split (s)	14.5	38.8		15.3	15.0		14.5	38.5	38.5	14.5	37.5	37.5
Total Split (s)	39.0	42.0		20.0	23.0		21.0	55.0	55.0	43.0	77.0	77.0
Total Split (%)	24.4%	26.3%		12.5%	14.4%		13.1%	34.4%	34.4%	26.9%	48.1%	48.1%
Maximum Green (s)	32.5	35.2		12.7	16.0		14.5	48.5	48.5	36.5	70.5	70.5
Yellow Time (s)	4.0	4.4		3.4	3.7		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.4		3.9	3.3		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.8		7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		5.0						7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0						25.0	25.0		24.0	24.0
Pedestrian Calls (#/hr)		0						0	0		0	0
Act Effect Green (s)	32.5	35.2		14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22		0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
v/c Ratio	0.62	2.10		1.06	1.61		0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	52.2	522.0		158.5	323.1		56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	522.0		158.5	323.1		56.7	52.2	20.7	88.3	70.8	1.5
LOS	D	F		F	F		E	D	C	F	E	A
Approach Delay		481.2			298.1			48.5			65.5	
Approach LOS		F			F			D			E	
Queue Length 50th (ft)	163	~1316		157	~402		315	333	137	112	154	0
Queue Length 95th (ft)	m246	#1408		#318	#534		m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478			5515			695	
Turn Bay Length (ft)	450			250			446			150		110
Base Capacity (vph)	340	1059		143	527		1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.62	2.10		1.06	1.61		0.56	0.51	0.38	0.30	0.21	0.09

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	22 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	150
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	2.10
Intersection Signal Delay:	281.8
Intersection Capacity Utilization:	94.9%
Intersection LOS:	F
ICU Level of Service:	F

Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

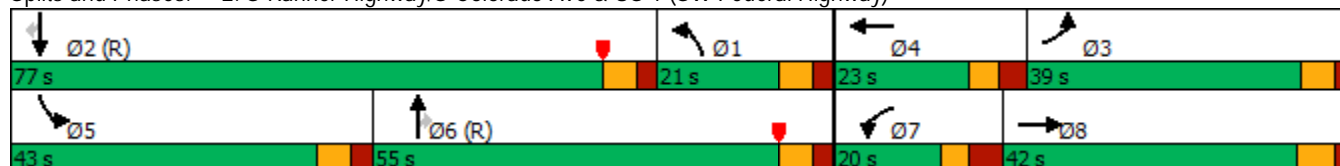
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

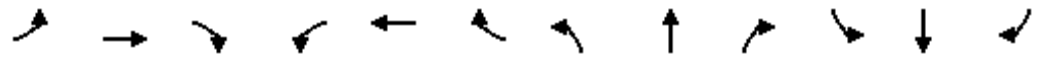
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)



Lanes, Volumes, Timings
 3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑↑		↔	↑↑↑		↔	↑↑	↔
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	205
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	10	11	11	10	11	11
Storage Length (ft)	450		175	325		0	620		0	350		0
Storage Lanes	2		1	2		0	1		0	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.984			0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3255	3355	1501	3255	3302	0	1620	4677	0	1620	3355	1501
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3255	3355	1501	3255	3302	0	1620	4677	0	1620	3355	1501
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160		8			35				113
Link Speed (mph)		35			40			45				40
Link Distance (ft)		901			622			786				5595
Travel Time (s)		17.6			10.6			11.9				95.4
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	233
Shared Lane Traffic (%)												
Lane Group Flow (vph)	917	1089	170	220	592	0	233	933	0	203	745	233
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov

Existing AM SW Palm City Road @ US-1 Intersection Feasibility Study 9:25 am 02/08/2023
 TCG

Synchro 11 Report
 Page 7

Lanes, Volumes, Timings
3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	8.0	10.0	10.0	8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	14.7	40.7	40.7	14.7	39.7		14.2	36.8		14.8	42.8	14.7
Total Split (s)	43.0	66.0	66.0	20.0	43.0		31.0	38.0		36.0	43.0	43.0
Total Split (%)	26.9%	41.3%	41.3%	12.5%	26.9%		19.4%	23.8%		22.5%	26.9%	26.9%
Maximum Green (s)	36.3	59.3	59.3	13.3	36.3		24.8	31.2		29.2	36.2	36.3
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4		4.0	4.8		4.0	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3		2.2	2.0		2.8	2.4	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			7.0			7.0	
Flash Dont Walk (s)		29.0	29.0		28.0			23.0			29.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.8
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.20		0.18	0.23	0.47
v/c Ratio	1.18	0.87	0.26	0.83	0.83		0.94	0.99		0.69	0.98	0.31
Control Delay	144.6	55.7	6.5	96.7	69.9		108.6	88.6		48.6	52.2	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9		108.6	88.6		48.6	52.2	8.6
LOS	F	E	A	F	E		F	F		D	D	A
Approach Delay		89.3			77.1			92.6			43.0	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	~611	557	7	119	305		244	349		156	348	49
Queue Length 95th (ft)	#721	633	55	#186	380		#391	#425		m125	m218	m34
Internal Link Dist (ft)		821			542			706			5515	
Turn Bay Length (ft)	450		175	325			620			350		
Base Capacity (vph)	778	1248	659	270	755		251	940		295	763	761
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78		0.93	0.99		0.69	0.98	0.31

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	65 (41%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle:	145
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.18
Intersection Signal Delay:	77.9
Intersection Capacity Utilization:	90.0%
Intersection LOS:	E
ICU Level of Service:	E

Lanes, Volumes, Timings

3: S Kanner Highway & SW Monterey Road

03/07/2023

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

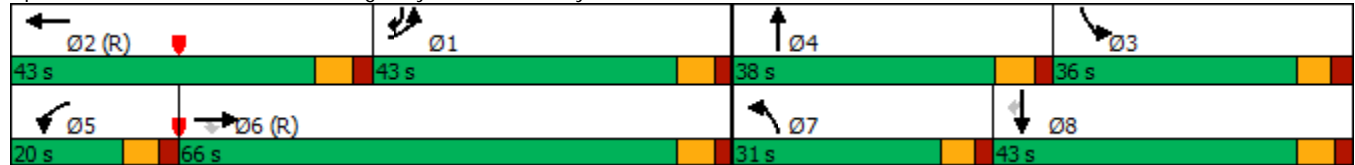
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.


















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S Kanner Highway & SW Monterey Road



























Lanes, Volumes, Timings
4: SW Pine Ave/SW Palm City Road

03/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	4	2	38	4	0	2	220	81	0	520	4
Future Volume (vph)	0	4	2	38	4	0	2	220	81	0	520	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	16	16	16	11	11	11	12	12	12
Storage Length (ft)	0		0	0		0	0		60	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frts		0.955							0.850		0.999	
Flt Protected					0.956							
Satd. Flow (prot)	0	1720	0	0	2018	0	0	1801	1531	0	1861	0
Flt Permitted					0.956							
Satd. Flow (perm)	0	1720	0	0	2018	0	0	1801	1531	0	1861	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		232			174			803			248	
Travel Time (s)		6.3			4.7			21.9			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	4	2	41	4	0	2	239	88	0	565	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	45	0	0	241	88	0	569	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		50			0			0			0	
Crosswalk Width(ft)		0			0			0			0	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.85	0.85	0.85	1.04	1.04	1.04	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	46.0%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 2010 Signalized Intersection Summary
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	320	11	77	13	15	21	43	2211	10	3	1413	3
Future Volume (veh/h)	320	11	77	13	15	21	43	2211	10	3	1413	3
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	381	13	0	21	25	34	44	2279	10	3	1553	3
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	391	13	361	30	36	57	63	2691	12	119	2867	6
Arrive On Green	0.23	0.23	0.00	0.04	0.04	0.04	0.01	0.17	0.17	0.07	0.55	0.55
Sat Flow, veh/h	1702	58	1568	823	980	1568	1757	5175	23	1757	5190	10
Grp Volume(v), veh/h	394	0	0	46	0	34	44	1478	811	3	1005	551
Grp Sat Flow(s),veh/h/ln	1760	0	1568	1803	0	1568	1757	1679	1841	1757	1679	1843
Q Serve(g_s), s	37.8	0.0	0.0	4.3	0.0	3.6	4.2	72.5	72.6	0.3	32.5	32.5
Cycle Q Clear(g_c), s	37.8	0.0	0.0	4.3	0.0	3.6	4.2	72.5	72.6	0.3	32.5	32.5
Prop In Lane	0.97		1.00	0.46		1.00	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	405	0	361	66	0	57	63	1746	957	119	1854	1018
V/C Ratio(X)	0.97	0.00	0.00	0.70	0.00	0.60	0.70	0.85	0.85	0.03	0.54	0.54
Avail Cap(c_a), veh/h	405	0	361	88	0	77	94	1758	964	119	1854	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	0.0	81.0	0.0	80.7	83.1	63.8	63.9	74.0	24.3	24.3
Incr Delay (d2), s/veh	37.7	0.0	0.0	14.6	0.0	9.6	1.3	0.5	0.9	0.1	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	0.0	0.0	2.4	0.0	1.7	2.1	34.0	37.4	0.1	15.4	17.1
LnGrp Delay(d),s/veh	102.7	0.0	0.0	95.6	0.0	90.2	84.3	64.4	64.8	74.1	25.5	26.4
LnGrp LOS	F			F		F	F	E	E	E	C	C
Approach Vol, veh/h		394			80			2333			1559	
Approach Delay, s/veh		102.7			93.3			64.9			25.9	
Approach LOS		F			F			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	100.1		12.9	17.7	94.4		45.0				
Change Period (Y+Rc), s	5.9	* 6.2		* 6.7	6.2	* 6		5.9				
Max Green Setting (Gmax), s	9.1	* 89		* 8.3	8.8	* 89		39.1				
Max Q Clear Time (g_c+I1), s	6.2	34.5		6.3	2.3	74.6		39.8				
Green Ext Time (p_c), s	0.0	32.4		0.0	0.0	13.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			54.9									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1016	353	240	1348	96	690	454	167	133	473	131
Future Volume (veh/h)	130	1016	353	240	1348	96	690	454	167	133	473	131
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	143	1116	388	261	1465	104	784	516	0	155	550	152
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	794	276	282	970	69	926	1316	589	172	707	316
Arrive On Green	0.17	0.21	0.21	0.16	0.20	0.20	0.27	0.37	0.00	0.10	0.20	0.20
Sat Flow, veh/h	1774	3728	1296	1774	4848	344	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	143	1015	489	261	1024	545	784	516	0	155	550	152
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1695	1802	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.3	36.2	36.2	24.7	34.0	34.0	36.7	18.2	0.0	14.7	25.0	14.4
Cycle Q Clear(g_c), s	12.3	36.2	36.2	24.7	34.0	34.0	36.7	18.2	0.0	14.7	25.0	14.4
Prop In Lane	1.00		0.79	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	722	348	282	678	360	926	1316	589	172	707	316
V/C Ratio(X)	0.46	1.41	1.41	0.93	1.51	1.51	0.85	0.39	0.00	0.90	0.78	0.48
Avail Cap(c_a), veh/h	360	722	348	331	678	360	926	1316	589	172	926	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	0.13	0.13	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	66.9	66.9	70.5	68.0	68.0	58.8	39.3	0.0	75.9	64.5	60.2
Incr Delay (d2), s/veh	1.2	189.3	196.0	28.7	237.5	243.9	1.1	0.1	0.0	41.4	8.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	35.9	35.3	14.4	38.3	41.3	17.6	8.9	0.0	9.2	13.0	6.8
LnGrp Delay(d),s/veh	64.4	256.2	262.9	99.2	305.5	311.9	59.9	39.4	0.0	117.3	72.7	65.4
LnGrp LOS	E	F	F	F	F	F	E	D		F	E	E
Approach Vol, veh/h		1647			1830			1300			857	
Approach Delay, s/veh		241.5			278.0			51.8			79.5	
Approach LOS		F			F			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	52.2	40.5	36.3	41.0	23.0	69.7	34.3	43.0				
Change Period (Y+Rc), s	6.5	6.5	6.8	* 7	6.5	6.5	7.3	6.8				
Max Green Setting (Gmax), s	30.5	44.5	34.5	* 34	16.5	58.5	31.7	36.2				
Max Q Clear Time (g_c+I1), s	38.7	27.0	14.3	36.0	16.7	20.2	26.7	38.2				
Green Ext Time (p_c), s	0.0	6.9	0.6	0.0	0.0	7.0	0.3	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			184.9									
HCM 2010 LOS			F									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: S Kanner Highway & SW Monterey Road

03/07/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	448	658	74	265	867	67	249	799	167	147	697	452
Future Volume (veh/h)	448	658	74	265	867	67	249	799	167	147	697	452
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	477	700	79	273	894	69	274	878	184	150	711	461
Adj No. of Lanes	2	2	1	2	2	0	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	1304	583	321	1079	83	272	935	195	266	786	570
Arrive On Green	0.14	0.37	0.37	0.09	0.32	0.32	0.15	0.22	0.22	0.15	0.22	0.22
Sat Flow, veh/h	3442	3539	1583	3442	3330	257	1774	4218	880	1774	3539	1583
Grp Volume(v), veh/h	477	700	79	273	475	488	274	705	357	150	711	461
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1817	1774	1695	1708	1774	1770	1583
Q Serve(g_s), s	22.3	25.2	5.4	12.7	40.2	40.2	24.8	33.1	33.4	12.7	31.7	36.0
Cycle Q Clear(g_c), s	22.3	25.2	5.4	12.7	40.2	40.2	24.8	33.1	33.4	12.7	31.7	36.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	474	1304	583	321	573	589	272	751	378	266	786	570
V/C Ratio(X)	1.01	0.54	0.14	0.85	0.83	0.83	1.01	0.94	0.94	0.56	0.90	0.81
Avail Cap(c_a), veh/h	474	1304	583	431	573	589	272	758	382	266	786	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51
Uniform Delay (d), s/veh	69.8	40.3	34.0	72.3	50.6	50.6	68.6	62.0	62.1	63.9	61.3	46.8
Incr Delay (d2), s/veh	43.1	1.6	0.5	11.6	13.0	12.7	56.9	19.2	31.9	1.4	7.9	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	12.6	2.4	6.5	21.7	22.3	16.4	17.6	19.1	6.4	16.4	19.4
LnGrp Delay(d),s/veh	112.9	41.8	34.5	83.9	63.6	63.3	125.5	81.1	93.9	65.3	69.2	51.3
LnGrp LOS	F	D	C	F	E	E	F	F	F	E	E	D
Approach Vol, veh/h		1256			1236			1336			1322	
Approach Delay, s/veh		68.4			67.9			93.7			62.5	
Approach LOS		E			E			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.0	59.2	31.1	42.7	21.8	66.4	31.0	42.8				
Change Period (Y+Rc), s	* 6.7	* 6.7	6.8	* 6.8	* 6.7	* 6.7	* 6.2	6.8				
Max Green Setting (Gmax), s	* 22	* 52	22.2	* 36	* 20	* 54	* 25	36.0				
Max Q Clear Time (g_c+I1), s	24.3	42.2	14.7	35.4	14.7	27.2	26.8	38.0				
Green Ext Time (p_c), s	0.0	6.4	0.2	0.5	0.4	9.9	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			73.3									
HCM 2010 LOS			E									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻	↻		↻	
Traffic Vol, veh/h	0	6	2	55	6	0	2	327	75	0	520	4
Future Vol, veh/h	0	6	2	55	6	0	2	327	75	0	520	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	7	2	60	7	0	2	355	82	0	565	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	1008	567	931	928	-	569	0	0	437	0	0
Stage 1	-	567	-	359	359	-	-	-	-	-	-	-
Stage 2	-	441	-	572	569	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	240	523	247	268	0	1003	-	-	1123	-	-
Stage 1	0	507	-	659	627	0	-	-	-	-	-	-
Stage 2	0	577	-	505	506	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	239	523	240	267	-	1003	-	-	1123	-	-
Mov Cap-2 Maneuver	-	239	-	240	267	-	-	-	-	-	-	-
Stage 1	-	507	-	657	625	-	-	-	-	-	-	-
Stage 2	-	575	-	496	506	-	-	-	-	-	-	-

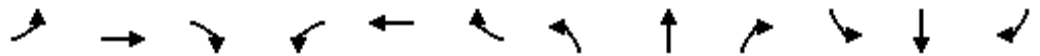
Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.4		25.4		0		0	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	277	242	1123	-
HCM Lane V/C Ratio	0.002	-	-	0.031	0.274	-	-
HCM Control Delay (s)	8.6	0	-	18.4	25.4	0	-
HCM Lane LOS	A	A	-	C	D	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.1	0	-

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑	
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1413	3
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1413	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	11	11	11	11	11
Storage Length (ft)	150		75	20		20	275		0	245		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			40			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Fr _t			0.850			0.850		0.999				
Fl _t Protected		0.954			0.978		0.950			0.950		
Satd. Flow (prot)	0	1760	1568	0	1804	1568	1636	4863	0	1694	4868	0
Fl _t Permitted		0.954			0.978		0.950			0.950		
Satd. Flow (perm)	0	1760	1568	0	1804	1568	1636	4863	0	1694	4868	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			140			135		1				
Link Speed (mph)		25			25			35				35
Link Distance (ft)		174			186			1408				706
Travel Time (s)		4.7			5.1			27.4				13.8
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	1553	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	394	92	0	46	34	44	2289	0	3	1556	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			0				10
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1		2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left		Thru
Leading Detector (ft)	20	100	20	20	100	20	20	100		20		100
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0		0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0		0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20		6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot		NA

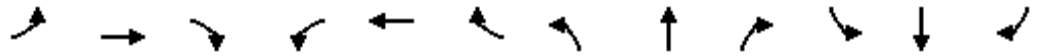
Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
TCG

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Detector Phase	8	8	8	4	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	7.0	10.0		4.0	10.0	
Minimum Split (s)	10.7	10.7	10.7	10.7	10.7	10.7	12.9	24.0		10.2	24.0	
Total Split (s)	45.0	45.0	45.0	15.0	15.0	15.0	15.0	95.0		15.0	95.0	
Total Split (%)	26.5%	26.5%	26.5%	8.8%	8.8%	8.8%	8.8%	55.9%		8.8%	55.9%	
Maximum Green (s)	39.1	39.1	39.1	8.3	8.3	8.3	9.1	89.0		8.8	89.0	
Yellow Time (s)	3.7	3.7	3.7	3.4	3.4	3.4	3.7	4.0		3.7	4.0	
All-Red Time (s)	2.2	2.2	2.2	3.3	3.3	3.3	2.2	2.0		2.5	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	3.5	3.5	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)								5.0			5.0	
Flash Dont Walk (s)								13.0			13.0	
Pedestrian Calls (#/hr)								0			0	
Act Effect Green (s)		41.5	41.5		8.4	8.4	8.5	101.1		6.3	92.2	
Actuated g/C Ratio		0.24	0.24		0.05	0.05	0.05	0.59		0.04	0.54	
v/c Ratio		0.92	0.19		0.52	0.17	0.54	0.79		0.05	0.59	
Control Delay		88.6	1.8		99.4	1.8	67.0	47.9		79.3	28.7	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		88.6	1.8		99.4	1.8	67.0	47.9		79.3	28.7	
LOS		F	A		F	A	E	D		E	C	
Approach Delay		72.2			57.9			48.3			28.8	
Approach LOS		E			E			D			C	
Queue Length 50th (ft)		422	0		51	0	52	682		3	474	
Queue Length 95th (ft)		#587	0		66	0	m41	m581		15	484	
Internal Link Dist (ft)		94			106			1328			626	
Turn Bay Length (ft)			75			20	275			245		
Base Capacity (vph)		429	488		93	209	87	2891		87	2717	
Starvation Cap Reductn		0	0		0	0	0	0		0	0	
Spillback Cap Reductn		0	0		0	0	0	0		0	0	
Storage Cap Reductn		0	0		0	0	0	0		0	0	
Reduced v/c Ratio		0.92	0.19		0.49	0.16	0.51	0.79		0.03	0.57	

Intersection Summary

Area Type:	Other
Cycle Length:	170
Actuated Cycle Length:	170
Offset:	127 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.92
Intersection Signal Delay:	44.3
Intersection LOS:	D
Intersection Capacity Utilization:	80.1%
ICU Level of Service:	D

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

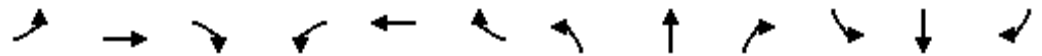
Splits and Phases: 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway



Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑		↘	↑↑↑		↘↘	↑↑	↘	↘	↑↑	↘
Traffic Volume (vph)	130	1016	353	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	353	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	11	11	11	10	10	10
Storage Length (ft)	450		0	250		0	446		0	150		110
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	102			55			93			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	1.00	1.00	0.95	1.00
Frt		0.961			0.990				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	4724	0	1652	4867	0	3319	3421	1531	1652	3303	1478
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1711	4724	0	1652	4867	0	3319	3421	1531	1652	3303	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			6				190			113
Link Speed (mph)		35			35			40				30
Link Distance (ft)		1408			558			5595				775
Travel Time (s)		27.4			10.9			95.4				17.6
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	388	261	1465	104	784	516	190	155	550	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	1504	0	261	1569	0	784	516	190	155	550	152
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			22				22
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5		2

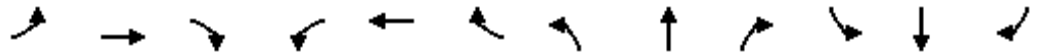
Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
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Synchro 11 Report
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Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										6		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	10.0	10.0	8.0	10.0	10.0
Minimum Split (s)	14.5	38.8		15.3	41.0		14.5	38.5	38.5	14.5	37.5	37.5
Total Split (s)	41.0	43.0		39.0	41.0		37.0	65.0	65.0	23.0	51.0	51.0
Total Split (%)	24.1%	25.3%		22.9%	24.1%		21.8%	38.2%	38.2%	13.5%	30.0%	30.0%
Maximum Green (s)	34.5	36.2		31.7	34.0		30.5	58.5	58.5	16.5	44.5	44.5
Yellow Time (s)	4.0	4.4		3.4	3.7		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.4		3.9	3.3		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.8		7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		5.0			5.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0			29.0			25.0	25.0		24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	34.5	38.3		29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.23		0.17	0.20		0.22	0.34	0.34	0.10	0.22	0.22
v/c Ratio	0.41	1.37		0.91	1.60		1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	61.3	218.1		101.9	317.1		119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.3	218.1		101.9	317.1		119.9	44.5	5.8	137.3	67.5	17.7
LOS	E	F		F	F		F	D	A	F	E	B
Approach Delay		204.5			286.4			79.2			71.3	
Approach LOS		F			F			E			E	
Queue Length 50th (ft)	165	-833		285	-916		-508	234	0	175	302	35
Queue Length 95th (ft)	245	#929		#440	#1012		#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478			5515			695	
Turn Bay Length (ft)	450			250			446			150		110
Base Capacity (vph)	347	1099		308	978		719	1177	651	160	864	470
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.37		0.85	1.60		1.09	0.44	0.29	0.97	0.64	0.32

Intersection Summary

Area Type:	Other
Cycle Length:	170
Actuated Cycle Length:	170
Offset:	127 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	150
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.60
Intersection Signal Delay:	178.6
Intersection LOS:	F
Intersection Capacity Utilization:	96.2%
ICU Level of Service:	F
Analysis Period (min):	15

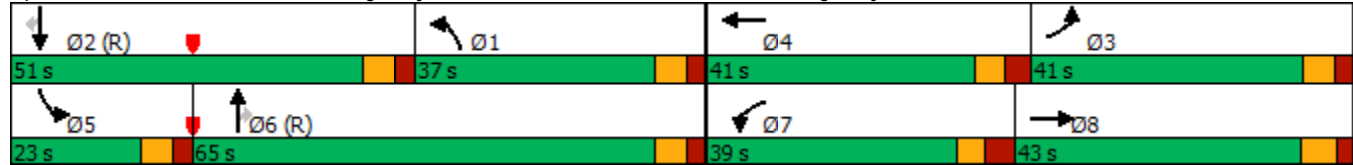
Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)



Lanes, Volumes, Timings
3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑↑		↔	↑↑↑		↔	↑↑	↔
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	452
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	10	11	11	10	11	11
Storage Length (ft)	450		175	325		0	620		0	350		0
Storage Lanes	2		1	2		0	1		0	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	1.00	0.91	0.91	1.00	0.95	1.00
Fr _t			0.850		0.989			0.974				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3421	1531	3319	3384	0	1652	4788	0	1652	3421	1531
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3421	1531	3319	3384	0	1652	4788	0	1652	3421	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			158		5			26				67
Link Speed (mph)		35			40			45				40
Link Distance (ft)		901			622			786				5595
Travel Time (s)		17.6			10.6			11.9				95.4
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	461
Shared Lane Traffic (%)												
Lane Group Flow (vph)	477	700	79	273	963	0	274	1062	0	150	711	461
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1

Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
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Synchro 11 Report
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Lanes, Volumes, Timings
 3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6						8					
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	8.0	10.0	10.0	8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	14.7	40.7	40.7	14.7	39.7		14.2	36.8		14.8	42.8	14.7
Total Split (s)	29.0	61.0	61.0	27.0	59.0		31.0	43.0		29.0	42.8	29.0
Total Split (%)	17.9%	37.7%	37.7%	16.7%	36.5%		19.2%	26.6%		17.9%	26.5%	17.9%
Maximum Green (s)	22.3	54.3	54.3	20.3	52.3		24.8	36.2		22.2	36.0	22.3
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4		4.0	4.8		4.0	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3		2.2	2.0		2.8	2.4	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			7.0				
Flash Dont Walk (s)		29.0	29.0		28.0			23.0				
Pedestrian Calls (#/hr)		0	0		0			0				
Act Effct Green (s)	22.7	56.2	56.2	17.9	51.3		25.8	36.6		24.2	35.6	65.1
Actuated g/C Ratio	0.14	0.35	0.35	0.11	0.32		0.16	0.23		0.15	0.22	0.40
v/c Ratio	1.02	0.59	0.12	0.75	0.89		1.04	0.96		0.61	0.95	0.70
Control Delay	114.4	46.1	0.4	82.5	63.8		130.2	79.4		75.9	83.6	40.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	114.4	46.1	0.4	82.5	63.8		130.2	79.4		75.9	83.6	40.9
LOS	F	D	A	F	E		F	E		E	F	D
Approach Delay		69.1			67.9			89.8			67.8	
Approach LOS		E			E			F			E	
Queue Length 50th (ft)	~280	320	0	146	506		~323	404		151	393	352
Queue Length 95th (ft)	#397	396	0	196	600		#516	#505		234	#514	493
Internal Link Dist (ft)		821			542			706			5515	
Turn Bay Length (ft)	450		175	325			620			350		
Base Capacity (vph)	466	1187	634	416	1097		263	1103		247	761	656
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	1.02	0.59	0.12	0.66	0.88		1.04	0.96		0.61	0.93	0.70

Intersection Summary	
Area Type:	Other
Cycle Length:	161.8
Actuated Cycle Length:	161.8
Offset:	85.8 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle:	145
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.04
Intersection Signal Delay:	73.9
Intersection LOS:	E
Intersection Capacity Utilization:	93.9%
ICU Level of Service:	F
Analysis Period (min):	15

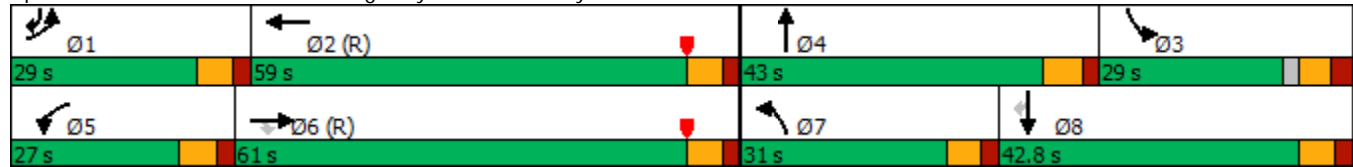
Lanes, Volumes, Timings

3: S Kanner Highway & SW Monterey Road

03/07/2023


















- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: S Kanner Highway & SW Monterey Road



Lanes, Volumes, Timings
4: SW Pine Ave/SW Palm City Road

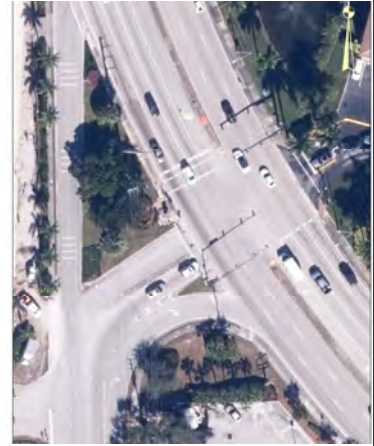
03/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	55	6	0	2	327	75	0	520	4
Future Volume (vph)	0	6	2	55	6	0	2	327	75	0	520	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	16	16	16	11	11	11	12	12	12
Storage Length (ft)	0		0	0		0	0		60	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.970							0.850		0.999	
Flt Protected					0.957							
Satd. Flow (prot)	0	1747	0	0	2020	0	0	1801	1531	0	1861	0
Flt Permitted					0.957							
Satd. Flow (perm)	0	1747	0	0	2020	0	0	1801	1531	0	1861	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		232			174			803			248	
Travel Time (s)		6.3			4.7			21.9			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	60	7	0	2	355	82	0	565	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	67	0	0	357	82	0	569	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		50			0			0			0	
Crosswalk Width(ft)		0			0			0			0	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.85	0.85	0.85	1.04	1.04	1.04	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	45.6%					ICU Level of Service A						
Analysis Period (min)	15											

APPENDIX C

PAC MEETING #1 (FEBRUARY 15, 2023)

US 1 /SR 5/FEDERAL HIGHWAY at SW PALM CITY ROAD FEASIBILITY STUDY



THE CORRADINO GROUP

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MEETING AGENDA



1. Introductions
2. Project Overview
3. Project Scope & Schedule
4. Overview of Data Collected
5. Initial Review & High-Level Ideas/Concepts
6. PAC Member Input
7. Next Steps



THE CORRADINO GROUP

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INTRODUCTIONS TECHNICAL PROJECT TEAM

Gerald Bolden, PE, PTOE
Project Manager

Joseph M. Corradino
Principal-in-Charge

Michael Biggs, PE, CPESC
Geometric Design

Asif Ahmed
Transportation Planning

3

INTRODUCTIONS MPO & PAC

- Joy Tracy Puerta, Martin MPO – Project Manager
- Beth Beltran, Martin MPO Administrator
- Milton Leggett – City of Stuart Public Works Director
- David Dyess – City of Stuart
- Joe Catrambone - Chamber
- James Gorton – Martin County Public Works Director
- George Dzama – Martin County Deputy Public Works Director
- Lukas Lambert – Martin County Traffic Engineering Manager
- Lisa Wichser – Martin County Traffic Engineer
- Chon Wong – FDOT
- Thomas Lanahan – Treasure Coast Regional Planning Council
- Mark Waldo – Publix
- Robert Doster - CubeSmart
- Lance Feldman – Royal Palm Financial Center

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PROJECT OVERVIEW



Background:

- SW Palm City Road is an attractive alternative to US-1 to Kanner Highway movement
- Southbound uncontrolled slip right-turn movement
- Speeds and volume of traffic

Goals & Objectives :

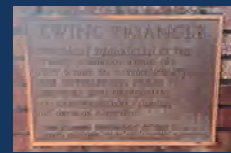
- Improve safety and mobility for all modes at the intersection of US-1 and SW Palm City Road.
- Manage speeds along SW Palm City Road
- Reduce traffic volumes along SW Palm City Road



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PROJECT OVERVIEW STUDY AREA



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**PROJECT OVERVIEW
STUDY AREA**

SW Palm City Rd
US 1 (SW Federal Hwy)
SR 76 (S Kanner Hwy)

MARTIN MPO
Metropolitan Planning Organization

THE CORRADINO GROUP

Google Earth

EWING TRIANGLE

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**PROJECT OVERVIEW
STUDY AREA**

SW Palm City Rd
US 1 (SW Federal Hwy)

Publix
CubeSmart


MARTIN MPO
Metropolitan Planning Organization

THE CORRADINO GROUP

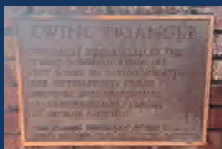
Google Earth

EWING TRIANGLE



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PROJECT SCOPE



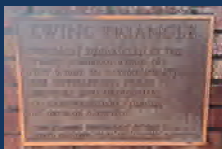
- Task 1: Project Management & Coordination
- Task 2: Stakeholder Coordination & Meetings
 - 2.1 PAC Meetings (2)
 - 2.2 Public Workshops (2)
 - 2.3 Presentations – Stuart Commission; CAC; BPAC; TAC; and MPO Board
- Task 3: Existing Conditions Evaluation
- Task 4: Alternatives Development/Evaluation
- Task 5: Concept Development



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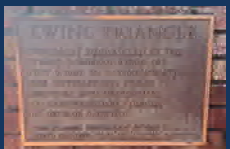
PROJECT SCOPE



- Task 3: Existing Conditions Evaluation
 - 3.1 Traffic Data Collection
 - 3.2 General Data Collection
 - a. Studies & plans
 - b. Crash history
 - c. Multimodal
 - d. Traffic signal timings
 - 3.3 Field Review
 - 3.4 Multimodal Evaluation
 - 3.5 Existing Traffic Operations

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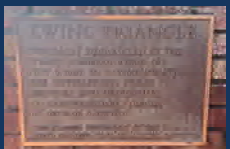



PROJECT SCOPE

- Task 4: Alternatives Development/Evaluation
 - 4.1 Alternatives Development
 - 4.2 Alternatives Evaluation
 - a. Traffic Operations
 - b. Physical impacts
 - c. Cost
- Task 5: Concept Development
 - 5.1 Concept Plan
 - 5.2 Opinion of Probable Cost
 - 5.3 Final Study






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PROJECT SCHEDULE

US 1/SR 51 FEDERAL HIGHWAY AT SW PALM CITY ROAD
MULTIMODAL INTERSECTION IMPROVEMENT FEASIBILITY STUDY

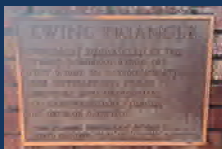
Task/Item	Start	End	Duration
SCOPE OF SERVICES APPROVAL BY MPO BOARD	Mon 1/16/2023	Mon 1/16/2023	1 day
NTD TO CORRADINO GROUP	Mon 1/16/23	Mon 1/16/23	1 day
1. PROJECT MANAGEMENT	Tue 1/16/23	Mon 1/22/23	6 days
2. Stakeholder Coordination	Wed 2/15/23	Mon 1/22/23	179 days
a. PAC Meetings (2)	Wed 2/15/23	Wed 5/17/23	66 days
PAC Meeting #1	Wed 2/15/23	Wed 2/15/23	1 day
PAC Meeting #2	Wed 5/17/23	Wed 5/17/23	1 day
b. Public Walkable	Thu 3/23/23	Thu 3/23/23	1 day
Workshop #1	Wed 5/17/23	Wed 5/17/23	1 day
c. Agency Meetings	Mon 5/22/23	Mon 5/22/23	111 days
Board Commission Meeting	Mon 5/22/23	Mon 5/22/23	1 day
CADD/INTEGRAL Joint Meeting	Mon 5/22/23	Mon 5/22/23	1 day
MPO Meeting	Mon 5/22/23	Mon 5/22/23	1 day
CAC	Wed 5/24/23	Wed 5/24/23	1 day
BPAC	Mon 5/22/23	Mon 5/22/23	1 day
RAC	Mon 5/22/23	Mon 5/22/23	1 day
MPO	Mon 5/22/23	Mon 5/22/23	1 day
3. Existing Conditions	Tue 1/16/23	Fri 5/19/23	49 days
a. Traffic Data Collection	Tue 1/16/23	Mon 2/20/23	25 days
b. Video Collection (Traffic Signal, Intersect, Roadway, etc. Specifics)	Tue 1/16/23	Mon 2/20/23	25 days
c. Field Photos	Mon 1/16/23	Tue 1/16/23	2 days
d. Materials Evaluation	Tue 2/21/23	Tue 2/21/23	1 day
e. Traffic Operations	Thu 2/16/23	Thu 2/16/23	1 day
Existing Conditions Task Meeting	Fri 3/17/23	Fri 3/17/23	1 day
4. Alternatives Development	Mon 2/20/23	Thu 7/20/23	141 days
a. Alternatives - Road widened	Mon 2/20/23	Fri 4/13/23	24 days
b. Traffic Operations	Mon 2/20/23	Fri 4/13/23	24 days
c. Physical Impacts	Mon 2/20/23	Fri 4/13/23	24 days
d. Cost	Mon 2/20/23	Fri 4/13/23	24 days
Alternatives Task Meeting	Thu 3/23/23	Thu 3/23/23	1 day
5. Concept Development	Fri 5/19/23	Mon 5/22/23	4 days
Concept Plan	Fri 5/19/23	Mon 5/22/23	4 days
Cost Estimate	Tue 5/23/23	Thu 5/25/23	3 days
Cost Report	Fri 5/26/23	Fri 5/26/23	1 day
Final Report	Mon 5/22/23	Fri 5/26/23	5 days


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PROJECT SCHEDULE KEY DATES/DELIVERABLES



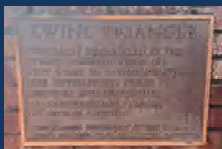
Notice to Proceed – January 9, 2023
 First Public Workshop – March 8, 2023
 Second PAC Meeting – week of May 15, 2023
 Stuart Commission Meeting – May 22, 2023
 Other Meetings (CAC, BPAC, TAC, MPO) – 2nd/3rd week of June; October
 Existing Conditions Technical Memorandum – March 17, 2023
 Alternatives Technical Memorandum – July 20, 2023
 Draft Report – September 8, 2023
 Final Report – October 23, 2023






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DATA COLLECTION




1. Studies and Plans
 - a. City of Stuart Federal Highway Master Plan (August 2021)
 - b. Intersection Operations Study – City of Stuart (June 2014)
 - c. US-1 Multimodal Corridor (June 2015)
 - d. FDOT Resurfacing Project & Right Turn Lane at Kanner Highway Project
2. Traffic Volumes
 - a. Turning Movement Counts
 - b. ADT
 - c. Speed
 - d. Pedestrian & bicycle



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DATA COLLECTION – con’t



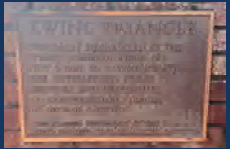
4. Traffic Signal Timings
5. Crash History
6. Transit





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DATA COLLECTION TRAFFIC DATA







1. Traffic Volumes
 - a) ADT/Speed
 - i. SW Palm City Road – free-flow right
 - ii. SW Palm City Road – near SW Indianola Street
 - b) Turning Movement Counts (TMC)
 - i. US 1 & SW Palm City Road
 - ii. US 1 & SR 76/Kanner Highway
 - iii. SW Palm City Road & Publix





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DATA COLLECTION CRASH DATA







US 1 @ SW Palm City Road Feasibility Study
 (Crash History: 2018-2023)


Legend
 Crash (2018-2023)
 Crash Severity
 Rear-End
 Left-Turn
 Sideswipe
 Other

Prepared by
 The Corradino Group
 Transmittal No. 27963

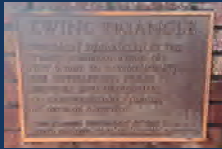
1. Crashes (2018 -2023)
 - a) Total Number of Crashes = 64
 - b) Bicycle/Pedestrian Crashes = 1
 - c) Total Number of Injury Crashes = 17
 - d) Total Number of Serious Injury Crashes = 1
2. Crash Type
 - a) Rear-End = 39
 - b) Sideswipe = 13
 - c) Left-Turn = 4
 - d) Other = 8

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SITE VISIT OBSERVATIONS



Observations

- a) Vehicles utilizing the free flow right-turn continue through at or above posted speed limit
- b) Right-turn volume doesn't appear to be heavily impacted by congestion levels on US-1
- c) Some pedestrian activity along US-1 and crossing the free flow right-turn
- d) Rumble strips are not effective – appear to be worn down
- e) Monument in the triangular island, Ewing Triangle
- f) Potential utility conflicts throughout the Ewing Triangle
- g) Significant queue on SW Palm City Road at SR 714 (SW Monterey Road)





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SITE VISIT OBSERVATIONS








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SITE VISIT OBSTACLES



Obstacles - Utilities






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SITE VISIT OBSTACLES




Obstacles – Traffic Signal



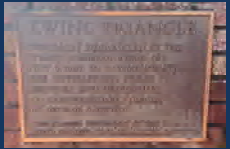








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SITE VISIT OBSTACLES




Obstacles – Ewing Triangle Monument






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INITIAL REVIEW GENERAL THOUGHTS




General Thoughts

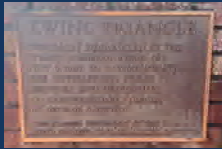
- a) SW Palm City is very attractive alternative to US-1 and Kanner Highway
- b) Without some physical barrier, the drivers will continue to use SW Palm City Road as an alternative route.
- c) The existing traffic calming measures appear to have a positive impact on speeds
- d) SW Palm City Road traffic volumes is a mixture, estimation 60/40 – 65/35, of cut-through to local traffic

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INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS





Alternative 1: Modification of “Triangle” to eliminate free-flow right-turn


Eliminate free-flow right-turn. Do not add a southbound right-turn lane to the signalized intersection with SW Palm City Road and install signage for “No Right Turn Allowed” at signal.

PRO – Should reduce the right-turn volume and will reduce the speeds in the immediate vicinity of the intersection.


CON – Potential to create a safety concern for rear-end crashes as vehicles.


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INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS




Alternative 1: Modification of “Triangle” to eliminate free-flow right-turn

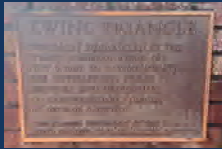


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INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS





Alternative 2: Modification of “Triangle” to eliminate free-flow right-turn


Eliminate free-flow right-turn. Add a southbound right-turn lane to the signalized intersection with SW Palm City Road

PRO – May reduce the right-turn volume and should reduce the speeds in the immediate vicinity of the intersection.

CON – Will require a total rebuild of the traffic signal. Major utility conflicts. Removal/relocation of Ewing Triangle monument.





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INITIAL REVIEW

HIGH-LEVEL IDEAS/CONCEPTS




Alternative 2: Modification of “Triangle” to eliminate free-flow right-turn



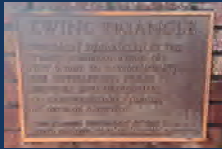



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INITIAL REVIEW

HIGH-LEVEL IDEAS/CONCEPTS





Alternative 3: Modification of “Triangle” to eliminate free-flow right-turn


Eliminate free-flow right-turn. Add a southbound right-turn lane to the signalized intersection with SW Palm City Road with a raised channelization island to avoid traffic signal cabinet (FDOT Technical Appendix Multimodal Project Recommendations (June 2015)).

PRO – May reduce the right-turn volume and should reduce the speeds in the immediate vicinity of the intersection. Should be able to avoid a traffic signal rebuild.

CON – Major utility conflicts. Removal/relocation of Ewing Triangle monument.





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INITIAL REVIEW

HIGH-LEVEL IDEAS/CONCEPTS




Alternative 3: Modification of "Triangle" to eliminate free-flow right-turn



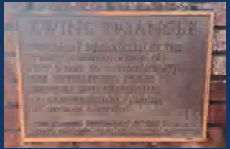



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INITIAL REVIEW



HIGH-LEVEL IDEAS/CONCEPTS



Alternative 4: Modify a section of SW Palm City Road to create a section of one-way northbound traffic

PRO – Will reduce the right-turn volume and should reduce the speeds in the immediate vicinity of the intersection.

CON – Major change to residential traffic patterns. May create a Wrong-Way driving issue.

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INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS




Alternative 4: Modify a section of SW Palm City Road to create a section of one-way northbound traffic

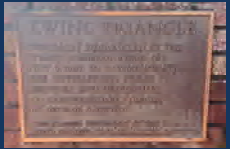





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INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS



Alternative 5: Modify traffic calming devices on SW Palm City Road to deter cut-through traffic.

PRO – Should reduce the right-turn volume and should reduce the speeds on SW Pam City Road.

CON – Change to residential traffic patterns.

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PAC INPUT



Questions for PAC Members:

1. What issues have you observed, or have you heard from those you represent?
2. What are your primary concerns with the existing conditions?
3. What are your primary concerns with potential changes to accomplish the identified goals and objectives of the study?
4. In your opinion, what obstacles need to be overcome to implement the recommended alternative (To be determined) for this study?
5. Are there any areas of opportunity that need to be addressed?
6. Do you have a concept or potential modification in mind that may accomplish the identified goals and objectives of the study?



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NEXT STEPS



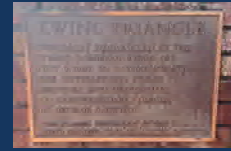
- A. Public Workshop – March 8, 2023
- B. Complete Existing Conditions Evaluation and Prepare Existing Conditions Memorandum – March 17, 2023
- C. Development of Alternatives – late March thru early May
- D. Second PAC Meeting – week of May 15, 2023



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QUESTIONS?



Gerald Bolden, PE, PTOE
615.406.8707
gbolden@corradino.com



PROJECT ADVISORY COMMITTEE (PAC) MEETING MINUTES

Date/Time:	February 15, 2023, at 3:00 PM
Submitted:	April 10, 2023
Project:	US 1 at SW Palm City Road Feasibility Study
TCG Proj:	4731*05

Meeting Attendees:

1. Joy Tracy Puerta, Planner	Martin MPO	jpuerta@martin.fl.us
2. Beth Beltran, MPO Administrator	Martin MPO	bbeltran@martin.fl.us
3. Gerald Bolden, PE	TCG	gbolden@corradino.com
4. Joseph M. Corradino	TCG	jmcorradino@corradino.com
5. Marty D. McWilliams	TCG	mmcwilliams@corradino.com
6. Asif Ahmed	TCG	aahmed@corradino.com
7. David Dyess	City of Stuart	ddyess@ci.stuart.fl.us
8. James Gorton, Director	Martin County, PW	jgorton@martin.fl.us
9. Milton Leggett, Director	City of Stuart, PW	mleggett@ci.stuart.fl.us
10. Lisa Wichser, Traffic Engineer (TE)	Martin County	lwichser@martin.fl.us
11. Lukas Lambert, TE Manager	Martin County	llambert@martin.fl.us
12. Robert Doster	Cube Smart	rd@macarthurholdings.com
13. Thomas Lanahan, Treasure Coast Regional Planning Council		tlanahan@tcrpc.org
14. Chon Wong	FDOT	chon.wong@dot.state.fl.us
15. Michael Mortell		mmortell@ci.stuart.fl.us

Discussion:

Mr. Bolden started the meeting by introducing himself and The Project Team of The Corradino Group. Then introductions of all individuals on the call were made and Mr. Bolden began a presentation on the project by going over the agenda for the meeting.

Mr. Bolden briefly described Project Background, Project Goals & Objectives, Study Area, Project Scope (including all tasks), and Project Schedule. After the overview on the projects, Mr. Bolden described about the completed task. Through presentation he showed The Corradino Team has gathered data that includes other studies and projects, crash history, traffic counts, multimodal and existing traffic operations review. At this point, he also showed different maps depicting Existing AADT and Crash History of the study area.

Mr. Doster asked if the presentation slides could be made available after the meeting. Mr. Bolden assured that he will send all the materials to everyone through OneDrive link.

Mr. Bolden continued with his presentation and shared his experience with site visit that he conducted through January 30, 2023, and January 31, 2023. He discussed both general observations (e.g., the study area traffic, bike & pedestrian movement) and specific observations (e.g., utilities, traffic signals, Ewing Triangle Monuments etc.) that came from the site visit. Mr. Bolden described his observations using pictures and videos taken while making the site visit. At this moment, Mr. Bolden asked everyone if they have any questions on what is presented so far. There being no comments from the members, Mr. Bolden moved forward with his presentation.

Mr. Bolden shared couple of high-level ideas for potential solutions to address the issues/concerns identified in the purpose section through couple of alternatives. Once all the alternatives were thoroughly described, Mr. Bolden opened the floor for the attendees to share their comments, observations, and ideas. This session was very interactive. Every attendee shared their thoughts on alternatives.

Discussion was centered on how alternatives will have negative and positive impacts on the study area (SW Palm City Road, SW Palm City Road & US-1 Intersection) and nearby intersections (US-1 & Kanner Highway; Kanner Highway & Monterey Road and Monterey Road & SW Palm City Road), how public might react to those alternatives, whether those alternatives will impact traffic movement/pattern on neighborhood roads or not, if alternatives will have positive or negative impacts on traffic coming from cross street. The Corradino Group Team members took notes on all the observations to address in future analysis.

Mr. Lambert asked if an Origin-Destination Study could be conducted for SW Palm City Road to determine percentages of local and cut-thru traffic. Mr. Bolden replied that is not within the scope of the study. Mr. Lambert also asked if recent speed data has been analyzed. Mr. Bolden replied that will be looked at soon and added in the technical memorandum.

Mr. Dyess added to the discussion that City has tried traffic calming measure to control the speeding issue through speed bumps, however, it was found that neighborhood reacts differently at different times. He added that City also made a plan for complete streets but considering the cost they could not make it to the implementation. Ms. Puerta said she would send that plan to Mr. Gerald.

After this discussion Mr. Bolden opened the floor again for PAC Input with following questions:

- What issues have you observed, or have you heard from those you represent?
- What are your primary concerns with the existing conditions?
- What are your primary concerns with potential changes to accomplish the identified goals and objectives of the study?

- In your opinion, what obstacles need to be overcome to implement the recommended alternative (To be determined) for this study?
- Are there any areas of opportunity that need to be addressed?
- Do you have a concept or potential modification in mind that may accomplish the identified goals and objectives of the study?

Mr. Bolden encouraged everyone to go through the questions and put their inputs.

Mr. Bolden asked Mr. Dyess about the recent speed study City did on SW Palm City Road. Mr. Dyess said they have one study on traffic counts and speeds on the SW Palm City Road that he will send to Mr. Bolden.

Ms. Puerta shared about a problem that one of the BPAC members having, who lives in the study area vicinity. That member always has problems getting out from the cross streets because the traffic is just so congested along there heading southbound and the speeds are just very high. Mr. Bolden explained the reasoning behind this problem with engineering judgment.

A discussion was generated about the removal/relocation of the Ewing Triangle Monument. After considerable discussion, it was found that The Monument does not have historical significance but is important for City of Stuart. This Monument could be relocated.

Ms. Puerta pointed out to the email that Mr. Wong sent before this meeting. In that email, Mr. Wong mentioned if SW Palm City Road Slip Ramp were to be removed, an impact analysis on the intersections of US-1 & Kanner Highway, Kanner Highway & Monterey Road and Monterey Road & SW Palm City Road would require.

Mr. Wong asked if elimination of the thru-movement from the office park on the east side of the US-1 to Palm City Road might be worth investigating. Discussion on this issue revealed that this could be investigated by changing signal timing pattern.

Mr. Bolden stated that he has observed a southbound queue from the intersection of US-1 & Kanner Highway backing up up-to Publix Access on US-1. He asked how likely it is that southbound right-turning traffic will use Public Access/Driveways to get onto Monterey Road. Ms. Lisa replied if no physical measure is taken for southbound right-turn traffic on US-1 & Kanner Highway, that traffic might consider using the Publix Driveway.

Mr. Gorton suggested to figure out if the primary concern in the study area is related to speeding or volume then it would be easy to make the final solution. Mr. Bolden replied right now the prime concern is volume.

After this discussion on PAC Input was finished, Mr. Bolden reminded everyone about the upcoming Public Workshop Meeting on March 8, 2023.

There being no other business, the meeting was adjourned.

ACTION ITEMS:

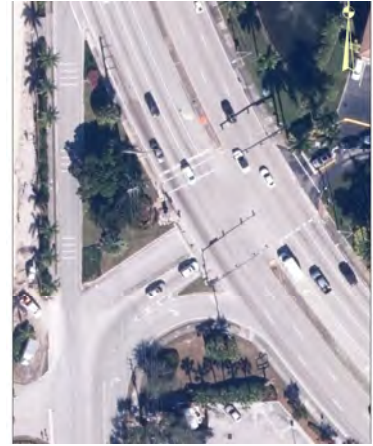
1. Corradino to prepare for Public Workshop Meeting.
2. City of Stuart to send complete street plan and recent speed study.

This is an interpretation of the verbal exchange between the participants of the meeting. If any of the information reported in these minutes is incorrect or should be clarified or amended, please contact the office of The Corradino Group within 2 working days, otherwise this report is considered as fully accurate.

APPENDIX D

PUBLIC WORKSHOP #1 (MARCH 8, 2023)

US 1 /SR 5/FEDERAL HIGHWAY at SW PALM CITY ROAD FEASIBILITY STUDY

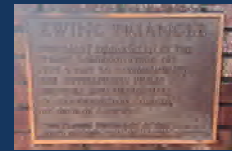


**PUBLIC WORKSHOP
MARCH 8, 2023**



1

MEETING AGENDA



1. Introductions
2. Workshop Format
3. Project Overview
 - a. Study Area
 - b. Goals & Objectives
 - c. Scope
4. Video



2



INTRODUCTIONS CORRADINO & MPO



Gerald Bolden, Corradino – Project Manager

Edward Ng, Corradino – Client Manager

Vanessa Spatafora, Corradino – Traffic Engineer


Samantha Kayser, Corradino – Community Outreach Specialist

Joy Tracy Puerta, Martin MPO – Project Manager

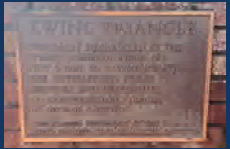
Beth Beltran, Martin MPO Administrator






3





PROJECT ADVISORY COMMITTEE MEMBERS



- Milton Leggett – City of Stuart Public Works Director
- David Dyess – City of Stuart
- Joe Catrambone - Chamber
- James Gorton – Martin County Public Works Director
- George Dzama – Martin County Deputy Public Works Director
- Lukas Lambert – Martin County Traffic Engineering Manager
- Lisa Wichser – Martin County Traffic Engineer
- Chon Wong – FDOT
- Thomas Lanahan – Treasure Coast Regional Planning Council
- Mark Waldo – Publix
- Robert Doster - CubeSmart
- Lance Feldman – Royal Palm Financial Center

4





WORKSHOP FORMAT

Overview Presentation

Breakout Stations

1. Data and Challenges – Crash History; Traffic Volumes; Obstacles
2. Evaluation of Existing Conditions – Observations; Early Evaluation; Concepts
3. Public Ideas – TELL US YOUR THOUGHTS, IDEAS, CONCEPTS!




5




OVERALL STUDY AREA





6




SPECIFIC STUDY AREA



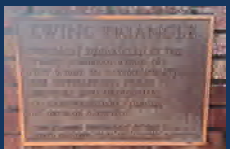
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7



GOALS & OBJECTIVES



- ▶ Improve safety and mobility for all modes at the intersection of US-1 and SW Palm City Road.
- ▶ Manage speeds along SW Palm City Road
- ▶ Reduce traffic volumes along SW Palm City Road



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8



PROJECT SCOPE

Stakeholder Coordination & Meetings

PAC Meetings (2) – February 15, 2023 & May 17, 2023 (Rescheduled August 1, 2023)

Public Workshops (2) – March 8, 2023 & May 10, 2023 (Rescheduled August 23, 2023)

Presentations

City of Stuart Commission – May 22, 2023 (Rescheduled August 28, 2023)

TAC – June 5, 2023 (Rescheduled September 6, 2023)


CAC – June 7, 2023 (Rescheduled September 6, 2023)

BPAC – June 12, 2023 (Rescheduled September 11, 2023)

MPO – June 19, 2023 (Rescheduled September 18, 2023)




9





PROJECT SCOPE

Existing Conditions Evaluation


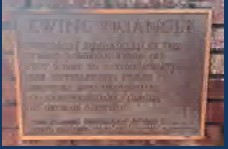
Data Collection – traffic; crash history; multimodal; studies and plans

On-site Review – observations; obstacles; opportunities

Evaluation & Analysis – multimodal; traffic; speeds; volumes

10



PROJECT SCOPE

Alternatives Development/Evaluation


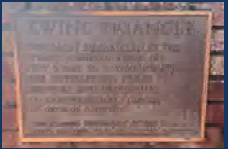
Alternatives Development

Alternatives Evaluation – traffic operations, physical impacts (utilities, right-of-way, cultural, landscaping, etc.)

Cost Implications

11



PROJECT SCOPE

Final Concept Development & Document

Concept Plan

Opinion of Probable Cost

Final Feasibility Study

12




SITE VISIT OBSERVATION

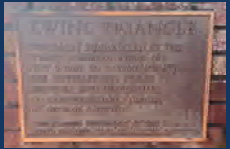







13



QUESTIONS?



Gerald Bolden, PE, PTOE
615.406.8707
gbolden@corradino.com

14



WELCOME

US 1 @ SW PALM CITY ROAD

FEASIBILITY STUDY


PUBLIC WORKSHOP



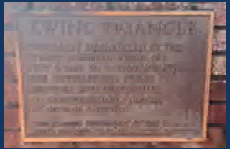






1




TRAFFIC AND CRASH DATA







US 1 @ SW Palm City Road Feasibility Study (AADT : 2021)



US 1 @ SW Palm City Road Feasibility Study (Crash History: 2018-2023)

2

CHALLENGES

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3

STUDY AREA

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4



INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS



Modification of "Triangle" to eliminate free-flow right-turn



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5



INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS



Modification of "Triangle" to eliminate free-flow right-turn



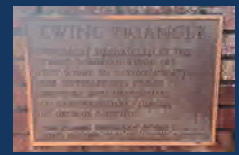
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6



INITIAL REVIEW HIGH-LEVEL IDEAS/CONCEPTS



Modify a section of SW Palm City Road to create a section of one-way northbound traffic



**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
1	Doris Brennan	Traffic light on 1 for Palm City turn intersects quickly with Palm City Rd going straight through. The stop sign is unexpected so cars speed through. As a result a number of near misses and not misses have occurred. Very Dangerous.
2	Clifford Christ	Close the turn off at US #1. If that is not enough to slow the amount of traffic then, make a no right turn at Palm City Rd. Then remove the speed bumps. Use traffic cones at first to prove this step works.
3	Devon Bell	Very interested for vision for Kanner/US 1 plan being considered.
4	Janice Tucker	Please keep us connected and deal with the other end of SW Palm City Rd and Monterey. AWFUL
5	Jon & Karen Sweet	Shut off the right turn to Palm City Rd and push that traffic to Kanner Rd. to Monterey to Palm City.
6	Jackie Vitale	The signaled right feels like the option that makes the most sense. The modified hot right feels even more dangerous than what is already there. The option with no right turn would create challenges further up with U-turns and increased traffic on Manor.
7	Wolfgang Pozsicsany	Palm City Rd is going thru habitational area! Many/most hab areas are "Planted" with stop signs. Put stop sign at any intersection - slows down traffic to the point that Palm City Rd gets boring - unattractive for thru traffic. Low cost, not blocking directions. Makes it bad for all, but especially for thru-traffic.
8	Amy Eason (Martin CAC)	I prefer the mod to "Triangle" to eliminate free flow right turn. The crosswalk across US 1 needs to be examined. Crossing between off & on traffic to PC Road is difficult. Can an elevated crosswalk over US 1 be considered or other alternatives? Consider PC Road w/ smaller lanes & share row for bicycles?
9	Pam Knott	Modify to eliminate fast right and make right turn at signalized intersection. SAFETY!
10	Susie Borrack/Brock	Changing signal/lane off US 1 seems like a good idea. I feel the traffic should be closed southbound at bottom of Palm City Bridge. Northbound traffic coming off Monterey Rd could remain open. This would eliminate a ton of traffic using Palm City Rd as a short cut to the bridge. Thank you.
11	Janet Burnett	Concerns - High speed, congestion and risky crossing for pedestrians & bikes. Please eliminate slip lane. Not opposed to the northbound one way. Would certainly solve our speed and congestion on all of SW Palm City Rd. Thank you for your work and ideas.
12	Pat D'Ambrosio	So. Bound US 1 traffic turning onto Palm City Rd needs to be slowed down. Creating a turn off lane. Eliminate islands allows a driver to decelerate to a 25 mph speed limit. Closing off Palm City Rd or conversion to one-way would impact residents GREATLY! Suggest eliminate traffic tables & use stop signs. Police presence would also be a plus!

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
13	Carol LeBreck	Concept/idea to at the southwest corner of Palm City Rd <u>close</u> road so there is no right turning onto Monterey and travel on to Palm City closer. It could be implemented (7am - 9am and 3pm-6pm)
14	Carol LeBreck	Making portions of Palm City Rd one-way is NOT a sensible plan. Eliminate the "slip road". Must use right turn at light to access Palm City Rd. Indicate "Not a Thru Rd" for people going onto PC Rd. OR Eliminate access to Palm City Bridge during high traffic times. Gaining access to bridge is the main problem for all issues on PC Rd.
15	Mike Berger	<ol style="list-style-type: none"> 1. Eliminate high speed cut-off on US 1. 2. Do not allow right turn from US 1 to Palm City Rd for non-residents. 3. Align speed bumps 45 degrees to traffic flow.
16	Julie Preast	<p>Speed is the primary problem. Option #3, Modification of triangle to eliminate free-flow right turn will:</p> <ol style="list-style-type: none"> 1. Slow those moving onto Palm City Road from driving at the faster US 1 speed. 2. By slowing speed at this intersection that sets the tone, so to speak, for the driver to continue down the rest of Palm City Road at the slower speed. <p>Install all the traffic calming features possible: medians, narrow lanes, crosswalks, etc. I dislike all other options.</p>
17	Joe Hartowski	No slip lanes - they are one of the known deadly road designs for pedestrians and people biking. Chicanes. MULTI-USE TRAILS!!!
18	Joe Hartowski	Chicanes every block using NACTO standards. Protected bike lanes w/ room guided by chicanes.
19	David Borrack	My belief would be use some of Publix Shopping center parking lot SW side and create extra right turn lane (only) also eliminate slip access onto Palm City Road creating 90 degree right only.
20	Cristy Hooks	I'm a resident of 52 years. I currently live off Indian Grove Dr. in Village Oaks. My backyard is right on P.C. Road & Mangrove Park. I see first-hand the mass of vehicles and speed racers day & night. Until big changes can be made, I recommend speed tables located from north to south all the way down. The speed tables on the south end slow down traffic - please add speed tables all the way through. We also need pedestrian (midblock) signalized crosswalks throughout P.C. Road.
21	No name	To slow traffic <u>must eliminate & enforce</u> trucks from using SW Palm City Rd. Concept 3 at this point seems safest.
22	Art Ruebenson	Proposal to make northbound only on Palm City Road will only increase traffic through residential roads of Manor, Winnache and Indianola.

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
23	Gail Goldy	1. A “heads-up” to residents along PC Road about the study & next public workshop - need their input. 2. YouTube Video - to be placed on City video.
24	Micah Hartowski	I think it's important to eliminate the slip lane from US-1 onto Palm City Rd. That would go a long way as a first step to folks cutting through. I also think roundabouts or chicanes throughout Palm City Rd. would support slowing speed but keep traffic moving. Second step may be incorporating #4 drawing but seems drastic and challenges could be addressed in other cheaper ways.
25	Elsie Stewart	I am impressed with the #4 concept that includes the northbound only section of Palm City Road. It would accomplish reducing the volume of traffic that uses the road as a thru-way to Palm City and/or Port St. Lucie without significant negative impact to the residents. Everyone will experience some positive and some negative impact but overall it would accomplish the objective. That plan would necessitate the removal of free-flow right off US 1. Palm City Road is bordered with residential properties and should primarily serve the residents. Thank you for asking for our input.
26	Bridget Kean	The No Truck signs are ineffective. The sidewalks are inadequate and dangerous. Need sidewalks on both sides where sufficient ROW. Support reduction of traffic on Palm City Road. Difficult to pull out from residential street onto Palm City Road due to traffic volumes & speed midway up the road. This street has more problems than one intersection.
27	Trish Millner	This is an old Stuart neighborhood, very few vacant lots so very limited future growth. As your undoubtedly observed many people walk in AM & PM and bike. Children walk to bus stops. It is vital to keep this wonderful small town, small neighborhood character and convenience. Please totally eliminate the right hand slipway access off US 1 and instead install a traffic light with a very short right turn time hopefully discouraging the non-neighborhood traffic who only use P.C.R. as a connector to avoid Kanner Hwy. Another problem is traffic cutting through the church from Kanner to Palm City Rd if the afternoon, then speeding. Thank you. If the slipway is eliminated I would be more than happy to head up a group to plant that area, expanding the current triangle planting & making a great little neighborhood green area /park.
28	Patty Henderson	#4 very interesting. I think you would need a roundabout to allow southbound traffic on PC Rd to reverse direction and get back safely to US 1 (southbound). Move stop area (raised?) to S. of Poppleton Ck Bridge & use City property at Popp Ck. Pk. For roundabout area. How about stop access from PC Rd onto Monterey at base of bridge? Local traffic only south of Manor Dr.

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
29	Glenn Scheiner	<ol style="list-style-type: none"> 1. Dedicated right turn lane at US 1 and Kanner Hwy. 2. No one-way streets on Palm City Rd. 3. Widen Palm City Road to include bike lanes and an additional sidewalk. 4. Stop signs on Palm City Road to slow traffic.
30	Bonnie Landry	May be outside of scope of this project but consider open intersection PC Road & Monterey with signal.
31	Bonnie Landry	Option 3 of all concepts is best with caveat of No Right on Red (dangerous for bikers). The cost to move the FPL pole is a concern. Please slow down the cars by signage to slow cars from Roosevelt Bridge, Speed limit is 35, Your speed is "55" ...Narrow car travel lane & make sidewalk wider. Add 2 & 4 way stops on PC Road. Add cameras & license plate readers on PC Road to catch and enforce traffic laws (no passing) & speeders.
32	Brenda Flanagan	Of the designs displayed, I find that #3 would be the most effective for deterring traffic volume and speed. Design #3 has a nice incorporation of greenspace and sidewalk. I like the signal impact & stoppage for the turn lane coming off US 1 onto PCR. But <u>please</u> be respectful of the potential impact the chosen design will have on Indian Grove Dr, Winnachee Dr, and Manor Dr. traffic volume. We have worked for years to preserve the residential integrity of our three streets and I don't want the chosen design to change the work we have done.
33	Werner Bols	Right now traffic in Stuart needs to be able to get thru Stuart. Blocking the Hi speed turn will just be another change causing slower transit through town. The plan appears to cause traffic to transit through residential streets to Kanner. What would you expect residents living south of the bridge & west side of PC road to do? Leave things alone and create of backup at Monterey to relocate traffic.
34	Frank Swain	<p>No right turn on red at US 1 & Palm City Rd.</p> <p>Close off southern end of Palm City Rd so you cannot turn right - no outlet.</p> <p>Only turn off Monterey to north on Palm City Rd.</p>
35	Elizabeth Leone	The problem on P.C. Rd. is the traffic going to Palm City. That exit to the P.C. bridge should be eliminated & reroute all that traffic to US 1 & Kanner - to get to Palm city. Thank you.
36	Carl Stewart	The closing of Poppleton Creek Bridge to southbound traffic would be by far the most cost-effective way to reduce traffic on Palm City Rd without major disruption of local traffic flow.
37	Bernie Muckenfuss	Like idea of northbound traffic only!!!
38	Bridget Johnson	Close the end of Palm City Road to Monterey Road.

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
39	Michelle Smith	<ol style="list-style-type: none"> 1. Representation of private citizens makes me afraid of lack of transparency. 2. Could not get through stations - too tight of a space. 3. More frustrated than before & know less.
40	Michelle Smith	<u>Do not</u> modify SW P.C. Rd to create a one-way northbound. I live in Tierra Verde.
41	Rich Kennedy	<ol style="list-style-type: none"> 1. Eliminate easy right turn from US 1 to Palm City Road. 2. Add traffic light to intersection of Palm City Rd & Monterey.
42	Karen Schedler	Will there ever be a light at the base of the Palm City bridge? This would allow people to make a left turn onto Palm City Rd & eliminate the U turns on Monterey.
43	Paul Kjos	The elimination of the “free flow” right turn is a necessity - regardless of other changes. Eliminating a right turn onto P.C.R. from 1 would significantly increase traffic flow thru Publix and on Manor (between Kanner & P.C.R.). This would also significantly reduce volume of traffic at P.C.R. & Monterey. The NBound only traffic would be detrimental to P.C.R. residents. I feel best first option is eliminate the right turn & then address 1 to Kanner right turn and this will help P.C.R. residents w/ traffic volume.
44	Jim Galleges	Please do away w/ the hot right on US 1 to PCR
45	Steve Romig	Home is SWC of P.C. Rd & SW Riverview. 1. Most local residents will agree that the speed & volume on PC Rd is hazardous and it is clearly getting worse. It's prob just a matter of time before there are serious accidents involving pedestrians, so this study is very timely. 2. If creating a safer PC Rd means some inconvenience to locals, it is worth it. 3. I have to give it some more thought, but conceptually closing the Poppleton Bridge to southbound traffic would seem to be an effective option.
46	Merritt Matheson	<ol style="list-style-type: none"> 1. End hot right on Palm City Rd. Make it a traditional right turn to access Palm City Rd from US 1. 2. Multimodal path along Palm City Rd at least 10 ft wide - “Palm City Rd - Complete Street.” Landscaping to shade street and path and slow traffic. Focus on pedestrian safety and slowing traffic with chicanes and medians and landscaping.
47	Lou Dambrosio	<p>Agree with eliminating south “hot” ramp off of US-1 on to Palm City Rd. Agree with creating turn lane on US-1 to enable controlled speed turn. Hate 1-way traffic idea! Suggest (Believe it or not) eliminate traffic tables & replace with STOP SIGNS with strict enforcement.</p>

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
48	Linda Flynn	Do away with "free flow" right.
49	Gary Hall	Close cut off road just before US 1 (entrance to Palm City Rd) so everyone goes to light. Then remove barrier at Bridge exit and place light.
50	Paul & Nicole Ross	The volume of traffic on Palm City Rd. is very dangerous and the road is substantially residential. I believe the majority of traffic southbound on Palm City Road is just thru traffic going to Palm City. It makes sense from a safety aspect as well as quite enjoyment to stop the thru traffic. A significant reduction of thru traffic could be achieved by not allowing traffic from Rt. 1 to turn onto Palm City Rd. This action would push most Palm City traffic from Rt 1 down Kanner which is only 1 block from Palm City Rd. and Kanner is mostly commercial with little to no pedestrians or residential. Reduction in traffic = safer quieter Palm City Rd. I look forward to the day when it is safer to pull out of Circle Bay onto Palm City.
51	Maren Reid	Prevent traffic from making U-turns off Monterey Rd. onto Palm City Rd. and driving northward to Hwy 1 Light. Also, prevent traffic from cutting thru shopping center to turn onto Palm City Rd. Also, existing stop sign does not seem to prevent a lot of cars from stopping. This pertains to traffic turning off Hwy #1 entering Palm City Rd.
52	Mary and Dennis Stewart	It is already difficult for residents along Palm City Rd. to go south or east. If Palm City Rd. going south is closed we would be forced to go all the way to Kanner, Monterey to Palm City Rd. causing not only inconvenience to residents but substantially more traffic on Kanner and Monterey. We need Palm City Road open! If totally necessary: Make Palm City Road a DEAD END going south so only residents have access.
53	Judi Mills	Whatever choices are made, all emergency vehicles and the residents on Palm City Road need access to US 1, Kanner and Monterey by car. Motor vehicles, bikes and pedestrians need to peacefully coexist. 1- 4 way stop sign at Manor and traffic light and Manor and Kanner hwy. Needs left hand arrow if access is closed off to turn right onto US 1. 2- Place additional traffic hump between existing one by Publix and Manor to slow traffic. 3- Create bike/ped path by Bark Park. 4- Widen current sidewalk so bikes and pedestrians are separated. Or make one side pedestrian and the other side for bikes.
54	Brian McCue	No change at Federal and SW Palm City Road but close the exit onto Monterrey and keep entrance onto Palm City Road off Monterey. This should limit traffic to homeowners on/off SW Palm City Road.
55	Clement P. McGrath	Power assisted bikes are flying down Palm City Road sidewalk where many old folks like myself are walking daily. Someone is going to get hurt! I believe these vehicles are not allowed on Martin County sidewalks. Perhaps a sign or 2 would help.
56	Donald Wilder	I live in Circle Bay and do not like the current traffic on Palm City Road. Many of the vehicles do not slow down for the speed bumps. Even if they slow down they accelerate rapidly creating loud noise. A one-way bridge on Palm City Road will deter the "short cut" drivers. Please implement ASAP.

**PUBLIC WORKSHOP
MARCH 8, 2023
SUMMARY OF COMMENTS**

#	NAME	COMMENT
57	William Mills	Palm City Road needs access to US 1 and Kanner Hwy traffic light or stop sign somewhere on Palm City Road. Another walkway on the opposite side of the road for bike traffic one more road bump at US 1 and entrance to Palm City Road. More walkways across street west so pedestrians and drivers of autos can see each other.
58	FB Hohenstein	To ease the heavy flow of traffic (and trucks!) which use the street as a route to the Palm City Bridge, I recommend that the end of the road be closed to right turns to the bridge.



ATTACHMENT B

ALTERNATIVES EVALUATION
TECHNICAL MEMORANDUM

US 1 AT SW PALM CITY ROAD FEASIBILITY STUDY ALTERNATIVES EVALUATION



**US 1/SR 5/Federal Highway at SW Palm City Road
Multimodal Intersection Improvement Feasibility Study**

Stuart, Florida

**ALTERNATIVES EVALUATION
TECHNICAL MEMORANDUM**

Prepared For:
Martin MPO

Prepared By:
The Corradino Group
Franklin, TN

November 2023

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Appendices

Appendix A: Traffic Operational Analysis

Appendix B: Existing Conditions LOS (Existing Conditions Technical Memorandum)

Appendix C: Preliminary Opinion of Probable Cost

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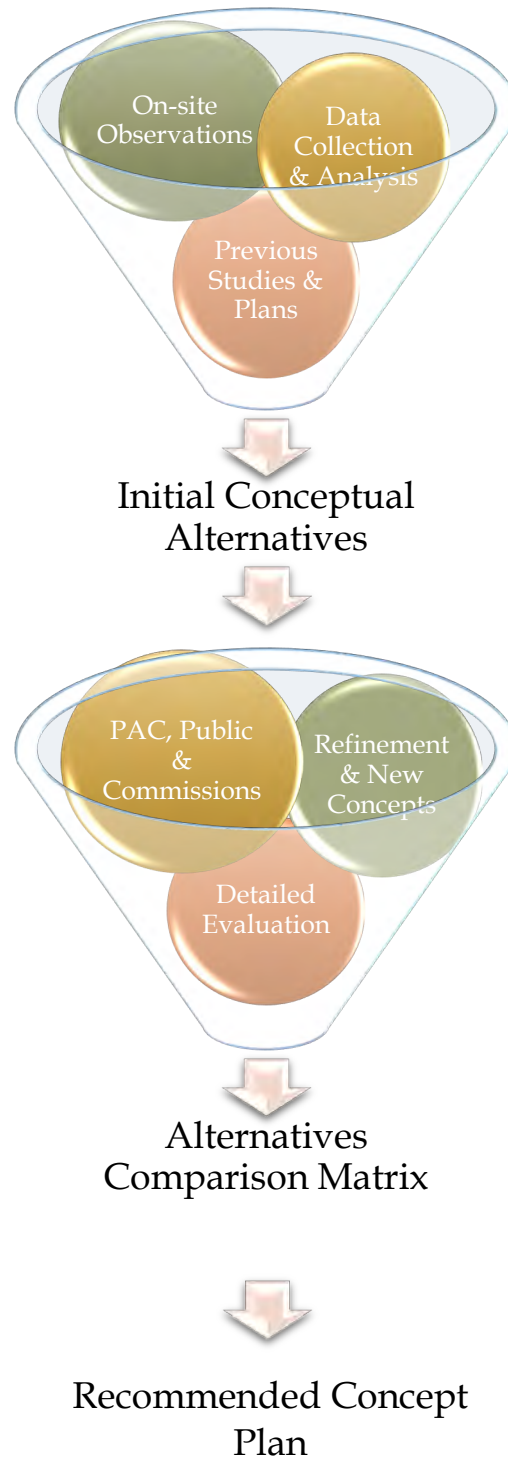
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Introduction

The US 1/SR 5/Federal Highway at SW Palm City Road Multimodal Intersection Improvement Feasibility Study (US 1 at SW Palm City Road Feasibility Study) is identified for completion in the Martin MPO’s FY22/23 – FY 23/24 Unified Planning Work Program. This Alternatives Evaluation Technical Memorandum is the deliverable for the next task of the study. This memorandum is based on the information and data contained Existing Conditions Technical Memorandum and the results of in-depth evaluation of the initial conceptual alternatives presented to the Project Advisory Committee (PAC) and the public during the first Public Workshop.

The conceptual alternatives were developed to a level to complete an operational analysis; evaluate the potential physical impacts of construction of the alternative, including utilities, right-of-way, cultural resources, landscaping, etc.; prepare a preliminary planning level cost estimate; and potential overall attainment of the projects goal and objectives, in order to develop a basic comparison matrix of the various alternatives.



Alternative Development/Evaluation

Based on the information gathered from the Existing Conditions task and from the input received during the PAC Meeting held on February 15, 2023, and the Public Workshop held on March 8, 2023, Corradino refined the previously presented alternatives and developed others to address the goals and objectives of the study and the public’s concerns. The goals and objectives of the study include:

- Improve safety and mobility for all modes at the US 1 and SW Palm City Road intersection.
- Improve mobility for all modes at the US 1 and SW Palm City Road intersection.
- Manage vehicular speeds along SW Palm City Road.
- Manage vehicular volumes along SW Palm City Road.

According to existing FDOT project #FM 446257-1, a right-turn lane will be constructed from southbound US 1 to westbound SR 76/Kanner Highway. The evaluation of all the alternatives developed as part of this feasibility study included the #FM 446257-1 proposed improvements at the intersection of US 1 and SR 76/Kanner Highway.

The alternatives presented in the US 1 and SW Palm City Road Multimodal Intersection Improvement Feasibility Study will be developed to a basic conceptual level, complete enough to convey the layout and provide a clear understanding of the modifications proposed for the intersection and other facilities within the immediate vicinity of the intersection. Corradino assessed each alternative relative to traffic operations, physical impacts, cost, and potential overall attainment of the project goals and objectives.

Traffic Operations Evaluations

Operational analysis of the roadway network was conducted using the latest versions of Synchro Traffic Analysis Software. The operational analysis results in a Level of Service (LOS) for each intersection during the AM and Midday/PM peak hours. The LOS is based on the industry standard outlined in the *Highway Capacity Manual 2010*. The LOS results range from an A to an F with A being the best and F the worst. For intersections, the LOS is based on the volume-to-capacity ratio and amount of delay experienced by each movement. For unsignalized intersections, the LOS is reported for critical turning movements based on delay and volume-to-capacity (v/c) ratio and for signalized intersection the LOS is reported for each approach and for the overall intersection based on delay, as shown in **Table 1**.

Table 1
LOS Range

LOS	Control Delay/Vehicle (s/veh)	
	Unsignalized	Signalized
A	0 – 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Table 2 shows the estimated percentage of traffic utilizing the various routes between US 1 at SW Palm City Road intersection and SW Monterey Road based on the proposed alternatives.

Table 2
Traffic Redistribution Percentages

Alternative	Percentage of Traffic		
	Southbound Right Turn at US 1 onto SW Palm City Road	Eastbound Right Turn at US 1 onto S Kanner Highway	Southbound Right Turn at S Kanner Highway onto SW Monterey Road
Alternative 1A	60%	40%	40%
Alternative 1B	5%	95%	95%
Alternative 1C	75%	25%	25%
Alternative 2	75%	25%	25%
Alternative 3	50%	50%	50%
Alternative 4	75%	25%	25%
Alternative 5	75%	25%	25%
Alternative 6	Varies by Alternative 1-5	Varies by Alternative 1-5	Varies by Alternative 1-5

Physical Impacts

Corradino reviewed the intersection of US 1 and SW Palm City Road using aerial imagery, field review observations, property appraiser data, and available GIS data, to summarize the physical impacts of each proposed alternative. These physical impacts include utilities, landscaping, cultural resources (monument/park), right-of-way, driveways, and drainage.

Preliminary Opinion of Probable Cost

Corradino reviewed the intersection of US 1 and SW Palm City Road using aerial imagery, field review observations, property appraiser data, and available GIS data, to develop a preliminary opinion of probable cost. The data used for the development of the opinion of probable cost was obtained from the Historical Item Average Cost Reports available via the FDOT website ([Historical Item Average Costs Reports \(fdot.gov\)](https://www.fdot.gov/historical-item-average-cost-reports)).

The project documentation presented at the MPO Policy Board Meeting on December 12, 2022 for approval of the project states, *“The scope of services includes identifying and evaluating conceptual alternatives and gathering input from the public and relevant stakeholders to recommend an alternative to eliminate the uncontrolled right turn from southbound US-1 onto southbound SW Palm City Road and deter traffic from using SW Palm City Road.”*

Each of the presented alternatives in this Technical Memorandum were developed to support this portion of the scope of services.

ALTERNATIVE 1A:

Alternative 1A, as shown in **Figure 1**, is the most basic of all the alternatives considered. This alternative includes:

- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.
- Addition of “No Right Turn” sign on southbound approach at US 1 and SW Palm City Road/Driveway.

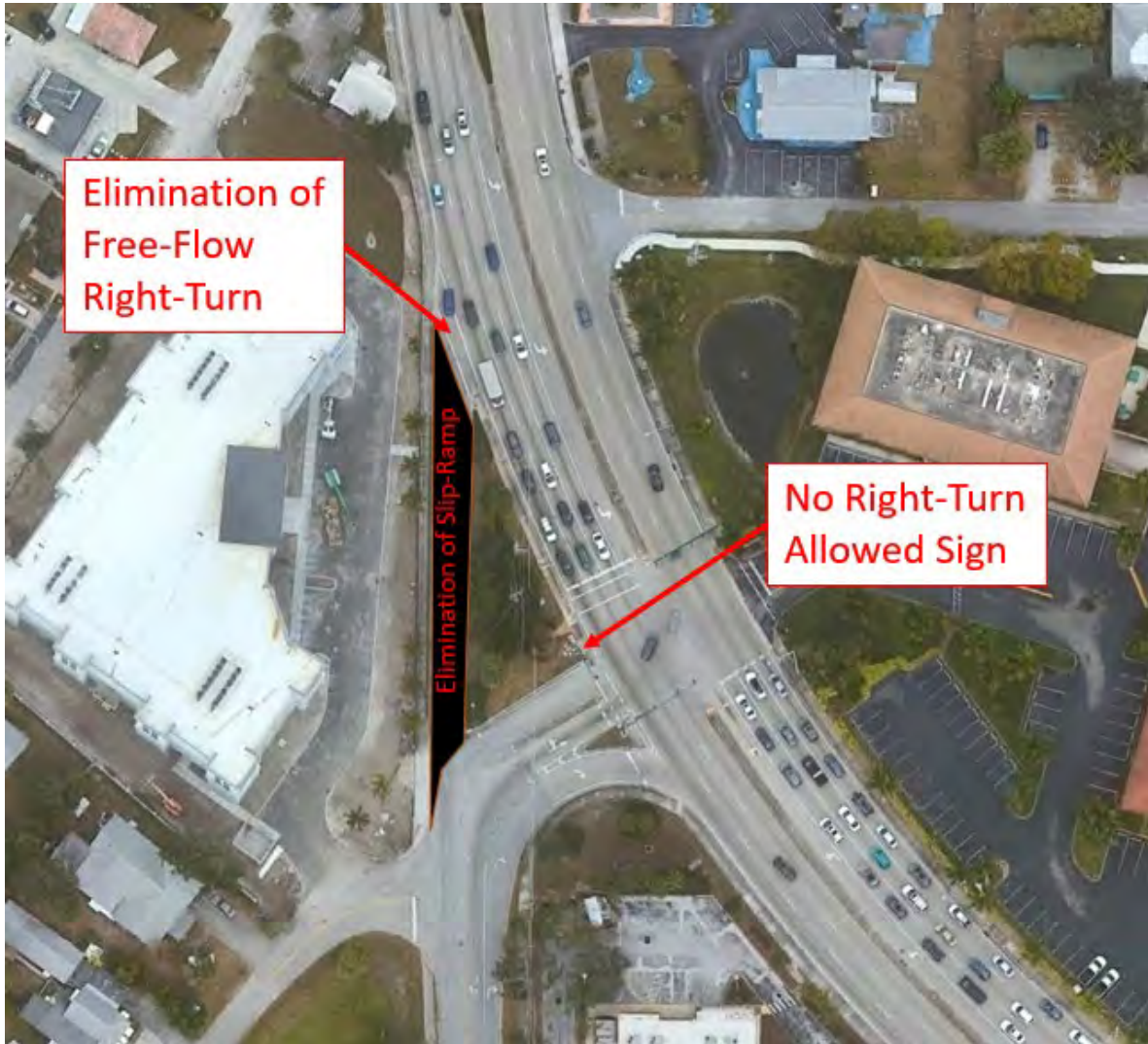


Figure 1:
Alternative 1A

As part of the evaluation of this alternative the following generalized Pros and Cons were identified.

Pros

- Reduce the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of US 1 and SW Palm City Road.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.
- Reduce southbound traffic volumes on SW Palm City Road.

Cons

- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to attempt to make the “illegal” southbound US 1 right turn onto southbound SW Palm City Road.
- Not expected to reduce speeds along SW Palm City Road, south of the intersection of US 1 and SW Palm City Road.
- Redistribution of traffic to US 1 and Kanner Highway intersection, Publix development, other local streets, such as SW Indian Grove Drive, SW Winnachee Drive, S Manor Drive.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 1A is shown in **Table 3**. The LOS reports are included in **Appendix A**.

Table 3
Alternative 1A LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	97.9	#409	0.91	F	82.2	501	0.90
	Eastbound Right-Turn	E	57.0	<25	0.06	D	48.6	<25	0.06
	Eastbound Approach	F	86.9	-	-	E	75.8	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	106.7	m54	0.71	E	68.1	m41	0.66
	Northbound Through/Right-Turn	D	36.5	m124	0.55	D	53.7	m614	0.84
	Northbound Approach	D	38.7	-	-	D	54.0	-	-
	Southbound Left-Turn	E	55.8	103	0.20	F	92.7	<25	0.23
	Southbound Through	D	41.5	#1245	0.98	D	37.3	853	0.84
	Southbound Approach	D	41.8	-	-	D	37.4	-	-
	Overall Intersection	D	44.4	-	-	D	49.9	-	-
US 1 and S Kanner	Eastbound Left-Turn	D	53.4	m196	0.62	D	51.3	m204	0.41
	Eastbound Through	F	296.2	m#941	1.53	F	83.7	#612	1.01
	Eastbound Right-Turn	F	480.5	m#1283	1.95	F	220.9	#875	1.25
	Eastbound Approach	F	334.5	-	-	F	126.5	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
Highway (includes the new Southbound right-turn lane)	Westbound Through	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	234.1	-	-	F	165.8	-	-
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397	1.03
	Eastbound Through	E	55.4	633	0.87	D	45.6	396	0.59
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.3	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	72.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	77.7	196	0.74
	Westbound Through	F	70.8	380	0.83	E	64.2	600	0.90
	Westbound Approach	F	86.8	-	-	E	67.2	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	134.8	#516	1.04
	Northbound Through	F	92.3	#425	0.99	F	80.7	#505	0.96
	Northbound Approach	F	95.2	-	-	F	91.8	-	-
	Southbound Left-Turn	D	54.6	m151	0.69	E	68.5	234	0.61
	Southbound Through	E	59.3	m276	0.98	F	82.6	#514	0.95
	Southbound Right-Turn	C	33.8	m115	0.59	F	138.3	#972	1.15
Southbound Approach	D	50.1	-	-	F	105.7	-	-	
Overall Intersection	F	80.9	-	-	F	85.6	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 1A, as shown on **Figure 1**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and SW Palm City Road

- In the AM peak, the 95th percentile queue on the southbound through increased from 819 feet to 1,245 feet with a change in v/c ratio from 0.77 to 0.98.

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 234.1 seconds in the AM peak.
- In the AM peak, eastbound through delay, 95th percentile queue and v/c ratio has decreased from 527.9 seconds, 1408 feet and 2.10 to 296.2 seconds, 941 feet and 1.53, respectively.
- In the PM peak, eastbound through delay, 95th percentile queue and v/c ratio has decreased from 256.2 seconds, 929 feet and 1.37 to 83.7 seconds, 612 feet and 1.01, respectively.

S Kanner Highway and SW Monterey Road

- In the PM peak, southbound approach LOS and delay has deteriorated from LOS E and 62.5 seconds to LOS F and 105.7 seconds.
- In the PM peak, southbound right-turn LOS, delay, 95th percentile queue and v/c ratio has deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 138.3 seconds, 972 feet and 1.15, respectively.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 1A. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- None.

Cultural Resources

- None.

Right-of-Way

- None.

Infrastructure

- None.

Preliminary Opinion of Probable Cost

For Alternative 1A, the Preliminary Opinion of Probable Construction Cost is approximately \$125,000. Right-of-way acquisition should not be needed to accommodate this alternative. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 1B:

Alternative 1B, as shown in **Figure 2**, is very similar to Alternative 1A. The difference is Alternative 1B provides a bulb-out (aka physical barrier) restricting the southbound US 1 right turns on southbound SW Palm City Road. This alternative includes:

- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.
- Addition of “No Right Turn” sign on southbound approach at US 1 and SW Palm City Road/Driveway.
- Modification of the northwest corner of the intersection of US 1 and SW Palm City Road to create a bulb-out that would allow for the northbound left-turn to access SW Palm City Road while physically restricting the southbound right-turn movement.

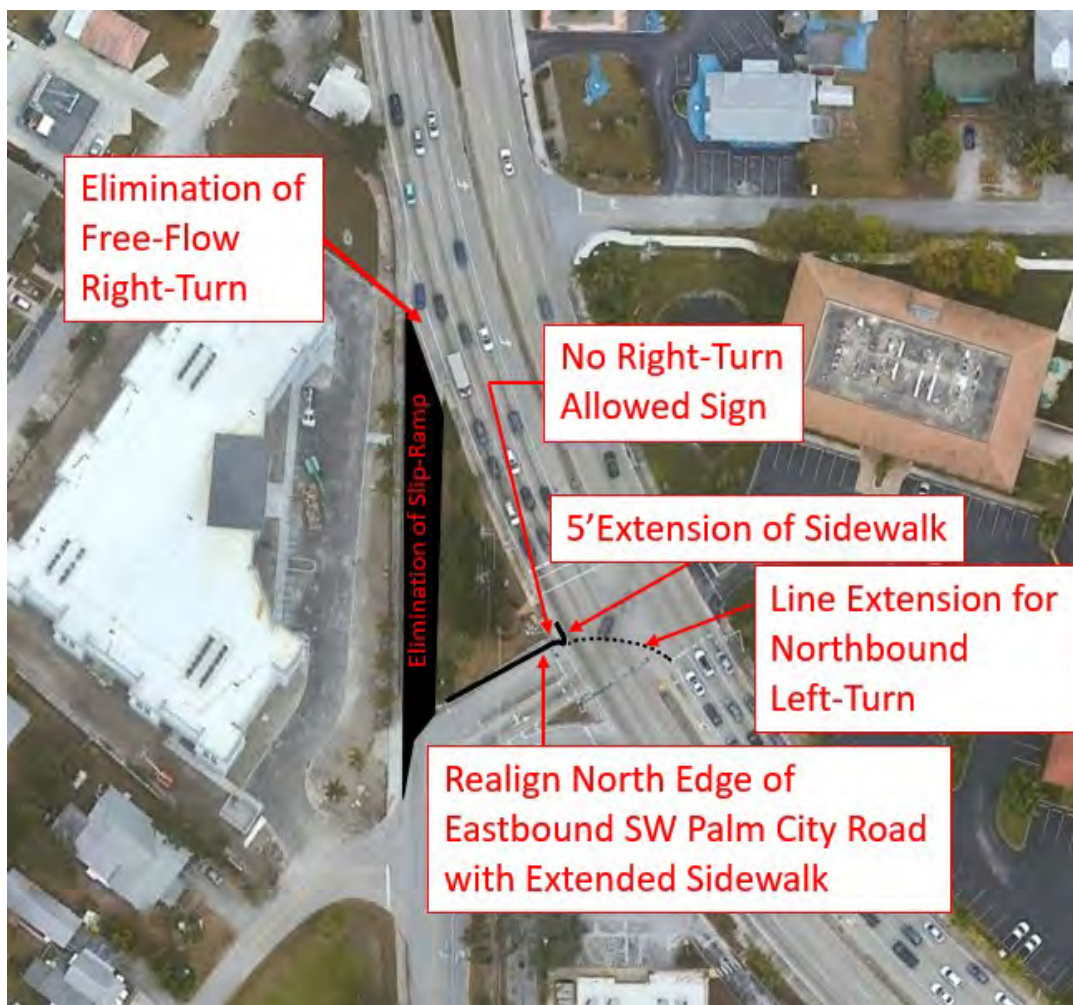


Figure 2:
Alternative 1B

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Reduce/eliminate the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of US 1 and SW Palm City Road.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.
- Reduce southbound traffic volumes on SW Palm City Road.

Cons

- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to attempt to make the “illegal” southbound US 1 right turn onto southbound SW Palm City Road.
- Not expected to reduce speeds along SW Palm City Road, south of the intersection of US 1 and SW Palm City Road.
- Redistribution of traffic to US 1 and Kanner Highway intersection, Publix development, other local streets, such as SW Indian Grove Drive, SW Winnachee Drive, S Manor Drive.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 1B is shown in **Table 4**. The LOS reports are included in **Appendix A**.

**Table 4
Alternative 1B LOS Analysis**

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	97.9	#409	0.91	F	82.2	501	0.90
	Eastbound Right-Turn	E	57.0	<25	0.06	D	48.6	<25	0.06
	Eastbound Approach	F	86.9	-	-	E	75.8	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	106.7	m54	0.71	E	68.1	m41	0.66
	Northbound Through/Right-Turn	D	36.7	m126	0.55	D	53.7	m614	-
	Northbound Approach	D	39.0	-	-	D	54.0	-	-
	Southbound Left-Turn	E	55.7	102	0.20	F	92.7	<25	0.23
	Southbound Through	D	38.9	#1236	0.97	D	36.5	847	0.83
	Southbound Approach	D	39.3	-	-	D	36.6	-	-
	Overall Intersection	D	42.9	-	-	-	D	49.5	-
	Eastbound Left-Turn	D	53.3	m198	0.62	D	52.1	m211	0.41

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and S Kanner Highway (includes the new Southbound right-turn lane)	Eastbound Through	F	296.0	#957	1.53	F	85.0	#612	1.01
	Eastbound Right-Turn	F	814.9	m#1942	2.70	F	524.7	#1405	1.88
	Eastbound Approach	F	478.9	-	-	F	270.1	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
Overall Intersection	F	309.2	-	-	F	213.4	-	-	
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397	1.03
	Eastbound Through	E	55.4	633	0.87	D	45.6	396	0.59
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.3	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	72.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	77.7	196	0.74
	Westbound Through/Right-Turn	E	70.8	380	0.83	E	64.2	600	0.90
	Westbound Approach	E	76.3	-	-	E	67.2	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	134.8	#516	1.04
	Northbound Through/Right-Turn	F	92.3	#425	0.99	F	80.7	#505	0.96
	Northbound Approach	F	95.2	-	-	F	91.8	-	-
	Southbound Left-Turn	D	54.3	m127	0.69	E	68.5	234	0.61
	Southbound Through	E	59.0	m228	0.98	F	82.6	#514	0.95
	Southbound Right-Turn	E	79.7	m186	1.05	F	365.2	#1633	1.68
Southbound Approach	E	67.9	-	-	F	231.0	-	-	
Overall Intersection	F	84.5	-	-	F	127.1	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 1B, as shown on **Figure 2**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the

Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and S Kanner Highway

- Overall, the intersection delay increased from 184.9 seconds to 213.4 seconds in the PM peak.

S Kanner Highway and SW Monterey Road

- Overall, the intersection LOS and delay deteriorated from LOS E and 73.3 seconds to LOS F and 127.1 seconds in the PM peak.
- In the PM peak, southbound approach LOS and delay deteriorated from LOS E and 62.5 seconds to LOS F and 231.0 seconds.
- In the PM peak, southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 365.2 seconds, 1633 feet and 1.68.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 1B. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- None.

Cultural Resources

- None.

Right-of-Way

- None.

Infrastructure

- None.

Preliminary Opinion of Probable Cost

For Alternative 1B, the Preliminary Opinion of Probable Construction Cost is \$165,000. Right-of-way acquisition should not be needed to accommodate this alternative. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 1C:

As with the previous alternatives, Alternative 1C, as shown in **Figure 3**, also eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection. This alternative includes:

- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.
- Addition of a southbound right-turn lane on US 1 at the signalized intersection with SW Palm City Road.

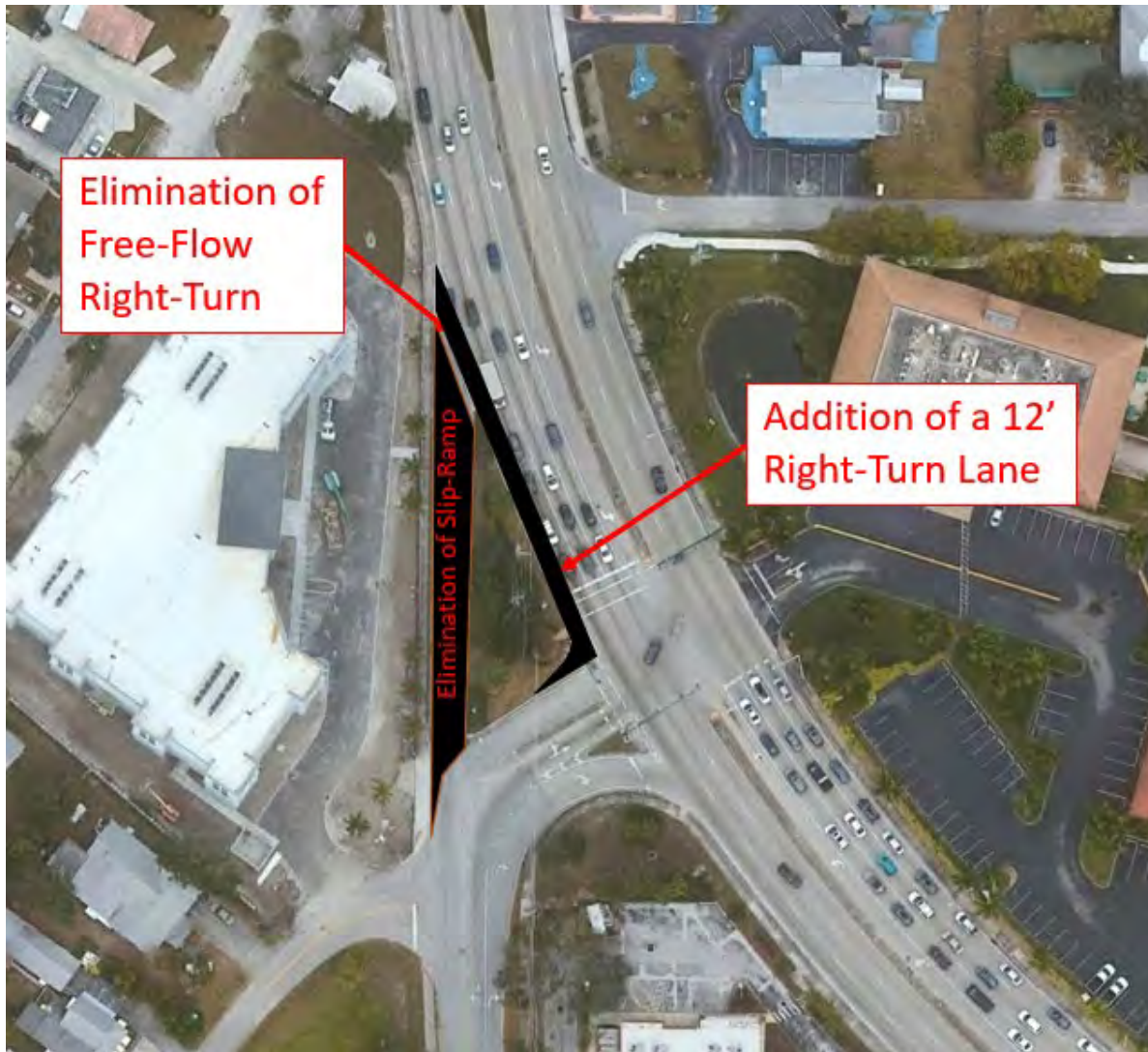


Figure 3:
Alternative 1C

As part of the evaluation of this alternative the following generalized Pros and Cons were identified.

Pros

- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of US 1 and SW Palm City Road.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.

Cons

- ROW and utility impacts
 - Due to the required storage to accommodate the project queue, the additional length may impact additional properties north of the intersection.
 - Significant utility conflicts within the Ewing Triangle.
 - Will require traffic signal rebuild/major modification.
- Not expected to reduce speeds along SW Palm City Road, south of the intersection of US 1 and SW Palm City Road.
- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane at SW Palm City Road.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 1C is shown in **Table 5**. The LOS reports are included in **Appendix A**.

**Table 5
Alternative 1C LOS Analysis**

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	85.0	349	0.85	F	84.0	505	0.90
	Eastbound Right-Turn	E	55.5	<25	0.06	D	48.8	<25	0.06
	Eastbound Approach	E	77.0	-	-	E	77.3	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	103.2	m54	0.63	E	65.9	m41	0.59
	Northbound Through/Right-Turn	D	38.4	m151	0.54	D	53.0	m622	0.83
	Northbound Approach	D	40.5	-	-	D	53.2	-	-
	Southbound Left-Turn	E	58.1	106	0.22	F	92.7	<25	0.23
	Southbound Through	C	28.7	917	0.85	C	30.4	599	0.66
Southbound Right-Turn	B	17.3	233	0.39	C	26.1	281	0.43	

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
	Southbound Approach	C	27.7	-	-	C	29.6	-	-
	Overall Intersection	D	35.2	-	-	D	46.3	-	-
US 1 and SR 76/Kanner Highway (includes the new Southbound right-turn lane)	Eastbound Left-Turn	D	50.4	m230	0.62	E	58.0	246	0.41
	Eastbound Through	F	293.8	#957	1.53	F	93.9	#612	1.01
	Eastbound Right-Turn	F	385.1	#1130	1.74	F	163.8	#722	1.07
	Eastbound Approach	F	300.2	-	-	F	111.8	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	217.2			F	162.0	-	-
	S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397
Eastbound Through		E	55.4	633	0.87	D	45.6	396	0.59
Eastbound Right-Turn		C	33.6	55	0.12	D	35.3	<25	0.05
Eastbound Approach		F	95.1	-	-	E	72.4	-	-
Westbound Left-Turn		F	90.9	#186	0.83	E	77.7	196	0.74
Westbound Through/Right-Turn		E	70.8	380	0.83	E	64.2	600	0.90
Westbound Approach		F	76.3	-	-	E	67.2	-	-
Northbound Left-Turn		F	106.8	#391	0.94	F	134.8	#516	1.04
Northbound Through/Right-Turn		F	92.3	#425	0.99	F	80.7	#505	0.96
Northbound Approach		F	95.2	-	-	F	91.8	-	-
Southbound Left-Turn		E	55.9	m161	0.69	E	68.5	234	0.61
Southbound Through		E	64.8	m297	0.98	F	82.6	#514	0.95
Southbound Right-Turn		C	32.9	m93	0.46	F	90.2	#783	1.00
Southbound Approach		D	54.3	-	-	F	84.2	-	-
Overall Intersection	F	82.5	-	-	E	79.4	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 1C, as shown in **Figure 3**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and SW Palm City Road @ US 1

- The added southbound right-turn movement has 95th percentile queue length of 233 feet and 281 feet in the AM and PM peak, respectively.

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 217.2 seconds in the AM peak.
- Eastbound approach delay decreased from 498.0 seconds to 300.2 seconds in the AM Peak.
- In the AM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 293.8 seconds, 957 feet and 1.53, from 527.9 seconds, 1408 feet and 2.10.
- In the PM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 93.9 seconds, 612 feet and 1.01, from 256.2 seconds, 929 feet and 1.37.

S Kanner Highway and SW Monterey Road

- In the PM peak, the southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 90.2 seconds, 783 feet and 1.00.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 1C. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- Overhead electrical lines and wooden pole.
- Roadway lighting pole
- Possible impact to large concrete transmission pole and lines.
- Teco/Peoples Gas line located along back of existing sidewalk.
- Fiber optic communication lines, conduit and pull boxes.

Cultural Resources

- Encroachment onto the Ewing Triangle, but should not require removal of monument.

Right-of-Way

- Require acquisition of right-of-way from Stuart Self Storage, LLC and may require acquisition of right-of-way from EPH Holdings, Inc.



Infrastructure

- The traffic signal control cabinet, pedestrian poles (2), mast arm signal pole, and appurtenances will require modification and rebuild.
- Reconstruction of sidewalk and ADA ramps.

Preliminary Opinion of Probable Cost

For Alternative 1C, the Preliminary Opinion of Probable Construction Cost is \$1,100,000. Less than 0.25 acres of right-of way may be required to accommodate the construction of this alternative. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 2:

Alternative 2, as shown in **Figure 4**, is very similar to Alternative 1C as it also eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection. The difference is Alternative 2 has a raised channelization island at the connection to SW Palm City Road. This alternative includes:

- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.
- Addition of a southbound right-turn lane on US 1 at the signalized intersection with SW Palm City Road with a raised channelization island.



PRELIMINARY MULTIMODAL PROJECT RECOMMENDATIONS
AND CORRIDOR-WIDE STRATEGIES

14. US 1 at Palm City Road



Figure 4:
Alternative 2

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of US 1 and SW Palm City Road.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.

Cons

- ROW and utility impacts
 - Due to the required storage to accommodate the project queue, the additional length may impact additional properties north of the intersection.
 - Significant utility conflicts within the Ewing Triangle.
 - May require traffic signal rebuild/major modification – by including the raised channelization island, the traffic signal cabinet may be able to remain in place.
- Not expected to reduce speeds along SW Palm City Road, south of the intersection of US 1 and SW Palm City Road.
- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane at SW Palm City Road.
- Safety – The channelized right-turn operations potentially create pedestrian safety concerns.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 2 is shown in **Table 6**. The LOS reports are included in **Appendix A**.

**Table 6
Alternative 2 LOS Analysis**

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	85.0	349	0.85	F	84.0	505	0.90
	Eastbound Right-Turn	E	55.5	<25	0.06	D	48.8	<25	0.06
	Eastbound Approach	E	77.0	-	-	E	77.3	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	103.2	m54	0.63	E	65.9	m41	0.59
	Northbound Through/Right-Turn	D	38.4	m151	0.54	D	53.0	m622	0.83
	Northbound Approach	D	40.5	-	-	D	53.2	-	-
	Southbound Left-Turn	E	58.1	106	0.22	F	92.7	<25	0.23
	Southbound Through	C	28.7	917	0.85	C	30.4	599	0.66
Southbound Right-Turn	B	17.3	233	0.39	C	26.1	281	0.43	

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
	Southbound Approach	C	27.7	-	-	C	29.6	-	-
	Overall Intersection	D	35.2	-	-	D	46.3	-	-
US 1 and SR 76/Kanner Highway (includes the new Southbound right-turn lane)	Eastbound Left-Turn	D	50.4	m230	0.62	E	58.0	246	0.41
	Eastbound Through	F	293.8	#957	1.53	F	93.9	#612	1.01
	Eastbound Right-Turn	F	385.1	#1130	1.74	F	163.8	#722	1.07
	Eastbound Approach	F	300.2	-	-	F	111.8	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	217.2			F	162.0	-	-
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397	1.03
	Eastbound Through	E	55.4	633	0.87	D	45.6	396	0.59
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.3	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	72.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	77.7	196	0.74
	Westbound Through/Right-Turn	E	70.8	380	0.83	E	64.2	600	0.90
	Westbound Approach	F	76.3	-	-	E	67.2	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	134.8	#516	1.04
	Northbound Through/Right-Turn	F	92.3	#425	0.99	F	80.7	#505	0.96
	Northbound Approach	F	95.2	-	-	F	91.8	-	-
	Southbound Left-Turn	E	55.9	m161	0.69	E	68.5	234	0.61
	Southbound Through	E	64.8	m297	0.98	F	82.6	#514	0.95
	Southbound Right-Turn	C	32.9	m93	0.46	F	90.2	#783	1.00
Southbound Approach	D	54.3	-	-	F	84.2	-	-	
Overall Intersection	F	82.5	-	-	E	79.4	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 2, as shown in **Figure 4**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and SW Palm City Road @ US 1

- The added southbound right-turn movement has 95th percentile queue length of 233 feet and 281 feet in the AM and PM peak, respectively.

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 217.2 seconds in the AM peak.
- Eastbound approach delay decreased from 498.0 seconds to 300.2 seconds in the AM Peak.
- In the AM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 293.8 seconds, 957 feet and 1.53, from 527.9 seconds, 1408 feet and 2.10.
- In the PM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 93.9 seconds, 612 feet and 1.01, from 256.2 seconds, 929 feet and 1.37.

S Kanner Highway and SW Monterey Road

- In the PM peak, the southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 90.2 seconds, 783 feet and 1.00.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 2. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- Overhead electrical lines and wooden pole.
- Roadway lighting pole.
- Likely impact to large concrete transmission pole and lines.
- Teco/Peoples Gas line located along back of existing sidewalk.
- Fiber optic communication lines, conduit and pull boxes.
- AT&T Distribution Cable.

Cultural Resources

- Encroachment onto the Ewing Triangle, and removal/relocation of Ewing Triangle monument.

Right-of-Way

- Require acquisition of right-of-way from Stuart Self Storage, LLC and may require acquisition of right-of-way from EPH Holdings, Inc.



Infrastructure

- The traffic signal control cabinet, pedestrian poles (2), mast arm signal pole, and appurtenances will require modification and rebuild.
- Reconstruction of sidewalk and ADA ramps.

Preliminary Opinion of Probable Cost

For Alternative 2, the Preliminary Opinion of Probable Construction Cost is \$1,335,000. Less than 0.25 acres of right-of way may be required to accommodate the construction of this alternative. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 3:

Alternative 3, as shown in **Figure 5**, like all of the other alternatives, this one also includes the elimination of the uncontrolled right-turn from southbound US 1 onto southbound SW Palm City Road. Alternative 3 includes:

- Construction a “traffic circle” (similar to A1A at SE Manatee Lane) on SW Palm City Road just south of the US 1 intersection.
- Improve northwest corner curb radius to allow for better operations of right turning maneuvers.
- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.



Figure 5:
Alternative 3

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Reduce the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of SW Palm City Road and SW Pine Avenue and SW Indianola Street.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.

Cons

- Not expected to reduce speeds along SW Palm City Road south of the “traffic circle”.
- ROW impacts
 - Potential impact to the residential parcels on the west side of SW Palm City Road.
- Utility impacts
 - Potential overhead electrical pole conflicts on both sides of SW Palm City Road.
 - Potential gas line conflicts on the east side of SW Palm City Road.
 - Potential water line conflicts on both sides of SW Palm City Road.
- Safety – High Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver the right turn at SW Palm City Road.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 3 is shown in **Table 7**. The LOS reports are included in **Appendix A**.

Table 7
Alternative 3 LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	85.0	349	0.85	F	82.2	501	0.90
	Eastbound Right-Turn	E	55.5	<25	0.06	D	48.6	<25	0.06
	Eastbound Approach	E	77.0	-	-	E	75.8	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	103.2	m54	0.63	E	68.1	m41	0.66
	Northbound Through/Right-Turn	D	38.4	m151	0.54	D	53.7	m614	0.84
	Northbound Approach	D	40.5	-	-	D	54.0	-	-
	Southbound Left-Turn	E	58.1	106	0.22	F	92.7	<25	0.23
	Southbound Through/Right-Turn	D	49.0	#1316	1.00	D	37.1	852	0.84
	Southbound Approach	D	49.2	-	-	D	37.2	-	-

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
	Overall Intersection	D	49.0	-	-	D	49.8	-	-
US 1 and SR 76/Kanner Highway (includes improved NE corner radius)	Eastbound Left-Turn	D	50.4	m185	0.62	D	51.4	m205	0.41
	Eastbound Through	F	293.3	m#909	1.53	E	66.9	#550	0.94
	Eastbound Right-Turn	F	535.5	m#1355	2.08	F	221.8	#919	1.25
	Eastbound Approach	F	353.5	-	-	F	119.8	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	129.6	#496	1.01
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	315.3	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	243.8			F	164.7	-	-
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	125.2	#403	1.05
	Eastbound Through	E	55.4	633	0.87	D	46.0	397	0.60
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.6	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	75.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	76.4	194	0.74
	Westbound Through/Right-Turn	E	70.8	380	0.83	E	64.5	596	0.90
	Westbound Approach	E	76.3	-	-	E	67.1	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	131.5	#509	1.03
	Northbound Through/Right-Turn	F	92.3	#425	0.99	E	72.1	#469	0.92
	Northbound Approach	F	95.2	-	-	F	84.3	-	-
	Southbound Left-Turn	D	54.4	m146	0.69	E	69.9	234	0.63
	Southbound Through	E	59.1	m265	0.98	E	79.5	#502	0.93
	Southbound Right-Turn	D	36.5	m126	0.67	F	175.2	#1076	1.24
	Southbound Approach	D	50.4	-	-	F	122.4	-	-
	Overall Intersection	F	80.7	-	-	F	89.5	-	-
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 3, as shown in **Figure 5**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 243.8 seconds in the AM peak.
- Overall, eastbound approach delay decreased from 498.0 seconds to 353.5 seconds in the AM Peak.
- In the AM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 293.3 seconds, 909 feet and 1.53, from 527.9 seconds, 1408 feet and 2.10.
- In the PM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 66.9 seconds, 550 feet and 0.94, from 256.2 seconds, 929 feet and 1.37.

S Kanner Highway and SW Monterey Road

- In the PM peak, the southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 175.2 seconds, 1,076 feet and 1.24.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 3. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- Overhead electrical lines and wooden pole.
- Teco/Peoples Gas line located along SW Palm City Road.
- AT&T Distribution Cable.

Cultural Resources

- Minimal encroachment onto the Ewing Triangle.

Right-of-Way

- May require acquisition of some amount of right-of-way from AGB Stuart, LLC and Centro NP Downtown Publix LLC on the east side of SW Palm City Road and from the residential property on the west side of SW Palm City Road adjacent to the City-owned parcel.

Infrastructure

- Potential impact to the traffic signal conduit, pedestrian pole, mast arm signal pole, and appurtenances.
- Reconstruction of sidewalk and ADA ramps.

Preliminary Opinion of Probable Cost

For Alternative 3, the Preliminary Opinion of Probable Construction Cost is \$1,850,000. Less than 0.5 acres of right-of way may be required to accommodate the construction of this alternative, as the most impacted parcel is owned by the City of Stuart. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 4:

Alternative 4, as shown in **Figure 6**, this alternative eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection via a new realigned right turn lane through the Ewing Triangle. Alternative 4 includes:

- Construction a right-turn lane with deceleration lane that curves through the Ewing Triangle.
- Construct raised crosswalk with signing and striping on the southern connection point (southeast corner of Ewing Triangle) between new right-turn lane and SW Palm City Road.
- Construct new sidewalk between signalized intersection of US 1 and SW Palm City Road and raised crosswalk identified in second bullet.
- Modify sidewalk along Ewing Triangle and US 1 to eliminate crossing of right-turn lane except at new raised crosswalk identified in second bullet.
- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.

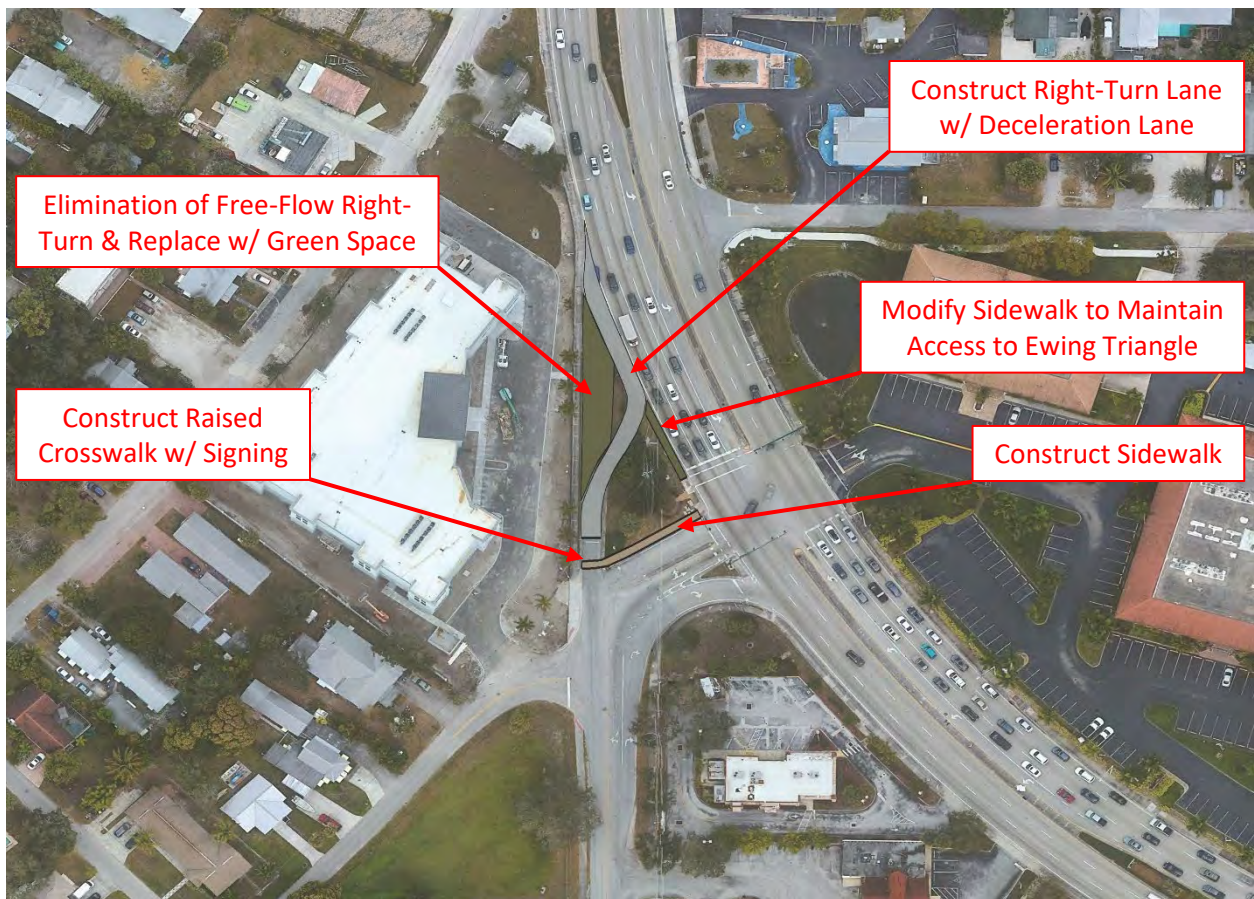


Figure 6:
Alternative 4

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Reduce the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of SW Palm City Road.
- Improve pedestrian safety.

Cons

- Not expected to reduce speeds along SW Palm City Road south of the intersection.
- Utility impacts
 - Potential overhead electrical pole conflicts along US 1 and within Ewing Triangle.
 - Potential gas line, water and AT&T conflicts within Ewing Triangle.
- Safety – Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane at SW Palm City Road.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 4 is shown in **Table 8**. The LOS reports are included in **Appendix A**.

Table 8
Alternative 4 LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	85.0	349	0.85	F	84.0	505	0.90
	Eastbound Right-Turn	E	55.5	<25	0.06	D	48.8	<25	0.06
	Eastbound Approach	E	77.0	-	-	E	77.3	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	103.2	m54	0.63	E	65.9	m41	0.59
	Northbound Through/Right-Turn	D	38.4	m151	0.54	D	53.0	m622	0.83
	Northbound Approach	D	40.5	-	-	D	53.2	-	-
	Southbound Left-Turn	E	58.1	106	0.22	F	92.7	<25	0.23
	Southbound Through	C	28.7	917	0.85	C	30.4	599	0.66
	Southbound Right-Turn	B	17.3	233	0.39	C	26.1	281	0.43
	Southbound Approach	C	27.7	-	-	C	29.6	-	-
	Overall Intersection	D	35.2	-	-	D	46.3	-	-
US 1 and SR 76/Kanner Highway	Eastbound Left-Turn	D	50.4	m230	0.62	E	58.0	246	0.41
	Eastbound Through	F	293.8	#957	1.53	F	93.9	#612	1.01
	Eastbound Right-Turn	F	385.1	#1130	1.74	F	163.8	#722	1.07

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
(includes the new Southbound right-turn lane)	Eastbound Approach	F	300.2	-	-	F	111.8	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	217.2			F	162.0	-	-
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397	1.03
	Eastbound Through	E	55.4	633	0.87	D	45.6	396	0.59
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.3	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	72.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	77.7	196	0.74
	Westbound Through/Right-Turn	E	70.8	380	0.83	E	64.2	600	0.90
	Westbound Approach	F	76.3	-	-	E	67.2	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	134.8	#516	1.04
	Northbound Through/Right-Turn	F	92.3	#425	0.99	F	80.7	#505	0.96
	Northbound Approach	F	95.2	-	-	F	91.8	-	-
	Southbound Left-Turn	E	55.9	m161	0.69	E	68.5	234	0.61
	Southbound Through	E	64.8	m297	0.98	F	82.6	#514	0.95
	Southbound Right-Turn	C	32.9	m93	0.46	F	90.2	#783	1.00
	Southbound Approach	D	54.3	-	-	F	84.2	-	-
Overall Intersection	F	82.5	-	-	E	79.4	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 4, as shown in **Figure 6**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and SW Palm City Road @ US 1

- The added southbound right-turn movement has 95th percentile queue length of 233 feet and 281 feet in the AM and PM peak, respectively.

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 217.2 seconds in the AM peak.
- Eastbound approach delay decreased from 498.0 seconds to 300.2 seconds in the AM Peak.
- In the AM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 293.8 seconds, 957 feet and 1.53, from 527.9 seconds, 1408 feet and 2.10.
- In the PM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 93.9 seconds, 612 feet and 1.01, from 256.2 seconds, 929 feet and 1.37.

S Kanner Highway and SW Monterey Road

- In the PM peak, the southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 90.2 seconds, 783 feet and 1.00.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 4. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- Overhead electrical lines and wooden pole.
- Roadway lighting pole.
- Possible impact to large concrete transmission pole and lines.
- Teco/Peoples Gas line located along back of existing sidewalk.
- Fiber optic communication lines, conduit and pull boxes.
- AT&T Distribution Cable.

Cultural Resources

- Significant encroachment onto/through the Ewing Triangle, and potential removal/relocation of Ewing Triangle monument.

Right-of-Way

- May Require acquisition of right-of-way from Stuart Self Storage, LLC and may require acquisition of right-of-way from EPH Holdings, Inc.

Infrastructure

- Reconstruction of sidewalk and ADA ramps.

Preliminary Opinion of Probable Cost

For Alternative 4, the Preliminary Opinion of Probable Construction Cost is \$975,000. Less than 0.25 acres of right-of way may be required to accommodate the construction of this alternative. A breakdown of the cost components is included in **Appendix C**.

ALTERNATIVE 5:

Alternative 5, as shown in **Figure 7**, this alternative eliminates the free-flow right-turn lane but allows for the southbound US 1 right-turn movement at the intersection via a new realigned right turn lane through the Ewing Triangle along with modification to SW Palm City Road just south of the intersection. Alternative 5 includes:

- Construction a right-turn lane with deceleration lane that curves through the Ewing Triangle.
- Construct raised crosswalk with signing and striping on the southern connection point (southeast corner of Ewing Triangle) between new right-turn lane and SW Palm City Road.
- Construct new sidewalk between signalized intersection of US 1 and SW Palm City Road and raised crosswalk identified in second bullet.
- Modify sidewalk along Ewing Triangle and US 1 to eliminate crossing of right-turn lane except at new raised crosswalk identified in second bullet.
- Elimination of uncontrolled right-turn from US 1 onto southbound SW Palm City Road.
- Construction a raised island on SW Palm City Road just south of the US 1 intersection and realign southbound travel lane.

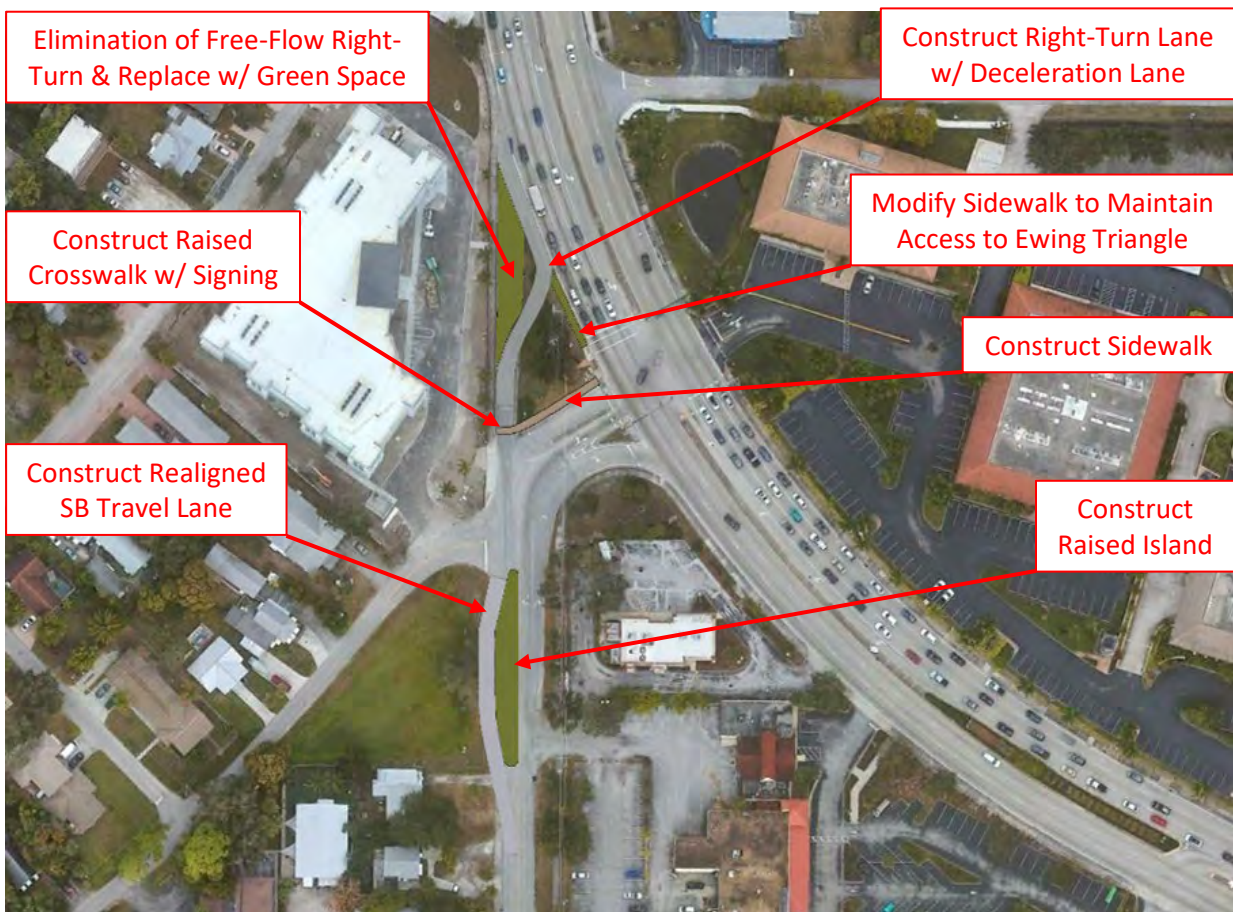


Figure 7:
Alternative 5

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Reduce the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of SW Palm City Road and SW Pine Avenue and SW Indianola Street.
- Improve pedestrian safety.

Cons

- Not expected to reduce speeds along SW Palm City Road south of Poppleton Creek Bridge.
- ROW impacts
 - Potential impact to the residential parcels on the west side of SW Palm City Road.
- Utility impacts
 - Potential overhead electrical pole conflicts along US 1, within the Ewing Triangle and on the west side of SW Palm City Road.
 - Potential gas line, water and AT&T conflicts within Ewing Triangle.
 - Potential water line conflicts on west side of SW Palm City Road.
- Safety – Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver the right turn at SW Palm City Road.

Traffic Operations

The LOS for the redistributed traffic volumes at the study area intersections for Alternative 5 is shown in **Table 9**. The LOS reports are included in **Appendix A**.

Table 9
Alternative 5 LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	85.0	349	0.85	F	84.0	505	0.90
	Eastbound Right-Turn	E	55.5	<25	0.06	D	48.8	<25	0.06
	Eastbound Approach	E	77.0	-	-	E	77.3	-	-
	Westbound Through/Left-Turn	F	80.2	29	0.27	F	121.8	66	0.75
	Westbound Right-Turn	E	76.3	<25	0.00	E	79.5	<25	0.02
	Westbound Approach	E	79.0	-	-	F	103.8	-	-
	Northbound Left-Turn	F	103.2	m54	0.63	E	65.9	m41	0.59
	Northbound Through/Right-Turn	D	38.4	m151	0.54	D	53.0	m622	0.83
	Northbound Approach	D	40.5	-	-	D	53.2	-	-
	Southbound Left-Turn	E	58.1	106	0.22	F	92.7	<25	0.23
	Southbound Through	C	28.7	917	0.85	C	30.4	599	0.66
Southbound Right-Turn	B	17.3	233	0.39	C	26.1	281	0.43	

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
	Southbound Approach	C	27.7	-	-	C	29.6	-	-
	Overall Intersection	D	35.2	-	-	D	46.3	-	-
US 1 and SR 76/Kanner Highway (includes the new Southbound right-turn lane)	Eastbound Left-Turn	D	50.4	m230	0.62	E	58.0	246	0.41
	Eastbound Through	F	293.8	#957	1.53	F	93.9	#612	1.01
	Eastbound Right-Turn	F	385.1	#1130	1.74	F	163.8	#722	1.07
	Eastbound Approach	F	300.2	-	-	F	111.8	-	-
	Westbound Left-Turn	F	165.9	#318	1.06	F	99.2	#440	0.91
	Westbound Through/Right-Turn	F	357.5	#534	1.62	F	346.2	#1012	1.61
	Westbound Approach	F	328.4	-	-	F	311.0	-	-
	Northbound Left-Turn	E	55.1	m255	0.56	F	128.0	#687	1.09
	Northbound Through	D	50.7	m270	0.51	D	44.3	283	0.44
	Northbound Right-Turn	F	136.0	m102	0.22	D	38.7	53	0.12
	Northbound Approach	E	67.4	-	-	F	87.6	-	-
	Southbound Left-Turn	E	79.3	166	0.67	F	137.6	#309	0.97
	Southbound Through	E	71.4	188	0.64	E	67.9	337	0.74
	Southbound Right-Turn	E	59.7	<25	0.04	D	54.7	89	0.19
	Southbound Approach	E	71.7	-	-	E	78.2	-	-
	Overall Intersection	F	217.2			F	162.0	-	-
S Kanner Highway and SW Monterey Road	Eastbound Left-Turn	F	153.7	#721	1.18	F	118.0	#397	1.03
	Eastbound Through	E	55.4	633	0.87	D	45.6	396	0.59
	Eastbound Right-Turn	C	33.6	55	0.12	D	35.3	<25	0.05
	Eastbound Approach	F	95.1	-	-	E	72.4	-	-
	Westbound Left-Turn	F	90.9	#186	0.83	E	77.7	196	0.74
	Westbound Through/Right-Turn	E	70.8	380	0.83	E	64.2	600	0.90
	Westbound Approach	F	76.3	-	-	E	67.2	-	-
	Northbound Left-Turn	F	106.8	#391	0.94	F	134.8	#516	1.04
	Northbound Through/Right-Turn	F	92.3	#425	0.99	F	80.7	#505	0.96
	Northbound Approach	F	95.2	-	-	F	91.8	-	-
	Southbound Left-Turn	E	55.9	m161	0.69	E	68.5	234	0.61
	Southbound Through	E	64.8	m297	0.98	F	82.6	#514	0.95
	Southbound Right-Turn	C	32.9	m93	0.46	F	90.2	#783	1.00
Southbound Approach	D	54.3	-	-	F	84.2	-	-	
Overall Intersection	F	82.5	-	-	E	79.4	-	-	
SW Palm City Road and SW Pine Avenue	Eastbound Approach	A	8.4	<25	0.01	A	8.4	<25	0.01

m = Volume for 95th percentile queue is metered by upstream signal
 # = 95th Percentile volume exceeds capacity, queue maybe longer

Alternative 5, as shown in **Figure 7**, impacts the southbound approach of US 1 and SW Palm City Road, the eastbound approach of US 1 and S Kanner Highway and the southbound approach of S Kanner Highway and Monterey Road. For reference purposes, the Existing Conditions LOS Tables from the Existing Conditions Technical Memorandum are included in **Appendix B**. The majority of the impacts are minimal except the following:

US 1 and SW Palm City Road @ US 1

- The added southbound right-turn movement has 95th percentile queue length of 233 feet and 281 feet in the AM and PM peak, respectively.

US 1 and S Kanner Highway

- Overall, the intersection delay decreased from 310.8 seconds to 217.2 seconds in the AM peak.
- Eastbound approach delay decreased from 498.0 seconds to 300.2 seconds in the AM Peak.
- In the AM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 293.8 seconds, 957 feet and 1.53, from 527.9 seconds, 1408 feet and 2.10.
- In the PM peak, the eastbound through delay, 95th percentile queue and v/c ratio decreased to 93.9 seconds, 612 feet and 1.01, from 256.2 seconds, 929 feet and 1.37.

S Kanner Highway and SW Monterey Road

- In the PM peak, the southbound right-turn LOS, delay, 95th percentile queue and v/c ratio deteriorated from LOS D, 51.3 seconds, 493 feet and 0.70 to LOS F, 90.2 seconds, 783 feet and 1.00.

Physical Impacts

As part of the review of each alternative, Corradino identified the following physical impacts for Alternative 5. **NOTE:** These impacts were identified by visual observations and review of the available documentation. Actual field survey, utility locate services, environmental review, etc. were not completed as part of this study.

Utilities

- Overhead electrical lines and wooden pole.
- Roadway lighting pole.
- Possible impact to large concrete transmission pole and lines.
- Teco/Peoples Gas line located along back of existing sidewalk and along SW Palm City Road.
- Fiber optic communication lines, conduit and pull boxes.
- AT&T Distribution Cable.

Cultural Resources

- Significant encroachment onto/through the Ewing Triangle, and potential removal/relocation of Ewing Triangle monument.

Right-of-Way

- May require acquisition of right-of-way from Stuart Self Storage, LLC and may require acquisition of right-of-way from EPH Holdings, Inc.
- May require acquisition of some amount of right-of-way from the residential property on the west side of SW Palm City Road adjacent to the City-owned parcel.

Infrastructure

- Reconstruction of sidewalk and ADA ramps.

Preliminary Opinion of Probable Cost

For Alternative 5, the Preliminary Opinion of Probable Construction Cost is \$1,350,000. Less than 1.0 acres of right-of way may be required to accommodate the construction of this alternative, as the most impacted parcel is owned by the City of Stuart. A breakdown of the cost components is included in **Appendix C.**

ALTERNATIVE 6:

Alternative 6, as shown in **Figure 8**, shows the recommended addition and/or modification to the traffic calming devices along SW Palm City Road between US 1 intersection and SW Monterey Road. **Note:** This alternative would be in conjunction with any of the other proposed alternatives as a means to address the speeding and potentially deter vehicular volumes along SW Palm City Road south of the US 1 intersection. This alternative includes:

- Installation of speed bumps/table (matching existing designs) along SW Palm City Road at appropriate spacing.
- Construction of bike lanes on the SW Palm City Road from US 1 to SW Monterey Road as recommended in the Martin MPO Complete Streets: Access to Transit Study (June 2020). The raised bike lane concept would be applied in the segment of SW Palm City Road from the intersection with US 1 to the Poppleton Creek Bridge. Then, south of the bridge to SW Monterey Road, the concept would be bike lanes adjacent to the vehicle travel lanes.

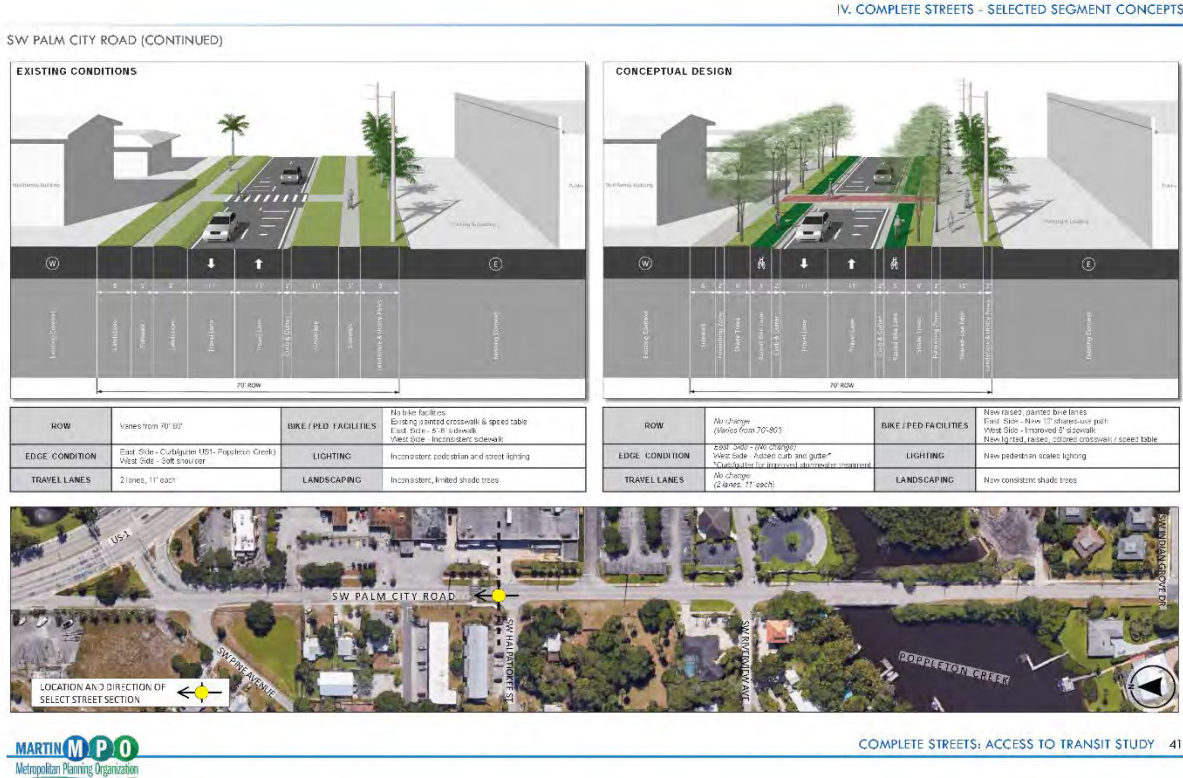


Figure 8:
Alternative 6

As part of the evaluation of this alternative the following Pros and Cons were identified.

Pros

- Potential reduction of speeds on SW Palm City Road.
- Potential reduction of traffic volumes on SW Palm City Road.
- Increased bicycle safety on SW Palm City Road.

Cons

- Redistribution of traffic to US 1 and Kanner Highway intersection and other local streets, such as SW Indian Grove Drive, SW Winnachee Drive, S Manor Drive.

Alternatives Comparison

Based on the analysis, evaluation and general information presented in this memorandum, **Table 10** shows a comparison of the various alternatives. Each of the categories discussed in this memorandum were evaluated for each alternative and against the other alternatives to provide a comparison matrix. A full “**BLUE**” circle is considered the best alternative for the category evaluated and a totally “**WHITE**” is considered the worse alternative for the category evaluated.

Table 10
Alternatives Comparison

Alternative	Traffic Operations	Physical Impacts	Opinion of Probable Cost	Goals & Objectives
1A				
1B				
1C				
2				
3				
4				
5				
6	<p>Alternative 6 could be inclusive with any of the above alternatives. The objective of Alternative 6 is to address vehicle speeds both southbound and northbound and safety along SW Palm City Road outside of the US 1 intersection limits.</p>			

APPENDICES

APPENDIX A

TRAFFIC OPERATION ANALYSIS

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑	
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2423	313
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2423	313
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1743	1553		1763	1553	1620	4814		1678	4739	
Flt Permitted		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1743	1553		1763	1553	1620	4814		1678	4739	
Peak-hour factor, PHF	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2578	333
RTOR Reduction (vph)	0	0	79	0	0	5	0	1	0	0	10	0
Lane Group Flow (vph)	0	256	15	0	11	0	42	1264	0	60	2901	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Actuated Green, G (s)		25.8	25.8		3.8	3.8	5.9	76.4		29.2	100.0	
Effective Green, g (s)		25.8	25.8		3.8	3.8	5.9	76.4		29.2	100.0	
Actuated g/C Ratio		0.16	0.16		0.02	0.02	0.04	0.48		0.18	0.62	
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)		281	250		41	36	59	2298		306	2961	
v/s Ratio Prot		c0.15			c0.01		0.03	c0.26		0.04	c0.61	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.91	0.06		0.27	0.00	0.71	0.55		0.20	0.98	
Uniform Delay, d1		66.0	56.8		76.7	76.3	76.2	29.6		55.4	29.0	
Progression Factor		1.00	1.00		1.00	1.00	1.35	1.23		1.00	1.00	
Incremental Delay, d2		31.9	0.1		3.5	0.0	3.7	0.1		0.3	12.4	
Delay (s)		97.9	57.0		80.2	76.3	106.7	36.5		55.8	41.5	
Level of Service		F	E		F	E	F	D		E	D	
Approach Delay (s)		86.9			79.0			38.7			41.8	
Approach LOS		F			E			D			D	

Intersection Summary		
HCM 2000 Control Delay	44.4	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.94	D
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	82.7%	24.8
Analysis Period (min)	15	ICU Level of Service
		E

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑↑		↘↗	↑↑	↗	↘	↑↑	↗
Traffic Volume (vph)	190	1461	749	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	749	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Peak-hour factor, PHF	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Adj. Flow (vph)	211	1623	832	152	768	79	693	725	301	109	293	63
RTOR Reduction (vph)	0	0	189	0	8	0	0	0	162	0	0	54
Lane Group Flow (vph)	211	1623	643	152	839	0	693	725	139	109	293	9
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Effective Green, g (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22	0.22	0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	340	1060	330	143	519		1236	1413	632	163	459	205
v/s Ratio Prot	0.13	0.34		0.09	c0.18		c0.21	c0.22		0.07	c0.09	
v/s Ratio Perm			c0.43						0.09			0.01
v/c Ratio	0.62	1.53	1.95	1.06	1.62		0.56	0.51	0.22	0.67	0.64	0.04
Uniform Delay, d1	58.1	62.4	62.4	72.9	71.2		39.1	34.2	29.5	69.4	64.8	59.3
Progression Factor	0.89	0.89	0.79	1.00	1.00		1.41	1.48	4.60	1.00	1.00	1.00
Incremental Delay, d2	1.6	240.9	431.4	93.0	286.3		0.1	0.1	0.1	9.9	6.7	0.4
Delay (s)	53.4	296.2	480.5	165.9	357.5		55.1	50.7	136.0	79.3	71.4	59.7
Level of Service	D	F	F	F	F		E	D	F	E	E	E
Approach Delay (s)		334.5			328.4			67.4			71.7	
Approach LOS		F			F			E			E	

Intersection Summary		
HCM 2000 Control Delay	234.1	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.10	F
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	82.9%	27.1
Analysis Period (min)	15	ICU Level of Service
		E

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑↑		↔	↑↑↔		↔	↑↑	↔
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	415
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	472
RTOR Reduction (vph)	0	0	101	0	6	0	0	28	0	0	0	60
Lane Group Flow (vph)	917	1089	70	220	586	0	233	905	0	203	745	412
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Effective Green, g (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.19		0.18	0.23	0.47
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	779	1247	558	266	707		249	911		295	763	700
v/s Ratio Prot	c0.28	c0.32		0.07	c0.18		0.14	c0.19		0.13	c0.22	0.14
v/s Ratio Perm			0.05									0.13
v/c Ratio	1.18	0.87	0.12	0.83	0.83		0.94	0.99		0.69	0.98	0.59
Uniform Delay, d1	60.9	46.7	33.1	72.3	60.0		66.9	64.3		61.1	61.4	31.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.88	0.88	1.07
Incremental Delay, d2	92.9	8.6	0.5	18.6	10.8		39.9	28.0		0.6	5.5	0.1
Delay (s)	153.7	55.4	33.6	90.9	70.8		106.8	92.3		54.6	59.3	33.8
Level of Service	F	E	C	F	E		F	F		D	E	C
Approach Delay (s)		95.1			76.3			95.2			50.1	
Approach LOS		F			E			F			D	

Intersection Summary		
HCM 2000 Control Delay	80.9	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.05	F
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	90.0%	ICU Level of Service
Analysis Period (min)	15	E

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	2	351	8	2	81
Future Vol, veh/h	4	2	351	8	2	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	382	9	2	88

Major/Minor	Minor2	Major2	
Conflicting Flow All	773	9	0
Stage 1	773	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	330	1073	-
Stage 1	409	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1073	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1073	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	256	94	11	5	42	1265	60	2911
v/c Ratio	0.91	0.25	0.17	0.03	0.58	0.52	0.19	0.94
Control Delay	100.7	2.1	80.2	0.2	103.1	37.2	54.7	34.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.7	2.1	80.2	0.2	103.1	37.2	54.7	34.3
Queue Length 50th (ft)	267	0	11	0	42	434	50	~1174
Queue Length 95th (ft)	#409	0	29	0	m54	m124	103	#1245
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	288	381	69	198	73	2944	330	3086
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.25	0.16	0.03	0.58	0.43	0.18	0.94

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1623	832	152	847	693	725	301	109	293	63
v/c Ratio	0.62	1.53	1.61	1.06	1.61	0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	55.8	278.1	300.5	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.8	278.1	300.5	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Length 50th (ft)	179	-863	-1023	157	-402	315	333	137	112	154	0
Queue Length 95th (ft)	m196	m#941	m#1283	#318	#534	m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	340	1060	518	143	527	1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.53	1.61	1.06	1.61	0.56	0.51	0.38	0.30	0.21	0.09

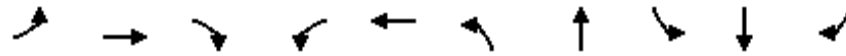
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	917	1089	170	220	592	233	933	203	745	472
v/c Ratio	1.18	0.87	0.26	0.83	0.83	0.94	0.99	0.69	0.98	0.62
Control Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.9	59.2	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.9	59.2	13.7
Queue Length 50th (ft)	~611	557	7	119	305	244	349	177	382	149
Queue Length 95th (ft)	#721	633	55	#186	380	#391	#425	m151	m276	m115
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	778	1248	659	270	755	251	940	295	763	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78	0.93	0.99	0.69	0.98	0.62

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023

































Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↑↑↑		↗	↑↑↑	
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1621	317
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1621	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Fr _t		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.98	
Fl _t Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760	1568		1803	1568	1636	4865		1694	4749	
Fl _t Permitted		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1760	1568		1803	1568	1636	4865		1694	4749	
Peak-hour factor, PHF	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	1781	348
RTOR Reduction (vph)	0	0	69	0	0	33	0	0	0	0	15	0
Lane Group Flow (vph)	0	394	23	0	46	1	44	2289	0	3	2114	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Actuated Green, G (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Effective Green, g (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Actuated g/C Ratio		0.25	0.25		0.03	0.03	0.04	0.56		0.01	0.53	
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)		440	392		61	53	67	2732		13	2519	
v/s Ratio Prot		c0.22			c0.03		0.03	c0.47		0.00	c0.45	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.90	0.06		0.75	0.02	0.66	0.84		0.23	0.84	
Uniform Delay, d ₁		61.6	48.5		81.4	79.4	80.3	30.8		83.8	33.8	
Progression Factor		1.00	1.00		1.00	1.00	0.82	1.73		1.00	1.00	
Incremental Delay, d ₂		20.6	0.1		40.4	0.2	2.1	0.3		8.9	3.6	
Delay (s)		82.2	48.6		121.8	79.5	68.1	53.7		92.7	37.3	
Level of Service		F	D		F	E	E	D		F	D	
Approach Delay (s)		75.8			103.8			54.0			37.4	
Approach LOS		E			F			D			D	

Intersection Summary		
HCM 2000 Control Delay	49.9	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.87	D
Actuated Cycle Length (s)	170.0	Sum of lost time (s)
Intersection Capacity Utilization	80.1%	24.8
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (vph)	130	1016	563	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	563	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	619	261	1465	104	784	516	190	155	550	152
RTOR Reduction (vph)	0	0	189	0	5	0	0	0	125	0	0	88
Lane Group Flow (vph)	143	1116	430	261	1564	0	784	516	65	155	550	64
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Effective Green, g (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.23	0.23	0.17	0.20		0.22	0.34	0.34	0.10	0.22	0.22
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	347	1107	344	287	973		718	1177	526	160	742	332
v/s Ratio Prot	0.08	0.23		0.16	c0.32		c0.24	0.15		c0.09	c0.17	
v/s Ratio Perm			c0.28						0.04			0.04
v/c Ratio	0.41	1.01	1.25	0.91	1.61		1.09	0.44	0.12	0.97	0.74	0.19
Uniform Delay, d1	58.9	65.8	65.8	68.9	68.0		66.6	43.1	38.2	76.5	61.3	53.4
Progression Factor	0.86	0.92	1.44	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	22.9	126.3	30.3	278.2		61.4	1.2	0.5	61.1	6.6	1.3
Delay (s)	51.3	83.7	220.9	99.2	346.2		128.0	44.3	38.7	137.6	67.9	54.7
Level of Service	D	F	F	F	F		F	D	D	F	E	D
Approach Delay (s)		126.5			311.0			87.6			78.2	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay			165.8			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.20									
Actuated Cycle Length (s)			170.0			Sum of lost time (s)		27.1				
Intersection Capacity Utilization			90.2%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑		↗	↑↑↔		↗	↑↑	↗
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	662
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	662
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	676
RTOR Reduction (vph)	0	0	52	0	3	0	0	20	0	0	0	43
Lane Group Flow (vph)	477	700	27	273	960	0	274	1042	0	150	711	633
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Effective Green, g (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Actuated g/C Ratio	0.14	0.35	0.35	0.11	0.32		0.16	0.23		0.15	0.22	0.36
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	465	1186	530	367	1072		263	1083		247	752	551
v/s Ratio Prot	0.14	c0.20		0.08	c0.28		0.17	c0.22		0.09	0.21	c0.16
v/s Ratio Perm			0.02									0.25
v/c Ratio	1.03	0.59	0.05	0.74	0.90		1.04	0.96		0.61	0.95	1.15
Uniform Delay, d1	69.6	43.4	35.2	69.7	52.7		68.0	61.9		64.4	62.1	51.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	48.5	2.2	0.2	7.9	11.5		66.8	18.8		4.2	20.5	86.6
Delay (s)	118.0	45.6	35.3	77.7	64.2		134.8	80.7		68.5	82.6	138.3
Level of Service	F	D	D	E	E		F	F		E	F	F
Approach Delay (s)		72.4			67.2			91.8			105.7	
Approach LOS		E			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	85.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	161.8	Sum of lost time (s)	27.0
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th TWSC
4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔		↔	
Traffic Vol, veh/h	6	2	367	10	2	75
Future Vol, veh/h	6	2	367	10	2	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	399	11	2	82

Major/Minor	Minor2	Major2	
Conflicting Flow All	809	11	0
Stage 1	809	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	314	1070	-
Stage 1	394	-	-
Stage 2	-	-	-
Platoon blocked, %	-		
Mov Cap-1 Maneuver	0	1070	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1070	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	394	92	46	34	44	2289	3	2129
v/c Ratio	0.90	0.19	0.61	0.18	0.55	0.79	0.05	0.82
Control Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.1
Queue Length 50th (ft)	420	0	51	0	52	676	3	779
Queue Length 95th (ft)	501	0	66	0	m41	m614	15	853
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	487	535	77	196	82	2911	67	2602
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.17	0.60	0.17	0.54	0.79	0.04	0.82

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	1116	619	261	1569	784	516	190	155	550	152
v/c Ratio	0.41	1.01	1.16	0.91	1.60	1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	53.3	82.2	128.1	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	82.2	128.1	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Length 50th (ft)	165	~511	~622	285	-916	~508	234	0	175	302	35
Queue Length 95th (ft)	m204	#612	#875	#440	#1012	#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	347	1106	534	308	978	719	1177	651	160	864	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.01	1.16	0.85	1.60	1.09	0.44	0.29	0.97	0.64	0.32

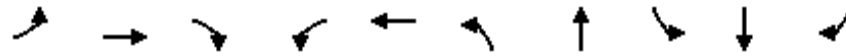
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	477	700	79	273	963	274	1062	150	711	676
v/c Ratio	1.02	0.59	0.12	0.75	0.89	1.04	0.96	0.61	0.95	1.03
Control Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	85.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	85.2
Queue Length 50th (ft)	~280	320	0	146	506	~323	404	151	393	~718
Queue Length 95th (ft)	#397	396	0	196	600	#516	#505	234	#514	#972
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	466	1187	634	416	1097	263	1103	247	761	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.59	0.12	0.66	0.88	1.04	0.96	0.61	0.93	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↑↑↑		↖	↑↑↑	
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2709	28
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2709	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Fr _t		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Fl _t Protected		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1743	1553		1763	1553	1620	4814		1678	4814	
Fl _t Permitted		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1743	1553		1763	1553	1620	4814		1678	4814	
Peak-hour factor, PHF	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2882	30
RTOR Reduction (vph)	0	0	79	0	0	5	0	1	0	0	1	0
Lane Group Flow (vph)	0	256	15	0	11	0	42	1264	0	60	2911	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Actuated Green, G (s)		25.8	25.8		3.8	3.8	5.9	76.3		29.3	100.0	
Effective Green, g (s)		25.8	25.8		3.8	3.8	5.9	76.3		29.3	100.0	
Actuated g/C Ratio		0.16	0.16		0.02	0.02	0.04	0.48		0.18	0.62	
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)		281	250		41	36	59	2295		307	3008	
v/s Ratio Prot		c0.15			c0.01		0.03	c0.26		0.04	c0.60	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.91	0.06		0.27	0.00	0.71	0.55		0.20	0.97	
Uniform Delay, d ₁		66.0	56.8		76.7	76.3	76.2	29.7		55.4	28.5	
Progression Factor		1.00	1.00		1.00	1.00	1.35	1.23		1.00	1.00	
Incremental Delay, d ₂		31.9	0.1		3.5	0.0	3.7	0.1		0.3	10.5	
Delay (s)		97.9	57.0		80.2	76.3	106.7	36.7		55.7	38.9	
Level of Service		F	E		F	E	F	D		E	D	
Approach Delay (s)		86.9			79.0			39.0			39.3	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	42.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑↑		↘↗	↑↑	↗	↘	↑↑	↗
Traffic Volume (vph)	190	1461	1036	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	1036	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Peak-hour factor, PHF	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Adj. Flow (vph)	211	1623	1151	152	768	79	693	725	301	109	293	63
RTOR Reduction (vph)	0	0	261	0	8	0	0	0	162	0	0	54
Lane Group Flow (vph)	211	1623	890	152	839	0	693	725	139	109	293	9
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Effective Green, g (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22	0.22	0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	340	1060	330	143	519		1236	1413	632	163	459	205
v/s Ratio Prot	0.13	0.34		0.09	c0.18		c0.21	c0.22		0.07	c0.09	
v/s Ratio Perm			c0.59						0.09			0.01
v/c Ratio	0.62	1.53	2.70	1.06	1.62		0.56	0.51	0.22	0.67	0.64	0.04
Uniform Delay, d1	58.1	62.4	62.4	72.9	71.2		39.1	34.2	29.5	69.4	64.8	59.3
Progression Factor	0.89	0.88	0.77	1.00	1.00		1.41	1.48	4.60	1.00	1.00	1.00
Incremental Delay, d2	1.6	241.0	766.7	93.0	286.3		0.1	0.1	0.1	9.9	6.7	0.4
Delay (s)	53.3	296.0	814.9	165.9	357.5		55.1	50.7	136.0	79.3	71.4	59.7
Level of Service	D	F	F	F	F		E	D	F	E	E	E
Approach Delay (s)		478.9			328.4			67.4			71.7	
Approach LOS		F			F			E			E	

Intersection Summary		
HCM 2000 Control Delay	309.2	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.29	F
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	96.8%	27.1
Analysis Period (min)	15	ICU Level of Service
		F

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↕	↖	↖↗	↕		↖	↕↖↗		↖	↕	↖
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	702
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	702
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	798
RTOR Reduction (vph)	0	0	101	0	6	0	0	28	0	0	0	60
Lane Group Flow (vph)	917	1089	70	220	586	0	233	905	0	203	745	738
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Effective Green, g (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.19		0.18	0.23	0.47
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	779	1247	558	266	707		249	911		295	763	700
v/s Ratio Prot	c0.28	c0.32		0.07	c0.18		0.14	c0.19		0.13	0.22	c0.25
v/s Ratio Perm			0.05									0.24
v/c Ratio	1.18	0.87	0.12	0.83	0.83		0.94	0.99		0.69	0.98	1.05
Uniform Delay, d1	60.9	46.7	33.1	72.3	60.0		66.9	64.3		61.1	61.4	42.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.88	0.87	1.21
Incremental Delay, d2	92.9	8.6	0.5	18.6	10.8		39.9	28.0		0.6	5.5	28.2
Delay (s)	153.7	55.4	33.6	90.9	70.8		106.8	92.3		54.3	59.0	79.7
Level of Service	F	E	C	F	E		F	F		D	E	E
Approach Delay (s)		95.1			76.3			95.2			67.9	
Approach LOS		F			E			F			E	

Intersection Summary		
HCM 2000 Control Delay	84.5	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.07	F
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	90.0%	27.0
Analysis Period (min)	15	ICU Level of Service
		E

c Critical Lane Group

HCM 6th TWSC
 4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	2	65	8	2	81
Future Vol, veh/h	4	2	65	8	2	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	71	9	2	88

Major/Minor	Minor2	Major2	
Conflicting Flow All	151	9	0
Stage 1	151	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	741	1073	-
Stage 1	772	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1073	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1073	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	256	94	11	5	42	1265	60	2912
v/c Ratio	0.91	0.25	0.17	0.03	0.58	0.52	0.19	0.93
Control Delay	100.7	2.1	80.2	0.2	103.1	37.5	54.6	33.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.7	2.1	80.2	0.2	103.1	37.5	54.6	33.2
Queue Length 50th (ft)	267	0	11	0	42	436	50	~1112
Queue Length 95th (ft)	#409	0	29	0	m54	m126	102	#1236
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	288	381	69	198	73	2920	334	3126
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.25	0.16	0.03	0.58	0.43	0.18	0.93

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1623	1151	152	847	693	725	301	109	293	63
v/c Ratio	0.62	1.53	1.95	1.06	1.61	0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	55.7	278.0	449.4	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	278.0	449.4	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Length 50th (ft)	179	-862	-1753	157	-402	315	333	137	112	154	0
Queue Length 95th (ft)	m198	m#957	m#1942	#318	#534	m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	340	1060	591	143	527	1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.53	1.95	1.06	1.61	0.56	0.51	0.38	0.30	0.21	0.09

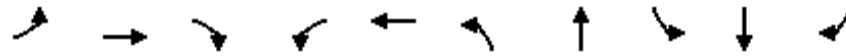
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	917	1089	170	220	592	233	933	203	745	798
v/c Ratio	1.18	0.87	0.26	0.83	0.83	0.94	0.99	0.69	0.98	1.05
Control Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.6	58.9	51.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.6	58.9	51.2
Queue Length 50th (ft)	~611	557	7	119	305	244	349	177	383	-465
Queue Length 95th (ft)	#721	633	55	#186	380	#391	#425	m127	m228	m186
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	778	1248	659	270	755	251	940	295	763	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78	0.93	0.99	0.69	0.98	1.05

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023

































Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑	
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1907	29
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1907	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760	1568		1803	1568	1636	4865		1694	4857	
Flt Permitted		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1760	1568		1803	1568	1636	4865		1694	4857	
Peak-hour factor, PHF	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	2096	32
RTOR Reduction (vph)	0	0	69	0	0	33	0	0	0	0	1	0
Lane Group Flow (vph)	0	394	23	0	46	1	44	2289	0	3	2127	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Actuated Green, G (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Effective Green, g (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Actuated g/C Ratio		0.25	0.25		0.03	0.03	0.04	0.56		0.01	0.53	
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)		440	392		61	53	67	2732		13	2577	
v/s Ratio Prot		c0.22			c0.03		0.03	c0.47		0.00	c0.44	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.90	0.06		0.75	0.02	0.66	0.84		0.23	0.83	
Uniform Delay, d1		61.6	48.5		81.4	79.4	80.3	30.8		83.8	33.3	
Progression Factor		1.00	1.00		1.00	1.00	0.82	1.73		1.00	1.00	
Incremental Delay, d2		20.6	0.1		40.4	0.2	2.1	0.3		8.9	3.2	
Delay (s)		82.2	48.6		121.8	79.5	68.1	53.7		92.7	36.5	
Level of Service		F	D		F	E	E	D		F	D	
Approach Delay (s)		75.8			103.8			54.0			36.6	
Approach LOS		E			F			D			D	

Intersection Summary		
HCM 2000 Control Delay	49.5	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.87	D
Actuated Cycle Length (s)	170.0	Sum of lost time (s)
Intersection Capacity Utilization	80.1%	24.8
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (vph)	130	1016	850	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	850	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	934	261	1465	104	784	516	190	155	550	152
RTOR Reduction (vph)	0	0	286	0	5	0	0	0	125	0	0	88
Lane Group Flow (vph)	143	1116	648	261	1564	0	784	516	65	155	550	64
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Effective Green, g (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.23	0.23	0.17	0.20		0.22	0.34	0.34	0.10	0.22	0.22
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	347	1107	344	287	973		718	1177	526	160	742	332
v/s Ratio Prot	0.08	0.23		0.16	c0.32		c0.24	0.15		c0.09	c0.17	
v/s Ratio Perm			c0.42						0.04			0.04
v/c Ratio	0.41	1.01	1.88	0.91	1.61		1.09	0.44	0.12	0.97	0.74	0.19
Uniform Delay, d1	58.9	65.8	65.8	68.9	68.0		66.6	43.1	38.2	76.5	61.3	53.4
Progression Factor	0.87	0.94	1.82	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	23.2	404.6	30.3	278.2		61.4	1.2	0.5	61.1	6.6	1.3
Delay (s)	52.1	85.0	524.7	99.2	346.2		128.0	44.3	38.7	137.6	67.9	54.7
Level of Service	D	F	F	F	F		F	D	D	F	E	D
Approach Delay (s)		270.1			311.0			87.6			78.2	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay			213.4			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.37									
Actuated Cycle Length (s)			170.0			Sum of lost time (s)		27.1				
Intersection Capacity Utilization			96.2%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑		↗	↑↑↔		↗	↑↑	↗
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	949
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	949
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	968
RTOR Reduction (vph)	0	0	52	0	3	0	0	20	0	0	0	43
Lane Group Flow (vph)	477	700	27	273	960	0	274	1042	0	150	711	925
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Effective Green, g (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Actuated g/C Ratio	0.14	0.35	0.35	0.11	0.32		0.16	0.23		0.15	0.22	0.36
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	465	1186	530	367	1072		263	1083		247	752	551
v/s Ratio Prot	0.14	c0.20		0.08	c0.28		0.17	c0.22		0.09	0.21	c0.24
v/s Ratio Perm			0.02									0.37
v/c Ratio	1.03	0.59	0.05	0.74	0.90		1.04	0.96		0.61	0.95	1.68
Uniform Delay, d1	69.6	43.4	35.2	69.7	52.7		68.0	61.9		64.4	62.1	51.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	48.5	2.2	0.2	7.9	11.5		66.8	18.8		4.2	20.5	313.4
Delay (s)	118.0	45.6	35.3	77.7	64.2		134.8	80.7		68.5	82.6	365.2
Level of Service	F	D	D	E	E		F	F		E	F	F
Approach Delay (s)		72.4			67.2			91.8			231.0	
Approach LOS		E			E			F			F	

Intersection Summary		
HCM 2000 Control Delay	127.1	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.28	F
Actuated Cycle Length (s)	161.8	Sum of lost time (s)
Intersection Capacity Utilization	115.0%	ICU Level of Service
Analysis Period (min)	15	H
c Critical Lane Group		

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	2	84	10	2	75
Future Vol, veh/h	6	2	84	10	2	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	91	11	2	82

Major/Minor	Minor2	Major2	
Conflicting Flow All	193	11	0
Stage 1	193	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	702	1070	-
Stage 1	741	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1070	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1070	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	394	92	46	34	44	2289	3	2128
v/c Ratio	0.90	0.19	0.61	0.18	0.55	0.79	0.05	0.80
Control Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.0
Queue Length 50th (ft)	420	0	51	0	52	676	3	776
Queue Length 95th (ft)	501	0	66	0	m41	m614	15	847
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	487	535	77	196	82	2911	67	2649
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.17	0.60	0.17	0.54	0.79	0.04	0.80

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	1116	934	261	1569	784	516	190	155	550	152
v/c Ratio	0.41	1.01	1.48	0.91	1.60	1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	54.2	83.4	258.0	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.2	83.4	258.0	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Length 50th (ft)	167	~512	~1135	285	~916	~508	234	0	175	302	35
Queue Length 95th (ft)	m211	#612	#1405	#440	#1012	#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	347	1106	630	308	978	719	1177	651	160	864	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.01	1.48	0.85	1.60	1.09	0.44	0.29	0.97	0.64	0.32

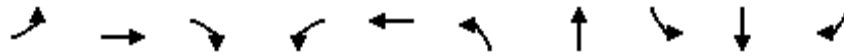
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	477	700	79	273	963	274	1062	150	711	968
v/c Ratio	1.02	0.59	0.12	0.75	0.89	1.04	0.96	0.61	0.95	1.48
Control Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	255.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	255.3
Queue Length 50th (ft)	~280	320	0	146	506	~323	404	151	393	~1367
Queue Length 95th (ft)	#397	396	0	196	600	#516	#505	234	#514	#1633
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	466	1187	634	416	1097	263	1103	247	761	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.59	0.12	0.66	0.88	1.04	0.96	0.61	0.93	1.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑	↗
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2345	395
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2345	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	1.00
Fr _t		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Fl _t Protected		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1743	1553		1763	1553	1620	4814		1678	4821	1501
Fl _t Permitted		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1743	1553		1763	1553	1620	4814		1678	4821	1501
Peak-hour factor, PHF	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2495	420
RTOR Reduction (vph)	0	0	78	0	0	5	0	1	0	0	0	65
Lane Group Flow (vph)	0	256	16	0	11	0	42	1264	0	60	2495	355
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5		2
Permitted Phases			8			4						2
Actuated Green, G (s)		27.6	27.6		3.8	3.8	6.7	77.2		26.6	97.4	97.4
Effective Green, g (s)		27.6	27.6		3.8	3.8	6.7	77.2		26.6	97.4	97.4
Actuated g/C Ratio		0.17	0.17		0.02	0.02	0.04	0.48		0.17	0.61	0.61
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	6.0
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)		300	267		41	36	67	2322		278	2934	913
v/s Ratio Prot		c0.15			c0.01		0.03	c0.26		0.04	c0.52	
v/s Ratio Perm			0.01			0.00						0.24
v/c Ratio		0.85	0.06		0.27	0.00	0.63	0.54		0.22	0.85	0.39
Uniform Delay, d ₁		64.2	55.4		76.7	76.3	75.4	29.1		57.7	25.4	16.0
Progression Factor		1.00	1.00		1.00	1.00	1.35	1.32		1.00	1.00	1.00
Incremental Delay, d ₂		20.7	0.1		3.5	0.0	1.7	0.1		0.4	3.3	1.3
Delay (s)		85.0	55.5		80.2	76.3	103.2	38.4		58.1	28.7	17.3
Level of Service		F	E		F	E	F	D		E	C	B
Approach Delay (s)		77.0			79.0			40.5			27.7	
Approach LOS		E			E			D			C	

Intersection Summary		
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service D
HCM 2000 Volume to Capacity ratio	0.83	
Actuated Cycle Length (s)	160.0	Sum of lost time (s) 24.8
Intersection Capacity Utilization	75.5%	ICU Level of Service D
Analysis Period (min)	15	

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑↑		↘↗	↑↑	↗	↘	↑↑	↗
Traffic Volume (vph)	190	1461	669	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	669	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Peak-hour factor, PHF	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Adj. Flow (vph)	211	1623	743	152	768	79	693	725	301	109	293	63
RTOR Reduction (vph)	0	0	168	0	8	0	0	0	162	0	0	54
Lane Group Flow (vph)	211	1623	575	152	839	0	693	725	139	109	293	9
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Effective Green, g (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22	0.22	0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	340	1060	330	143	519		1236	1413	632	163	459	205
v/s Ratio Prot	0.13	0.34		0.09	c0.18		c0.21	c0.22		0.07	c0.09	
v/s Ratio Perm			c0.38						0.09			0.01
v/c Ratio	0.62	1.53	1.74	1.06	1.62		0.56	0.51	0.22	0.67	0.64	0.04
Uniform Delay, d1	58.1	62.4	62.4	72.9	71.2		39.1	34.2	29.5	69.4	64.8	59.3
Progression Factor	0.83	0.83	0.71	1.00	1.00		1.41	1.48	4.60	1.00	1.00	1.00
Incremental Delay, d2	2.3	241.8	340.7	93.0	286.3		0.1	0.1	0.1	9.9	6.7	0.4
Delay (s)	50.4	293.8	385.1	165.9	357.5		55.1	50.7	136.0	79.3	71.4	59.7
Level of Service	D	F	F	F	F		E	D	F	E	E	E
Approach Delay (s)		300.2			328.4			67.4			71.7	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	217.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.1
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑		↗	↑↑↔		↗	↑↑	↗
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	335
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	381
RTOR Reduction (vph)	0	0	101	0	6	0	0	28	0	0	0	60
Lane Group Flow (vph)	917	1089	70	220	586	0	233	905	0	203	745	321
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Effective Green, g (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.19		0.18	0.23	0.47
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	779	1247	558	266	707		249	911		295	763	700
v/s Ratio Prot	c0.28	c0.32		0.07	c0.18		0.14	c0.19		0.13	c0.22	0.11
v/s Ratio Perm			0.05									0.10
v/c Ratio	1.18	0.87	0.12	0.83	0.83		0.94	0.99		0.69	0.98	0.46
Uniform Delay, d1	60.9	46.7	33.1	72.3	60.0		66.9	64.3		61.1	61.4	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.89	0.88	1.13
Incremental Delay, d2	92.9	8.6	0.5	18.6	10.8		39.9	28.0		1.5	10.6	0.1
Delay (s)	153.7	55.4	33.6	90.9	70.8		106.8	92.3		55.9	64.8	32.9
Level of Service	F	E	C	F	E		F	F		E	E	C
Approach Delay (s)		95.1			76.3			95.2			54.3	
Approach LOS		F			E			F			D	
Intersection Summary												
HCM 2000 Control Delay			82.5				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.05									
Actuated Cycle Length (s)			160.0			Sum of lost time (s)			27.0			
Intersection Capacity Utilization			90.0%			ICU Level of Service			E			
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th TWSC
 4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	2	429	8	2	81
Future Vol, veh/h	4	2	429	8	2	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	466	9	2	88

Major/Minor	Minor2	Major2	
Conflicting Flow All	941	9	0
Stage 1	941	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	263	1073	-
Stage 1	342	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1073	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1073	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	256	94	11	5	42	1265	60	2495	420
v/c Ratio	0.85	0.24	0.17	0.03	0.51	0.52	0.21	0.82	0.42
Control Delay	89.0	1.9	80.2	0.2	102.5	39.6	57.9	28.1	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.0	1.9	80.2	0.2	102.5	39.6	57.9	28.1	11.5
Queue Length 50th (ft)	260	0	11	0	42	464	51	837	147
Queue Length 95th (ft)	349	0	29	0	m54	m151	106	917	233
Internal Link Dist (ft)	94		106			1328		626	
Turn Bay Length (ft)		75		20	275		245		150
Base Capacity (vph)	338	421	69	198	85	2811	305	3050	1010
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.22	0.16	0.03	0.49	0.45	0.20	0.82	0.42

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1623	743	152	847	693	725	301	109	293	63
v/c Ratio	0.62	1.53	1.49	1.06	1.61	0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	53.6	277.6	252.1	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	277.6	252.1	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Length 50th (ft)	168	-858	-871	157	-402	315	333	137	112	154	0
Queue Length 95th (ft)	m230	#957	#1130	#318	#534	m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	340	1060	498	143	527	1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.53	1.49	1.06	1.61	0.56	0.51	0.38	0.30	0.21	0.09

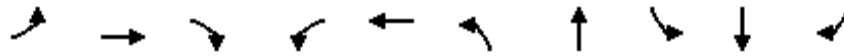
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	917	1089	170	220	592	233	933	203	745	381
v/c Ratio	1.18	0.87	0.26	0.83	0.83	0.94	0.99	0.69	0.98	0.50
Control Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	58.1	64.8	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	58.1	64.8	12.5
Queue Length 50th (ft)	~611	557	7	119	305	244	349	177	382	111
Queue Length 95th (ft)	#721	633	55	#186	380	#391	#425	m161	m297	m93
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	778	1248	659	270	755	251	940	295	763	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78	0.93	0.99	0.69	0.98	0.50

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑	↗
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1543	397
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1543	397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	1.00
Fr _t		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Fl _t Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1760	1568		1803	1568	1636	4865		1694	4868	1516
Fl _t Permitted		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1760	1568		1803	1568	1636	4865		1694	4868	1516
Peak-hour factor, PHF	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	1696	436
RTOR Reduction (vph)	0	0	69	0	0	33	0	0	0	0	0	95
Lane Group Flow (vph)	0	394	23	0	46	1	44	2289	0	3	1696	341
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8		4	4		1	6		5		2
Permitted Phases			8			4						2
Actuated Green, G (s)		42.2	42.2		5.8	5.8	7.7	95.8		1.4	89.8	89.8
Effective Green, g (s)		42.2	42.2		5.8	5.8	7.7	95.8		1.4	89.8	89.8
Actuated g/C Ratio		0.25	0.25		0.03	0.03	0.05	0.56		0.01	0.53	0.53
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	6.0
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)		436	389		61	53	74	2741		13	2571	800
v/s Ratio Prot		c0.22			c0.03		0.03	c0.47		0.00	c0.35	
v/s Ratio Perm			0.01			0.00						0.23
v/c Ratio		0.90	0.06		0.75	0.02	0.59	0.83		0.23	0.66	0.43
Uniform Delay, d ₁		61.9	48.7		81.4	79.4	79.6	30.6		83.8	29.0	24.4
Progression Factor		1.00	1.00		1.00	1.00	0.81	1.72		1.00	1.00	1.00
Incremental Delay, d ₂		22.1	0.1		40.4	0.2	1.2	0.3		8.9	1.3	1.7
Delay (s)		84.0	48.8		121.8	79.5	65.9	53.0		92.7	30.4	26.1
Level of Service		F	D		F	E	E	D		F	C	C
Approach Delay (s)		77.3			103.8			53.2			29.6	
Approach LOS		E			F			D			C	

Intersection Summary		
HCM 2000 Control Delay	46.3	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.86	D
Actuated Cycle Length (s)	170.0	Sum of lost time (s)
Intersection Capacity Utilization	80.1%	24.8
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑↑		↘↗	↑↑	↗	↘	↑↑	↗
Traffic Volume (vph)	130	1016	483	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	483	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	531	261	1465	104	784	516	190	155	550	152
RTOR Reduction (vph)	0	0	163	0	5	0	0	0	125	0	0	88
Lane Group Flow (vph)	143	1116	368	261	1564	0	784	516	65	155	550	64
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Effective Green, g (s)	34.5	38.3	38.3	29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.23	0.23	0.17	0.20		0.22	0.34	0.34	0.10	0.22	0.22
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	347	1107	344	287	973		718	1177	526	160	742	332
v/s Ratio Prot	0.08	0.23		0.16	c0.32		c0.24	0.15		c0.09	c0.17	
v/s Ratio Perm			c0.24						0.04			0.04
v/c Ratio	0.41	1.01	1.07	0.91	1.61		1.09	0.44	0.12	0.97	0.74	0.19
Uniform Delay, d1	58.9	65.8	65.8	68.9	68.0		66.6	43.1	38.2	76.5	61.3	53.4
Progression Factor	0.97	1.03	1.53	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	26.0	63.2	30.3	278.2		61.4	1.2	0.5	61.1	6.6	1.3
Delay (s)	58.0	93.9	163.8	99.2	346.2		128.0	44.3	38.7	137.6	67.9	54.7
Level of Service	E	F	F	F	F		F	D	D	F	E	D
Approach Delay (s)		111.8			311.0			87.6			78.2	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay			162.0			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.15									
Actuated Cycle Length (s)			170.0			Sum of lost time (s)			27.1			
Intersection Capacity Utilization			90.2%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↕	↖	↖↗	↕		↖	↕↖↗		↖	↕	↖
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	582
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	594
RTOR Reduction (vph)	0	0	52	0	3	0	0	20	0	0	0	43
Lane Group Flow (vph)	477	700	27	273	960	0	274	1042	0	150	711	551
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Effective Green, g (s)	22.7	56.1	56.1	17.9	51.3		25.8	36.6		24.2	35.6	58.3
Actuated g/C Ratio	0.14	0.35	0.35	0.11	0.32		0.16	0.23		0.15	0.22	0.36
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	465	1186	530	367	1072		263	1083		247	752	551
v/s Ratio Prot	c0.14	c0.20		0.08	c0.28		0.17	c0.22		0.09	0.21	c0.14
v/s Ratio Perm			0.02									0.22
v/c Ratio	1.03	0.59	0.05	0.74	0.90		1.04	0.96		0.61	0.95	1.00
Uniform Delay, d1	69.6	43.4	35.2	69.7	52.7		68.0	61.9		64.4	62.1	51.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	48.5	2.2	0.2	7.9	11.5		66.8	18.8		4.2	20.5	38.4
Delay (s)	118.0	45.6	35.3	77.7	64.2		134.8	80.7		68.5	82.6	90.2
Level of Service	F	D	D	E	E		F	F		E	F	F
Approach Delay (s)		72.4			67.2			91.8			84.2	
Approach LOS		E			E			F			F	
Intersection Summary												
HCM 2000 Control Delay			79.4				HCM 2000 Level of Service				E	
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			161.8				Sum of lost time (s)			27.0		
Intersection Capacity Utilization			93.9%				ICU Level of Service			F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM 6th TWSC
4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	2	448	10	2	75
Future Vol, veh/h	6	2	448	10	2	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	487	11	2	82

Major/Minor	Minor2	Major2	
Conflicting Flow All	985	11	0
Stage 1	985	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	248	1070	-
Stage 1	326	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1070	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1070	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	394	92	46	34	44	2289	3	1696	436
v/c Ratio	0.90	0.19	0.61	0.18	0.51	0.78	0.05	0.64	0.48
Control Delay	85.7	1.7	112.3	2.0	65.6	47.8	80.7	31.1	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.7	1.7	112.3	2.0	65.6	47.8	80.7	31.1	15.8
Queue Length 50th (ft)	420	0	51	0	52	686	3	534	173
Queue Length 95th (ft)	505	0	66	0	m41	m622	15	599	281
Internal Link Dist (ft)	94		106			1328		626	
Turn Bay Length (ft)		75		20	275		245		150
Base Capacity (vph)	477	527	77	196	97	2920	67	2642	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.17	0.60	0.17	0.45	0.78	0.04	0.64	0.48

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	1116	531	261	1569	784	516	190	155	550	152
v/c Ratio	0.41	1.01	1.05	0.91	1.60	1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	60.7	91.6	100.9	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.7	91.6	100.9	101.9	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Length 50th (ft)	165	~512	~552	285	-916	~508	234	0	175	302	35
Queue Length 95th (ft)	246	#612	#722	#440	#1012	#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	347	1106	507	308	978	719	1177	651	160	864	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.01	1.05	0.85	1.60	1.09	0.44	0.29	0.97	0.64	0.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

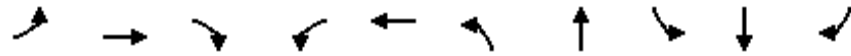
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	477	700	79	273	963	274	1062	150	711	594
v/c Ratio	1.02	0.59	0.12	0.75	0.89	1.04	0.96	0.61	0.95	0.91
Control Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	58.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.4	46.1	0.4	82.5	63.8	130.2	79.4	75.9	83.6	58.9
Queue Length 50th (ft)	~280	320	0	146	506	~323	404	151	393	538
Queue Length 95th (ft)	#397	396	0	196	600	#516	#505	234	#514	#783
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	466	1187	634	416	1097	263	1103	247	761	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.59	0.12	0.66	0.88	1.04	0.96	0.61	0.93	0.91

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↕	↗		↕	↗	↘	↑↑↑		↘	↑↑↑		
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2475	261	
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2475	261	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11	
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0		
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91		
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99		
Flt Protected		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)		1743	1553		1763	1553	1620	4814		1678	4752		
Flt Permitted		0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (perm)		1743	1553		1763	1553	1620	4814		1678	4752		
Peak-hour factor, PHF	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94	
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2633	278	
RTOR Reduction (vph)	0	0	78	0	0	5	0	1	0	0	7	0	
Lane Group Flow (vph)	0	256	16	0	11	0	42	1264	0	60	2904	0	
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA		
Protected Phases	8	8		4	4		1	6		5	2		
Permitted Phases			8			4							
Actuated Green, G (s)		27.6	27.6		3.8	3.8	6.7	77.2		26.6	97.4		
Effective Green, g (s)		27.6	27.6		3.8	3.8	6.7	77.2		26.6	97.4		
Actuated g/C Ratio		0.17	0.17		0.02	0.02	0.04	0.48		0.17	0.61		
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0		
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0		
Lane Grp Cap (vph)		300	267		41	36	67	2322		278	2892		
v/s Ratio Prot		c0.15			c0.01		0.03	c0.26		0.04	c0.61		
v/s Ratio Perm			0.01			0.00							
v/c Ratio		0.85	0.06		0.27	0.00	0.63	0.54		0.22	1.00		
Uniform Delay, d1		64.2	55.4		76.7	76.3	75.4	29.1		57.7	31.3		
Progression Factor		1.00	1.00		1.00	1.00	1.35	1.32		1.00	1.00		
Incremental Delay, d2		20.7	0.1		3.5	0.0	1.7	0.1		0.4	17.7		
Delay (s)		85.0	55.5		80.2	76.3	103.2	38.4		58.1	49.0		
Level of Service		F	E		F	E	F	D		E	D		
Approach Delay (s)		77.0			79.0			40.5			49.2		
Approach LOS		E			E			D			D		
Intersection Summary													
HCM 2000 Control Delay			49.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio			0.95										
Actuated Cycle Length (s)			160.0		Sum of lost time (s)					24.8			
Intersection Capacity Utilization			82.5%		ICU Level of Service					E			
Analysis Period (min)			15										

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑↑		↘↗	↑↑	↗	↘	↑↑	↗
Traffic Volume (vph)	190	1461	799	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	799	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1678	4821	1501	1620	4754		3255	3355	1501	1620	3240	1449
Peak-hour factor, PHF	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Adj. Flow (vph)	211	1623	888	152	768	79	693	725	301	109	293	63
RTOR Reduction (vph)	0	0	201	0	8	0	0	0	162	0	0	54
Lane Group Flow (vph)	211	1623	687	152	839	0	693	725	139	109	293	9
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Effective Green, g (s)	32.5	35.2	35.2	14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22	0.22	0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	340	1060	330	143	519		1236	1413	632	163	459	205
v/s Ratio Prot	0.13	0.34		0.09	c0.18		c0.21	c0.22		0.07	c0.09	
v/s Ratio Perm			c0.46						0.09			0.01
v/c Ratio	0.62	1.53	2.08	1.06	1.62		0.56	0.51	0.22	0.67	0.64	0.04
Uniform Delay, d1	58.1	62.4	62.4	72.9	71.2		39.1	34.2	29.5	69.4	64.8	59.3
Progression Factor	0.84	0.84	0.73	1.00	1.00		1.41	1.48	4.60	1.00	1.00	1.00
Incremental Delay, d2	1.4	240.7	490.1	93.0	286.3		0.1	0.1	0.1	9.9	6.7	0.4
Delay (s)	50.4	293.3	535.5	165.9	357.5		55.1	50.7	136.0	79.3	71.4	59.7
Level of Service	D	F	F	F	F		E	D	F	E	E	E
Approach Delay (s)		353.5			328.4			67.4			71.7	
Approach LOS		F			F			E			E	

Intersection Summary		
HCM 2000 Control Delay	243.8	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.13	F
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	82.9%	27.1
Analysis Period (min)	15	ICU Level of Service
		E

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑		↗	↑↑↔		↗	↑↑	↗
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	465
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	3355	1501	3255	3300		1620	4675		1620	3355	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	528
RTOR Reduction (vph)	0	0	101	0	6	0	0	28	0	0	0	60
Lane Group Flow (vph)	917	1089	70	220	586	0	233	905	0	203	745	468
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Effective Green, g (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.7
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.19		0.18	0.23	0.47
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	779	1247	558	266	707		249	911		295	763	700
v/s Ratio Prot	c0.28	c0.32		0.07	c0.18		0.14	c0.19		0.13	c0.22	0.16
v/s Ratio Perm			0.05									0.15
v/c Ratio	1.18	0.87	0.12	0.83	0.83		0.94	0.99		0.69	0.98	0.67
Uniform Delay, d1	60.9	46.7	33.1	72.3	60.0		66.9	64.3		61.1	61.4	33.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.88	0.87	1.10
Incremental Delay, d2	92.9	8.6	0.5	18.6	10.8		39.9	28.0		0.6	5.5	0.2
Delay (s)	153.7	55.4	33.6	90.9	70.8		106.8	92.3		54.4	59.1	36.5
Level of Service	F	E	C	F	E		F	F		D	E	D
Approach Delay (s)		95.1			76.3			95.2			50.4	
Approach LOS		F			E			F			D	

Intersection Summary

HCM 2000 Control Delay	80.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th TWSC
4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	2	299	8	2	81
Future Vol, veh/h	4	2	299	8	2	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	2	325	9	2	88

Major/Minor	Minor2	Major2	
Conflicting Flow All	659	9	0
Stage 1	659	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	384	1073	-
Stage 1	461	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1073	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1073	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	256	94	11	5	42	1265	60	2911
v/c Ratio	0.85	0.24	0.17	0.03	0.51	0.52	0.21	0.97
Control Delay	89.0	1.9	80.2	0.2	102.5	39.6	57.9	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.0	1.9	80.2	0.2	102.5	39.6	57.9	39.1
Queue Length 50th (ft)	260	0	11	0	42	464	51	~1240
Queue Length 95th (ft)	349	0	29	0	m54	m151	106	#1316
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	338	421	69	198	85	2811	305	3014
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.22	0.16	0.03	0.49	0.45	0.20	0.97

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1623	888	152	847	693	725	301	109	293	63
v/c Ratio	0.62	1.53	1.67	1.06	1.61	0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	52.6	276.7	328.2	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	276.7	328.2	158.5	323.1	56.7	52.2	20.7	88.3	70.8	1.5
Queue Length 50th (ft)	175	-861	-725	157	-402	315	333	137	112	154	0
Queue Length 95th (ft)	m185	m#909	m#1355	#318	#534	m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	340	1060	531	143	527	1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.53	1.67	1.06	1.61	0.56	0.51	0.38	0.30	0.21	0.09

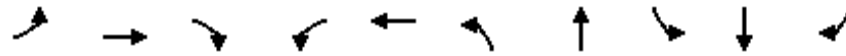
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	917	1089	170	220	592	233	933	203	745	528
v/c Ratio	1.18	0.87	0.26	0.83	0.83	0.94	0.99	0.69	0.98	0.69
Control Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.7	59.0	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9	108.6	88.6	55.7	59.0	15.4
Queue Length 50th (ft)	~611	557	7	119	305	244	349	176	382	172
Queue Length 95th (ft)	#721	633	55	#186	380	#391	#425	m146	m265	m126
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	778	1248	659	270	755	251	940	295	763	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78	0.93	0.99	0.69	0.98	0.69

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023

































Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↑↑↑		↗	↑↑↑	
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1673	263
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1673	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	10	11	11	11	11	11
Total Lost time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Fr _t		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.98	
Fl _t Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760	1568		1803	1568	1636	4865		1694	4769	
Fl _t Permitted		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1760	1568		1803	1568	1636	4865		1694	4769	
Peak-hour factor, PHF	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	1838	289
RTOR Reduction (vph)	0	0	69	0	0	33	0	0	0	0	11	0
Lane Group Flow (vph)	0	394	23	0	46	1	44	2289	0	3	2116	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Actuated Green, G (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Effective Green, g (s)		42.5	42.5		5.8	5.8	7.0	95.5		1.4	90.2	
Actuated g/C Ratio		0.25	0.25		0.03	0.03	0.04	0.56		0.01	0.53	
Clearance Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Vehicle Extension (s)		3.5	3.5		3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)		440	392		61	53	67	2732		13	2530	
v/s Ratio Prot		c0.22			c0.03		0.03	c0.47		0.00	c0.44	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.90	0.06		0.75	0.02	0.66	0.84		0.23	0.84	
Uniform Delay, d ₁		61.6	48.5		81.4	79.4	80.3	30.8		83.8	33.7	
Progression Factor		1.00	1.00		1.00	1.00	0.82	1.73		1.00	1.00	
Incremental Delay, d ₂		20.6	0.1		40.4	0.2	2.1	0.3		8.9	3.5	
Delay (s)		82.2	48.6		121.8	79.5	68.1	53.7		92.7	37.1	
Level of Service		F	D		F	E	E	D		F	D	
Approach Delay (s)		75.8			103.8			54.0			37.2	
Approach LOS		E			F			D			D	

Intersection Summary		
HCM 2000 Control Delay	49.8	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.87	D
Actuated Cycle Length (s)	170.0	Sum of lost time (s)
Intersection Capacity Utilization	80.1%	24.8
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)






























07/25/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (vph)	130	1016	613	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	613	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	11	11	11	10	10	10
Total Lost time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1711	4916	1531	1652	4867		3319	3421	1531	1652	3303	1478
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	674	261	1465	104	784	516	190	155	550	152
RTOR Reduction (vph)	0	0	209	0	5	0	0	0	125	0	0	88
Lane Group Flow (vph)	143	1116	465	261	1564	0	784	516	65	155	550	64
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases			8						6			2
Actuated Green, G (s)	34.5	41.2	41.2	26.7	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Effective Green, g (s)	34.5	41.2	41.2	26.7	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.24	0.24	0.16	0.20		0.22	0.34	0.34	0.10	0.22	0.22
Clearance Time (s)	6.5	6.8	6.8	7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Vehicle Extension (s)	4.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	347	1191	371	259	973		718	1177	526	160	742	332
v/s Ratio Prot	0.08	0.23		0.16	c0.32		c0.24	0.15		c0.09	c0.17	
v/s Ratio Perm			c0.30						0.04			0.04
v/c Ratio	0.41	0.94	1.25	1.01	1.61		1.09	0.44	0.12	0.97	0.74	0.19
Uniform Delay, d1	58.9	63.1	64.4	71.7	68.0		66.6	43.1	38.2	76.5	61.3	53.4
Progression Factor	0.86	0.92	1.48	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	9.1	126.8	57.9	278.2		61.4	1.2	0.5	61.1	6.6	1.3
Delay (s)	51.4	66.9	221.8	129.6	346.2		128.0	44.3	38.7	137.6	67.9	54.7
Level of Service	D	E	F	F	F		F	D	D	F	E	D
Approach Delay (s)		119.8			315.3			87.6			78.2	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay			164.7			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.20									
Actuated Cycle Length (s)			170.0			Sum of lost time (s)		27.1				
Intersection Capacity Utilization			90.2%			ICU Level of Service		E				
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: S Kanner Highway & SW Monterey Road

07/25/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			  			 	
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	712
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	712
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	11	10	11	11
Total Lost time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3319	3421	1531	3319	3384		1652	4788		1652	3421	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	727
RTOR Reduction (vph)	0	0	52	0	3	0	0	21	0	0	0	44
Lane Group Flow (vph)	477	700	27	273	960	0	274	1041	0	150	711	683
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Actuated Green, G (s)	21.9	54.5	54.5	17.8	50.4		25.7	37.7		23.0	35.6	57.5
Effective Green, g (s)	21.9	54.5	54.5	17.8	50.4		25.7	37.7		23.0	35.6	57.5
Actuated g/C Ratio	0.14	0.34	0.34	0.11	0.31		0.16	0.24		0.14	0.22	0.36
Clearance Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Lane Grp Cap (vph)	454	1165	521	369	1065		265	1128		237	761	550
v/s Ratio Prot	0.14	c0.20		0.08	c0.28		0.17	c0.22		0.09	0.21	c0.17
v/s Ratio Perm			0.02									0.28
v/c Ratio	1.05	0.60	0.05	0.74	0.90		1.03	0.92		0.63	0.93	1.24
Uniform Delay, d1	69.0	43.7	35.4	68.9	52.4		67.2	59.7		64.5	61.1	51.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	56.2	2.3	0.2	7.6	12.1		64.4	12.3		5.4	18.4	123.9
Delay (s)	125.2	46.0	35.6	76.4	64.5		131.5	72.1		69.9	79.5	175.2
Level of Service	F	D	D	E	E		F	E		E	E	F
Approach Delay (s)		75.4			67.1			84.3			122.4	
Approach LOS		E			E			F			F	
Intersection Summary												
HCM 2000 Control Delay			89.5			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.09									
Actuated Cycle Length (s)			160.0			Sum of lost time (s)			27.0			
Intersection Capacity Utilization			100.3%			ICU Level of Service				G		
Analysis Period (min)			15									
c Critical Lane Group												

HCM 6th TWSC
4: SW Pine Ave/SW Palm City Road

07/25/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	2	318	10	2	75
Future Vol, veh/h	6	2	318	10	2	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	346	11	2	82

Major/Minor	Minor2	Major2	
Conflicting Flow All	703	11	0
Stage 1	703	-	-
Stage 2	0	-	-
Critical Hdwy	6.52	6.22	4.12
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	4.018	3.318	2.218
Pot Cap-1 Maneuver	362	1070	-
Stage 1	440	-	-
Stage 2	-	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	0	1070	-
Mov Cap-2 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-

Approach	EB	WB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1070	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Queues

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

07/25/2023



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	394	92	46	34	44	2289	3	2127
v/c Ratio	0.90	0.19	0.61	0.18	0.55	0.79	0.05	0.81
Control Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.5	1.7	112.3	2.0	67.6	48.4	80.7	37.1
Queue Length 50th (ft)	420	0	51	0	52	676	3	778
Queue Length 95th (ft)	501	0	66	0	m41	m614	15	852
Internal Link Dist (ft)	94		106			1328		626
Turn Bay Length (ft)		75		20	275		245	
Base Capacity (vph)	487	535	77	196	82	2911	67	2611
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.17	0.60	0.17	0.54	0.79	0.04	0.81

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	1116	674	261	1569	784	516	190	155	550	152
v/c Ratio	0.41	0.94	1.16	1.01	1.60	1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	53.4	67.6	127.6	126.8	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	67.6	127.6	126.8	317.1	119.9	44.5	5.8	137.3	67.5	17.7
Queue Length 50th (ft)	166	481	~659	~298	-916	~508	234	0	175	302	35
Queue Length 95th (ft)	m205	#550	#919	#496	#1012	#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478		5515			695	
Turn Bay Length (ft)	450		125	250		446			150		110
Base Capacity (vph)	347	1191	580	259	978	719	1177	651	160	864	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.94	1.16	1.01	1.60	1.09	0.44	0.29	0.97	0.64	0.32

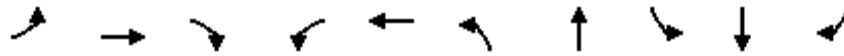
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

3: S Kanner Highway & SW Monterey Road

07/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	477	700	79	273	963	274	1062	150	711	727
v/c Ratio	1.05	0.60	0.13	0.74	0.90	1.03	0.93	0.63	0.93	1.11
Control Delay	120.5	46.7	0.4	81.0	64.1	127.7	71.8	77.9	80.7	109.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.5	46.7	0.4	81.0	64.1	127.7	71.8	77.9	80.7	109.1
Queue Length 50th (ft)	~286	321	0	144	502	~316	391	151	386	-822
Queue Length 95th (ft)	#403	397	0	194	596	#509	#469	234	#502	#1076
Internal Link Dist (ft)		821			542		706		5515	
Turn Bay Length (ft)	450		175	325		620		350		
Base Capacity (vph)	454	1165	627	421	1088	265	1163	237	774	655
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.60	0.13	0.65	0.89	1.03	0.91	0.63	0.92	1.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX B

LEVEL OF SERVICE REPORTS

Table 5
Existing Conditions LOS Analysis

Intersection	Movement	AM Peak				PM Peak			
		LOS	Delay	95 th % Q	V/C	LOS	Delay	95 th % Q	V/C
US 1 and SW Palm City Road	Eastbound Through/Left-Turn	F	90.6	349	0.85	F	102.7	#587	0.92
	Eastbound Approach	F	90.6	-	-	F	102.7	-	-
	Westbound Through/Left-Turn	F	94.1	29	0.17	F	95.6	66	0.52
	Westbound Right-Turn	F	84.8	0	0.03	F	90.2	0	0.17
	Westbound Approach	F	91.2	-	-	F	93.3	-	-
	Northbound Left-Turn	E	79.0	m54	0.51	F	84.3	m41	0.54
	Northbound Through	E	59.2	m149	0.52	E	64.4	m581	0.79
	Northbound Through/Right-Turn	E	59.4	-	-	E	64.8	-	-
	Northbound Approach	E	59.9	-	-	E	64.9	-	-
	Southbound Left-Turn	D	42.8	106	0.21	E	74.1	15	0.05
	Southbound Through	C	22.0	819	0.77	C	25.5	484	0.59
	Southbound Through/Right-Turn	C	23.7	-	-	C	26.4	-	-
	Southbound Approach	C	23.1	-	-	C	25.9	-	-
	Overall Intersection	D	39.7	-	-	D	54.9	-	-
US 1 and SR 76/Kanner Highway	US 1 Eastbound Left-Turn	E	60.0	m246	0.62	E	64.4	245	0.41
	US 1 Eastbound Through	F	527.9	#1408	2.10	F	256.2	#929	1.37
	US 1 Eastbound Through /Right-Turn	F	563.0	-	-	F	262.9	-	-
	US 1 Eastbound Approach	F	498.0	-	-	F	241.5	-	-
	US 1 Westbound Left-Turn	F	179.8	#318	1.06	F	99.2	#440	0.91
	US 1 Westbound Through	F	384.8	#534	1.61	F	305.5	#1012	1.60
	US 1 Westbound Through /Right-Turn	F	401.6	-	-	F	311.9	-	-
	US 1 Westbound Approach	F	358.5	-	-	F	278.0	-	-
	Northbound Left-Turn	D	35.3	m255	0.56	E	59.9	#687	1.09
	Northbound Through	C	30.0	m270	0.51	D	39.4	283	0.44
	Northbound Right-Turn	-	-	m102	0.38	-	-	53	0.29
	Northbound Approach	C	32.6	-	-	D	51.8	-	-
	Southbound Left-Turn	F	85.5	166	0.67	F	117.3	#309	0.97
	Southbound Through	E	75.9	188	0.64	E	72.7	337	0.74
	Southbound Right-Turn	E	68.7	0	0.20	E	65.4	89	0.36
	Southbound Approach	E	77.2	-	-	E	79.5	-	-
Overall Intersection	F	310.8			F	184.9	-	-	
SR 76/S Kanner Highway and	Eastbound Left-Turn	F	94.3	#721	1.18	F	112.9	#397	1.02
	Eastbound Through	D	49.3	633	0.87	D	41.8	396	0.59
	Eastbound Right-Turn	C	35.0	55	0.26	C	34.5	0	0.12

SW Monterey Road	Eastbound Approach	E	67.1	-	-	E	68.4	-	-
	Westbound Left-Turn	F	92.1	#186	0.83	F	83.9	196	0.75
	Westbound Through	F	84.6	380	0.83	E	63.6	600	0.89
	Westbound Through/Right-Turn	F	84.9	-	-	E	63.3	-	-
	Westbound Approach	F	86.8	-	-	E	67.9	-	-
	Northbound Left-Turn	F	101.4	#391	0.94	F	125.5	#516	1.04
	Northbound Through	F	89.0	#425	0.99	F	81.1	#505	0.96
	Northbound Thru/Right-Turn	F	105.8	-	-	F	93.9	-	-
	Northbound Approach	F	96.0	-	-	F	93.7	-	-
	Southbound Left-Turn	E	64.9	m125	0.69	E	65.3	234	0.61
	Southbound Through	E	74.7	m218	0.98	E	69.2	#514	0.95
	Southbound Right-Turn	A	8.7	m34	0.31	D	51.3	493	0.70
	Southbound Approach	E	60.0	-	-	E	62.5	-	-
	Overall Intersection	E	74.8	-	-	E	73.3	-	-
SW Palm City Road and SW Pine Avenue	Eastbound Approach	C	16.2	3	0.02	C	18.4	3	0.03
	Westbound Approach	C	19.5	13	0.16	D	25.4	28	0.27

m = Volume for 95th percentile queue is metered by upstream signal

= 95th Percentile volume exceeds capacity, queue maybe longer

US 1 and SW Palm City Road

- Overall, the intersection operates at LOS D with an acceptable delay.
- All movements on eastbound approach of SW Palm City Road and Westbound Driveway approach operate at LOS F. This situation is common for low volume minor roads approaching high volume major roads. However, eastbound SW Palm City Road left-turn/thru movement has a 95th percentile queue length of 587 feet in the PM period that leads to traffic backing up beyond SW Indianola Street.
- The northbound US 1 approach movements operate at LOS E and/or worse. In the PM peak period, the northbound through movement has a 95th percentile queue length of 581 feet that leads to traffic backing up to the south access at the nearby Publix located on the west side of US 1.
- The southbound approach movements operate under LOS D or better with the exception of the southbound left-turn movement that operates at LOS E in the PM peak period. Despite having a LOS C, surprisingly, the southbound through movement has a 95th percentile queue length of 819 feet in the AM peak period.

US 1 @ SR 76/S. Kanner Highway

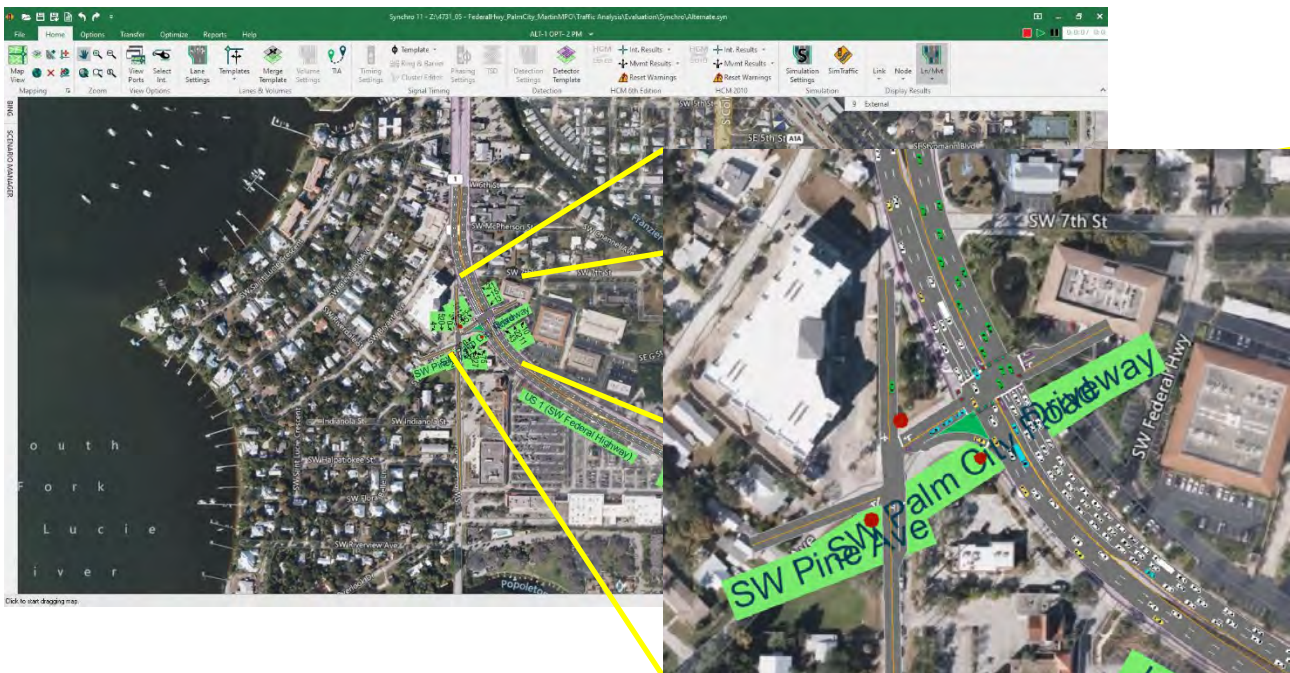
- Overall, the intersection operates at LOS F both in the AM peak and PM peak periods with a delay of 310.8 seconds and 184.9 seconds, respectively.
- The eastbound approach movements operate at LOS E or worse. Notably, in the AM peak period the eastbound through movement has a 95th percentile queue length of 1,408 feet that leads to traffic backing up upstream to the intersection of US 1 and SW Palm City Road. Also, in the

AM peak period, both eastbound through and shared through/right-turn movements have a delay of 527.9 seconds and 563.0 seconds, respectively.

- The US 1 westbound approach movements operate at LOS E or worse. In the PM peak period, the westbound through has a 95th percentile queue length of 1,012 feet. The 95th percentile queue for the US 1 westbound left-turn volume exceeds capacity both in the AM peak and PM peak periods.
- The northbound approach movements operate at LOS D or better except northbound left-turn movement that operates at LOS E in the PM peak period with a 95th queue length of 687 feet which exceeds existing turn lane capacity.
- The southbound approach movements operate at LOS E or worse. In the PM peak period, the southbound left-turn 95th percentile volume exceeds existing turn lane capacity.






















SR 76/S Kanner Highway @ SW Monterey Road

- Overall, the intersection operates at LOS E in the AM Peak and PM peak periods.
- The eastbound through and right-turn movement operates at LOS D or better. However, the eastbound left-turn movement 95th percentile volume exceeds capacity both in the AM peak and PM peak periods. Also, the eastbound through movement has a 95th percentile queue length of 600 feet.
- The westbound approach movements operate at LOS E or worse both in the AM peak and PM peak periods. The westbound through has a 95th percentile queue length of 600 feet in the PM peak period.
- The northbound approach movements operate at LOS E or worse both in the AM peak and PM peak periods. The westbound through has a 95th percentile queue length of 600 feet in the PM peak period. The northbound left-turn movement 95th percentile volume exceeds capacity both in the AM peak and PM peak periods.
- The southbound approach, through, and left-turn movements operate at LOS E in the AM peak and PM peak periods.



HCM 2010 Signalized Intersection Summary
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway






























03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	8	82	6	2	4	39	1164	12	56	2215	1
Future Volume (veh/h)	215	8	82	6	2	4	39	1164	12	56	2215	1
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1900	1827	1827	1900
Adj Flow Rate, veh/h	247	9	0	8	3	5	42	1252	13	60	2356	1
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	273	10	252	16	6	20	64	1973	20	492	3264	1
Arrive On Green	0.16	0.16	0.00	0.01	0.01	0.01	0.01	0.13	0.13	0.28	0.63	0.63
Sat Flow, veh/h	1682	61	1553	1282	481	1553	1740	5090	53	1740	5149	2
Grp Volume(v), veh/h	256	0	0	11	0	5	42	818	447	60	1521	836
Grp Sat Flow(s),veh/h/ln	1743	0	1553	1763	0	1553	1740	1663	1818	1740	1663	1827
Q Serve(g_s), s	23.1	0.0	0.0	1.0	0.0	0.5	3.8	37.4	37.4	4.1	49.4	49.4
Cycle Q Clear(g_c), s	23.1	0.0	0.0	1.0	0.0	0.5	3.8	37.4	37.4	4.1	49.4	49.4
Prop In Lane	0.96		1.00	0.73		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	283	0	252	22	0	20	64	1289	705	492	2107	1158
V/C Ratio(X)	0.91	0.00	0.00	0.49	0.00	0.25	0.65	0.63	0.63	0.12	0.72	0.72
Avail Cap(c_a), veh/h	339	0	302	69	0	61	88	1787	977	492	2107	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	0.0	0.0	78.5	0.0	78.2	78.0	59.0	59.0	42.7	19.8	19.8
Incr Delay (d2), s/veh	24.8	0.0	0.0	15.6	0.0	6.5	1.0	0.2	0.4	0.1	2.2	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	0.0	0.0	0.6	0.0	0.3	1.9	17.3	18.9	2.0	23.2	26.1
LnGrp Delay(d),s/veh	90.6	0.0	0.0	94.1	0.0	84.8	79.0	59.2	59.4	42.8	22.0	23.7
LnGrp LOS	F			F		F	E	E	E	D	C	C
Approach Vol, veh/h		256			16			1307			2417	
Approach Delay, s/veh		90.6			91.2			59.9			23.1	
Approach LOS		F			F			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	107.6		8.7	51.4	68.0		31.8				
Change Period (Y+Rc), s	5.9	* 6.2		* 6.7	6.2	* 6		5.9				
Max Green Setting (Gmax), s	8.1	* 90		* 6.3	11.8	* 86		31.1				
Max Q Clear Time (g_c+I1), s	5.8	51.4		3.0	6.1	39.4		25.1				
Green Ext Time (p_c), s	0.0	35.5		0.0	0.0	22.7		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			39.7									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)























03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (veh/h)	190	1461	539	129	653	67	582	609	253	94	252	54
Future Volume (veh/h)	190	1461	539	129	653	67	582	609	253	94	252	54
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	211	1623	599	152	768	79	693	725	0	109	293	63
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	350	798	285	138	460	47	1378	1582	708	131	427	191
Arrive On Green	0.20	0.22	0.22	0.08	0.10	0.10	0.41	0.46	0.00	0.08	0.12	0.12
Sat Flow, veh/h	1740	3627	1297	1740	4599	470	3375	3471	1553	1740	3471	1553
Grp Volume(v), veh/h	211	1484	738	152	554	293	693	725	0	109	293	63
Grp Sat Flow(s),veh/h/ln	1740	1663	1598	1740	1663	1744	1688	1736	1553	1740	1736	1553
Q Serve(g_s), s	17.6	35.2	35.2	12.7	16.0	16.0	24.5	23.0	0.0	9.9	12.9	5.9
Cycle Q Clear(g_c), s	17.6	35.2	35.2	12.7	16.0	16.0	24.5	23.0	0.0	9.9	12.9	5.9
Prop In Lane	1.00		0.81	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	732	352	138	333	174	1378	1582	708	131	427	191
V/C Ratio(X)	0.60	2.03	2.10	1.10	1.67	1.68	0.50	0.46	0.00	0.83	0.69	0.33
Avail Cap(c_a), veh/h	353	732	352	138	333	174	1378	1582	708	397	1529	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	62.4	62.4	73.7	72.0	72.0	35.2	29.9	0.0	73.0	67.2	64.1
Incr Delay (d2), s/veh	2.0	465.5	500.6	106.1	312.8	329.6	0.0	0.1	0.0	12.5	8.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	63.4	64.4	10.2	21.8	23.7	11.4	11.0	0.0	5.2	6.7	2.8
LnGrp Delay(d),s/veh	60.0	527.9	563.0	179.8	384.8	401.6	35.3	30.0	0.0	85.5	75.9	68.7
LnGrp LOS	E	F	F	F	F	F	D	C		F	E	E
Approach Vol, veh/h		2433			999			1418			465	
Approach Delay, s/veh		498.0			358.5			32.6			77.2	
Approach LOS		F			F			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	71.8	26.2	39.0	23.0	18.6	79.4	20.0	42.0				
Change Period (Y+Rc), s	6.5	6.5	6.8	* 7	6.5	6.5	7.3	6.8				
Max Green Setting (Gmax), s	14.5	70.5	32.5	* 16	36.5	48.5	12.7	35.2				
Max Q Clear Time (g_c+I1), s	26.5	14.9	19.6	18.0	11.9	25.0	14.7	37.2				
Green Ext Time (p_c), s	0.0	4.7	0.7	0.0	0.3	8.8	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			310.8									
HCM 2010 LOS			F									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: S Kanner Highway & SW Monterey Road

03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	807	958	150	207	495	61	203	647	164	179	656	205
Future Volume (veh/h)	807	958	150	207	495	61	203	647	164	179	656	205
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	917	1089	170	220	527	65	233	744	189	203	745	233
Adj No. of Lanes	2	2	1	2	2	0	1	3	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	898	1342	600	261	616	76	253	775	195	300	782	763
Arrive On Green	0.27	0.39	0.39	0.08	0.20	0.20	0.15	0.20	0.20	0.17	0.23	0.23
Sat Flow, veh/h	3375	3471	1553	3375	3112	383	1740	3976	999	1740	3471	1553
Grp Volume(v), veh/h	917	1089	170	220	293	299	233	621	312	203	745	233
Grp Sat Flow(s),veh/h/ln	1688	1736	1553	1688	1736	1759	1740	1663	1651	1740	1736	1553
Q Serve(g_s), s	42.6	44.9	12.1	10.3	26.1	26.3	21.1	29.6	30.0	17.5	33.9	5.2
Cycle Q Clear(g_c), s	42.6	44.9	12.1	10.3	26.1	26.3	21.1	29.6	30.0	17.5	33.9	5.2
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	898	1342	600	261	344	348	253	648	322	300	782	763
V/C Ratio(X)	1.02	0.81	0.28	0.84	0.85	0.86	0.92	0.96	0.97	0.68	0.95	0.31
Avail Cap(c_a), veh/h	898	1342	600	281	394	399	270	648	322	318	785	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.53	0.53	0.53
Uniform Delay (d), s/veh	58.7	43.9	33.8	72.9	61.9	62.0	67.4	63.7	63.9	62.0	61.1	8.6
Incr Delay (d2), s/veh	35.6	5.4	1.2	19.3	22.7	23.0	34.0	25.2	41.9	2.8	13.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.3	22.5	5.4	5.5	14.7	15.0	12.6	15.9	17.4	8.6	17.7	2.9
LnGrp Delay(d),s/veh	94.3	49.3	35.0	92.1	84.6	84.9	101.4	89.0	105.8	64.9	74.7	8.7
LnGrp LOS	F	D	C	F	F	F	F	F	F	E	E	A
Approach Vol, veh/h		2176			812			1166			1181	
Approach Delay, s/veh		67.1			86.8			96.0			60.0	
Approach LOS		E			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	49.3	38.4	34.4	38.0	19.1	68.6	29.5	42.9				
Change Period (Y+Rc), s	* 6.7	* 6.7	6.8	* 6.8	* 6.7	* 6.7	* 6.2	6.8				
Max Green Setting (Gmax), s	* 36	* 36	29.2	* 31	* 13	* 59	* 25	36.2				
Max Q Clear Time (g_c+I1), s	44.6	28.3	19.5	32.0	12.3	46.9	23.1	35.9				
Green Ext Time (p_c), s	0.0	3.4	0.4	0.0	0.1	9.2	0.2	0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			74.8									
HCM 2010 LOS			E									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻	↻		↻	
Traffic Vol, veh/h	0	4	2	38	4	0	2	220	81	0	520	4
Future Vol, veh/h	0	4	2	38	4	0	2	220	81	0	520	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	2	41	4	0	2	239	88	0	565	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	898	567	813	812	-	569	0	0	327	0	0
Stage 1	-	567	-	243	243	-	-	-	-	-	-	-
Stage 2	-	331	-	570	569	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	279	523	297	313	0	1003	-	-	1233	-	-
Stage 1	0	507	-	761	705	0	-	-	-	-	-	-
Stage 2	0	645	-	506	506	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	278	523	292	312	-	1003	-	-	1233	-	-
Mov Cap-2 Maneuver	-	278	-	292	312	-	-	-	-	-	-	-
Stage 1	-	507	-	759	704	-	-	-	-	-	-	-
Stage 2	-	644	-	500	506	-	-	-	-	-	-	-

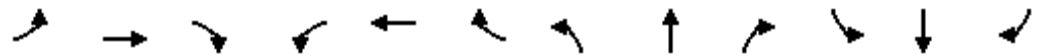
Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.2		19.5		0.1		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	329	294	1233	-
HCM Lane V/C Ratio	0.002	-	-	0.02	0.155	-	-
HCM Control Delay (s)	8.6	0	-	16.2	19.5	0	-
HCM Lane LOS	A	A	-	C	C	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

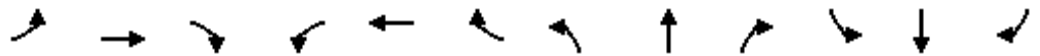


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↑↑↑		↗	↑↑↑	
Traffic Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2215	1
Future Volume (vph)	215	8	82	6	2	4	39	1164	12	56	2215	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	11	11	11	11	11
Storage Length (ft)	150		75	20		20	275		0	245		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			40			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Fr _t			0.850			0.850		0.998				
Fl _t Protected		0.954			0.965		0.950			0.950		
Satd. Flow (prot)	0	1743	1553	0	1763	1553	1620	4812	0	1678	4821	0
Fl _t Permitted		0.954			0.965		0.950			0.950		
Satd. Flow (perm)	0	1743	1553	0	1763	1553	1620	4812	0	1678	4821	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			143		1				
Link Speed (mph)		25			25			35				35
Link Distance (ft)		174			186			1408				706
Travel Time (s)		4.7			5.1			27.4				13.8
Peak Hour Factor	0.87	0.87	0.87	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	247	9	94	8	3	5	42	1252	13	60	2356	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	256	94	0	11	5	42	1265	0	60	2357	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		10			10			0			10	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Detector Phase	8	8	8	4	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	7.0	10.0		4.0	10.0	
Minimum Split (s)	10.7	10.7	10.7	10.7	10.7	10.7	12.9	24.0		10.2	24.0	
Total Split (s)	37.0	37.0	37.0	13.0	13.0	13.0	14.0	92.0		18.0	96.0	
Total Split (%)	23.1%	23.1%	23.1%	8.1%	8.1%	8.1%	8.8%	57.5%		11.3%	60.0%	
Maximum Green (s)	31.1	31.1	31.1	6.3	6.3	6.3	8.1	86.0		11.8	90.0	
Yellow Time (s)	3.7	3.7	3.7	3.4	3.4	3.4	3.7	4.0		3.7	4.0	
All-Red Time (s)	2.2	2.2	2.2	3.3	3.3	3.3	2.2	2.0		2.5	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	3.5	3.5	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)								5.0			5.0	
Flash Dont Walk (s)								13.0			13.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)		27.6	27.6		6.0	6.0	8.1	81.3		27.8	101.2	
Actuated g/C Ratio		0.17	0.17		0.04	0.04	0.05	0.51		0.17	0.63	
v/c Ratio		0.85	0.24		0.17	0.03	0.51	0.52		0.21	0.77	
Control Delay		89.0	1.9		80.2	0.2	102.5	39.3		58.0	26.1	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		89.0	1.9		80.2	0.2	102.5	39.3		58.0	26.1	
LOS		F	A		F	A	F	D		E	C	
Approach Delay		65.6			55.3			41.4			26.9	
Approach LOS		E			E			D			C	
Queue Length 50th (ft)		260	0		11	0	42	462		51	746	
Queue Length 95th (ft)		349	0		29	0	m54	m149		106	819	
Internal Link Dist (ft)		94			106			1328			626	
Turn Bay Length (ft)			75			20	275			245		
Base Capacity (vph)		338	421		69	198	85	2835		302	3050	
Starvation Cap Reductn		0	0		0	0	0	0		0	0	
Spillback Cap Reductn		0	0		0	0	0	0		0	0	
Storage Cap Reductn		0	0		0	0	0	0		0	0	
Reduced v/c Ratio		0.76	0.22		0.16	0.03	0.49	0.45		0.20	0.77	

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	22 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	35.0
Intersection Capacity Utilization:	75.5%
Intersection LOS:	C
ICU Level of Service:	D

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

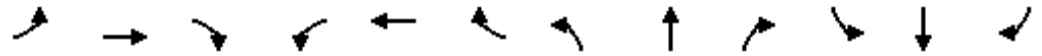
Splits and Phases: 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway



Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑		↘	↑↑↑		↘↘	↑↑	↘	↘	↑↑	↘
Traffic Volume (vph)	190	1461	539	129	653	67	582	609	253	94	252	54
Future Volume (vph)	190	1461	539	129	653	67	582	609	253	94	252	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	11	11	11	10	10	10
Storage Length (ft)	450		0	250		0	446		0	150		110
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	102			55			93			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	1.00	1.00	0.95	1.00
Frt		0.960			0.986				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	4628	0	1620	4754	0	3255	3355	1501	1620	3240	1449
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1678	4628	0	1620	4754	0	3255	3355	1501	1620	3240	1449
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			9				280			120
Link Speed (mph)		35			35			40				30
Link Distance (ft)		1408			558			5595				775
Travel Time (s)		27.4			10.9			95.4				17.6
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.84	0.84	0.84	0.86	0.86	0.86
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	211	1623	599	152	768	79	693	725	301	109	293	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	211	2222	0	152	847	0	693	725	301	109	293	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			22				22
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm

Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	10.0	10.0	8.0	10.0	10.0
Minimum Split (s)	14.5	38.8		15.3	15.0		14.5	38.5	38.5	14.5	37.5	37.5
Total Split (s)	39.0	42.0		20.0	23.0		21.0	55.0	55.0	43.0	77.0	77.0
Total Split (%)	24.4%	26.3%		12.5%	14.4%		13.1%	34.4%	34.4%	26.9%	48.1%	48.1%
Maximum Green (s)	32.5	35.2		12.7	16.0		14.5	48.5	48.5	36.5	70.5	70.5
Yellow Time (s)	4.0	4.4		3.4	3.7		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.4		3.9	3.3		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.8		7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		5.0						7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0						25.0	25.0		24.0	24.0
Pedestrian Calls (#/hr)		0						0	0		0	0
Act Effect Green (s)	32.5	35.2		14.2	17.5		60.8	67.4	67.4	16.1	22.7	22.7
Actuated g/C Ratio	0.20	0.22		0.09	0.11		0.38	0.42	0.42	0.10	0.14	0.14
v/c Ratio	0.62	2.10		1.06	1.61		0.56	0.51	0.38	0.67	0.64	0.20
Control Delay	52.2	522.0		158.5	323.1		56.7	52.2	20.7	88.3	70.8	1.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	522.0		158.5	323.1		56.7	52.2	20.7	88.3	70.8	1.5
LOS	D	F		F	F		E	D	C	F	E	A
Approach Delay		481.2			298.1			48.5			65.5	
Approach LOS		F			F			D			E	
Queue Length 50th (ft)	163	~1316		157	~402		315	333	137	112	154	0
Queue Length 95th (ft)	m246	#1408		#318	#534		m255	m270	m102	166	188	0
Internal Link Dist (ft)		1328			478			5515			695	
Turn Bay Length (ft)	450			250			446			150		110
Base Capacity (vph)	340	1059		143	527		1237	1413	794	369	1427	705
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.62	2.10		1.06	1.61		0.56	0.51	0.38	0.30	0.21	0.09

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	22 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	150
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	2.10
Intersection Signal Delay:	281.8
Intersection LOS:	F
Intersection Capacity Utilization:	94.9%
ICU Level of Service:	F

Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

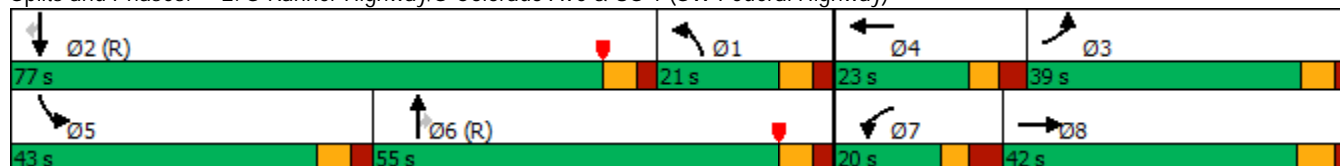
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

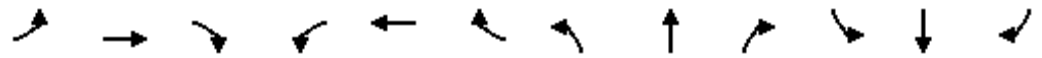
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)



Lanes, Volumes, Timings
 3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑↑		↔	↑↑↑		↔	↑↑	↔
Traffic Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	205
Future Volume (vph)	807	958	150	207	495	61	203	647	164	179	656	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	10	11	11	10	11	11
Storage Length (ft)	450		175	325		0	620		0	350		0
Storage Lanes	2		1	2		0	1		0	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.984			0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3255	3355	1501	3255	3302	0	1620	4677	0	1620	3355	1501
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3255	3355	1501	3255	3302	0	1620	4677	0	1620	3355	1501
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160		8			35				113
Link Speed (mph)		35			40			45				40
Link Distance (ft)		901			622			786				5595
Travel Time (s)		17.6			10.6			11.9				95.4
Peak Hour Factor	0.88	0.88	0.88	0.94	0.94	0.94	0.87	0.87	0.87	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	917	1089	170	220	527	65	233	744	189	203	745	233
Shared Lane Traffic (%)												
Lane Group Flow (vph)	917	1089	170	220	592	0	233	933	0	203	745	233
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov

Existing AM SW Palm City Road @ US-1 Intersection Feasibility Study 9:25 am 02/08/2023
 TCG

Synchro 11 Report
 Page 7

Lanes, Volumes, Timings
3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6									8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	8.0	10.0	10.0	8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	14.7	40.7	40.7	14.7	39.7		14.2	36.8		14.8	42.8	14.7
Total Split (s)	43.0	66.0	66.0	20.0	43.0		31.0	38.0		36.0	43.0	43.0
Total Split (%)	26.9%	41.3%	41.3%	12.5%	26.9%		19.4%	23.8%		22.5%	26.9%	26.9%
Maximum Green (s)	36.3	59.3	59.3	13.3	36.3		24.8	31.2		29.2	36.2	36.3
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4		4.0	4.8		4.0	4.4	4.4
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3		2.2	2.0		2.8	2.4	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.7	6.7	6.7	6.7	6.7		6.2	6.8		6.8	6.8	6.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	4.0	5.0	5.0	3.0	5.0		4.0	3.0		3.0	3.0	4.0
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			7.0			7.0	
Flash Dont Walk (s)		29.0	29.0		28.0			23.0			29.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	38.3	59.5	59.5	13.1	34.3		24.6	31.2		29.2	36.4	74.8
Actuated g/C Ratio	0.24	0.37	0.37	0.08	0.21		0.15	0.20		0.18	0.23	0.47
v/c Ratio	1.18	0.87	0.26	0.83	0.83		0.94	0.99		0.69	0.98	0.31
Control Delay	144.6	55.7	6.5	96.7	69.9		108.6	88.6		48.6	52.2	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	144.6	55.7	6.5	96.7	69.9		108.6	88.6		48.6	52.2	8.6
LOS	F	E	A	F	E		F	F		D	D	A
Approach Delay		89.3			77.1			92.6			43.0	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	~611	557	7	119	305		244	349		156	348	49
Queue Length 95th (ft)	#721	633	55	#186	380		#391	#425		m125	m218	m34
Internal Link Dist (ft)		821			542			706			5515	
Turn Bay Length (ft)	450		175	325			620			350		
Base Capacity (vph)	778	1248	659	270	755		251	940		295	763	761
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	1.18	0.87	0.26	0.81	0.78		0.93	0.99		0.69	0.98	0.31

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	65 (41%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle:	145
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.18
Intersection Signal Delay:	77.9
Intersection Capacity Utilization:	90.0%
Intersection LOS:	E
ICU Level of Service:	E

Lanes, Volumes, Timings

3: S Kanner Highway & SW Monterey Road

03/07/2023

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

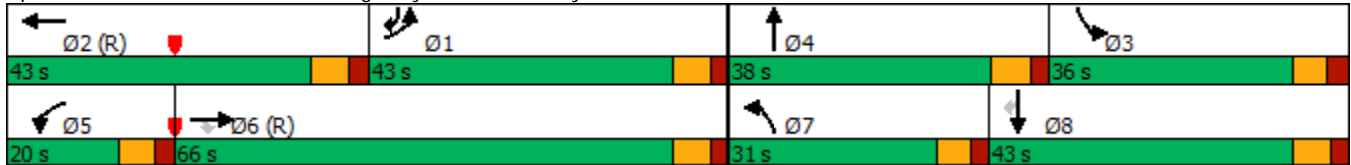
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.


















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S Kanner Highway & SW Monterey Road



























Lanes, Volumes, Timings
4: SW Pine Ave/SW Palm City Road

03/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	4	2	38	4	0	2	220	81	0	520	4
Future Volume (vph)	0	4	2	38	4	0	2	220	81	0	520	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	16	16	16	11	11	11	12	12	12
Storage Length (ft)	0		0	0		0	0		60	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.955							0.850		0.999	
Flt Protected					0.956							
Satd. Flow (prot)	0	1720	0	0	2018	0	0	1801	1531	0	1861	0
Flt Permitted					0.956							
Satd. Flow (perm)	0	1720	0	0	2018	0	0	1801	1531	0	1861	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		232			174			803			248	
Travel Time (s)		6.3			4.7			21.9			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	4	2	41	4	0	2	239	88	0	565	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	45	0	0	241	88	0	569	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		50			0			0			0	
Crosswalk Width(ft)		0			0			0			0	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.85	0.85	0.85	1.04	1.04	1.04	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	46.0%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM 2010 Signalized Intersection Summary
 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway






























03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	320	11	77	13	15	21	43	2211	10	3	1413	3
Future Volume (veh/h)	320	11	77	13	15	21	43	2211	10	3	1413	3
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	381	13	0	21	25	34	44	2279	10	3	1553	3
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	391	13	361	30	36	57	63	2691	12	119	2867	6
Arrive On Green	0.23	0.23	0.00	0.04	0.04	0.04	0.01	0.17	0.17	0.07	0.55	0.55
Sat Flow, veh/h	1702	58	1568	823	980	1568	1757	5175	23	1757	5190	10
Grp Volume(v), veh/h	394	0	0	46	0	34	44	1478	811	3	1005	551
Grp Sat Flow(s),veh/h/ln	1760	0	1568	1803	0	1568	1757	1679	1841	1757	1679	1843
Q Serve(g_s), s	37.8	0.0	0.0	4.3	0.0	3.6	4.2	72.5	72.6	0.3	32.5	32.5
Cycle Q Clear(g_c), s	37.8	0.0	0.0	4.3	0.0	3.6	4.2	72.5	72.6	0.3	32.5	32.5
Prop In Lane	0.97		1.00	0.46		1.00	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	405	0	361	66	0	57	63	1746	957	119	1854	1018
V/C Ratio(X)	0.97	0.00	0.00	0.70	0.00	0.60	0.70	0.85	0.85	0.03	0.54	0.54
Avail Cap(c_a), veh/h	405	0	361	88	0	77	94	1758	964	119	1854	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	0.0	81.0	0.0	80.7	83.1	63.8	63.9	74.0	24.3	24.3
Incr Delay (d2), s/veh	37.7	0.0	0.0	14.6	0.0	9.6	1.3	0.5	0.9	0.1	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	0.0	0.0	2.4	0.0	1.7	2.1	34.0	37.4	0.1	15.4	17.1
LnGrp Delay(d),s/veh	102.7	0.0	0.0	95.6	0.0	90.2	84.3	64.4	64.8	74.1	25.5	26.4
LnGrp LOS	F			F		F	F	E	E	E	C	C
Approach Vol, veh/h		394			80			2333			1559	
Approach Delay, s/veh		102.7			93.3			64.9			25.9	
Approach LOS		F			F			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	100.1		12.9	17.7	94.4		45.0				
Change Period (Y+Rc), s	5.9	* 6.2		* 6.7	6.2	* 6		5.9				
Max Green Setting (Gmax), s	9.1	* 89		* 8.3	8.8	* 89		39.1				
Max Q Clear Time (g_c+I1), s	6.2	34.5		6.3	2.3	74.6		39.8				
Green Ext Time (p_c), s	0.0	32.4		0.0	0.0	13.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			54.9									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)























03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (veh/h)	130	1016	353	240	1348	96	690	454	167	133	473	131
Future Volume (veh/h)	130	1016	353	240	1348	96	690	454	167	133	473	131
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	143	1116	388	261	1465	104	784	516	0	155	550	152
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	794	276	282	970	69	926	1316	589	172	707	316
Arrive On Green	0.17	0.21	0.21	0.16	0.20	0.20	0.27	0.37	0.00	0.10	0.20	0.20
Sat Flow, veh/h	1774	3728	1296	1774	4848	344	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	143	1015	489	261	1024	545	784	516	0	155	550	152
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1695	1802	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.3	36.2	36.2	24.7	34.0	34.0	36.7	18.2	0.0	14.7	25.0	14.4
Cycle Q Clear(g_c), s	12.3	36.2	36.2	24.7	34.0	34.0	36.7	18.2	0.0	14.7	25.0	14.4
Prop In Lane	1.00		0.79	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	722	348	282	678	360	926	1316	589	172	707	316
V/C Ratio(X)	0.46	1.41	1.41	0.93	1.51	1.51	0.85	0.39	0.00	0.90	0.78	0.48
Avail Cap(c_a), veh/h	360	722	348	331	678	360	926	1316	589	172	926	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	0.13	0.13	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	66.9	66.9	70.5	68.0	68.0	58.8	39.3	0.0	75.9	64.5	60.2
Incr Delay (d2), s/veh	1.2	189.3	196.0	28.7	237.5	243.9	1.1	0.1	0.0	41.4	8.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	35.9	35.3	14.4	38.3	41.3	17.6	8.9	0.0	9.2	13.0	6.8
LnGrp Delay(d),s/veh	64.4	256.2	262.9	99.2	305.5	311.9	59.9	39.4	0.0	117.3	72.7	65.4
LnGrp LOS	E	F	F	F	F	F	E	D		F	E	E
Approach Vol, veh/h		1647			1830			1300			857	
Approach Delay, s/veh		241.5			278.0			51.8			79.5	
Approach LOS		F			F			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	52.2	40.5	36.3	41.0	23.0	69.7	34.3	43.0				
Change Period (Y+Rc), s	6.5	6.5	6.8	* 7	6.5	6.5	7.3	6.8				
Max Green Setting (Gmax), s	30.5	44.5	34.5	* 34	16.5	58.5	31.7	36.2				
Max Q Clear Time (g_c+I1), s	38.7	27.0	14.3	36.0	16.7	20.2	26.7	38.2				
Green Ext Time (p_c), s	0.0	6.9	0.6	0.0	0.0	7.0	0.3	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			184.9									
HCM 2010 LOS			F									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: S Kanner Highway & SW Monterey Road

03/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	448	658	74	265	867	67	249	799	167	147	697	452
Future Volume (veh/h)	448	658	74	265	867	67	249	799	167	147	697	452
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	477	700	79	273	894	69	274	878	184	150	711	461
Adj No. of Lanes	2	2	1	2	2	0	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	1304	583	321	1079	83	272	935	195	266	786	570
Arrive On Green	0.14	0.37	0.37	0.09	0.32	0.32	0.15	0.22	0.22	0.15	0.22	0.22
Sat Flow, veh/h	3442	3539	1583	3442	3330	257	1774	4218	880	1774	3539	1583
Grp Volume(v), veh/h	477	700	79	273	475	488	274	705	357	150	711	461
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1817	1774	1695	1708	1774	1770	1583
Q Serve(g_s), s	22.3	25.2	5.4	12.7	40.2	40.2	24.8	33.1	33.4	12.7	31.7	36.0
Cycle Q Clear(g_c), s	22.3	25.2	5.4	12.7	40.2	40.2	24.8	33.1	33.4	12.7	31.7	36.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	474	1304	583	321	573	589	272	751	378	266	786	570
V/C Ratio(X)	1.01	0.54	0.14	0.85	0.83	0.83	1.01	0.94	0.94	0.56	0.90	0.81
Avail Cap(c_a), veh/h	474	1304	583	431	573	589	272	758	382	266	786	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51
Uniform Delay (d), s/veh	69.8	40.3	34.0	72.3	50.6	50.6	68.6	62.0	62.1	63.9	61.3	46.8
Incr Delay (d2), s/veh	43.1	1.6	0.5	11.6	13.0	12.7	56.9	19.2	31.9	1.4	7.9	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	12.6	2.4	6.5	21.7	22.3	16.4	17.6	19.1	6.4	16.4	19.4
LnGrp Delay(d),s/veh	112.9	41.8	34.5	83.9	63.6	63.3	125.5	81.1	93.9	65.3	69.2	51.3
LnGrp LOS	F	D	C	F	E	E	F	F	F	E	E	D
Approach Vol, veh/h		1256			1236			1336			1322	
Approach Delay, s/veh		68.4			67.9			93.7			62.5	
Approach LOS		E			E			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.0	59.2	31.1	42.7	21.8	66.4	31.0	42.8				
Change Period (Y+Rc), s	* 6.7	* 6.7	6.8	* 6.8	* 6.7	* 6.7	* 6.2	6.8				
Max Green Setting (Gmax), s	* 22	* 52	22.2	* 36	* 20	* 54	* 25	36.0				
Max Q Clear Time (g_c+I1), s	24.3	42.2	14.7	35.4	14.7	27.2	26.8	38.0				
Green Ext Time (p_c), s	0.0	6.4	0.2	0.5	0.4	9.9	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			73.3									
HCM 2010 LOS			E									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻	↻		↻	
Traffic Vol, veh/h	0	6	2	55	6	0	2	327	75	0	520	4
Future Vol, veh/h	0	6	2	55	6	0	2	327	75	0	520	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	7	2	60	7	0	2	355	82	0	565	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	1008	567	931	928	-	569	0	0	437	0	0
Stage 1	-	567	-	359	359	-	-	-	-	-	-	-
Stage 2	-	441	-	572	569	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	240	523	247	268	0	1003	-	-	1123	-	-
Stage 1	0	507	-	659	627	0	-	-	-	-	-	-
Stage 2	0	577	-	505	506	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	239	523	240	267	-	1003	-	-	1123	-	-
Mov Cap-2 Maneuver	-	239	-	240	267	-	-	-	-	-	-	-
Stage 1	-	507	-	657	625	-	-	-	-	-	-	-
Stage 2	-	575	-	496	506	-	-	-	-	-	-	-

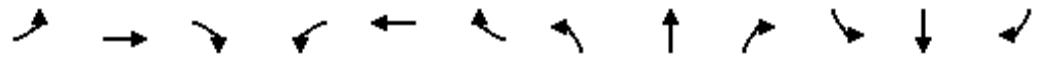
Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.4		25.4		0		0	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	277	242	1123	-
HCM Lane V/C Ratio	0.002	-	-	0.031	0.274	-	-
HCM Control Delay (s)	8.6	0	-	18.4	25.4	0	-
HCM Lane LOS	A	A	-	C	D	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.1	0	-

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↑↑↑		↕	↑↑↑	
Traffic Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1413	3
Future Volume (vph)	320	11	77	13	15	21	43	2211	10	3	1413	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	11	11	11	11	11
Storage Length (ft)	150		75	20		20	275		0	245		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			40			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Fr _t			0.850			0.850		0.999				
Fl _t Protected		0.954			0.978		0.950			0.950		
Satd. Flow (prot)	0	1760	1568	0	1804	1568	1636	4863	0	1694	4868	0
Fl _t Permitted		0.954			0.978		0.950			0.950		
Satd. Flow (perm)	0	1760	1568	0	1804	1568	1636	4863	0	1694	4868	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			140			135		1				
Link Speed (mph)		25			25			35				35
Link Distance (ft)		174			186			1408				706
Travel Time (s)		4.7			5.1			27.4				13.8
Peak Hour Factor	0.84	0.84	0.84	0.61	0.61	0.61	0.97	0.97	0.97	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	381	13	92	21	25	34	44	2279	10	3	1553	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	394	92	0	46	34	44	2289	0	3	1556	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			0				10
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1		2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	

Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
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Synchro 11 Report
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Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4		1	6		5	2	
Permitted Phases			8			4						
Detector Phase	8	8	8	4	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	7.0	10.0		4.0	10.0	
Minimum Split (s)	10.7	10.7	10.7	10.7	10.7	10.7	12.9	24.0		10.2	24.0	
Total Split (s)	45.0	45.0	45.0	15.0	15.0	15.0	15.0	95.0		15.0	95.0	
Total Split (%)	26.5%	26.5%	26.5%	8.8%	8.8%	8.8%	8.8%	55.9%		8.8%	55.9%	
Maximum Green (s)	39.1	39.1	39.1	8.3	8.3	8.3	9.1	89.0		8.8	89.0	
Yellow Time (s)	3.7	3.7	3.7	3.4	3.4	3.4	3.7	4.0		3.7	4.0	
All-Red Time (s)	2.2	2.2	2.2	3.3	3.3	3.3	2.2	2.0		2.5	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.9	5.9		6.7	6.7	5.9	6.0		6.2	6.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	3.5	3.5	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)								5.0			5.0	
Flash Dont Walk (s)								13.0			13.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)		41.5	41.5		8.4	8.4	8.5	101.1		6.3	92.2	
Actuated g/C Ratio		0.24	0.24		0.05	0.05	0.05	0.59		0.04	0.54	
v/c Ratio		0.92	0.19		0.52	0.17	0.54	0.79		0.05	0.59	
Control Delay		88.6	1.8		99.4	1.8	67.0	47.9		79.3	28.7	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		88.6	1.8		99.4	1.8	67.0	47.9		79.3	28.7	
LOS		F	A		F	A	E	D		E	C	
Approach Delay		72.2			57.9			48.3			28.8	
Approach LOS		E			E			D			C	
Queue Length 50th (ft)		422	0		51	0	52	682		3	474	
Queue Length 95th (ft)		#587	0		66	0	m41	m581		15	484	
Internal Link Dist (ft)		94			106			1328			626	
Turn Bay Length (ft)			75			20	275			245		
Base Capacity (vph)		429	488		93	209	87	2891		87	2717	
Starvation Cap Reductn		0	0		0	0	0	0		0	0	
Spillback Cap Reductn		0	0		0	0	0	0		0	0	
Storage Cap Reductn		0	0		0	0	0	0		0	0	
Reduced v/c Ratio		0.92	0.19		0.49	0.16	0.51	0.79		0.03	0.57	

Intersection Summary

Area Type:	Other
Cycle Length:	170
Actuated Cycle Length:	170
Offset:	127 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.92
Intersection Signal Delay:	44.3
Intersection Capacity Utilization:	80.1%
Intersection LOS:	D
ICU Level of Service:	D

Lanes, Volumes, Timings

1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway

03/07/2023

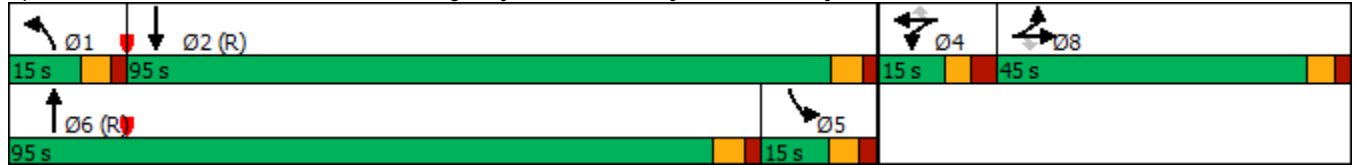
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

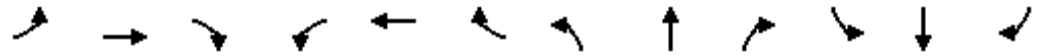
Splits and Phases: 1: US 1 (SW Federal Highway) & SW Palm City Road/Driveway



Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑		↘	↑↑↑		↘↘	↑↑	↘	↘	↑↑	↘
Traffic Volume (vph)	130	1016	353	240	1348	96	690	454	167	133	473	131
Future Volume (vph)	130	1016	353	240	1348	96	690	454	167	133	473	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	11	11	11	10	10	10
Storage Length (ft)	450		0	250		0	446		0	150		110
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	102			55			93			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	1.00	1.00	0.95	1.00
Frt		0.961			0.990				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	4724	0	1652	4867	0	3319	3421	1531	1652	3303	1478
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1711	4724	0	1652	4867	0	3319	3421	1531	1652	3303	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			6				190			113
Link Speed (mph)		35			35			40				30
Link Distance (ft)		1408			558			5595				775
Travel Time (s)		27.4			10.9			95.4				17.6
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	143	1116	388	261	1465	104	784	516	190	155	550	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	1504	0	261	1569	0	784	516	190	155	550	152
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			22				22
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5		2

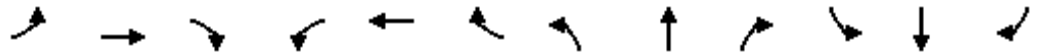
Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
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Synchro 11 Report
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Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										6		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	10.0	10.0	8.0	10.0	10.0
Minimum Split (s)	14.5	38.8		15.3	41.0		14.5	38.5	38.5	14.5	37.5	37.5
Total Split (s)	41.0	43.0		39.0	41.0		37.0	65.0	65.0	23.0	51.0	51.0
Total Split (%)	24.1%	25.3%		22.9%	24.1%		21.8%	38.2%	38.2%	13.5%	30.0%	30.0%
Maximum Green (s)	34.5	36.2		31.7	34.0		30.5	58.5	58.5	16.5	44.5	44.5
Yellow Time (s)	4.0	4.4		3.4	3.7		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.4		3.9	3.3		2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.8		7.3	7.0		6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		5.0			5.0			7.0	7.0		7.0	7.0
Flash Dont Walk (s)		27.0			29.0			25.0	25.0		24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	34.5	38.3		29.6	34.0		36.8	58.5	58.5	16.5	38.2	38.2
Actuated g/C Ratio	0.20	0.23		0.17	0.20		0.22	0.34	0.34	0.10	0.22	0.22
v/c Ratio	0.41	1.37		0.91	1.60		1.09	0.44	0.29	0.97	0.74	0.36
Control Delay	61.3	218.1		101.9	317.1		119.9	44.5	5.8	137.3	67.5	17.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.3	218.1		101.9	317.1		119.9	44.5	5.8	137.3	67.5	17.7
LOS	E	F		F	F		F	D	A	F	E	B
Approach Delay		204.5			286.4			79.2			71.3	
Approach LOS		F			F			E			E	
Queue Length 50th (ft)	165	-833		285	-916		-508	234	0	175	302	35
Queue Length 95th (ft)	245	#929		#440	#1012		#687	283	53	#309	337	89
Internal Link Dist (ft)		1328			478			5515			695	
Turn Bay Length (ft)	450			250			446			150		110
Base Capacity (vph)	347	1099		308	978		719	1177	651	160	864	470
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.41	1.37		0.85	1.60		1.09	0.44	0.29	0.97	0.64	0.32

Intersection Summary

Area Type:	Other
Cycle Length:	170
Actuated Cycle Length:	170
Offset:	127 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle:	150
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.60
Intersection Signal Delay:	178.6
Intersection LOS:	F
Intersection Capacity Utilization:	96.2%
ICU Level of Service:	F
Analysis Period (min):	15

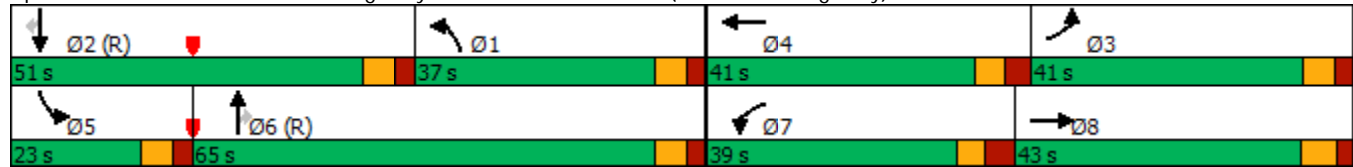
Lanes, Volumes, Timings

2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)

03/07/2023

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: S Kanner Highway/S Colorado Ave & US 1 (SW Federal Highway)



Lanes, Volumes, Timings
3: S Kanner Highway & SW Monterey Road

03/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑↑		↔	↑↑↑		↔	↑↑	↔
Traffic Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	452
Future Volume (vph)	448	658	74	265	867	67	249	799	167	147	697	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	10	11	11	10	11	11
Storage Length (ft)	450		175	325		0	620		0	350		0
Storage Lanes	2		1	2		0	1		0	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	1.00	0.91	0.91	1.00	0.95	1.00
Frts			0.850		0.989			0.974				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3421	1531	3319	3384	0	1652	4788	0	1652	3421	1531
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3421	1531	3319	3384	0	1652	4788	0	1652	3421	1531
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			158		5			26				67
Link Speed (mph)		35			40			45				40
Link Distance (ft)		901			622			786				5595
Travel Time (s)		17.6			10.6			11.9				95.4
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	477	700	79	273	894	69	274	878	184	150	711	461
Shared Lane Traffic (%)												
Lane Group Flow (vph)	477	700	79	273	963	0	274	1062	0	150	711	461
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		10			10			10				10
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1

Existing PM SW Palm City Road @ US-1 Intersection Feasibility Study 2:03 pm 03/06/2023
TCG

Synchro 11 Report
Page 7

Lanes, Volumes, Timings

3: S Kanner Highway & SW Monterey Road

03/07/2023

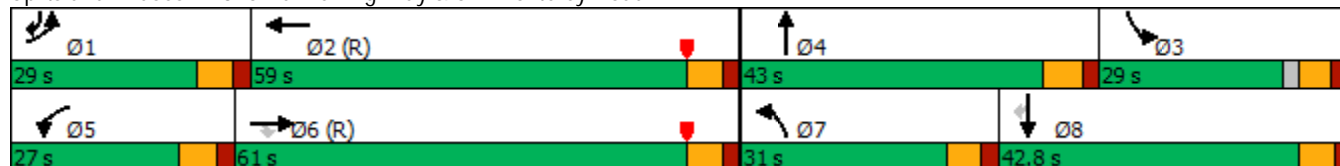
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



















Queue shown is maximum after two cycles.

Splits and Phases: 3: S Kanner Highway & SW Monterey Road



Lanes, Volumes, Timings
4: SW Pine Ave/SW Palm City Road

03/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	6	2	55	6	0	2	327	75	0	520	4
Future Volume (vph)	0	6	2	55	6	0	2	327	75	0	520	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	16	16	16	11	11	11	12	12	12
Storage Length (ft)	0		0	0		0	0		60	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.970							0.850		0.999	
Flt Protected					0.957							
Satd. Flow (prot)	0	1747	0	0	2020	0	0	1801	1531	0	1861	0
Flt Permitted					0.957							
Satd. Flow (perm)	0	1747	0	0	2020	0	0	1801	1531	0	1861	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		232			174			803			248	
Travel Time (s)		6.3			4.7			21.9			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	2	60	7	0	2	355	82	0	565	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	67	0	0	357	82	0	569	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		50			0			0			0	
Crosswalk Width(ft)		0			0			0			0	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	0.85	0.85	0.85	1.04	1.04	1.04	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	45.6%											
Analysis Period (min)	15											
	ICU Level of Service A											

APPENDIX C

PRELIMINARY OPINION OF PROBABLE COST INFORMATION

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 1A - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	30	\$1,126.39	\$33,791.70
0102.60	WORK ZONE SIGN	ED	60	\$0.22	\$13.20
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	60	\$0.67	\$40.20
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	60	\$5.14	\$308.40
0102115	TYPE III BARRICADE	ED	60	\$0.28	\$16.80
0104.10.3	SEDIMENT BARRIER	LF	500	\$2.44	\$1,220.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1000	\$44.00	\$44,000.00
0110.23	TREE REMOVAL	EA	0	\$1,639.38	\$0.00
0120.1	REGULAR EXCAVATION	CY	0	\$7.56	\$0.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, PG 76-22	TN	0	\$290.00	\$0.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	0	\$299.92	\$0.00
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	0	\$10,945.00	\$0.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	200	\$35.55	\$7,110.00
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	85	\$71.16	\$6,048.60
0527.2	DETECTABLE WARNINGS	SF	0	\$50.06	\$0.00
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	0	\$16.34	\$0.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	0	\$9,440.19	\$0.00
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	0	\$5.60	\$0.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	0	\$5.38	\$0.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	0	\$54.19	\$0.00
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	0	\$1,172.75	\$0.00
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	0	\$69.79	\$0.00
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	0	\$2,701.29	\$0.00
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	0	\$4,076.19	\$0.00
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	0	\$551.66	\$0.00
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	0	\$72,100.47	\$0.00
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	0	\$1,826.90	\$0.00
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	0	\$2,019.79	\$0.00
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	0	\$2,142.32	\$0.00
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	0	\$34,227.00	\$0.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	2	\$447.03	\$894.06
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	2	\$331.57	\$663.14
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	0	\$2.38	\$0.00
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	0	\$5.68	\$0.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0	\$8,278.21	\$0.00
	MISCELLANEOUS UTILITIES	LS	0	\$0.00	\$0.00
				SUBTOTAL	\$94,106.10
				30% Engineering & Contingency	\$28,231.83
				TOTAL	\$122,337.93

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 1B - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	45	\$1,126.39	\$50,687.55
0102.60	WORK ZONE SIGN	ED	90	\$0.22	\$19.80
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	90	\$0.67	\$60.30
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	90	\$5.14	\$462.60
0102115	TYPE III BARRICADE	ED	90	\$0.28	\$25.20
0104.10.3	SEDIMENT BARRIER	LF	500	\$2.44	\$1,220.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1125	\$44.00	\$49,500.00
0110.23	TREE REMOVAL	EA	0	\$1,639.38	\$0.00
0120.1	REGULAR EXCAVATION	CY	10	\$7.56	\$75.60
0337.7.80	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	5	\$290.00	\$1,450.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	0	\$299.92	\$0.00
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	0	\$10,945.00	\$0.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	250	\$35.55	\$8,887.50
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	100	\$71.16	\$7,116.00
0527.2	DETECTABLE WARNINGS	SF	2	\$50.06	\$100.12
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	0	\$16.34	\$0.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	0	\$9,440.19	\$0.00
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	0	\$5.60	\$0.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	0	\$5.38	\$0.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	0	\$54.19	\$0.00
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	0	\$1,172.75	\$0.00
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	0	\$69.79	\$0.00
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	0	\$2,701.29	\$0.00
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	0	\$4,076.19	\$0.00
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	0	\$551.66	\$0.00
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	0	\$72,100.47	\$0.00
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	0	\$1,826.90	\$0.00
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	0	\$2,019.79	\$0.00
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	0	\$2,142.32	\$0.00
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	0	\$34,227.00	\$0.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	4	\$447.03	\$1,788.12
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	4	\$331.57	\$1,326.28
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	75	\$2.38	\$178.50
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	25	\$5.68	\$142.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0.25	\$8,278.21	\$2,069.55
	MISCELLANEOUS UTILITIES	LS	0	\$0.00	\$0.00
				SUBTOTAL	\$125,109.12
				30% Engineering & Contingency	\$37,532.74
				TOTAL	\$162,641.86

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 1C - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	180	\$1,126.39	\$202,750.20
0102.60	WORK ZONE SIGN	ED	2160	\$0.22	\$475.20
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	180	\$0.67	\$120.60
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	360	\$5.14	\$1,850.40
0102115	TYPE III BARRICADE	ED	180	\$0.28	\$50.40
0104.10.3	SEDIMENT BARRIER	LF	2500	\$2.44	\$6,100.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1050	\$44.00	\$46,200.00
0110.23	TREE REMOVAL	EA	2	\$1,639.38	\$3,278.76
0120.1	REGULAR EXCAVATION	CY	700	\$7.56	\$5,292.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, PG 76-22	TN	250	\$290.00	\$72,500.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	50	\$299.92	\$14,996.00
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	5	\$10,945.00	\$54,725.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	500	\$35.55	\$17,775.00
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	350	\$71.16	\$24,906.00
0527.2	DETECTABLE WARNINGS	SF	2	\$50.06	\$100.12
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	500	\$16.34	\$8,170.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1	\$9,440.19	\$9,440.19
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	500	\$5.60	\$2,800.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	350	\$5.38	\$1,883.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	288	\$54.19	\$15,606.72
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	2	\$1,172.75	\$2,345.50
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	2	\$69.79	\$139.58
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	10	\$2,701.29	\$27,012.90
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	2	\$4,076.19	\$8,152.38
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	2	\$551.66	\$1,103.32
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	1	\$72,100.47	\$72,100.47
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	0	\$1,826.90	\$0.00
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	1	\$2,019.79	\$2,019.79
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	2	\$2,142.32	\$4,284.64
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	1	\$34,227.00	\$34,227.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	2	\$447.03	\$894.06
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	2	\$331.57	\$663.14
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	100	\$2.38	\$238.00
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	100	\$5.68	\$568.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0.25	\$8,278.21	\$2,069.55
	MISCELLANEOUS UTILITIES - GAS, ELECTRIC, FIBER	LS	1	\$200,000.00	\$200,000.00
				SUBTOTAL	\$844,837.92
				30% Engineering & Contingency	\$253,451.38
				TOTAL	\$1,098,289.30

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 2 - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	180	\$1,126.39	\$202,750.20
0102.60	WORK ZONE SIGN	ED	2160	\$0.22	\$475.20
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	180	\$0.67	\$120.60
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	360	\$5.14	\$1,850.40
0102.115	TYPE III BARRICADE	ED	180	\$0.28	\$50.40
0104.10.3	SEDIMENT BARRIER	LF	2500	\$2.44	\$6,100.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1050	\$44.00	\$46,200.00
0110.23	TREE REMOVAL	EA	4	\$1,639.38	\$6,557.52
0120.1	REGULAR EXCAVATION	CY	750	\$7.56	\$5,670.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, PG 76-22	TN	250	\$290.00	\$72,500.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	50	\$299.92	\$14,996.00
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	6	\$10,945.00	\$65,670.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	600	\$35.55	\$21,330.00
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	400	\$71.16	\$28,464.00
0527.2	DETECTABLE WARNINGS	SF	4	\$50.06	\$200.24
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	700	\$16.34	\$11,438.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1	\$9,440.19	\$9,440.19
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	500	\$5.60	\$2,800.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	350	\$5.38	\$1,883.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	288	\$54.19	\$15,606.72
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	2	\$1,172.75	\$2,345.50
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	2	\$69.79	\$139.58
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	10	\$2,701.29	\$27,012.90
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	2	\$4,076.19	\$8,152.38
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	2	\$551.66	\$1,103.32
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	1	\$72,100.47	\$72,100.47
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	1	\$1,826.90	\$1,826.90
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	1	\$2,019.79	\$2,019.79
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	3	\$2,142.32	\$6,426.96
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	1	\$34,227.00	\$34,227.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	4	\$447.03	\$1,788.12
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	4	\$331.57	\$1,326.28
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	125	\$2.38	\$297.50
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	125	\$5.68	\$710.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0.25	\$8,278.21	\$2,069.55
	MISCELLANEOUS UTILITIES - GAS, ELECTRIC, FIBER	LS	1	\$350,000.00	\$350,000.00
				SUBTOTAL	\$1,025,648.72
				30% Engineering & Contingency	\$307,694.62
				TOTAL	\$1,333,343.34

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 4 - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	180	\$1,126.39	\$202,750.20
0102.60	WORK ZONE SIGN	ED	2160	\$0.22	\$475.20
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	180	\$0.67	\$120.60
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	360	\$5.14	\$1,850.40
0102115	TYPE III BARRICADE	ED	180	\$0.28	\$50.40
0104.10.3	SEDIMENT BARRIER	LF	2500	\$2.44	\$6,100.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1100	\$44.00	\$48,400.00
0110.23	TREE REMOVAL	EA	4	\$1,639.38	\$6,557.52
0120.1	REGULAR EXCAVATION	CY	700	\$7.56	\$5,292.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, PG 76-22	TN	300	\$290.00	\$87,000.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	60	\$299.92	\$17,995.20
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	6	\$10,945.00	\$65,670.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	625	\$35.55	\$22,218.75
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	375	\$71.16	\$26,685.00
0527.2	DETECTABLE WARNINGS	SF	2	\$50.06	\$100.12
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	500	\$16.34	\$8,170.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	0	\$9,440.19	\$0.00
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	300	\$5.60	\$1,680.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	300	\$5.38	\$1,614.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	288	\$54.19	\$15,606.72
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	2	\$1,172.75	\$2,345.50
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	2	\$69.79	\$139.58
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	10	\$2,701.29	\$27,012.90
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	2	\$4,076.19	\$8,152.38
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	0	\$551.66	\$0.00
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	0	\$72,100.47	\$0.00
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	0	\$1,826.90	\$0.00
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	0	\$2,019.79	\$0.00
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	0	\$2,142.32	\$0.00
0654.2.21	MIDBLOCK CROSSWALK: RECTANGULAR RAPID FLASHING BEACON, FURNISH & INSTALL-SOLAR, COMPLETE SIGN ASSEMBLY- SINGLE DIRECTION	AS	2	\$10,246.04	\$20,492.08
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	0	\$34,227.00	\$0.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	2	\$447.03	\$894.06
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	2	\$331.57	\$663.14
0700.6.21	HIGHLIGHTED SIGN, F&I GROUND MOUNT-SOLAR POWERED, UP TO 12 SF	AS	2	\$8,813.69	\$17,627.38
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	100	\$2.38	\$238.00
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	100	\$5.68	\$568.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0.25	\$8,278.21	\$2,069.55
	MISCELLANEOUS UTILITIES - GAS, ELECTRIC, FIBER	LS	1	\$150,000.00	\$150,000.00
SUBTOTAL					\$748,538.68
30% Engineering & Contingency					\$224,561.60
TOTAL					\$973,100.29

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 5 - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

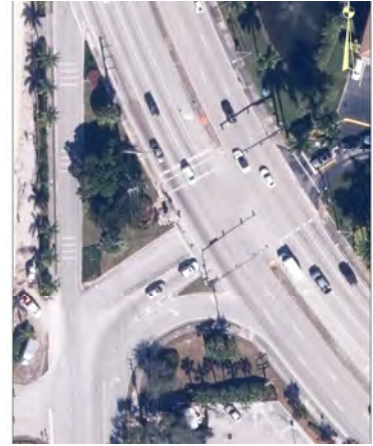
ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	240	\$1,126.39	\$270,333.60
0102.60	WORK ZONE SIGN	ED	2500	\$0.22	\$550.00
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	240	\$0.67	\$160.80
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	360	\$5.14	\$1,850.40
0102115	TYPE III BARRICADE	ED	180	\$0.28	\$50.40
0104.10.3	SEDIMENT BARRIER	LF	3500	\$2.44	\$8,540.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1750	\$44.00	\$77,000.00
0110.23	TREE REMOVAL	EA	5	\$1,639.38	\$8,196.90
0120.1	REGULAR EXCAVATION	CY	1000	\$7.56	\$7,560.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-9.5, PG 76-22	TN	500	\$290.00	\$145,000.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	110	\$299.92	\$32,991.20
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	6	\$10,945.00	\$65,670.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	625	\$35.55	\$22,218.75
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	500	\$71.16	\$35,580.00
0527.2	DETECTABLE WARNINGS	SF	4	\$50.06	\$200.24
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	500	\$16.34	\$8,170.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	0	\$9,440.19	\$0.00
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	300	\$5.60	\$1,680.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	300	\$5.38	\$1,614.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	288	\$54.19	\$15,606.72
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	2	\$1,172.75	\$2,345.50
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	2	\$69.79	\$139.58
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	10	\$2,701.29	\$27,012.90
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	2	\$4,076.19	\$8,152.38
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	0	\$551.66	\$0.00
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	0	\$72,100.47	\$0.00
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	0	\$1,826.90	\$0.00
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	0	\$2,019.79	\$0.00
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	0	\$2,142.32	\$0.00
0654.2.21	MIDBLOCK CROSSWALK: RECTANGULAR RAPID FLASHING BEACON, FURNISH & INSTALL-SOLAR, COMPLETE SIGN ASSEMBLY- SINGLE DIRECTION	AS	2	\$10,246.04	\$20,492.08
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	0	\$34,227.00	\$0.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	4	\$447.03	\$1,788.12
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	4	\$331.57	\$1,326.28
0700.6.21	HIGHLIGHTED SIGN, F&I GROUND MOUNT-SOLAR POWERED, UP TO 12 SF	AS	2	\$8,813.69	\$17,627.38
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	300	\$2.38	\$714.00
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	100	\$5.68	\$568.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	0.5	\$8,278.21	\$4,139.11
	MISCELLANEOUS UTILITIES - GAS, ELECTRIC, FIBER	LS	1	\$250,000.00	\$250,000.00
				SUBTOTAL	\$1,037,278.34
				30% Engineering & Contingency	\$311,183.50
				TOTAL	\$1,348,461.84



ATTACHMENT C

MPO BOARD PRESENTATION ON SEPTEMBER 18, 2023

US 1 /SR 5/FEDERAL HIGHWAY at SW PALM CITY ROAD FEASIBILITY STUDY



MPO MEETING – SEPTEMBER 18, 2023



THE CORRADINO GROUP

1

PRESENTATION OUTLINE



- Project Team and Project Advisory Committee
- Project Information
 - Goals & Objectives
 - Study Area
 - Schedule
- Alternatives
- Preferred Alternatives – PAC, Public, City Commission, CAC, TAC
- Q & A



THE CORRADINO GROUP

2




PROJECT ADVISORY COMMITTEE MEMBERS



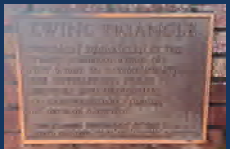
- City of Stuart City Manager
- Florida Department of Transportation Representative
- Martin County Public Works Director
- Martin County Engineer
- Martin County Traffic Engineering Manager
- City of Stuart Public Works Director
- City of Stuart Utilities & Engineering Director
- Stuart/Martin Chamber President
- Treasure Coast Regional Planning Council Executive Director
- Royal Palm Financial Center Representative
- CubeSmart (MacArthur Holdings, LLC) Representative
- Publix Representative
- Mayor’s Citizen Representative






3



GOALS & OBJECTIVES



- ▶ Improve safety and mobility for all modes at the intersection of US-1 and SW Palm City Road.
- ▶ Manage speeds along SW Palm City Road
- ▶ Reduce traffic volumes along SW Palm City Road

4



**PROJECT OVERVIEW
STUDY AREA**

SR 714 (SW Monticello Rd)

SW Palm City Rd

SR 76 (S Kanner Hwy)

US 1 (SW Federal Hwy)

MARTIN MPO
Metropolitan Planning Organization

THE CORRADINO GROUP

*Historical Marker: EWING TRIANGLE
Established by Congress in 1845, the
Triangle is a unique blend of
history and modernity, offering
a glimpse into the past while
providing a modern shopping and
entertainment destination.
The Triangle is a testament to
the vision and leadership of
the community's founders.*

5



**PROJECT OVERVIEW
STUDY AREA**

Publix

CubeSmart

SW Palm City Rd

US 1 (SW Federal Hwy)

MARTIN MPO
Metropolitan Planning Organization

THE CORRADINO GROUP

*Historical Marker: EWING TRIANGLE
Established by Congress in 1845, the
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entertainment destination.
The Triangle is a testament to
the vision and leadership of
the community's founders.*

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**PROJECT SCHEDULE
KEY DATES/DELIVERABLES**

- ✓ PAC Meetings – February 15, 2023; August 1, 2023
- ✓ Public Workshops – March 8, 2023; August 23, 2023
- ✓ Existing Conditions Technical Memorandum – March 17, 2023
- ✓ Stuart Commission Meeting – August 28, 2023
- ✓ CAC and TAC Meetings – September 6, 2023
- ✓ BPAC Meeting – September 11, 2023
- 🎯 MPO Meeting – September 18, 2023
- Alternatives Technical Memorandum – October 5, 2023
- Other Meetings (CAC, BPAC, TAC, MPO) – November/December 2023
- Draft Report – November 8, 2023
- Final Report – December 11, 2023

MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

7



ALTERNATIVE 1


Elimination of Free-Flow Right-Turn & Replace w/ Green Space

Addition of 12' Right-Turn Lane


MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

8






ALTERNATIVE 1




Pros

- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.

Preliminary Opinion of Probable Cost : \$1,100,000

9




ALTERNATIVE 1



Cons

- ROW and utility impacts
 - Turn lane storage length may impact properties north of intersection.
 - Significant utility conflicts.
 - Traffic signal rebuild/major modification.
- Not expected to reduce speeds along SW Palm City Road, south of intersection.
- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane.

Preliminary Opinion of Probable Cost : \$1,100,000





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ALTERNATIVE 2

2

Add Channelized Right-Turn Lane Along Southbound US 1 (SW Federal Highway) with Raised Pedestrian Island

1

Installing Crosswalk Across Southern Leg of US 1 (SW Federal Highway)

SOURCE: FDOT – Preliminary Multimodal Project Recommendations and Corridor-Wide Strategies

11


ALTERNATIVE 2

Pros

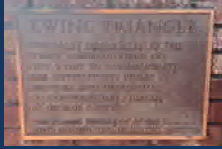
- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of the intersection of US 1 and SW Palm City Road.
- Improve pedestrian safety at the pedestrian crossing of the uncontrolled right turn.

Preliminary Opinion of Probable Cost: \$1,335,000

12





ALTERNATIVE 2




Cons

- ROW and utility impacts
 - Turn lane storage length may impact additional properties north of intersection.
 - Significant utility conflicts.
 - Potential traffic signal rebuild/major modification.
- Not expected to reduce speeds along SW Palm City Road, south of intersection.
- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane
- Safety – Pedestrian safety concerns.

Preliminary Opinion of Probable Cost : \$1,335,000



13

ALTERNATIVE 3






14



ALTERNATIVE 3



Pros


- Reduce the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduce the speeds in the immediate vicinity of intersection of SW Palm City Road with SW Pine Avenue and SW Indianola Street.
- Improve pedestrian safety.

Preliminary Opinion of Probable Cost: \$1,850,000

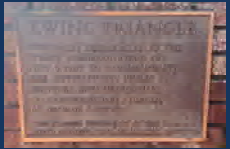





15




ALTERNATIVE 3




Cons

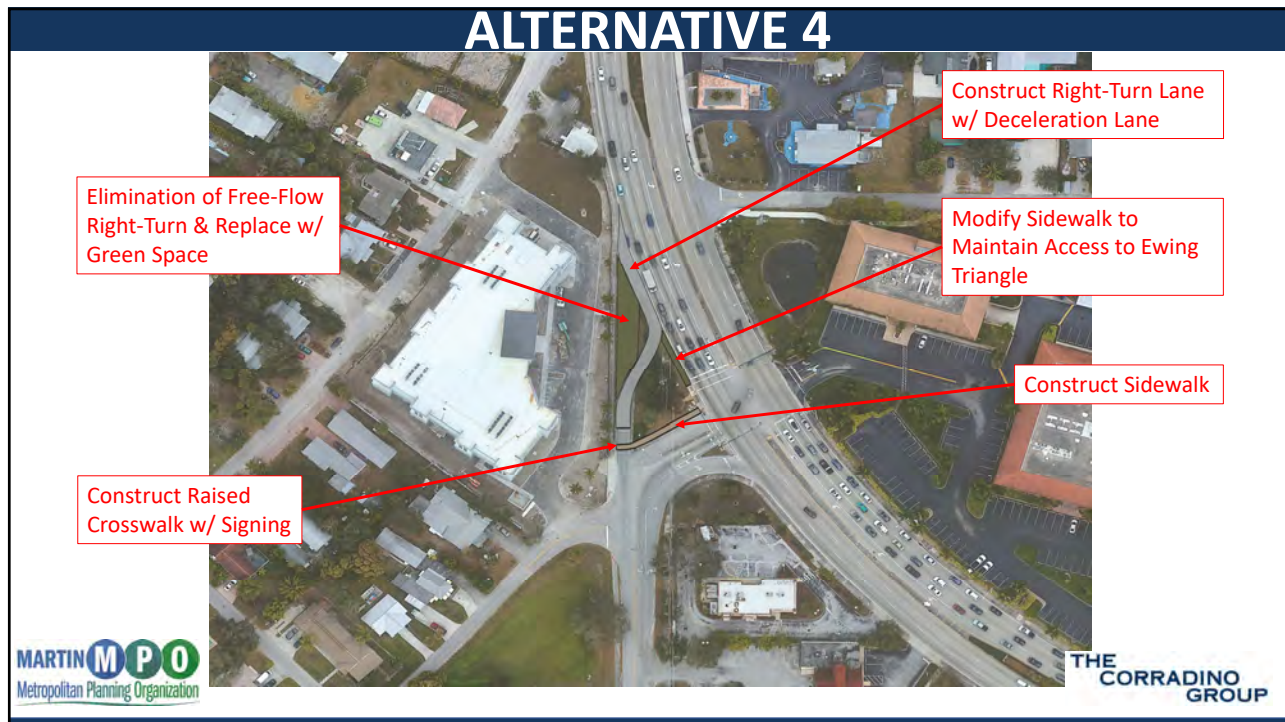
- Not expected to reduce speeds along SW Palm City Road south of SW Indianola Street.
- Potential ROW impact on SW Palm City Road between SW Pine Avenue and SW Indianola Street.
- Utility impacts
 - Potential overhead electrical conflict.
 - Potential gas line conflict.
 - Potential water line conflicts on both sides of SW Palm City Road.
- Safety – High potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver for the right turn at SW Palm City Road.

Preliminary Opinion of Probable Cost: \$1,850,000



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ALTERNATIVE 4

Pros

- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduced speeds in the immediate vicinity of intersection of SW Palm City Road with SW Pine Avenue and SW Indianola Street.
- Improve pedestrian safety.

Preliminary Opinion of Probable Cost: \$975,000

MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

Elimination of Free-Flow Right-Turn & Replace w/ Green Space

Construct Right-Turn Lane w/ Deceleration Lane



Modify Sidewalk to Maintain Access to Ewing Triangle

Construct Sidewalk

Construct Raised Crosswalk w/ Signing

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ALTERNATIVE 4

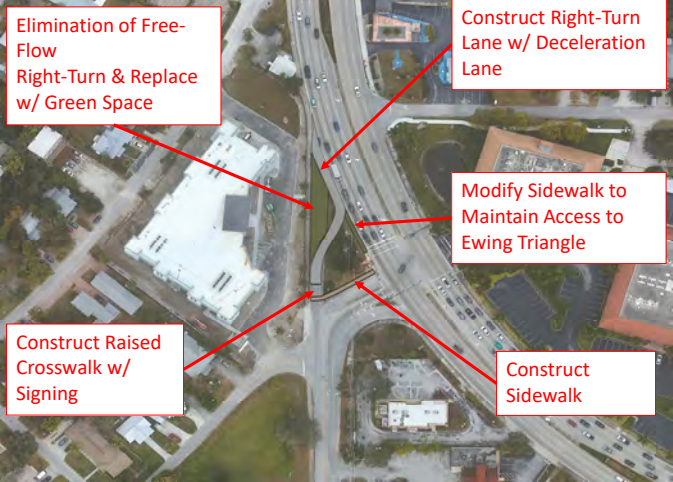



Cons

- Not expected to reduce speeds along SW Palm City Road south of intersection.
- Potential utility impacts within Ewing Triangle
 - Overhead electrical; gas line; AT&T and water
- Safety – Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane.

Preliminary Opinion of Probable Cost : \$975,000







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ALTERNATIVE 5



20



ALTERNATIVE 5



Pros


- Minor reduction of the right-turn volume from southbound US 1 to SW Palm City Road.
- Reduced speeds in the immediate vicinity of intersection of SW Palm City Road with SW Pine Avenue and SW Indianola Street.
- Improve pedestrian safety.

Preliminary Opinion of Probable Cost: \$1,350,000

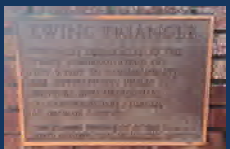





21





ALTERNATIVE 5

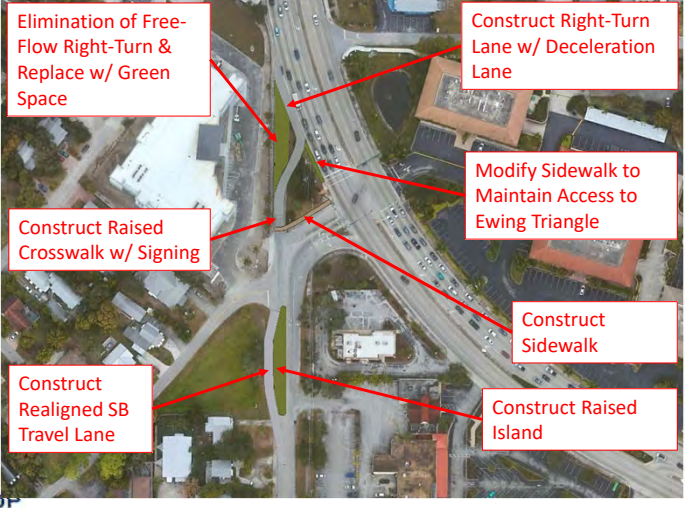


Cons

- Potential utility impacts within Ewing Triangle
 - Overhead electrical; gas line; AT&T and water
- Some potential utility conflicts along west side of SW Palm City Road for realignment.
- Not expected to reduce speeds along SW Palm City Road, south of Poppleton Creek Bridge.
- Safety - Potential to create rear-end collisions on southbound US 1 as vehicles slow to maneuver into the southbound US 1 right turn lane.

Preliminary Opinion of Probable Cost: \$1,350,000



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SW PALM CITY ROAD TRAFFIC CALMING ALTERNATIVE

IV. COMPLETE STREETS - SELECTED SEGMENT CONCEPTS

SW PALM CITY ROAD (CONTINUED)

EXISTING CONDITIONS		CONCEPTUAL DESIGN	
ROW	12' (6' on each side)	ROW	12' (6' on each side)
EDGE CONDITION	12' (6' on each side) - 12' (6' on each side)	EDGE CONDITION	12' (6' on each side) - 12' (6' on each side)
TRAVEL LANE	2 lanes, 11' each	TRAVEL LANE	2 lanes, 11' each
LANDSCAPING	Minimal, 2 palm trees per block	LANDSCAPING	Minimal, 2 palm trees per block

LOCATION MAP TO DIRECTION OF SELECT STREET SECTION

MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

COMPLETE STREETS: ACCESS TO TRANSIT STUDY 41

23



SW PALM CITY ROAD TRAFFIC CALMING ALTERNATIVE

IV. COMPLETE STREETS - SELECTED SEGMENT CONCEPTS

SW PALM CITY ROAD (CONTINUED)

EXISTING CONDITIONS		CONCEPTUAL DESIGN	
ROW	12' (6' on each side)	ROW	12' (6' on each side)
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TRAVEL LANE	2 lanes, 11' each	TRAVEL LANE	2 lanes, 11' each
LANDSCAPING	Minimal, 2 palm trees per block	LANDSCAPING	Minimal, 2 palm trees per block

LOCATION MAP TO DIRECTION OF SELECT STREET SECTION

MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

COMPLETE STREETS: ACCESS TO TRANSIT STUDY 41


Pros

- Potential reduction of speeds on SW Palm City Road.
- Potential reduction of traffic volumes on SW Palm City Road.
- Increased bicycle safety on SW Palm City Road.


Cons

- Redistribution of traffic to US 1 and Kanner Highway intersection and other local streets, such as SW Indian Grove Drive, SW Winnachee Drive, S Manor Drive.

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SUMMARY OF ALTERNATIVES




Alternative	Traffic Operations	Physical Impacts	Opinion of Probable Cost	Goals & Objectives
1				
2				
3				
4				
5				
6	Alternative 6 could be inclusive with any of the above alternatives. The objective of Alternative 6 is to address vehicle speeds both southbound and northbound and safety along SW Palm City Road outside of the US 1 intersection limits.			

Legend

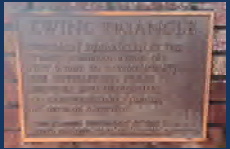
- Best
- ◐ Very Good
- ◑ Good
- ◒ OK
- Not Good

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PAC GENERAL COMMENTS



General Comments

1. Concern about curb radii for delivery trucks to Publix and commercial businesses.
2. Concern of potential traffic operations of intersection and overall cost for Alternative 3.
3. Concern about the raised crosswalk at the southern end of the new southbound lane for Alternatives 4 and 5.
4. Consider including the Traffic Calming Alternative in combination with selected alternative to address the speeding along SW Palm City Road.

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PAC PREFERRED ALTERNATIVES

ALTERNATIVE 1

ALTERNATIVE 2

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GENERAL PUBLIC COMMENTS




- Attendance: 80+ individuals
- Number of Written Comments: 23 comment cards filled out








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GENERAL PUBLIC COMMENTS



General Comments

1. Need more enforcement for speeding and trucks.
2. Love the traffic calming alternative.
3. Need to address SW Palm City Road at SW Monterey Road.
4. These are all band-aids and don't address the real problem.
5. Multiuse path along SW Palm City Road.



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PUBLIC WORKSHOP

ALTERNATIVE 1

- Limitation of Free-Flow Right-Turn & Replace w/ Green Space
- Addition of 12 Right-Turn Lanes

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE

ALTERNATIVE 2

- Limitation of Free-Flow Right-Turn & Replace w/ Green Space
- Addition of 12 Right-Turn Lanes

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE

ALTERNATIVE 3

- Limitation of Free-Flow Right-Turn & Replace w/ Green Space
- Addition of 12 Right-Turn Lanes

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE

ALTERNATIVE 4

- Limitation of Free-Flow Right-Turn & Replace w/ Green Space
- Addition of 12 Right-Turn Lanes

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE

ALTERNATIVE 5

- Limitation of Free-Flow Right-Turn & Replace w/ Green Space
- Addition of 12 Right-Turn Lanes

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE






SW PALM CITY ROAD TRAFFIC CALMING ALTERNATIVE

Legend:
 ● THIS IS THE BEST
 ● ACCEPTABLE
 ● NEUTRAL
 ● DISAPPROVE




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PUBLIC WORKSHOP

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
YES/Acceptable	10	0	30	33	39
Maybe	6	3	12	10	4
NO/Doubtful	28	37	19	10	7




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Metropolitan Planning Organization



Public Response


- Yes – 57
- No – 3



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PREFERRED ALTERNATIVE (PUBLIC WORKSHOP)



Elimination of Free-Flow Right-Turn & Replace w/ Green Space

Construct Right-Turn Lane w/ Deceleration Lane


Construct Raised Crosswalk w/ Signing

Modify Sidewalk to Maintain Access to Ewing Triangle


Construct Realigned SB Travel Lane

Construct Sidewalk

Construct Raised Island



MARTIN MPO
Metropolitan Planning Organization



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CITY OF STUART COMMISSION

August 28, 2023

Public Comments at Commission Meeting

- a) We can do whatever, but we need to change driver behavior.
- b) Problem is traffic and trucks cutting through on SW Palm City Road.
- c) Ask the MPO to get this on FDOT's radar and on a high priority list. Additionally, include the traffic calming alternative as part of the project.

City Commission General Comments

- a) Mayor McDonald – This is the first time we have come close to a consensus for improvements related to this project. YAY!
- b) Motion to recommend Alternative 5 with the Traffic Calming Alternative for the MPO to put on the priority list. **MOTION APPROVED – 5 - 0**



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TAC MEETING

TAC General Comments

- a) No matter what we do, if traffic is diverted from SW Palm City Road, then it will make things worse on the major routes such as US 1, Kanner Highway and SW Monterey Road.
- b) Traffic control at the connection of the right-turn lane with SW Palm City Road is critical. This needs to be closely evaluated and coordinated signalization with the main intersection considered.
- c) Include with Alternative 5 the crosswalks at the intersection of US 1 and SW Palm City Road as shown in Alternative 2.
- d) The preferred alternative should include the Traffic Calming Alternative.
- e) **TAC RECOMMENDATION** - Alternative 5 with crosswalks at intersection and inclusion of the Traffic Calming Alternative to be on the priority list for projects.



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PREFERRED ALTERNATIVE (CITY COMMISSION, CAC and TAC)

ALTERNATIVE 5

Elimination of Free-Flow Right-Turn & Replace w/ Green Space

Construct Right-Turn Lane w/ Deceleration Lane

Modify Sidewalk to Maintain Access to Ewing

Construct Raised Crosswalk w/ Signing

Construct Raised

Construct Realigned SB

Construct Raised

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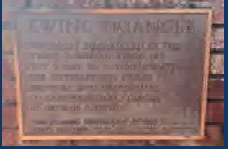
NEXT STEPS

- Joint CAC/BPAC/TAC – December 4, 2023
- MPO Meeting/Final Report – December 11, 2023



MARTIN MPO Metropolitan Planning Organization

THE CORRADINO GROUP

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Q & A

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CONTACT INFO

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 Joy Tracy Puerta
jpuerta@martin.fl.us

The Corradino Group Project Manager
 Gerald Bolden, PE, PTOE
 615.406.8707
gbolden@corradino.com




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ATTACHMENT D

OPINION OF PROBABLE COST

US 1 at SW PALM CITY ROAD FEASIBILITY STUDY
Alternative 5 - PLANNING LEVEL OPINION OF PROBABLE COST
Florida Department of Transportation
Item Average Unit Cost
From 2022/06/01 to 2023/05/31
Market Area: 11
Report Run On: 06/26/2023

ITEM #	DESCRIPTION	UNIT	QUANTITY	AVERAGE UNIT	
				COST	TOTAL COST
0102.01	MAINTENANCE OF TRAFFIC	DA	300	\$1,126.39	\$337,917.00
0102.60	WORK ZONE SIGN	ED	2500	\$0.22	\$550.00
0102.62.13	BARRIER MOUNTED WORK ZONE SIGN	ED	240	\$0.67	\$160.80
0102.76	ARROW BOARD/ADVANCE WARNING ARROW PANEL	ED	360	\$5.14	\$1,850.40
0102913.21	REMOVABLE TAPE, WHITE, SOLID 6"	GM	1	\$15,125.64	\$15,125.64
0102115	TYPE III BARRICADE	ED	180	\$0.28	\$50.40
0104.10.3	SEDIMENT BARRIER	LF	3500	\$2.44	\$8,540.00
0104.18	INLET PROTECTION SYSTEM	EA	6	\$500.00	\$3,000.00
0110.4.10	REMOVAL OF EXISTING CONCRETE	SY	1750	\$44.00	\$77,000.00
0110.23	TREE REMOVAL	EA	7	\$2,225.04	\$15,575.28
0120.1	REGULAR EXCAVATION	CY	2000	\$7.56	\$15,120.00
0327.70.6	MILLING EXISTING ASPHALT PAVEMENT, 1 1/2" AVG DEPTH	SY	10350	\$3.50	\$36,225.00
0337.7.80	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	1000	\$290.00	\$290,000.00
0339.1	MISCELLANEOUS ASPHALT PAVEMENT	TN	300	\$299.92	\$89,976.00
0425.1311	INLETS, CURB, TYPE P-1, <10'	EA	3	\$10,945.00	\$32,835.00
0520.1.7	CONCRETE CURB & GUTTER, TYPE E	LF	900	\$35.55	\$31,995.00
0522.1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	525	\$83.14	\$43,648.50
0527.2	DETECTABLE WARNINGS	SF	5	\$50.06	\$250.30
0536.1.1	GUARDRAIL -ROADWAY, GENERAL TL-3	LF	150	\$49.70	\$7,455.00
0536.85.24	GUARDRAIL END TREATMENT- PARALLEL APPROACH TERMINAL	EA	2	\$3,663.02	\$7,326.04
0546.72.1	GROUND-IN RUMBLE STRIPS, 16"	GM	0.2	\$2,294.24	\$458.85
0570.1.2	PERFORMANCE TURF, SOD	SY	460	\$3.93	\$1,807.80
0630.2.11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	200	\$16.34	\$3,268.00
0632.7.1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1	\$9,440.19	\$9,440.19
0633.124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97-144 FIBERS	LF	100	\$5.60	\$560.00
0633.1420	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND	LF	100	\$5.38	\$538.00
0633.2.31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	144	\$54.19	\$7,803.36
0633.3.11	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE ENCLOSURE	EA	1	\$1,172.75	\$1,172.75
0633.3.12	FIBER OPTIC CONNECTION HARDWARE, F&I SPLICE TRAY	EA	1	\$69.79	\$69.79
0635.2.12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	2	\$2,701.29	\$5,402.58
0646.1.11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	2	\$4,076.19	\$8,152.38
0646.1.60	ALUMINUM SIGNALS POLE, REMOVE	EA	0	\$551.66	\$0.00
0649.21.6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	EA	2	\$72,100.47	\$144,200.94
0650.1.34	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY	AS	4	\$1,826.90	\$7,307.60
0650.1.38	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION STRAIGHT, 1 WAY	AS	0	\$2,019.79	\$0.00
0653.1.12	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS	AS	2	\$2,142.32	\$4,284.64
0654.2.21	MIDBLOCK CROSSWALK: RECTANGULAR RAPID FLASHING BEACON, FURNISH & INSTALL-SOLAR, COMPLETE SIGN ASSEMBLY- SINGLE DIRECTION	AS	0	\$10,246.04	\$0.00
0660.3.12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA	2	\$9,847.72	\$19,695.44
0676.1116	TRAFFIC SIGNAL CONTROLLER CABINET, FURNISH & INSTALL WITHOUT CONTROLLER, NEMA SIZE6, 44" W X 52" H X 24" D	EA	0	\$34,227.00	\$0.00
0700.1.11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	4	\$447.03	\$1,788.12
0700.3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	6	\$331.57	\$1,989.42
0700.6.21	HIGHLIGHTED SIGN, F&I GROUND MOUNT-SOLAR POWERED, UP TO 12 SF	AS	2	\$8,813.69	\$17,627.38
0711.11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	850	\$2.38	\$2,023.00
0711.11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	225	\$5.68	\$1,278.00
0711.15102	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SOLID, 8"	GM	1	\$8,278.21	\$8,278.21
711.1417	THERMOPLASTIC, PREFORMED, WHITE, ARROW	EA	15	\$190.13	\$2,851.95
	MISCELLANEOUS UTILITIES - GAS, ELECTRIC, FIBER, WATER	LS	1	\$300,000.00	\$300,000.00
	MOBILIZATION (10% CONSTRUCTION COST)	LS	1	\$156,459.88	\$156,459.88
	CONSTRUCTION ENGINEERING INSPECTION (20% CONSTRUCTION COST)	LS	1	\$312,919.75	\$312,919.75
				SUBTOTAL	\$2,033,978.39
				30% Engineering & Contingency	\$610,193.52
				TOTAL	\$2,644,171.90





**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 3
WORDING: TRANSPORTATION SAFETY PERFORMANCE TARGETS - 2024		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: N/A

BACKGROUND

State Departments of Transportation and Metropolitan Planning Organizations (MPOs) are required to continue to adopt Safety Performance Targets to meet Federal Highway Administration (FHWA) requirements. There are five Federal Safety Performance Measures: Number of Fatalities; Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT); Number of Serious Injuries; Rate of Serious Injuries per 100 million VMT; Number of Non-motorized Fatalities and Serious Injuries. Last year’s Statewide and MPO Safety Targets are included in the Martin MPO’s adopted FY24-FY28 Transportation Improvement Program (TIP).

The Florida Department of Transportation (FDOT) has again identified “Vision Zero” Targets (goal of no fatalities and injuries) for all five of the Safety Performance Measures, supporting the philosophy that the death or injury of any person is unacceptable. Although data for fatalities and injuries could continue to trend upward in 2024 or decrease, FDOT expects that the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities and injuries.

ISSUES

MPOs have until February 27, 2024, to adopt the FDOT “Vision Zero” Targets for all five Safety Performance Measures. Given FDOT’s resources and expertise in data collection and analysis, Martin MPO is requesting the adoption of FDOT’s Targets of “Vision Zero”.

RECOMMENDED ACTION

- a. Recommend for approval
- b. Recommend for approval with comments

APPROVAL

MPO

ATTACHMENTS

- 1. 2024 Safety Performance Measures and Forecasting Summary Sheet
- 2. Draft Resolution 24-04

Calendar Year 2024 Targets

Number of Fatalities	0.0
----------------------	-----

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting on ARIMA Hybrid Regression Model with VMT, the five year rolling average for total fatalities on Florida’s roads is forecasted to be between 3,336 and 3,698 in 2024. Florida’s target for fatalities is zero in 2024. While the data forecast indicates Florida’s five year rolling average for fatalities could continue to trend upward in 2023 and 2024, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities.

Number of Serious Injuries	0.0
----------------------------	-----

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five year rolling average for serious injuries on Florida’s roads is forecasted to be between 14,511 and 16,141 in 2024. Florida’s target for serious injuries is zero in 2024. The data forecast indicates Florida’s five-year rolling average of serious injuries will continue to trend downward in 2023 and 2024. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in the number of serious injuries on Florida’s roads.

Fatality Rate	0.000
---------------	-------

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five year rolling average for fatality rate per 100 million VMT (vehicle miles traveled) on Florida’s roads is forecasted to be between 0.53 to 2.54 in 2024. Florida’s target for fatality rate per 100 million VMT is zero in 2024. While data forecast indicates Florida’s fatality rate per 100 million VMT will trend downward in 2023 and 2024, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the rate of traffic fatalities.

Serious Injury Rate	0.000
---------------------	-------

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting the five year rolling average for serious injury rate per 100 million VMT (vehicle miles traveled) on Florida’s roads is forecasted to be between 3.32 and 10.05 in 2024. Florida’s target for serious injury rate per million VMT is zero in 2024. While the data forecast indicates Florida’s serious injury rate per 100 million VMT could continue to trend downward in 2023 and 2024, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the rate of serious injury.

Total Number of Non-motorized Fatalities and Serious Injuries	0.0
----------------------------------------------------------------------	------------

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, number of non-motorized fatalities and serious injuries on Florida’s roads is forecasted to be between 3,036 to 3,392 in 2024. Florida’s target for number of non-motorized fatalities and serious injuries is zero in 2023. While the data forecast indicates Florida’s number of non-motorized fatalities and serious injuries could continue to trend downward in 2023 and 2024, the FDOT State Safety Office expects the projects chosen for funding will create a downward trend in the number of pedestrian fatalities.

A few of the more accepted approaches to forecasting time series data are (1) regression models, (2) autoregressive integrated moving average models (ARIMA), and (3) a hybrid variation of these two approaches. Both methodological tools were used in the pre-forecasting and forecasting processes. The five selected models for the federal safety performance measures have been developed based on accepted statistical modeling practices. The models proved useful in providing forecasts of future fatalities and serious injuries for 2023 and 2024, based on data from January 2007 to 2022. It is recommended that the models be reevaluated annually as more data/information becomes available. It is possible that with new data, potentially new functional forms of the forecasting equations will emerge. However, as with any forecasting method, future predictions will always be challenging and inexact.

RESOLUTION NUMBER #24-04

**A RESOLUTION OF THE MARTIN
METROPOLITAN PLANNING ORGANIZATION OF
MARTIN COUNTY, FLORIDA, TO ADOPT THE
FLORIDA DEPARTMENT OF
TRANSPORTATION'S "VISION ZERO" SAFETY
PERFORMANCE TARGETS TO MEET FEDERAL
HIGHWAY ADMINISTRATION REQUIREMENTS**

WHEREAS, State Departments of Transportation and Metropolitan Planning Organizations (MPOs) are required to adopt Safety Performance Targets annually to meet Federal Highway Administration (FHWA) requirements; and

WHEREAS, there are five Federal Safety Performance Measures: Number of Fatalities; Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT); Number of Serious Injuries; Rate of Serious Injuries per 100 million VMT; Number of Non-motorized Fatalities and Serious Injuries; and

WHEREAS, the Florida Department of Transportation (FDOT) supports the philosophy that the death or injury of any person is unacceptable; and

WHEREAS, FDOT has identified "Vision Zero" Targets (the goal of no fatalities and injuries) for all five of the Safety Performance Measures in 2024; and

WHEREAS, given FDOT's resources and expertise in data collection and analysis, almost all of the 27 Florida MPOs are adopting FDOT's targets of "Vision Zero"; and

WHEREAS, Florida MPOs are required to submit Safety Performance Targets to FDOT by February 27, 2024.

NOW, THEREFORE, BE IT RESOLVED BY THE MARTIN METROPOLITAN PLANNING ORGANIZATION, THAT:

Section 1. The Martin MPO hereby adopts the FDOT "Vision Zero" targets for all five Federal Safety Performance Measures.

Section 2. The MPO Administrator or designee is authorized to work with FDOT to provide required information for submittal.

DULY PASSED AND ADOPTED THIS 11th DAY OF December, 2023

MARTIN METROPOLITAN PLANNING
ORGANIZATION

Troy McDonald, Chairman

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

Sarah W. Woods, County Attorney

ATTEST:

Anthony O'Neill-Butler, Clerk



**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 3
WORDING: 2023 COMMUNITY CHARACTERISTICS DRAFT REPORT		
REQUESTED BY: MPO	PREPARED BY: Lucine Martens / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: 2023 Community Characteristics Draft Report

BACKGROUND

Title VI of the Civil Rights Act of 1964 and subsequent legislation and executive orders prohibit discrimination against or exclusion of individuals on the basis of race, color, national origin, minority status, income level, or ability to speak English by agencies that receive Federal funding. In addition, guidance from the USDOT requires that MPOs collect and analyze socio-economic data to better incorporate the needs of diverse groups into the transportation decision-making process.

ISSUES

At the December 11, 2023, MPO Policy Board meeting, the consultant will present and seek approval for the Martin County 2023 Community Characteristics Draft Report. This report divides Martin County into 10 planning areas and documents the demographic, socioeconomic, and relevant data for transportation planning purposes. This report also includes crash data. Meeting Federal requirements related to traditionally underserved populations, the Community Characteristics Report will be used by the MPO for public involvement efforts. It will also serve as a valuable informational resource for Martin County agencies, municipalities, and community stakeholders.

RECOMMENDED ACTION

- a. Motion to approve the 2023 Community Characteristics Draft Report.
- b. Motion to approve the 2023 Community Characteristics Draft Report, with comments.

APPROVAL

MPO

ATTACHMENTS

- a. 2023 Community Characteristics Draft Report – PowerPoint Presentation
- b. 2023 Community Characteristics Draft Report



2023 Community Characteristics Report

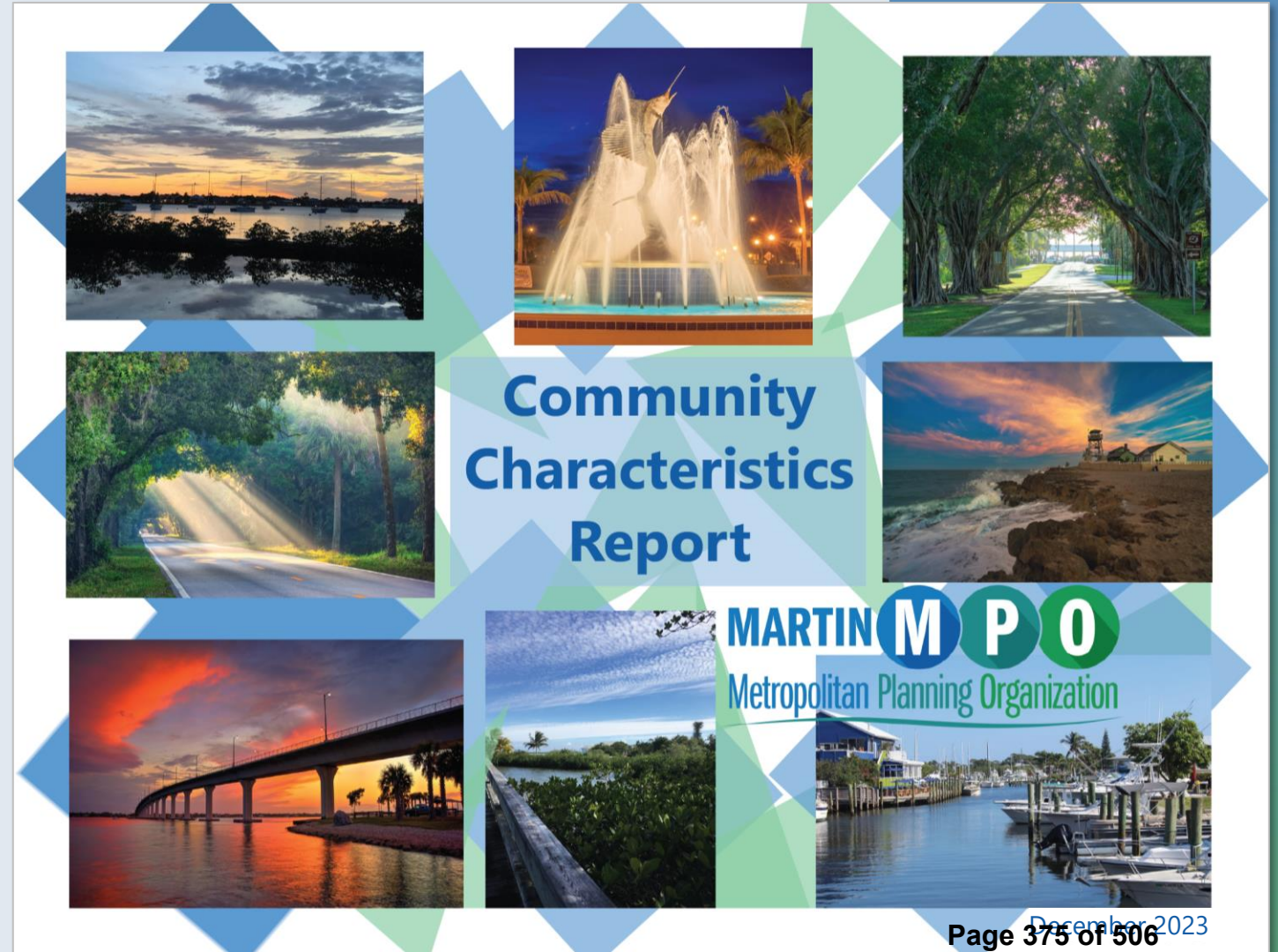
MPO Policy Board Meeting
December 11, 2023

MPO Policy Board Meeting 12/11/2023

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Agenda

- Background & Purpose
- Approach & Data Sources
- Countywide Trends
- 2023 Report Organization:
 - Overview & Key Features
 - Demographic Data
 - Economic Data
 - Commuting Characteristics
 - Crash Characteristics
- Next Steps



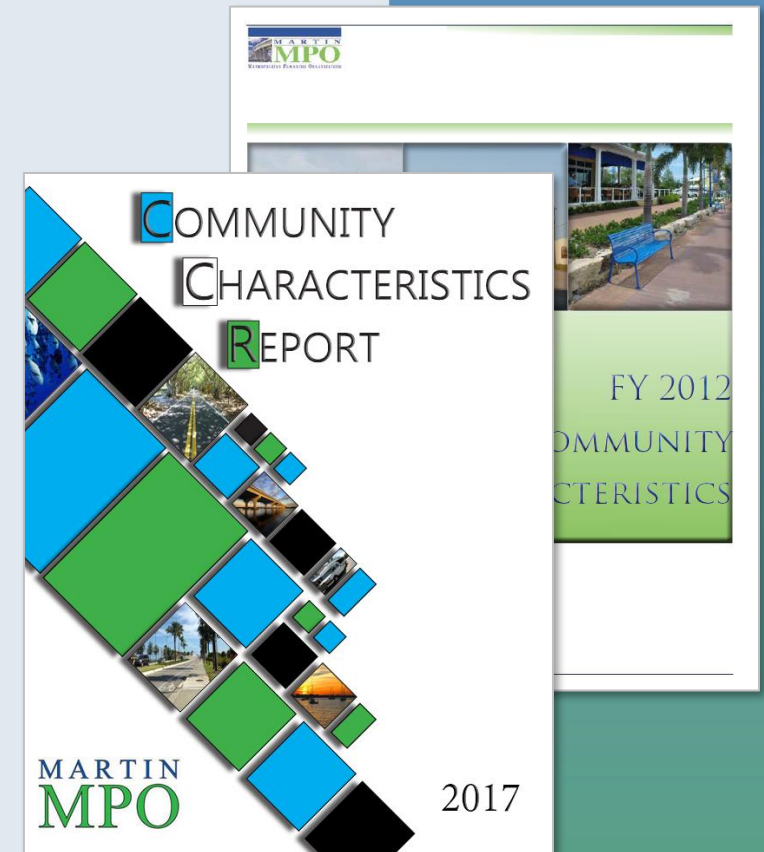
Community Characteristics Report

MARTIN MPO
Metropolitan Planning Organization

December 2023

Background & Purpose

- Produced regularly since 2012
- Organized by Martin County Community Planning Areas
- Provides socioeconomic and other relevant data for transportation planning purposes
- Used by the MPO to:
 - Inform Public Involvement Efforts
 - Provide information to agency or community stakeholders
 - Meet federal requirements related to traditionally underserved populations



Approach & Data Sources



Re-evaluation of **Community Planning Areas**

- Changed from 11 in 2017 to 10 in 2023
- Considerations included:
 - Boundary changes since 2017
 - Incorporation of the Village of Indiantown
 - Consistency with other planning efforts



Census & ACS **Demographic Data Update**

- Information from previous report updated using 2020 Decennial Census & American Community Survey (ACS) data
- Added data categories related to commuting and travel patterns



Five-Year **Crash Data Assessment**

- Based on incident reports from the Florida Department of Highway Safety & Motor Vehicles (FLHSMV) covering 2016-2020
- Identifies locations with high levels of fatal or serious injury crashes

Countywide Demographics



**Total
Population**

158,431

4.3%

Increase
since 2015



**Total
Households***

81,371

24.3%

Increase
since 2015



Persons Below
Poverty Level

10.3%
in 2020

12.1%
in 2015



Persons 65+

31.4%
in 2020

28.8%
in 2015



Zero-Vehicle
Households*

4.8%
in 2020

4.6%
in 2015



Minority
Population

24.8%
in 2020

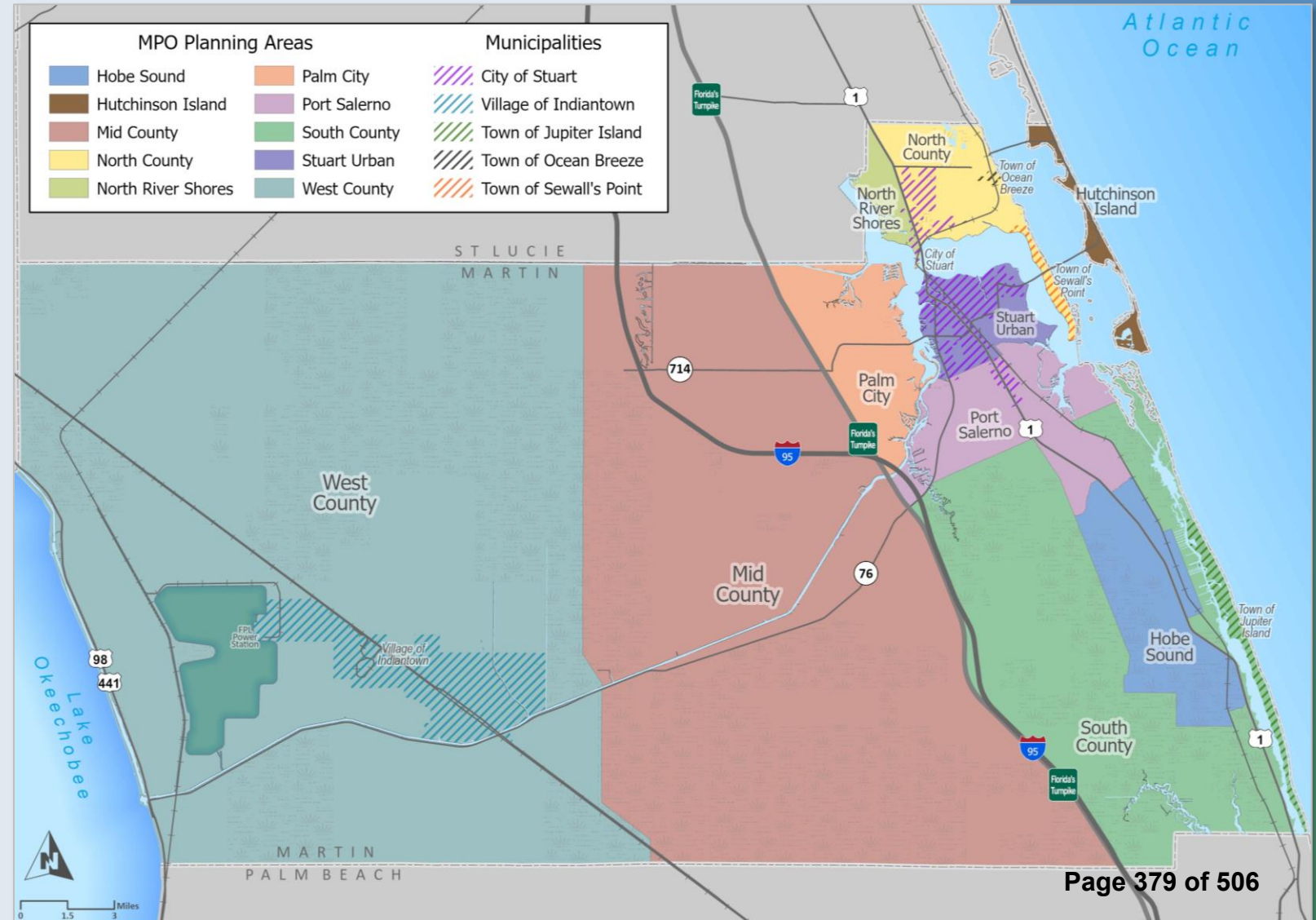
20.6%
in 2015

* The term 'household' is defined by the Census Bureau as all the people who occupy a single housing unit, regardless of their relationship to one another.

2023 Planning Area Boundaries

10 Community Planning Areas:

- Hobe Sound
- Hutchinson Island
- Mid County
- North County
- North River Shores
- Palm City
- Port Salerno
- South County
- Stuart Urban
- West County



2023 Report Organization

- Planning Area subsections are listed in alphabetical order
- Each provides a consistent, six-page series of graphics, maps, and supporting text descriptions:
 - Key features or points of interests
 - Infographics for socioeconomic and travel-related indicators
 - Comparisons to Martin County
 - Maps showing geographic context, nearby community facilities, and high-crash locations

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South County	46
Stuart Urban	52
West County	58

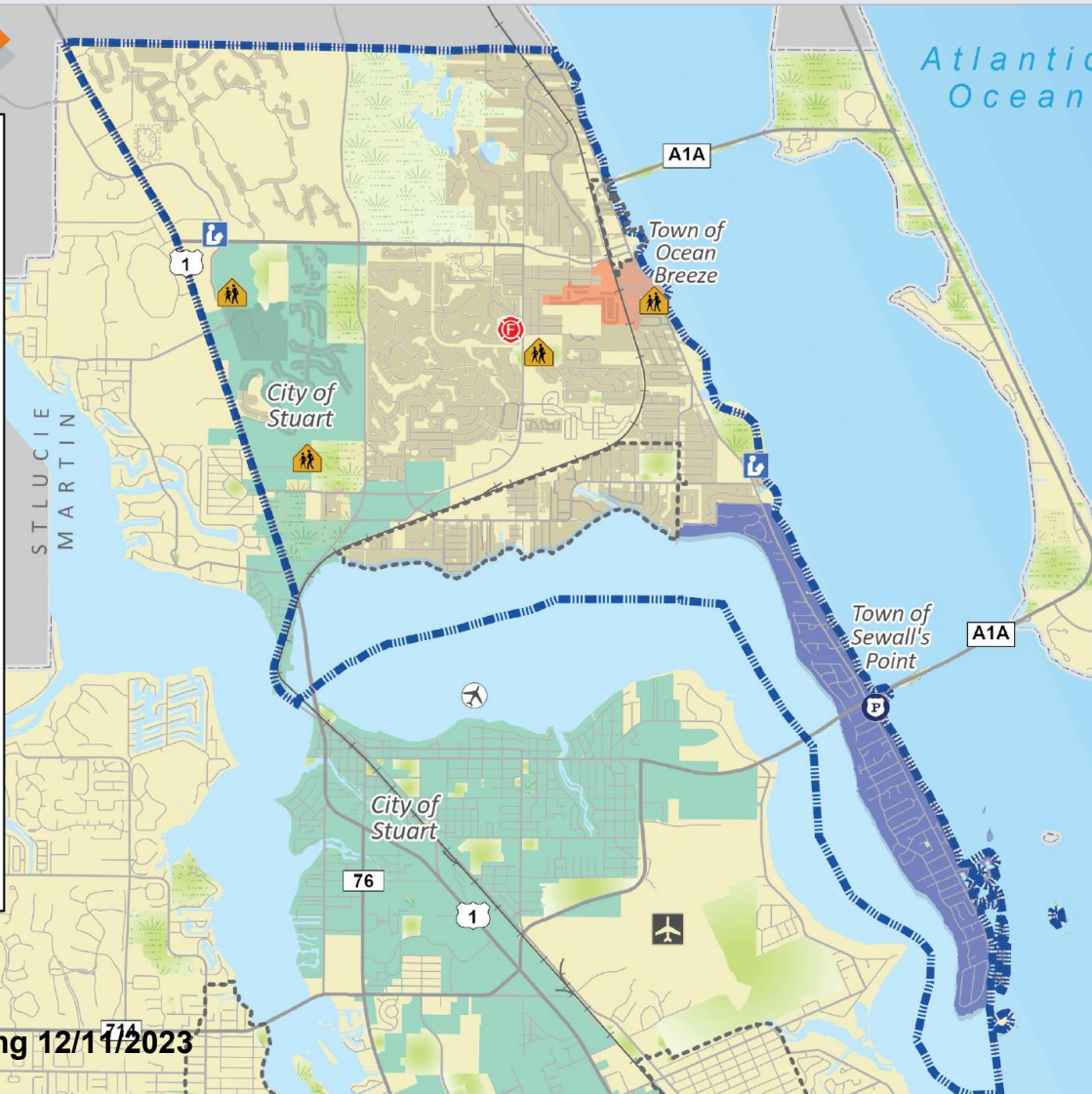
2023 Report Organization

Overview Maps & Key Features – North County

NORTH COUNTY

- Fire and Rescue
- Law Enforcement
- Library
- Schools
- Public Airport
- Private Airport or Heliport
- North County Planning Area
- City of Stuart
- Town of Ocean Breeze
- Town of Sewall's Point
- Residential Area
- Community Redevelopment Area
- Park or Recreation Area
- Conservation Area

0 1 2 4 Miles



MPO Policy Board Meeting 12/11/2023

Overview & Key Features

The North County Planning Area encompasses the northeastern portion of Martin County and covers roughly 17.7 square miles or 3% of the County total. North County includes four communities, Jensen Beach, Rio, Ocean Breeze and Sewall's Point. Originally a pineapple farming area, Jensen Beach celebrates this heritage with the annual Jensen Beach Pineapple Festival. Ocean Breeze began as a mobile home park that was incorporated as the Town of Ocean Breeze in 1960. The Town of Sewall's Point, named for its first settler, Henry Sewall, was incorporated in 1957. Rio, originally known as Rio San Lucie until 1897 when the name was shortened, is an unincorporated community featuring waterfront homes, businesses, and its own civic center.

North County has a population of 18,050 residents, or 11.4% of the Martin County total.

- 13.8% of North County's population live in a household with income below the poverty level,
- 13.7% identify as a racial or ethnic minority, and
- 31% are aged 65 or older.

It contains 9,954 households, or 12.2% of the County total.

- 0.5% of the households in North County are home to a person with Limited English Proficiency (LEP),
- 28.8% are home to a person with a disability, and
- 5.5% do not own a personal vehicle.

Key features of the North County Planning Area include:

- City of Stuart
- Town of Sewall's Point
- Town of Ocean Breeze
- Jensen Beach CRA
- Rio CRA
- Rio Civic Center
- Felix A. Williams Elementary School
- Hoke Library
- Jensen Beach Elementary School
- Jensen Beach High School
- Log Cabin Senior Center
- Martin County Fire Rescue Station 16
- Savannas Preserve State Park
- Sewall's Point Police Department

2023 Report Organization

Summary Stats & County Comparison – Port Salerno

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Port Salerno Planning Area compares to all of Martin County:

Household with Persons with Disability

Persons 65+

Persons Below Poverty Level

Zero-Vehicle Households

Port Salerno	25.8%	30.1%	11.0%	3.7%
Martin County	26.5%	31.4%	10.3%	4.8%

Minority Population

Households with Limited English

High School/ Bachelor's Degree

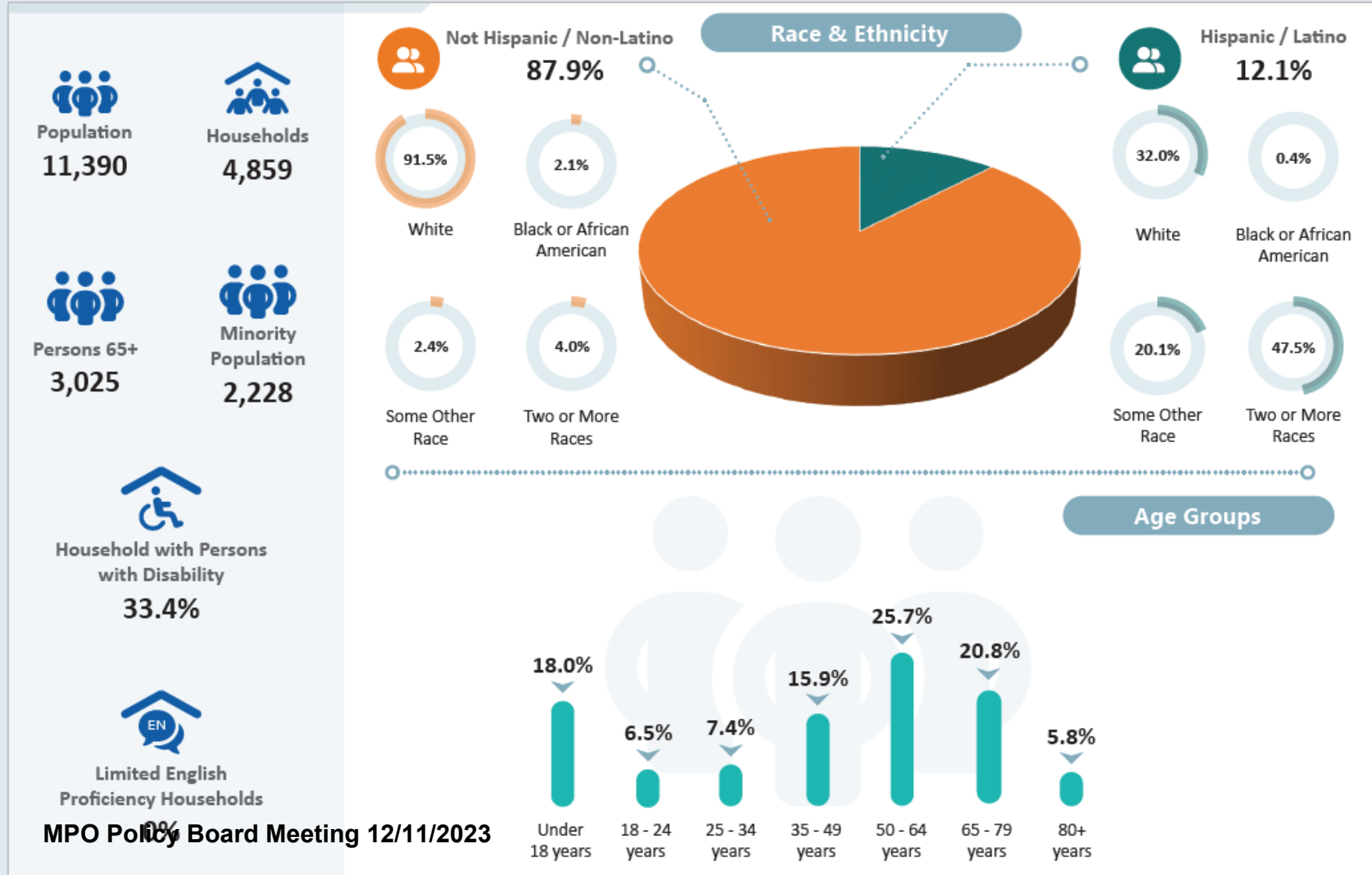
30+ minute Commute Time

% of Telecommuters

Port Salerno	30.4%	2.4%	90.5%/27.7%	39.0%	5.0%
Martin County	24.8%	2.1%	91.4% / 33.5%	39.3%	9.8%

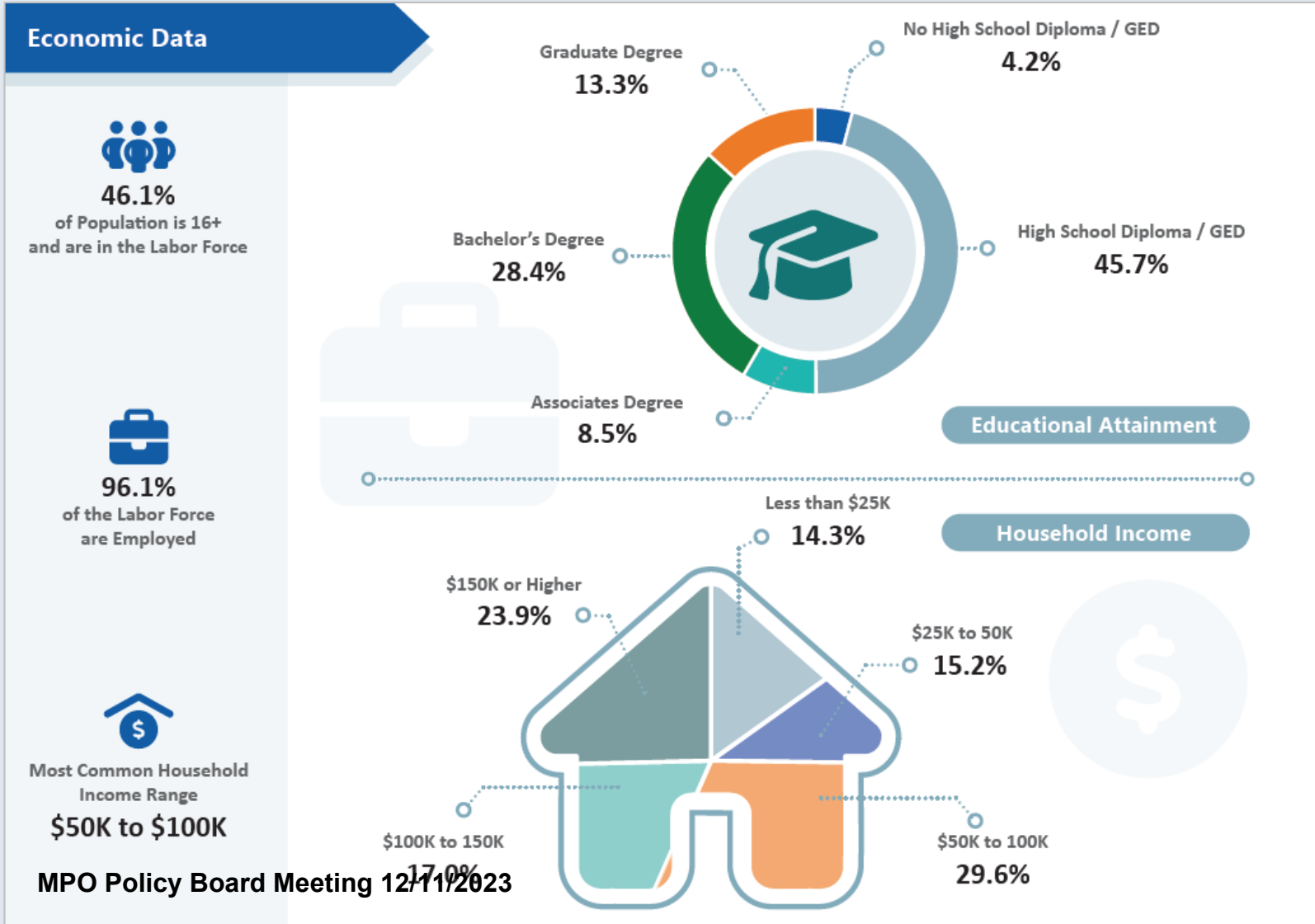
2023 Report Organization

Demographic Data – Mid County



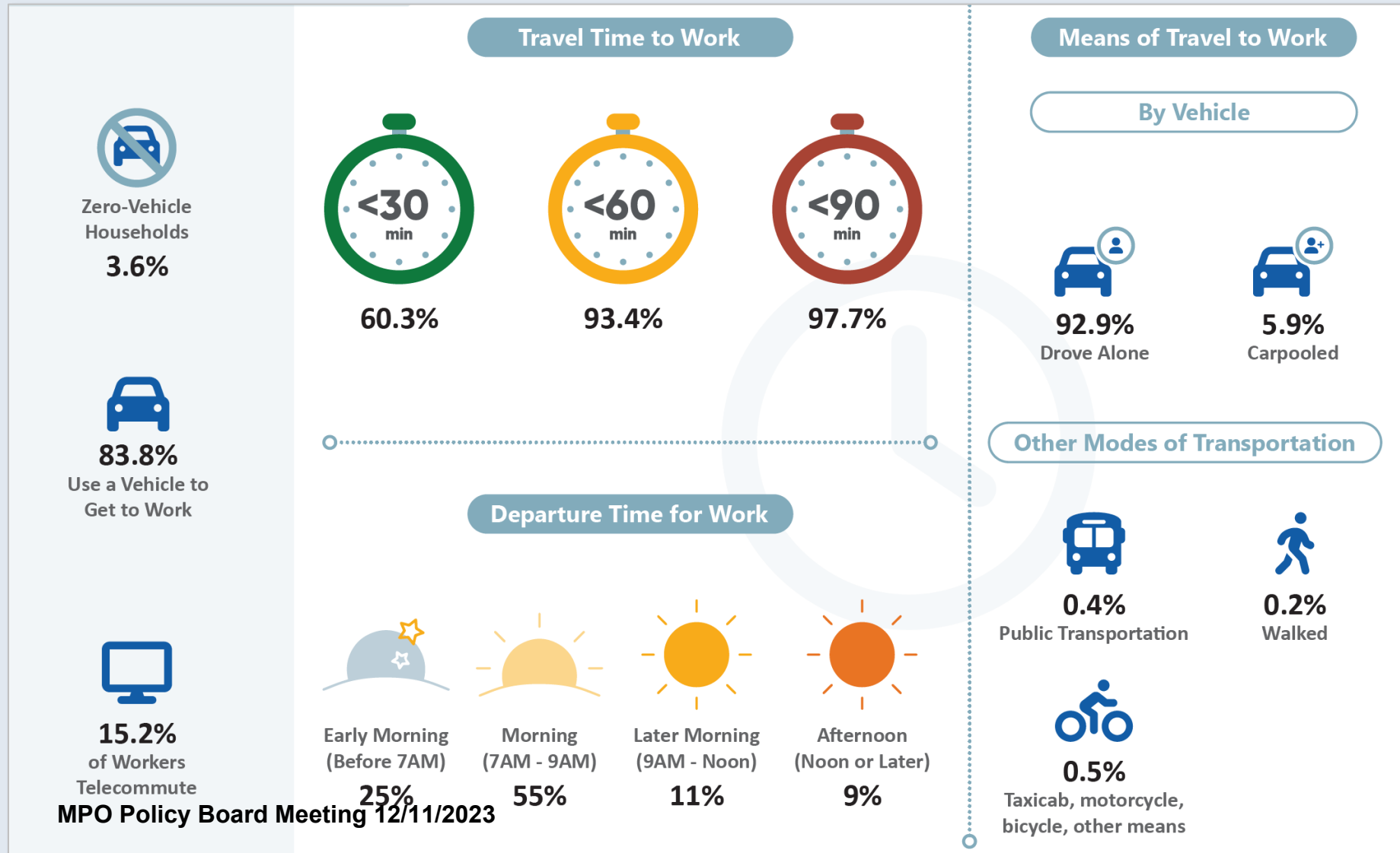
2023 Report Organization

Economic Data – South County



2023 Report Organization

Commuting Characteristics – Palm City



2023 Report Organization

Crash Characteristics – West County

High Crash Locations

The map on this page shows the West County intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrian are shown separately to highlight their increased vulnerability.

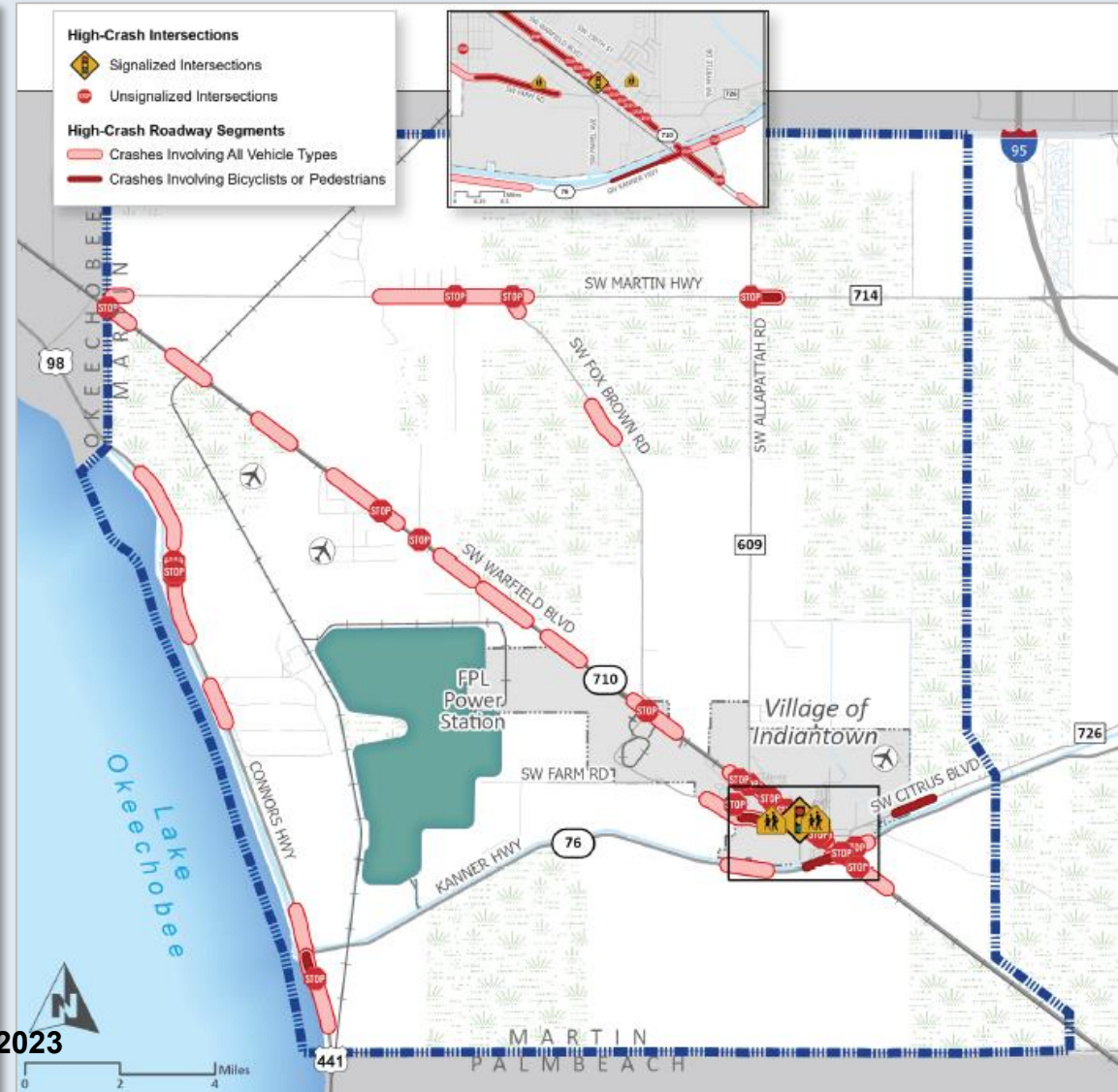
Crash Occurrences

Total Fatal or Serious Injury Crashes (All Vehicle Types)

57 Crashes 21 Fatal / 36 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

6 Crashes 2 Fatal / 4 Serious Injury



Next Steps

MPO Advisory Committees Meeting
October 2023

MPO Board Meeting
December 11

ADA-Compliant Formatting for Report
End of December

Final Report Available on MPO Website
January 2024

Project Team

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Community Characteristics Report



MARTIN M P O
Metropolitan Planning Organization



Martin MPO Board

- Troy McDonald, Chair - City of Stuart Commissioner
- Doug Smith, Vice Chair - Martin County Commissioner
- Stacey Hetherington - Martin County Commissioner
- Christopher Collins - City of Stuart Commissioner
- Sarah Heard - Martin County Commissioner
- Harold Jenkins - Martin County Commissioner
- James Campo - Town of Sewall's Point Commissioner
- Susan Gibbs Thomas - Indiantown Council Member



Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons with questions or concerns about nondiscrimination, or who require special accommodations under the American with Disabilities Act or language translation services (free of charge) should contact Ricardo Vazquez, Senior Planner (Title VI/Non-discrimination Contact) at (772) 221-1498 or rvazquez@martin.fl.us. Hearing impaired individuals are requested to telephone the Florida Relay System at #711.

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INTRODUCTION

Approaching the anniversary of its first century, Martin County was founded on May 29, 1925, and named after John W. Martin, Governor of Florida from 1925 until 1929. At the start, the area was focused on agriculture and fishing, which remain important industries, though they comprise less than 2% of the County's employment today.¹ As Martin County has grown, it has maintained its small-town culture and its county seat, the City of Stuart. In addition to Stuart, there are four other incorporated areas, including the Village of Indiantown, and the Towns of Jupiter Island, Ocean Breeze, and Sewall's Point. Bordered on the north by St. Lucie County, on the south by Palm Beach County, on the west by Lake Okeechobee (which includes borders with Hendry, Glades, and Okeechobee counties), and the east by the Atlantic Ocean, Martin County is known for its natural features, including rivers, waterways, wetlands, parks, and beaches.

The Martin Metropolitan Planning Organization, or MPO, is the agency responsible for transportation planning in Martin County. The MPO develops long-range transportation plans and policies and prioritizes projects for implementation with state and federal transportation funds in coordination with local communities, transportation agencies, and other public or private stakeholder organizations. This Community Characteristics Report, along with the information provided in the Public Participation Plan, provides an understanding of the socioeconomic and mobility conditions of the County's local communities, referred to as Planning Areas in this document. The goal of this document is to assist the MPO and its partners in ensuring fair consideration and engagement of its various communities in the transportation planning and decision-making processes. This report also helps the MPO follow the requirements of Title VI of the Civil Rights Act of 1964 and Executive Orders 12898, 13166, and 13985.

1 Source: US Census Bureau, American Community Survey - 2021 5-Year Estimates:
https://data.census.gov/profile/Martin_County,_Florida?g=050XX00US12085#business-and-economy

DATA SOURCES

The socioeconomic information used for this Community Characteristics Report comes from the US Census Bureau's 2020 Decennial Census and American Community Survey (ACS) 2020 5-year estimates. Spatial mapping files were used to identify Census Block Group boundaries within Martin County, and then joined with the corresponding demographic data for each Block Group to allow for custom geographic analysis and calculations. The results of this process were then converted to Excel spreadsheets for ease of further analysis and visualization purposes. More information about Census and ACS data is available from the US Census Bureau at www.census.gov.

Crash data was collected from the Florida Department of Highway Safety & Motor Vehicles (FLHSMV) database covering all crash incidents occurring on State and County roadways during the 5-year period between 2016 and 2020. The crash locations and associated crash report data were then analyzed to identify Martin County roadway segments and intersections with high rates of fatal or serious injury crashes. A per-mile basis was used for determining high-crash roadway segments to account for variations in segment length. More information about crash data, as well as an interactive dashboard application, is available on the FLHSMV website at www.flhsmv.gov/traffic-crash-reports/crash-dashboard/.

REPORT ORGANIZATION

The Census Block Groups for Martin County are organized based on population and housing by the County's Growth Management Department. These geographic areas are known as the Martin County Planning Areas and are used routinely in the County's Comprehensive Plan process to allocate future housing. Starting with the Planning Areas from the 2017 Community Characteristics Report, MPO staff consulted the Growth Management Department and decided to recombine Indiantown with the West County Planning Area, resulting in 10 Planning Areas for this report, as shown by the map on the following page.

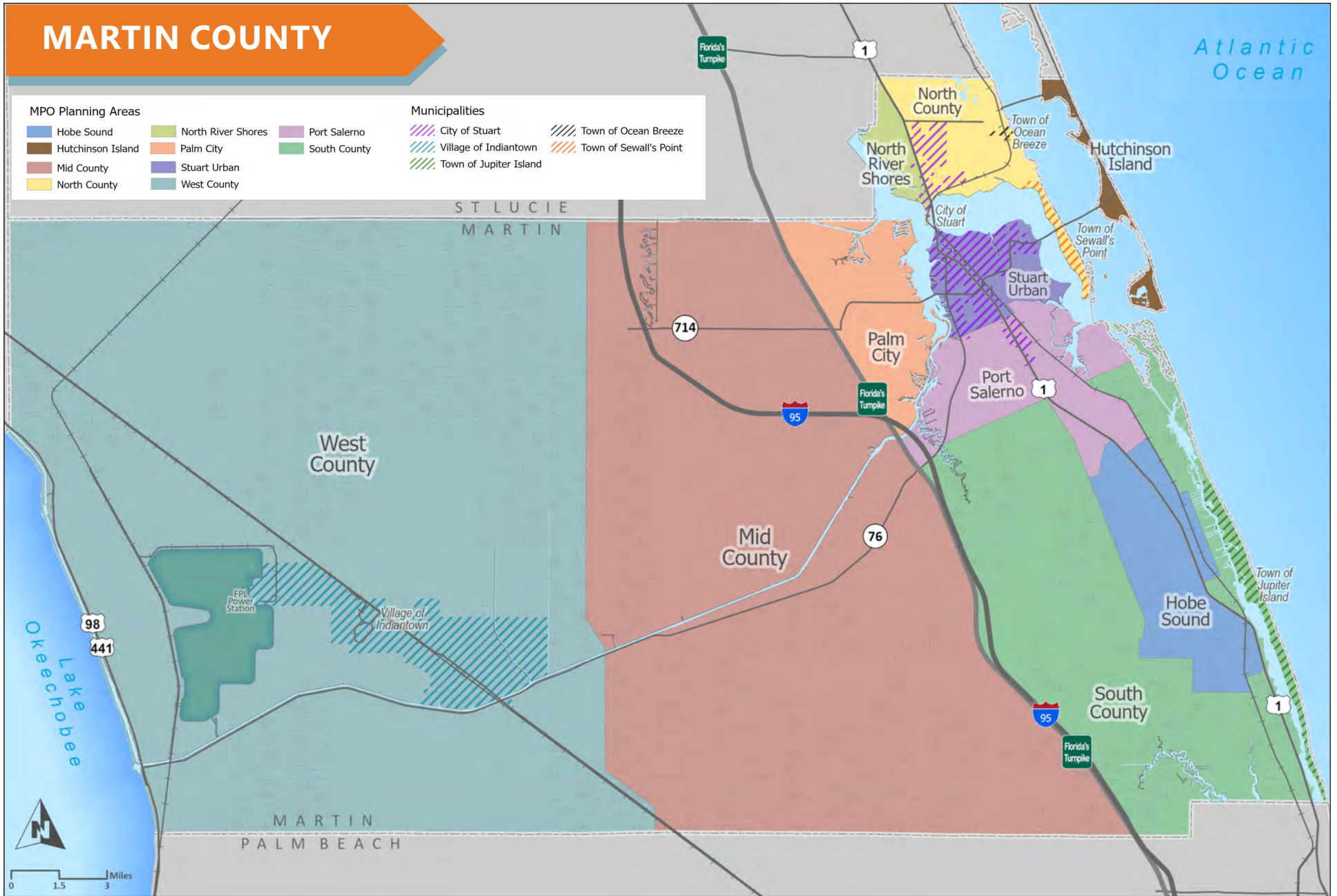
MARTIN COUNTY

MPO Planning Areas

- Hobe Sound
- Hutchinson Island
- Mid County
- North County
- North River Shores
- Palm City
- South County
- Stuart Urban
- West County

Municipalities

- City of Stuart
- Village of Indiantown
- Town of Jupiter Island
- Town of Ocean Breeze
- Town of Sewall's Point



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Overview & Key Features

The total land area of Martin County is 591.6 square miles, not including the portion of Lake Okeechobee included within the boundary. This represents approximately 1.1% of the State of Florida's land area.¹

Martin County has a population of 158,431, which is:

- 0.7% of the total population of Florida, and
- An increase of 6,845 people (or 4.3%) compared to 2015.

The County has a total of 81,371 households, which is:

- 0.8% of the total households within the state, and
- An increase of 19,779 housing units (or 24.3%) compared to 2015.

Martin County's median household income of \$65,821 is:

- Higher than Florida's, at \$57,703, and
- An increase of \$13,688 (or 21%) compared to 2015.

The percentage of people living below the poverty line (10.3%) and of households with a limited ability to speak English (2.1%) in Martin County are both less than Florida's statewide levels (13.3% and 6.9%).

Other notable changes in Martin County's population since 2015 are:

- An increase in the minority population from 20.6% to 24.8%,
- An increase in the population age 65 or older from 28.8% to 31.4%,
- A slight increase in the percentage of households without a vehicle from 4.6% to 4.8%,
- An increase in educational attainment with 91.4% having a high school diploma or higher (compared to 89.7% in 2015) and 33.5% with a bachelor's degree or higher (compared to 31.6% in 2015).

Summary Stats

The following socioeconomic indicators are commonly used during the transportation planning process as a starting point for gaining a better understanding of local communities or neighborhoods. They provide the context needed for developing public involvement plans and conducting more specific public engagement activities:



Household with Persons
with Disability
26.5%



Households with Limited
English
2.1%



High School/
Bachelor's Degree
91.4%/33.5%



Minority
Population
24.8%



Persons Below
Poverty Level
10.3%



Persons 65+
31.4%



Zero-Vehicle
Households
4.8%



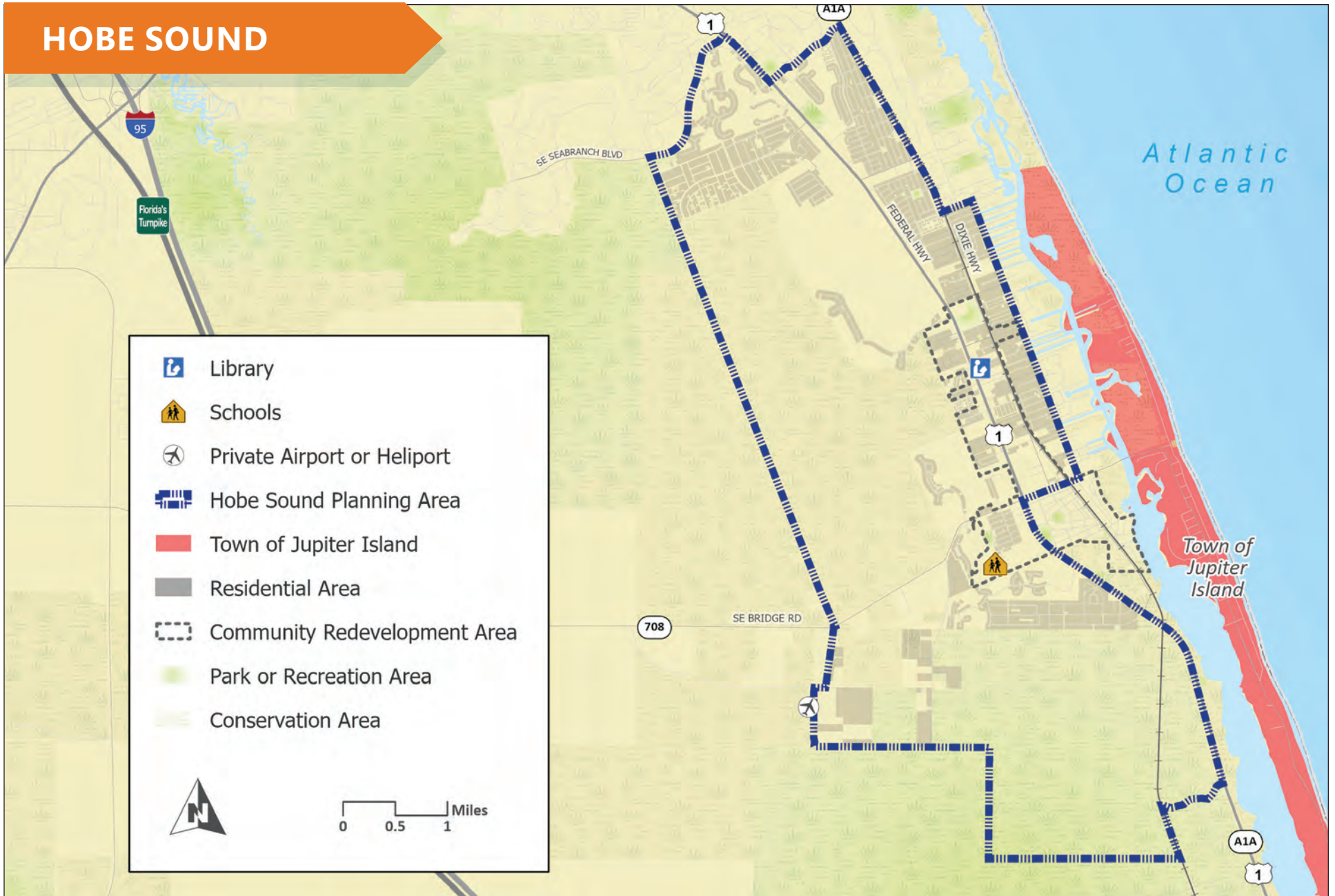
30+ minute
Commute Time
39.3%



% of Telecommuters
9.8%

¹ Note: Land area was calculated using 2020 US Census TIGER/Line boundary data for Martin County and all Planning Areas based on the Census Block Groups within each geography. Totals include all surface water except for the large portions of Lake Okeechobee and the Atlantic Ocean within County boundaries.

HOBE SOUND



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Overview & Key Features

Hobe Sound is an unincorporated community in southeastern Martin County. It covers 16.3 square miles, representing 2.7% of the County total. Originally settled by the Spanish, its name was recorded as “Jobe” and later changed to its current spelling by Jonathan Dickinson, who shipwrecked nearby in 1696. Like other areas of Martin County, the Florida East Coast Railway brought opportunities for tourism, business, and jobs to the area and helped it become what it is today.

Hobe Sound has a population of 13,417 residents, or 8.5% of the Martin County total.

- 11.5% of Hobe Sound’s population live in a household with income below the poverty level,
- 21.5% identify as a racial or ethnic minority, and
- 32.2% are aged 65 or older.

It contains 7,223 households, or 8.9% of the County total.

- 2% of the households in Hobe Sound are home to a person with Limited English Proficiency (LEP),
- 28.7% are home to a person with a disability, and
- 5.2% do not own a personal vehicle.

Key features of the Hobe Sound Planning Area include:

- Hobe Sound CRA
- Hobe Sound Civic Center
- Martin County Fire Rescue Stations 32 & 33
- Hobe Sound Branch Library
- Hobe Sound Elementary School
- Banner Lake Community Center
- Hobe Sound Scrub Preserve
- J.V. Reed Park
- Pettway Park
- Pilots Cove Preserve
- The Pine School
- Zeus Park

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Hobe Sound Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

Hobe Sound	28.7%	2.0%	88.4%/24.7%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

Hobe Sound	21.5%	11.5%	32.2%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Hobe Sound	5.2%	43.5%	12.9%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
13,417

Households
7,223

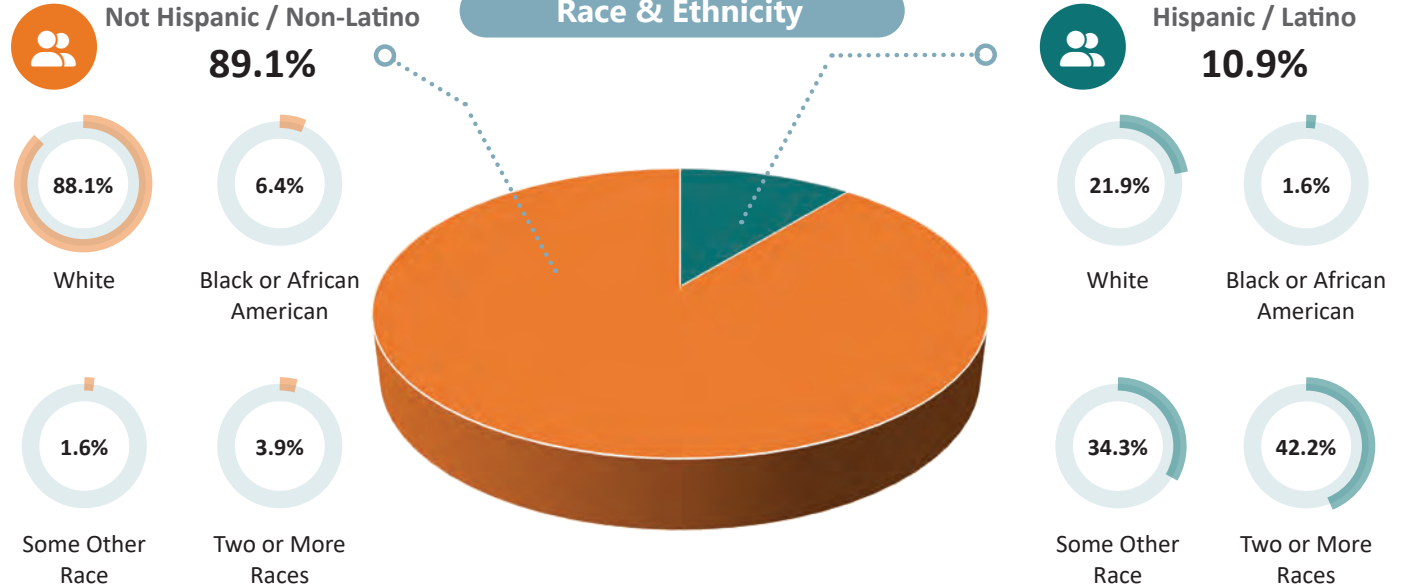
Persons 65+
4,322

Minority Population
2,884

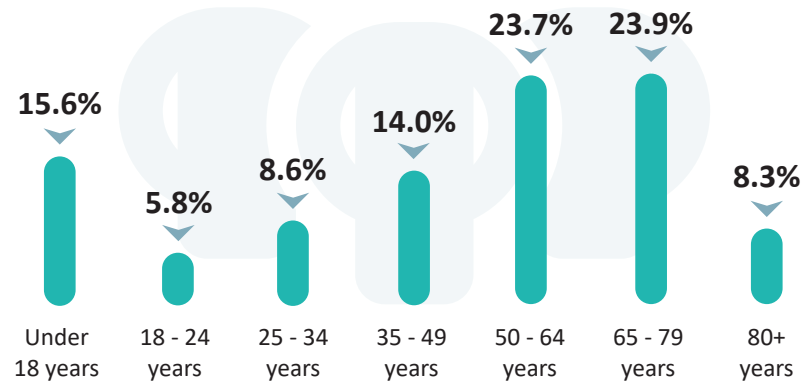
Household with Persons with Disability
28.7%

Limited English Proficiency Households
2.0%

Race & Ethnicity



Age Groups



Economic Data



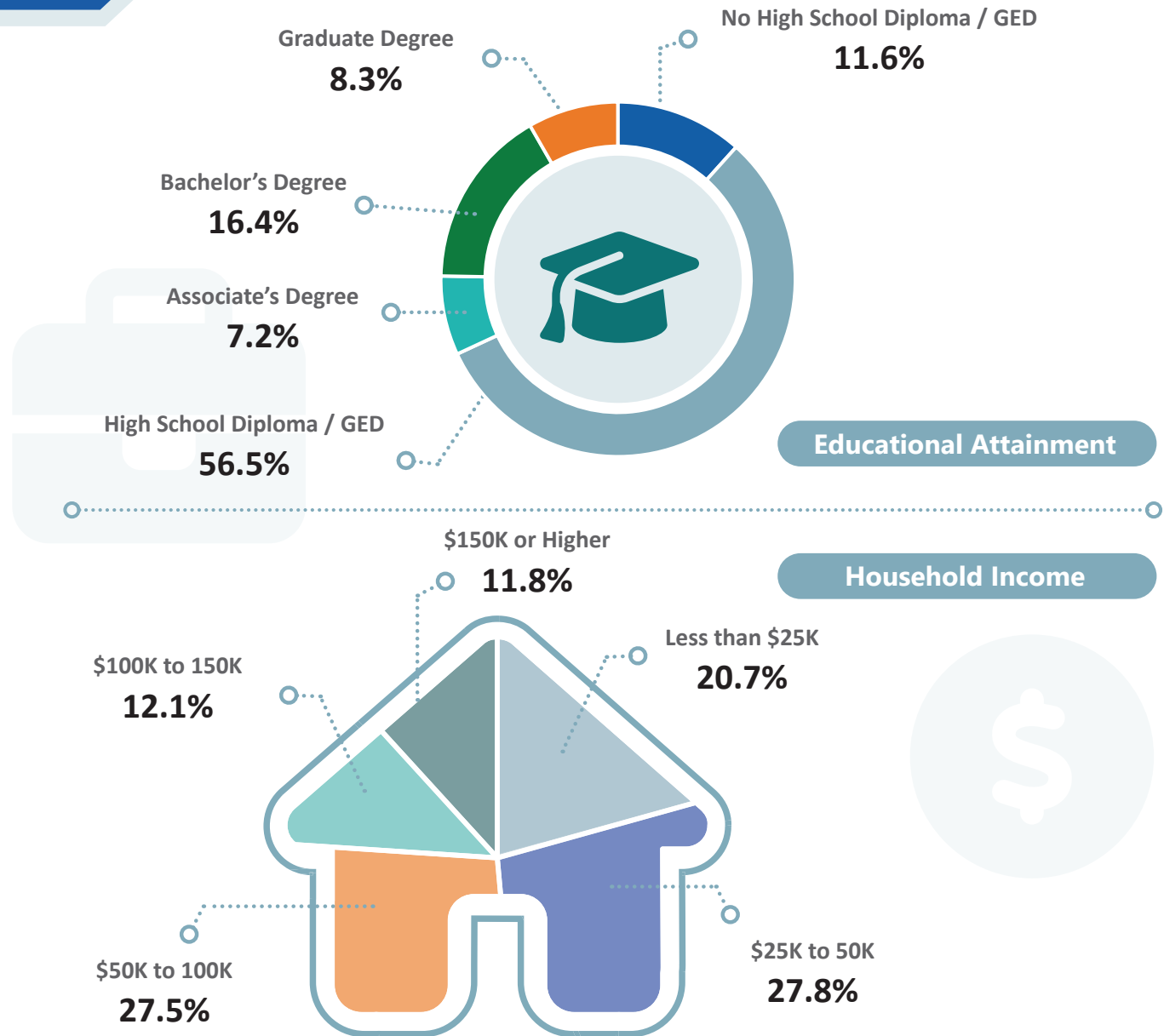
53.8%
of Population is 16+
and are in the Labor Force



94.2%
of the Labor Force
are Employed



Most Common Household
Income Range
\$25K - \$50K



Commuting Characteristics


Zero-Vehicle
Households
5.2%



83.7%
Use a Vehicle to
Get to Work


12.9%
of Workers
Telecommute


Travel Time to Work



<30
min
56.5%



<60
min
94.2%



<90
min
97.3%

Departure Time for Work


Early Morning
(Before 7AM)
29.7%



Morning
(7AM - 9AM)
49.8%



Later Morning
(9AM - Noon)
12.6%


Afternoon
(Noon or Later)
7.9%


Means of Travel to Work

By Vehicle



83.1%
Drove Alone


13.0%
Carpooled

Other Modes of Transportation


0.1%
Public Transportation


3.5%
Walked


0.3%
Taxicab, motorcycle,
bicycle, other means

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Crash Characteristics

High Crash Locations

The map on this page shows the Hobe Sound intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

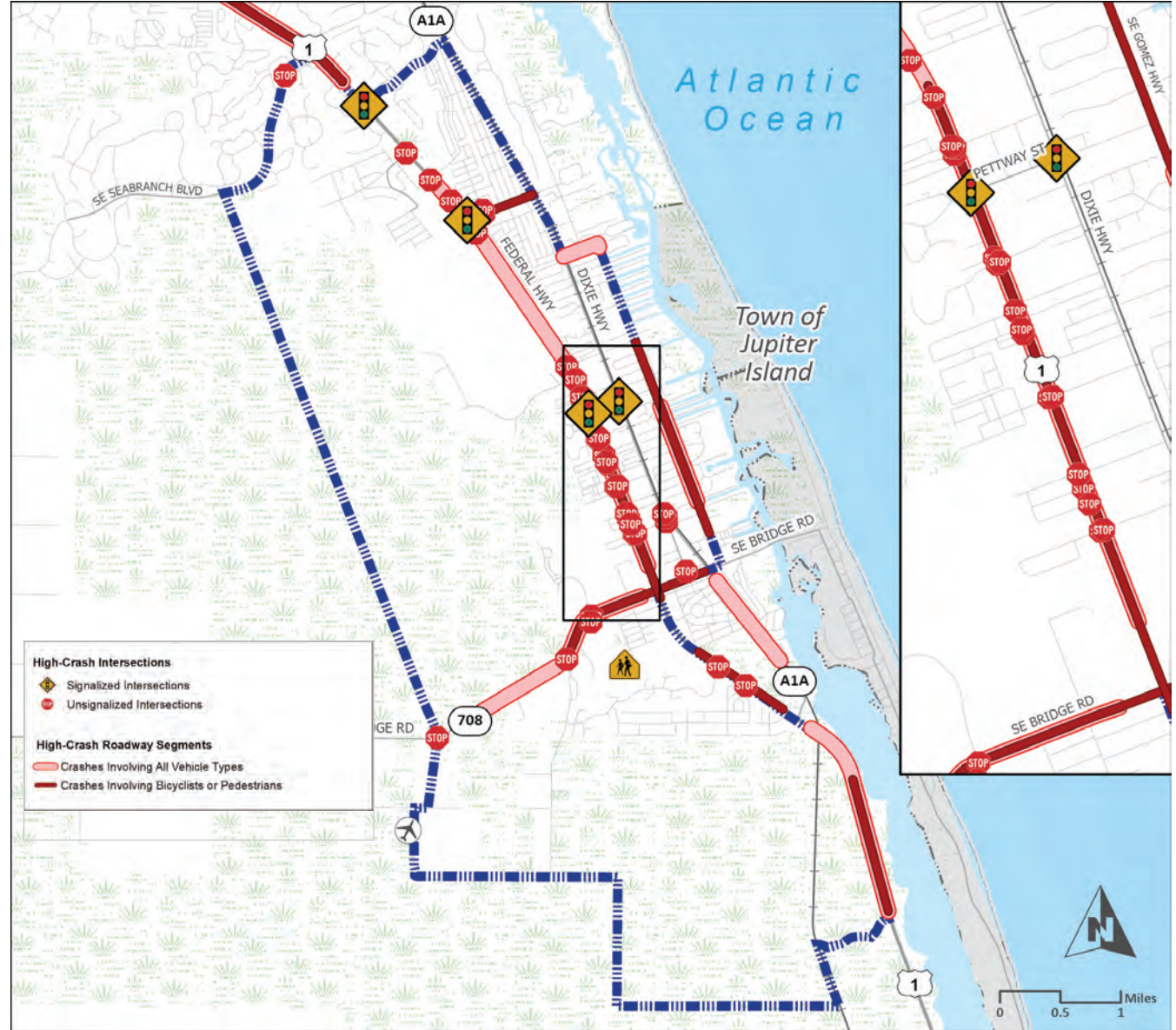
Crash Occurrences

Total Fatal or Serious Injury Crashes (All Vehicle Types)

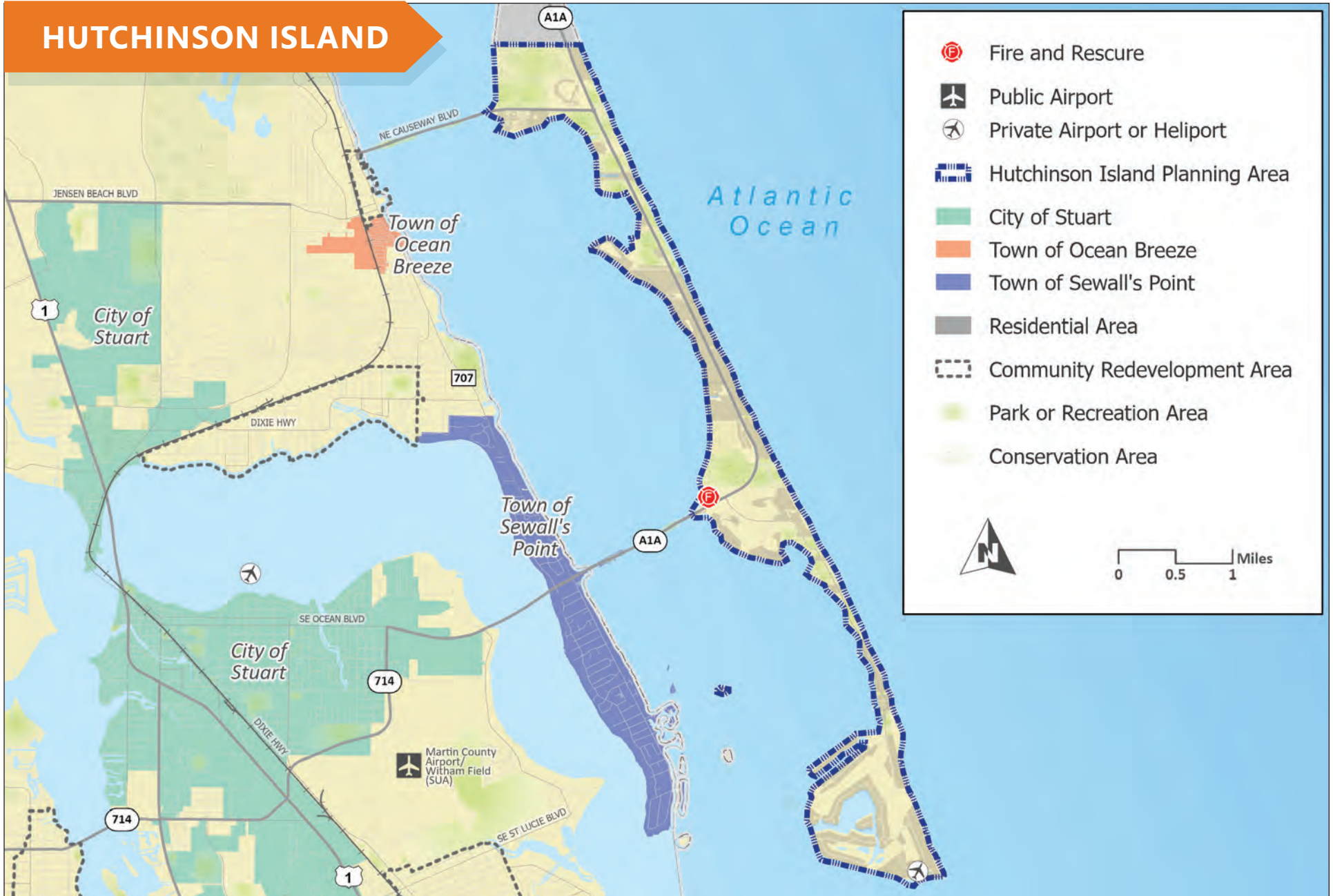
18 Crashes 2 Fatal / 16 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

2 Crashes 0 Fatal / 2 Serious Injury



HUTCHINSON ISLAND



DRAFT

Overview & Key Features

The Hutchinson Island Planning Area is one of the smallest in terms of area, covering roughly 11 square miles or 1.9% of the County total. It borders St. Lucie County to the north and is a peninsula in the Atlantic Ocean, connected to the mainland via two causeways. Hutchinson Island is home to many small and large public beaches with condominiums and hotels. The environment is an important aspect of the area.

Hutchinson Island has a population of 2,779 residents, or 1.8% of the Martin County total.

- 3% of Hutchinson Island’s population live in a household with income below the poverty level,
- 6.6% identify as a racial or ethnic minority, and
- 65.6% are aged 65 or older (the highest of all Planning Areas).

It contains 3,197 households, or 3.9% of the County total.

- None of the households in Hutchinson Island are home to a person with Limited English Proficiency (LEP),
- 26% are home to a person with a disability, and
- 2% do not own a personal vehicle.

Key features of the Hutchinson Island Planning Area include:

- Martin County Fire Rescue Station 14
- Bathtub Reef Beach Park
- Bryn Mawr Beach Park
- Curtis Beach Park
- Santa Lucea Beach Park
- Jensen Beach Park
- Joe’s River Park
- Ross Whitham Beach
- Sailfish Point Airfield
- Sea Turtle Beach Park
- Stuart Beach Park

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Hutchinson Island Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

Hutchinson Island	26.1%	0%	97.6%/59.5%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

Hutchinson Island	6.6%	3.0%	65.6%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Hutchinson Island	2.2%	15.3%	17.1%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
2,779

Households
3,197

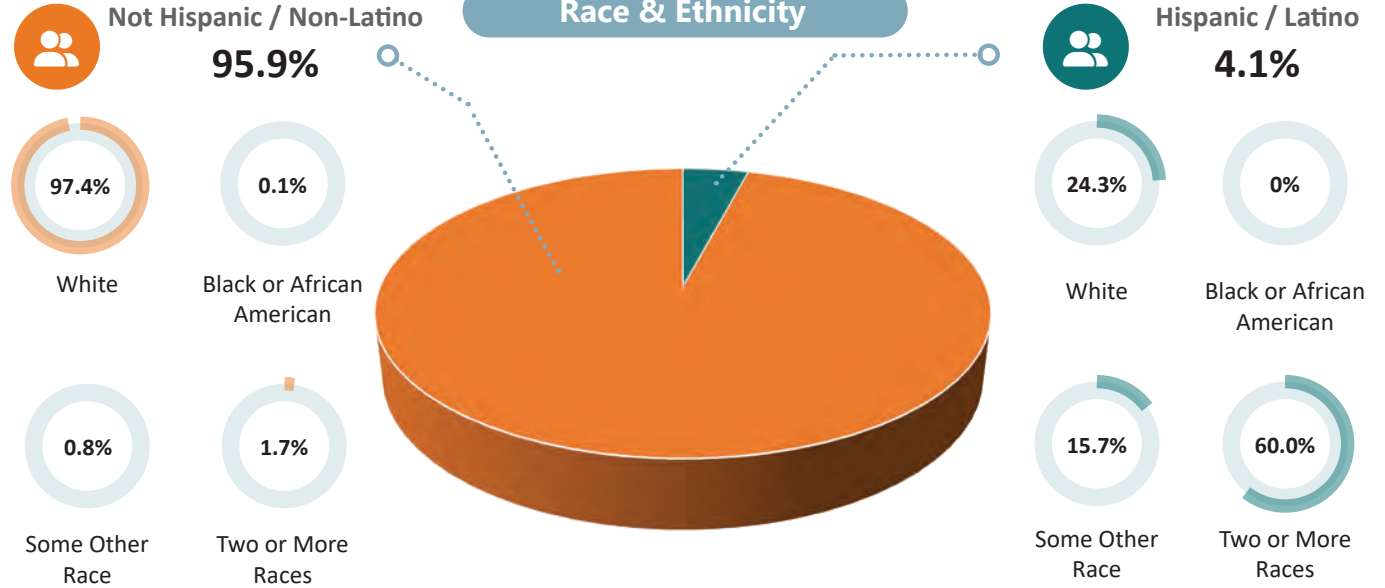
Persons 65+
1,822

Minority Population
183

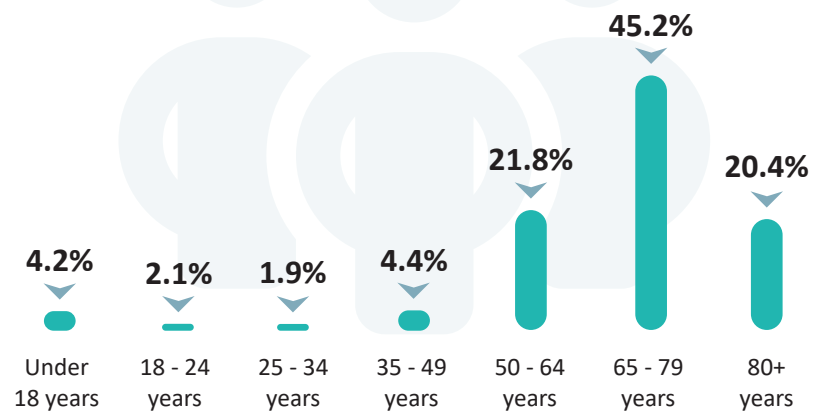
Household with Persons with Disability
26.1%

Limited English Proficiency Households
0%

Race & Ethnicity



Age Groups



Economic Data



20.4%

of Population is 16+
and are in the Labor Force



98.2%

of the Labor Force
are Employed



Most Common Household
Income Range

\$50K to \$100K

No High School Diploma / GED

2.4%

Graduate Degree

33.4%

Bachelor's Degree

26.1%

High School Diploma / GED

32.0%

Associate's Degree

6.1%

Educational Attainment

Less than \$25K

6.6%

Household Income

\$150K or Higher

30.5%

\$25K to 50K

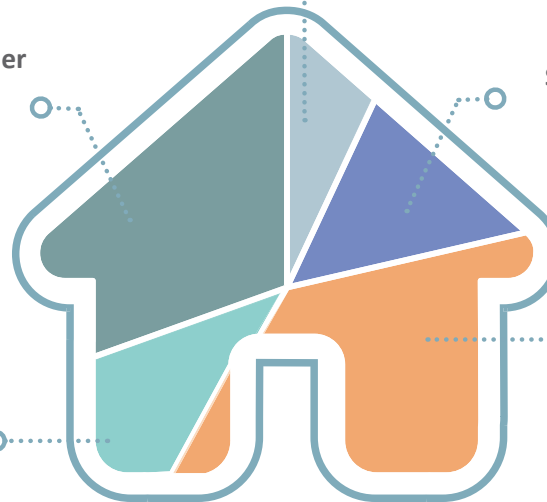
15.3%

\$100K to 150K

10.7%

\$50K to 100K

36.9%



Commuting Characteristics



Zero-Vehicle Households
2.2%



75.0%
Use a Vehicle to Get to Work



17.1%
of Workers Telecommute

Travel Time to Work



84.7%



87.7%



88.8%

Means of Travel to Work

By Vehicle



90.5%
Drove Alone



0%
Carpooled

Other Modes of Transportation



0%
Public Transportation



3.9%
Walked



5.6%
Taxicab, motorcycle,
bicycle, other means

Departure Time for Work



Early Morning
(Before 7AM)
39.1%



Morning
(7AM - 9AM)
34.0%



Later Morning
(9AM - Noon)
15.5%



Afternoon
(Noon or Later)
11.4%

DRAFT

Crash Characteristics

High Crash Locations

The map on this page shows the Hutchinson Island intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

Crash Occurrences

Total Fatal or Serious Injury Crashes (All Vehicle Types)














12 Crashes 1 Fatal / 11 Serious Injury



Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

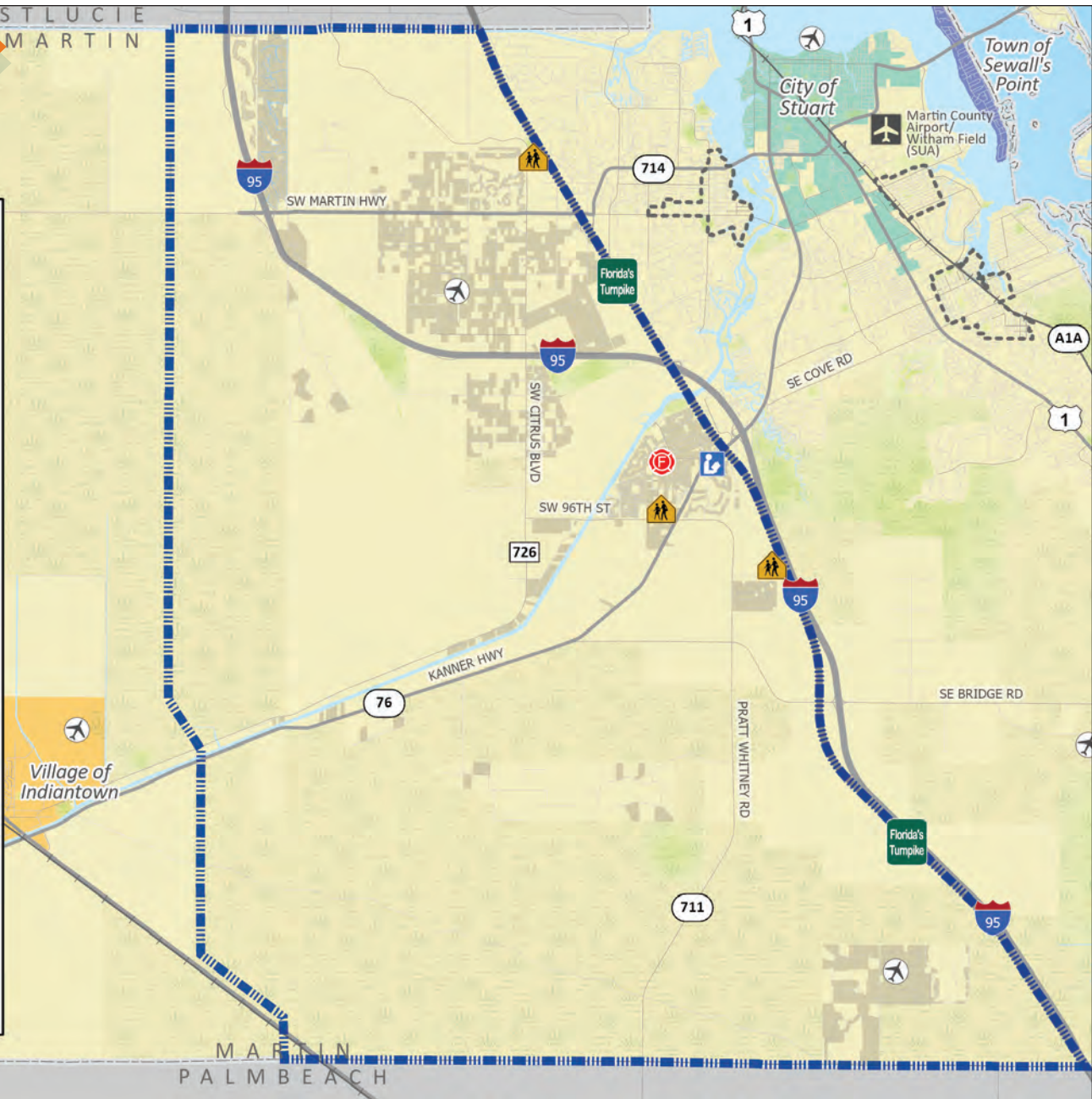
2 Crashes 0 Fatal / 2 Serious Injury



MID COUNTY

-  Fire and Rescue
-  Library
-  Schools
-  Public Airport
-  Private Airport or Heliport
-  Mid County Planning Area
-  City of Stuart
-  Village of Indiantown
-  Town of Sewall's Point
-  Residential Area
-  Community Redevelopment Area
-  Park or Recreation Area
-  Conservation Area



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Overview & Key Features

The Mid County Planning Area comprises the central portion of Martin County, stretching from Palm Beach County in the south to St. Lucie County in the north. It is the second largest Planning Area, covering 165.5 square miles, and representing 27.9% of the County total. The southern portion of Mid County is characterized by environmentally sensitive lands while the remainder support a mixture of agricultural and residential uses.

Mid County has a population of 11,390 residents, or 7.2% of the Martin County total.

- 3% of Mid County’s population live in a household with income below the poverty level,
- 19.6% identify as a racial or ethnic minority, and
- 26.6% are aged 65 or older.

It contains 4,859 households, or 6% of the County total.

- None of the households in Mid County are home to a person with Limited English Proficiency (LEP),
- 33.4% are home to a person with a disability, and
- 1.4% do not own a personal vehicle.

Key features of the Mid County Planning Area include:

- Citrus Grove Elementary School
- Citrus Grove Park
- Crystal Lake Elementary School
- I-95 Trail
- John C. and Mariana Jones/Hungryland Wildlife & Environmental Area
- Martin County Fire Rescue Station 22
- Treasure Coast Wildlife Center
- Martin County Sheriff’s Office Firearms Range
- Phipps Park & Boat Ramp
- South Fork High School
- Tailwinds Airfield

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Mid County Planning Area compares to all of Martin County:



Household with Persons with Disability

Mid County	33.4%	0%	91.2%/36.5%
Martin County	26.5%	2.1%	91.4% / 33.5%



Households with Limited English



High School/ Bachelor’s Degree



Minority Population



Persons Below Poverty Level



Persons 65+

Mid County	19.6%	3.0%	26.6%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Mid County	1.4%	38.2%	9.3%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
11,390

Households
4,859

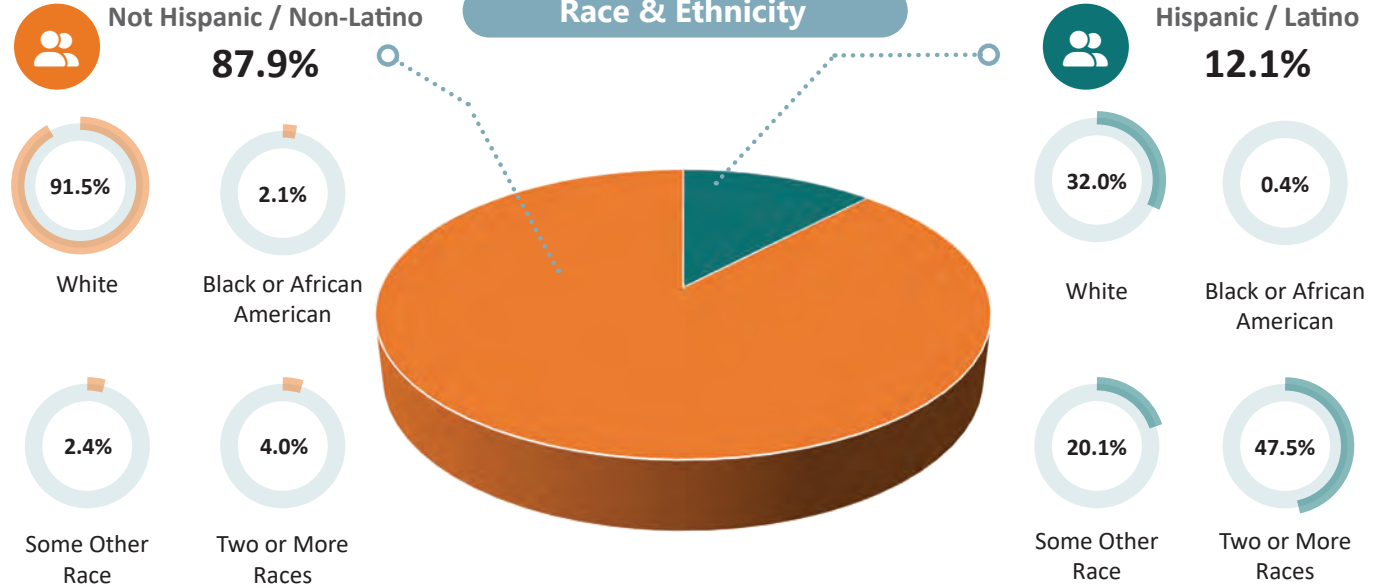
Persons 65+
3,025

Minority Population
2,228

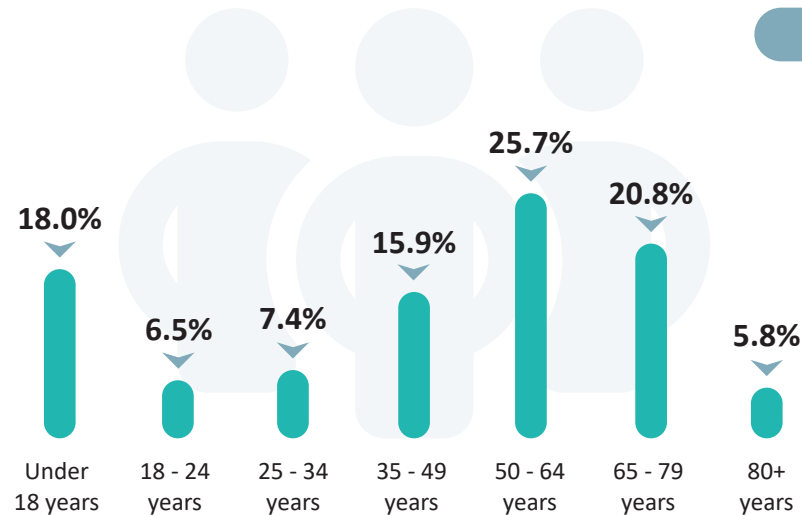
Household with Persons with Disability
33.4%

Limited English Proficiency Households
0%

Race & Ethnicity



Age Groups



Economic Data



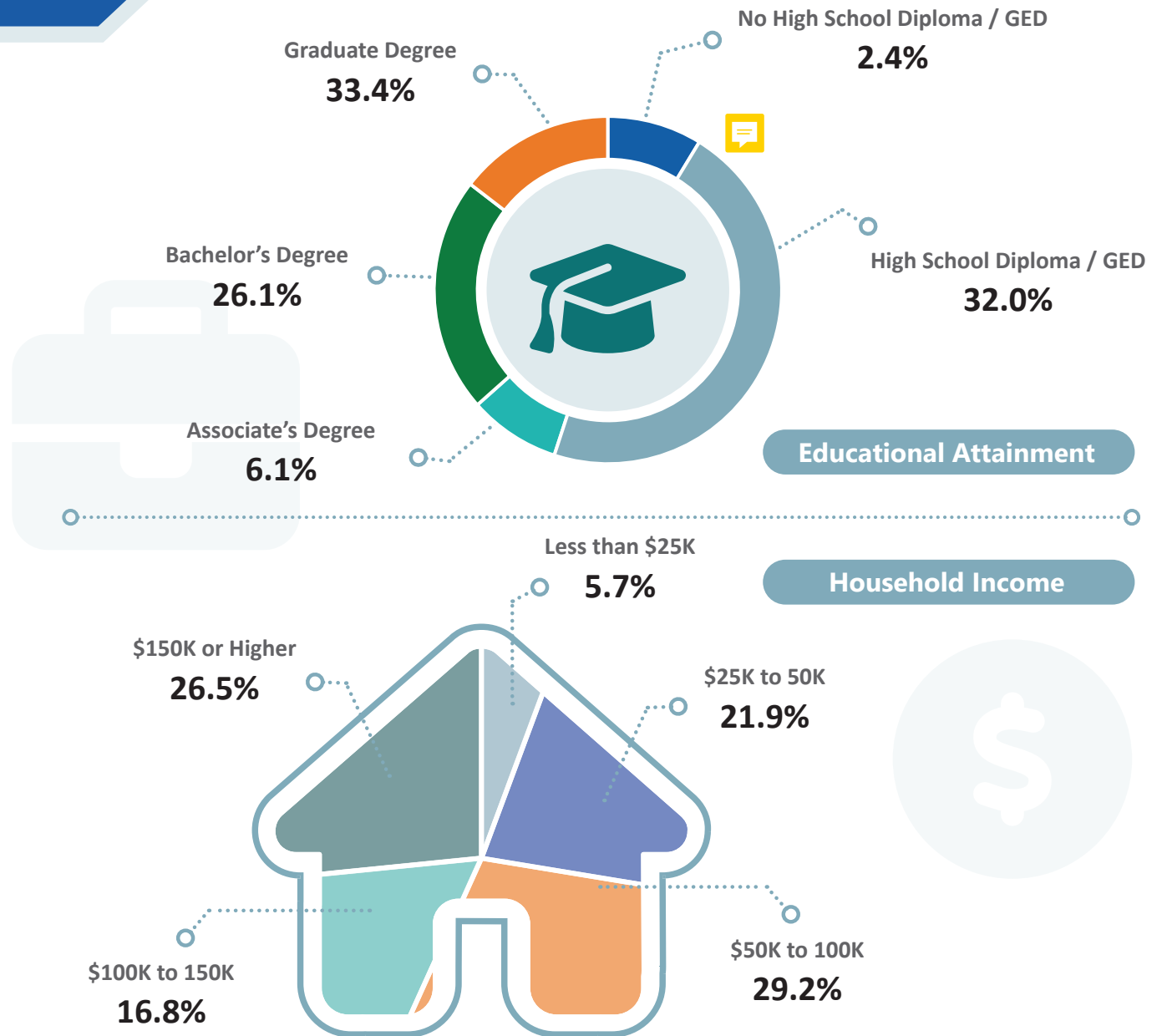
56.1%
of Population is 16+
and are in the Labor Force



98.1%
of the Labor Force
are Employed



Most Common Household
Income Range
\$50K to \$100K



Commuting Characteristics



Zero-Vehicle Households
1.4%



89.0%
Use a Vehicle to Get to Work



9.3%
of Workers Telecommute

Travel Time to Work



61.8%



88.8%



99.2%

Means of Travel to Work

By Vehicle



97.2%
Drove Alone



0.9%
Carpooled

Other Modes of Transportation



0%
Public Transportation



0%
Walked



1.9%
Taxicab, motorcycle, bicycle, other means

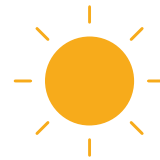
Departure Time for Work



Early Morning (Before 7AM)
34.7%



Morning (7AM - 9AM)
37.6%



Later Morning (9AM - Noon)
17.4%



Afternoon (Noon or Later)
10.3%

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Crash Characteristics

High Crash Locations

The map on this page shows the Mid County intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

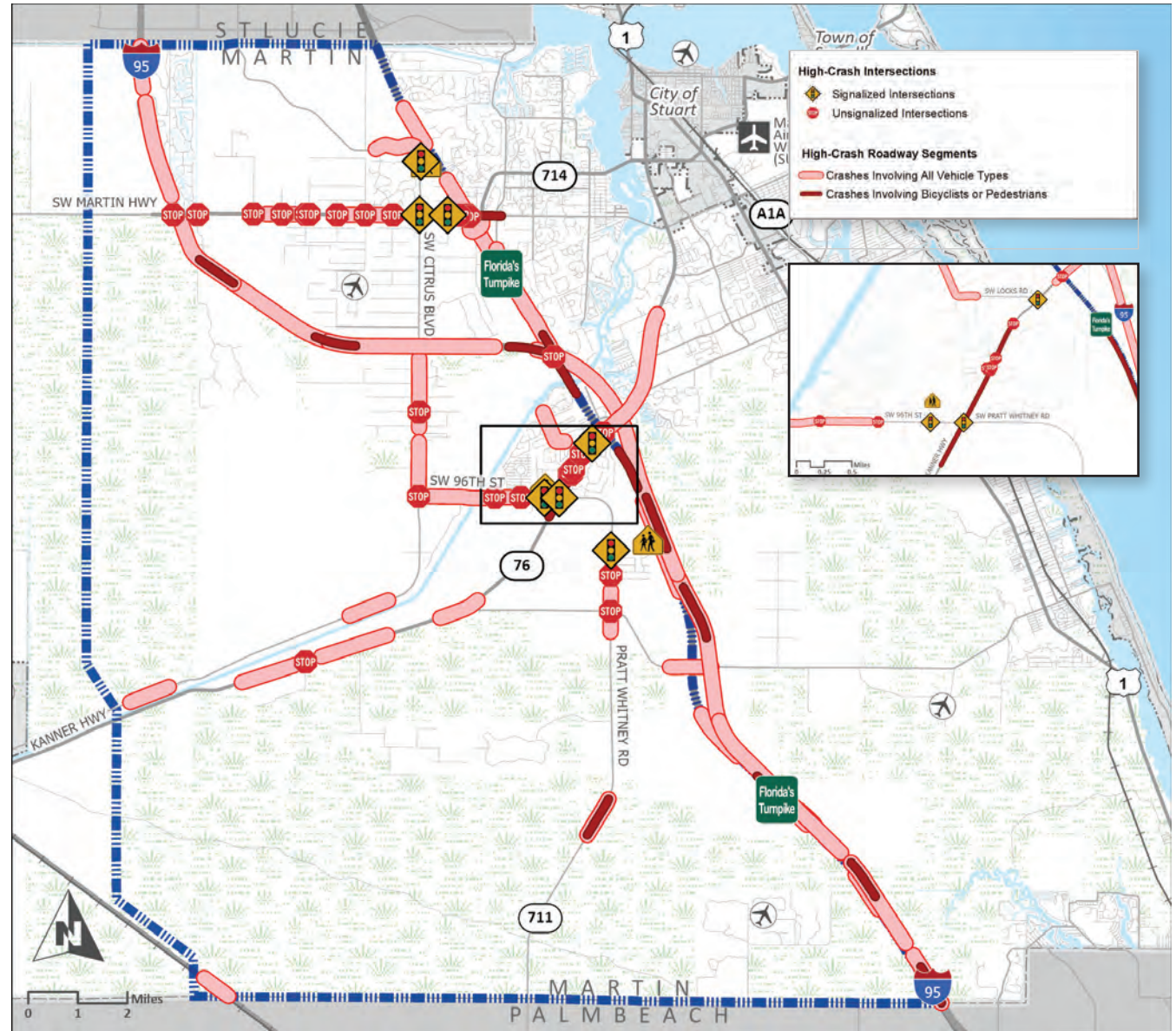
Crash Occurrences

Total Fatal of Serious Injury Crashes (All Vehicle Types)















99 Crashes 28 Fatal / 71 Serious Injury


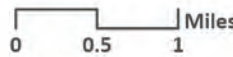
Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

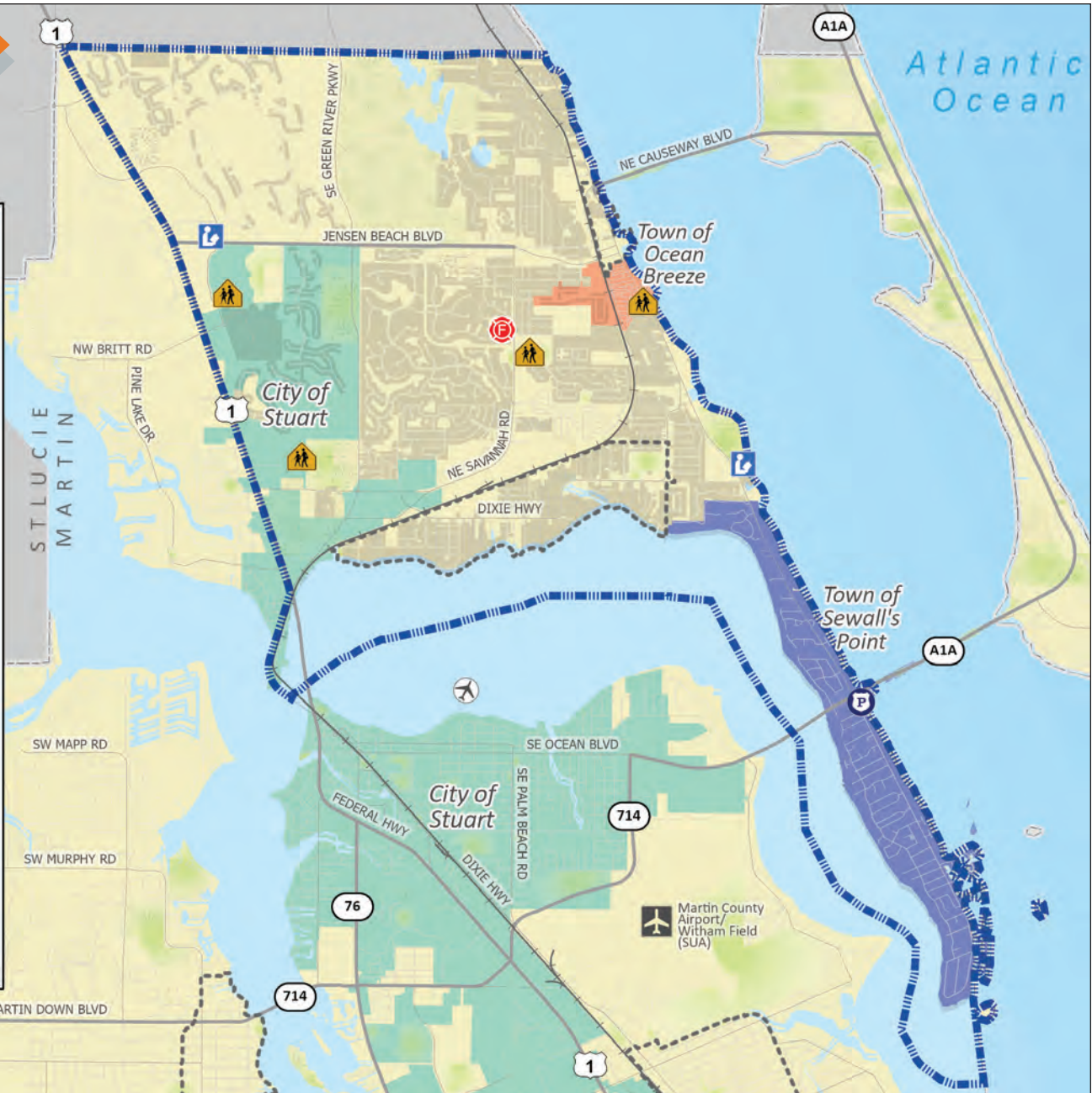
3 Crashes 2 Fatal / 1 Serious Injury



NORTH COUNTY

-  Fire and Rescue
-  Law Enforcement
-  Library
-  Schools
-  Public Airport
-  Private Airport or Helicopter
-  North County Planning Area
-  City of Stuart
-  Town of Ocean Breeze
-  Town of Sewall's Point
-  Residential Area
-  Community Redevelopment Area
-  Park or Recreation Area
-  Conservation Area



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Overview & Key Features

The North County Planning Area encompasses the northeastern portion of Martin County and covers roughly 17.7 square miles or 3% of the County total. North County includes four communities, Jensen Beach, Rio, Ocean Breeze and Sewall's Point. Originally a pineapple farming area, Jensen Beach celebrates this heritage with the annual Jensen Beach Pineapple Festival. Ocean Breeze began as a mobile home park that was incorporated as the Town of Ocean Breeze in 1960. The Town of Sewall's Point, named for its first settler, Henry Sewall, was incorporated in 1957. Rio, originally known as Rio San Lucie until 1897 when the name was shortened, is an unincorporated community featuring waterfront homes, businesses, and its own civic center.

North County has a population of 18,050 residents, or 11.4% of the Martin County total.

- 13.8% of North County's population live in a household with income below the poverty level,
- 13.7% identify as a racial or ethnic minority, and
- 31% are aged 65 or older.

It contains 9,954 households, or 12.2% of the County total.

- 0.5% of the households in North County are home to a person with Limited English Proficiency (LEP),
- 28.8% are home to a person with a disability, and
- 5.5% do not own a personal vehicle.

Key features of the North County Planning Area include:

- City of Stuart
- Town of Sewall's Point
- Town of Ocean Breeze
- Jensen Beach CRA
- Rio CRA
- Rio Civic Center
- Felix A. Williams Elementary School
- Hoke Library
- Jensen Beach Elementary School
- Jensen Beach High School
- Log Cabin Senior Center
- Martin County Fire Rescue Station 16
- Savannas Preserve State Park
- Sewall's Point Police Department

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the North County Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor's Degree

North County	28.8%	0.5%	93.4%/37.5%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

North County	13.7%	13.8%	31.0%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

North County	5.5%	33.7%	10.9%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
18,050

Households
9,954

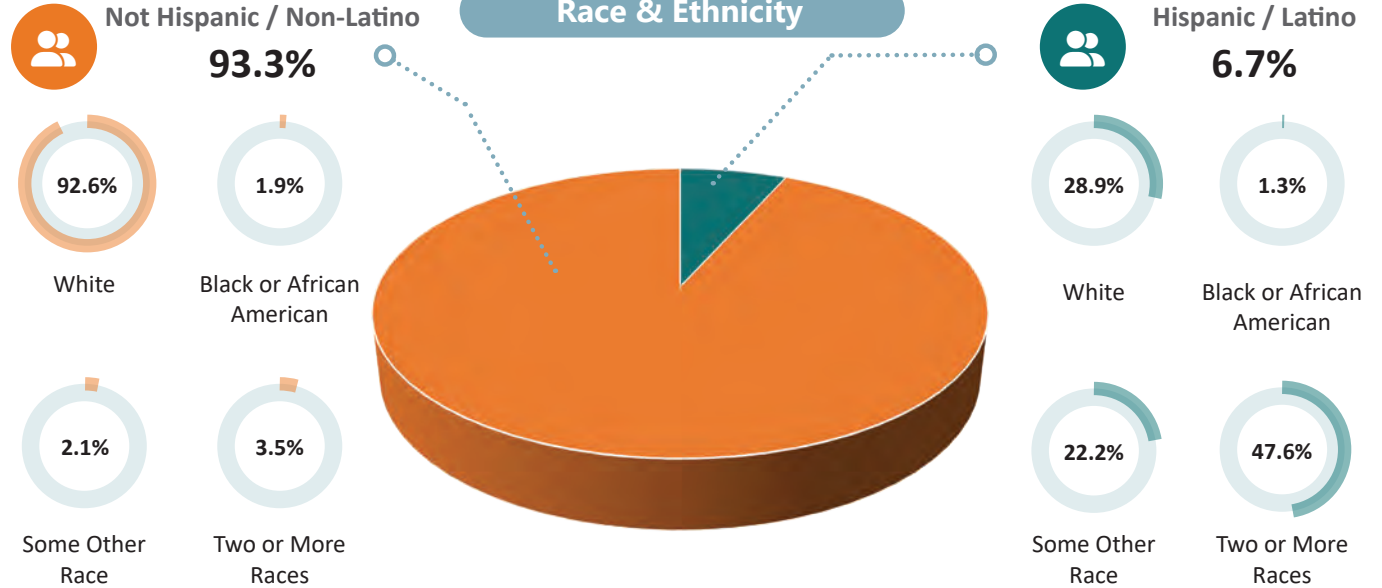
Persons 65+
5,604

Minority Population
2,464

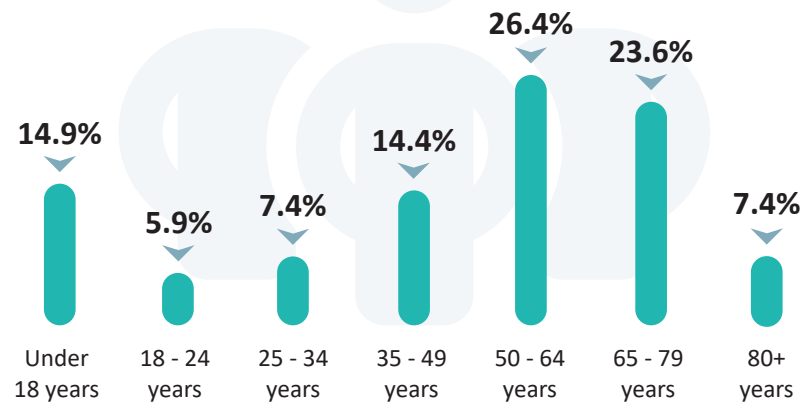
Household with Persons with Disability
28.8%

Limited English Proficiency Households
0.5%

Race & Ethnicity



Age Groups



Economic Data



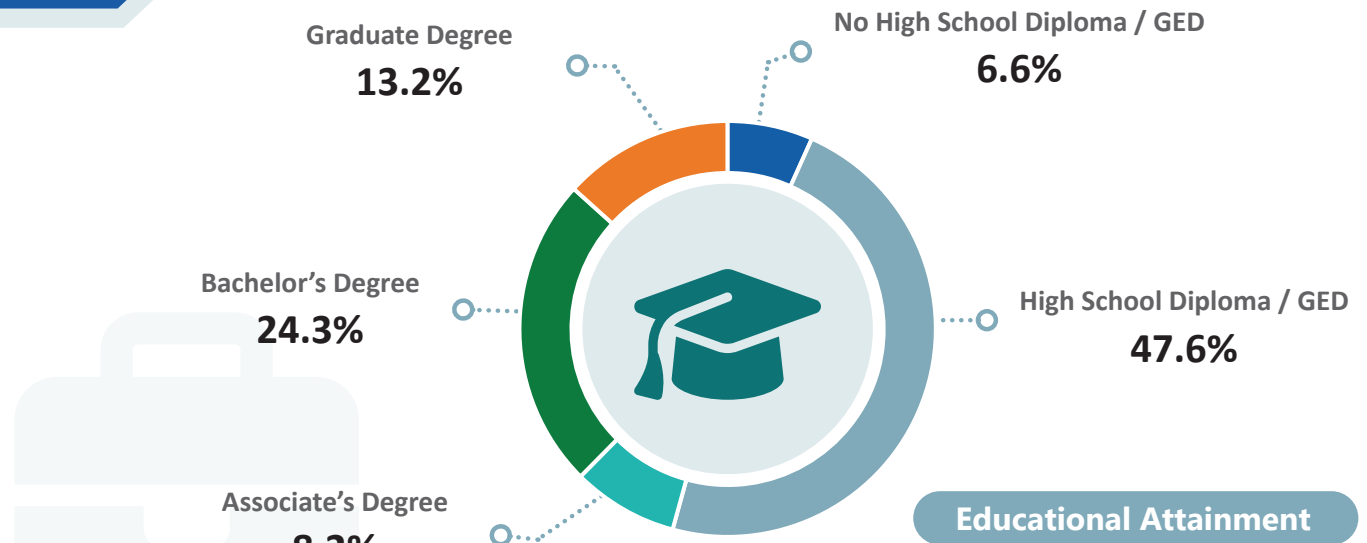
52.5%
of Population is 16+
and are in the Labor Force



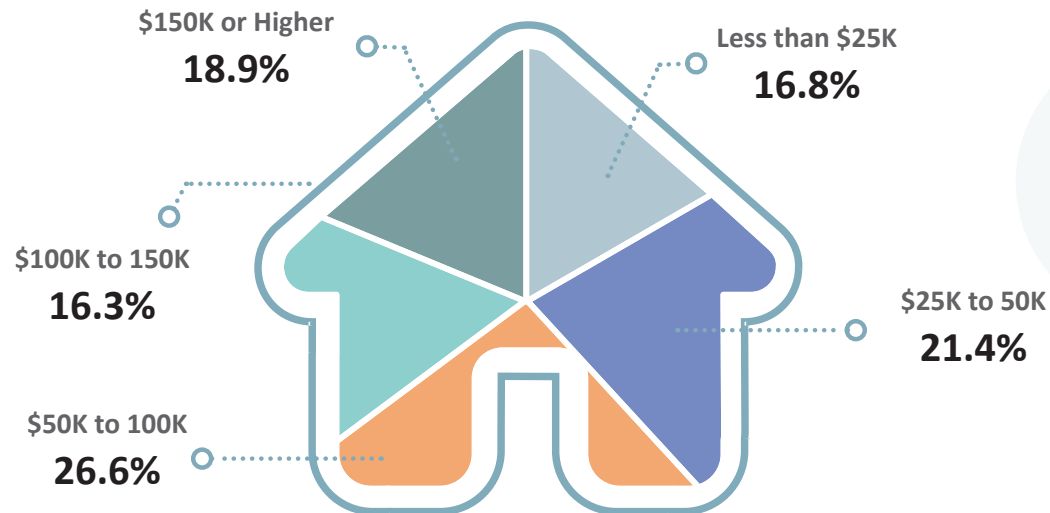
96.7%
of the Labor Force
are Employed



Most Common Household
Income Range
\$50K to \$100K



Educational Attainment



Household Income

Commuting Characteristics



Zero-Vehicle Households
5.5%



86.6%
Use a Vehicle to Get to Work



10.9%
of Workers Telecommute

Travel Time to Work



66.3%



89.1%



97.8%

Means of Travel to Work

By Vehicle



89.2%
Drove Alone



8.0%
Carpooled

Other Modes of Transportation



0.4%
Public Transportation



0.03%
Walked



2.3%
Taxicab, motorcycle,
bicycle, other means

Departure Time for Work



Early Morning
(Before 7AM)
23.6%



Morning
(7AM - 9AM)
48.8%












Later Morning
(9AM - Noon)
12.4%





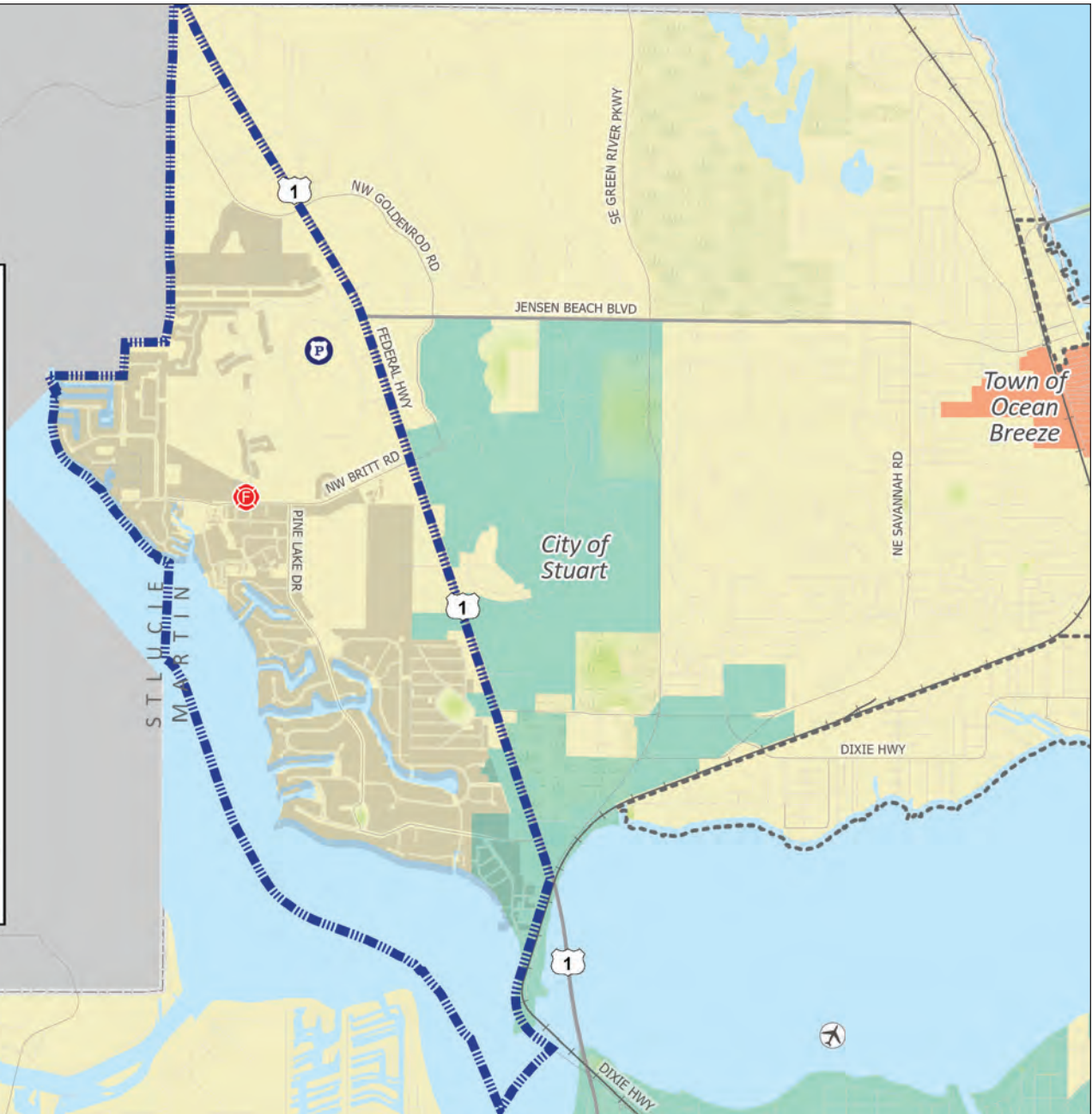
Afternoon
(Noon or Later)
15.2%

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NORTH RIVER SHORES

-  Fire and Rescue
-  Law Enforcement
-  Private Airport or Heliport
-  North River Shores Planning Area
-  City of Stuart
-  Town of Ocean Breeze
-  Residential Area
-  Community Redevelopment Area
-  Park or Recreation Area
-  Conservation Area



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Overview & Key Features

The North River Shores Planning Area is the smallest Planning Area, covering roughly 3.9 square miles or 0.6% of the County total. North River Shores is an unincorporated community established in the mid-1950s and is one of the oldest residential areas of Martin County.

North River Shores has a population of 6,033 residents, or 3.8% of the Martin County total.

- 12.1% of North River Shores’s population live in a household with income below the poverty level,
- 19.5% identify as a racial or ethnic minority, and
- 27.9% are aged 65 or older.

It contains 3,386 households, or 4.2% of the County total.

- 2.3% of the households in North River Shores are home to a person with Limited English Proficiency (LEP),
- 23.6% are home to a person with a disability, and
- 5.1% do not own a personal vehicle.

Key features of the North River Shores Planning Area include:

- City of Stuart
- Riverside Park Neighborhood Improvement Area
- Martin County Fire Rescue Station 18
- Martin County Sheriff’s Office Jensen Beach Substation
- Oleander Park
- Palm Lake Park
- Pine Lake Park
- Treasure Coast Square

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the North River Shores Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

North River Shores	23.6%	2.3%	94.9%/35.3%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

North River Shores	19.5%	12.1%	27.9%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

North River Shores	5.1%	37.1%	7.4%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
6,033

Households
3,386

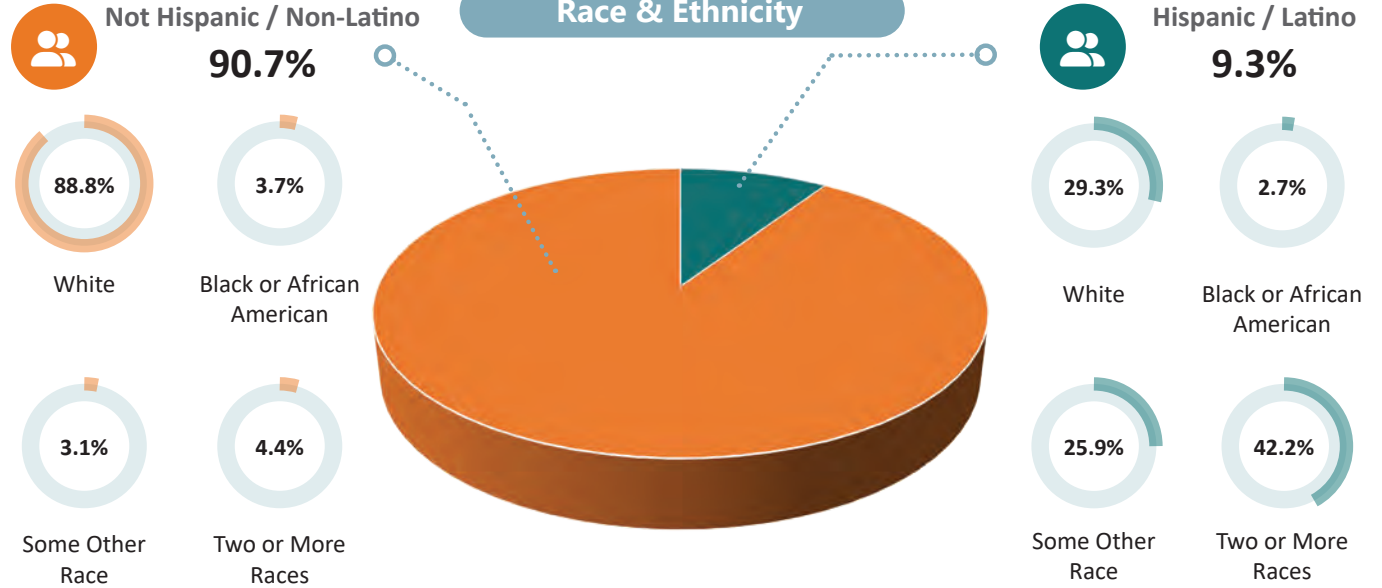
Persons 65+
1,684

Minority Population
1,175

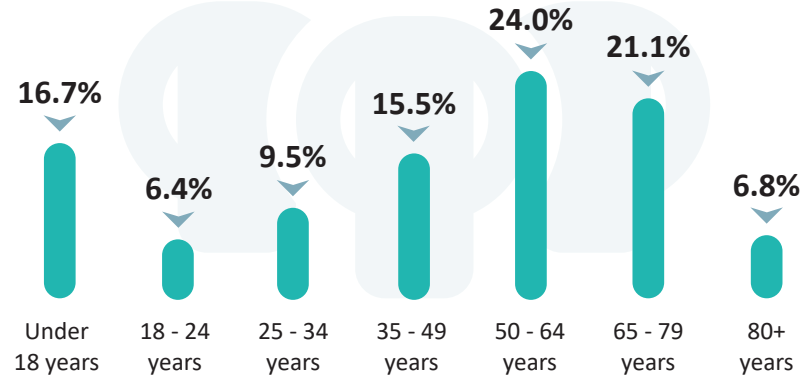
Household with Persons with Disability
23.6%

Limited English Proficiency Households
2.3%

Race & Ethnicity



Age Groups



Economic Data



61.0%
of Population is 16+
and are in the Labor Force



94.6%
of the Labor Force
are Employed



Most Common Household
Income Range
\$25K to \$50K

Graduate Degree
13.4%

No High School Diploma / GED
5.1%

Bachelor's Degree
21.9%

High School Diploma / GED
46.3%

Associate's Degree
13.3%

Educational Attainment

Household Income

\$150K or Higher
16.8%

Less than \$25K
23.3%

\$100K to 150K
9.6%

\$50K to 100K
23.9%

\$25K to 50K
26.4%



Commuting Characteristics



Zero-Vehicle Households
5.1%



87.2%
Use a Vehicle to Get to Work



7.4%
of Workers Telecommute

Travel Time to Work



62.9%



92.3%



98.8%

Means of Travel to Work

By Vehicle



91.6%
Drove Alone



2.7%
Carpooled

Other Modes of Transportation



0.04%
Public Transportation



0%
Walked



5.7%
Taxicab, motorcycle, bicycle, other means

Departure Time for Work



Early Morning (Before 7AM)
33.8%



Morning (7AM - 9AM)
40.1%



Later Morning (9AM - Noon)
11.5%



Afternoon (Noon or Later)
15.6%

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Crash Characteristics

High Crash Locations

The map on this page shows the North River Shores intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

Crash Occurrences

Total Fatal of Serious Injury Crashes (All Vehicle Types)

2 Crashes 0 Fatal / 2 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

1 Crash 0 Fatal / 1 Serious Injury



PALM CITY



DRAFT

Overview & Key Features

The Palm City Planning Area covers roughly 16.3 square miles or 2.8% of the County total. It has one of the largest populations in the unincorporated areas of the County. With access to both Florida's Turnpike and I-95, it can be one of the first locations visitors enter when visiting Martin County. Once a small agricultural area, it grew into a heavily populated area, most likely due to its easy access from the regional transportation network.

Palm City has a population of 25,883 residents, or 16.3% of the Martin County total.

- 6.3% of Palm City's population live in a household with income below the poverty level,
- 15.8% identify as a racial or ethnic minority, and
- 27.8% are aged 65 or older.

It contains 11,651 households, or 14.3% of the County total.

- 0.4% of the households in Palm City are home to a person with Limited English Proficiency (LEP),
- 21.2% are home to a person with a disability, and
- 3.6% do not own a personal vehicle.

Key features of the Palm City Planning Area include:

- Old Palm City CRA
- Bessey Creek Elementary School
- Cummings Library
- Hidden Oaks Middle School
- Jock Leighton Park
- LCPL Justin Wilson Memorial Park
- Leighton Park & Boat Ramp
- Martin County Fire Rescue Station 21
- Palm City Elementary School
- Pendarvis Cove Park
- C-23 Canal Fishing Pier

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Palm City Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor's Degree

Palm City	21.2%	0.4%	96.7%/46.1%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

Palm City	15.8%	6.3%	27.8%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Palm City	3.6%	39.7%	15.2%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
25,883

Households
11,651

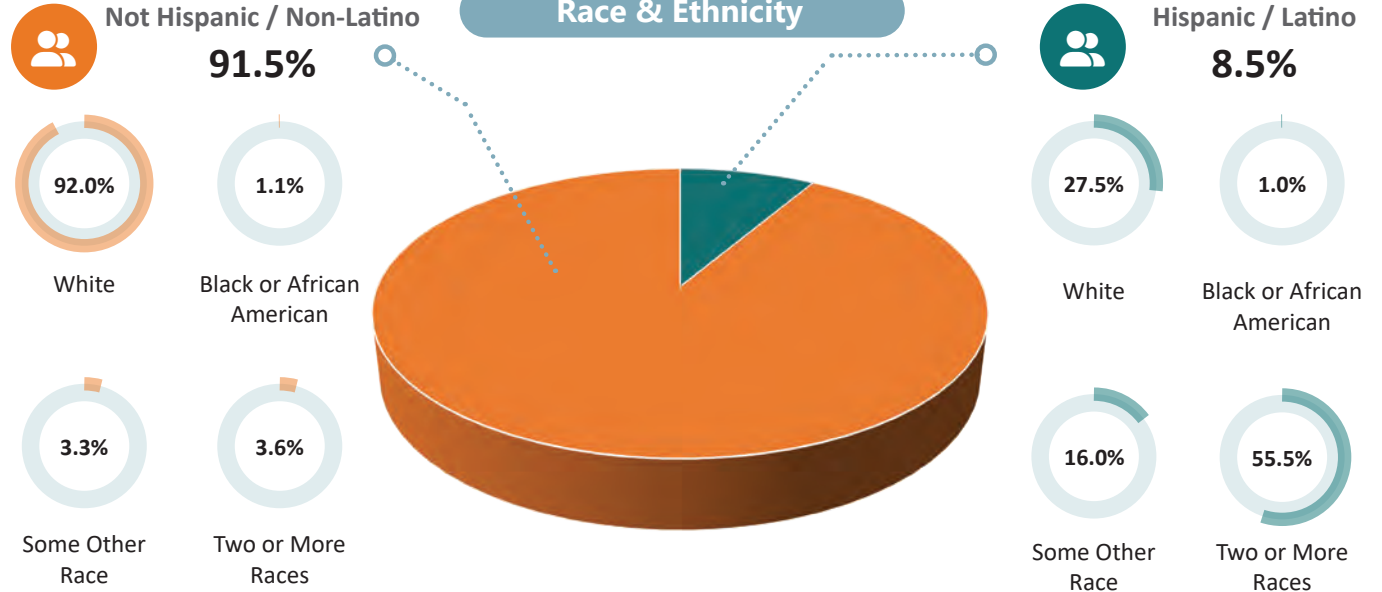
Persons 65+
7,184

Minority Population
4,080

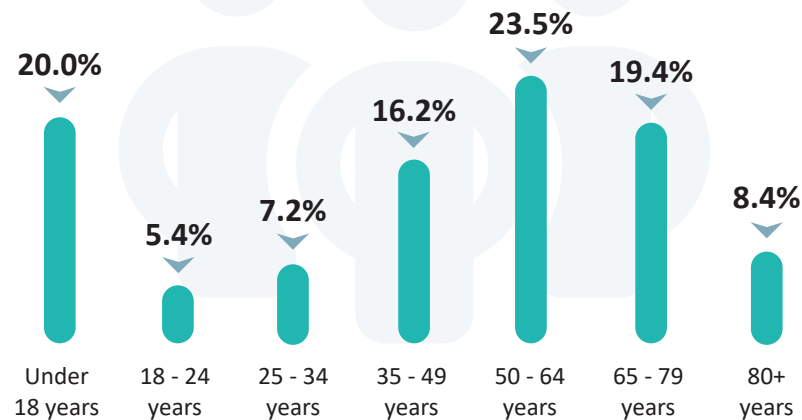
Household with Persons with Disability
21.2%

Limited English Proficiency Households
0.4%

Race & Ethnicity



Age Groups



Economic Data



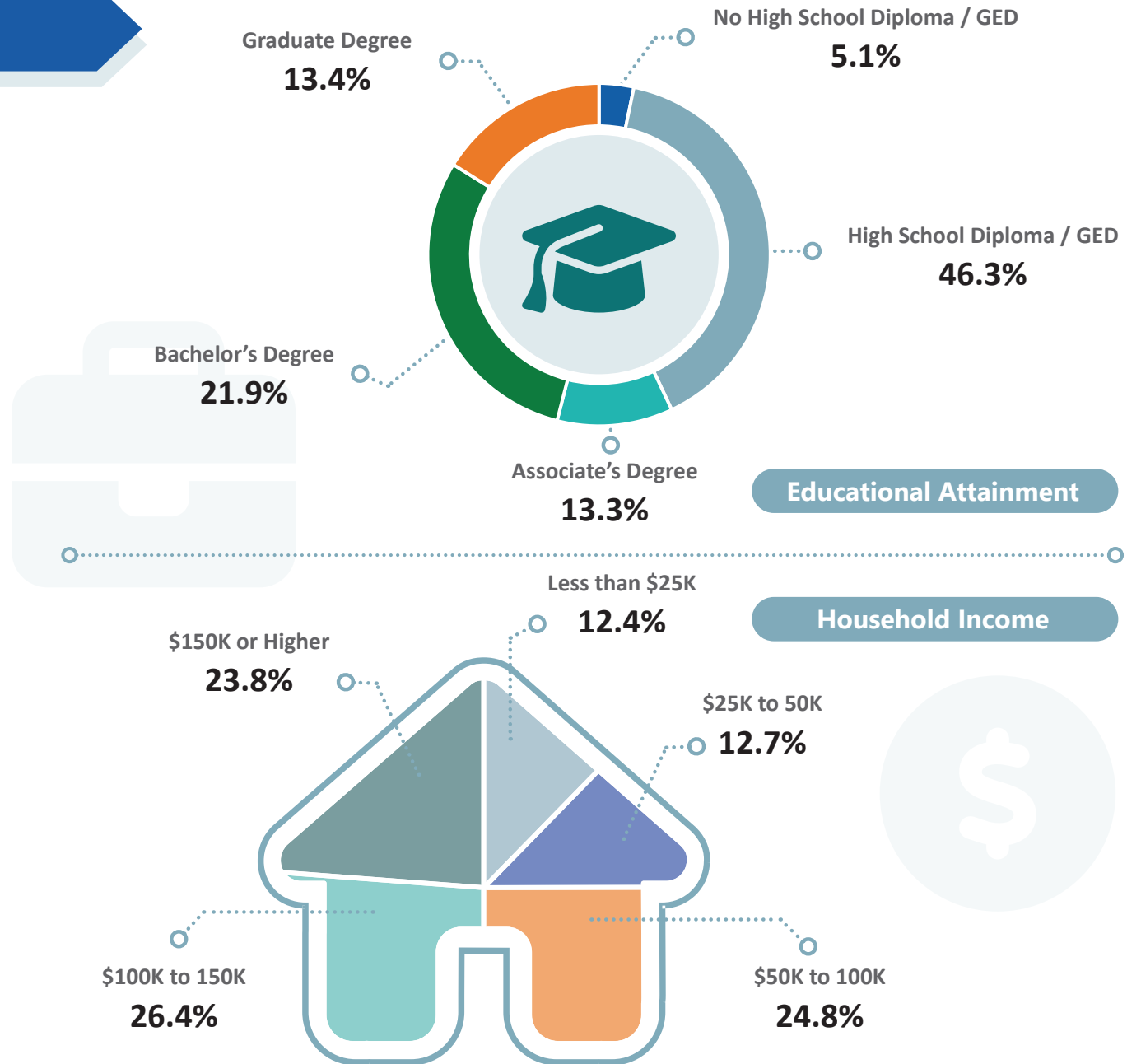
54.9%
of Population is 16+
and are in the Labor Force



94.5%
of the Labor Force
are Employed



Most Common Household
Income Range
\$100K to \$150K



Commuting Characteristics


Zero-Vehicle
Households
3.6%



83.8%
Use a Vehicle to
Get to Work


15.2%
of Workers
Telecommute

Travel Time to Work



<30
min
60.3%



<60
min
93.4%


<90
min
97.7%


Means of Travel to Work

By Vehicle



92.9%
Drove Alone


5.9%
Carpooled


Other Modes of Transportation



0.4%
Public Transportation



0.2%
Walked


0.5%
Taxicab, motorcycle,
bicycle, other means

Departure Time for Work


Early Morning
(Before 7AM)
25.3%


Morning
(7AM - 9AM)
54.7%


Later Morning
(9AM - Noon)
10.6%


Afternoon
(Noon or Later)
9.4%

DRAFT

Crash Characteristics

High Crash Locations

The map on this page shows the Palm City intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

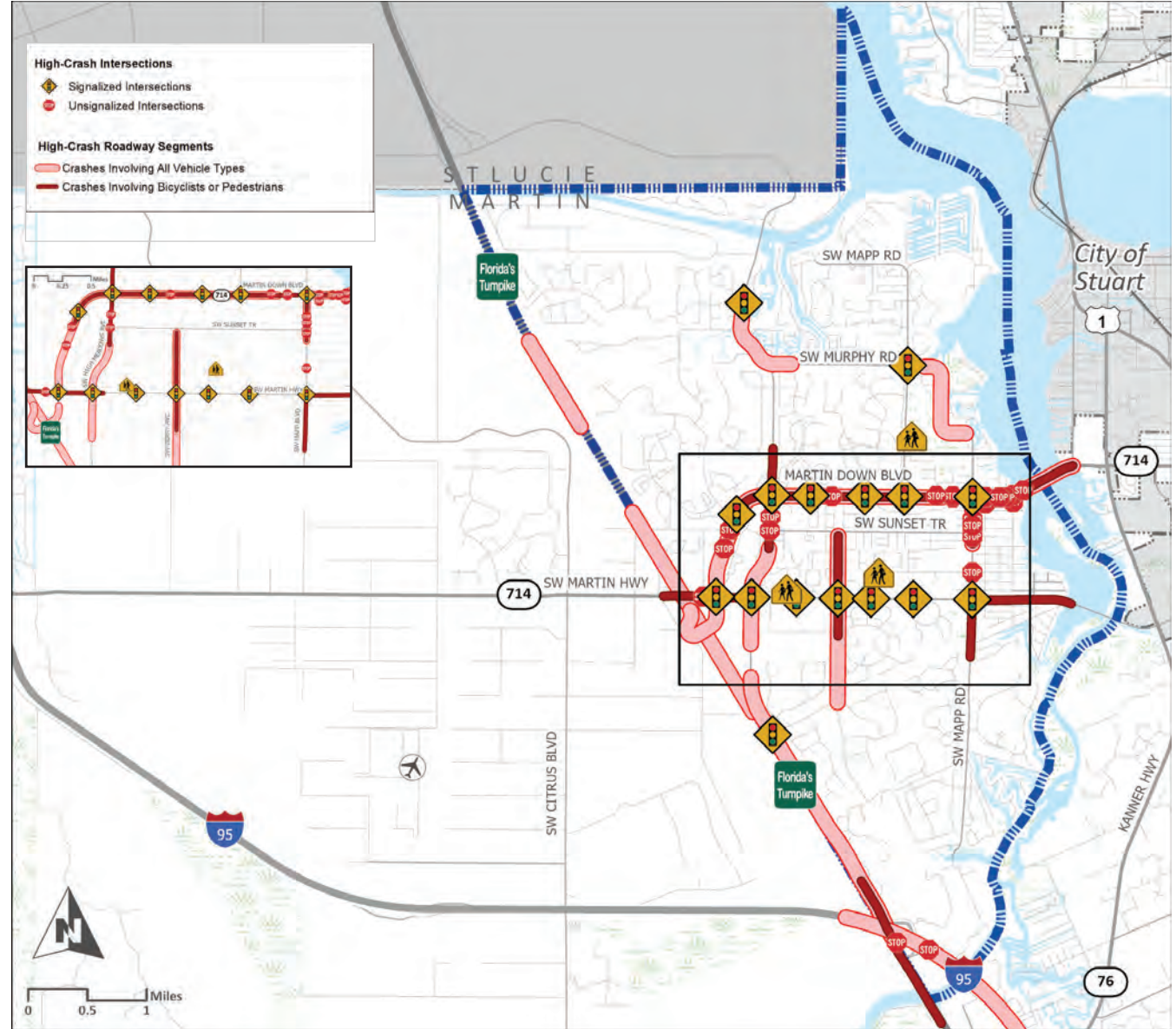
Crash Occurrences

Total Fatal of Serious Injury Crashes (All Vehicle Types)

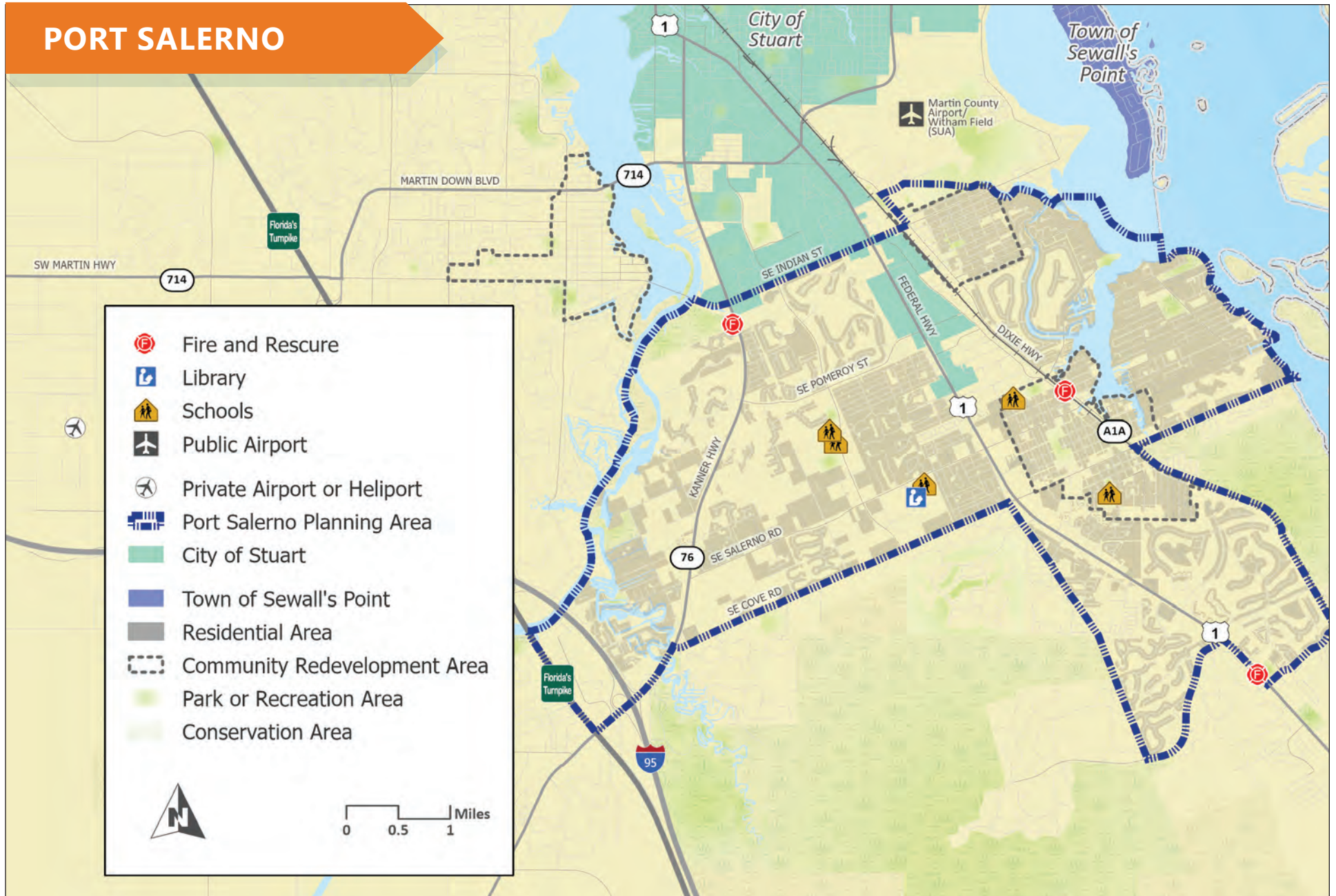
35 Crashes 4 Fatal / 31 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

6 Crashes 1 Fatal / 5 Serious Injury



PORT SALERNO



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Overview & Key Features

The Port Salerno Planning Area covers roughly 18.11 square miles or 3% of the County total. It has the largest population of the unincorporated areas within Martin County. Created in the 1920's as a small settlement on the southern shores of the St. Lucie River inlet, the name Salerno comes from the Italians who settled the area, originally from the City of Salerno, Italy. The area has a strong fishing and boating community.

Port Salerno has a population of 35,144 residents, or 22.2% of the Martin County total.

- 11% of Port Salerno's population live in a household with income below the poverty level,
- 30.4% identify as a racial or ethnic minority, and
- 30.1% are aged 65 or older.

It contains 17,311 households, or 21.3% of the County total.

- 2.4% of the households in Port Salerno are home to a person with Limited English Proficiency (LEP),
- 25.8% are home to a person with a disability, and
- 3.7% do not own a personal vehicle.

Key features of the Port Salerno Planning Area include:

- City of Stuart
- Golden Gate CRA
- Port Salerno CRA
- Port Salerno Civic Center
- Indian River State College Chastain Campus
- Kiplinger Nature Preserve
- Lamar Howard Park & Golden Gate Recreation Trail
- Martin County Fire Rescue Stations 23 & 30
- Martin Health System
- Murray Middle School
- Pinewood Elementary School
- Port Salerno Elementary School
- Robert Morgrade Library

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Port Salerno Planning Area compares to all of Martin County:



Household with Persons with Disability

Port Salerno	25.8%	2.4%	90.5%/27.7%
Martin County	26.5%	2.1%	91.4% / 33.5%



Households with Limited English



High School/ Bachelor's Degree



Minority Population



Persons Below Poverty Level



Persons 65+

Port Salerno	30.4%	11.0%	30.1%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Port Salerno	3.7%	39.0%	5.0%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
35,144

Households
17,311

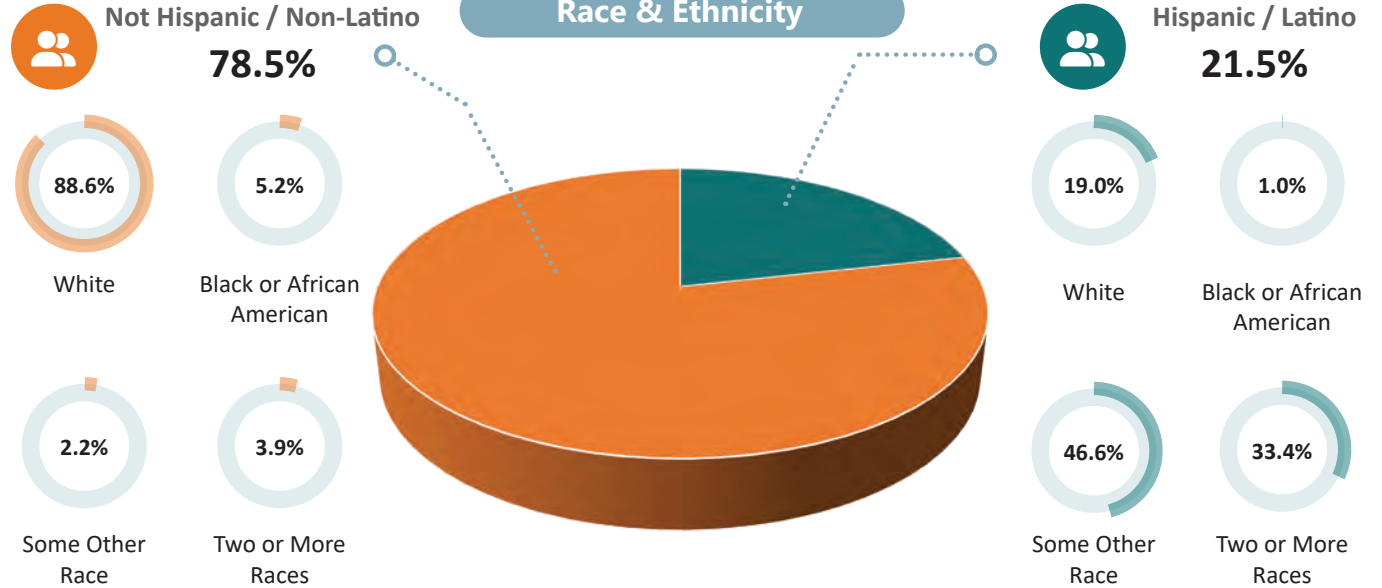
Persons 65+
10,580

Minority Population
10,701

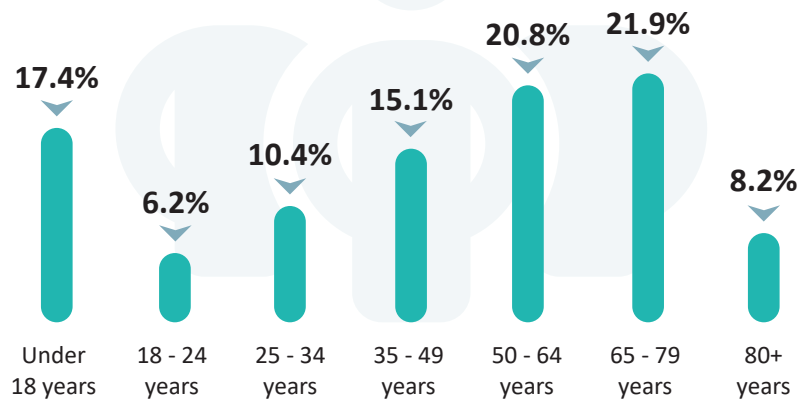
Household with Persons with Disability
25.8%

Limited English Proficiency Households
2.4%

Race & Ethnicity



Age Groups



Economic Data



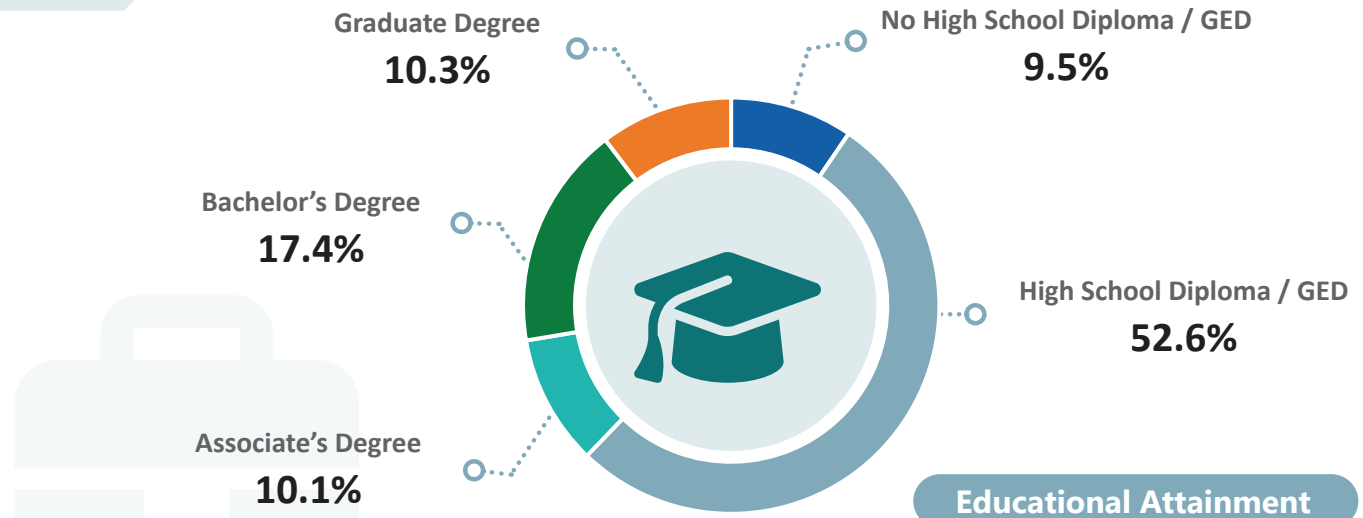
53.1%
of Population is 16+
and are in the Labor Force



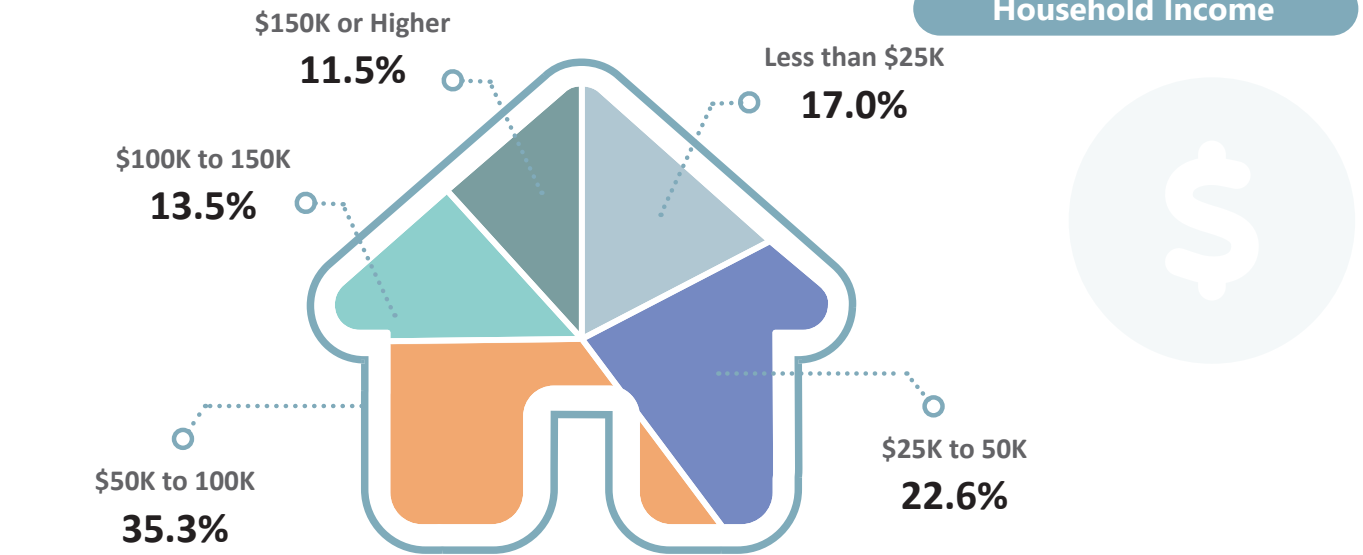
95.2%
of the Labor Force
are Employed



Most Common Household
Income Range
\$50K to \$100K





Educational Attainment



Household Income

Commuting Characteristics


Zero-Vehicle
Households
3.7%



91.9%
Use a Vehicle to
Get to Work


5.0%
of Workers
Telecommute


Travel Time to Work



<30
min
61.0%



<60
min
91.0%



<90
min
94.6%

Departure Time for Work


Early Morning
(Before 7AM)
34.0%



Morning
(7AM - 9AM)
45.2%



Later Morning
(9AM - Noon)
7.5%


Afternoon
(Noon or Later)
13.3%


Means of Travel to Work

By Vehicle



81.5%
Drove Alone


15.1%
Carpooled

Other Modes of Transportation


0.1%
Public Transportation


0.7%
Walked


2.5%
Taxicab, motorcycle,
bicycle, other means

DRAFT

Crash Characteristics

High Crash Locations

The map on this page shows the Port Salerno intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

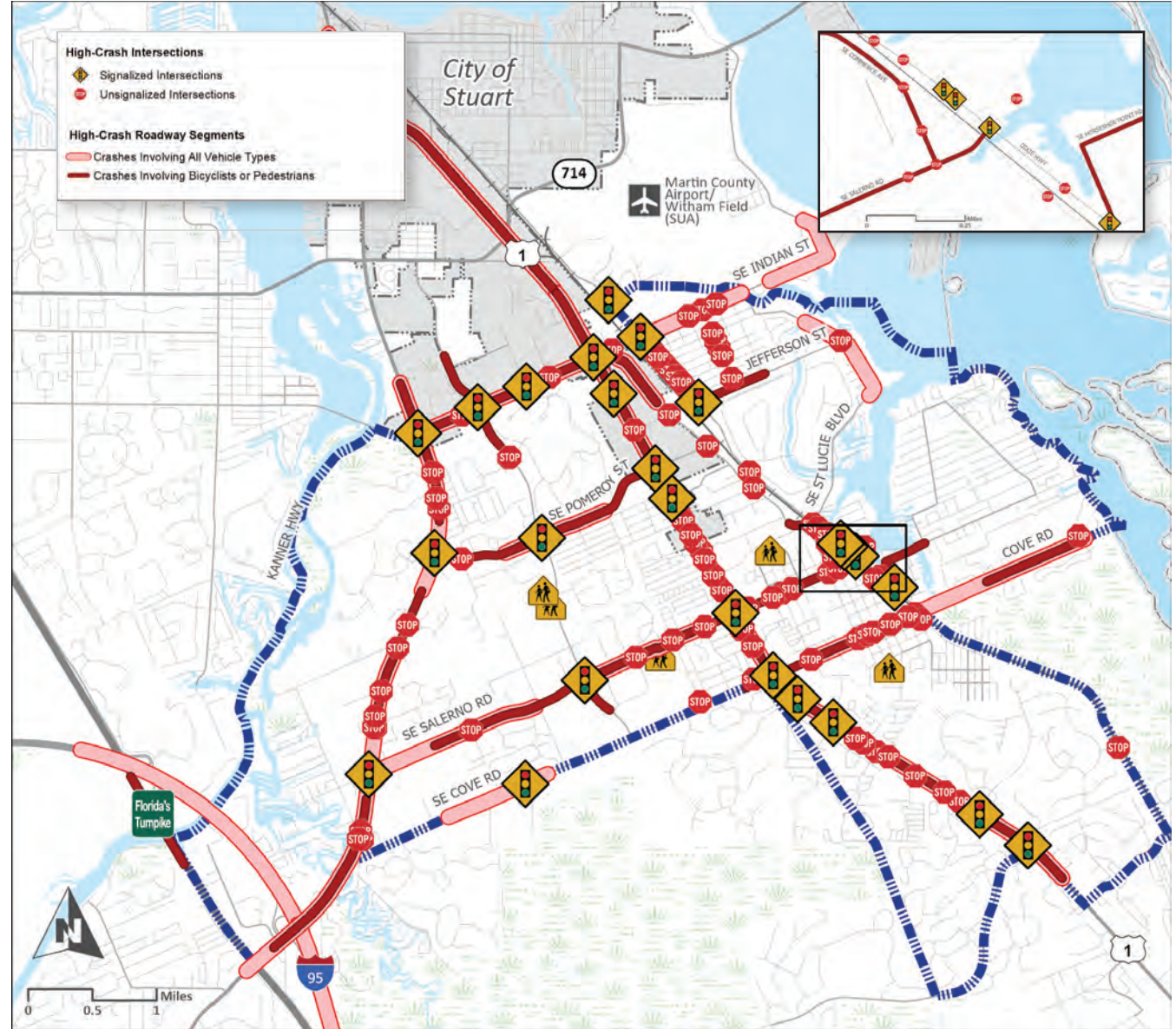
Crash Occurrences

Total Fatal or Serious Injury Crashes (All Vehicle Types)

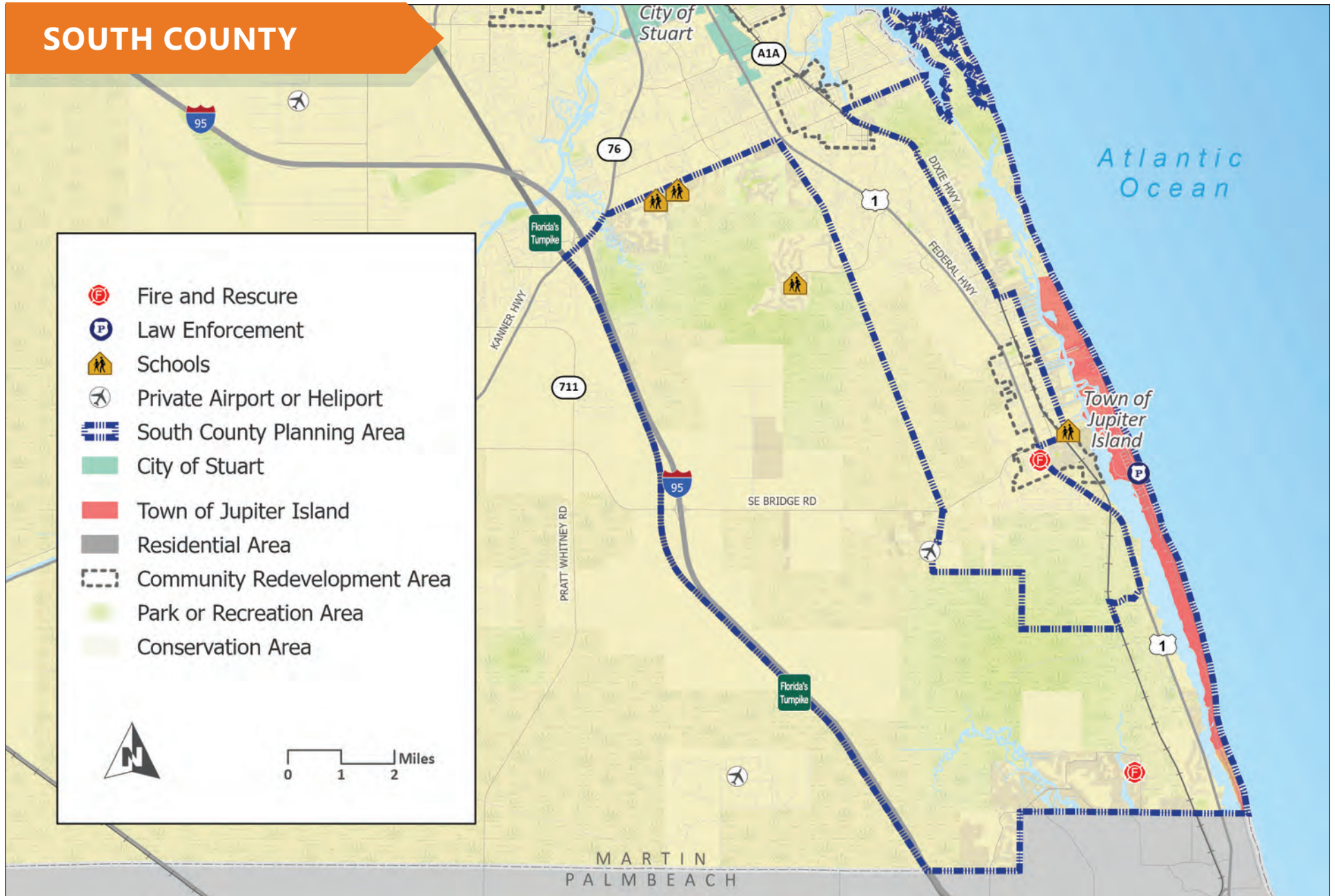
90 Crashes 20 Fatal / 70 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

22 Crashes 9 Fatal / 13 Serious Injury



SOUTH COUNTY



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Overview & Key Features

South County is in southeastern Martin County, bordering Palm Beach County. It covers 72.4 square miles, representing 12.2% of the County total. It is one of the most environmentally sensitive areas of the County and is home to Jonathan Dickinson State Park, Hobe Sound Nature Center, and the Hobe Sound National Wildlife Refuge. South County also includes the Town of Jupiter Island, which was incorporated in 1953 and is located entirely on the barrier island.

South County has a population of 15,663 residents, or 9.9% of the Martin County total.

- 5.4% of South County’s population live in a household with income below the poverty level,
- 9.8% identify as a racial or ethnic minority, and
- 45.9% are aged 65 or older.

It contains 9,319 households, or 11.5% of the County total.

- 0.9% of the households in South County are home to a person with Limited English Proficiency (LEP),
- 23.1% are home to a person with a disability, and
- 4.1% do not own a personal vehicle.

Key features of the South County Planning Area include:

- Town of Jupiter Island
- Blowing Rocks Preserve Park
- Dr. David L. Anderson Middle School
- Hobe Sound CRA (partial)
- Jonathan Dickinson State Park
- Jupiter Island Police Department
- Martin County Fire Rescue Station 36
- Nathaniel P. Reed Hobe Sound National Wildlife Refuge
- Sea Branch Preserve State Park
- Seawind Elementary
- St. Lucie Inlet Preserve State Park

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the South County Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

South County	23.1%	0.9%	95.8%/41.7%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

South County	9.8%	5.4%	45.9%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

South County	4.1%	48.4%	9.7%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
15,663

Households
9,319

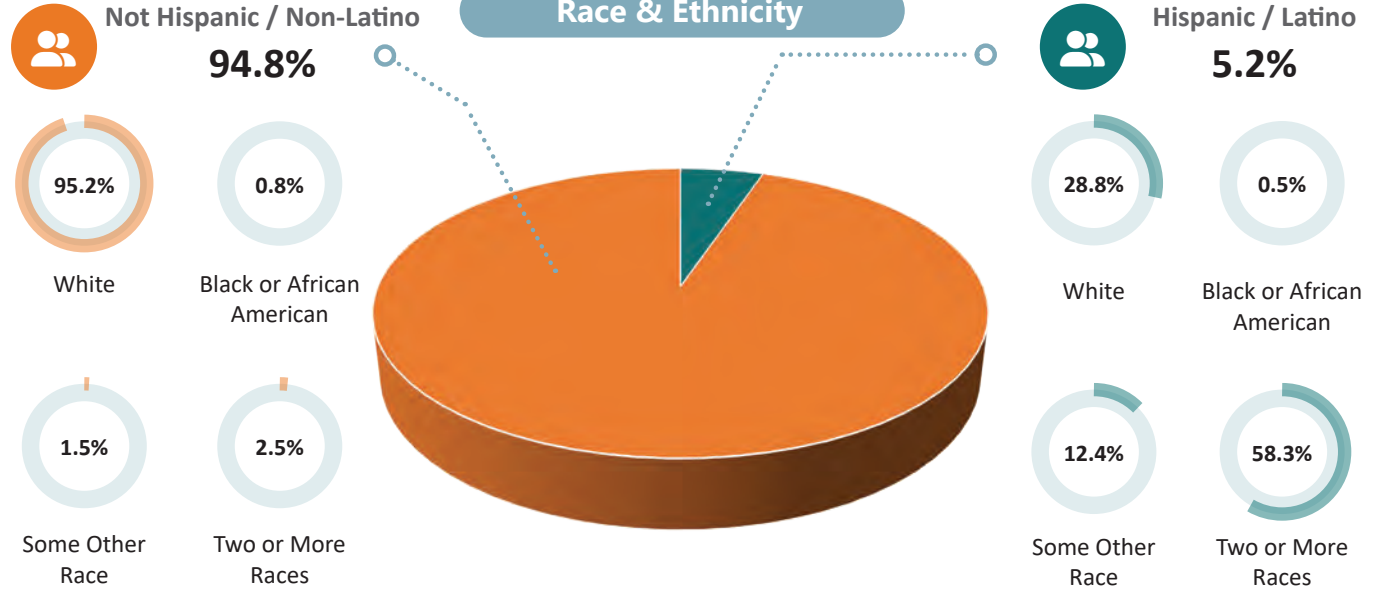
Persons 65+
7,193

Minority Population
1,537

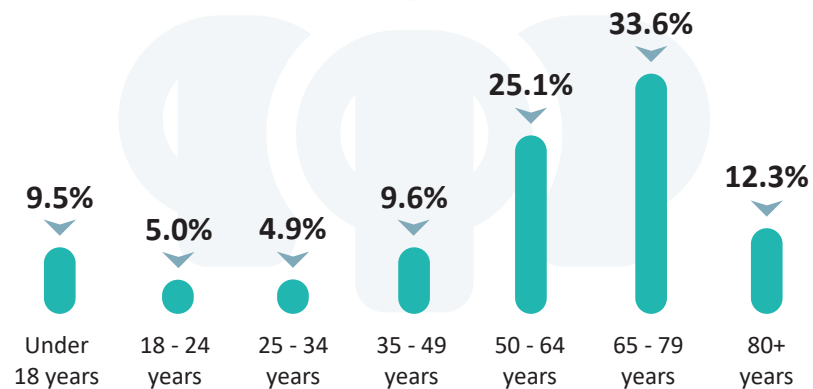
Household with Persons with Disability
23.1%

Limited English Proficiency Households
0.9%

Race & Ethnicity



Age Groups



Economic Data



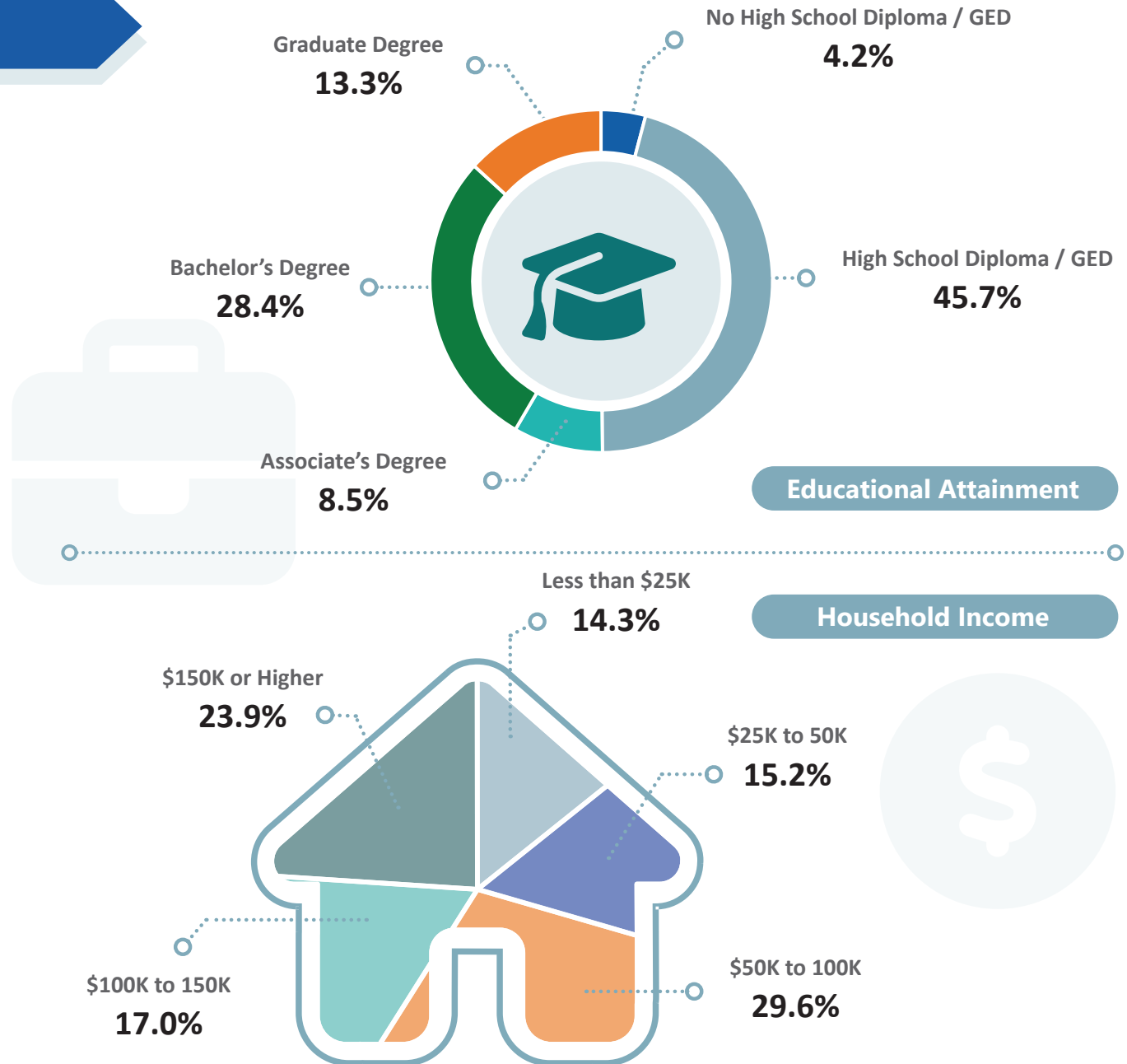
46.1%
of Population is 16+
and are in the Labor Force




96.1%
of the Labor Force
are Employed



Most Common Household
Income Range
\$50K to \$100K



Commuting Characteristics


Zero-Vehicle
Households
4.1%



85.3%
Use a Vehicle to
Get to Work


9.7%
of Workers
Telecommute

Travel Time to Work



<30
min
51.6%



<60
min
94.6%


<90
min
97.4%


Means of Travel to Work

By Vehicle



87.8%
Drove Alone


6.6%
Carpooled


Other Modes of Transportation



1.1%
Public Transportation


2.0%
Walked


2.4%
Taxicab, motorcycle,
bicycle, other means

Departure Time for Work


Early Morning
(Before 7AM)
26.4%


Morning
(7AM - 9AM)
51.0%


Later Morning
(9AM - Noon)
18.1%


Afternoon
(Noon or Later)
4.5%

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Crash Characteristics

High Crash Locations

The map on this page shows the South County intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.



Crash Occurrences

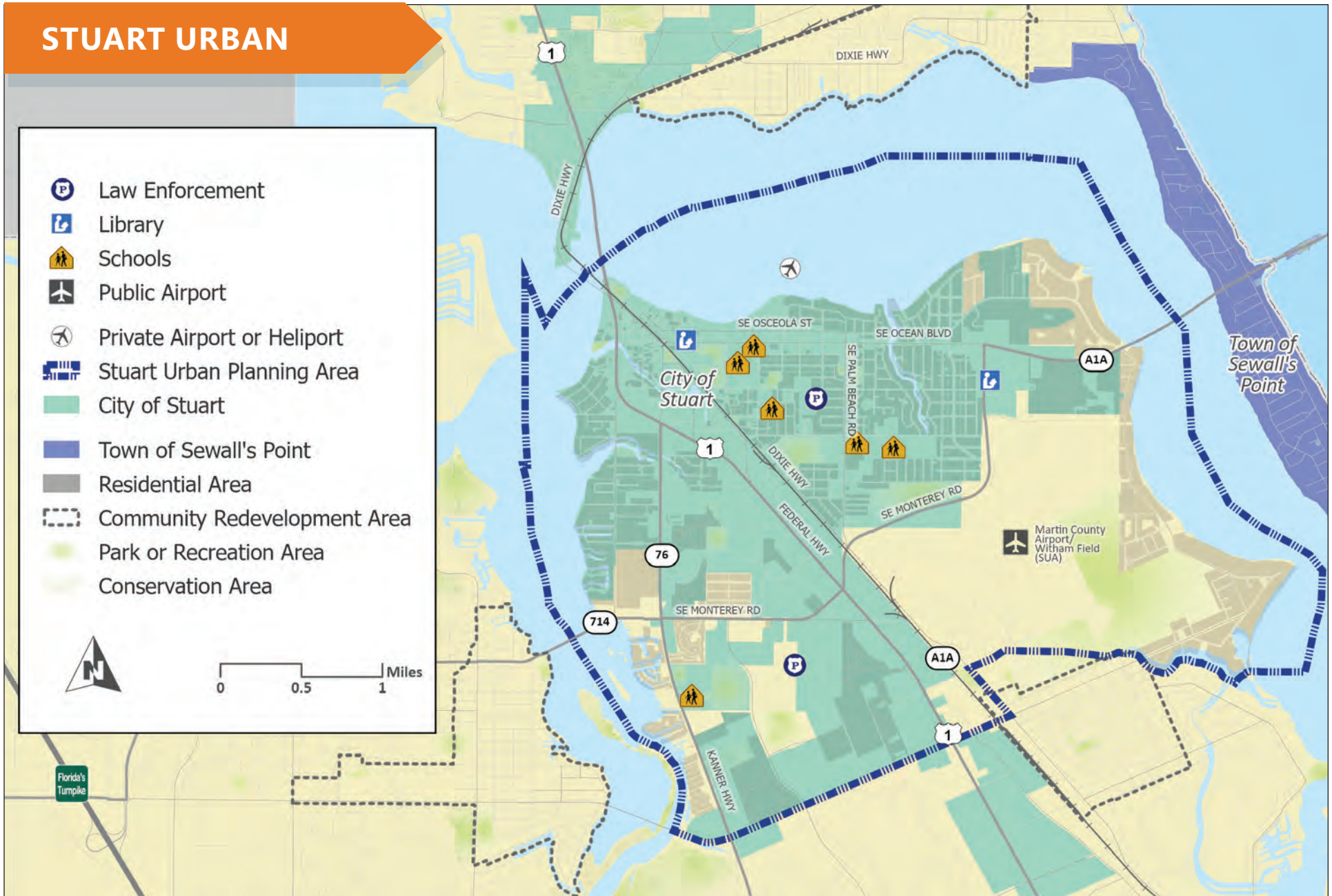
Total Fatal or Serious Injury Crashes (All Vehicle Types)

93 Crashes 27 Fatal / 66 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

14 Crashes 3 Fatal / 11 Serious Injury

STUART URBAN



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Overview & Key Features

The Stuart Urban Planning Area is home to the largest municipality in Martin County, which also serves as the county seat. Stuart Urban covers roughly 10.8 square miles or 1.8% of the County total. The City of Stuart was incorporated in 1914 when it was still part of Palm Beach County. It was named the county seat of Martin County in 1925. Known as the Sailfish Capital of the World, it is a small but popular area of Martin County.

Stuart Urban has a population of 19,489 residents, or 12.3% of the Martin County total.

- 12.9% of Stuart Urban’s population live in a household with income below the poverty level,
- 31.2% identify as a racial or ethnic minority, and
- 36.3% are aged 65 or older.

It contains 11,740 households, or 14.4% of the County total.

- 4.2% of the households in Stuart Urban are home to a person with Limited English Proficiency (LEP),
- 30.6% are home to a person with a disability, and
- 8.7% do not own a personal vehicle.

Key features of the Stuart Urban Planning Area include:

- City of Stuart
- Blake Library
- Cleveland Clinic Martin North Hospital
- East Stuart CRA
- J.D. Parker Elementary School
- Martin County Airport/Witham Field
- Martin County Courthouse
- Martin County High School
- City of Stuart Fire Rescue Stations 1 & 2
- Stuart Middle School
- City of Stuart Police Department
- Multiple Parks & Recreational Areas

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the Stuart Urban Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

Stuart Urban	30.6%	4.2%	91.7%/28.3%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

Stuart Urban	31.2%	12.9%	36.3%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

Stuart Urban	8.7%	31.2%	11.5%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
19,489

Households
11,740

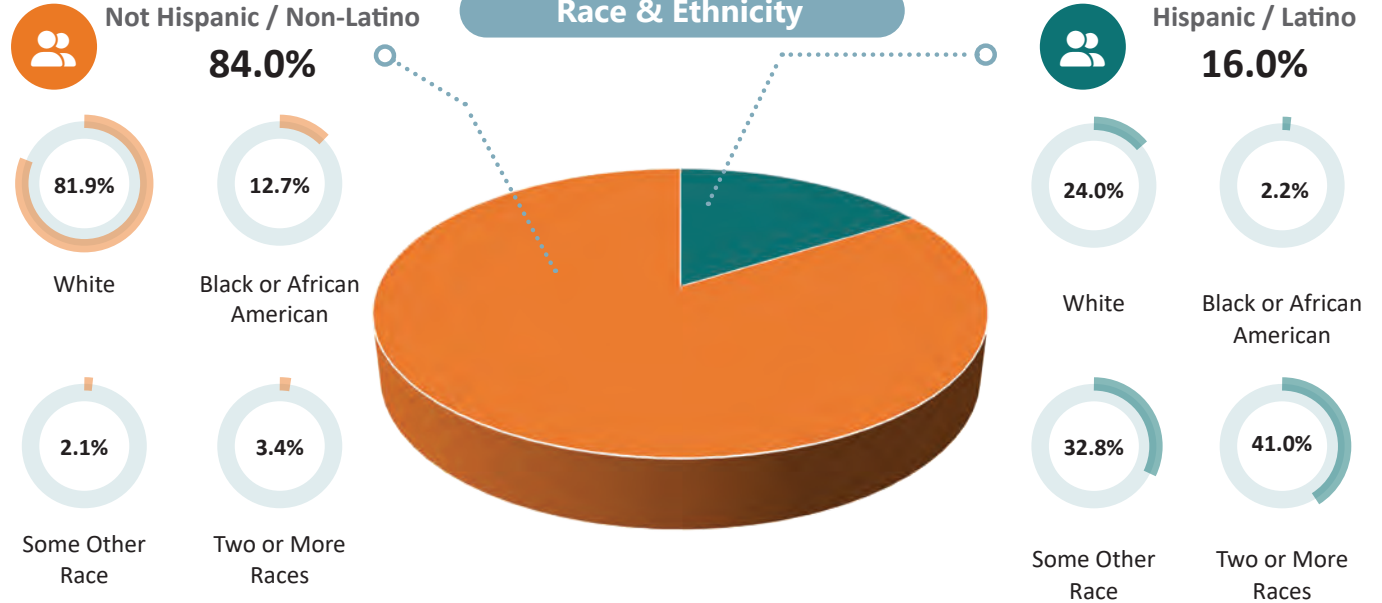
Persons 65+
7,071

Minority Population
6,089

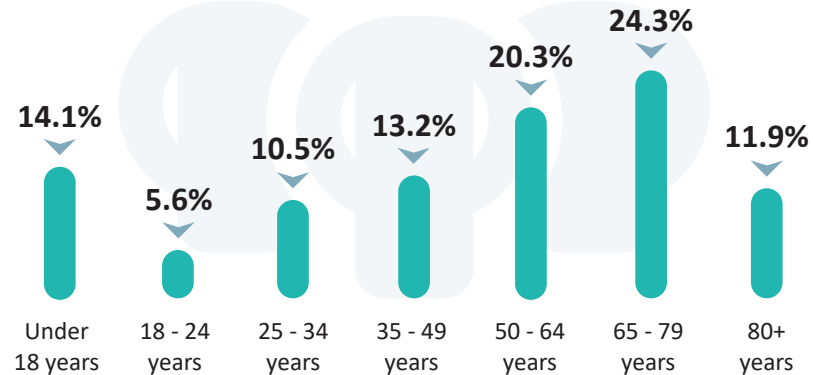
Household with Persons with Disability
30.6%

Limited English Proficiency Households
4.2%

Race & Ethnicity



Age Groups



DRAFT

Economic Data



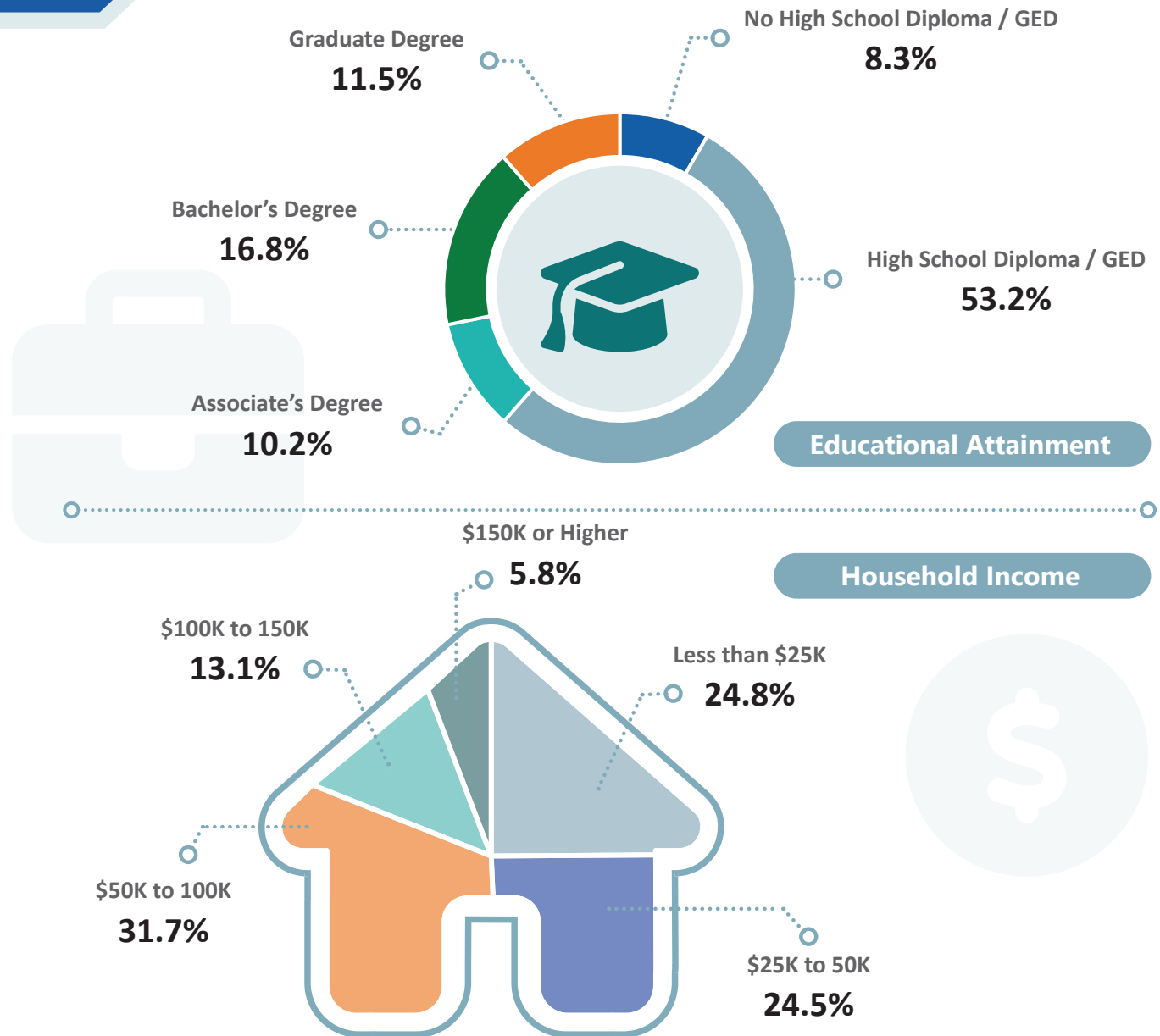
47.2%
of Population is 16+
and are in the Labor Force



96.4%
of the Labor Force
are Employed



Most Common Household
Income Range
\$50K to \$100K



Commuting Characteristics



Zero-Vehicle Households
8.7%



82.3%
Use a Vehicle to Get to Work



11.5%
of Workers Telecommute

Travel Time to Work



68.8%



94.9%



98.5%

Means of Travel to Work

By Vehicle



84.6%
Drove Alone



8.4%
Carpooled

Other Modes of Transportation



0%
Public Transportation



1.5%
Walked



5.5%
Taxicab, motorcycle, bicycle, other means

Departure Time for Work



Early Morning (Before 7AM)
27.5%



Morning (7AM - 9AM)
43.6%



Later Morning (9AM - Noon)
11.4%



Afternoon (Noon or Later)
17.5%

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Crash Characteristics

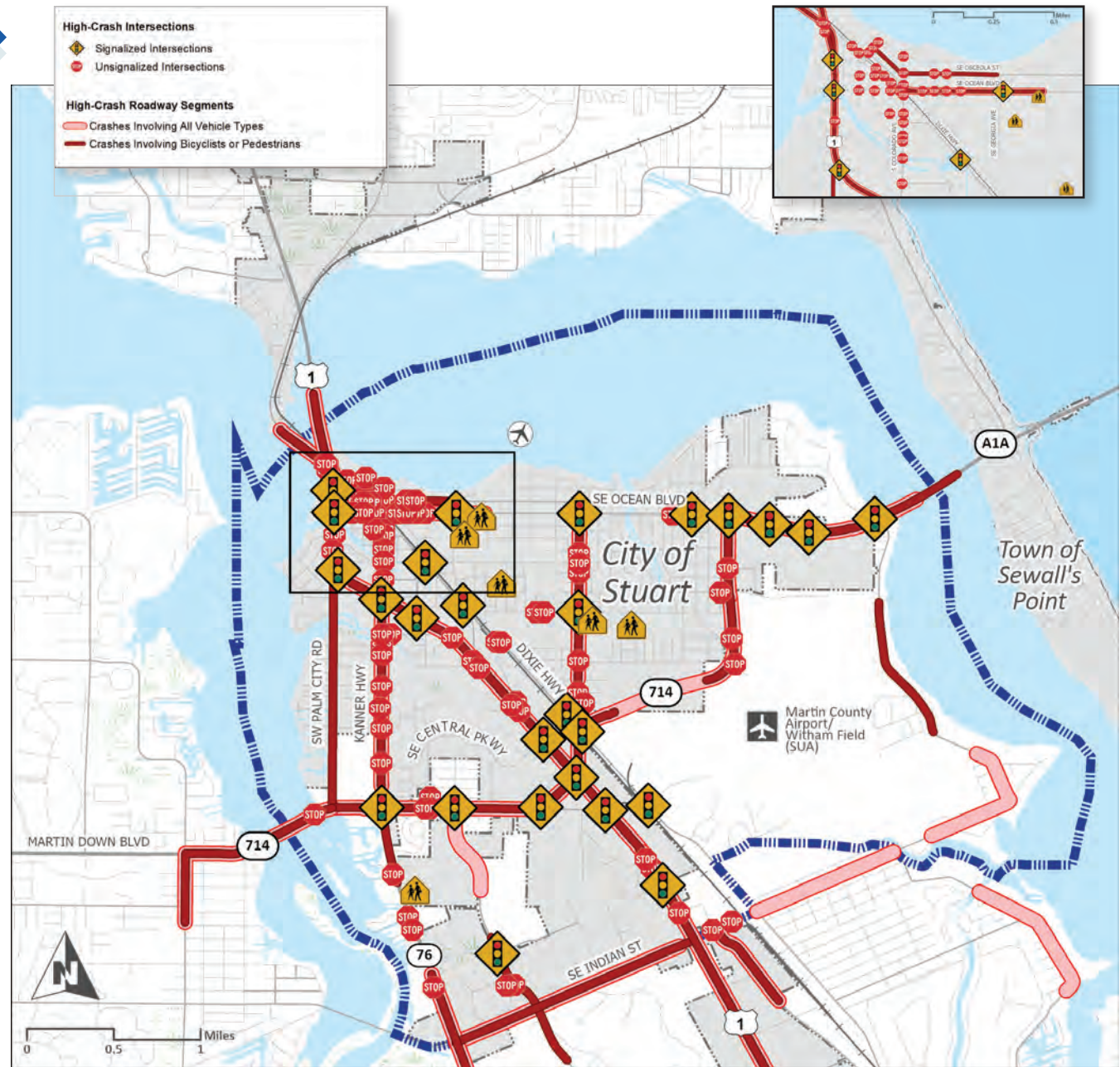
High Crash Locations

The map on this page shows the Stuart Urban intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

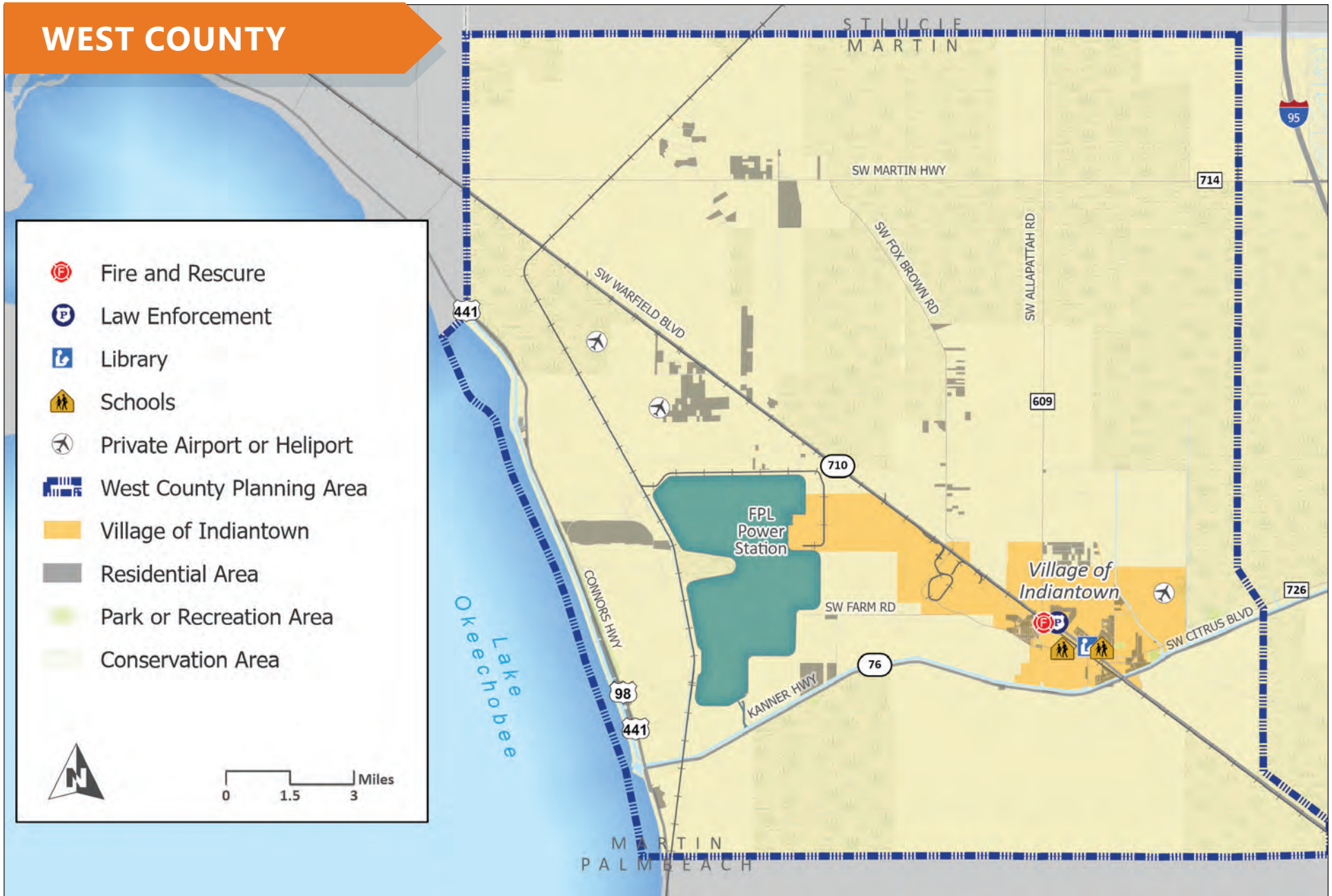
Crash Occurrences

Total Fatal of Serious Injury Crashes (All Vehicle Types)	
98 Crashes	11 Fatal / 87 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)	
25 Crashes	1 Fatal / 24 Serious Injury



WEST COUNTY



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Overview & Key Features

The West County Planning Area encompasses the westernmost portion of Martin County and is the largest in terms of area, covering roughly 260 square miles or 44% of the County total. It borders St. Lucie County to the north, Palm Beach County to the south, and Lake Okeechobee to the west.

West County has a population of 10,583 residents, or 6.7% of the Martin County total.

- 23.3% of West County’s population live in a household with income below the poverty level,
- 74.4% identify as a racial or ethnic minority, and
- 12.5% are aged 65 or older.

It contains 2,731 households, or 3.4% of the County total.

- 11.6% of the households in West County are home to a person with Limited English Proficiency (LEP),
- 27% are home to a person with a disability, and
- 8.5% do not own a personal vehicle.

Key features of the West County Planning Area include:

- Village of Indiantown
- Martin County Fire Rescue Station 24
- Martin County Sheriff’s Office - Indiantown Substation
- Elisabeth Lahti Library
- Warfield Elementary School
- Indiantown Middle School
- Indiantown High School
- Indiantown Airport
- Brady Ranch Airport
- Horseshoe Acres Airpark
- Timers Powers Park / Rodeo Arena

Summary Stats

The following socioeconomic indicators, which are commonly used for transportation planning purposes, show how the West County Planning Area compares to all of Martin County:



Household with Persons with Disability



Households with Limited English



High School/ Bachelor’s Degree

West County	27.0%	11.6%	53.0%/6.3%
Martin County	26.5%	2.1%	91.4% / 33.5%



Minority Population



Persons Below Poverty Level



Persons 65+

West County	74.4%	23.3%	12.5%
Martin County	24.8%	10.3%	31.4%



Zero-Vehicle Households



30+ minute Commute Time



% of Telecommuters

West County	8.5%	50.0%	5.0%
Martin County	4.8%	39.3%	9.8%

Demographics

Population
10,583

Households
2,731

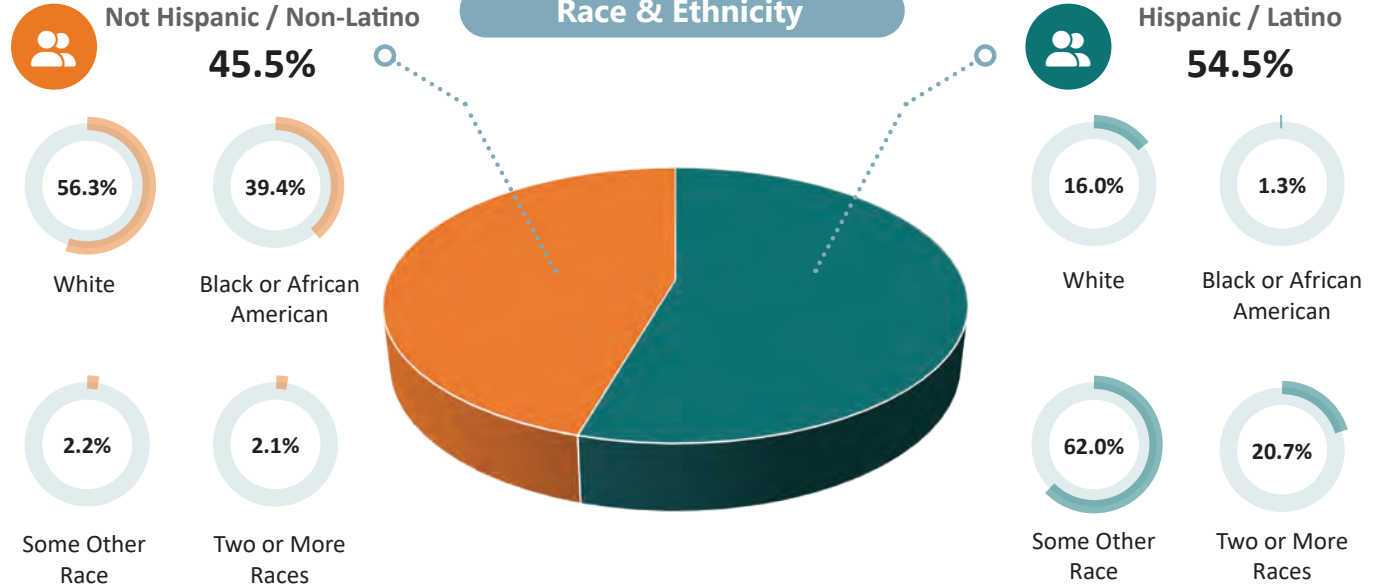
Persons 65+
1,321

Minority Population
7,874

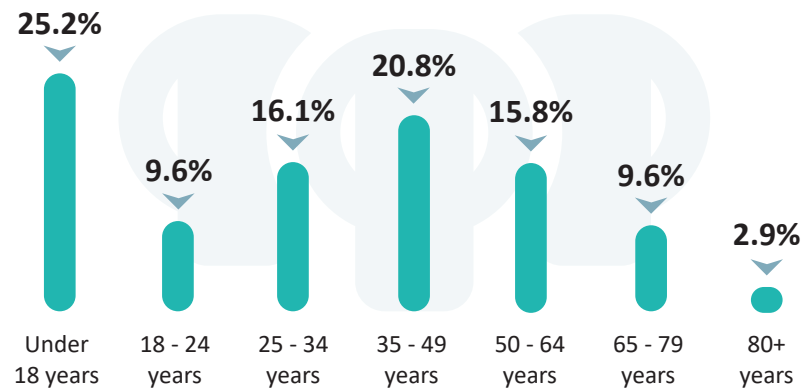
Household with Persons with Disability
27.0%

Limited English Proficiency Households
11.6%

Race & Ethnicity



Age Groups



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Economic Data



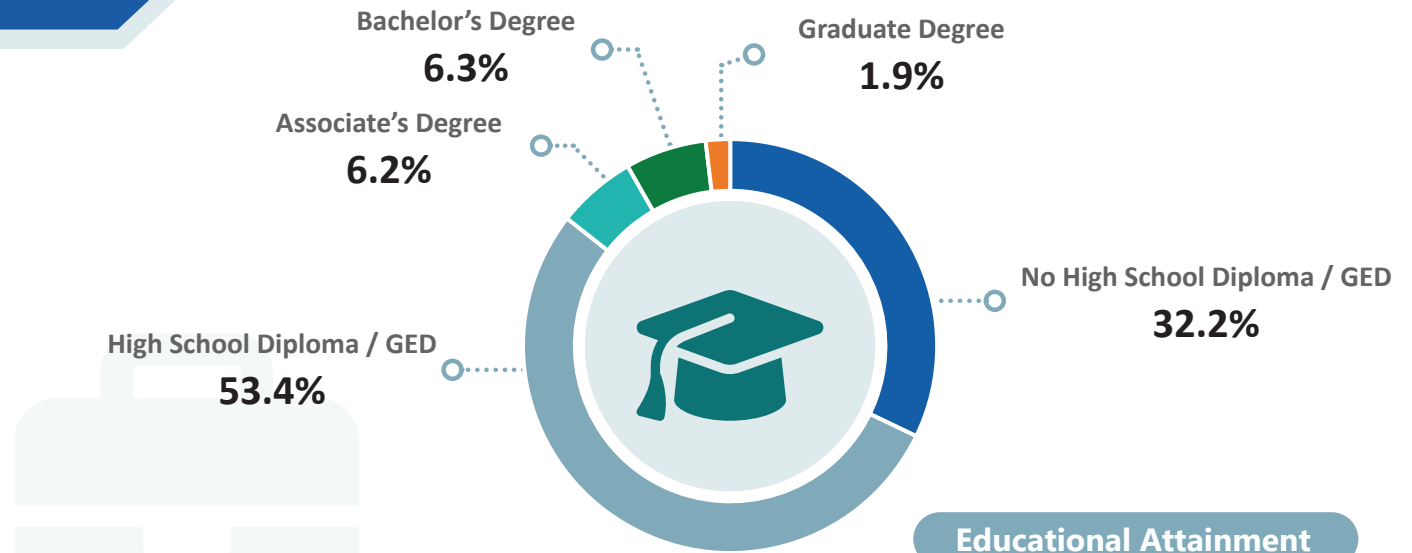
48.0%
of Population is 16+
and are in the Labor Force



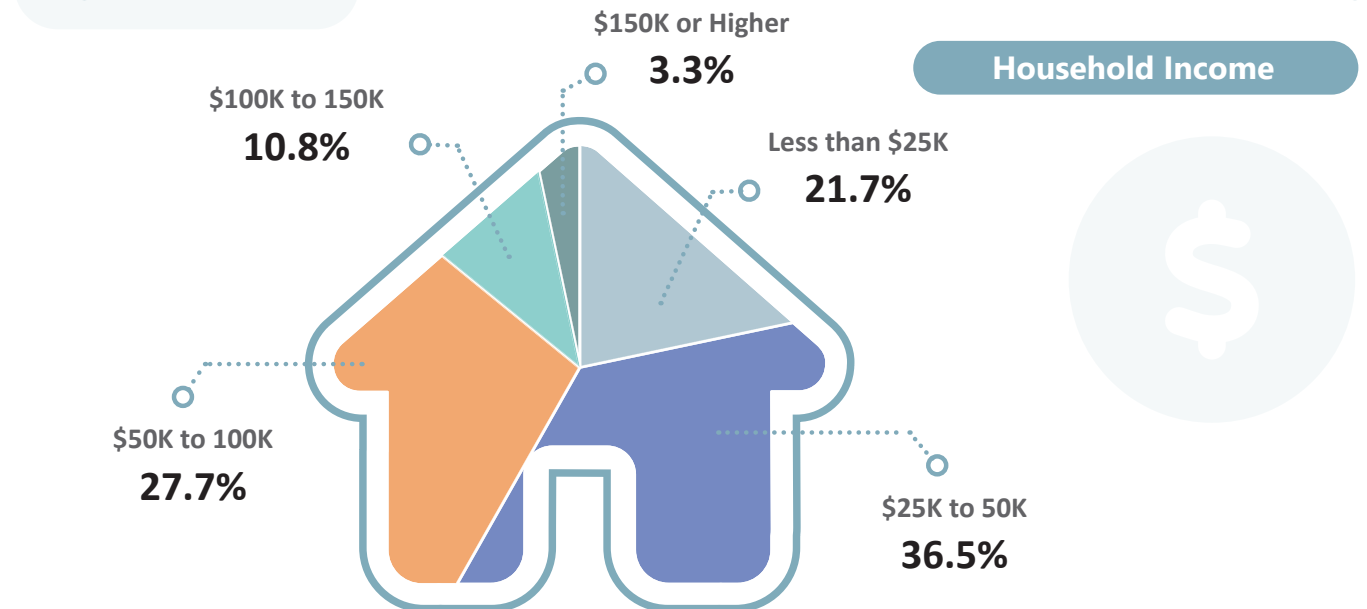
91.0%
of the Labor Force
are Employed



Most Common Household
Income Range
\$25K - \$50K



Educational Attainment



Household Income

Commuting Characteristics



Zero-Vehicle Households
8.5%



93.2%
Use a Vehicle to Get to Work



5.0%
of Workers Telecommute

Travel Time to Work



49.7%



94.0%



99.0%

Means of Travel to Work

By Vehicle



72.2%
Drove Alone



21.0%
Carpooled

Other Modes of Transportation



0.1%
Public Transportation



0.6%
Walked



0.9%
Taxicab, motorcycle,
bicycle, other means

Departure Time for Work



Early Morning
(Before 7AM)
52.6%



Morning
(7AM - 9AM)
25.3%



Later Morning
(9AM - Noon)
9.6%



Afternoon
(Noon or Later)
12.5%

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Crash Characteristics

High Crash Locations

The map on this page shows the West County intersections and roadway segments with the highest levels of fatal and serious injury crashes from 2016 to 2020, with crashes on roadway segments considered on a per-mile basis. The data separates intersections by signalized and unsignalized (or stop signs). Crashes involving bicyclists or pedestrians are shown separately to highlight their increased vulnerability.

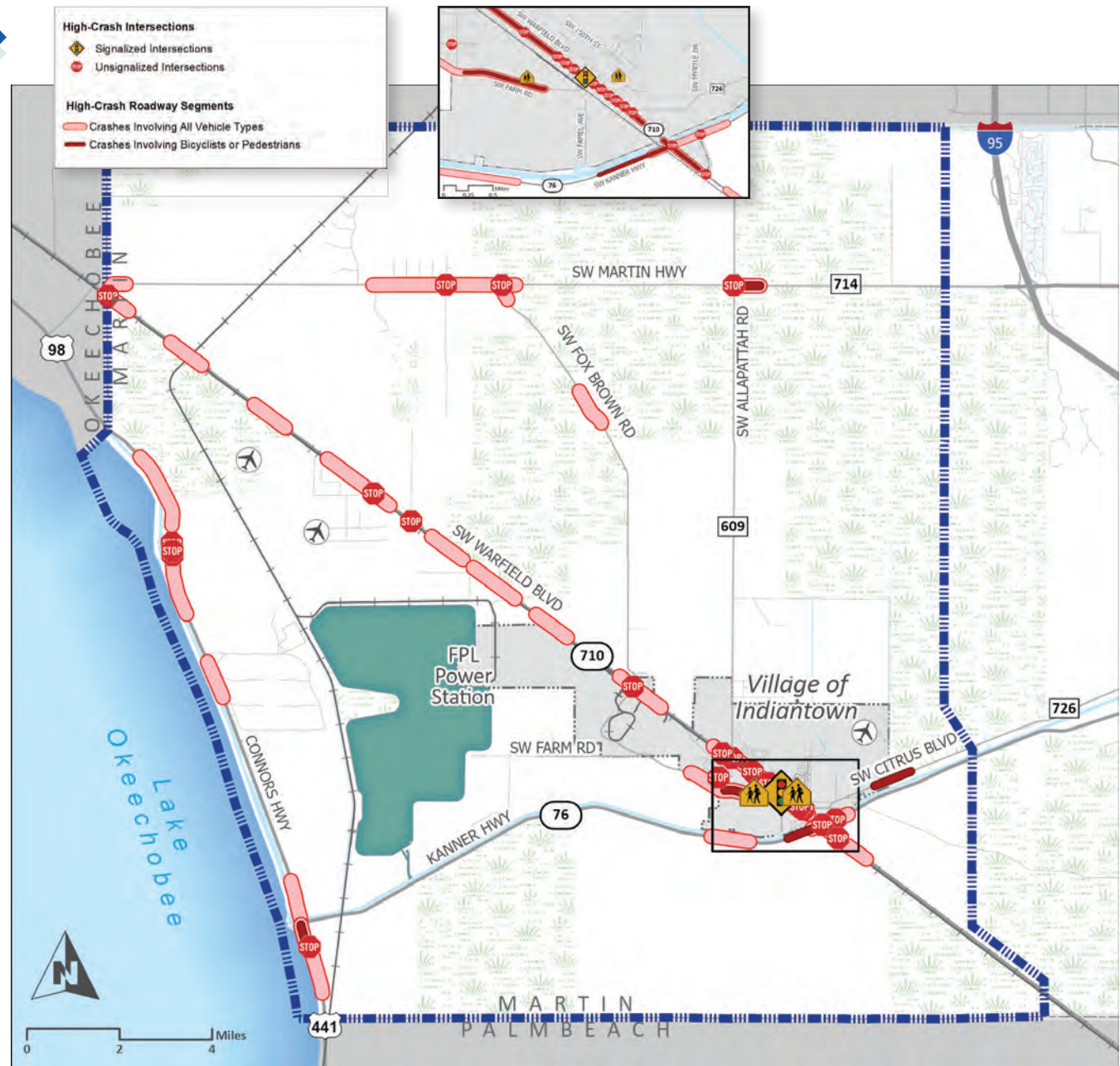
Crash Occurrences

Total Fatal of Serious Injury Crashes (All Vehicle Types)

57 Crashes 21 Fatal / 36 Serious Injury

Total Fatal or Serious Injury Crashes (Involving a Bicyclist or Pedestrian)

6 Crashes 2 Fatal / 4 Serious Injury



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3481 SE Willoughby Blvd, Suite
101, Stuart, FL 34994
www.martinmpo.com



**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 5
WORDING: NE ALICE STREET REALIGNMENT PRESENTATION		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: N/A

BACKGROUND

The NW Alice Street Sidewalk Project's original intent was to provide sidewalk connectivity from the intersection of NW Wright Boulevard and NW Dixie Highway, across the FEC Railroad, to the existing sidewalk along NE Alice Street, north of the Rio Nature Park. At the request of the Martin MPO Board, an alternate design was proposed that would close the existing NW Alice Street roadway segment while providing a direct extension of NW Wright Boulevard across the railroad to NE Alice Street.

ISSUES

At the December 2023 Policy Board meeting, FDOT's staff and consultant will present the NE Alice Street realignment project.

RECOMMENDED ACTION

Provide comments.

APPROVAL

MPO

ATTACHMENTS

NE Alice Street Sidewalk PowerPoint presentation

ALICE STREET SIDEWALK FEASIBILITY STUDY



MPO Policy Board Meeting 12/11/2023



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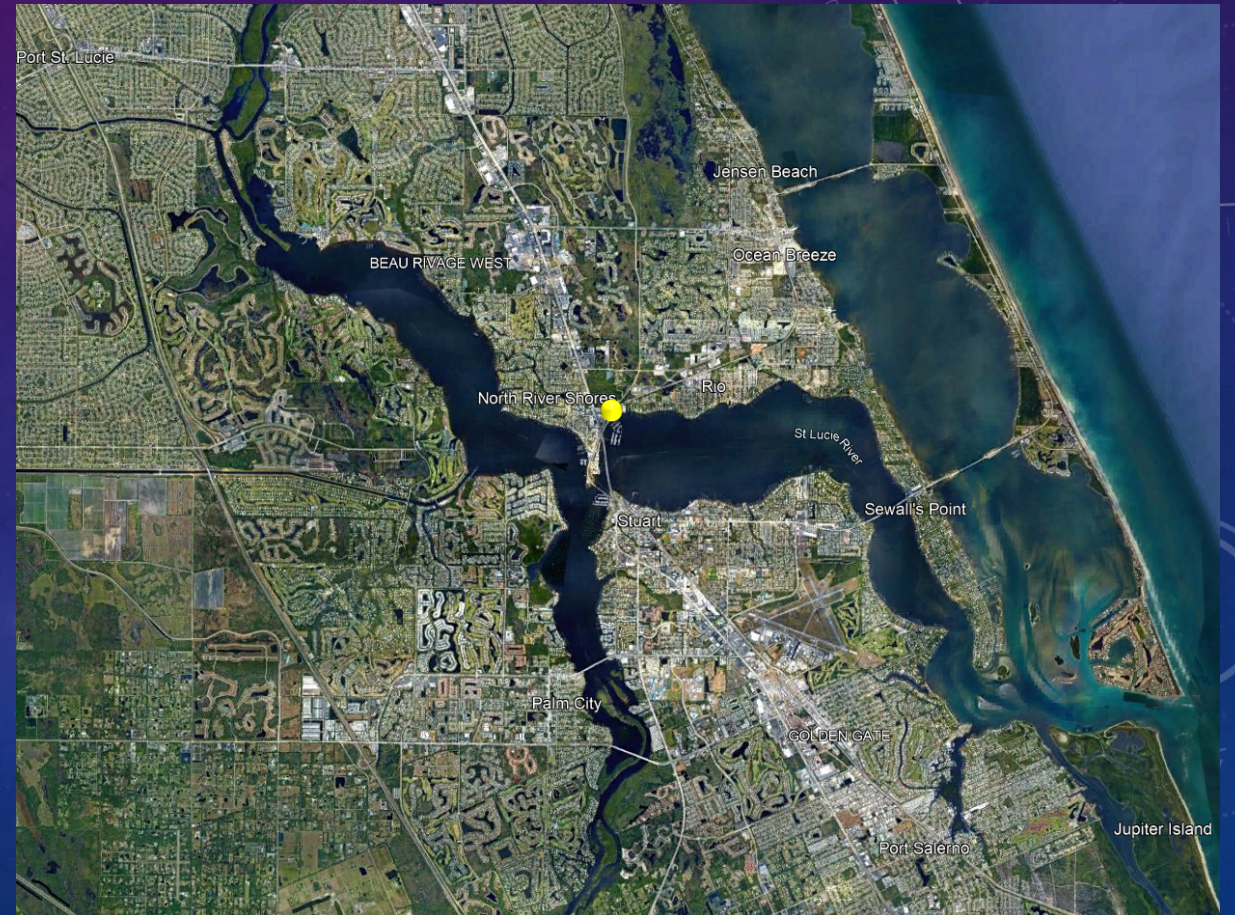
INTRODUCTION

- Project Location
- Existing Conditions Safety Review
- Traffic Data Collection
- Conceptual Design Alternative
- Construction Cost Estimation

PROJECT LOCATION

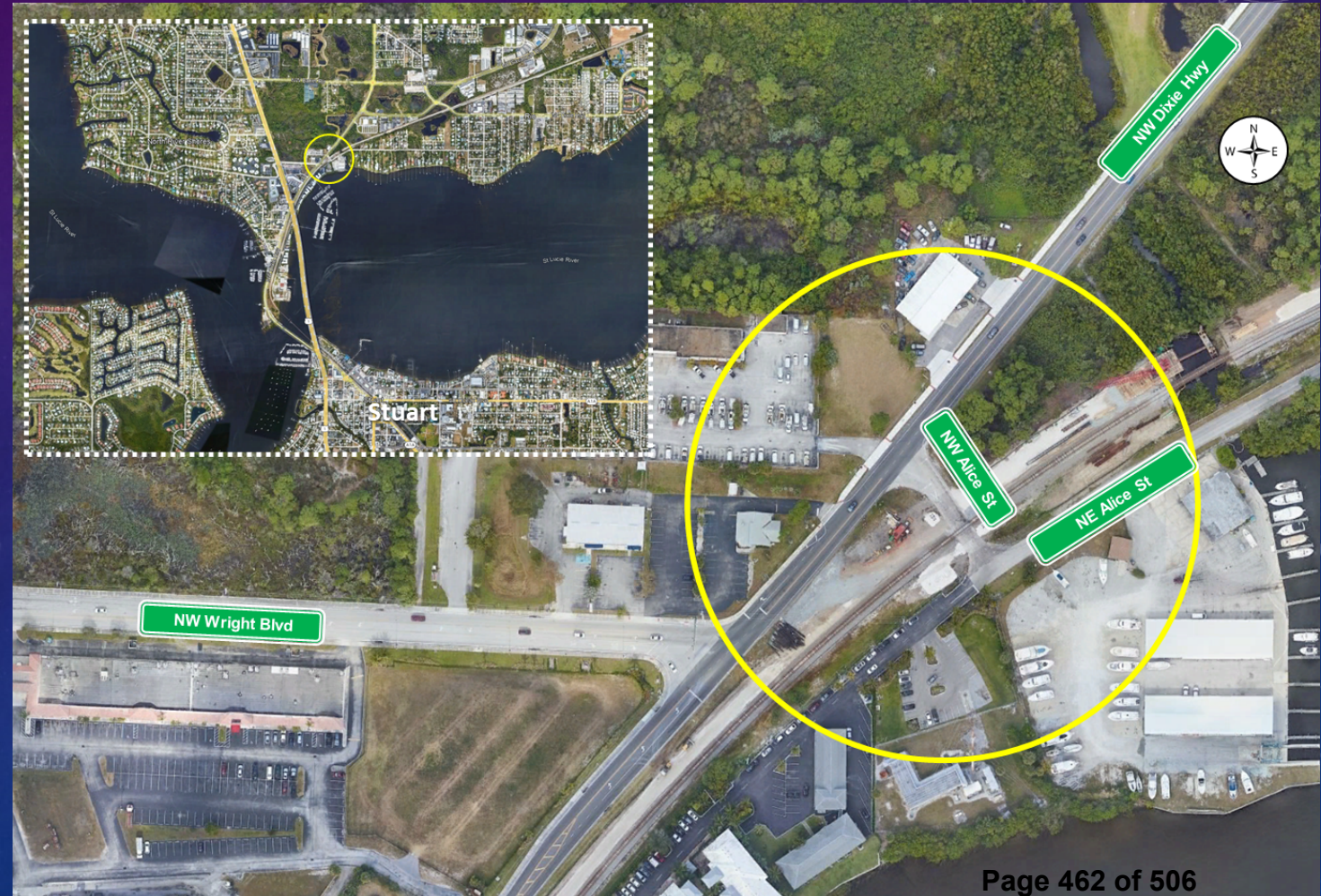
PROJECT LOCATION

- Located within the limits of the City of Stuart in Martin County, Florida



PROJECT LOCATION

- NW Alice Street is a two-lane road connecting NW Dixie Highway and NE Alice Street



EXISTING CONDITIONS

EXISTING CONDITIONS

- NW Alice Street looking west



- NW Alice Street looking east



EXISTING CONDITIONS

Project Intent

- To provide sidewalk connectivity from the intersection of NW Wright Boulevard and NW Dixie Highway, across the FEC Railroad, to the existing sidewalk along NE Alice Street, north of the Rio Nature Park



EXISTING CONDITIONS

Rail

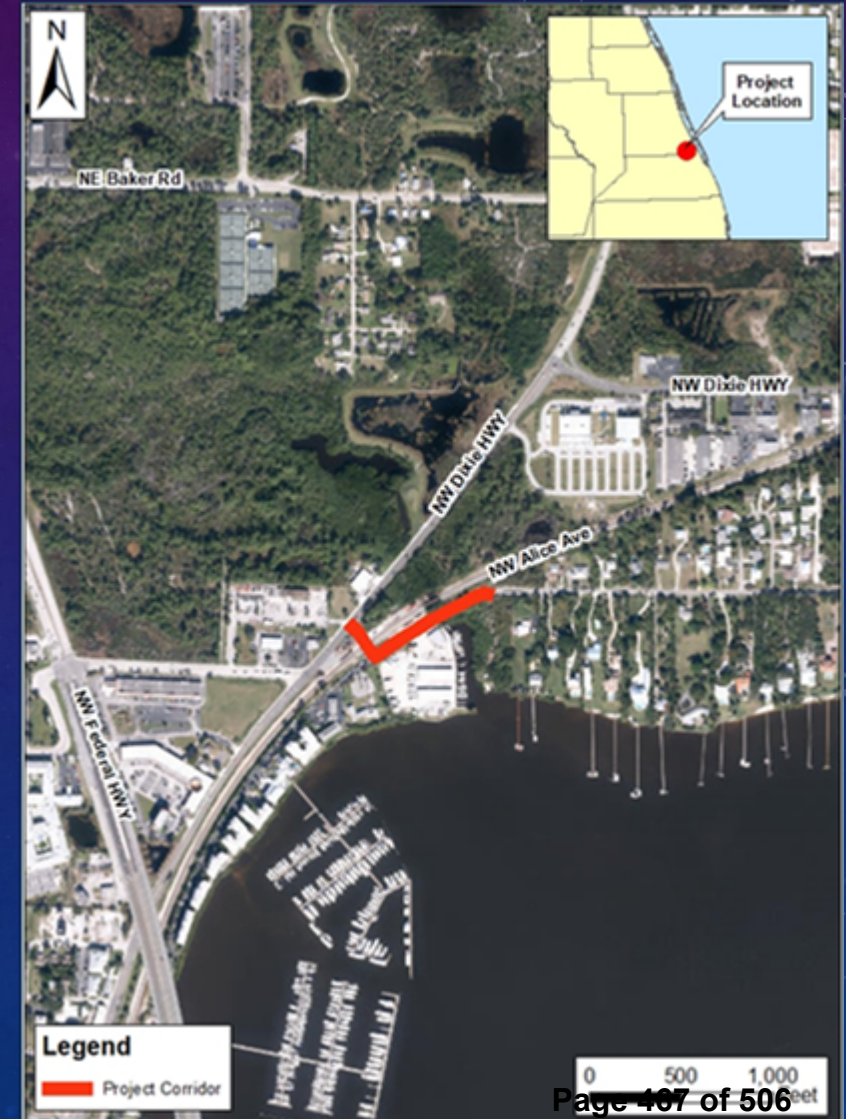
- The Florida East Coast Railroad maintains a crossing over NW Alice Street (#272344N),
- The rail line was recently converted to double track,
- Provides service for Brightline intercity passenger rail, as well as freight service between Miami and Jacksonville



EXISTING CONDITIONS

ETDM Analysis

- Existing environmental features were reviewed to identify potential opportunities, impacts, and agency coordination required for projects along the corridor.
- Data for existing environmental features was collected using the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST).



EXISTING CONDITIONS

Land Uses

- The EST identified the predominant land uses to be retail/office, residential, ROW, and public/semi-public, residential. Industrial, institutional, recreation, vacant non-residential, and water also line the project corridor. The table to the right shows the breakdown of 2021 parcel-derived generalized land uses within 500 feet.

Generalized Land Use	Acres	Percent
Centrally Assessed	3.82	10.2
Industrial	0.79	2.11
Institutional	1.77	4.73
Public/Semi-Public	12.02	32.1
ROW	3.58	9.56
Recreation	0.03	0.08
Residential	4.24	11.32
Retail/Office	7.37	19.67
Vacant Nonresidential	0.44	1.18
Water	3.13	8.35
Vacant Residential	0.32	0.86

SAFETY REVIEW

SAFETY REVIEW

- A review of the most recent five years (2018-2022) of available vehicle crash data at the intersection of NW Dixie Highway and NW Alice Street, was performed using Signal 4 Analytics data, as FDOT's CARS crash data was unavailable for the study location.
- A total of 15 crashes were identified over the five-year period.
- No pedestrian or bicycle crashes were noted.

NO.	CRASH REPORT NUMBER	CRASH YEAR	CRASH DATE	CRASH TIME	CRASH TYPE	CRASH SEVERITY	LIGHTING
1	87614180	2018	6/26/2018	6:21 PM	Rear End	No Injury	Daylight
2	87614025	2018	8/7/2018	3:06 PM	Rear End	No Injury	Daylight
3	87614530	2018	10/9/2018	3:16 PM	Sideswipe	No Injury	Daylight
4	87614535	2018	11/1/2018	11:01 AM	Other	No Injury	Daylight
5	87922636	2018	11/6/2018	10:47 AM	Rear End	Possible Injury	Daylight
6	87922936	2019	4/5/2019	8:35 AM	Rear End	Possible Injury	Daylight
7	87923372	2019	4/16/2019	8:45 AM	Rear End	No Injury	Daylight
8	89256308	2019	8/13/2019	4:15 PM	Sideswipe	Possible Injury	Daylight
9	89924945	2020	7/1/2020	11:58 AM	Left Turn	No Injury	Daylight
10	24292610	2021	4/14/2021	3:50 PM	Left Turn	Possible Injury	Daylight
11	24292623	2021	4/19/2021	8:26 AM	Rear End	No Injury	Daylight
12	24292737	2021	5/21/2021	12:47 PM	Left Turn	No Injury	Daylight
13	24293155	2021	10/6/2021	1:04 PM	Left Turn	No Injury	Daylight
14	24293197	2021	10/19/2021	8:35 AM	Rear End	No Injury	Daylight
15	24820052	2022	4/2/2022	5:45 PM	Sideswipe	No Injury	Daylight

Crash Type	Count	Percentage
Rear End	7	46.7%
Left Turn	4	26.7%
Sideswipe	3	20.0%
Other	1	6.7%
Total	15	100.0%

SAFETY REVIEW

- A review of the Federal Railroad Administration's accident reporting database was performed.
- This review identified two train related crashes at the subject crossing
 - August 1990 - Tractor-trailer impacted train
 - June 1988 – Train impacted a pedestrian.

HIGHWAY-RAIL GRADE CROSSING ACCIDENT/INCIDENT REPORT
 FEDERAL RAILROAD ADMINISTRATION (FRA) OMB Approval No. 2130-0500

1. Reporting Railroad Florida East Coast Railway Company [FEC]		Alphabetic Code 1a. FEC	RR Accident/Incident No. 1b. 65304U0
2. Other Railroad Involved in Train Accident/Incident		2a.	2b.
3. Railroad Responsible for Track Maintenance Florida East Coast Railway Company [FEC]		3a. FEC	3b. 65304U0
4. U.S. DOT-AAR Grade Crossing ID No. 272344N	5. Date of Accident/Incident 08/10/90	6. Time of Accident/Incident 09:40 AM	
7. Nearest Railroad Station STUART			
11. City (if in a city) STUART			
Highway User			
13. Type C. Truck-trailer F. Bus A. Auto D. Pick-up truck G. School Bus B. Truck E. Van H. Motorcycle		17. Equipment 4. Car(s) (moving) 8. Other (specify) Code 1. Train (units pulling) 5. Car(s) (standing) A. Train pulling-RCL Code 2. Train (units pushing) 6. Light locom(s) (moving) B. Train pushing-RCL Code 3. Train (standing) 7. Light locom(s) (standing) C. Train standing-RCL Code	
14. Vehicle Speed 15. Direction (est. mph at impact) 0 1. North		18. Position of Car Unit in Train 1	
16. Position 1. Stalled on crossing 3. 2. Stopped on Crossing 4.		19. Circumstance 1. Rail equipment struck highway user Code 2. Rail equipment struck by highway user Code 20b. Was there a hazardous materials release by Code	
20a. Was the highway user and/or rail eq in the impact transporting hazardous 1. Highway User 2. Rail Equipment		20c. State the name and quantity of the hazardous material released, if any	
21. Temperature (specify if minus) 90 °F 22. Visibility (specify if minus) 1 1. Dawn		23. Weather (single entry) Code 1. Clear 2. Cloudy 3. Rain 4. Fog 5. Steel 6. Snow Code 1	
24. Type of Equipment Consist 1. Freight train 4. Work (single entry) 2. Passenger train 5. Sing 3. Commuter train 6. Cut		25. Track Type Used by Rail Equipment Involved Code 1. Main 2. Yard 3. Siding 4. Industry Code 1 MAINLINE	
27. FRA Track Class 4 28. Number of Locomotive Units		30. Consist Speed (Recorded if available) Code R. Recorded E. Estimated 25 mph Code 1	
32. Type of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach		31. Time Table Direction Code 1. North 2. South 3. East 4. West Code 1	
35. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach		36. Crossing Warning Interconnected with Highway Signals Code 1. Yes 2. No 3. Unknown Code 1	
38. Driver's Age 39. Driver's Gender Code 40. Driver Drove Behind or in Front of Train and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown Code 1. Male 2. Female		41. Driver Code 1. Drove around or thru the gate 4. Stopped on crossing 3. Did not stop 5. Other (specify) Code	
42. Driver Passed Standing Highway Vehicle 1. Yes 2. No 3. Unknown Code 2		43. View of Track Obscured by (primary obstruction) Code 1. Permanent Structure 3. Passing Train 5. Vegetation 7. Other (specify) Code 2. Standing railroad equipment 4. Topography 6. Highway Vehicles 8. Not Obscured Code 8	
Casualties to: Killed		44. Driver was Code 1. Killed 2. Injured 3. Uninjured Code 45. Was Driver in the Vehicle? Code 1. Yes 2. No	
46. Highway-Rail Crossing Users 0		47. Highway Vehicle Property Damage (est. dollar damage) Code \$0	
49. Railroad Employees 0		48. Total Number of Highway-Rail Crossing Users (include driver) Code 0	
52. Passengers on Train 0		50. Total Number of People on Train (include passengers and crew) Code 0	
53a. Special Study Block		51. Is a Rail Equipment Accident / Incident Report Being Filed 1. Yes 2. No Code 2	
54. Narrative Description		55. Typed Name and Title	
55. Typed Name and Title		56. Signature	
55. Typed Name and Title		57. Date	

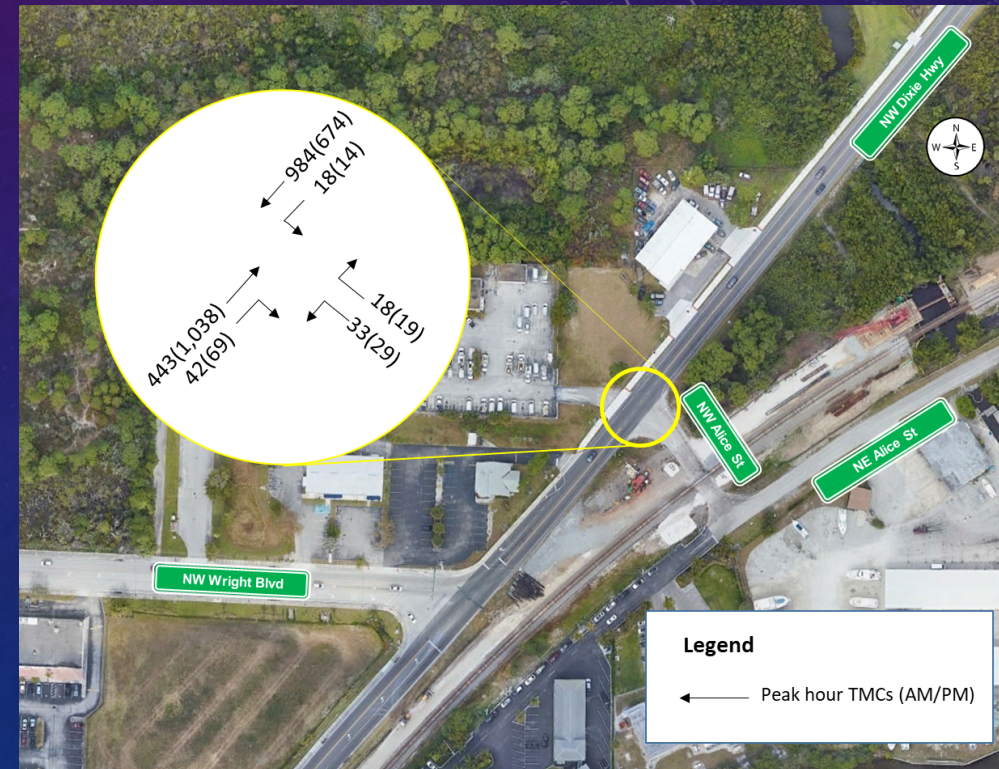
FORM FRA F 6180.57 *NOTE THAT ALL CASUALTIES MUST BE REPORTED ON FORM FRA F 6180.55A

TRAFFIC DATA COLLECTION

TRAFFIC DATA COLLECTION

- Turning movement counts (TMC's) were collected on September 15, 2022 during the AM, Midday and PM peak periods at the NW Dixie Highway and NW Alice Street intersection.
- TMC's were collected from 7:00AM to 10:00PM, 12:00PM to 2:00PM, & 4:00PM to 7:00PM.

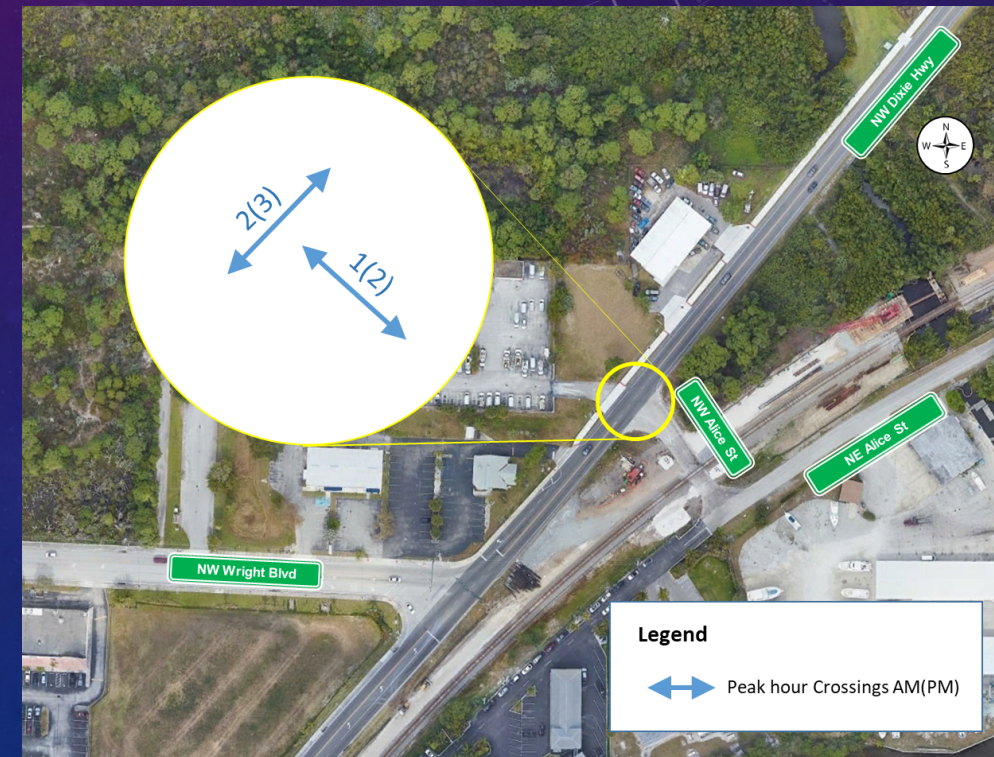
Start Time	NW Dixie Hwy Southbound				NW Alice Street Westbound				NW Dixie Hwy Northbound				NW Alice Street Eastbound			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:15	0	257	7	2	2	0	11	0	9	117	0	0	0	0	0	0
07:30	0	235	3	0	7	0	5	1	7	108	0	0	0	0	0	0
07:45	1	281	4	0	7	0	5	0	14	120	0	0	0	0	0	0
08:00	0	211	4	0	2	0	12	0	12	98	0	0	0	0	0	0
AM Peak	1	984	18	2	18	0	33	1	42	443	0	0	0	0	0	0
13:00	1	126	1	0	5	0	7	0	12	126	0	1	0	0	0	0
13:15	0	132	2	0	7	0	4	1	9	124	0	0	0	0	0	0
13:30	0	139	1	0	8	0	8	0	7	182	0	0	0	0	0	0
13:45	0	146	6	0	7	0	11	0	10	155	0	0	0	0	0	0
Midday Peak	1	543	10	0	27	0	30	1	38	587	0	1	0	0	0	0
16:30	0	184	4	0	2	0	7	0	18	248	0	0	0	0	0	0
16:45	0	168	3	1	4	0	13	0	20	261	0	1	0	0	0	0
17:00	0	152	3	0	4	0	4	2	15	248	0	1	0	0	0	0
17:15	0	170	4	0	9	0	5	0	16	281	0	0	0	0	0	0
PM Peak	0	674	14	0	19	0	28	2	69	1038	0	2	0	0	0	0



TRAFFIC DATA COLLECTION

- The TMC's also collected pedestrian activity during the AM, Midday and PM peak periods at the NW Dixie Highway and NW Alice Street intersection.
- Based on the count data, the pedestrian activity was low.

Start Time	NW Dixie Hwy Southbound				NW Alice Street Westbound				NW Dixie Hwy Northbound				NW Alice Street Eastbound			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
07:15	0	257	7	2	2	0	11	0	9	117	0	0	0	0	0	0
07:30	0	235	3	0	7	0	5	1	7	108	0	0	0	0	0	0
07:45	1	281	4	0	7	0	5	0	14	120	0	0	0	0	0	0
08:00	0	211	4	0	2	0	12	0	12	98	0	0	0	0	0	0
AM Peak	1	984	18	2	18	0	33	1	42	443	0	0	0	0	0	0
13:00	1	126	1	0	5	0	7	0	12	126	0	1	0	0	0	0
13:15	0	132	2	0	7	0	4	1	9	124	0	0	0	0	0	0
13:30	0	139	1	0	8	0	8	0	7	182	0	0	0	0	0	0
13:45	0	146	6	0	7	0	11	0	10	155	0	0	0	0	0	0
Midday Peak	1	543	10	0	27	0	30	1	38	587	0	1	0	0	0	0
16:30	0	184	4	0	2	0	7	0	18	248	0	0	0	0	0	0
16:45	0	168	3	1	4	0	13	0	20	261	0	1	0	0	0	0
17:00	0	152	3	0	4	0	4	2	15	248	0	1	0	0	0	0
17:15	0	170	4	0	9	0	5	0	16	281	0	0	0	0	0	0
PM Peak	0	674	14	1	19	0	28	2	69	1038	0	2	0	0	0	0



CONCEPTUAL DESIGN ALTERNATIVES

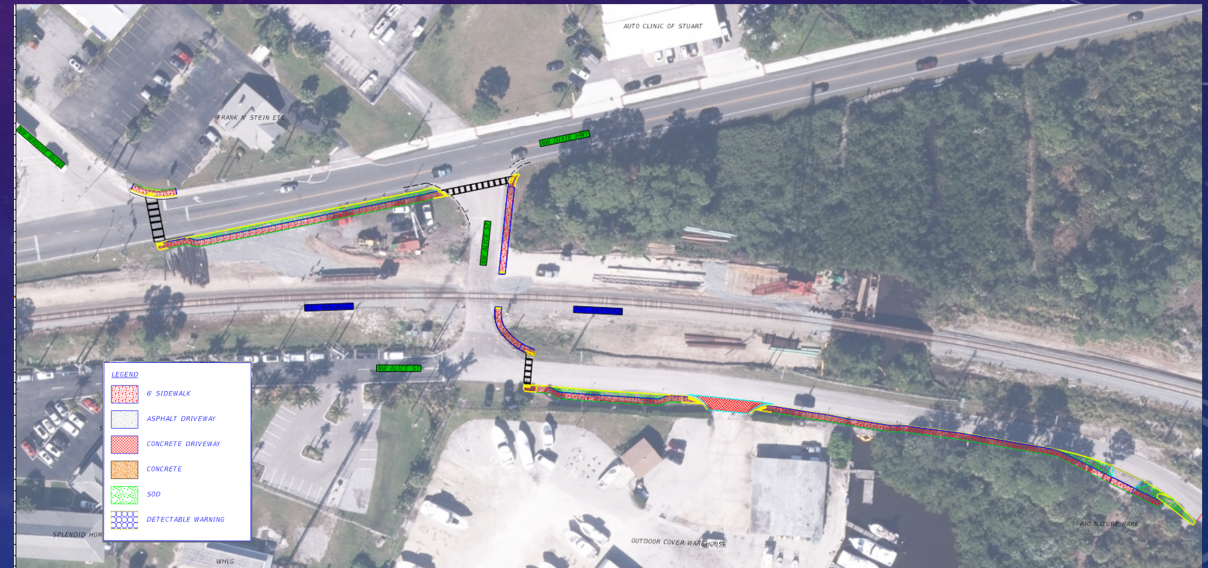
CONCEPTUAL DESIGN ALTERNATIVES

- Initially, a conceptual design alternative was developed which focused on the original intent of the study, which was to improve pedestrian connectivity.
- At the request of the Martin County Metropolitan Planning Organization (MPO), an alternate design was proposed which would close the existing NW Alice Street roadway segment while providing a direct extension of NW Wright Boulevard across the railroad to NE Alice Street.

CONCEPTUAL DESIGN ALTERNATIVES

Original Alternative

- With this improvement, a continuous sidewalk path would extend from the intersection of NW Dixie Highway and NW Wright Boulevard to the existing sidewalk segment north of the Rio Nature Park.



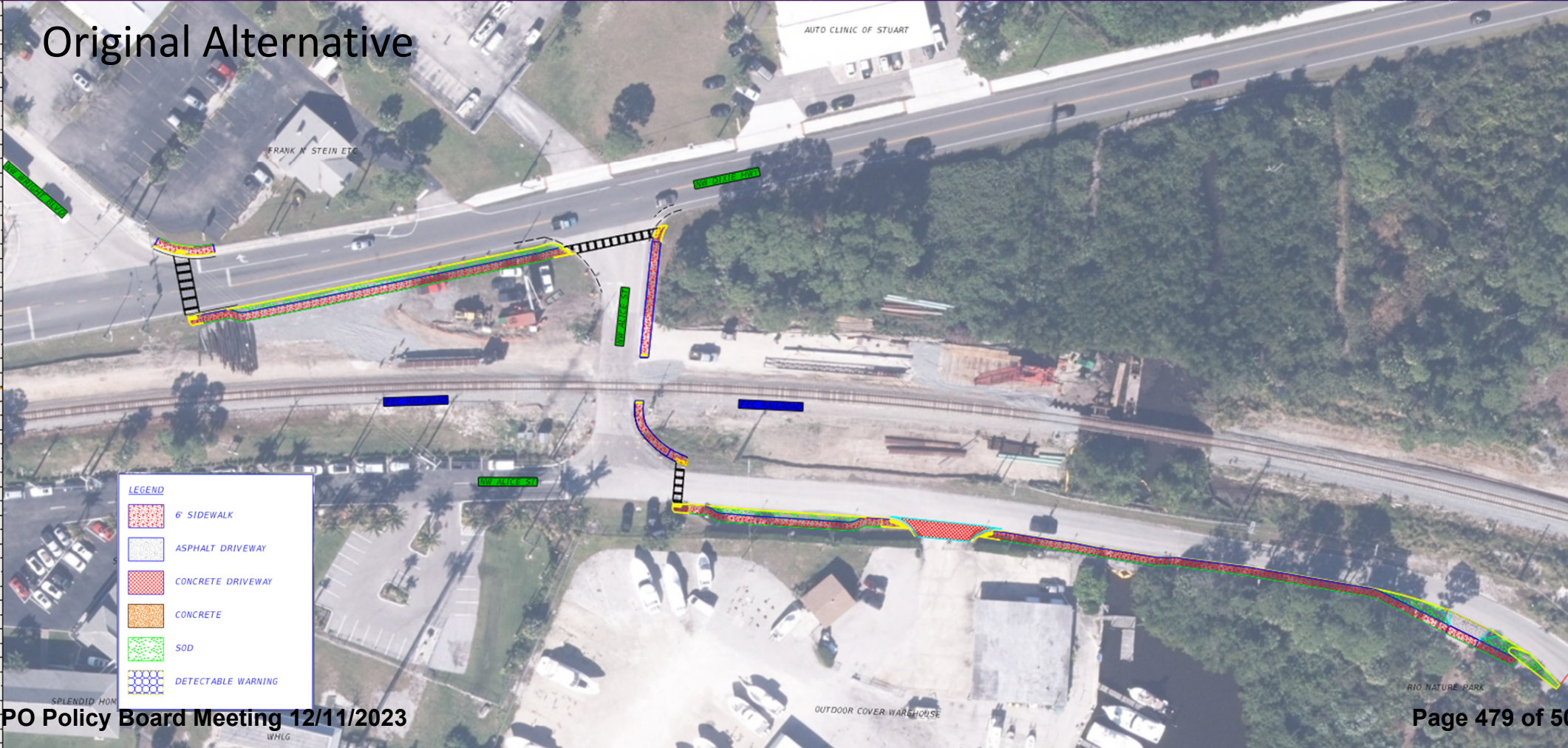
CONCEPTUAL DESIGN ALTERNATIVES

Original Alternative

- The path would cross the FEC rail on the north side of NW Alice Street, where there is sufficient space for pedestrians to cross.
- Sidewalk would extend up to the existing pavement with ADA Truncated domes installed on each side of the tracks at the edge of the dynamic envelope.



CONCEPTUAL DESIGN ALTERNATIVES



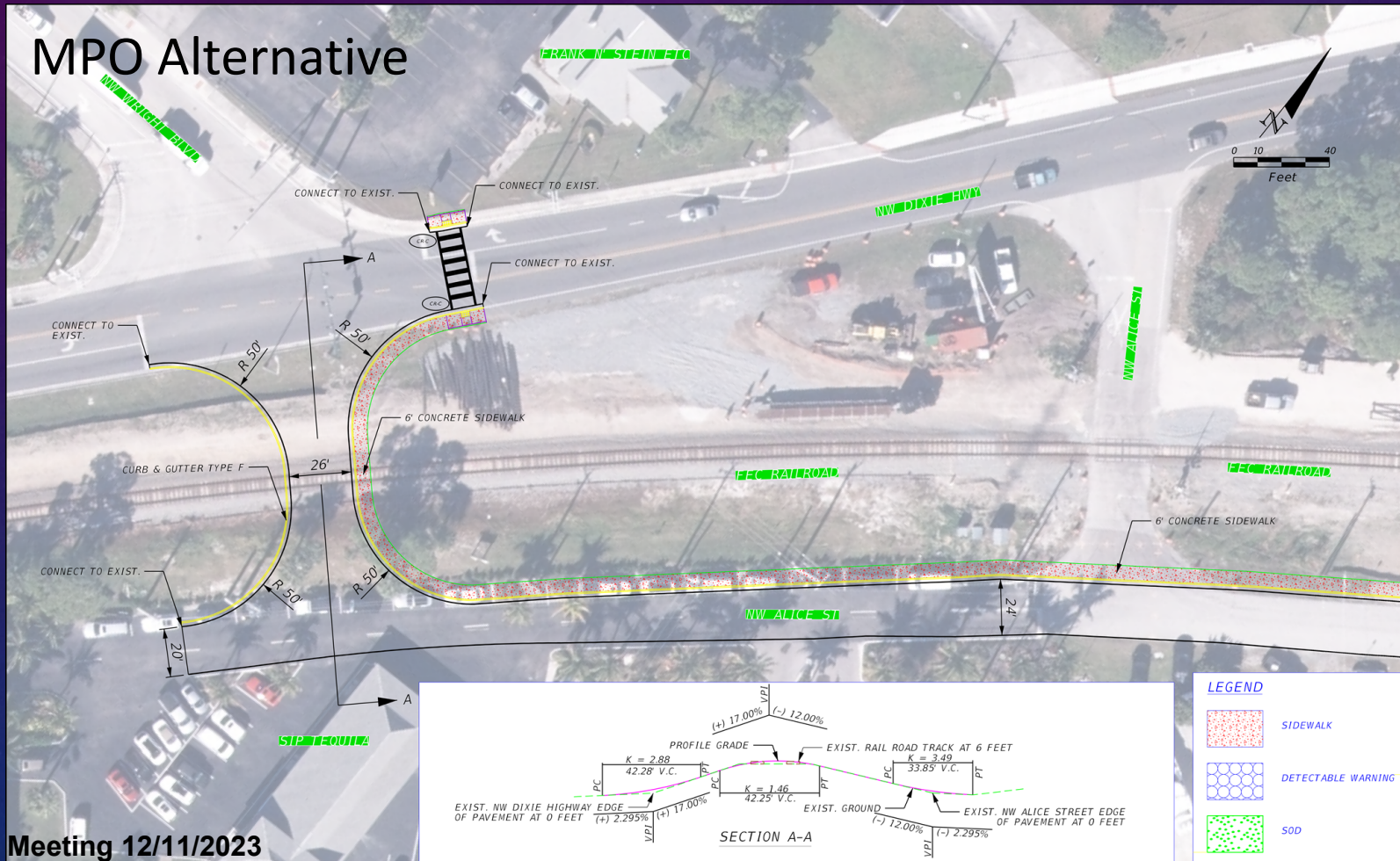
CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative

- With this alternative the MPO explored closing the existing NW Alice Street connection between NW Dixie Highway and NE Alice Street, and providing a through connection from NW Wright Boulevard. While this would improve pedestrian connectivity by reducing the number of crossings and would provide a secondary benefit to drivers by removing an unsignalized intersection, the overall plan has several critical drawbacks.



CONCEPTUAL DESIGN ALTERNATIVES



CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative Drawbacks

- The biggest drawback with this design is that it does not appear as though it will meet the required vertical geometry criteria. In order to address this deficiency, the FEC railroad tracks would need to be lowered, which is not feasible.
- Survey data will need to be collected at the site to confirm the elevations.



CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative Drawbacks

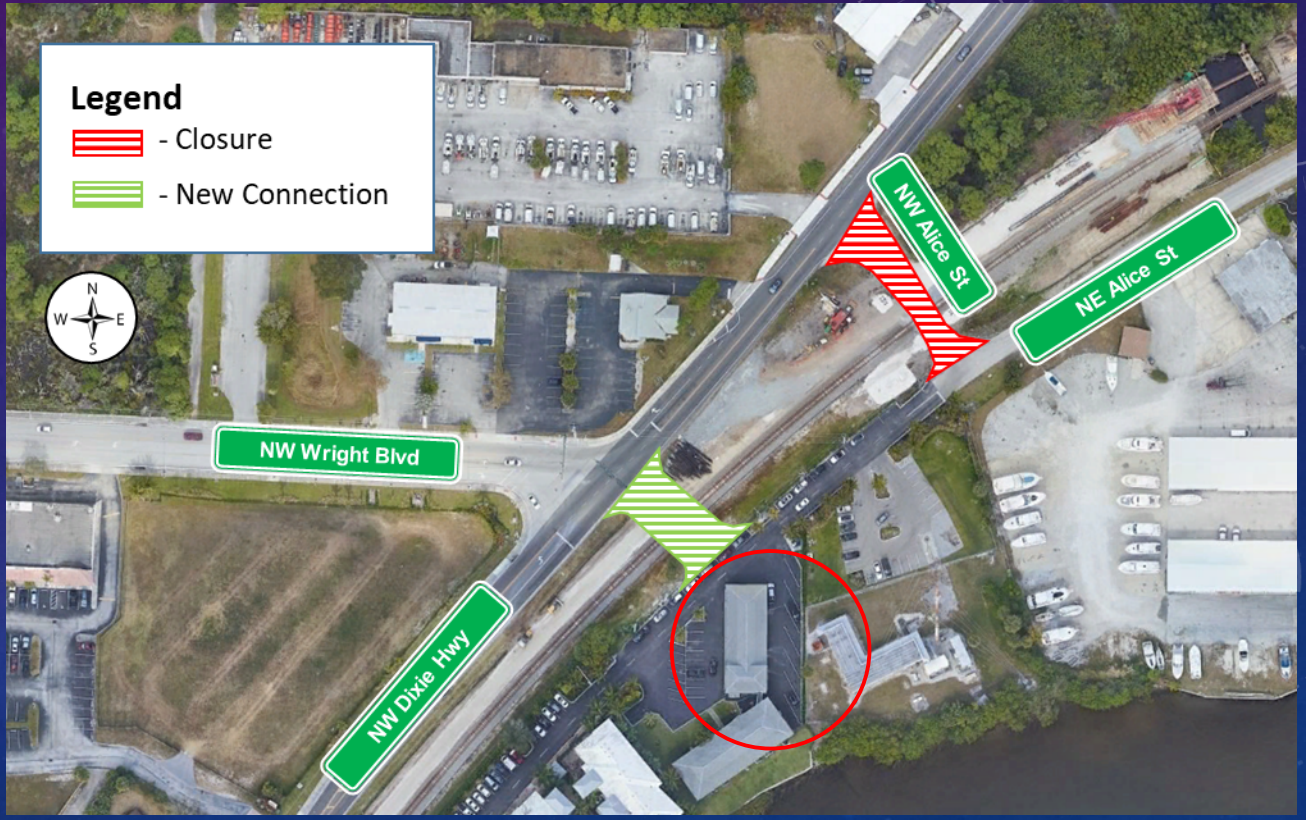
- Introducing sidewalk along NE Alice St. would reduce the existing number of parking spaces.



CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative Drawbacks

- Moving the intersection to this location would move traffic adjacent to the commercial buildings along NE Alice Street. This results in significant impacts to these businesses and loss of the existing driveway at this location due to height differential.



CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative Drawbacks

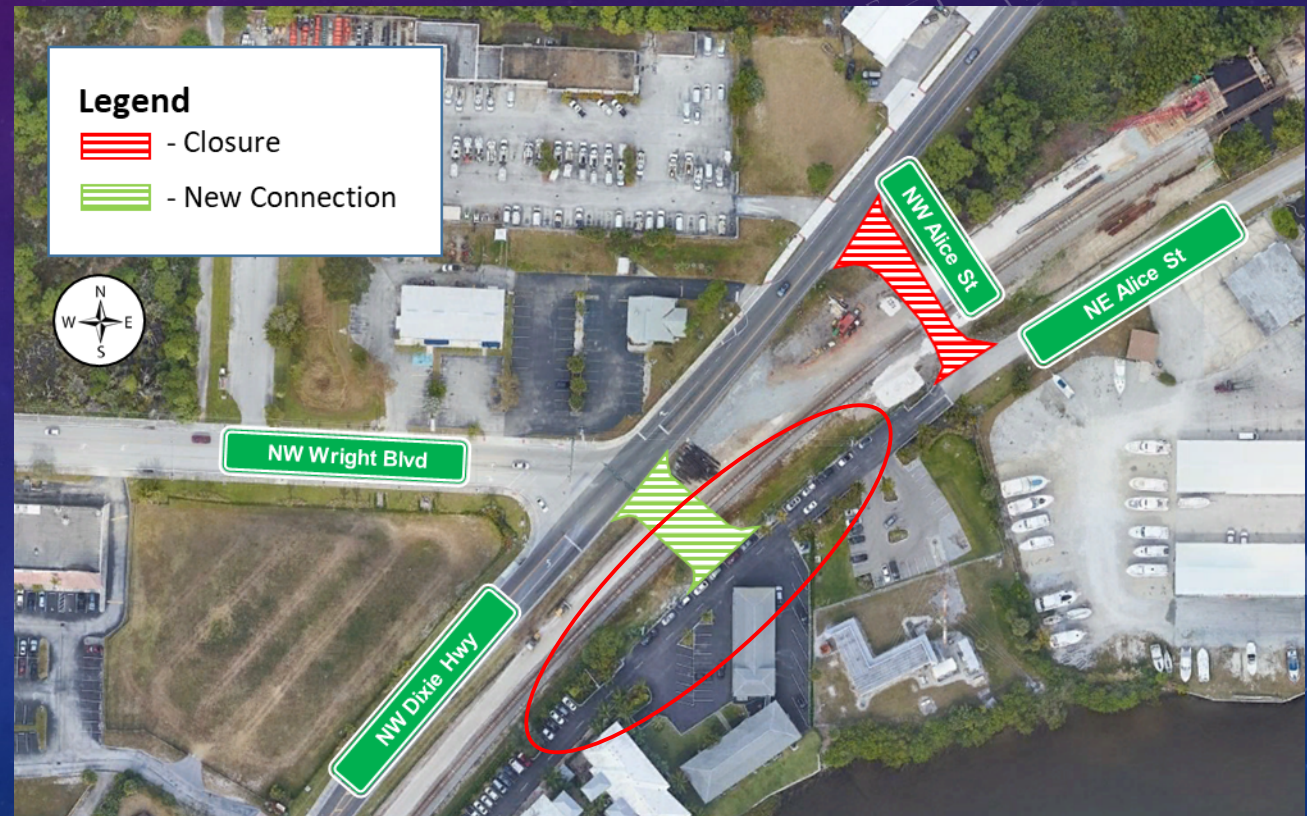
- Impact to existing drainage and new drainage analysis will need to be evaluated.
- This will require raising the intersection at NW Wright Boulevard and NW Dixie Highway, which will impact the business on the NW corner as well as the property at the SW corner of the intersection. This would require additional curb & gutter and sidewalk reconstruction as well.



CONCEPTUAL DESIGN ALTERNATIVES

MPO Alternative Drawbacks

- Impacts to existing utilities including the FPL power poles along east side of railroad.



CONSTRUCTION COST ESTIMATE

CONSTRUCTION COST ESTIMATE

- A construction cost estimate was developed for the original alternative's proposed sidewalk and crossing improvements. This estimate was based on FDOT unit cost information.
- Based on the estimated quantities and unit costs, the anticipated project construction cost is \$187,972.

		ALICE SIDEWALK IMPROVEMENTS		TOTAL	
ITEM NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
0102 1	MOBILIZATION	LS	1	\$20,885.83	\$20,885.83
0102 2	MAINTENANCE OF TRAFFIC	LS	1	\$27,847.77	\$27,847.77
0110 1 1	CLEANING & CONSTRUCTION - ASPHALT/DRIVEWAY BASE - ASPHALT	AC	0.14	50870.27	\$7,121.84
286 2	MATERIAL	TN	3	277.12	\$831.36
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	806	49.06	\$39,542.36
0520 2 4	CONCRETE CURB, TYPE D	LF	226	27.32	\$6,174.32
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	732	100.70	\$73,712.40
0527 2	DETECTABLE WARNINGS	SF	146	40.97	\$5,981.62
0570 1 2	PERFORMANCE TURF, SOD	SY	213	4.67	\$994.71
0711 14123	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF	259	8.29	\$2,147.11
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	156	17.52	\$2,733.12
				TOTAL	\$187,972.43

Disclaimer: Any negotiation for sidewalk on FECR property must be negotiated by the interested parties directly with FECR.



**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 3
WORDING: FEDERAL HIGHWAY ADMINISTRATION (FHWA) ADJUSTED URBAN BOUNDARY UPDATE PRESENTATION		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: N/A

BACKGROUND

Every ten years following the decennial Census, the Florida Department of Transportation (FDOT), in coordination with the Federal Highway Administration (FHWA) and local partners are required to update the Urban Boundary and Functional Classification system for the State of Florida. The Transportation Data and Analytics (TDA) Office acquires the U.S. Census population and urban boundary data for 2020 to develop maps with the appropriate projection and content for distribution. TDA compiles the boundaries into a statewide GIS layer, resolving data conflicts such as overlaps and gaps between District boundaries.

The FDOT Districts and local partners use this information for coordination purposes and to adjust the 2020 U.S. Census Urban Area boundaries around current land use conditions. These adjustments are reviewed by Central Office before they are submitted for approval by FHWA.

ISSUES

At the December 2023 Policy Board meeting, FDOT staff and their consultant will present the update to the FHWA Adjusted Urban Boundary.

RECOMMENDED ACTION

Provide comments.

APPROVAL

MPO

ATTACHMENTS

FHWA Adjusted Urban Boundary Update PowerPoint Presentation



District 4

2020 Urban Area Boundary and Functional Classification Adjustments

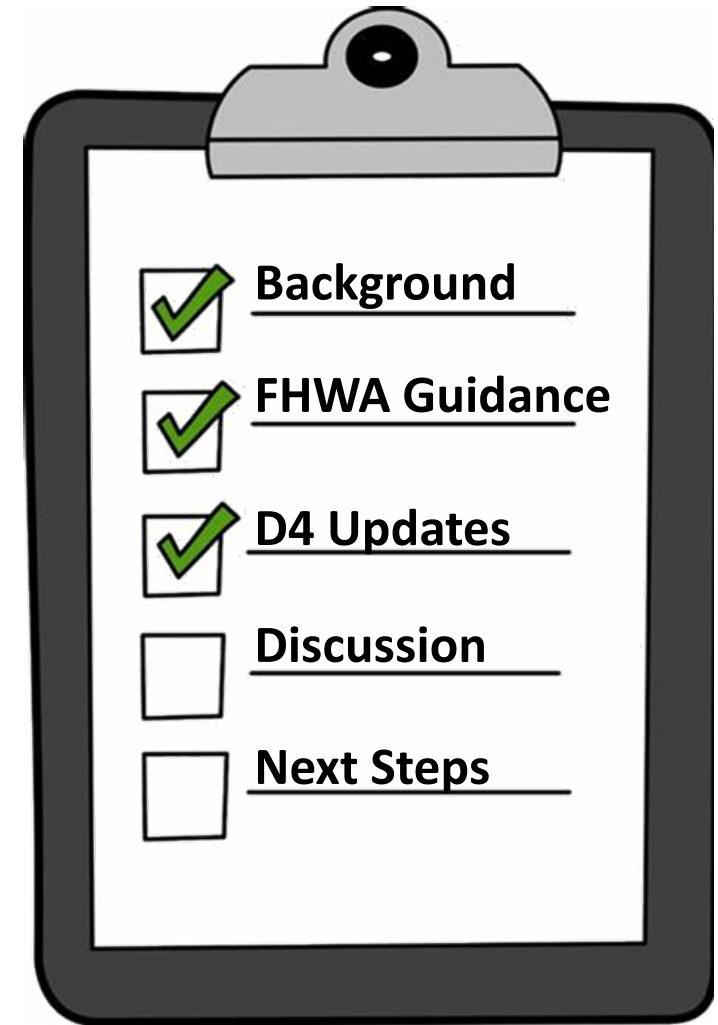
Dec. 4th, 2023





Agenda

- 1. FDOT D4 System Analytics Group Updates**
 - UAB & FC Overview
 - UAB Modification Timeline
 - Resources
- 2. FHWA Guidance for UAB Smoothing**
- 3. D4 DRAFT Smoothed Urban Area Boundary**
 - Review
 - Discussion





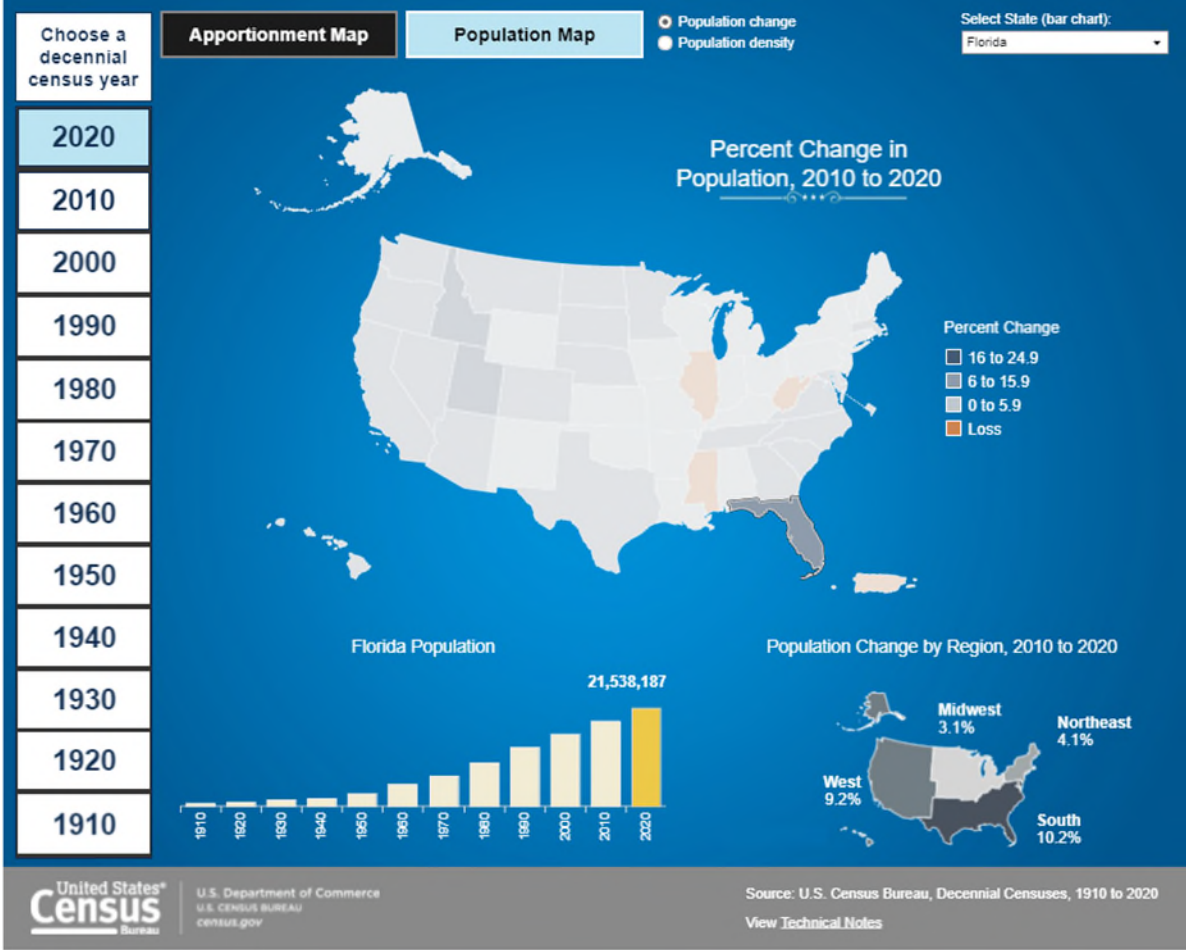
2020 Census Urban Boundary and Functional Classification Update



Urban Areas are revised every 10 years based on population counts from decennial census.

Urban Boundaries are adjusted to be consistent with transportation needs.

Functional Classification reviewed and updated in conjunction with adjusted urban boundaries.



Historical Apportionment Data Map (Interactive) (census.gov)



Final US Census Urban Area Criteria Highlights

- 2,000 housing units or 5,000 persons (2,500 persons in 2010).
- Census Block level instead of Track level designation.



Source Link: [Urban Area Criteria for the 2020 Census-Final Criteria](#)





Urban Area Boundary Adjustment FHWA Recommended Schedule

- Recommended 12-month schedule following Census release of Urban Area Boundaries.
- At a minimum – confirm Census boundaries are adequate.
- Build/share understanding of game plan.
- Generate maps and share electronically – **use GIS.**
- Encourage/work towards timely delivery of UB revisions.

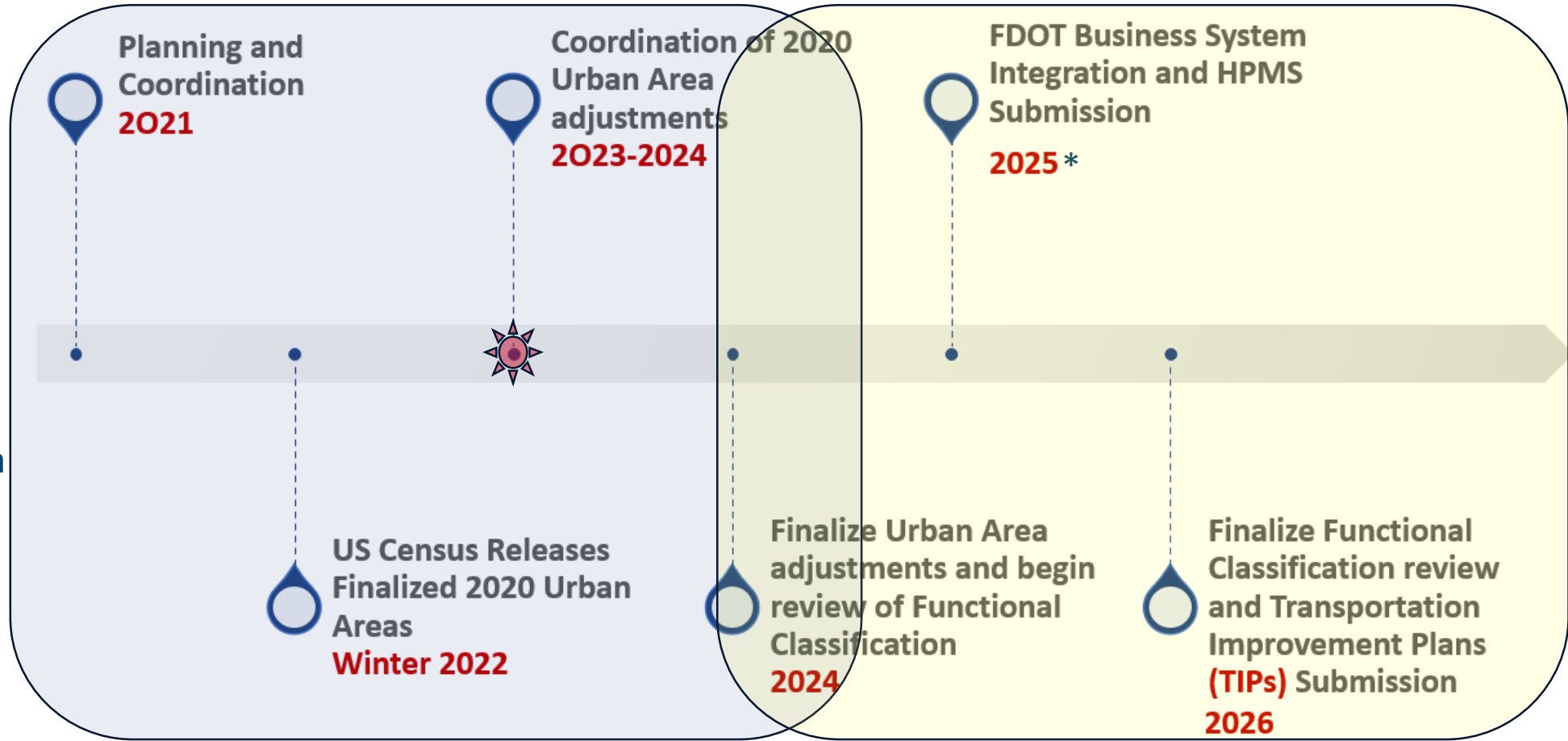
Event	Months Following Release of 2020 Census Urban Area boundaries
FHWA issues transmittal letter	Month 1
Begin adjusted urban area boundary update process	Month 1
DOT works with planning partners to define adjusted urban area boundaries	Month 3-9
Provide draft final data and/or maps to FHWA Division Office for review	Month 10
DOT incorporates Review Comments	Month 11
DOT submits adjusted urban area boundaries to FHWA Office of Planning	Month 12





Tentative Timeline

**2020
Census
Urban Area
Boundary
(UAB)
Designation**



**Roadway
Functional
Class
(FC)
Designation**

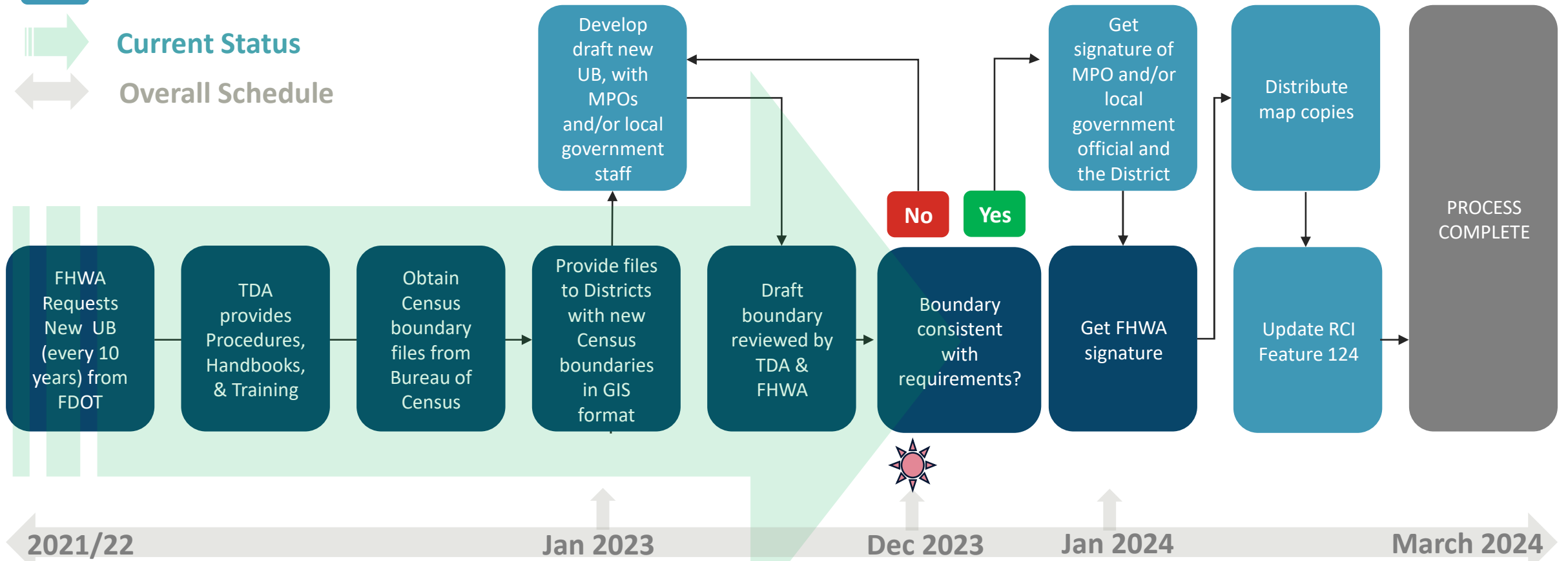
FHWA will consider all **urban area boundaries final as of April 15, 2025**, and will use the original 2020 Census boundaries for all urban areas that have not been adjusted.





Urban Area Boundary Process Flow Chart

- FDOT CO (TDA)
- FDOT District 4
- Current Status
- Overall Schedule





FDOT Website Resources

UBFC Info Page:

<https://www.fdot.gov/statistics/hwsys/UBFC-update-process.shtm>

UBFC Data Hub (FDOT ArcGIS Online Account is Required to Upload a File)

<https://urban-boundary-functional-class-update-2020-fdot.hub.arcgis.com/>

UBFC Story Map:

<https://storymaps.arcgis.com/stories/35c2943b23e64908b06dcedbb695c0ff>

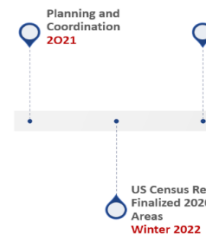
Resource Information

December 2022 is the estimated start date for State DOTs and MPOs to start adjusting these boundaries and to update functional classifications. The Census Bureau's final criteria for defining urban areas based on the results of the 2020 Decennial Census has been published. The Census is updating their Issues FAQs.

- 2010 Census Maps
- 2013 Functional Classification Guidance
- 2013 FHWA Edition - Highway Functional Classification Concepts, Criteria and Procedures
- 2020 Estimated Schedule of Activities
- 2020 Final Urban Area Criteria
- Census Frequently Asked Questions
- Metropolitan Planning Program Staff (District MPO Liaisons) - PDF
- Urban Areas for the 2020 Census
- Urban Boundary and Functional Classification Handbook
- Urban Boundary and Functional Classification Procedure (525-020-311)



Timeline




[Background](#) [Timeline](#) [Data](#) [Comments](#) [Resources](#) [Contact](#)



FHWA Guidance for UAB Smoothing



Census Urban Area Boundaries – Important Facts

- Urban and rural demarcation defined by function not urban area boundary.
- Area must encompass Census Bureau urban area, at a minimum.

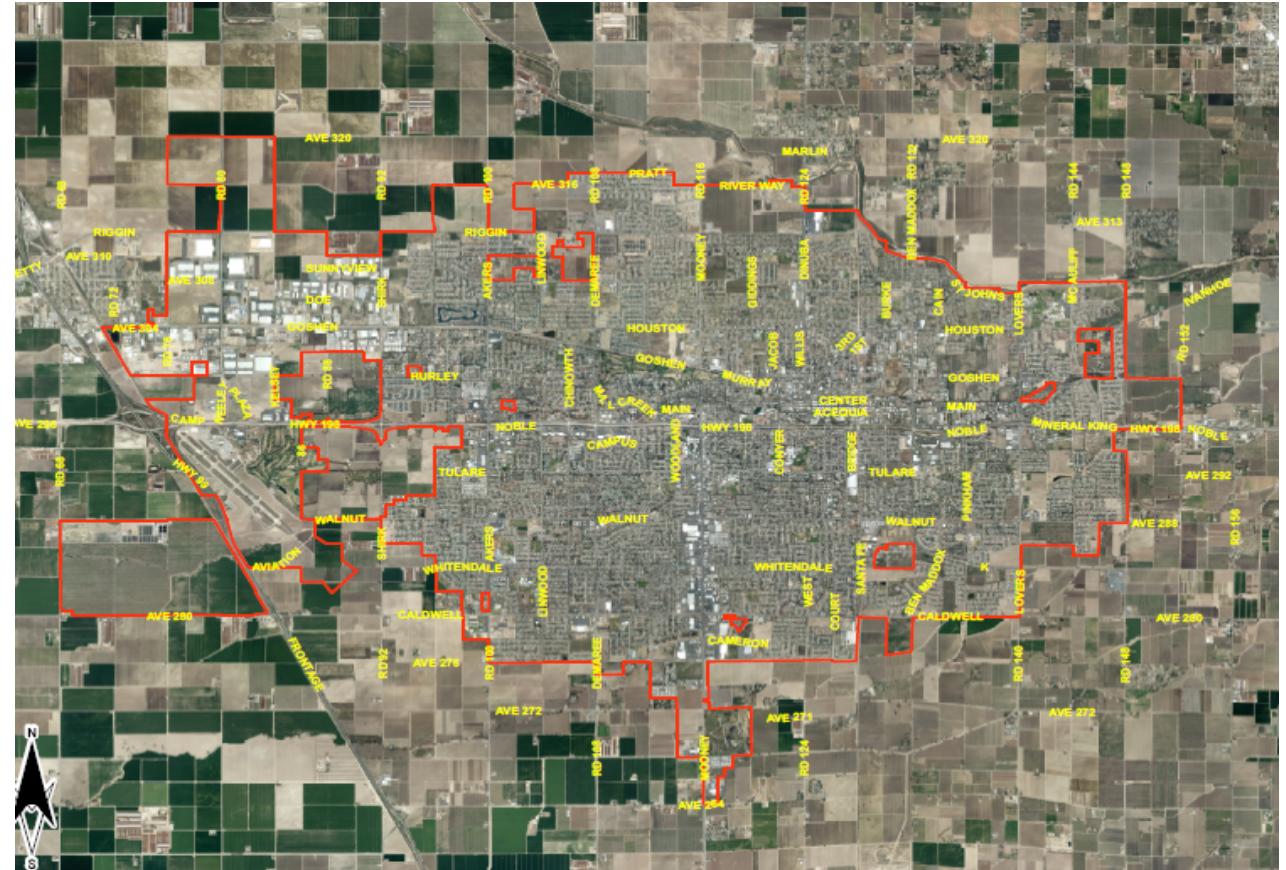
Note: States and MPOs may choose not to adjust the Census urban boundaries.





Census Urban Area Boundaries – Adjustment Considerations

- Include entire municipality.
- Include areas with urban characteristics.
- Boundary should be easy to discern.
- Boundaries should not split roadways or ramps.





Adjustment Considerations continued

- Boundaries should encompass the entire Census Bureau urban area.
- Boundaries should be one contiguous area.
- Boundaries should be simple, without irregularities.
- Boundaries should follow municipal boundaries or other physical features.
- Boundaries should include areas with urban characteristics, such as airports, industrial areas, transportation terminals, major activity centers, etc.

Reference:

https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf

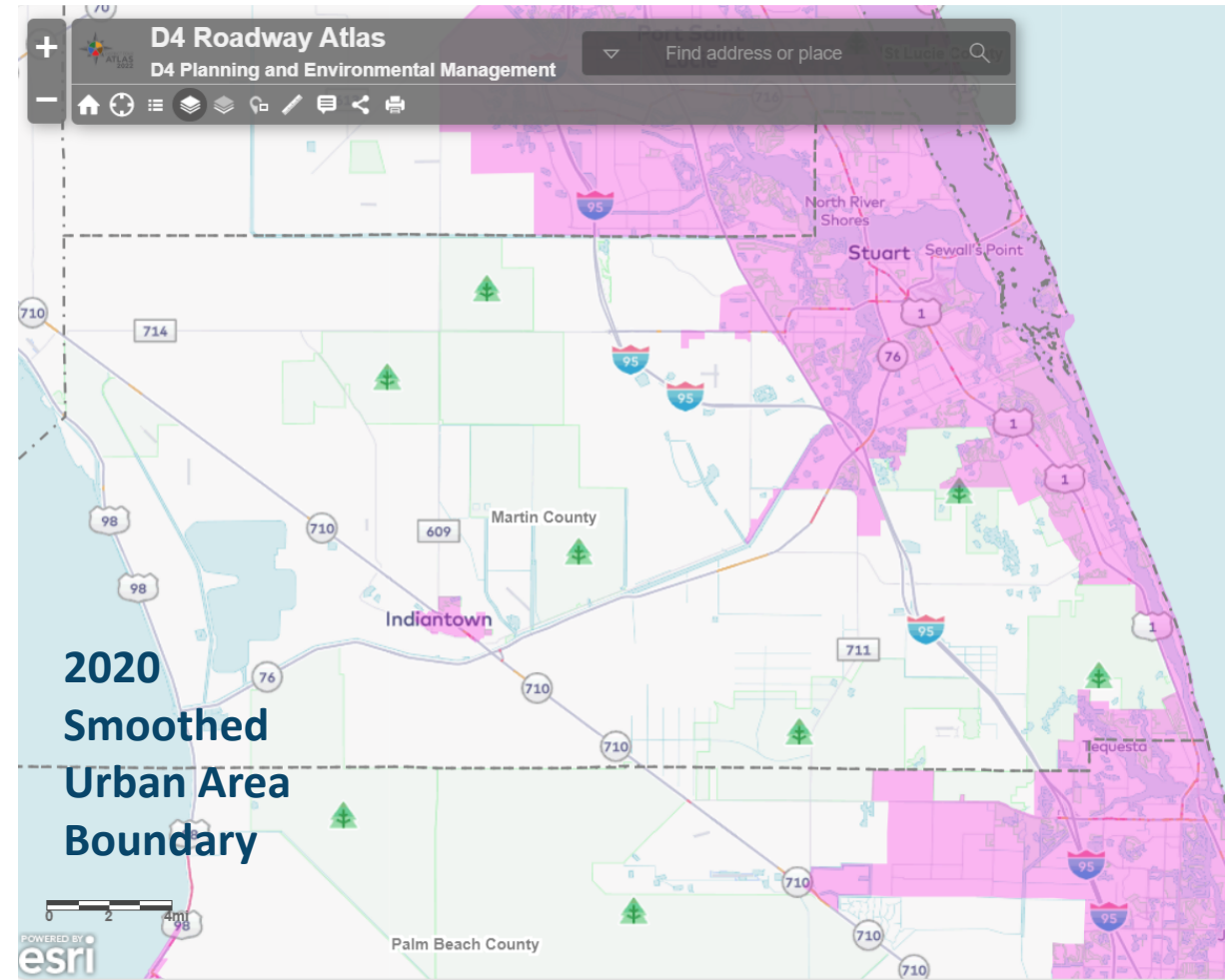
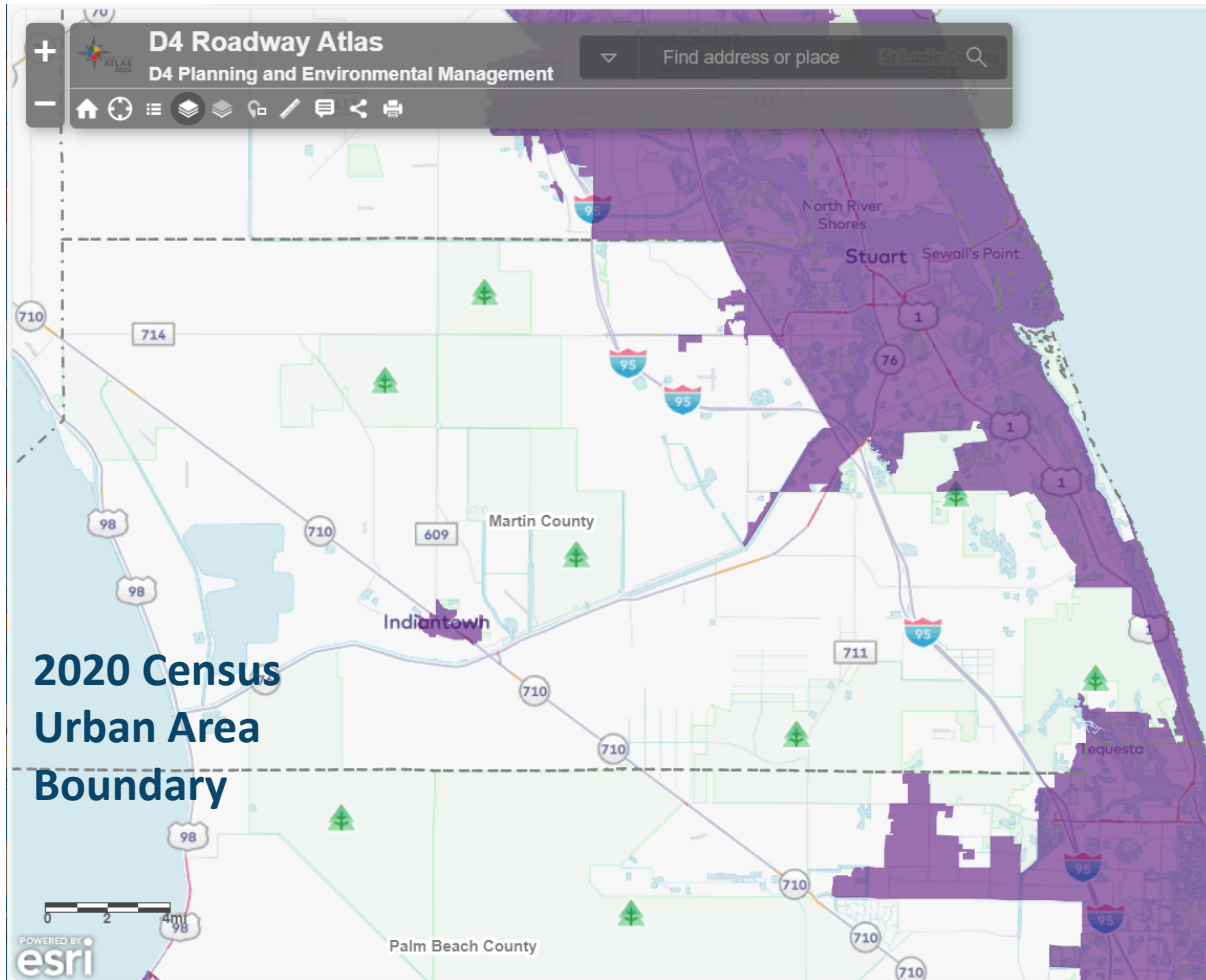




D4 DRAFT Smoothed UAB



UAB – Martin County





Questions

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**POLICY BOARD MEETING
AGENDA ITEM SUMMARY**

MEETING DATE: December 11, 2023	DUE DATE: December 4, 2023	UPWP#: 5
WORDING: STATE ROAD 710 (SR-710) UPDATE		
REQUESTED BY: MPO	PREPARED BY: Ricardo Vazquez / Beth Beltran	DOCUMENT(S) REQUIRING ACTION: N/A

BACKGROUND

The future widening of SR-710/Warfield Boulevard (the MPO’s #1 Priority) has been an ongoing discussion for the MPO. At the April 17, 2023, Policy Board Meeting, the Board recommended that SR-710 become a standing agenda item for all future meetings until the widening is completed.

Recently, the Florida Department of Transportation (FDOT) has requested that the Martin MPO write a letter of support for the designation of SR-710 as part of the National Highway Freight Network (NHFN). This designation will allow FDOT to pursue additional funding opportunities to enhance the corridor.

ISSUES

At the December 11, 2023, Policy Board meeting, FDOT staff will give an update on the widening of SR-710, and MPO staff will present a draft Letter of Support for the designation of SR-710 as part of the NHFN.

RECOMMENDED ACTION

Provide comments and make a motion to submit a letter of support to FDOT for the designation of SR-710 as part of the National Highway Freight Network (NHFN).

Notes

- Transit Development Plan (TDP) Survey – Progress Update