Citrus County Transit Comprehensive Operations Analysis (COA)

Board of County Commissioners Meeting

Date: 4/25/2023

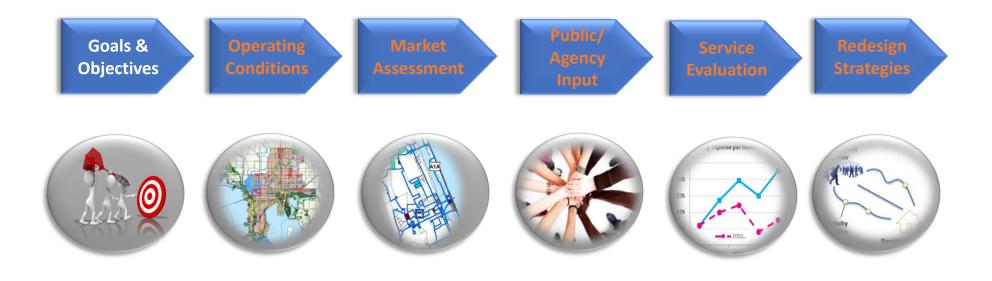




2023

Key Study Steps





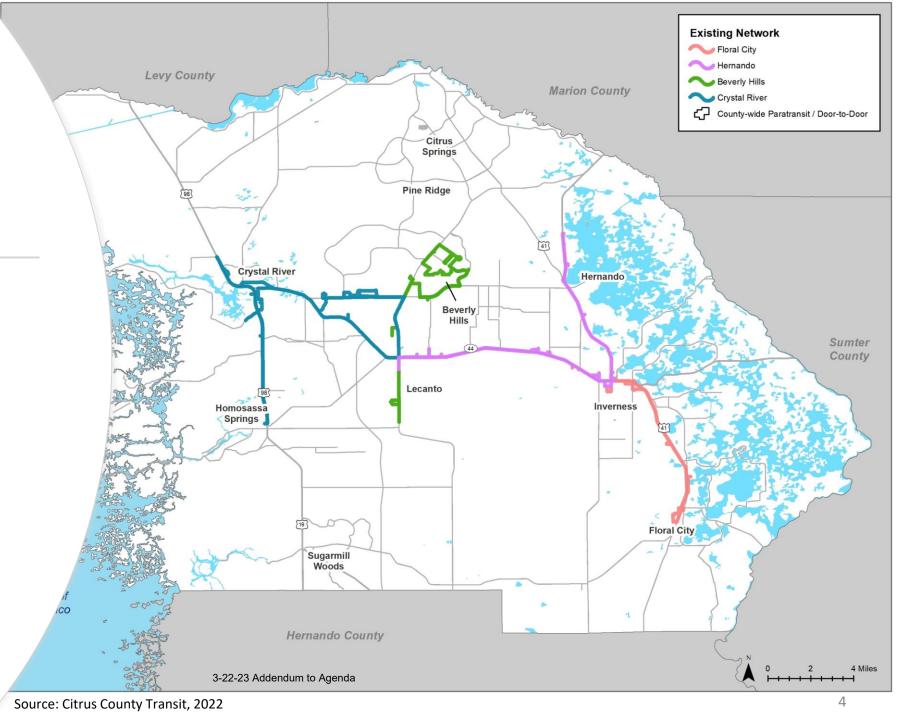
	In ER Ver Dert fpred jun	Des genan des Add-RM					-	2021 Operating Expenses, Revenue and S	nortfall	il – Vision Plan	14
	14.3.1 3.3 7.6 4 4843 11.1010 25.4 10.000	MARCHER, MILLING MARCHER	lithone	11.1				Needed Improvement		Total Cost	Strand Line
Final Plan:	A B	С	D	E	F	G		Expand/Maintain Existing Service	\$	96,043,487	The second a
			-1					New MetroRapid Service	\$	17,469,804	**
	Fixed-Route/ADA/Other Servic						ner Service	New Express Service	\$	3,269,833	
Implementation &			He	Headway (minutes) Revenue Hours			New Local Service	\$	9,738,326		
Implementation of	Service Type/Mode	Description				-	Saturday Sund	New Flex Service	S	6,380,882	10 10 10 V
			weekszy	Securosy	suncay	weekcay		New Paratransit Service	S	3,521,543	
Finances	Maintain Existing Fixed Ro Route #1	Maintain Existing Fixed Route Service	60	60	60	0.00	0.00 0.0	Total Operating Cost	s	136,423,876	
T THAT WE D		Route Realignment ain Existing Rived Route Service	60	60	60 60			Total Operating Revenues*	s	73,173,859	The second secon
	NUMBER OF	ain Existing ADA Panathanolt Service and Frequency are Hours of Service	60	60	60			Shortfall	s	(63,250,017)	
	Rada IS ALL	ere nours or service liev Service	1.00		- 10			12	-	(00,000,011)	and the second



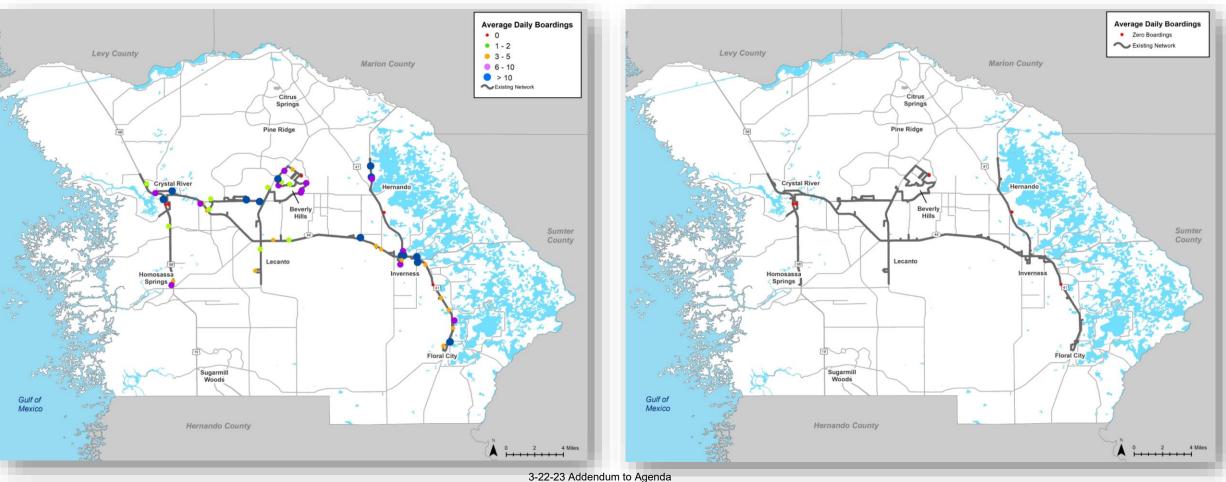


- Minimize impacts to existing ridership
- Increase system operational efficiencies
- Preserve route coverage, but realign routes where they are negatively impacting:
 - Travel Times
 - Speed and Reliability
 - On-Time Performance
 - Connections
- Reduce redundancy in routes to better utilize resources
- Streamline routes by removing excessive network overlap and potential to utilize on-street bus stops in suitable areas
- Implement Mobility-on-Demand (MOD) solutions in suitable areas

Citrus County Transit Network



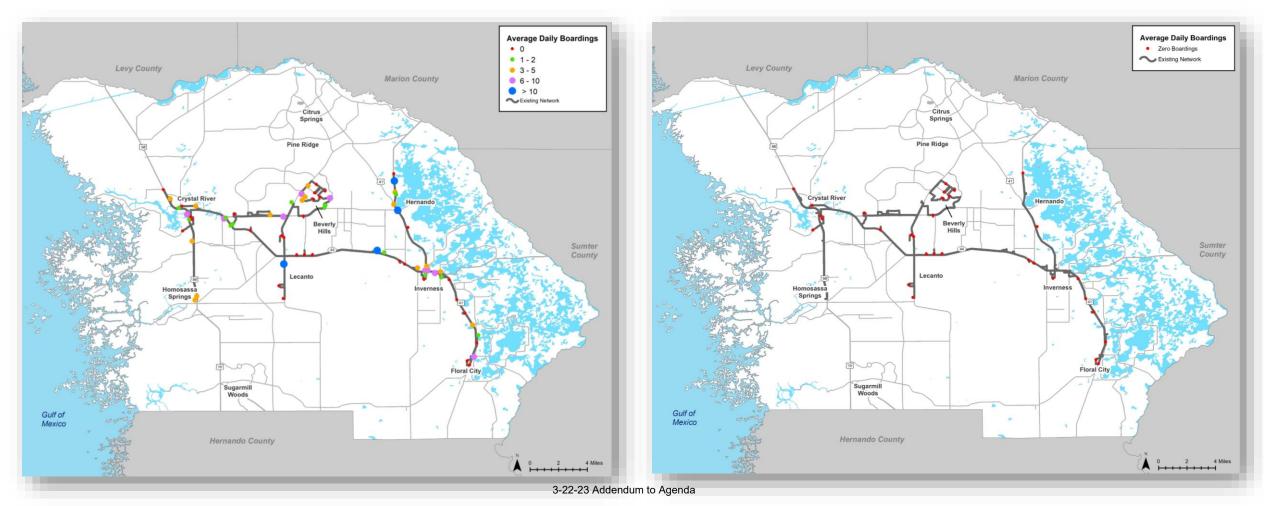
Average Weekday Daily Boardings





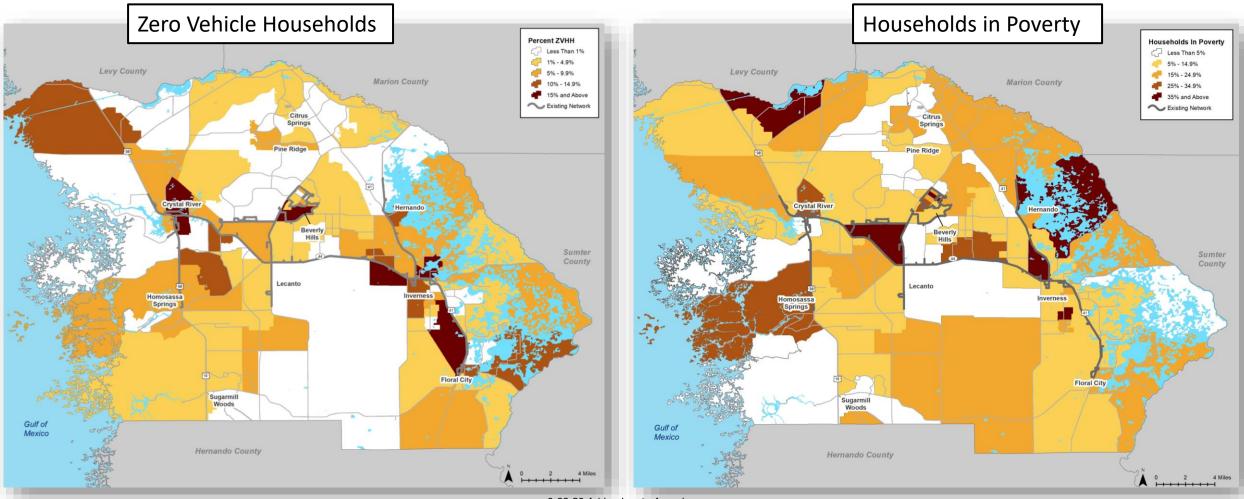
Average Weekday Daily Boardings





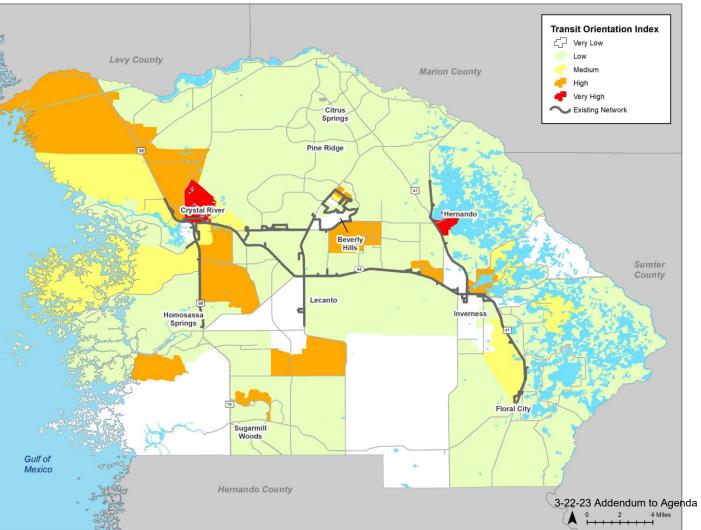
Latent Demand – (2020 ACS 5-Year)





3-22-23 Addendum to Agenda

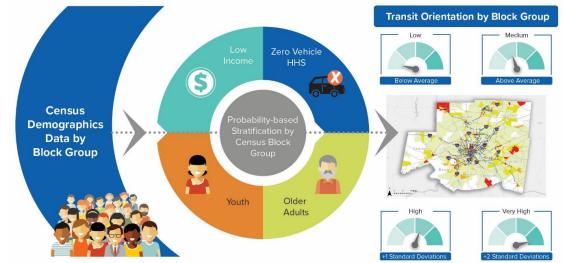
Transit Orientation Index – (ACS 2020 5-year)



METROPOLITAN PLANNING ORGANIZATION HERNANDO/CITRUS

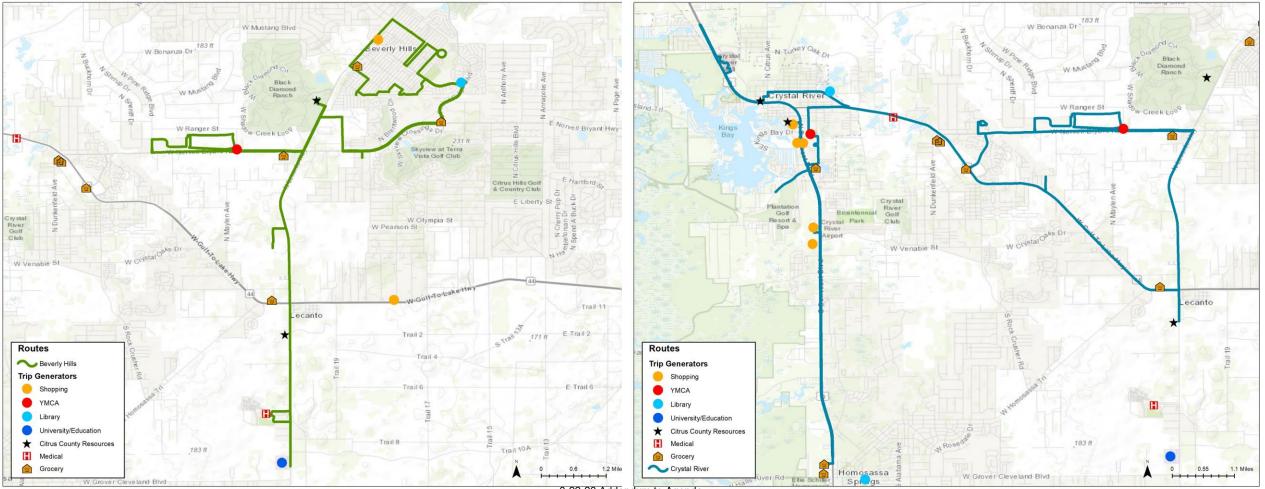
Analysis includes the following data components:

- Ages 15-24
- Ages 65 and above
- Zero vehicle households
- Low-income households



Existing Beverly Hills and Crystal River Routes

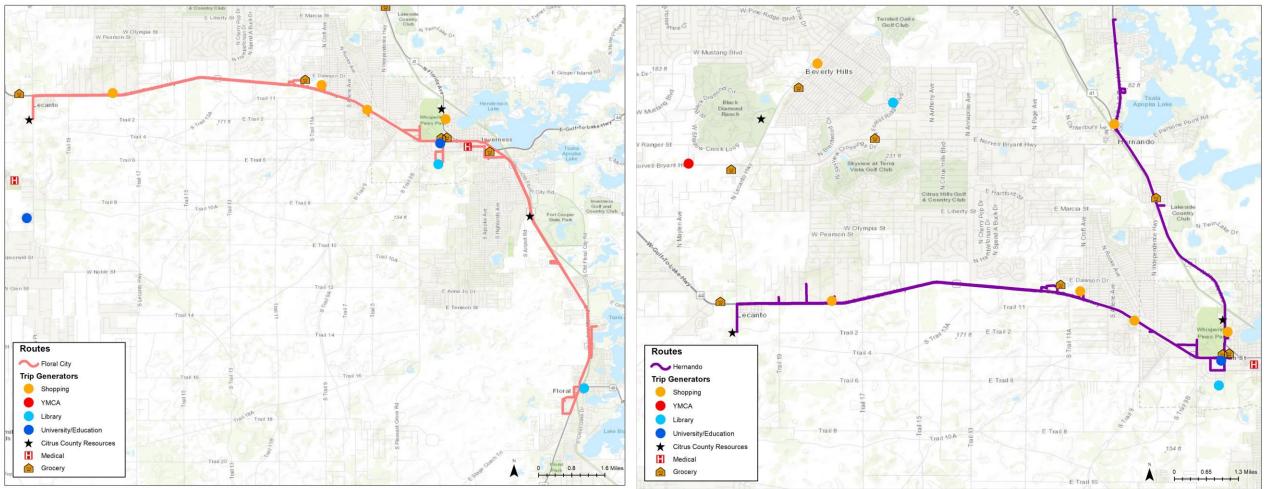




3-22-23 Addendum to Agenda

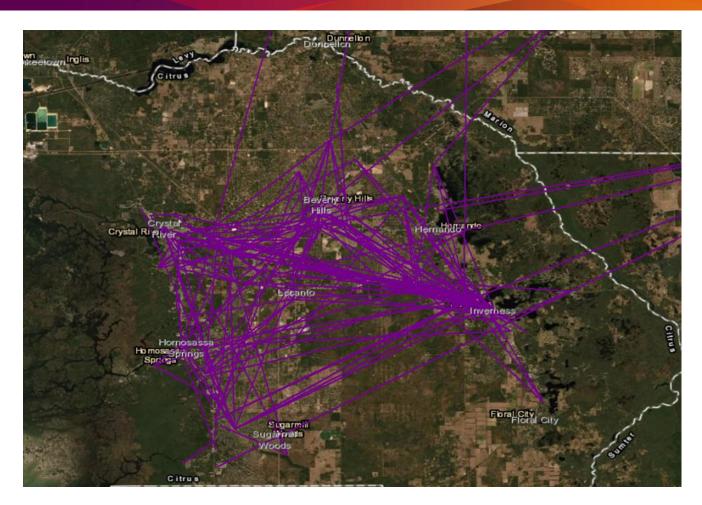
Existing Floral City and Hernando Routes

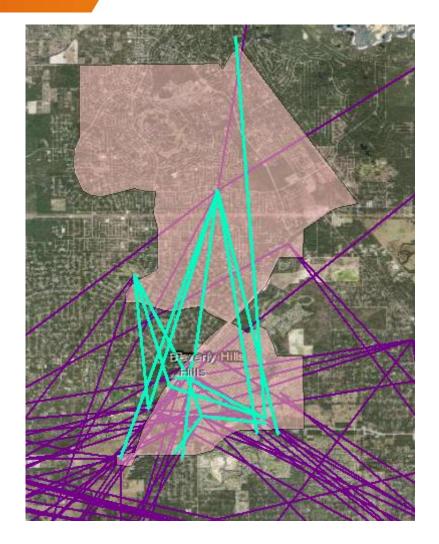




MOD Origin and Destination Analysis Jan 4th – Feb 24th, 2022





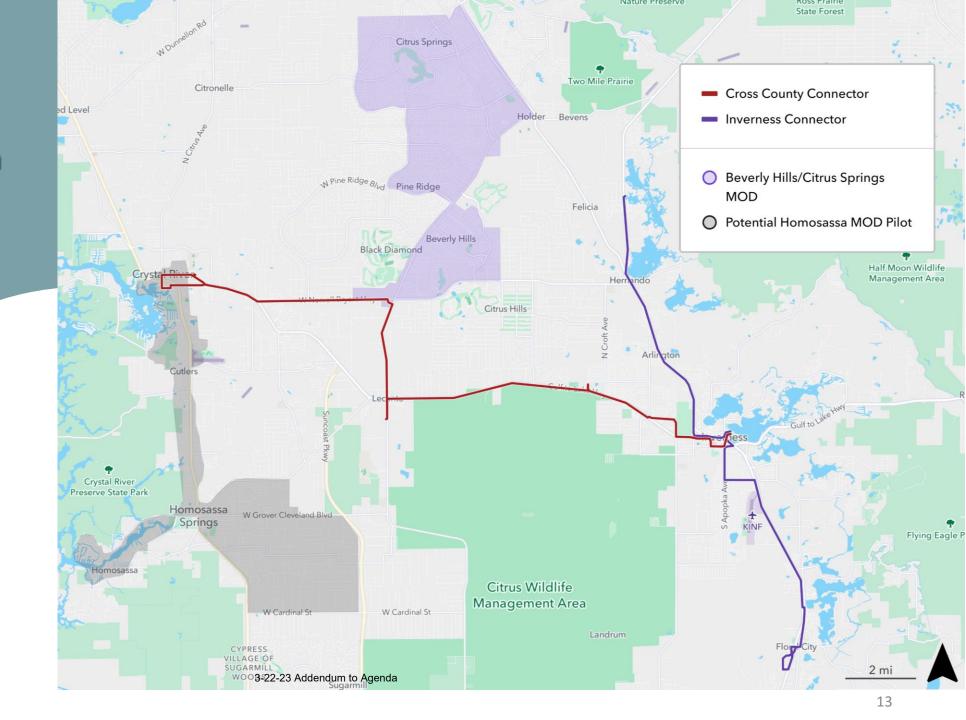


COA Network Recommendation



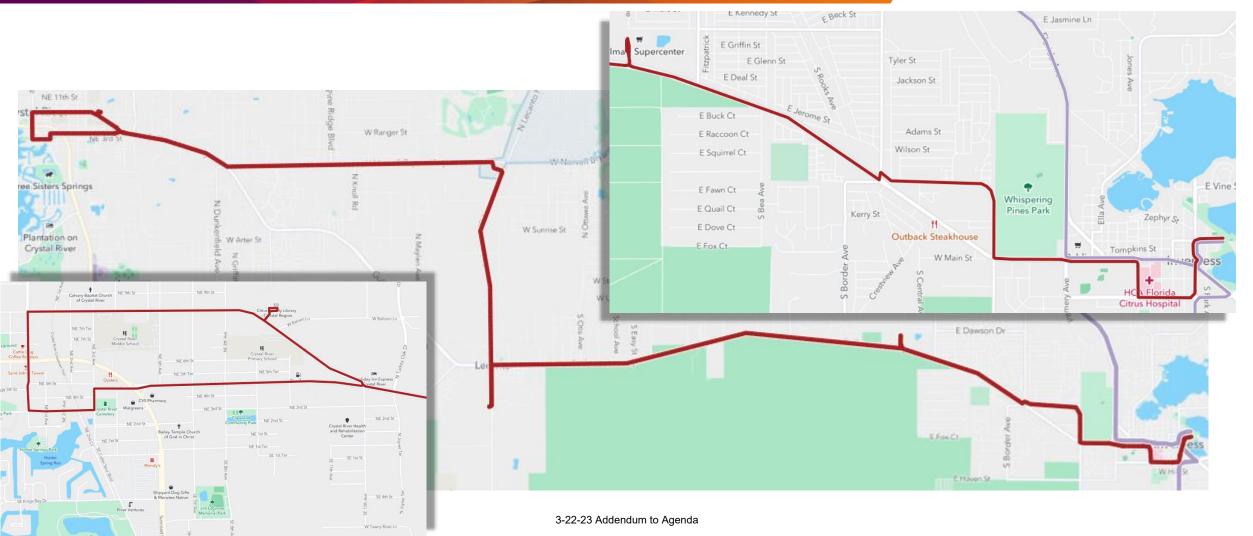
- Streamline cross county connections on US 44
- Streamline north-south connections along US 41
- Mobility-on-Demand (MOD) service in Beverly Hills and Homosassa to replace fixed route service
- Expand service to Citrus Springs
- Remove route redundancy
- Introduce bidirectional service to areas with highest ridership

COA Network Recommendation



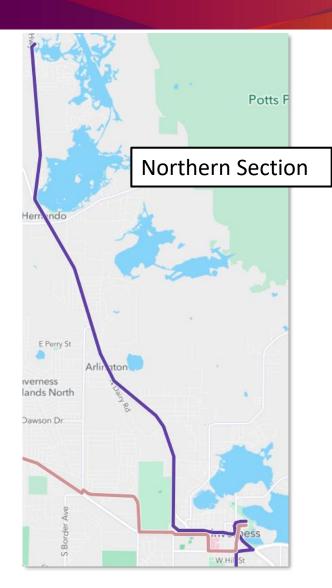
Cross County Connector Route

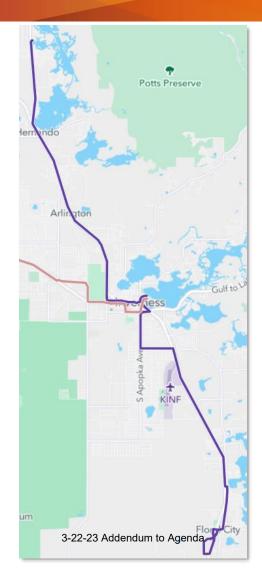


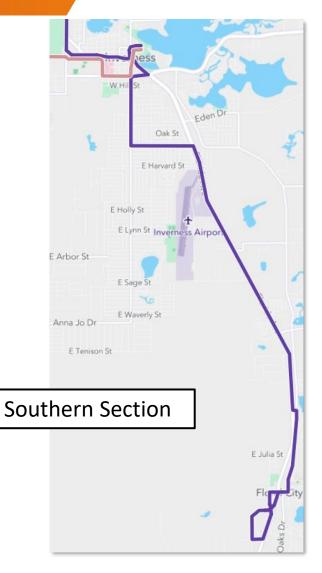


Inverness / Floral City Route

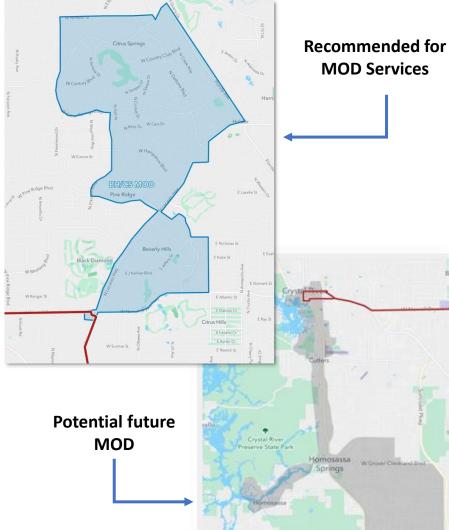








Citrus Springs / Beverly Hills Mobility-on-Demand (MOD)



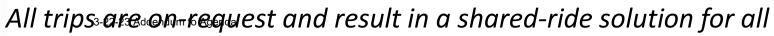
Evaluated

- Flex route serves fixed stops and rides on-request
- First/last mile connector
- Anchored point-to-point

Recommended

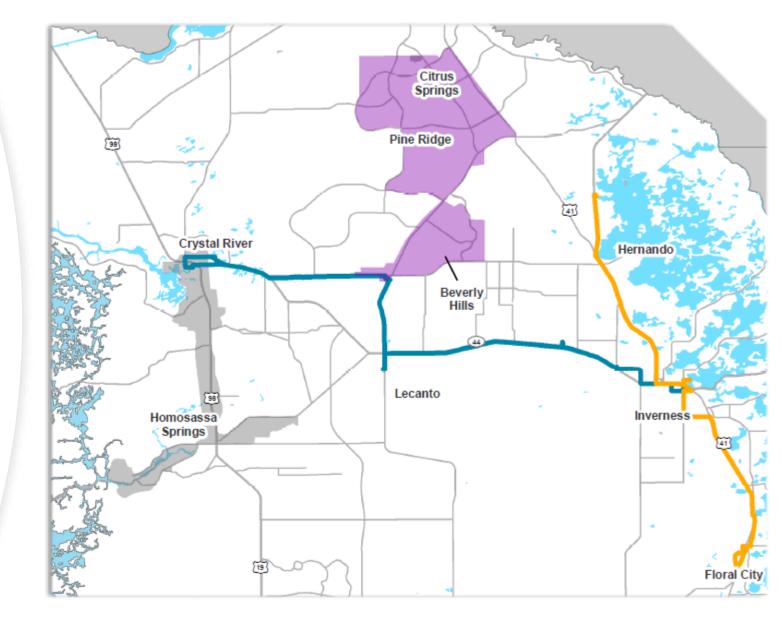
 Point-to-point shared-ride service in a zone, connects to mobility hub(s)



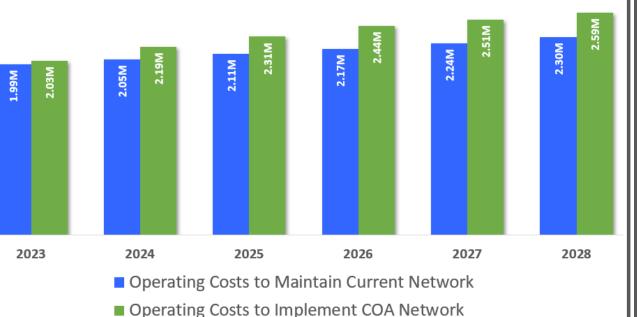


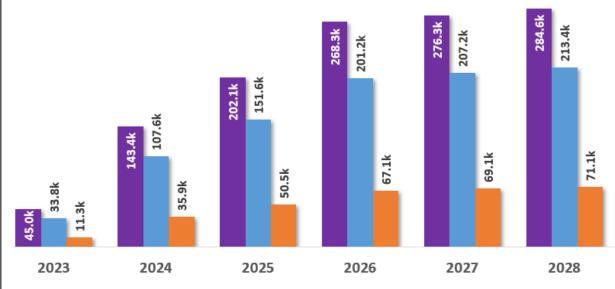
Benefits:

- Streamlined bidirectional routes
- Reduces the number of transfers
- Retains 4 vehicles
- Improves headways from 90-minutes to 60-minutes all day long with no breaks
- Expands coverage to major trip generators
- Introduces two MOD options
- Extends weekday span from 6:00 AM 5:20 PM to 6:00 AM to 6:30 PM
- Added Saturday Service 9:00 AM 3:00 PM



COA Financial Assumptions



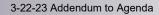


Total Additional funds needed to Implement COA Network

Additional State/Federal funds 75%

Additional Local Contribution 25%

Questions/Comments



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CITRUS COUNTY TRAFFIC DIVERSION

PROJECT UPDATE

APRIL 6, 2023, MPO BOARD MEETING

Introduction

- Study Purpose
- Technical Evaluation
- Key Findings & Recommendations

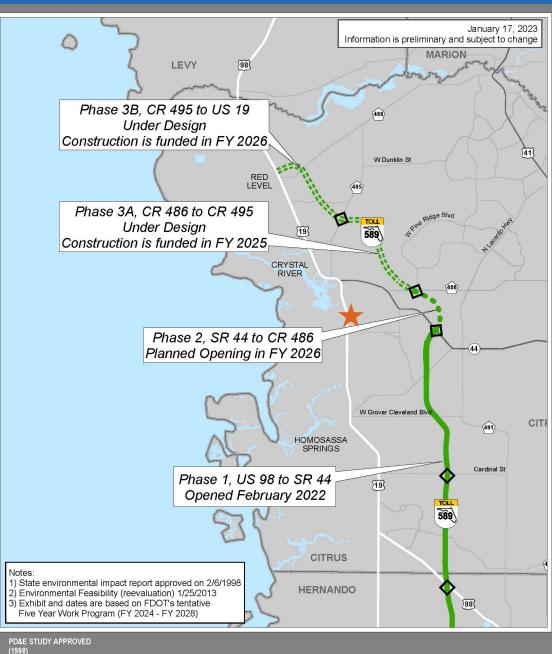


Study Corridors



SUNCOAST PARKWAY 2 (SR 589) (Enterprise System Facility)





Scenario Overview

Baseline: 2015 Validation Model

<u>Scenarios</u>

A: 2045 Suncoast Parkway Terminus at CR 486

B: 2045 Suncoast Parkway Terminus at CR 486 + Improvements

- At US 19 (Adding dual SB to EB left turn lanes)
- At Citrus Ave (Left Turn and Right Turn lanes on each approach)
- At SR 44 (WB to NB Right Turn Lane and Dual SB to EB Left Turn Lanes)

C: 2045 Suncoast Parkway Terminus at US 19 (Red Level)

CR 491 from Pine Ridge Blvd. to SR 200

LECOHUY CONTRACTOR

2015:	7,059 (LOS B)
Scenario A:	14,941 (LOS F)
Scenario B:	14,982 (LOS F)
Scenario C:	14,961 (LOS F)

Exceeds accepted LOS in 2045

Scenario A

41

- ~5,070 trips from Suncoast Pkwy
- 45% splits NB on US-41

Scenario C

- < 100 trips from Suncoast Pkwy
- Most continue to SR 200

2015: Adj. Validation Model

Scenario A: Existing Conditions + Suncoast Parkway Terminus at CR 486 Scenario B: Existing Conditions + Suncoast Parkway Terminus at CR 486 + Upgraded Turkey Oaks Drive (Geometric Operational Improvements) Scenario C: Existing Conditions + Suncoast Parkway Terminus at US 19 (Red Level)

200

 2015:
 14,342 (LOS B)

 Scenario A:
 25,094 (LOS F)

 Scenario B:
 25,111 (LOS F)

 Scenario C:
 24,929 (LOS F)

Pine Ridge Blvd. from CR 486 to CR 491

PINE RIDGE BLVD

4,754 (LOS B)

NORVELL BRYANT HWY

Scenario A: 7,691 (LOS B)

Scenario B: 7,710 (LOS B) Scenario C: 7,730 (LOS B)

2015:

2015:	1,868(LOS B)
Scenario A:	2,740 (LOS B)
Scenario B:	2,755 (LOS B)
Scenario C:	2,747 (LOS B)

Reserve capacity: ~6,800 trips

Scenario A

- ~1,000 trips from Suncoast Pkwy
- ~50% split to Mustang

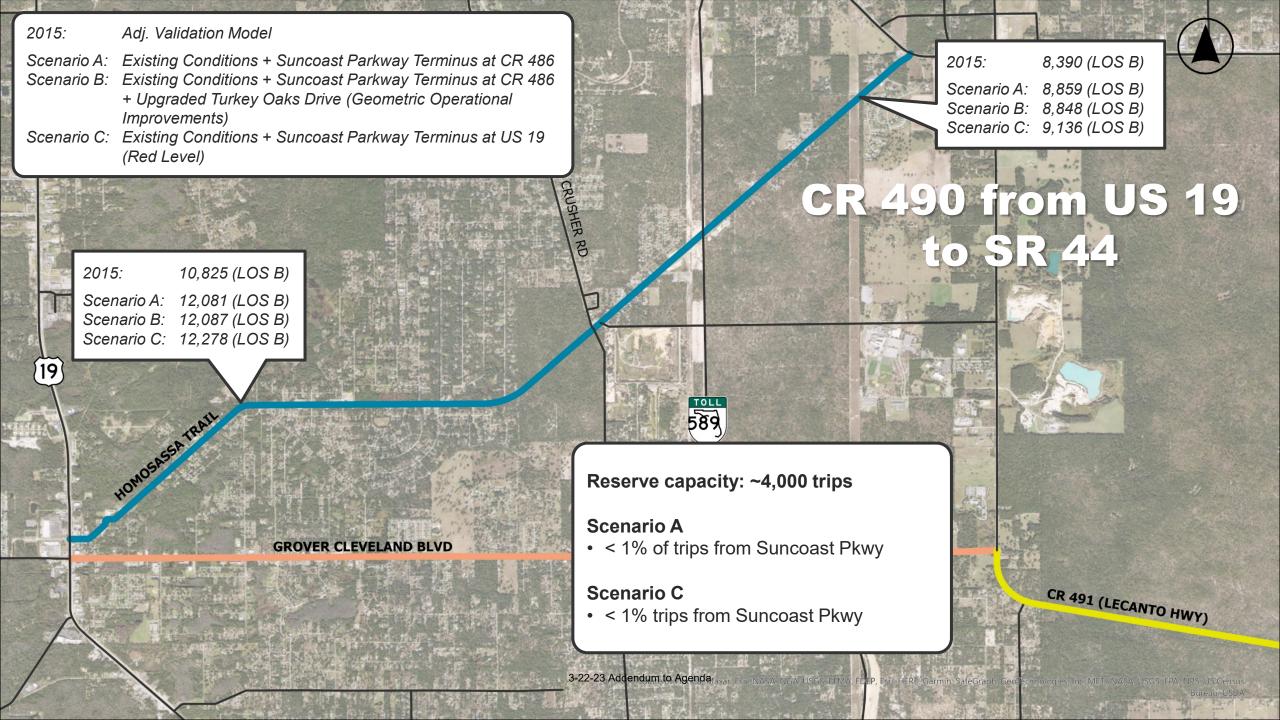
Scenario C

- ~200 trips from Suncoast Pkwy
- Most continue to SR 200

2015: Adj. Validation Model

(Red Level)

Scenario A: Existing Conditions + Suncoast Parkway Terminus at CR 486 Scenario B: Existing Conditions + Suncoast Parkway Terminus at CR 486 + Upgraded Turkey Oaks Drive (Geometric Operational Improvements) Scenario C: Existing Conditions + Suncoast Parkway Terminus at US 19



 2015: Adj. Validation Model
 Scenario A: Existing Conditions + Suncoast Parkway Terminus at CR 486
 Scenario B: Existing Conditions + Suncoast Parkway Terminus at CR 486
 + Upgraded Turkey Oaks Drive (Geometric Operational Improvements)
 Scenario C: Existing Conditions + Suncoast Parkway Terminus at US 19

GROVER CLEVELAND BLV

Reserve capacity: 9,700 – 11,700 trips

Scenario A

CRUSHER

RD

< 1% of trips from Suncoast Pkwy

Scenario C

589

Grover Cleveland Blvd.

from US3-22-23 Addendum to Agenda, CR A 49

• < 1% trips from Suncoast Pkwy

 2015:
 6,140 (LOS B)

 Scenario A:
 3,388 (LOS B)

 Scenario B:
 2,937 (LOS B)

 Scenario C:
 3,408 (LOS B)

CR 491 (LECANTO HWY)

 2015:
 4,156 (LOS B)

 Scenario A:
 3,075 (LOS B)

 Scenario B:
 3,075 (LOS B)

 Scenario C:
 3,331 (LOS B)

HOMOSASSA TRAIL

(Red Level)

19

2015: Adj. Validation Model

Scenario A: Existing Conditions + Suncoast Parkway Terminus at CR 486 Scenario B: Existing Conditions + Suncoast Parkway Terminus at CR 486 + Upgraded Turkey Oaks Drive (Geometric Operational Improvements)

Scenario C: Existing Conditions + Suncoast Parkway Terminus at US 19 (Red Level)

> West of Suncoast Pkwy Reserve capacity: ~8,400 trips

Scenario A

• < 1% of trips from Suncoast Pkwy

Scenario C

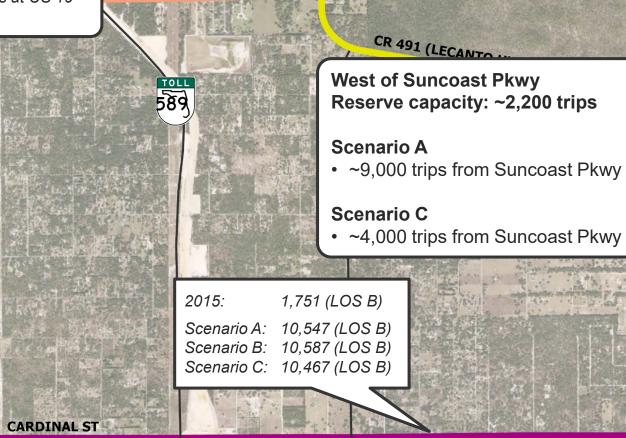
• < 1% trips from Suncoast Pkwy

 2015:
 7,693 (LOS B)

 Scenario A:
 7,478 (LOS B)

 Scenario B:
 7,535 (LOS B)

 Scenario C:
 7,522 (LOS B)



Cardinal St. from US 19 to G-22-23 Addendum to Agenda, aver

NASA, NGA, USGS, FEMA, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US C

2015: Adj. Validation Model

Scenario A: Existing Conditions + Suncoast Parkway Terminus at CR 486 Scenario B: Existing Conditions + Suncoast Parkway Terminus at CR 486 + Upgraded Turkey Oaks Drive (Geometric Operational Improvements)

Scenario C: Existing Conditions + Suncoast Parkway Terminus at US 19 (Red Level)

2015:	9,681(LOS B)
Scenario A: Scenario B: Scenario C:	21,134 (LOS F) 21,169 (LOS F) 21,103 (LOS F)



CR 491 from Grover Cleveland Blvd to Cardinal St.

CR 491 (LECANTO HWY)

Exceeds accepted LOS in 2045

Scenario A

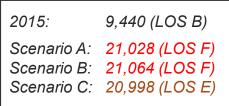
~7,800 trips from Suncoast Pkwy

Scenario C

• ~3,000 trips from Suncoast Pkwy

CARDINAL ST

10LL 589



3-22-23 Addendure to Agenda laxar, Esri, NASA, NGA, USGS, FEMA, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, EPA, NPS, U

Recommendations

- Continue to seek funding for SR 44 and Turkey Oak Drive Intersection Improvements
- Seek additional corridor funding and improvements for CR 491 and SR 200
- 2050 Long-Range Transportation Plan
 - Coordinate with FDOT on Forecast External Station Volumes on US 19
 - Update Forecast Population and Employment to address Suncoast Parkway
 - Update Assessment of Suncoast Parkway Impacts

Questions and Comments



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