



Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Tammy.Rowe@brevardclerk.us

March 4, 2016

M E M O R A N D U M

TO: Robin Sobrino, Planning and Development Director Attn: Cynthia Fox

RE: Item IV.A.3., Small Scale Plan Amendment 15S.08

The Board of County Commissioners, in regular session on March 3, 2016, adopted Ordinance No. 16-01, adopting Small Scale Plan Amendment 15S.08. Enclosed is a fully-executed Ordinance.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Rowe, Deputy Clerk

Encl. (1)



FLORIDA DEPARTMENT *of* STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

March 8, 2016

Honorable Scott Ellis
Clerk
Board of County Commissioners
Brevard County
Post Office Box 999
Titusville, Florida 32781-0999

Attention: Ms. Deborah Thomas, Administrative Assistant

Dear Mr. Ellis:

Pursuant to the provisions of Section 125.66, Florida Statutes, this will acknowledge receipt of your electronic copy of Brevard County Ordinance No. 16-01, which was filed in this office on March 7, 2016.

Sincerely,

Ernest L. Reddick
Program Administrator

ELR/lb

ORDINANCE NO. 16- 01

AN ORDINANCE AMENDING ARTICLE III, CHAPTER 62, OF THE CODE OF ORDINANCES OF BREVARD COUNTY, ENTITLED "THE 1988 COMPREHENSIVE PLAN", SETTING FORTH THE EIGHTH SMALL SCALE PLAN AMENDMENT OF 2015, 15S.08, TO THE FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN; AMENDING SECTION 62-501 ENTITLED CONTENTS OF THE PLAN; SPECIFICALLY AMENDING SECTION 62-501, PART XVI (E), ENTITLED THE FUTURE LAND USE MAP APPENDIX; AND PROVISIONS WHICH REQUIRE AMENDMENT TO MAINTAIN INTERNAL CONSISTENCY WITH THESE AMENDMENTS; PROVIDING LEGAL STATUS; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Section 163.3161 et. seq., Florida Statutes (1987) established the Local Government Comprehensive Planning and Land Development Regulation Act; and

WHEREAS, Section 163.3167, Florida Statutes, requires each County in the State of Florida to prepare and adopt a Comprehensive Plan as scheduled by the Department of Economic Opportunity; and

WHEREAS, on September 8, 1988, the Board of County Commissioners of Brevard County, Florida, approved Ordinance No. 88-27, adopting the 1988 Brevard County Comprehensive Plan, hereafter referred to as the 1988 Plan; and

WHEREAS, Sections 163.3184 and 163.3187, and 163.3189, Florida Statutes, established the process for the amendment of comprehensive plans pursuant to which Brevard County has established procedures for amending the 1988 Plan; and

WHEREAS, Brevard County initiated amendments and accepted application for small scale amendments to the Comprehensive Plan for adoption in calendar year 2015 as Plan Amendment 15S.08; and

WHEREAS, Brevard County established Technical Advisory Groups consisting of County technical employees grouped according to their operational relationship to the subject of a plan element or sub-element being prepared or amended, and these Technical Advisory Groups have provided technical expertise for the Amendment 15S.08; and

WHEREAS, the Board of County Commissioners of Brevard County, Florida, have provided for the broad dissemination of proposals and alternatives, opportunity for written comments, public hearings after due public notice, provisions for open discussion, communication programs and consideration of and response to public comments concerning the provisions contained in the 1988 Plan and amendments thereto; and

WHEREAS, Section 62-181, Brevard County Code designated the Brevard County Planning and Zoning Board as the Local Planning Agency for the unincorporated areas of Brevard County, Florida, and set forth the duties and responsibilities of said local planning agency; and

Officially filed with the Secretary of State 3/7/2016

WHEREAS, on January 4, 2016, the Brevard County Local Planning Agency held a duly noticed public hearing on Plan Amendment, and considered the findings and advice of the Technical Advisory Groups, and all interested parties submitting comments; and

WHEREAS, on March 3, 2016, the Brevard County Board of County Commissioners held a duly noticed public hearing, and considered the findings and recommendations of the Technical Advisory Group, and all interested parties submitting written or oral comments, and the recommendations of the Local Planning Agency, and upon thorough and complete consideration and deliberation, approved for adoption Plan Amendment 15S.08; and

WHEREAS, Plan Amendment 15S.08 adopted by this Ordinance comply with the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act; and

WHEREAS, Plan Amendment 15S.08 adopted by this Ordinance is based upon findings of fact as included in Exhibit A and Exhibit B.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, as follows:

Section 1. Authority. This ordinance is adopted in compliance with, and pursuant to the Local Government Comprehensive Planning and Land Development Regulations Act, Sections 163.3184 and 163.3187, Florida Statutes.

Section 2. Purpose and Intent. It is hereby declared to be the purpose and intent of this Ordinance to clarify, expand, correct, update, modify and otherwise further the provisions of the 1988 Brevard County Comprehensive Plan.

Section 3. Adoption of Comprehensive Plan Amendments. Pursuant to Plan Amendment 15S.08 to the 1988 Comprehensive Plan, Article III, Chapter 62-504, Brevard County Code, the 1988 Brevard County Comprehensive Plan is hereby amended based on documentation shown in Exhibit A and as specifically shown in Exhibit B. Exhibits A and B are hereby incorporated into and made part of this Ordinance.

Section 4. Legal Status of the Plan Amendments. After and from the effective date of this Ordinance, the plan amendment, Plan Amendment 15S.08, shall amend the 1988 Comprehensive Plan and become part of that plan and the plan amendment shall retain the legal status of the 1988 Brevard County Comprehensive Plan established in Chapter 62-504 of the Code of Laws and Ordinances of Brevard County, Florida, as amended.

Section 5. Severability. If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair,

invalidate, or nullify the remainder of this Ordinance, but the effect thereof shall be confined to the section, paragraph, subdivision, clause, sentence or provision immediately involved in the controversy in which such judgment or decree shall be rendered.

Section 6. Effective Date. The effective date of this small scale plan amendment shall be 31 days after adoption, unless the amendment is challenged pursuant to Section 163.3187(3), Florida Statutes. If challenged, the effective date of this amendment shall be the date a final order is issued by the Department of Community Affairs, or the Administration Commission, finding the amendment in compliance with Section 163.3184, Florida Statutes. A certified copy of the ordinance shall be filed with the Office of the Secretary of State, State of Florida, within ten days of enactment.

DONE AND ADOPTED in regular session, this 3rd day of March 2016.

ATTEST:



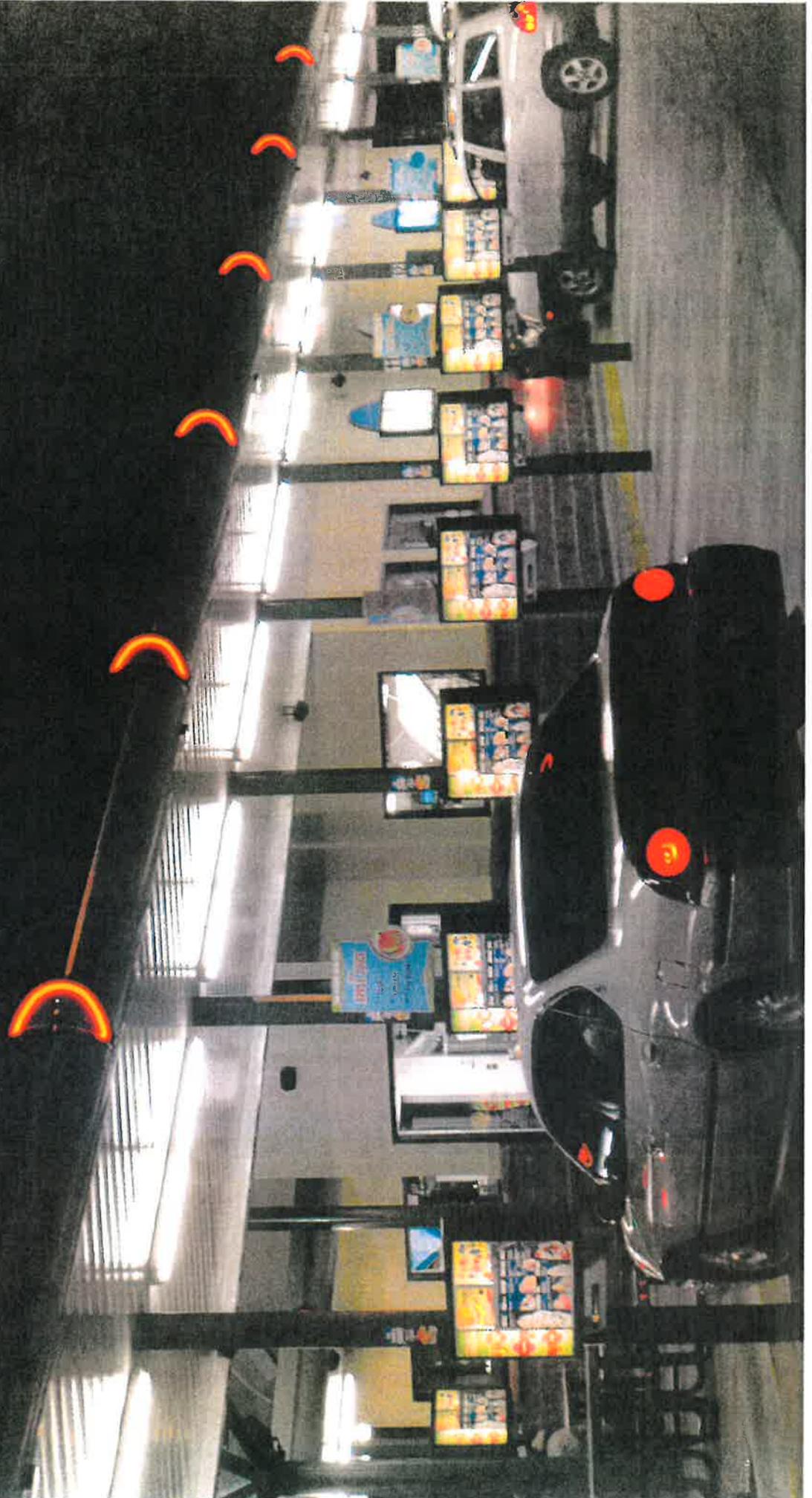
Scott Ellis

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA

By: _____
Jim Barfield, Chairman

As approved by the Board on March 3, 2016.

3/3/2016 11 A.3 Remond



IV.A.3
Perrone
3/3/2016 BCC

IV.A.3

Google Maps

Proposed Sonic

Courtenay Pkwy



Imagery ©2016 Google, Map data ©2016 Google 50 ft

Google Maps

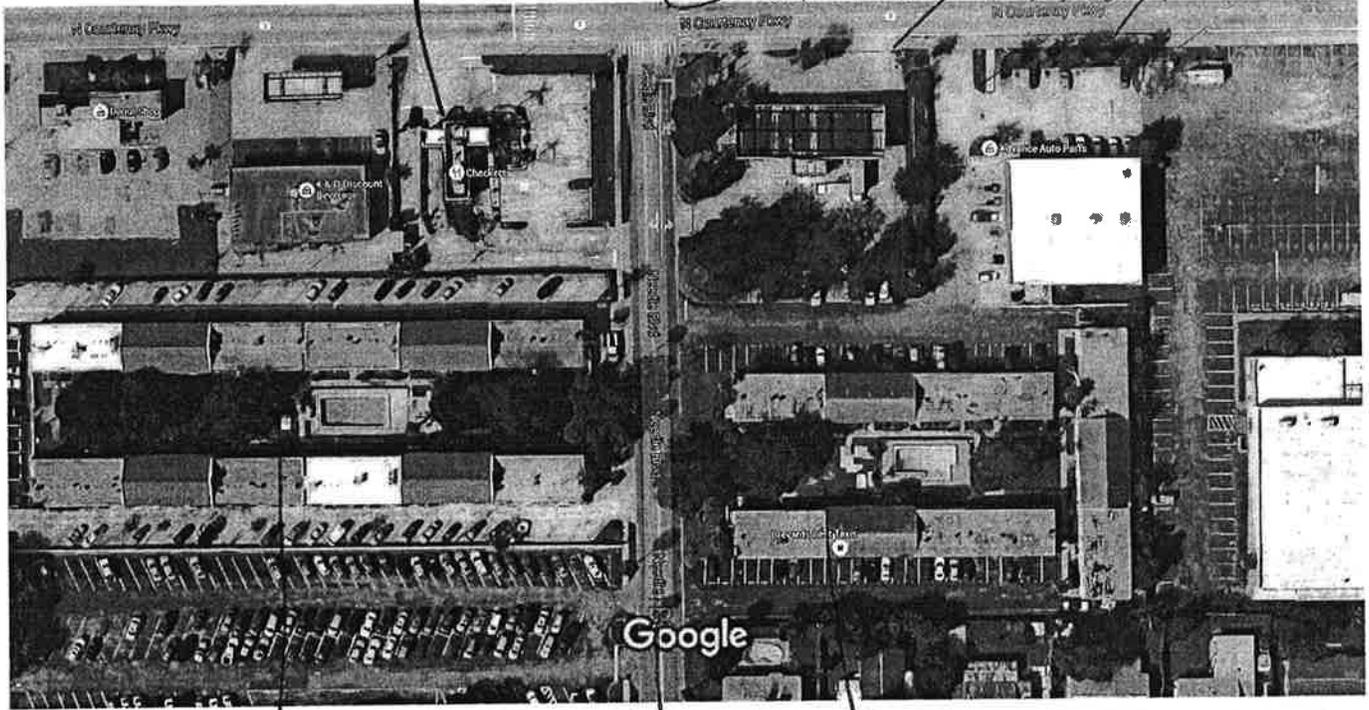
Emerald Ct.

Skyline Blvd.

Google Maps

Checker's

Courtenay Pkwy.



Google

Imagery ©2016 Google, Map data ©2016 Google 50 ft

Google Maps

55 Needle Blvd.

50 Needle Blvd.

Needle Blvd.

731003 Closed Rental PRIVATE AGENT ONLY REPORT 50 Needle Blvd 30, Merritt Island, FL 32953 LP:\$725 SP:\$725



Area: 251 - Central Merritt Island **County:** Brevard
Subd/Condo: WILLIAMSBURG VILLAGE NORTH **General County Loc:** Central
Prop Type: Townhouse **Bedrooms:** 2
Style: 2 Story **Baths - Total:** 1.1
Waterfront: No **Baths - Half:** 1
Waterfront Type: **Split Bedroom:** No
Lot Dimensions: **SqFt - Living:** 900
Acreage: 0.04 **SqFt - Total:** 900
Furnishings: None **Pool - Private:** No
Parking: Assigned **Pool - Community:** Yes
Year Built: 1965 **Front Door Faces:** W
Showing: Application Pending; Use CSS Scheduler

Narrative: APPROVED APPLICATION Two story townhouse in Central Merritt Island, half bath on first floor, washer and dryer included, pool in courtyard, assigned parking, large oak trees, convenient location to shopping, schools, bus route. Freshly painted.

Directions: From 520 go north on N. Courtenay, turn right on Needle Blvd (light at Checkers), left into west side of parking lot

Available Date: 07/29/2015 **Assoc App Fee:** 25 **Additional Fee Incl:** Attorney Fee
Lease Terms: 1 Yr Minimum **Pets:** No **Additional Fee:** 50
Application Fee: 50 **Pet Fee:** **Security Deposit:** 825
Smoking: No

Rent Includes: Lawn/Land Mntnce; Pool Maintenance; RE Taxes; Sewer; Trash P/U; Water

FEATURES

Interior Features: Ceiling Fan(s); Living/Dining Combo; Open Floor Plan; Window Treatments

Exterior Features:

Utilities: Cable Available; City Water; Electric; Sewer; Telephone **Cooling:** Central **Heat:** Central **Water Heater:** Electric

Equipment/Appliances: Dishwasher; Dryer; Range - Electric; Refrigerator; Washer

Construction: Concrete Block **Master BD/BT:** Tub/Shower
Exterior Finish: Painted; Stucco **Rooms:**
Roof: Other - Call Agent **Possession:** Subject to Lease
Floor: Carpet; Tile **Showing:** Application Pending; Use CSS Scheduler
Lot Description: Lot - City **To Be Constructed:**
Pool Features: Inground **Meas. From:** Tax Rolls
Dwelling View: Pool **55+ Community:** No
Security/Safety: **Gated Community:** No

Water Amenities:
Elementary School: Mila
Middle School: Jefferson
High School: Merritt Island

Conc Comments Y/N: No

Agent/Broker Info

Name	Office	Primary Phone	Office Phone	E-mail
LA Debra E Campbell	Florida Lifestyle Realty Llc	321-613-5922	321-613-5922	debra@livingflr.com
SA Debra E Campbell	Florida Lifestyle Realty Llc	321-613-5922	321-613-5922	debra@livingflr.com

Agent Remarks: Vacant - USE CSS APPROVED APPLICATION

Office Only Remarks:

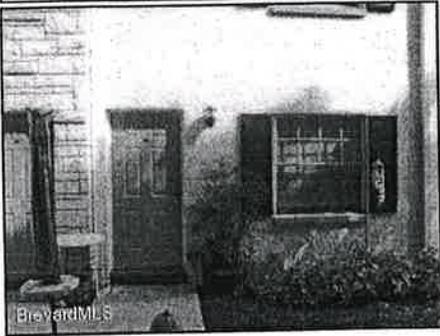
List Dt: 07/24/2015 **DOM/CDOM:** / **Buyer Agent:** 0.25% **List Type:** Exclusive
Rented Date: 09/03/2015 **Original List Price:** \$725 **Tran. Agent:** 0.25% **Type of Srvc:** Full
Contract Dt: **Rented Price:** \$725 **Non-Agent:** 0% **Svcs Not**
Withdraw Dt: **Sold Terms:** **Bonus/AMT:** No **Prov:**
Contingency Type: **Owner:** FOSTER, SCOTT; FOSTER, GEORGE **0** **Appt:**
Co-Owner: **Var Comm:** No **Appt Phone:**

Legal Desc: UNIT 30 WILLIAMSBURB VILLAGE NORTH AS DESC IN ORB 1440 PG 802 & AMENDED IN 2267 PG 810 AND ALL AMENDMENTS THERETO.

Tax Acct: 2419472 **Tax ID:** 24-36-26-00-00774.9-0000.00 **Home Owners Assoc:** HOA Home Owners Mandatory
Condo Unit #: 30 **HOA Amt:** \$0 Monthly
Unit Floor #: 2
Total Floors in Bldg: 2

Information is deemed to be reliable, but is not guaranteed. © 2016 MLS and FBS. Prepared by David M Diamond on Thursday, March 03, 2016 11:33

739026 Closed Rental PRIVATE AGENT ONLY REPORT 55 Needle Blvd 68, Merritt Island, FL 32953 LP:\$750 SP:\$750



Area: 251 - Central Merritt Island
Subd/Condo: HAMPTON COURT CONDO
Prop Type: Condo
Style: 2 Story
Waterfront: No
Waterfront Type:
Lot Dimensions:
Acreage: 0.04
Furnishings: None
Parking: Assigned
Year Built: 1964
Showing: Call Listing Office

County: Brevard
General County Loc: Central
Bedrooms: 2
Baths - Total: 1.1
Baths - Half: 1
Split Bedroom: No
SqFt - Living: 900
SqFt - Total: 900
Pool - Private: No
Pool - Community: Yes
Front Door Faces: W

Narrative: Nice 2 bedroom townhome in a very well maintained complex. This complex is centrally located and close to everything. The rent includes water, sewer and basic cable. No pets allowed by owner's choice.

Directions: Take Courtenay Parkway and Needle Blvd starts where the Checkers is located and this complex is right behind Checkers.

Available Date:
Lease Terms: 1 Yr Minimum
Application Fee: 100

Assoc App Fee: 100
Pets: No
Pet Fee:

Additional Fee Incl:
Additional Fee: 50
Security Deposit: 775
Smoking:

Rent Includes: Cable; Sewer; Water

FEATURES

Interior Features: Living/Dining Combo

Exterior Features:

Utilities: Cable Available; City Water; Sewer Heat: Central Water Heater: Electric
Equipment/Appliances: Dryer; Range - Electric; Refrigerator; Washer

Construction: Concrete Block
Exterior Finish: Painted; Stucco
Roof: Gravel
Floor: Carpet; Vinyl
Lot Description: Lot - County
Pool Features: Inground
Dwelling View: Garden
Security/Safety:
Water Amenities:
Elementary School: Mila
Middle School: Jefferson
High School: Merritt Island

Master BD/BT:
Rooms:
Possession: Subject to Lease
Showing: Call Listing Office
To Be Constructed:
Meas. From: Tax Rolls
55+ Community: No
Gated Community:
Restrictions: Pets

Conc Comments Y/N: No

Agent/Broker Info

Name	Office	Primary Phone	Office Phone	E-mail
LA Gerard Drew	A1A Minutemen Realty Inc	321-213-6699	321-213-6699	a1arealty@aol.com
SA Gerard Drew	A1A Minutemen Realty Inc	321-213-6699	321-213-6699	a1arealty@aol.com

Agent Remarks: Call listing agent for showing instructions and potential tenant must complete a credit report and approval by the association.

Office Only Remarks:

List Dt: 11/04/2015	DOM/CDOM: /	Buyer Agent: 0.25%	List Type: Exclusive
Rented Date: 02/01/2016	Original List Price: \$795	Tran. Agent: 0.25%	Type of Srvc: Right
Contract Dt:	Rented Price: \$750	Non-Agent: 0.25%	Svces Not: Full
Withdraw Dt:	Sold Terms:	Bonus/AMT: No	Prov:
Contingency Type:	Owner: SEROTA, STUART; SEROTA, LILA H	Var Comm: No	Contact: Co-List Agent
	Co-Owner:		Appt: List Office
			Appt Phone: 213-6699

Legal Desc: UNIT 68 HAMPTON COURT CONDO AS DESC IN ORB 2986 PG 2639 AND ALL AMENDMENTS THERETO.
Tax Acct: 2419510 **Tax ID:** 24-36-26-00-00778.7-0000.00 **Equitable Interest:** No **Home Owners Assoc:** Condo
Condo Unit #: 68 **HOA Amt:** \$250 Monthly
Unit Floor #: 1
Total Floors in Bldg: 2

Information is deemed to be reliable, but is not guaranteed. © 2016 MLS and FBS. Prepared by David M Diamond on Thursday, March 03, 2016 11:23 AM. The information on this sheet has been made available by the MLS and may not be the listing of the provider.

734716 Active Residential PRIVATE AGENT ONLY REPORT **55 Needle Blvd 79, Merritt Island, FL 32953** **\$49,900**



Area:	251 - Central Merritt Island	County:	Brevard
Subd/Condo:	HAMPTON COURT CONDO	General County Loc:	Central
Res Sub-Type:	Condo	Bedrooms:	2
Waterfront:	No	Baths - Total:	1.1
Dwelling View:	Pool	Baths - Full:	1
Lot Dimensions:		Baths - Half:	1
List Price/SqFt:	\$55.44	Split Bedroom:	No
Acreage:	0.04	SqFt - Living:	900
Lot SqFt:	1,742	SqFt - Total:	900
Furnished:	None	Year Built:	1964
Parking:	Assigned; Open Parking	Fireplace:	No
Home Warranty:	No	Pool - Private:	No
Property Status:	Standard	Pool - Community:	Yes
Close Date:		Front Door Faces:	E
		Sold-As-Is:	Yes

Narrative: Awesome Merritt Island location for this 2 story, 2 bedroom, 1.5 bath, 900 living sq. ft. condo. 1st floor open floor plan with spacious living room, dining area & kitchen. 2nd floor bedrooms & full bath. Unit has tile flooring throughout w/carpeted stairs. Complex has center courtyard with community pool & sitting area. Assigned parking space. Low HOA fee.
Directions: 520, North on Courtenay Pkwy, East on Needle, right into complex, unit on right.

FEATURES

Interior Features: Living/Dining Combo; Open Floor Plan
Exterior Features: Patio Slab
Utilities: Cable Available; City Water; Electric; Sewer; Telephone **Cooling:** Central; **Electric Heat:** Central; **Electric Water Heater:** Electric
Equipment/Appliances: Laundry-Hookup; Range - Electric

Style:	Multi Homes on Prop	Master BD/BT:	Walk-in Closet
Construction:	Combination	Rooms:	
Exterior Finish:	Painted; Stucco	Possible:	Cash; Conventional
Roof:	Other - Call Agent	Financing:	
Floor:	Tile	Possession:	Closing
Lot Description:	Paved Street	Showing:	Appointment Required; Call Listing Office; Pets on Property; Tenant Occupied
Unit Description:		To Be:	No
Dwelling View:	Pool	Constructed:	
Assoc/HOA:	BP Davis 321-784-2091	Meas. From:	Tax Rolls
Contact:	maureen@bpdavis.com	55+ Community:	No
HOA Home:	Condo	Gated:	No
Owners:		Community:	
HOA Info:	HOA Amt: 255; HOA Frequency: Monthly	Pet Restrictions:	0 - 20 lbs
Assoc Fee Incl:	Common Taxes; Maint - Common Area; Pool Maintenance	Rental:	1 Year Minimum
Common Amenities:		Restrictions:	
Security/Safety:		Management:	Association
Pool Features:	Inground		
Water Amenities:			
Elementary School:	Mila		
Middle School:	Jefferson		
High School:	Merritt Island		

Agent/Broker Info

Name	Office	Primary Phone	Office Phone	E-mail
LA Nick F Farinella	Coldwell Banker Res RE	321-704-1600	321-259-5280	callnickjr@gmail.com

Agent Remarks: Showing appointments after 4:30 pm ONLY. Call 321-259-5280 for appt.to show. Tenants lease through July 31, 2016 must be honored. Tenant pays \$690 per month.

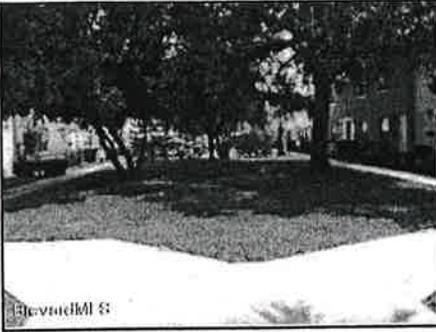
Office Only Remarks:

List Dt:	09/11/2015	DOM/CDOM:	174/174	Buyer Agent:	3%	List Type:	Exclusive Right
Contract Dt:		Original List Price:	\$49,900	Tran. Agent:	3%	Type of Srvc:	Full
Withdraw Dt:				Non-Rep:	0%	Appt:	List Office
Contingency Type:				Bonus/AMT:	No	Appt Phone:	321-259-5280
					\$0.00		

730371 Active Residential PRIVATE AGENT ONLY REPORT

50 Needle Blvd 39, Merritt Island, FL 32953

\$49,900



Area:	251 - Central Merritt Island	County:	Brevard
Subd/Condo:	WILLIAMSBURG UNIT 1	General County Loc:	Central
Res Sub-Type:	Condo	Bedrooms:	2
Waterfront:	No	Baths - Total:	1.1
Dwelling View:	Pool	Baths - Full:	1
Lot Dimensions:		Baths - Half:	1
List Price/SqFt:	\$55.44	Split Bedroom:	No
Acreage:	0.04	SqFt - Living:	900
Lot SqFt:	1,742	SqFt - Total:	900
Furnished:	None	Year Built:	1965
Parking:	Covered; Open Parking	Fireplace:	No
Home Warranty:	No	Pool - Private:	No
Property Status:	Standard	Pool - Community:	Yes
Fixer Upper:	Yes	Front Door Faces:	E
Close Date:		Sold-As-Is:	Yes

Narrative: Long term/ long time Tenant occupied, 2 story unit with bedrooms and a bathroom upstairs, half bath downstairs under stairwell.
Directions: Courtenay pkwy to Needle then eat on Needle to behind station on the left. 2nd unit from the end.

FEATURES

Interior Features: Living/Dining Combo

Exterior Features:

Utilities: Cable Available; City Water; Electric; Sewer **Cooling:** Central; **Electric Heat:** Central; **Electric Water Heater:** Electric

Equipment/Appliances: Dryer; Laundry-Hookup; Range - Electric; Refrigerator; Washer

Style: 2 Story

Construction: Concrete Block; Concrete Poured

Exterior Finish: Painted

Roof: Concrete; Shingle - Asphalt

Floor: Carpet; Ceramic Tile

Lot Description: County; Paved Street; Sidewalks

Unit Description: Exterior Hallways

Dwelling View: Pool

Assoc/HOA

Contact:

HOA Home HOA Home Owners Mandatory

Owners:

HOA Info: HOA Amt: 210; HOA Frequency: Monthly

Assoc Fee Incl: Lawn-Landscaping; Maint - Common Area; Maintenance-Exterior; Pool Maintenance; Trash-Garbage

Common

Amenities:

Security/Safety:

Pool Features: Concrete; Inground

Water Amenities:

Elementary Mila

School:

Middle School: Jefferson

High School: Merritt Island

Master BD/BT:

Rooms:

Possible Cash; Conventional; Will Consider FHA; Will Consider VA

Financing:

Possession:

Showing: 24 Hour Notice; Appointment Required; Tenant Occupied; See Agent Remarks

To Be No

Constructed:

Meas. From: Tax Rolls

55+ Community: No

Gated No

Community:

Pet 21 - 30 lbs

Restrictions:

Restrictions: 1st Right of Refusal

Management: Association; Offsite Professional

Agent/Broker Info

Name	Office	Primary Phone	Office Phone	E-mail
LA Vicki L Yates	Perrone Realty, LLC	321-452-9838	321-452-9838	yates_t@bellsouth.net

Agent Remarks: call Vicki to make appointment. tenant occupied

Office Only Remarks:

List Dt:	07/16/2015	DOM/CDOM:	231/231	Buyer Agent:	3%	List Type:	Exclusive Right
Contract Dt:		Original List	\$49,900	Tran. Agent:	3%	Type of Srvc:	Full
Withdraw Dt:		Price:		Non-Rep:	0%	Contact:	List Agent
Contingency Type:		Owner:	MEGREGIAN, MARTIN A; MEGREGIAN	Bonus/AMT:	No	Appt:	Agent
				Var Comm:	No	Appt Phone:	3214807906

Co-Owner:

Escrow Agent Info: Debbie Heitzman Aurora Title 321.242.2804 ext 18

Subj: **1112 Clearlake Road - Public Records Request**
Date: 3/3/2016 3:19:59 P.M. Eastern Standard Time
From: eaustin@cocoapolice.com
To: Utopia155@aol.com

To Whom It May Concern:

There have been no noise complaints at 1112 Clearlake Road, Cocoa, FL 32922 (Sonic) in the past five (5) years. If need any further information, please do not hesitate to contact me.

Thanks,



Major Eric Austin

Support Services Commander

1226 West King St., Cocoa, FL 32922

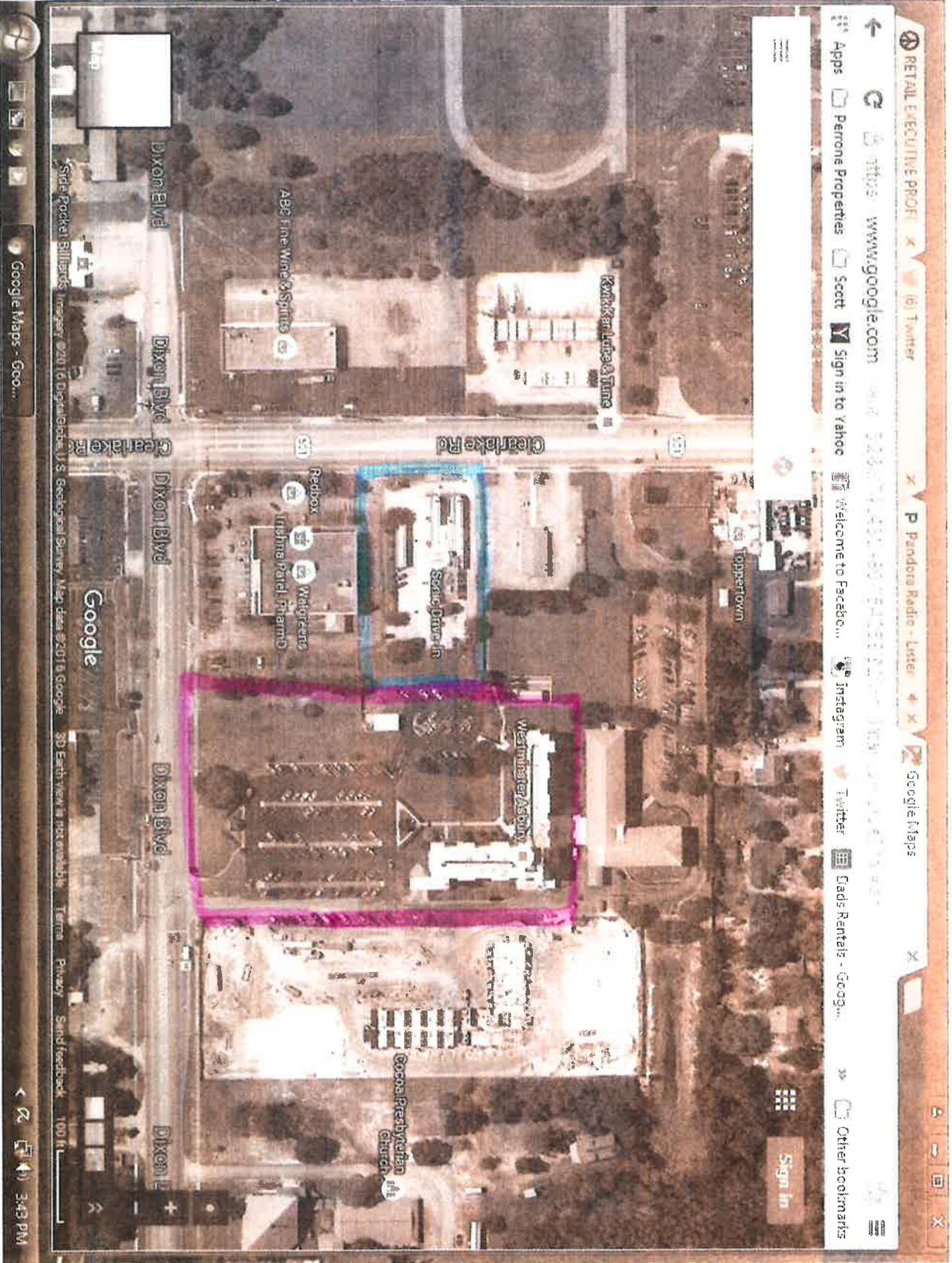
(321) 637-6358 | eaustin@cocoapolice.com

Fax: (321) 637-6357

Serving our Community with Pridel

Stay Connected:       www.cocoaf1.org

This electronic message is privileged and confidential material. This message is intended solely for the individual or entity named above. If the receiver of this message is not the intended recipient, please be advised that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately and delete it.



RETAIL EXECUTIVE PROF

6/ Twitter

P Pandora Radio - Listen

Google Maps

https://www.google.com

Perone Properties

Scott

Sign in to Yahoo

Welcome to Facedo...

Instagram

Twitter

Grids Rentals - Google

Other bookmarks

Sign in

Kont-Kan Luce & Fine

ABC Fine Wine & Spirits

Clearlake Rd

531

Sense Drive-In

Redbox

Lithina Panel FarmD

Westminster Ass'n

Cocoa Presbyterian Church

Dixon Blvd

Dixon Blvd

Dixon Blvd

Dixon Blvd

Dixon Blvd

Google

Side Pocket Billiards Imagery ©2016 DigitalGlobe, U.S. Geological Survey, Map data ©2016 Google 30 Earth View is not available. Terms Privacy Send feedback 100 ft

Google Maps - Geo...

3:43 PM



END PROJECT



BRUCE CAMP

Carroll Elementary School

ULUMAY WILDLIFE SANCTUARY

Florida Department of Transportation District Five

Courtenay Parkway (SR 3)

Corridor Planning and Concept Development Study

FUTURE CONDITIONS REPORT

September 2015

Merritt Island High School



Mia Elementary

Edgewood Junior/Senior



Table of Contents

- 1** Introduction 1
- 1.1** Report Purpose 1
- 1.2** Project Background and Purpose 2
- 2** Existing Conditions..... 4
- 2.1** Roadway and Intersection Characteristics 4
- 2.2** 2015 Existing Volumes..... 4
- 2.3** Existing Operational Analysis..... 9
- 2.3.1** Roadway Operational Analysis..... 9
- 2.3.2** Bicycle Operational Analysis..... 9
- 2.3.3** Pedestrian Operational Analysis 9
- 2.3.4** Transit Operational Analysis..... 9
- 2.3.5** Intersection Operational Analysis 10
- 3** Future Conditions 11
- 3.1** Future Land Use..... 11
- 3.2** Planned Improvements 13
- 3.2.1** Roadway Improvements 13
- 3.2.2** Bicycle and Pedestrian Improvements..... 14
- 3.2.3** Transit Improvements 15
- 3.3** Growth Projections and Assumptions 16
- 3.4** 2020 Short Term Scenario 22
- 3.4.1** 2020 Future Roadway Operations..... 22
- 3.4.2** 2020 Future Bicycle Operational Analysis 23
- 3.4.3** 2020 Future Pedestrian Operational Analysis..... 24
- 3.4.4** 2020 Future Transit Operations 25
- 3.4.5** 2020 Future Intersection Operations..... 25
- 3.5** 2040 Long Term Scenario 27





3.5.1	2040 Future Roadway Operations.....	27
3.5.2	2040 Future Bicycle Operational Analysis.....	28
3.5.3	2040 Future Pedestrian Operational Analysis.....	28
3.5.4	2040 Future Transit Operations.....	29
3.5.5	2040 Future Intersection Operations.....	29
4	Summary.....	32



LIST OF FIGURES

Figure 1: Study Area Map..... 3

Figure 2A: Existing Intersection Geometry 5

Figure 2B: Existing Intersection Geometry 6

Figure 3A: Existing Turning Movement Volumes and Level of Service Map..... 7

Figure 3B: Existing Turning Movement Volumes and Level of Service Map..... 8

Figure 4: Future Land Use Map..... 12

Figure 5A: 2020 Future Turning Movement Volumes and Level of Service Map 18

Figure 5B: 2020 Future Turning Movement Volumes and Level of Service Map 19

Figure 6A: 2040 Future Turning Movement Volumes and Level of Service Map 20

Figure 6B: 2040 Future Turning Movement Volumes and Level of Service Map 21

LIST OF TABLES

Table 1: Future Land Use 13

Table 2: Bus Stop Improvements 16

Table 3: Annual Growth Rate Comparison 16

Table 4: 2020 Projected Roadway Level of Service 23

Table 5: 2020 Bicycle Mode Level of Service 24

Table 6: 2020 Pedestrian Mode Level of Service 25

Table 7: 2020 Projected Intersection Level of Service 26

Table 8: 2040 Projected Roadway Level of Service 27

Table 9: 2040 Bicycle Mode Level of Service 28

Table 10: 2040 Pedestrian Mode Level of Service 29

Table 11: 2040 Projected Intersection Level of Service 30

Table 12: 2040 Projected SPUI Interchange/Intersection Level of Service 31

List of Appendices

Appendix A – SR 3 Existing Conditions Tables

Appendix B – Synchro Printouts

Appendix C – Growth Rate Calculations





1

Introduction

1.1 Report Purpose

In January 2015, the Florida Department of Transportation (FDOT) engaged the services of VHB to perform a Corridor Planning and Concept Development Study on Courtenay Parkway / State Road (SR) 3 from Fortenberry Road, south of SR 520 to Grant Road/Smith Road, north of SR 528.

A Corridor Planning Study is a high-level evaluation of safety, environmental and geometric concerns along a transportation corridor where needs, possible improvement options and planning level cost estimates are identified. The purpose of the study is to develop a multi-modal, design-driven vision, rather than a model-driven vision to determine how best to meet the needs of the current and future end users of the corridor, and to establish a long-term plan to guide evolution of the corridor. Multi-modal corridor projects are seen as essential to network efficiency, safety, and livability within the context of future transportation needs.

As part of the Corridor Planning Study, this Future Conditions Report summarizes the traffic findings from the Courtenay Parkway (SR 3) Corridor Planning and Concept Development Study Existing Conditions Report and expands on the issues and opportunities identified during that effort. The Existing Conditions Report identified existing facilities, conditions, and previous studies conducted relevant to the SR 3 Corridor study area. The summary of existing traffic conditions and levels of service (LOS) provide a baseline for comparison with projected future conditions. For detailed information regarding the existing conditions of the study corridor, please see the Courtenay Parkway (SR 3) Corridor Existing Conditions Report.

The ultimate purpose of the study is to develop a multi-modal, design-driven vision to determine how best to meet the needs of the current and future end users of the corridor and to establish a long-term plan to guide evolution of the corridor.

This report summarizes planned roadway and multi-modal improvements, projects future traffic demand along SR 3 from Fortenberry Road to Grant Road/Smith Road, and identifies any deficiencies and additional needs for the corridor for both the short-term (Year 2020) and long-term (Year 2040) conditions. The results of the analysis will be used to define the corridor needs and develop potential improvement alternatives.



1.2 Project Background and Purpose

This project has been requested by the Space Coast Transportation Planning Organization (Space Coast TPO) to coordinate the development of a future vision for the SR 3 corridor that will establish a multi-modal approach to providing for future transportation needs. This study will involve a community-based evaluation to determine how best to meet the needs of current and future users, and to establish a long-term plan to guide an evolution of the corridor that appropriately correlates the balance between land use and transportation planning. This project will be coordinated with local and regional agency partners, such as the Space Coast TPO, Brevard County, Space Coast Area Transit (SCAT), and the Merritt Island Redevelopment Agency (MIRA), to develop potential solutions that establish a more multi-modal urban environment utilizing a context-sensitive approach.

SR 3 has been the subject of various previous planning studies and improvement efforts by Brevard County and Space Coast TPO. FDOT will continue to work with a Project Visioning Team (PVT) consisting of local stakeholders to implement these previous recommendations to create a more walkable urban environment for the corridor. Figure 1 illustrates the Study Area.





2

Existing Conditions

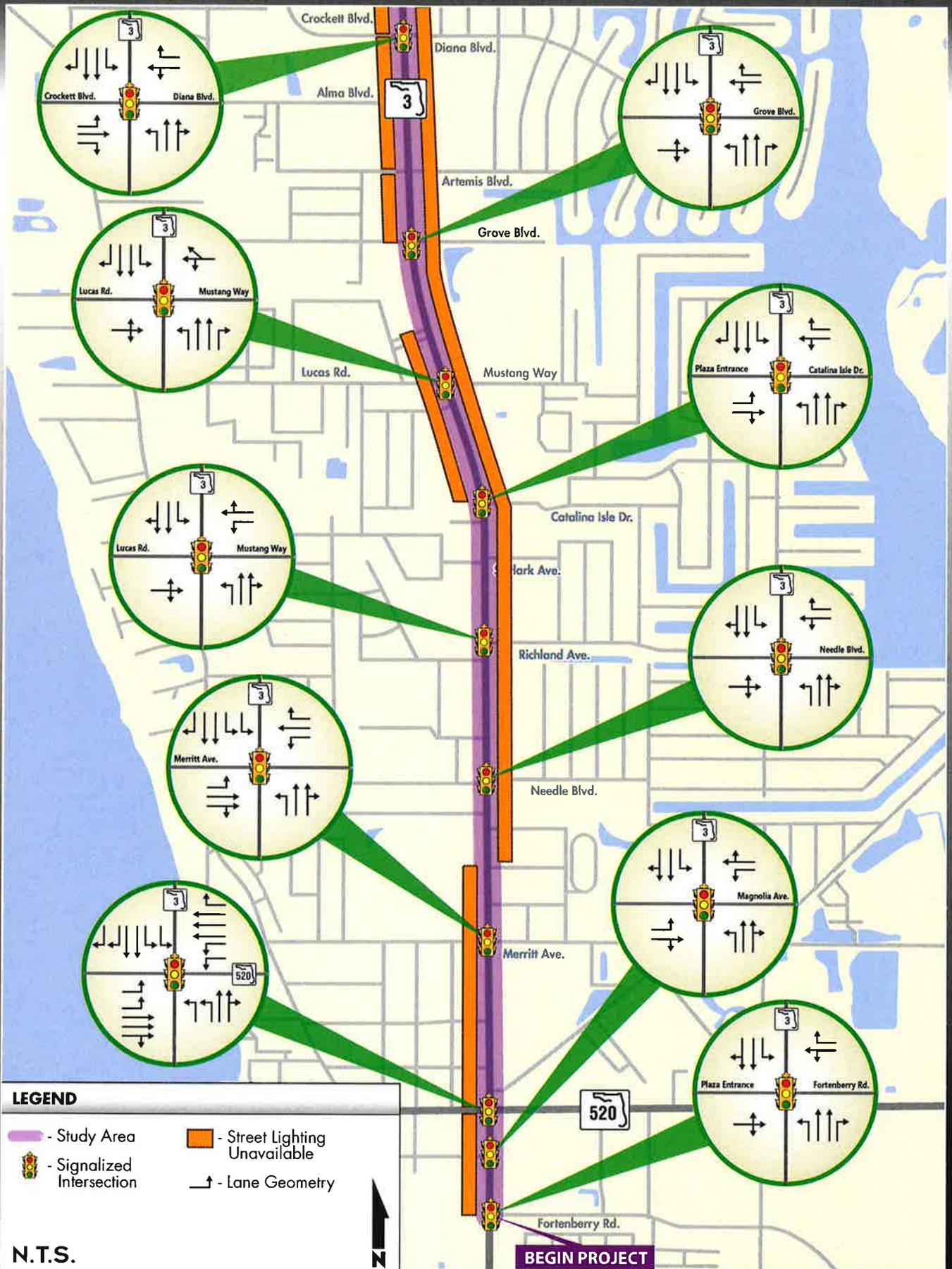
2.1 Roadway and Intersection Characteristics

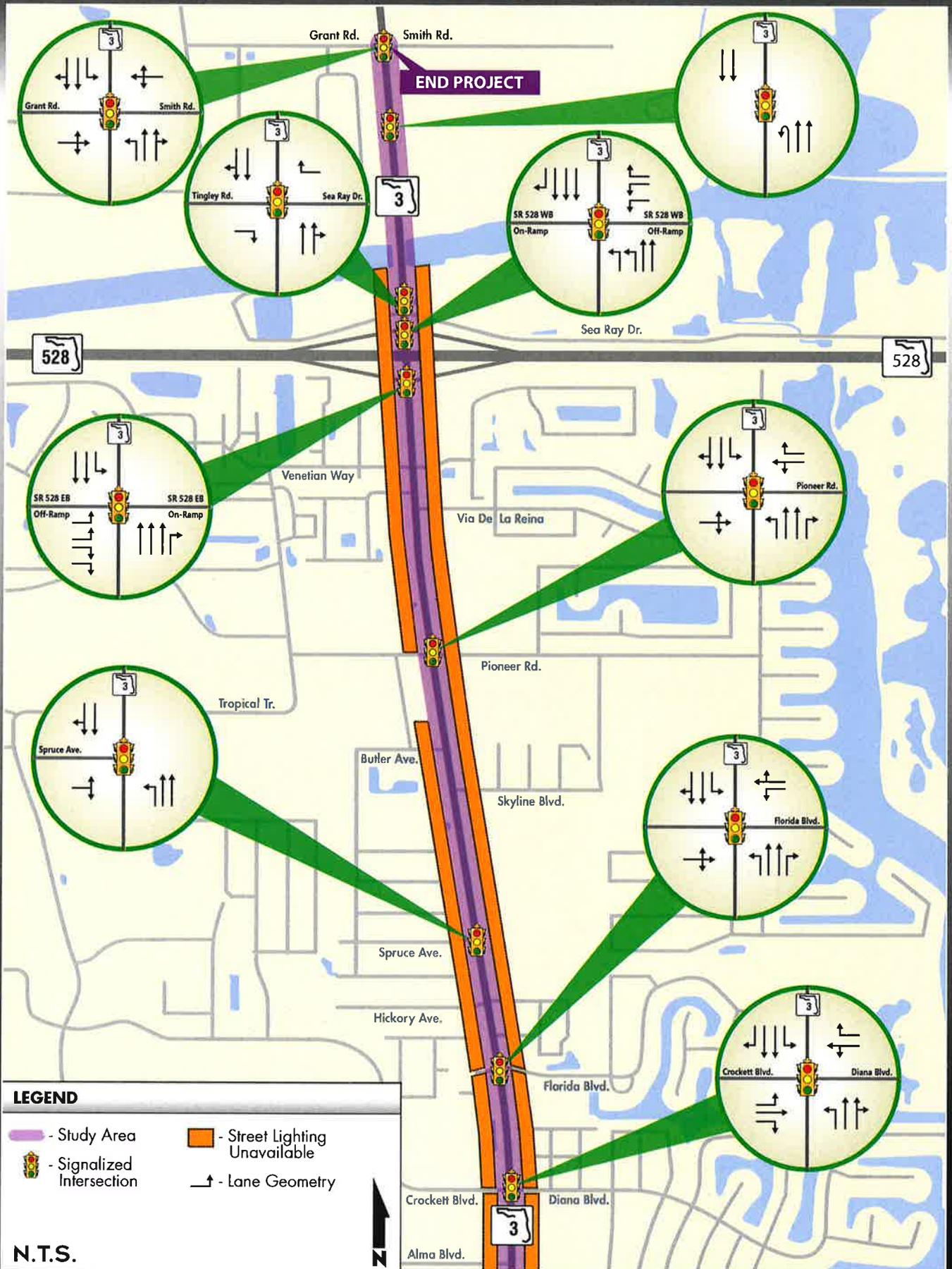
The SR 3 project corridor from Fortenberry Road to Grant Road / Smith Road is classified as an “urban principal arterial other”. The facility is owned and maintained by FDOT north of SR 520 and by Brevard County south of SR 520. There are two predominant typical sections of the corridor; a four-lane arterial with narrow center medians and curb/gutter from Fortenberry Road to Skylark Avenue; and a five-lane arterial with center left-turn median and paved shoulders and open swale drainage from Skylark Avenue to Grant Road / Smith Road. The posted speed limit on SR 3 from Fortenberry Road to south of Barony Drive is 35 miles per hour (mph) and increases to 40 mph south of Barony Drive to north of Artemis Boulevard. The speed limit then increases to 45 mph from north of Artemis Drive to the project end at Grant Road / Smith Road.

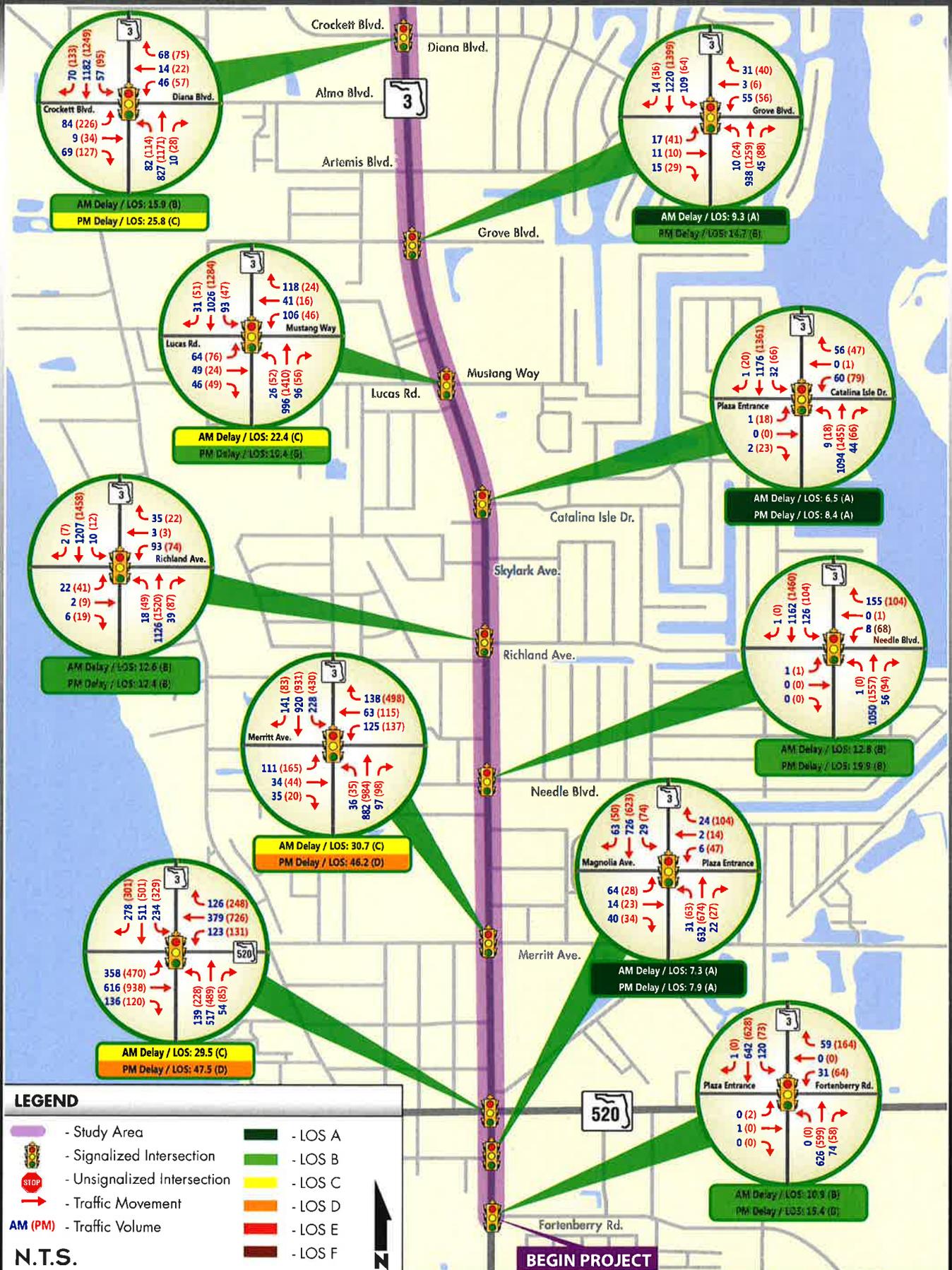
Figures 2A and 2B provide the year 2015 intersection geometry for the Study Area intersections.

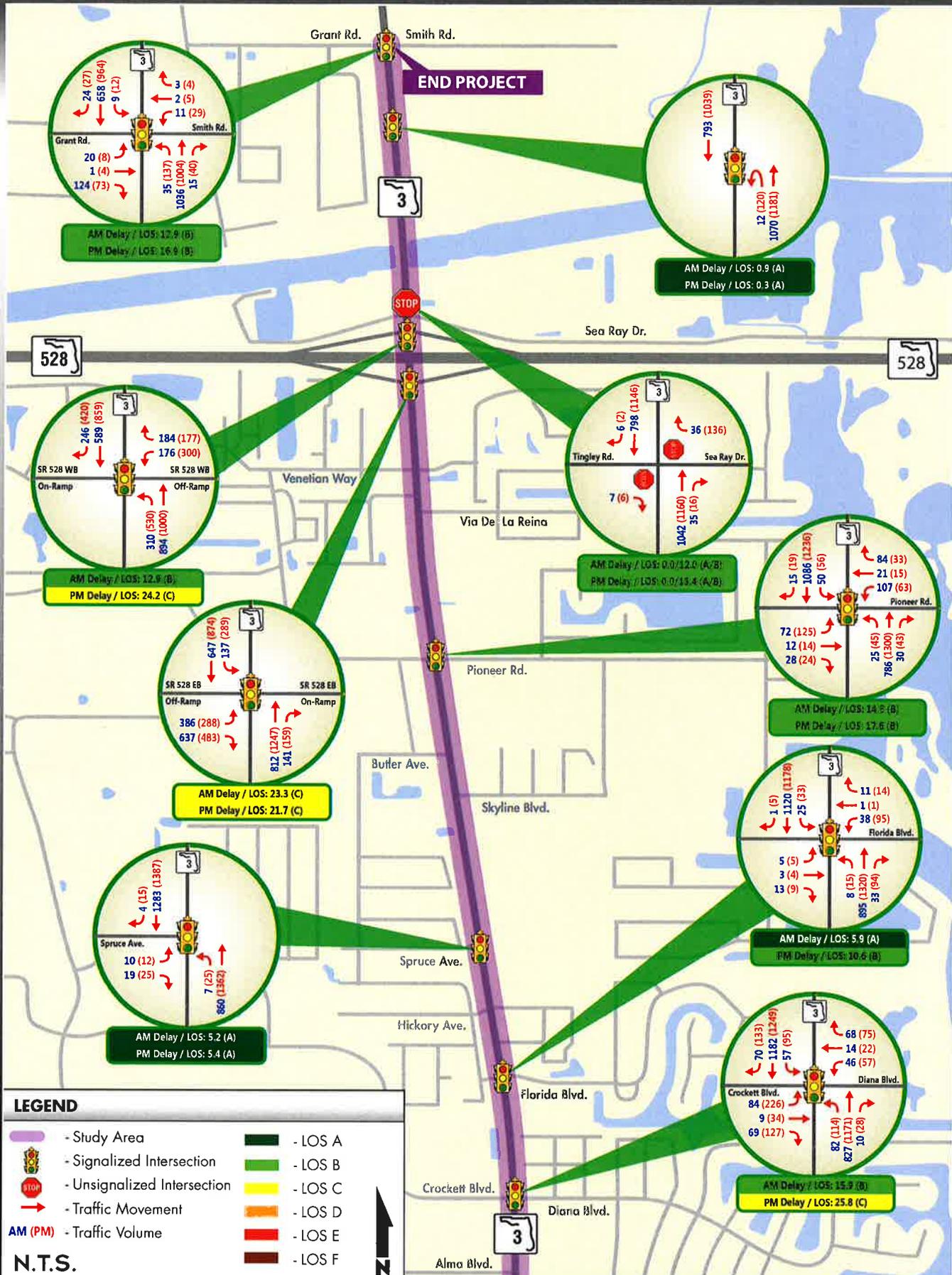
2.2 2015 Existing Volumes

Weekday daily and hourly traffic volumes along the Study Area roadway segments and intersections were collected from multiple sources, including the FDOT Florida Transportation Information (FTI) and the Space Coast TPO annual traffic counts program. These counts were also supplemented by 24-hour tube counts and 4-hour (7:00 – 9:00 AM and 4:00 – 6:00 PM) manual turning movement counts conducted along the Study Area roadway segments and intersections in March and April 2015. Figures 3A and 3B show the 2015 existing turning movement traffic volumes.











2.3 Existing Operational Analysis

Existing 2015 operational analysis was conducted to determine LOS for the roadway segments and the Study Area intersections. The detailed analysis is provided in the Existing Conditions Report. The following sections provide a summary of the key findings for each mode.

2.3.1 Roadway Operational Analysis

Policy 1.3 of the Brevard County Comprehensive Plan Transportation Element establishes that state roads within the urban area boundary shall be consistent with the LOS standards adopted by FDOT. FDOT has adopted LOS "D" as the standard for SR 3; however, the Space Coast TPO has adopted a LOS standard of "E" (Source: 2013 State of the System report). This inconsistency should be addressed in the future, either as an amendment to the County's Comprehensive Plan or change of the Space Coast TPO standard.

Table 2 in Appendix A shows the detailed existing roadway segment level of service analysis. The SR 3 corridor currently operates within acceptable LOS standards. The only exception is the segment from SR 520 to Barony Drive/Skylark Avenue, during the PM peak hour, which operates at a LOS "E".

2.3.2 Bicycle Operational Analysis

In addition to the LOS for the general motorists, the LOS for the bicycle mode was also evaluated. The LOS for the bicycle mode is based on the number of vehicles traveling on the roadway and the coverage of available bicycle lanes provided along the corridor. As shown in Table 3 in Appendix A, bicyclists traveling along the corridor are operating at LOS "E" due to the lack of bike lanes along the corridor.

2.3.3 Pedestrian Operational Analysis

In addition to the LOS for the general motorists, the LOS for the pedestrian mode was also evaluated. The LOS for the pedestrian mode is based on the number of vehicles traveling on the roadway and the coverage of available sidewalks provided along the corridor. As shown in Table 4 in Appendix A, pedestrians traveling along the corridor are operating at LOS "D" or better.

2.3.4 Transit Operational Analysis

The LOS for the transit mode was also evaluated. Based on the frequency of SCAT buses operating during the peak hour and the sidewalk coverage available along the corridor, Route 3 was found to operate at LOS E and Route 4 was found to operate at LOS D.



2.3.5 Intersection Operational Analysis

An overall intersection summary of the level of service analysis for the study intersections is shown in Figures 3A and 3B and also included in Table 5 in Appendix A. All of the Study Area intersections operate at an overall intersection LOS D or better; however, there are left-turn movements along SR 3 and side street movements that operate at LOS E and/or F. These movements experience long delays and queues due to the long signal cycle lengths along the SR 3 corridor. Although these movements operate at LOS E or worse, the volume-to-capacity (v/c) ratios are generally below 1.0. The Synchro reports are provided in Appendix B.



3

Future Conditions

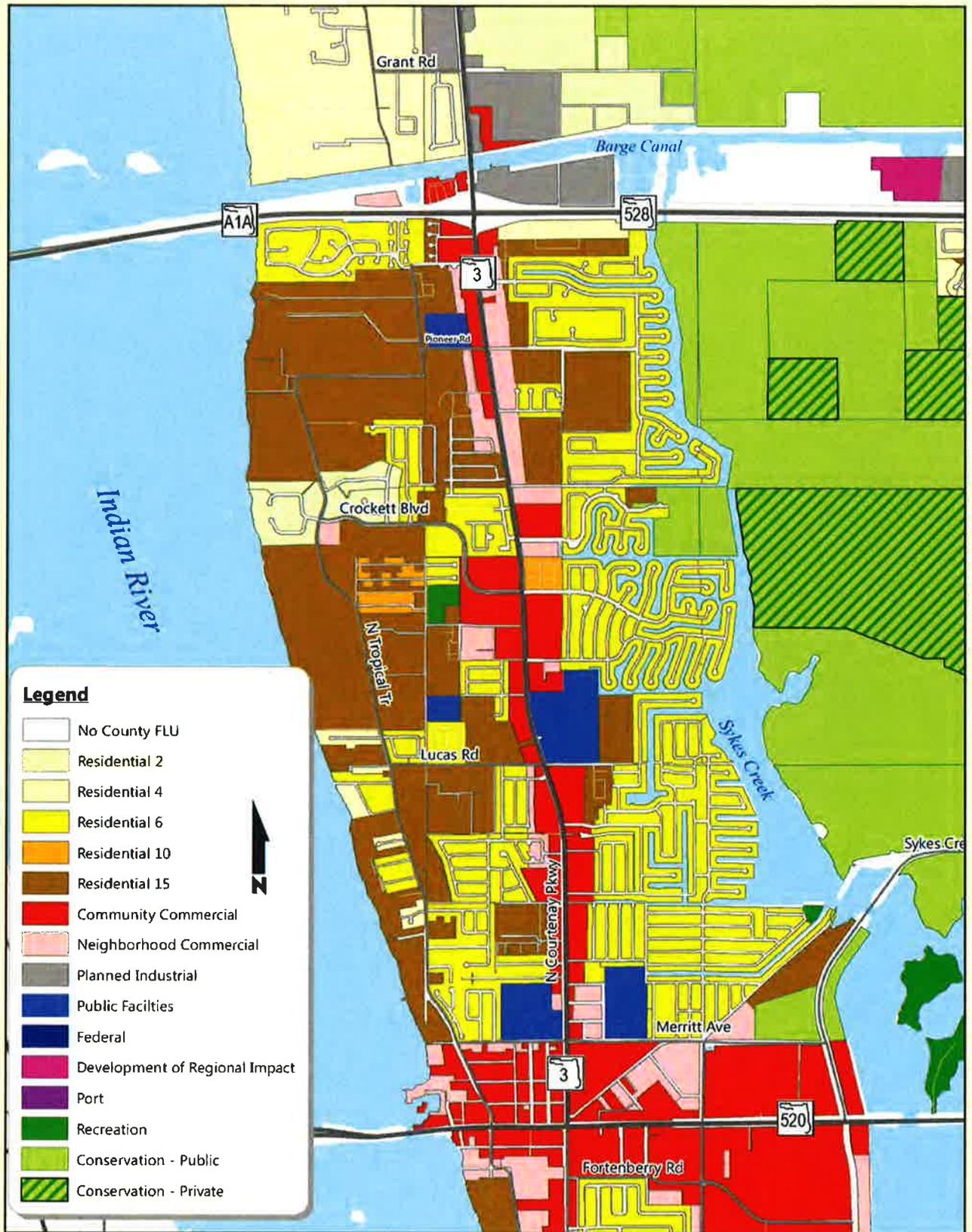
An essential component of this study involves forecasting travel demands and identifying land use changes. Doing so ensures that the alternatives identified and studied and the corresponding recommended transportation infrastructure investments appropriately anticipate future needs and provide long term benefits for the area. This analysis was performed for short-term (Year 2020) and long-term (Year 2040) conditions.

The 2020 short-term analysis was conducted in order to provide a 5-year horizon to evaluate the effect of transportation system improvements/enhancements that do not require substantial permitting, right of way (ROW) acquisitions, or lengthy environmental impact review. This scenario includes background growth that will occur by the year 2020 and planned transportation improvements identified in the Space Coast TPO Transportation Improvement Plan (TIP). This scenario also evaluates alternative signal timings (optimized timings) that may better serve future traffic volumes that reflect changes in travel patterns.

The 2040 long-term analysis was conducted in order to provide a 25-year horizon to evaluate the effect of transportation improvements/recommendations that will likely take more time to design, permit, and fund. The year 2040 is consistent with the Central Florida Regional Planning Model future year. This scenario includes background growth that will occur by the year 2040 and planned transportation improvements identified in the Space Coast TPO Long Range Transportation Plan (LRTP).

3.1 Future Land Use

As noted above, existing and planned future land use patterns along the SR 3 corridor are important factors to consider during the investigation of multi-modal transportation system improvements. As the population increases and the land uses evolve along the corridor, the demand for additional access and transportation infrastructure grows. The most prevalent existing land uses within the Study Area are residential and vacant uses. The Future Land Uses (FLUs) adopted by Brevard County in its Comprehensive Plan within the Study Area are shown in Figure 4. Residential FLUs are the primary future land use type within one-half mile of the SR 3 corridor. These residential areas are typically medium density areas, allowing up to 6 or 15 dwelling units per acre. Beyond the one-half mile buffer, residential uses remain the predominant future land use. Table 1 summarizes the future land uses within one-half mile of the SR 3 corridor within the Study Area.



N.T.S.



Table 1: Future Land Use

Future Land Use		Percentage (1/2-Mile Buffer)
Commercial	CC	18.2%
	NC	5.6%
Conservation		1.6%
PLNIP		4.4%
Public		3.4%
Recreation		0.4%
Residential	RES 2	6.6%
	RES 4	12.6%
	RES 6	24.9%
	RES 10	0.7%
	RES 15	21.5%
No FLU		0.0%

Source: Brevard County, Geographic Information Systems (GIS)

Commercial use is the second most prevalent future land use along the SR 3 corridor. This land use is divided into two categories, Community Commercial (CC) and Neighborhood Commercial (NC). The Community Commercial designation is intended to provide for a variety of retail, personal and professional uses that will serve multiple neighborhoods as well as regional areas. The Neighborhood Commercial designation is characterized by less intense, lower impact types of retail and professional uses than the Community Commercial areas. The Neighborhood Commercial future land use is intended to serve the needs of the residents in the immediate areas.

Future land uses in the northern portion of the Study Area are typically less intensive than the south. The residential areas are typically lower density, and are consistent with surrounding land areas north of SR 528.

3.2 Planned Improvements

3.2.1 Roadway Improvements

The Space Coast TPO has identified SR 3 from SR 520 to SR 528 as a multi-modal corridor with Intelligent Transportation Systems (ITS) improvements in its 2035 LRTP. According to the Space Coast TPO TIP, two improvements within the Study Area are identified as being started or in place by 2020:

- Resurface SR 3 from SR 520 to Skylark Avenue. Funding has been allocated for Fiscal Year (FY) 2015.
- Add lanes and reconstruct SR 528 through the Study Area. Funding has been allocated for FY 2016.

As part of the resurfacing of SR 3 from SR 520 to Skylark Avenue, the travel lanes will be reduced to 11 feet with a narrower median shoulder to accommodate a 4-foot bike lane on both sides of the



roadway. In addition, the median openings at Lura Lane and Minna Lane will be closed. This will restrict vehicles entering and exiting these roadways to right-in/right-out movements. The project will also widen some of the traffic separators and improve wheelchair ramps for Americans with Disabilities Act (ADA) compliance. The construction is expected to begin in the summer of 2015 and is expected to be complete by the end of the year.

The remainder of SR 3 identified as a multi-modal corridor (from Skylark Avenue to SR 528) is programmed to undergo improvements by 2035. The extent of these improvements is unknown at this time but will likely be operational in nature and consist of ITS improvements. Additional geometric improvements were not included in the long-term analysis.

As part of the SR 528 Project Development and Environment (PD&E) Study, a single point urban interchange (SPUI) is proposed at the SR 528 and SR 3 interchange to improve mobility, safety, and efficiency at the interchange. Funding has not been allocated for this project; therefore, it is evaluated in the long-term scenario.

3.2.2 Bicycle and Pedestrian Improvements

Short term multi-modal improvements within the Study Area were identified from the following transportation plans:

- Space Coast TPO 2035 LRTP;
- Space Coast TPO TIP;
- FDOT Five Year Work Program;
- Space Coast TPO Bicycle and Pedestrian Mobility Plan;
- SCAT 2013-2022 Transit Development Plan (TDP); and
- Space Coast TPO ITS Master Plan

The Brevard County Comprehensive Plan was also reviewed to analyze any policies that influence mobility within the Study Area. Brevard County has adopted multiple Objectives and Policies in the Transportation Element of the Comprehensive Plan that focus on multi-modal transportation options, including complete streets policies and multi-modal transportation improvements that are safe and accessible for users.

The Study Area is located within the boundaries of the MIRA Community Redevelopment Agency (CRA). The 2013 CRA Plan identified several issues and recommended projects for the SR 3 corridor. In addition to the CRA Plan, two Small Area Studies – the 1992 North Merritt Island Small Area Plan Study and the 2005 North Courtenay Parkway Corridor Study – have been completed for areas that include the north portion of the SR 3 Study Area. These studies resulted in recommendations to the SR 3 corridor, such as access management and aesthetic improvements, which would enhance the roadway network and create a multi-modal environment.

As part of the resurfacing project of SR 3 from SR 520 to Skylark Avenue, 4-foot bike lanes will be added to the roadway cross section. There are no other bicycle improvements identified through 2020. The remainder of the SR 3 corridor between Skylark Avenue and SR 528 is identified as a



multi-modal corridor in the Brevard County LRTP; however, specific improvements for the corridor are unknown at this time and were not included in the long-term analysis.

There are currently no planned pedestrian improvements scheduled for the short term. In general, SR 3 has sidewalks present on both sides of the road, with the exception of the following gaps:

- Sporadic sidewalk coverage on both sides of SR 3 from Queensland Avenue to Lucas Road/Mustang Way
- No sidewalks on the west side of SR 3 from Spruce Avenue to Marine Harbor Drive
- Sporadic sidewalk coverage on east side of SR 3 from Via De La Reina Way to Furman Road
- No sidewalks on east side of SR 3 from Furman Road to Sea Ray Drive

Additional pedestrian improvement opportunities include adding bus landing pads in the grassed buffer between the sidewalk and roadway at bus stops.

Though there are no planned pedestrian improvements at this time, this Corridor Planning and Concept Development Study will help to identify improvements to be considered by the Space Coast TPO to be included in the coast feasible plan.

There are currently no existing or planned trails identified through 2020 within the Study Area. The LRTP identifies several showcase trails across Brevard County. The North Merritt Island Pioneer Trail is planned to connect to the northern terminus of the Study Area from the east via Smith Road. The North Merritt Island Pioneer Trail is a 10-foot wide paved trail that will provide north-south connectivity from Smith Road to NASA Parkway.

3.2.3 Transit Improvements

The SCAT 2013-2022 TDP identified improvements to Routes 3 and 4, which run through the Study Area. All of the identified improvements are currently unfunded. The improvements are summarized by implementation year below:

Year 2018

- Increase weekday frequency to 15 minutes during the day and 30 minutes in the evening on Route 4
- Increase Saturday frequency to 15 minutes during the day and 30 minutes in the evening on Route 4
- Extend service on Sundays to 7 PM on Route 4

Year 2019

- Increase weekday frequency to 30 minutes on Route 3
- Increase Saturday frequency to 30 minutes on Route 3
- Start Sunday service on Route 3
- Create a new route from SR 520 to Port Canaveral (called Alternative 7). This route would provide service along SR 528, crossing the northern part of the Study Area.

Year 2020





- Extend service on weekdays to 9 PM on Route 3
- Extend service on Saturdays to 9 PM on Route 3

Other potential transit improvements include providing landing pads and other amenities at bus stops. These accessibility improvements have not been specifically identified in any of the transit plans for the Study Area; however, there are various bus stop improvements identified in SCAT's Bus Stop ADA Assessment Draft Report completed January 2015. Table 2 summarizes the improvements identified in this report for bus stops along the Study Area corridor.

Table 2: Bus Stop Improvements

Bus Stop ID	Bus Stop Location	Improvements
15803	Courtenay Palms Apartments @ Courtenay Parkway	move bus stop 280' south relocate bench
10998	Courtenay Parkway @ Country Club Apartments	move bus stop 590' north relocate bench
11017	Courtenay Parkway @ Tennessee Avenue	move bus stop 90' south
11006	N Courtenay Parkway @ Crockett Blvd	move bus stop 170' north relocate bench
10997	N Courtenay Parkway @ Diana Blvd	move bus stop 340' north relocate bench
11003	N Courtenay Parkway @ Centre of Merritt Publix	new sign
15804	S Courtenay Parkway @ TJ Maxx	new sign
11008	N Courtenay Parkway @ McDonalds	relocate bench

Source: Space Coast Area Transit Bus Stop ADA Assessment Draft Report

The Space Coast LRTP does not identify any transit improvements along the Study Area corridor through Year 2035.

3.3 Growth Projections and Assumptions

In order to determine an acceptable growth rate for the SR 3 Study Area, traffic projections from various available sources were considered. This included the latest year Central Florida Regional Planning Model, Version 5.1 (CFRPM 5.1) released in 2012, FDOT and Space Coast TPO historical Average Annual Daily Traffic (AADT) growth trends, and Brevard County population projections from the Bureau of Economic and Business Research (BEBR). Table 3 below presents the comparison of resulting growth rates.

Table 3: Annual Growth Rate Comparison

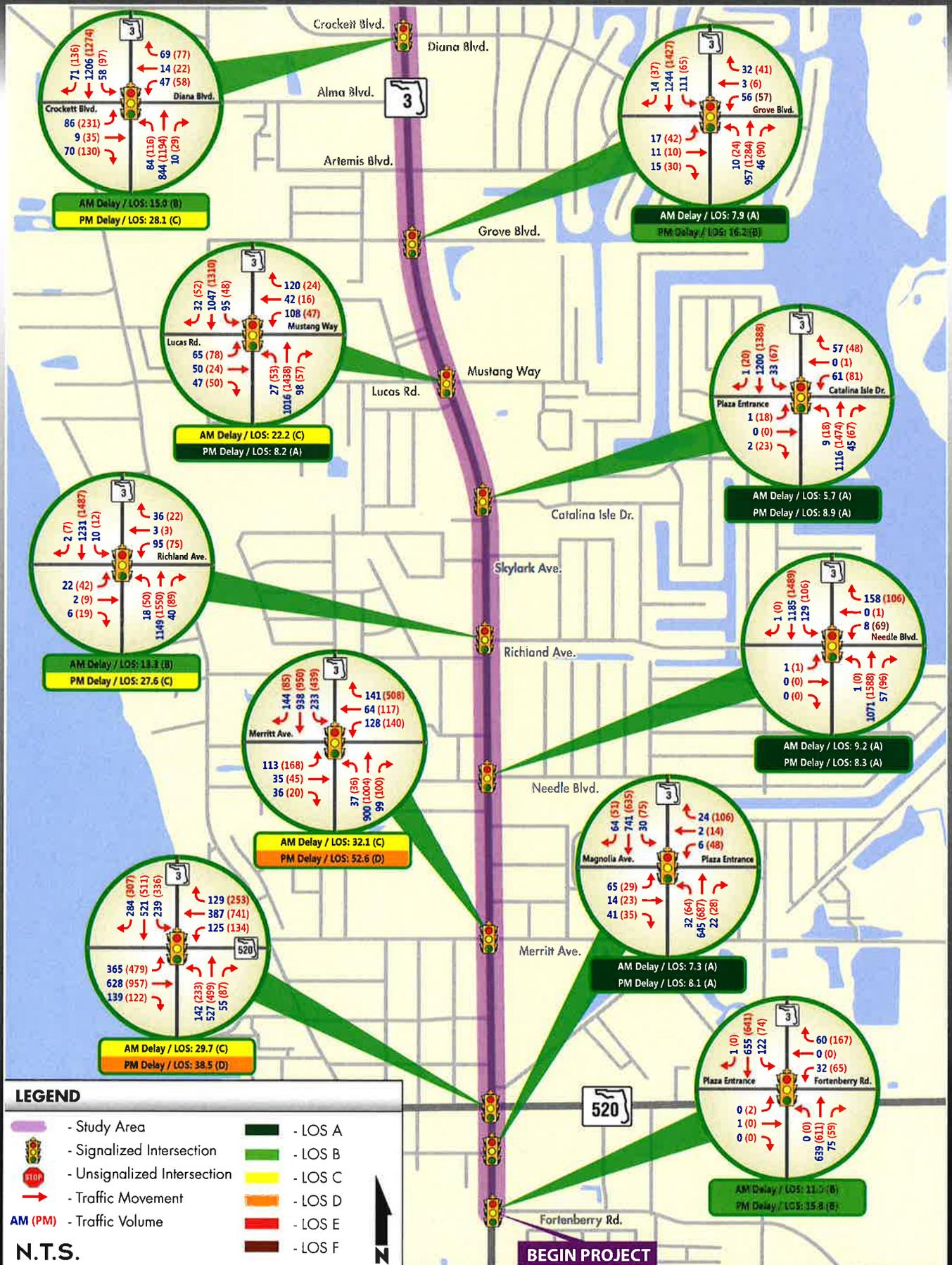
Growth Method	2020 Growth Rate	2040 Growth Rate
Historic Trends Analysis	-0.99%	-0.99%
Model Growth Analysis	-0.01%	0.205%
BEBR Growth Analysis		
Brevard County (Medium)	1.06%	0.87%
Average Growth Rate	0.35%	0.36%
Growth Rate Used in Study	0.40%	0.40%

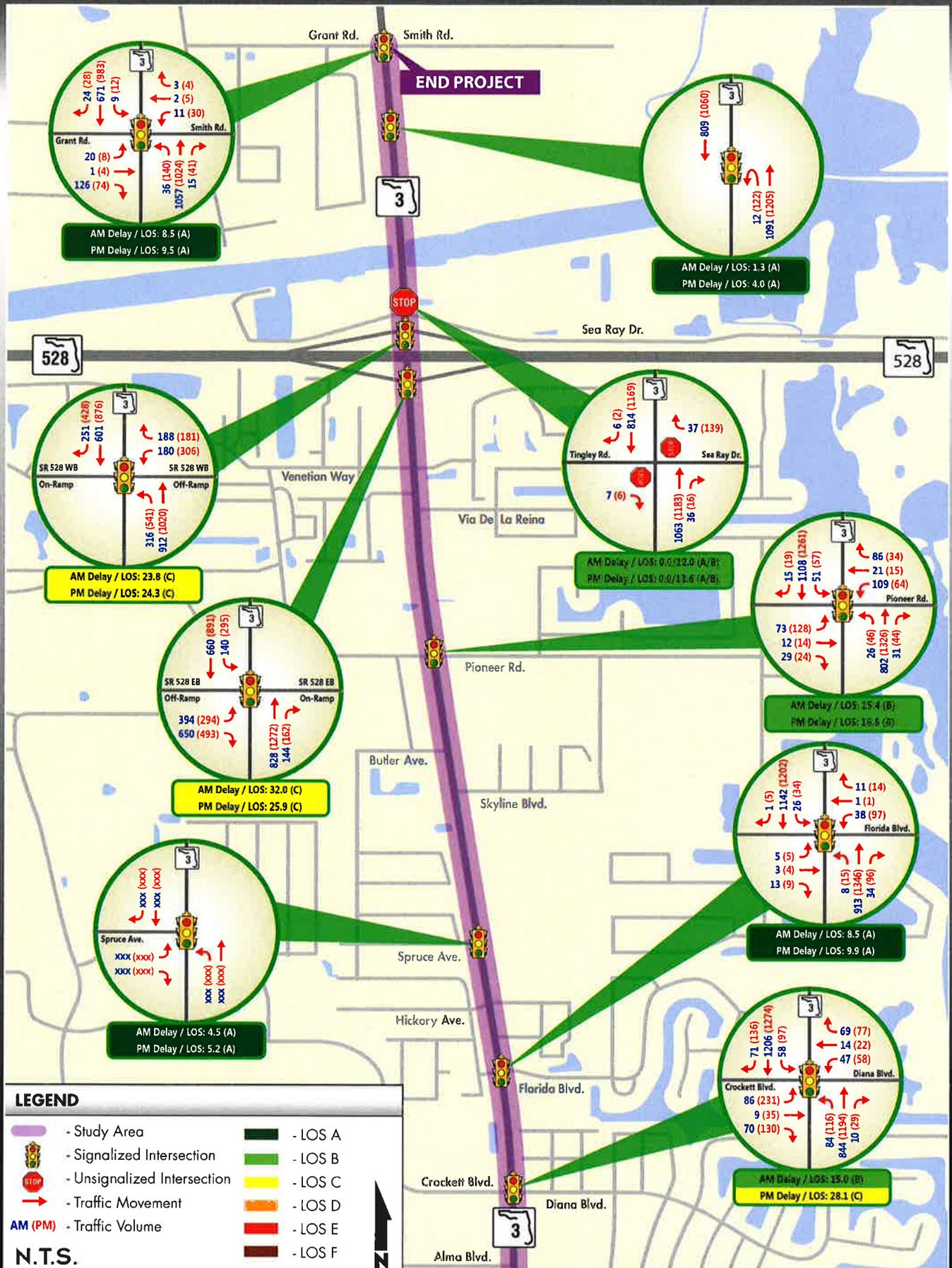
Source: Compiled by VHB.

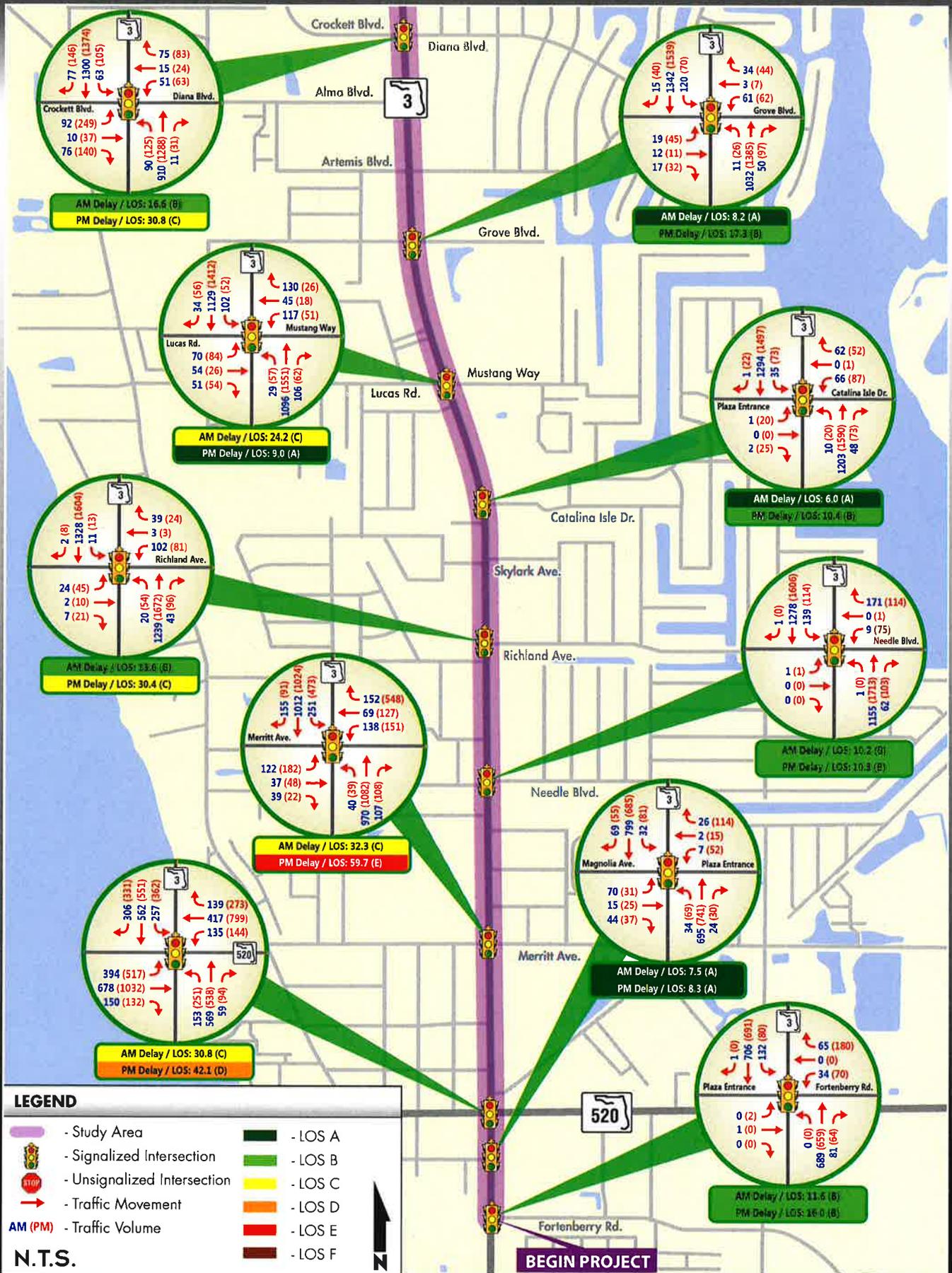


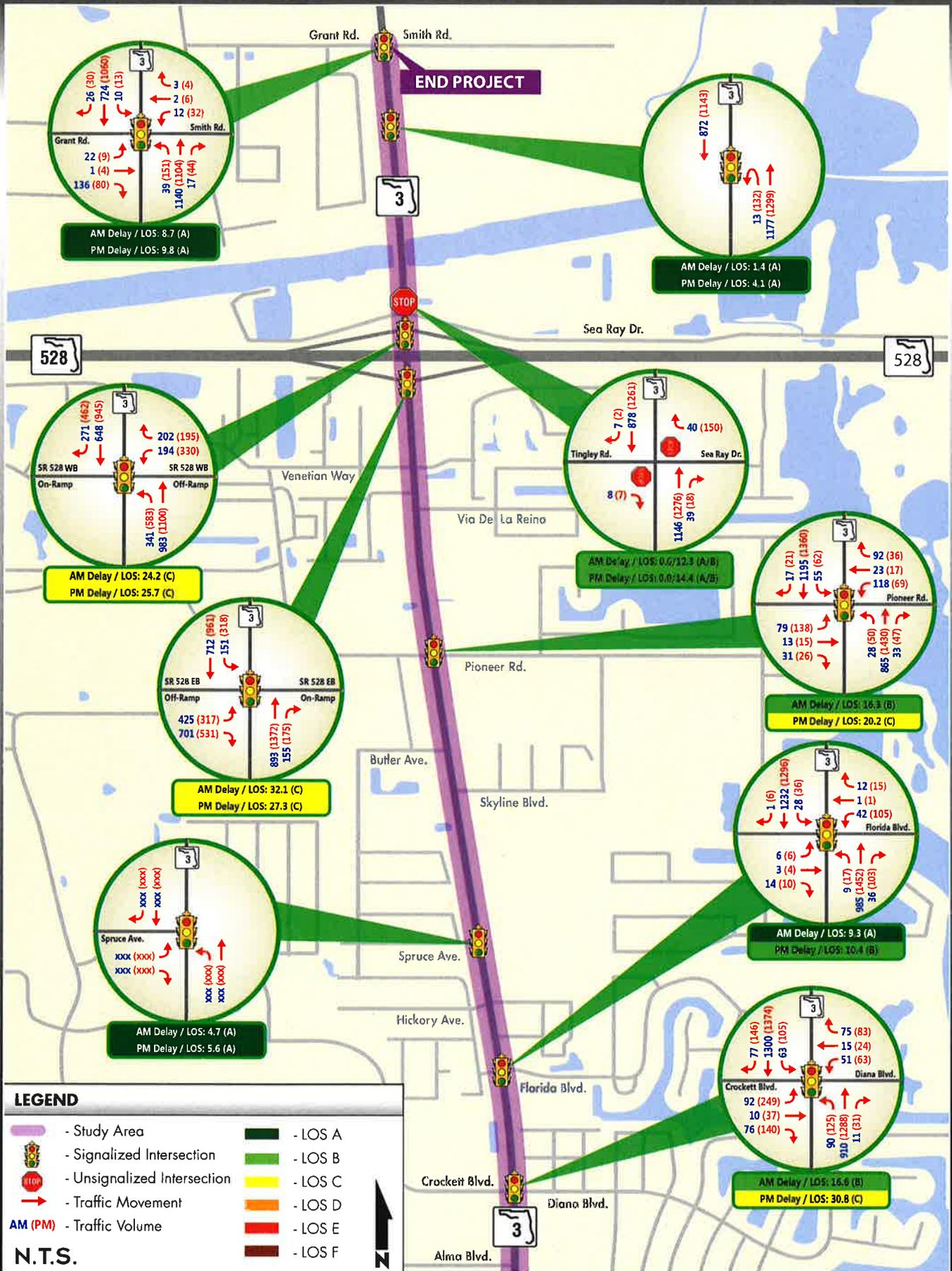
The historic growth trends were not applied due to the negative value as illustrated in Table 3. The model growth analysis also identified a negative growth rate between 2015 and 2020. The BEBR growth analysis projects the growth for Brevard County to be 1.06% between 2013 and 2020. The average of these three growths (assuming 0.0% growth for the negative values) was found to be 0.35%. This average was rounded to 0.40% to provide a conservative estimate to develop the 2020 future traffic volumes. Figures 5A and 5B illustrate the 2020 future traffic volumes. There are no major proposed developments along the Study Area that will impact the characteristics of the corridor, therefore, the background growth will be due to small scale developments and potential redevelopment along the corridor.

The same growth rate methodology was used to project the 2040 long-term traffic forecasts. The model growth analysis identified an annual growth rate of 0.205% between 2015 and 2040. The BEBR growth analysis projects the growth for Brevard County to be 0.87% between 2013 and 2040. The average of these three growths (assuming 0.0% growth for the negative historic growth rate value) was found to be 0.36%. This average was rounded to 0.40% to develop the 2040 future traffic volumes. Figures 6A and 6B illustrate the 2040 future traffic volumes.











3.4 2020 Short Term Scenario

An operational analysis was conducted to LOS for the Study Area roadway segments and intersections for the short-term analysis year. The same methodology used for determining 2015 Existing LOS was applied to this scenario.

For the 2020 future operational analysis, the projected traffic volumes were developed by applying the annual growth rate of 0.40% to the Existing 2015 Conditions traffic volumes. The geometric improvements identified in the proposed resurfacing of SR 3 from SR 520 to Skylark Avenue was factored into this scenario. In addition to the existing signal timings along the corridor, optimized signal timings were also applied at the Study Area intersections to better serve future traffic volumes that reflect changes in travel patterns. The results from the operational analysis for each mode are detailed in the following sections.

3.4.1 2020 Future Roadway Operations

The 2020 projected roadway operations are provided in Table 4 for daily, AM peak hour, and PM peak hour. As shown in Table 4, the SR 3 corridor is projected to operate within the adopted LOS standard. The only exception is the segment from SR 520 to Barony Drive/Skylark Avenue, during the PM peak hour, which operates at a LOS "F". It should be noted that this segment operates at LOS "E" in the existing condition, which indicates that it is near capacity. Even though this roadway segment is projected to operate at LOS F, the operations at adjacent signalized intersections are projected to operate at acceptable LOS D or better. The detailed intersection analysis is provided in Section 3.4.5 of this report. It should also be noted that even though the proposed resurfacing of SR 3 from SR 520 to Skylark Avenue was factored into this scenario, the project did not add capacity to the roadway segments along the corridor. However, the project will improve mobility, safety, access management, and efficiency of the corridor for all roadway users by adding bike lanes, widening traffic separators, closing two median openings, and upgrading wheelchair ramps for ADA compliance.



Table 4: 2020 Projected Roadway Level of Service

Roadway / Segment	No. of Lanes ¹	Speed Limit (mph) ¹	Adopted LOS ²	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
				Daily	Peak	AADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3													
Fortenberry Rd to SR 520	4LD	35	D	32,400	1,630	18,900	D	910	NB	D	1,020	SB	D
SR 520 to Barony Dr/Skylark Ave	4LD	35	D	32,400	1,630	28,600	D	1,330	SB	D	1,700	NB	F
Barony Dr/Skylark Ave to Lucas Rd	4LD	40	D	41,790	2,100	33,300	C	1,230	SB	C	1,550	NB	C
Lucas Rd to Crockett Blvd	4LD	40	D	41,790	2,100	31,800	C	1,350	SB	C	1,420	SB	C
Crockett Blvd to Pioneer Rd	4LD	45	D	41,790	2,100	35,400	C	1,340	SB	C	1,510	SB	C
Pioneer Rd to SR 528	4LD	45	D	41,790	2,100	32,700	C	1,440	SB	C	1,590	SB	C
SR 528 to Grant Rd/Smith Rd	4LD	45	D	39,800	2,000	31,100	C	1,230	NB	C	1,570	NB	C

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook and Brevard County Comprehensive Plan
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

3.4.2 2020 Future Bicycle Operational Analysis

The LOS for the bicycle mode is based on the number of vehicles traveling on the roadway and the coverage of available bicycle lanes provided along the corridor. As a result of the planned improvement to resurface and add bicycle lanes to SR 3 from SR 520 to Skylark Avenue, this segment of bike lane coverage has increased from 0-49% to 85-100%. As shown in Table 5, the LOS of bicyclists traveling along the segment between SR 520 and Skylark Avenue are expected to improve to LOS "C". However, bicyclists traveling along the remaining segments on the corridor will operate at LOS "E" due to the lack of bike lanes.



Table 5: 2020 Bicycle Mode Level of Service

Roadway / Segment	No. of Lanes ¹	Bike Lane Coverage ¹	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
			Daily	Peak	AADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3												
Fortenberry Rd to SR 520	4LD	0-49%	15,200	780	18,900	E	910	NB	E	1,020	SB	E
SR 520 to Barony Dr/Skylark Ave	4LD	85-100%	39,400	2,000	28,600	C	1,330	SB	C	1,700	NB	C
Barony Dr/Skylark Ave to Lucas Rd	4LD	0-49%	15,200	780	33,300	E	1,230	SB	E	1,550	NB	E
Lucas Rd to Crockett Blvd	4LD	0-49%	15,200	780	31,800	E	1,350	SB	E	1,420	SB	E
Crockett Blvd to Pioneer Rd	4LD	0-49%	15,200	780	35,400	E	1,340	SB	E	1,510	SB	E
Pioneer Rd to SR 528	4LD	0-49%	15,200	780	32,700	E	1,440	SB	E	1,590	SB	E
SR 528 to Grant Rd/Smith Rd	4LD	0-49%	15,200	780	31,100	E	1,230	NB	E	1,570	NB	E

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

Note: Level of service for the bicycle mode in this table is based on number of motorized vehicles, not number of bicyclists using the facility. Although there are no specific level of service standards established for bicycle mode or other non-motorized vehicle modes, the maximum service volumes for LOS D are used for comparison purposes.

3.4.3 2020 Future Pedestrian Operational Analysis

The LOS for the pedestrian mode is based on the number of vehicles traveling on the roadway and the coverage of available sidewalks provided along the corridor. As shown in Table 6, pedestrians traveling along the corridor will experience the same level of service as in the existing conditions, which is LOS “D” or better. The only exception is the segment from Crockett Boulevard to Pioneer Road in the daily condition, which is expected to experience LOS “E” due to the increase in daily traffic volumes.



Table 6: 2020 Pedestrian Mode Level of Service

Roadway / Segment	No. of Lanes ¹	Sidewalk Coverage ¹	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
			Daily	Peak	AADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3												
Fortenberry Rd to SR 520	4LD	85-100%	34,800	1,760	18,900	C	910	NB	C	1,020	SB	C
SR 520 to Barony Dr/Skylark Ave	4LD	85-100%	34,800	1,760	28,600	D	1,330	SB	D	1,700	NB	D
Barony Dr/Skylark Ave to Lucas Rd	4LD	85-100%	34,800	1,760	33,300	D	1,230	SB	D	1,550	NB	D
Lucas Rd to Crockett Blvd	4LD	85-100%	34,800	1,760	31,800	D	1,350	SB	D	1,420	SB	D
Crockett Blvd to Pioneer Rd	4LD	85-100%	34,800	1,760	35,400	E	1,340	SB	D	1,510	SB	D
Pioneer Rd to SR 528	4LD	85-100%	34,800	1,760	32,700	D	1,440	SB	D	1,590	SB	D
SR 528 to Grant Rd/Smith Rd	4LD	85-100%	34,800	1,760	31,100	D	1,230	NB	D	1,570	NB	D

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook
- 3 FDOT FTI, SCTPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

Note: Level of service for the pedestrian mode in this table is based on number of motorized vehicles, not number of pedestrians using the facility. Although there are no specific level of service standards established for pedestrian mode or other non-motorized vehicle modes, the maximum service volumes for LOS D are used for comparison purposes.

3.4.4 2020 Future Transit Operations

As noted in the Planned Transit Improvements section, all of the identified improvements are currently unfunded. Therefore, transit patrons will continue to operate at the same LOS "E" and LOS "D" based on the existing frequency of SCAT buses operating during the peak hour and the sidewalk coverage available along the corridor for Route 3 and Route 4, respectively.

3.4.5 2020 Future Intersection Operations

A summary of the 2020 future intersection operations for all Study Intersections is provided in Table 7 for the AM and PM peak hours.



Table 7: 2020 Projected Intersection Level of Service

Intersection	Control	With Existing Signal Timings				With Optimized Signal Timings			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²
SR 3 at Fortenberry Road	Signalized	11.0	B	15.8	B	10.9	B	15.8	B
SR 3 at Magnolia Avenue	Signalized	7.3	A	8.1	A	7.3	A	8.1	A
SR 3 at SR 520	Signalized	29.7	C	38.5	D	33.4	C	37.7	D
SR 3 at Merritt Avenue	Signalized	32.1	C	52.6	D	22.6	C	39.2	D
SR 3 at Needles Boulevard	Signalized	9.2	A	8.3	A	6.0	A	5.8	A
SR 3 at Richland Avenue	Signalized	13.3	B	27.6	C	13.7	B	16.3	B
SR 3 at Catalina Isle Drive	Signalized	5.7	A	8.9	A	5.5	A	7.9	A
SR 3 at Mustang Way/Lucas Road	Signalized	22.2	C	8.2	A	12.2	B	6.1	A
SR 3 at Grove Boulevard	Signalized	7.9	A	16.2	B	11.5	A	12.6	B
SR 3 at Diana Boulevard/Crockett Boulevard	Signalized	15.0	B	28.1	C	13.7	B	24.3	C
SR 3 at Florida Boulevard	Signalized	8.5	A	9.9	A	5.5	A	9.2	A
SR 3 at Church Pedestrian Crosswalk	Signalized	4.5	A	5.2	A	4.5	A	5.2	A
SR 3 at Pioneer Road	Signalized	15.4	B	18.5	B	15.1	B	17.7	B
SR 3 at SR 528 EB Ramps	Signalized	32.0	C	25.9	C	31.9	C	26.2	C
SR 3 at SR 528 WB Ramps	Signalized	23.8	C	24.3	C	24.1	C	23.8	C
SR 3 at Tingley Drive/Sea Ray Drive	Unsignalized ³	0.0/12.0	A/B	0.0/13.6	A/B	0.0/12.0	A/B	0.0/13.6	A/B
SR 3 at NB U-turns S of Grant Road	Signalized	1.3	A	4.0	A	1.3	A	4.0	A
SR 3 at Smith Road/Grant Road	Signalized	8.5	A	9.5	A	8.5	A	9.5	A

Source: Compiled by VHB using Synchro 8 software.

- 1 Overall intersection average delay in seconds per vehicle
- 2 Overall intersection level of service
- 3 Mainline/side street delay and level of service for un-signalized intersection

As presented in Table 7 above, all of the signalized Study Area intersections with existing signal timings are anticipated to operate at LOS “D” or better in 2020, which is within the acceptable level of service standards. The unsignalized intersection is anticipated to have minimal impacts to the mainline street operations, thus meeting LOS standards. The 2020 future intersection operations with existing signal timings are presented in Figures 5A and 5B. The Synchro reports are provided in Appendix B.

In general, the traffic operations at the Study Area intersections are not expected to significantly change from the 2015 Existing to 2020 Future conditions. Even though all Study Area intersections operate at an overall intersection LOS D or better, some of the left-turn lane(s) along SR 3 and side street movements are expected to continue to operate at LOS “E” and/or LOS “F” with long delays and queues due to the long traffic signal cycle length along the corridor similar to 2015 Existing Conditions. It should be noted that even though those movements are operating at LOS “E” and/or LOS “F”, the v/c ratio are generally below 1.0.



An additional scenario was analyzed with optimized signal timings. This scenario evaluates alternate signal timings that may better serve future traffic volumes that reflect changes in travel patterns. The results of this scenario are also summarized in Table 7. The Synchro reports are provided in Appendix B.

In general, the traffic operations under the optimized signal timings scenario are expected to be comparable to the traffic operations under the existing signal timings. The most noticeable benefits of the optimized signal timings are at the intersection of SR 3/Merritt Avenue and the intersection of SR 3/Richland Avenue.

3.5 2040 Long Term Scenario

Similar to the 2020 Future conditions, the projected 2040 traffic volumes were developed by applying the annual growth rate of 0.40% to the Existing 2015 Conditions traffic volumes. The geometric improvements identified in the proposed resurfacing of SR 3 from SR 520 to Skylark Avenue was factored into this scenario. In addition to the existing signal timings along the corridor, optimized signal timings were also applied at the Study Area intersections to better serve future traffic volumes that reflect changes in travel patterns. The proposed SPU at the SR 528 and SR 3 interchange will be evaluated as an additional alternative.

3.5.1 2040 Future Roadway Operations

The 2040 future roadway operations are provided in Table 8 for daily, AM peak hour, and PM peak hour.

Table 8: 2040 Projected Roadway Level of Service

Roadway / Segment	No. of Lanes ¹	Speed Limit (mph) ¹	Adopted LOS ²	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
				Daily	Peak	AA DT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3													
Fortenberry Rd to SR 520	4LD	35	D	32,400	1,630	20,400	D	980	NB	D	1,100	SB	D
SR 520 to Barony Dr/Skylark Ave	4LD	35	D	32,400	1,630	30,800	D	1,440	SB	D	1,830	NB	F
Barony Dr/Skylark Ave to Lucas Rd	4LD	40	D	41,790	2,100	35,900	C	1,330	SB	C	1,670	NB	C
Lucas Rd to Crockett Blvd	4LD	40	D	41,790	2,100	34,200	C	1,460	SB	C	1,530	SB	C
Crockett Blvd to Pioneer Rd	4LD	45	D	41,790	2,100	38,200	C	1,440	SB	C	1,620	SB	C
Pioneer Rd to SR 528	4LD	45	D	41,790	2,100	35,300	C	1,550	SB	C	1,710	SB	C
SR 528 to Grant Rd/Smith Rd	4LD	45	D	39,800	2,000	33,600	C	1,320	NB	C	1,690	NB	C

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook and Brevard County Comprehensive Plan
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment





As shown in Table 8, the SR 3 corridor is projected to operate within acceptable LOS standards. The only exception is the segment between SR 520 to Skylark Avenue, during the PM peak hour, which operates at a LOS “F”. The intersection of SR 3 and Merritt Avenue which is located within this roadway segment is projected to operate at LOS “E” during the PM peak hour due to the increasing traffic volumes in 2040, which are documented in the following section.

3.5.2 2040 Future Bicycle Operational Analysis

According to the Space Coast TPO LRTP, SR 3 between SR 520 and SR 528 is designated as a multi-modal corridor; however, improvements to the corridor have not been identified yet. For the 2040 analysis, it was assumed that no additional bicycle improvements will be made to the corridor. As shown in Table 9, bicyclists traveling along the section between SR 520 to Skylark Avenue that consist of bike lanes will operate at LOS “C”. Along the other sections of SR 3 that do not have bike lanes, bicyclists will operate at LOS “E” due to the lack of bike lanes along the corridor.

Table 9: 2040 Bicycle Mode Level of Service

Roadway / Segment	No. of Lanes ¹	Bike Lane Coverage ¹	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
			Daily	Peak	AA DT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3												
Fortenberry Rd to SR 520	4LD	0-49%	15,200	780	20,400	E	980	NB	E	1,100	SB	E
SR 520 to Barony Dr/Skylark Ave	4LD	85-100%	39,400	2,000	30,800	C	1,440	SB	C	1,830	NB	C
Barony Dr/Skylark Ave to Lucas Rd	4LD	0-49%	15,200	780	35,900	E	1,330	SB	E	1,670	NB	E
Lucas Rd to Crockett Blvd	4LD	0-49%	15,200	780	34,200	E	1,460	SB	E	1,530	SB	E
Crockett Blvd to Pioneer Rd	4LD	0-49%	15,200	780	38,200	E	1,440	SB	E	1,620	SB	E
Pioneer Rd to SR 528	4LD	0-49%	15,200	780	35,300	E	1,550	SB	E	1,710	SB	E
SR 528 to Grant Rd/Smith Rd	4LD	0-49%	15,200	780	33,600	E	1,320	NB	E	1,690	NB	E

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

Note: Level of service for the bicycle mode in this table is based on number of motorized vehicles, not number of bicyclists using the facility. Although there are no specific level of service standards established for bicycle mode or other non-motorized vehicle modes, the maximum service volumes for LOS D are used for comparison purposes.

3.5.3 2040 Future Pedestrian Operational Analysis

As shown in Table 10, pedestrians traveling along the corridor within the roadway segment from Crockett Boulevard to Pioneer Road will continue to experience LOS “E” similar to 2020 Future



Conditions. Due to the increase in traffic volumes, pedestrians traveling within the roadway segments between SR 520 and Lucas Road and between Pioneer Road and SR 528 will experience LOS "E".

Table 10: 2040 Pedestrian Mode Level of Service

Roadway / Segment	No. of Lanes ¹	Sidewalk Coverage ¹	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
			Daily	Peak	AADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3												
Fortenberry Rd to SR 520	4LD	85-100%	34,800	1,760	20,400	C	980	NB	C	1,100	SB	C
SR 520 to Barony Dr/Skylark Ave	4LD	85-100%	34,800	1,760	30,800	D	1,440	SB	D	1,830	NB	E
Barony Dr/Skylark Ave to Lucas Rd	4LD	85-100%	34,800	1,760	35,900	E	1,330	SB	D	1,670	NB	D
Lucas Rd to Crockett Blvd	4LD	85-100%	34,800	1,760	34,200	D	1,460	SB	D	1,530	SB	D
Crockett Blvd to Pioneer Rd	4LD	85-100%	34,800	1,760	38,200	E	1,440	SB	D	1,620	SB	D
Pioneer Rd to SR 528	4LD	85-100%	34,800	1,760	35,300	E	1,550	SB	D	1,710	SB	D
SR 528 to Grant Rd/Smith Rd	4LD	85-100%	34,800	1,760	33,600	D	1,320	NB	D	1,690	NB	D

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

Note: Level of service for the pedestrian mode in this table is based on number of motorized vehicles, not number of pedestrians using the facility. Although there are no specific level of service standards established for pedestrian mode or other non-motorized vehicle modes, the maximum service volumes for LOS D are used for comparison purposes.

3.5.4 2040 Future Transit Operations

Similarly to the 2020 Future Conditions, all of the identified transit improvements are currently unfunded. Therefore, transit patrons will continue to operate at the same LOS "E" and LOS "D" based on the existing frequency of SCAT buses operating during the peak hour and the sidewalk coverage available along the corridor for Route 3 and Route 4, respectively.

3.5.5 2040 Future Intersection Operations

A summary of the 2040 future intersection operations for all Study Intersections is provided in Table 11 for the AM and PM peak hours.



Table 12: 2040 Projected Intersection Level of Service

Intersection	Control	With Existing Signal Timings				With Optimized Signal Timings			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²
SR 3 at Fortenberry Road	Signalized	11.6	B	16.0	B	11.6	B	16.0	B
SR 3 at Magnolia Avenue	Signalized	7.5	A	8.3	A	7.4	A	8.3	A
SR 3 at SR 520	Signalized	30.8	C	42.1	D	31.9	C	39.8	D
SR 3 at Merritt Avenue	Signalized	32.3	C	59.7	E	24.1	C	41.2	D
SR 3 at Needles Boulevard	Signalized	10.2	B	10.3	B	13.3	B	14.0	B
SR 3 at Richland Avenue	Signalized	13.6	B	30.4	C	12.8	B	11.9	B
SR 3 at Catalina Isle Drive	Signalized	6.0	A	10.4	B	6.0	A	9.1	A
SR 3 at Mustang Way/Lucas Road	Signalized	24.2	C	9.0	A	12.7	B	7.9	A
SR 3 at Grove Boulevard	Signalized	8.2	A	17.3	B	10.6	B	10.4	B
SR 3 at Diana Boulevard/Crockett Boulevard	Signalized	16.6	B	30.8	C	14.6	B	30.7	C
SR 3 at Florida Boulevard	Signalized	9.3	A	10.4	B	6.4	A	10.5	B
SR 3 at Church Pedestrian Crosswalk	Signalized	4.7	A	5.6	A	4.7	A	5.6	A
SR 3 at Pioneer Road	Signalized	16.3	B	20.2	C	16.1	B	19.8	C
SR 3 at SR 528 EB Ramps	Signalized	32.1	C	27.3	C	32.0	C	28.5	C
SR 3 at SR 528 WB Ramps	Signalized	24.2	C	25.7	C	24.6	C	24.5	C
SR 3 at Tingley Drive/Sea Ray Drive	Un-Signalized ³	0.0/12.3	A/B	0.0/14.4	A/B	0.0/12.3	A/B	0.0/14.4	A/B
SR 3 at NB U-turns S of Grant Road	Signalized	1.4	A	4.1	A	1.4	A	4.1	A
SR 3 at Smith Road/Grant Road	Signalized	8.7	A	9.8	A	8.7	A	9.8	A

Source: Compiled by VHB using Synchro 8 software.

- 1 Overall intersection average delay in seconds per vehicle
- 2 Overall intersection level of service
- 3 Mainline/side street delay and level of service for un-signalized intersection

As presented in Table 11 above and in Figures 6A and 6B, all of the signalized Study Area intersections with existing signal timings are anticipated to operate at LOS “D” or better in 2040 with the exception of the intersection of SR 3 and Merrit Avenue during the PM peak hour. The unsignalized intersection is anticipated to have minimal impacts to the mainline street operations, thus meeting LOS standards. The Synchro reports are provided in Appendix B.

As discussed earlier, even though all Study Area intersections with the exception of the intersection of SR 3 and Merrit Avenue during the PM peak hour operate at an overall intersection LOS “D” or better, most of the left-turn lane(s) along SR 3 and side street movements are expected to continue to operate at LOS “E” and/or LOS “F” with long delays and queues due to the long traffic signal cycle length along the corridor similar to 2020 Future Conditions. The SR 3 northbound through movement approaching SR 520 will operate at LOS “F” with a v/c ratio greater than 1.0.



Similar to the 2020 conditions, the 2040 traffic operations with optimized signal timings scenario are expected to be comparable to the traffic operations with existing signal timings. The most noticeable benefits of the optimized signal timings are at the intersection of SR 3/Merritt Avenue and the intersection of SR 3/Richland Avenue.

Additional 2040 future intersection operational analysis was performed for the proposed SPUI at the SR 528 and SR 3 interchange as part of the SR 528 PD&E Study. The intent of the analysis is to test the proposed SPUI lane configuration with the 2040 future traffic volumes. A summary of the proposed SPUI operations provided in Table 12 for the AM and PM peak hours.

Table 3: 2040 Projected SPUI Interchange/Intersection Level of Service

Intersection	Control	AM Peak		PM Peak	
		Delay ¹	LOS ²	Delay ¹	LOS ²
SR 3 at Smith Road/Grant Road	Signalized	30.5	C	32.2	C

Source: Compiled by VHB using Synchro 8 software.

- 1 Overall intersection average delay in seconds per vehicle
- 2 Overall intersection level of service

As shown in Table 12, the overall traffic operations for the proposed SPUI are comparable to the existing diamond interchange configuration. Although the traffic operations are comparable, the proposed SPUI configuration would require less ROW and allows concurrent left-turns for greater efficiency. The Synchro reports are provided in Appendix B.



4

Summary

Based on the analysis performed based on short term (Year 2020) and long term (Year 2040) projected volumes along SR 3 within the Study Area, there are no anticipated intersection operational issues in the short-term 2020 future conditions; however, under the long-term 2040 future conditions, there is one segment of SR 3 between SR 520 and Skylark Avenue that is projected to operate at LOS "F". The intersection of SR 3 and Merritt Avenue is projected to operate at LOS E during the PM peak hour with existing signal timings. Most of the left-turn lane(s) along SR 3 and side street movements are expected to continue to operate at LOS "E" and/or LOS "F" with long delays and queues due to the long traffic signal cycle length along the corridor, similar to the existing conditions. With optimized signal timings, the intersection of SR 3 and Merritt Avenue is projected to operate at LOS "D". The bicycle and pedestrian mode operations are anticipated to perform at LOS "E" or better.

Although the corridor is projected to operate at or near adopted LOS standards in the long term planning horizon (with exceptions of certain segments and intersections), there are needs for improved safety conditions to create a more walkable and multi-modal corridor. The Project Visioning Team has identified the need for improved lighting, continuous sidewalks, bicycle facilities, improved transit stop facilities, and improved pedestrian safety to provide safe and convenient access to users of all ages.

Potential improvement alternatives will consider multimodal improvements such as bicycle lanes and filling in sidewalk gaps to create a complete street environment for the SR 3 corridor. There may be opportunities to improve transit stop locations, improve access management between properties along SR 3, and enhance landscaping. Potential intersection geometry improvements and/or upgrading the existing traffic control system to an adaptive system will also be considered at hotspot areas identified in this study to enhance the overall safety and mobility of multimodal users along the corridor.

Potential improvements will be identified and evaluated in subsequent phases of this project and will be organized into the following categories:

- Pedestrian/Bicycle Options
- Transit Options
- Traffic Operations/Roadway/Intersection Improvements
- Policy Recommendations



Appendices

Appendix A – SR 3 Existing Conditions Tables

Appendix B – Synchro Printouts

Appendix C – Growth Rate Calculations

Appendix D – List of Acronyms

**Brevard County
Board of County Commissioners
Meeting of March 3, 2016**

IV.B.5 (15PZ00078)

Small Scale Plan Amendment (15S.08) from NC to CC
Change of Classification from BU-1-A to BU-1
Removal of BSP on 1.07 acres
Proposed Binding Development Agreement

140 Skyline Boulevard, Merritt Island

- PRESENTED ON BEHALF OF -

Mark Homer, Developer

KIMBERLY BONDER REZANKA, ESQ.

DEAN MEAD

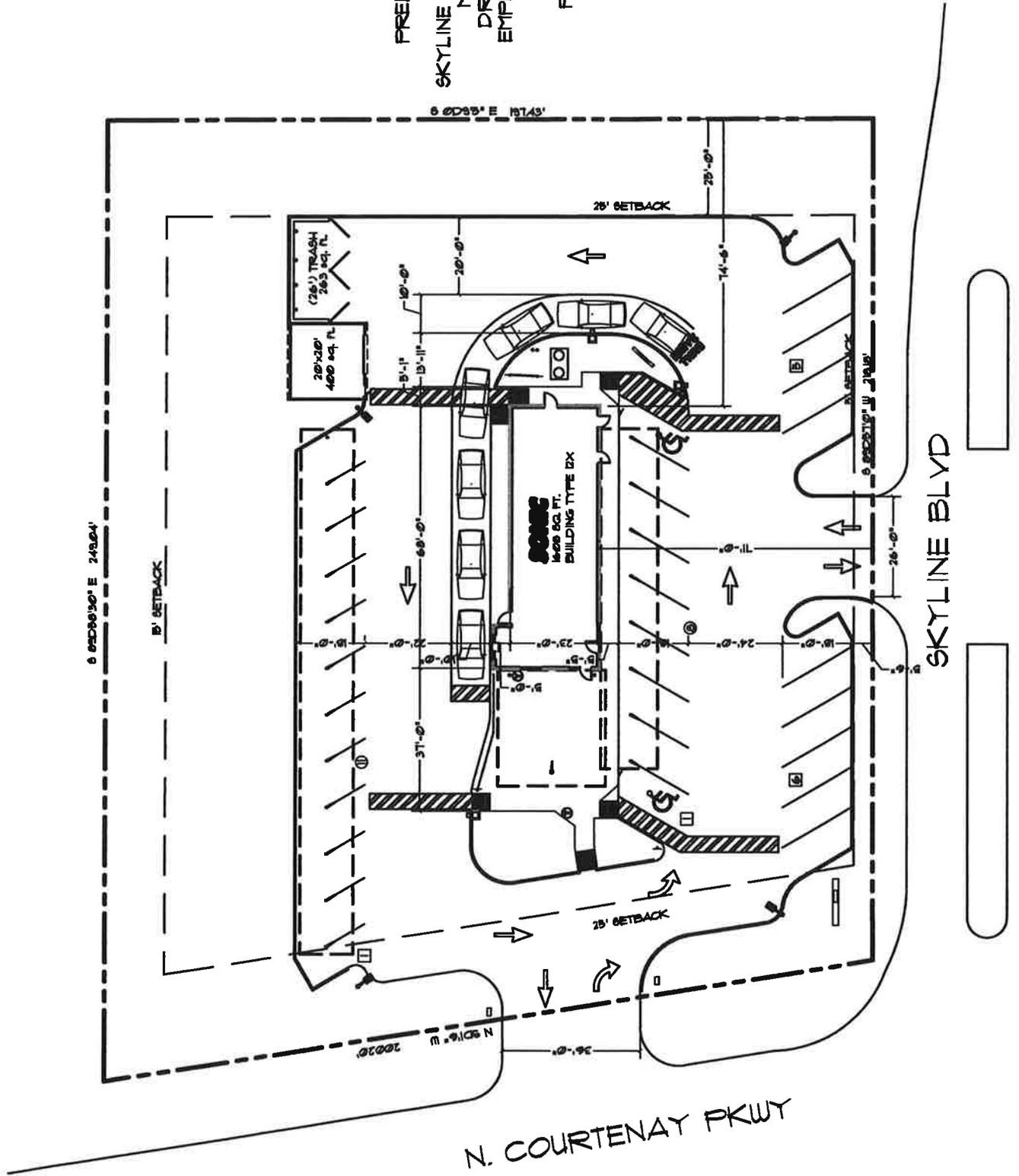
ATTORNEYS AT LAW

SUITE 200

7380 MURRELL ROAD

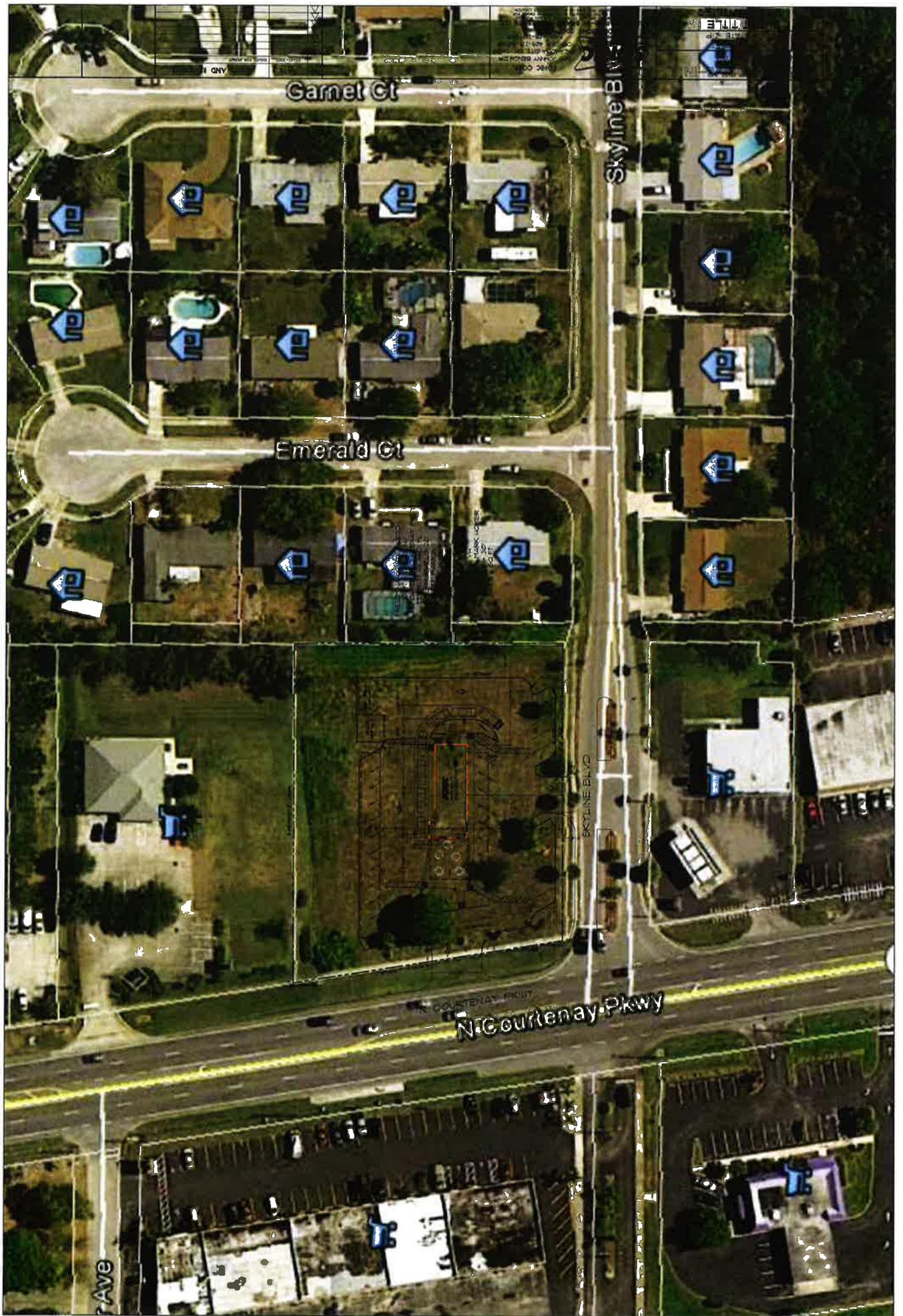
VIERA, FL 32940

PRELIMINARY SITE SKETCH
 SONIC DRIVE-IN
 SKYLINE BLVD & COURTENAY P
 MERRITT ISLAND, FL
 DRIVE-IN STALLS: 20
 EMPLOYEE PARKS: 11
 PATIO PARKS: NA
 12-22-15
 PROJECT: FLME - SKYLI
 LAYOUT: 06
 DESIGNER: YH
 OWNER: MARK HOY
 SCALE: 1" = 30'
 AREA = 99 FT



N. COURTENAY PKWY

SKYLINE BLVD



Garnet Ct

Emerald Ct

Skyline Blvd

N Courtenay Pkwy

Ave



Licensed Franchisee of Sonic Inc.

December 3, 2015

To: Neighbors in Merritt Island, Florida

RE: Brevard County Zoning #15PZ-00078, Rezoning and Comprehensive Plan Amendment For Property located at 140 Skyline Boulevard, Merritt Island

Mark Homer, the purchaser of the above property, would like to invite local residents to a Public Meeting to discuss the above referenced zoning application to be located on Courtenay Parkway and Skyline Boulevard, Merritt Island. You have received this invitation because you either live within 500 feet of the proposed use, or because you own property in close proximity to the proposed use.

We will give a brief presentation of the proposed use and will be happy to answer any questions and address concerns concerning our proposed Sonic Drive-In Restaurant to be located on the above referenced property. We are looking for input from the local property owners and residents regarding landscaping and buffering, as well and any other input wished to be provided

The meeting will be held at 5:30 p.m. to 6:30 p.m. on December 10, 2015 at:

Merritt Island Public Library

1195 N. Courtenay Pkwy, Auditorium

Merritt Island, FL. 32953

Phone: 321-455-1369

We look forward to seeing you and working with you.

According to requirements of the American Disability Act (ADA), organizations using library meeting rooms may be required to provide special accommodations for those citizens requesting assistance within 48 hours of the scheduled meeting time. Organizations are required to provide hearing devices and/or make special arrangements at the citizen's request.



Licensed Franchisee of Sonic Inc.

December 11, 2015

To: Neighbors in Merritt Island, Florida

RE: Brevard County Zoning #15PZ-00078, Rezoning and Comprehensive Plan Amendment
For Property located at 140 Skyline Boulevard, Merritt Island

SECOND MEETING!
(mailing mix-up for first meeting on 12/10/15)

Mark Homer, the purchaser of the above property, would like to invite local residents to a Public Meeting to discuss the above referenced zoning application to be located on Courtenay Parkway and Skyline Boulevard, Merritt Island. You have received this invitation because you either live within 500 feet of the proposed use, or because you own property in close proximity to the proposed use.

We will give a brief presentation of the proposed use and will be happy to answer any questions and address concerns concerning our proposed Sonic Drive-In Restaurant to be located on the above referenced property. We are looking for input from the local property owners and residents regarding traffic, landscaping and buffering, as well and any other input wished to be provided.

The meeting will be held at 5:30 p.m. to 6:30 p.m. on December 28, 2015 at:

Merritt Island Public Library

1195 N. Courtenay Pkwy, CONFERENCE ROOM

Merritt Island, FL. 32953

Phone: 321-455-1369

We look forward to seeing you and working with you.

According to requirements of the American Disability Act (ADA), organizations using library meeting rooms may be required to provide special accommodations for those citizens requesting assistance within 48 hours of the scheduled meeting time. Organizations are required to provide hearing devices and/or make special arrangements at the citizen's request.

DANA BLICKLEY, CFA - PROPERTY APPRAISER - BREVARD COUNTY FLORIDA

Owners: Texida Fast Foods Inc

Site Address: 4011 N Wickham Rd Melbourne 32935

Parcel ID: 26-37-31-00-504 · Tax ID: 2610197 · Photo Count: 6



2001

Sonic Restaurant, 4011 N. Wickham Road, Melbourne, FL





North  Pictometry® Imagery provided by the Brevard County Property Appraiser 2/4/2016. Image Date: 2/11/2012

DANA BLICKLEY, CFA - PROPERTY APPRAISER - BREVARD COUNTY FLORIDA

Owners: Texida Fast Foods Inc

Site Address: 555 S Babcock St Melbourne 32901

Parcel ID: 27-37-34-00-284 · Tax ID: 2729568 · Photo Count: 3



2001

DANA BLICKLEY, CFA - PROPERTY APPRAISER - BREVARD COUNTY FLORIDA

Owners: Texida Fast Foods Inc

Site Address: 1112 Clearlake Rd Cocoa 32922

Parcel ID: 24-36-29-27-A-6 · Tax ID: 2454545 · Photo Count: 3



2004

DANA BLICKLEY, CFA - PROPERTY APPRAISER - BREVARD COUNTY FLORIDA

Owners: Titusville Drive-In Inc

Site Address: 650 Cheney Hwy Unit Sonic Titusville 32780

Parcel ID: 22-35-22-25--114 · Tax ID: 2222447 · Photo Count: 11



2006

Bradley A. Smith, ASLA, AICP

Principal-In-Charge



Brad founded the firm in 1982. He is both a certified planner (AICP) and a registered landscape architect (ASLA). A strong “big-picture” thinker who understands the practical aspects of project implementation, Brad’s involvement will ensure that your expectations are met.

Mr. Smith will serve as Principal-in Charge, providing oversight of personnel, schedules, and the client’s goals and objectives. Brad is a maximizer – he loves to transform something strong into something superb. Excellence, not average, is his measure. He is a good strategic thinker. Faced with any given scenario, he can quickly spot the relevant patterns and issues. He is an activator, quickly turning thoughts into action. Finally, Brad is a good communicator, and is very effective in presenter, connecting with people in the process. As he likes to say: “*We don’t just take on projects, or even clients. We engage in relationships.*”

He knows the practical aspects of planning, project implementation, and on-going maintenance. This foundational understanding, coupled with strong design abilities and a high level of integrity has yielded numerous successful projects throughout the coastal portion of East Central Florida. He has experience in working with a wide range of clients and special interest groups to arrive at designs which solve specific project-related problems.

Brad will be responsible for the integrity of the project's overall strategy, planning, and design direction. He approaches problem-solving with creativity and innovation. His concepts are based on the client's needs and an understanding of the uniqueness of each site, resulting in appropriate solutions.

- **EDUCATION**

Bachelor of Landscape Architecture, 1979
University of Georgia

- **PROFESSIONAL EXPERIENCE**

Southern Landscapers, Inc.
1979-1982: Landscape Designer

Brad Smith Associates, Inc.
1982-Present: Principal

- **PROFESSIONAL REGISTRATION**

1981 – Florida Registered Landscape Architect #764
1997 – N.C. Registered Landscape Architect #937
2004 – AICP Certification

- **PROFESSIONAL AFFILIATIONS**

American Society of Landscape Architects
American Planning Association

- **REPRESENTATIVE PROJECT EXPERIENCE**

Melbourne International Airport
Olde Eau Gallie Riverfront Urban Infill and Redevelopment Plan
S.W. Palm Bay Community Planning Study
Water St. Park & Castaways Point Park – Palm Bay
Downtown Melbourne Redevelopment Project
Pocahontas Park – City of Vero Beach
Booker T. Washington Neighborhood Development
Palm Vista Preserve
Ridgewood Avenue Improvements
East Indian River County Stormwater Master Plan
Pelican Island National Wildlife Refuge & Jungle Trail Recreational Areas, Indian River County
North County Regional Park, Indian River County
Brevard Zoo Linear Park, Brevard County
Wabasso Causeway Improvements, Indian River County
CR 512 Landscape Enhancements
Titusville Stormwater Park (Spaceview Park)
43rd Avenue Landscape Enhancements
SR 405 Phases 1-6 FDOT Highway Beautification Grant
Cocoa Waterfront Redevelopment Concept
Cocoa West Recreation Area/Brevard County
Front Street Park/City of Melbourne
Ridgewood Ave., Cape Canaveral
Ocean Beach Blvd., Cocoa Beach
Atlantic Ave. Corridor, Cape Canaveral
Numerous FDOT Highway Beautification Grant Projects

**PLANNING AND ZONING BOARD MINUTES
LOCAL PLANNING AGENCY MINUTES**

The Brevard County Planning & Zoning Board, and Local Planning Agency, met in regular session on **Monday, January 4, 2016, at 3:00 p.m.**, in the Commission Room, Building C, Brevard County Government Center, 2725 Judge Fran Jamieson Way, Viera, Florida.

The meeting was called to order by the Chair, Henry Minneboo, at 3:00 p.m.

Board members present were: Henry Minneboo, Chair; Clyde Thodey; Andy Barber; Rochelle Lawandales; Peter Aydelotte; Bruce Moia; Robert LaMarr; John Stone; Bruce Moia; Ron McLellan; and Ron Bartcher.

Staff members present were: Cristina Berrios, Assistant County Attorney; Cindy Fox, Planning and Zoning Manager; Paul Body, Planner I; and Jennifer Jones, Special Projects Coordinator II.

The 10 regular members voted throughout the meeting.

Henry Minneboo – This is the Planning and Zoning Board, which is an advisory board to the Board of County Commissioners, and ultimately they will have the final decision on any decision that's made by this board today. They will review these items on Thursday, February 4th at 5:00 p.m. back in this room. Each applicant today will be given 15 minutes for their presentation, and all those speaking in the audience will be given up to five minutes if they need it. The first thing we have to do is a housekeeping issue, we've got to elect a Chairman and Vice Chairman for 2016.

CHAIR AND VICE CHAIR NOMINATIONS

Rochelle Lawandales – Mr. Chairman, I would nominate you again for Chairman.

Bill Cannon – Second.

Henry Minneboo called for a vote on the motion as stated, and it passed unanimously.

Henry Minneboo – Ok, thank you. We need a Vice Chairman.

Ron McLellan – I'd like to nominate Robert LaMarr for Vice Chair.

Rochelle Lawandales – I'll second that.

Henry Minneboo called for a vote on the motion as stated, and it passed unanimously.

APPROVAL OF NOVEMBER 9, 2015 MINUTES

Henry Minneboo – Did everybody have an opportunity to look at the November minutes?

Andy Barber – Motion to approve.

Ron McLellan – Second.

Henry Minneboo called for a vote on the motion as stated, and it passed unanimously.

IV.B.2. (15PZ00069) – JOSEPH W. & EDELMIRA HADDOW – requests a change of classification from RU-2-10(6.6) to AU on 5 acres, located on the east side of Adamson Rd., approx. 0.68 mile north of S.R. 524 (1085 Adamson Rd., Cocoa)

P&Z Recommendation: Cannon/ Lawandales – Approved. Vote was unanimous.

Joe Haddow – Hello, I'm Joe Haddow, property owner at 1085 Adamson Road, Cocoa, Florida.

Cindy Fox - You need to do the future land use first, you've got to change it from Neighborhood Commercial to Community Commercial, so you need to vote on that, and then you can consider the rezoning with the binding development plan.

Henry Minneboo - What's the pleasure of the board?

Bruce Moia - Can I make a couple of comments? I have a lot of experience doing site plans in Brevard County, not all of them enjoyable. They have performance standards that cover the requirements for lighting, and sound, and smell, but I'm not sure how great they work because it's hard to contain smell. Being that a restaurant is loud, I guess it could be a bar-b-que place and you can smell bar-b-que 24/7, so I'm not sure that's really going to change no matter what we do here if somebody proposes to do a restaurant there. The lighting, they have to do an extensive photo matrix plan to ensure the light does not spill over on the property. The limits of the lighting that's allowed to go over the property line is so small it's almost undetectable, but there is lighting requirements that they have to meet with the building code for life safety, so to limit how they're going to do their lighting could be detrimental to the safety of the site, so you might want to be careful if we're going to look at doing any kind of restriction on the height of the lighting, because the type of lighting that they have to do will ensure that they don't shine into the neighbor's property. Sound, in my opinion and in my experience, vegetative buffers work way better than a wall. I know I would never want to live next to an 8-foot wall, and definitely not a 10-foot wall, but I think a Type A buffer is required when you back up to residential, which is the most restrictive vegetative buffer they have as far as density.

Cindy Fox - Yes.

Bruce Moia - I know the strictest that the County has, is it the most restrictive buffer requirement I've ever seen? No. I would probably recommend that if we were going to look at anything to prevent noise, sound, and smell, would be additional landscaping. Those are my comments.

Rochelle Lawandales - Forget the idea of moving, altering, the building, but I do think there are some things that we can look at so that we can help this be a good neighbor. One, I agree with Bruce, and I have marked down additional landscaping. At planting, the tree canopy is higher, the number of bushes is more, the number of trees..... My thing is that we include in there to meet the County standards on lighting, that it all stays on the property. The trash can, I think, can probably be moved to the front if that would make the neighbors feel a little more comfortable that that smell might be moved. It can be moved to the front and buffered. If there is an opportunity to shift the box.....I know on several of the drive-through locations, the box is sort of caddy-cornered and not directly in the back, so maybe there's a way.....it might not work on this site because of the traffic patterns on this site, but if they can that would be great. I think that the character of this area has changed. I think there are precedents set for Community Commercial on the east side of Courtenay. I apologize for how I sound - part of it was screaming at the TV at a football game and the other part is probably a cold, so forgive me - I made a little note to suggest that maybe it's time to look at that whole corridor and see what might need to be done in terms of some broader brush changes from Neighborhood Commercial to Community Commercial. I'd be prepared to make a motion whenever the board is ready, to approve the change from Neighborhood Commercial to Community Commercial.

Andy Barber - Second.

Henry Minneboo called for a vote on the motion and it passed 9:1, with Clyde Thodey voting nay.

Andy Barber - I make a motion to approve the zoning change from BU-1-A to BU-1.

Rochelle Lawandales - With a binding development plan?

Sec. 62-2271. - Noise.**(a) Terminology, standards and definitions.**

- (1) *Terminology and standards.* All technical acoustical terminology and standards used in this article which are not defined in subsection (2) shall be read or construed in conformance with the American National Standards Institute, Inc., (ANSI) publication entitled "Acoustical Terminology, designated as ANSI S1.1-1960, or its successor publication.
- (2) *Definitions.* The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, unless the context clearly indicates a different meaning:
 - a. *A-weighted sound pressure level* shall mean the sound pressure level, in decibels, as measured on a sound level meter using the A-weighting network. The level so read shall be designated as dB (A-wt)
 - b. *Ambient noise level* shall mean the sound pressure level of the all-encompassing noise emanating from a given environment, usually being a composite of sounds from many sources.
 - c. *ANSI* shall mean the American National Standards Institute.
 - d. *Construction activities* shall mean any and all activity incidental to the erection, demolition, assembling, altering, installation or equipping of buildings, structures, roads or appurtenances thereof, including land clearing, grading, excavating and filling.
 - e. *Decibel* or *dB* shall mean a unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-newtons per square meter.
 - f. *Emergency* shall mean any occurrence or circumstance involving actual or imminent physical death or trauma, or property damage, demanding immediate emergency work or service.
 - g. *Emergency work or emergency service* shall mean any labor performed for the purpose of preventing or alleviating, or attempting to prevent or alleviate, an emergency.
 - h. *Equivalent sound pressure level (Leq)* shall mean a sound level descriptor based on the average acoustic intensity over time. Leq is intended as a single number indicator to describe the mean energy or intensity level over a specified period of time during which the sound level fluctuated, Leq is measured in dB and must be A-weighted.
 - i. *Impulsive sound* shall mean a sound of short duration, usually less than one second and of high intensity, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include pile drivers, drop forge impacts, the discharge of firearms, the barking of dogs, and the beating of drums.
 - j. *Motorboat* shall mean any boat or vessel propelled or powered by machinery, regardless of whether such machinery is the principal source of propulsion, including boats, barges, amphibious craft, water ski towing devices and hovercraft.
 - k. *Motor vehicle* shall mean any vehicle defined as motor vehicle by F.S. § 320.01(1)
 - l. *Multifamily residential dwelling* shall mean a building designated or used exclusively for residential occupancy by two (2) or more families.

Sound pressure shall mean the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space, as produced by the presence of sound energy.

- z. *Sound pressure level* shall mean a 20 times the logarithm to the base ten of the ratio of the RMS sound pressure to the reference pressure of 20 micro-newtons per meter squared. The sound pressure level is denoted Lp (or SPL) and is expressed in decibels.
- aa. *Use* shall mean any activity, event, operation or facility which creates noise.
- bb. *Water craft* shall mean any machine in, upon or by which any person or property is or may be transported or drawn upon or over any watercourse or body of water, including swamp lands; this term shall include hovercraft and air boats.

(b) *Measurement of sound.* Sound shall be measured with a sound level meter. Sound meters utilized for enforcement action shall have data logging capability and output to preserve a graphical record of measurements. Sound measurements shall be taken so as to secure and ensure an accurate representation of the sound. Sound level meters shall utilize an A-weighted filter, set to slow response, with a 3dBA doubling rate and no cut-offs. Measurements of sound in support or defense of an enforcement action shall be performed by individuals with documented training and/or experience in the collection and interpretation of sound level data.

- (1) The sound level shall be measured at a distance no closer to the point from which the sound in question is emanating than the property line of the parcel or lot from which the sound is emanating.
- (2) A measurement period shall be not less than 15 minutes in duration.
- (3) The sound being measured shall be representative of the sound which instigated the complaint.
- (4) A measurement should be taken at approximately five feet above the ground or water surface, away from any obstruction or reflecting surface.
- (5) A microphone windscreen shall be required to avoid wind noise biasing of a measurement.
- (6) All manufacturer's directions on the operation of the sound level meter shall be followed (e.g., proper microphone angle).
- (7) All sound level meters used for measurement shall be in conformance with ANSI section 1.4-1983.
- (8) All octave and third octave band filter sets of the sound level meter shall be in conformance with ANSI section 1.11-1976.
- (9) Calibration of all instruments, components, and attachments shall conform to the latest ANSI standards and manufacturer's directions and specifications.
- (10) Instrumentation for sound level measurements may be class 1 or class 2 (ANSI section 1.4-1971).

(c) *Maximum permissible sound levels; land use categories, times; and adjustment for character of sound.*

- (1) Subject to subsections (2) and (3) below, at no time shall the predicted or actual sound pressure levels emitted by the proposed use exceed the sound pressure levels specified in the table below at the closest property line of the below specified uses. If a use is located within a strip center, the noise level will be monitored from the outside wall of the use.

Table 1

Maximum Permissible Time Averaged (Leq)

A-Weighted Sound Pressure Limits for Receiving Uses

Type of Use	Time Period	Maximum Allowable Sound Pressure Level
Residential	7:00 a.m. to 10:00 p.m.	60 dB(A)
	10:00 p.m. to 7:00 a.m.	55 dB(A)
Commercial	7:00 a.m. to 10:00 p.m.	65 dB(A)
	10:00 p.m. to 7:00 a.m.	55 dB(A)
Industrial	7:00 a.m. to 10:00 p.m.	75 dB(A)
	10:00 p.m. to 7:00 a.m.	65 dB(A)

- (2) For any source of sound that emits a continuous pure tone, the sound level limits set forth in Table 1 shall be reduced by five (5) dB (A-weighted).
- (3) Impulsive sound shall not exceed the maximum sound levels contained in Table 1 during the hours of 7:00 AM to 10:00 PM. Impulsive sound is not permitted during the hours of 10:00 PM to 7:00 AM.

(d) *Prohibited acts.*

- (1) Subject to the provisions of this section, no person shall produce, cause to be produced, or allow to be produced, by any means, any sound within any private or public property, including a right-of-way, which sound, when measured pursuant to this section, exceed the applicable sound level limits set forth in this section.
- (2) Noises determined and enumerated as public nuisances under Part II Code of Ordinances Chapter 46, Article IV, Section 131.

(e) *Exemptions.* The provisions of section 62-2271 shall not apply to the following sounds or vibrations.

- (1) Cries for emergency assistance and warning calls. Emergency signals during emergencies. Emergency testing between 7:00 AM and 7:00 PM.
- (2) Radios, sirens, horns and bells on police, fire and other emergency response vehicles. Law enforcement activities including training.
- (3) Parades, fireworks displays and other special events for which a permit has been obtained from the county, within such hours as may be imposed as a condition for the issuance of the permit.

GALEN CAROL
A · U · D · I · O

ABOUT

PRODUCTS

ONLINE CATALOG

NEWSLETTER

RESOURCES

[Home](#) > [Resources](#) > [How-To's](#) > Loudness

[Checkout](#) | [My Account](#) | [Help](#)

HOW-TO's

Decibel (Loudness) Comparison Chart

Here are some interesting numbers, collected from a variety of sources, that help one to understand the volume levels of various sources and how they can affect our hearing.

Environmental Noise	
Weakest sound heard	0dB
Whisper Quiet Library at 6'	30dB
Normal conversation at 3'	60-65dB
Telephone dial tone	80dB
City Traffic (inside car)	85dB
Train whistle at 500', Truck Traffic	90dB
Jackhammer at 50'	95dB
Subway train at 200'	95dB
<i>Level at which sustained exposure may result in hearing loss</i>	90 - 95dB
Hand Drill	98dB
Power mower at 3'	107dB
Snowmobile, Motorcycle	100dB
Power saw at 3'	110dB
Sandblasting, Loud Rock Concert	115dB
<i>Pain begins</i>	125dB
Pneumatic riveter at 4'	125dB
<i>Even short term exposure can cause permanent damage - Loudest recommended exposure WITH hearing protection</i>	140dB
Jet engine at 100'	140dB
12 Gauge Shotgun Blast	165dB
Death of hearing tissue	180dB
Loudest sound possible	194dB

OSHA Daily Permissible Noise Level Exposure	
Hours per day	Sound level
8	90dB
6	92dB
4	95dB
3	97dB
2	100dB
1.5	102dB
1	105dB
.5	110dB

How-To

CONTACT

SEARCH OUR SITE

FIND:

SUBMIT

SIGN UP FOR SOUNDBITES

NAME:

EMAIL:

SUBMIT

.25 or less	115dB
-------------	-------

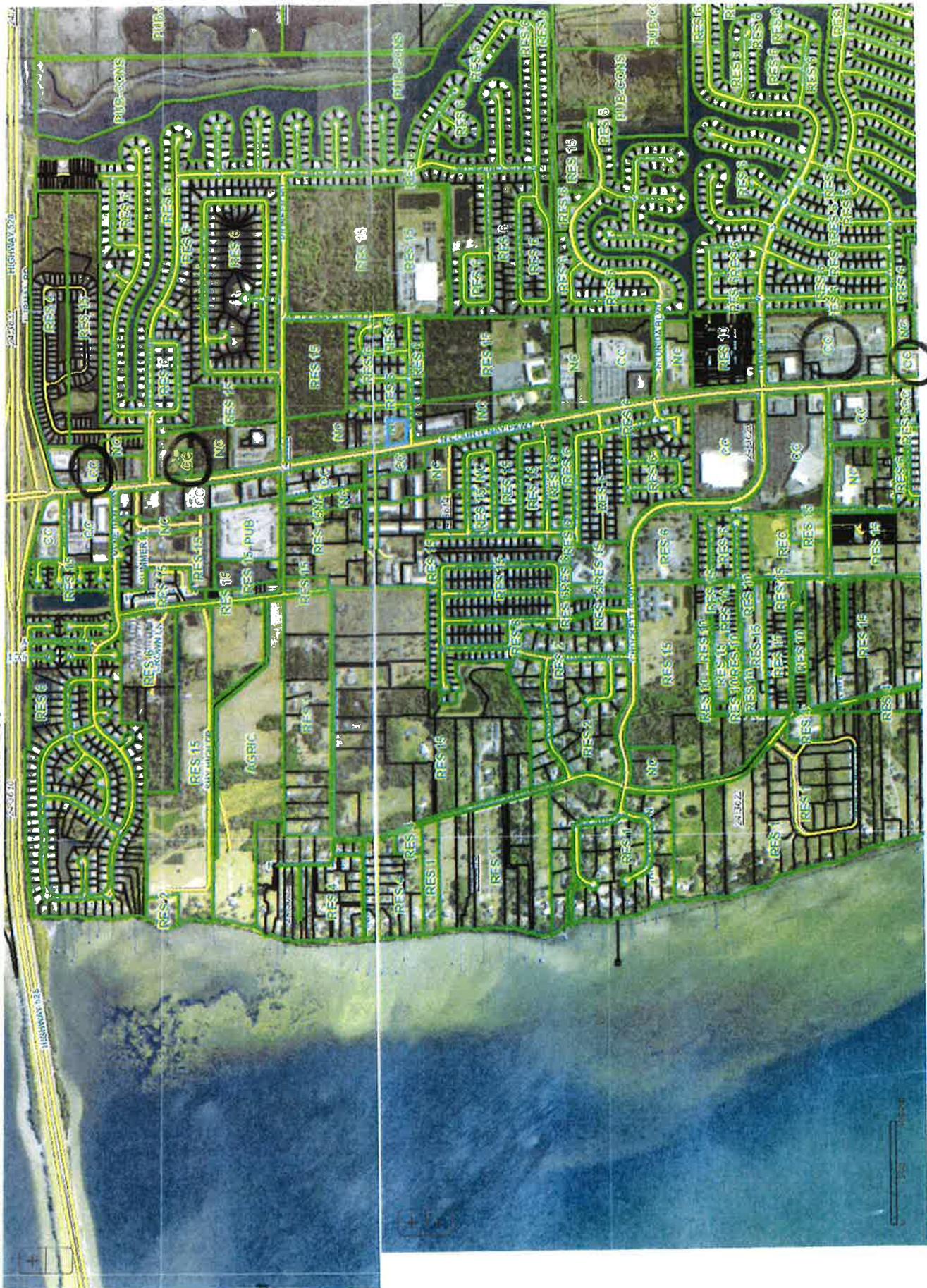
NIOSH Daily Permissible Noise Level Exposure	
Hours per day	Sound level
8	85dBA
6	86dBA
4	88dBA
3	89dBA
2	90dBA
1.5	92dBA
1	94dBA
.5	97dBA
.25 or less	100dBA
0	112dBA

Perceptions of Increases in Decibel Level	
Imperceptible Change	1dB
Barely Perceptible Change	3dB
Clearly Noticeable Change	5dB
About Twice as Loud	10dB
About Four Times as Loud	20dB

Sound Levels of Music	
Normal piano practice	60 -70dB
Fortissimo Singer, 3'	70dB
Chamber music, small auditorium	75 - 85dB
Piano Fortissimo	84 - 103dB
Violin	82 - 92dB
Cello	85 -111dB
Oboe	95-112dB
Flute	92 -103dB
Piccolo	90 -106dB
Clarinet	85 - 114dB
French horn	90 - 106dB
Trombone	85 - 114dB
Tympani & bass drum	106dB
Walkman on 5/10	94dB
Symphonic music peak	120 - 137dB
Amplifier, rock, 4-6'	120dB
Rock music peak	150dB

NOTES:

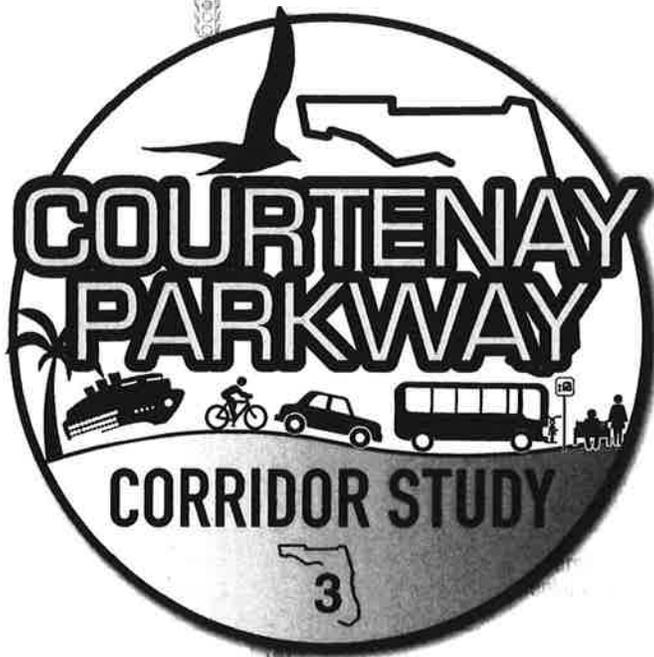
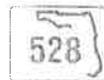
- One-third of the total power of a 75-piece orchestra comes from the bass drum.
- High frequency sounds of 2-4,000 Hz are the most damaging. The uppermost octave of the piccolo is 2,048-4,096 Hz.
- Aging causes gradual hearing loss, mostly in the high frequencies.



TaxAcct	ParcelID	Owner	Address
2412228	24 361400 538.1	PERRONE, RALPH S SR	140 SKYLINE BLVD
2706653	27 370200 25	ROTH, DIANE	140 SKYLINE BLVD



END PROJECT



Florida Department of Transportation District Five
Courtenay Parkway (SR 3)
Corridor Planning and Concept Development Study
FUTURE CONDITIONS REPORT

September 2015





1

Introduction

1.1 Report Purpose

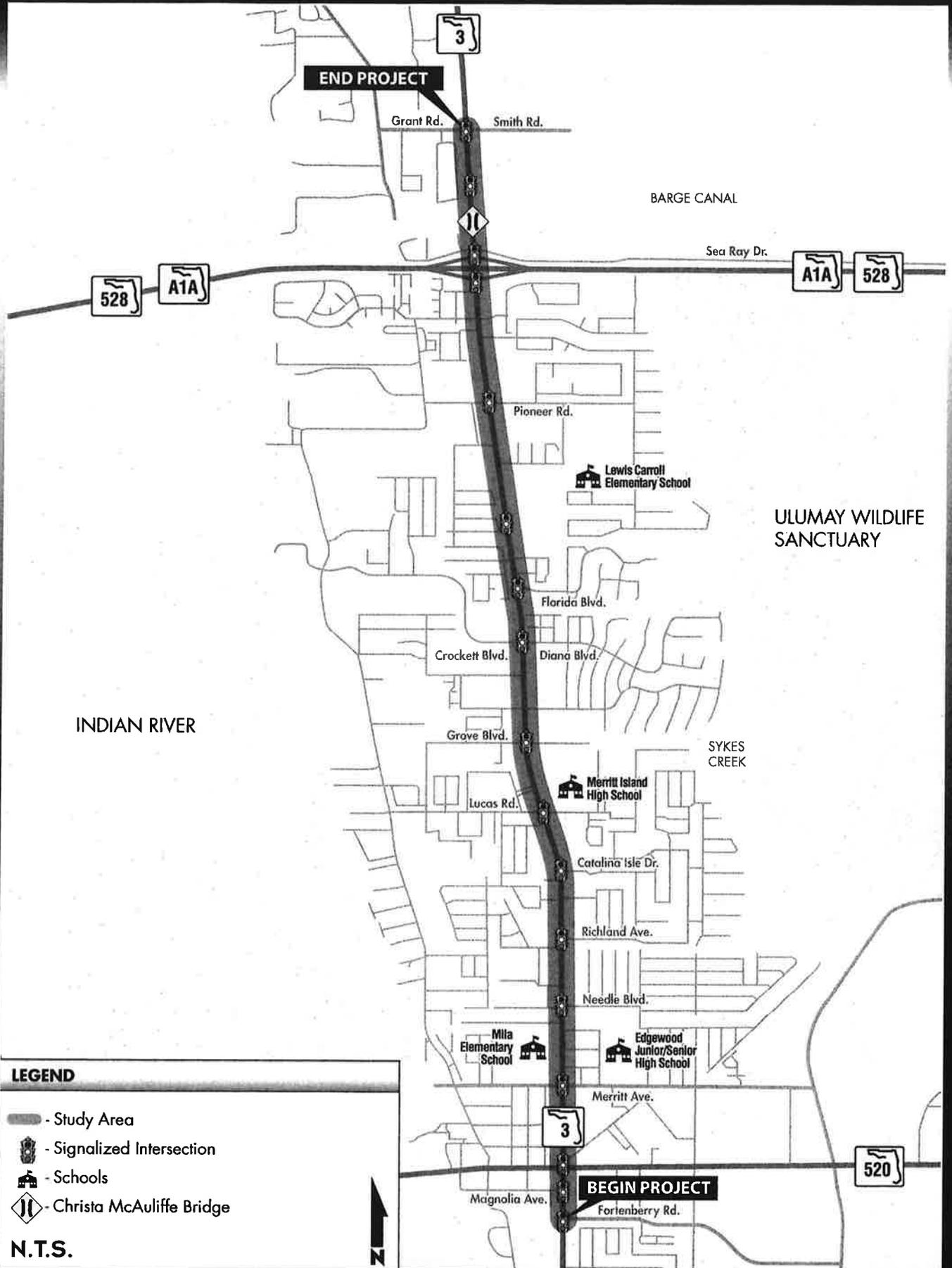
In January 2015, the Florida Department of Transportation (FDOT) engaged the services of VHB to perform a Corridor Planning and Concept Development Study on Courtenay Parkway / State Road (SR) 3 from Fortenberry Road, south of SR 520 to Grant Road/Smith Road, north of SR 528.

A Corridor Planning Study is a high-level evaluation of safety, environmental and geometric concerns along a transportation corridor where needs, possible improvement options and planning level cost estimates are identified. The purpose of the study is to develop a multi-modal, design-driven vision, rather than a model-driven vision to determine how best to meet the needs of the current and future end users of the corridor, and to establish a long-term plan to guide evolution of the corridor. Multi-modal corridor projects are seen as essential to network efficiency, safety, and livability within the context of future transportation needs.

As part of the Corridor Planning Study, this Future Conditions Report summarizes the traffic findings from the Courtenay Parkway (SR 3) Corridor Planning and Concept Development Study Existing Conditions Report and expands on the issues and opportunities identified during that effort. The Existing Conditions Report identified existing facilities, conditions, and previous studies conducted relevant to the SR 3 Corridor study area. The summary of existing traffic conditions and levels of service (LOS) provide a baseline for comparison with projected future conditions. For detailed information regarding the existing conditions of the study corridor, please see the Courtenay Parkway (SR 3) Corridor Existing Conditions Report.

The ultimate purpose of the study is to develop a multi-modal, design-driven vision to determine how best to meet the needs of the current and future end users of the corridor and to establish a long-term plan to guide evolution of the corridor.

This report summarizes planned roadway and multi-modal improvements, projects future traffic demand along SR 3 from Fortenberry Road to Grant Road/Smith Road, and identifies any deficiencies and additional needs for the corridor for both the short-term (Year 2020) and long-term (Year 2040) conditions. The results of the analysis will be used to define the corridor needs and develop potential improvement alternatives.



LEGEND

-  - Study Area
-  - Signalized Intersection
-  - Schools
-  - Christa McAuliffe Bridge

N.T.S.





2

Existing Conditions

2.1 Roadway and Intersection Characteristics

The SR 3 project corridor from Fortenberry Road to Grant Road / Smith Road is classified as an “urban principal arterial other”. The facility is owned and maintained by FDOT north of SR 520 and by Brevard County south of SR 520. There are two predominant typical sections of the corridor; a four-lane arterial with narrow center medians and curb/gutter from Fortenberry Road to Skylark Avenue; and a five-lane arterial with center left-turn median and paved shoulders and open swale drainage from Skylark Avenue to Grant Road / Smith Road. The posted speed limit on SR 3 from Fortenberry Road to south of Barony Drive is 35 miles per hour (mph) and increases to 40 mph south of Barony Drive to north of Artemis Boulevard. The speed limit then increases to 45 mph from north of Artemis Drive to the project end at Grant Road / Smith Road.

Figures 2A and 2B provide the year 2015 intersection geometry for the Study Area intersections.

2.2 2015 Existing Volumes

Weekday daily and hourly traffic volumes along the Study Area roadway segments and intersections were collected from multiple sources, including the FDOT Florida Transportation Information (FTI) and the Space Coast TPO annual traffic counts program. These counts were also supplemented by 24-hour tube counts and 4-hour (7:00 – 9:00 AM and 4:00 – 6:00 PM) manual turning movement counts conducted along the Study Area roadway segments and intersections in March and April 2015. Figures 3A and 3B show the 2015 existing turning movement traffic volumes.



3

Future Conditions

An essential component of this study involves forecasting travel demands and identifying land use changes. Doing so ensures that the alternatives identified and studied and the corresponding recommended transportation infrastructure investments appropriately anticipate future needs and provide long term benefits for the area. This analysis was performed for short-term (Year 2020) and long-term (Year 2040) conditions.

The 2020 short-term analysis was conducted in order to provide a 5-year horizon to evaluate the effect of transportation system improvements/enhancements that do not require substantial permitting, right of way (ROW) acquisitions, or lengthy environmental impact review. This scenario includes background growth that will occur by the year 2020 and planned transportation improvements identified in the Space Coast TPO Transportation Improvement Plan (TIP). This scenario also evaluates alternative signal timings (optimized timings) that may better serve future traffic volumes that reflect changes in travel patterns.

The 2040 long-term analysis was conducted in order to provide a 25-year horizon to evaluate the effect of transportation improvements/recommendations that will likely take more time to design, permit, and fund. The year 2040 is consistent with the Central Florida Regional Planning Model future year. This scenario includes background growth that will occur by the year 2040 and planned transportation improvements identified in the Space Coast TPO Long Range Transportation Plan (LRTP).

3.1 Future Land Use

As noted above, existing and planned future land use patterns along the SR 3 corridor are important factors to consider during the investigation of multi-modal transportation system improvements. As the population increases and the land uses evolve along the corridor, the demand for additional access and transportation infrastructure grows. The most prevalent existing land uses within the Study Area are residential and vacant uses. The Future Land Uses (FLUs) adopted by Brevard County in its Comprehensive Plan within the Study Area are shown in Figure 4. Residential FLUs are the primary future land use type within one-half mile of the SR 3 corridor. These residential areas are typically medium density areas, allowing up to 6 or 15 dwelling units per acre. Beyond the one-half mile buffer, residential uses remain the predominant future land use. Table 1 summarizes the future land uses within one-half mile of the SR 3 corridor within the Study Area.



Table 1: Future Land Use

Future Land Use		Percentage (1/2-Mile Buffer)
Commercial	CC	18.2%
	NC	5.6%
Conservation		1.6%
PLNIP		4.4%
Public		3.4%
Recreation		0.4%
Residential	RES 2	6.6%
	RES 4	12.6%
	RES 6	24.9%
	RES 10	0.7%
	RES 15	21.5%
No FLU		0.0%

Source: Brevard County, Geographic Information Systems (GIS)

Commercial use is the second most prevalent future land use along the SR 3 corridor. This land use is divided into two categories, Community Commercial (CC) and Neighborhood Commercial (NC). The Community Commercial designation is intended to provide for a variety of retail, personal and professional uses that will serve multiple neighborhoods as well as regional areas. The Neighborhood Commercial designation is characterized by less intense, lower impact types of retail and professional uses than the Community Commercial areas. The Neighborhood Commercial future land use is intended to serve the needs of the residents in the immediate areas.

Future land uses in the northern portion of the Study Area are typically less intensive than the south. The residential areas are typically lower density, and are consistent with surrounding land areas north of SR 528.

3.2 Planned Improvements

3.2.1 Roadway Improvements

The Space Coast TPO has identified SR 3 from SR 520 to SR 528 as a multi-modal corridor with Intelligent Transportation Systems (ITS) improvements in its 2035 LRTP. According to the Space Coast TPO TIP, two improvements within the Study Area are identified as being started or in place by 2020:

- Resurface SR 3 from SR 520 to Skylark Avenue. Funding has been allocated for Fiscal Year (FY) 2015.
- Add lanes and reconstruct SR 528 through the Study Area. Funding has been allocated for FY 2016.

As part of the resurfacing of SR 3 from SR 520 to Skylark Avenue, the travel lanes will be reduced to 11 feet with a narrower median shoulder to accommodate a 4-foot bike lane on both sides of the

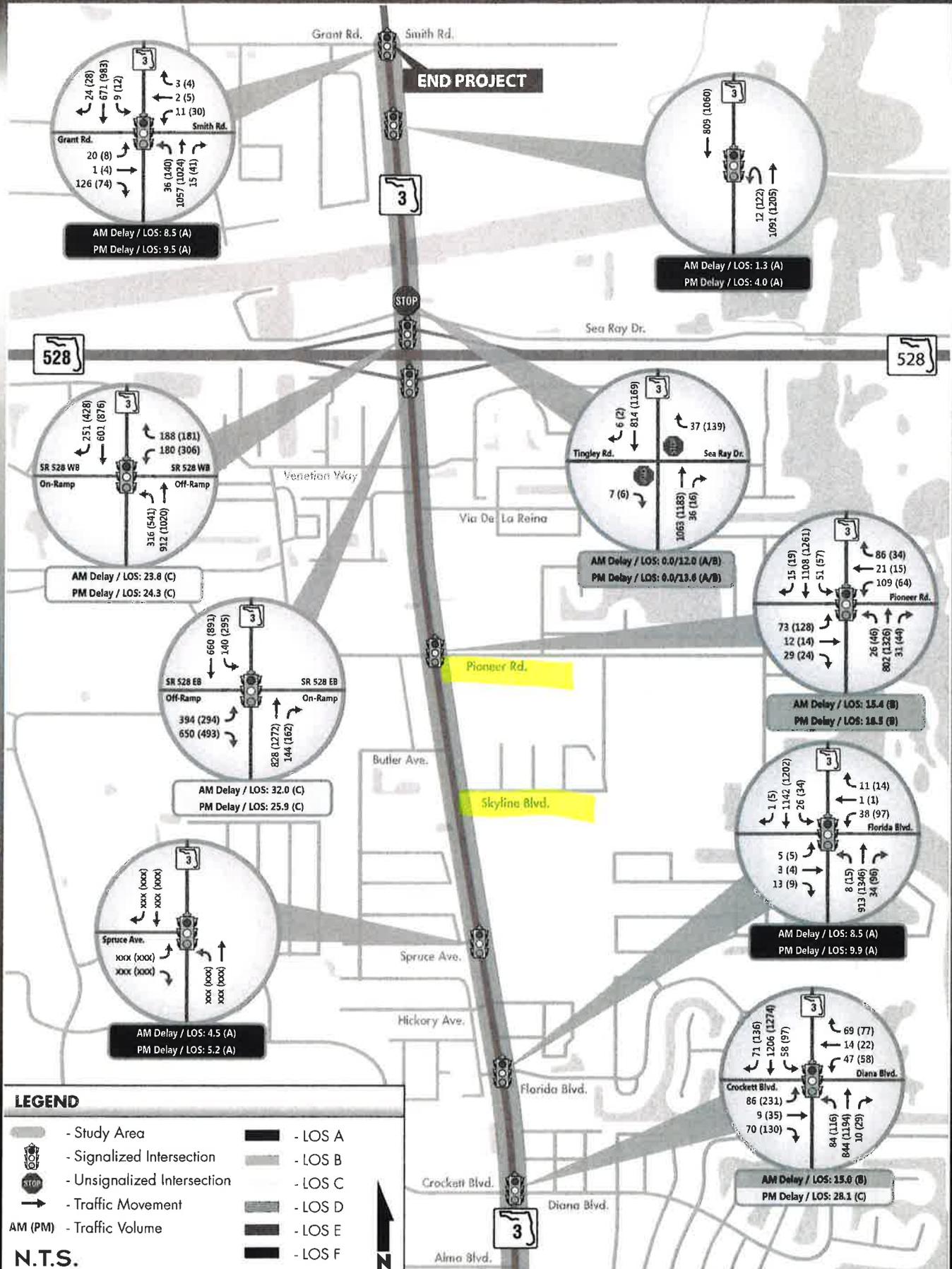




Table 4: 2020 Projected Roadway Level of Service

Roadway / Segment	No. of Lanes ¹	Speed Limit (mph) ¹	Adopted LOS ²	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
				Daily	Peak	AAADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3													
Fortenberry Rd to SR 520	4LD	35	D	32,400	1,630	18,900	D	910	NB	D	1,020	SB	D
SR 520 to Barony Dr/Skylark Ave	4LD	35	D	32,400	1,630	28,600	D	1,330	SB	D	1,700	NB	F
Barony Dr/Skylark Ave to Lucas Rd	4LD	40	D	41,790	2,100	33,300	C	1,230	SB	C	1,550	NB	C
Lucas Rd to Crockett Blvd	4LD	40	D	41,790	2,100	31,800	C	1,350	SB	C	1,420	SB	C
Crockett Blvd to Pioneer Rd	4LD	45	D	41,790	2,100	35,400	C	1,340	SB	C	1,510	SB	C
Pioneer Rd to SR 528	4LD	45	D	41,790	2,100	32,700	C	1,440	SB	C	1,590	SB	C
SR 528 to Grant Rd/Smith Rd	4LD	45	D	39,800	2,000	31,100	C	1,230	NB	C	1,570	NB	C

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook and Brevard County Comprehensive Plan
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

3.4.2 2020 Future Bicycle Operational Analysis

The LOS for the bicycle mode is based on the number of vehicles traveling on the roadway and the coverage of available bicycle lanes provided along the corridor. As a result of the planned improvement to resurface and add bicycle lanes to SR 3 from SR 520 to Skylark Avenue, this segment of bike lane coverage has increased from 0-49% to 85-100%. As shown in Table 5, the LOS of bicyclists traveling along the segment between SR 520 and Skylark Avenue are expected to improve to LOS "C". However, bicyclists traveling along the remaining segments on the corridor will operate at LOS "E" due to the lack of bike lanes.



An additional scenario was analyzed with optimized signal timings. This scenario evaluates alternate signal timings that may better serve future traffic volumes that reflect changes in travel patterns. The results of this scenario are also summarized in Table 7. The Synchro reports are provided in Appendix B.

In general, the traffic operations under the optimized signal timings scenario are expected to be comparable to the traffic operations under the existing signal timings. The most noticeable benefits of the optimized signal timings are at the intersection of SR 3/Merritt Avenue and the intersection of SR 3/Richland Avenue.

3.5 2040 Long Term Scenario

Similar to the 2020 Future conditions, the projected 2040 traffic volumes were developed by applying the annual growth rate of 0.40% to the Existing 2015 Conditions traffic volumes. The geometric improvements identified in the proposed resurfacing of SR 3 from SR 520 to Skylark Avenue was factored into this scenario. In addition to the existing signal timings along the corridor, optimized signal timings were also applied at the Study Area intersections to better serve future traffic volumes that reflect changes in travel patterns. The proposed SPUI at the SR 528 and SR 3 interchange will be evaluated as an additional alternative.

3.5.1 2040 Future Roadway Operations

The 2040 future roadway operations are provided in Table 8 for daily, AM peak hour, and PM peak hour.

Table 8: 2040 Projected Roadway Level of Service

Roadway / Segment	No. of Lanes ¹	Speed Limit (mph) ¹	Adopted LOS ²	Maximum Service Volumes ²		Daily ³		AM Peak Hour Directional Traffic ⁴			PM Peak Hour Directional Traffic ⁴		
				Daily	Peak	AADT	LOS	Volume	Dir	LOS	Volume	Dir	LOS
SR 3													
Fortenberry Rd to SR 520	4LD	35	D	32,400	1,630	20,400	D	980	NB	D	1,100	SB	D
SR 520 to Barony Dr/Skylark Ave	4LD	35	D	32,400	1,630	30,800	D	1,440	SB	D	1,830	NB	F
Barony Dr/Skylark Ave to Lucas Rd	4LD	40	D	41,790	2,100	35,900	C	1,330	SB	C	1,670	NB	C
Lucas Rd to Crockett Blvd	4LD	40	D	41,790	2,100	34,200	C	1,460	SB	C	1,530	SB	C
Crockett Blvd to Pioneer Rd	4LD	45	D	41,790	2,100	38,200	C	1,440	SB	C	1,620	SB	C
Pioneer Rd to SR 528	4LD	45	D	41,790	2,100	35,300	C	1,550	SB	C	1,710	SB	C
SR 528 to Grant Rd/Smith Rd	4LD	45	D	39,800	2,000	33,600	C	1,320	NB	C	1,690	NB	C

Source: Compiled by VHB.

- 1 FDOT Straight Line Diagrams (SLD)
- 2 2012 FDOT Quality/Level of Service Handbook and Brevard County Comprehensive Plan
- 3 FDOT FTI, SCPTPO, and supplemental daily counts
- 4 Turning movement counts within the roadway segment

