# ST. LUCIE LOCAL COORDINATING BOARD FOR THE TRANSPORTATION DISADVANTAGED (LCB)

# **Regular Meeting**

Wednesday, November 16, 2022 2:00 pm

# Public Participation/Accessibility

**Participation in Person:** Public comments may be provided in person at the meeting. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact the St. Lucie TPO at 772-462-1593 at least five days prior to the meeting. Persons who are hearing or speech impaired may use the Florida Relay System by dialing 711.

**Participation by Webconference:** Using a computer or smartphone, register at <u>https://attendee.gotowebinar.com/register/6445393663508277264</u>. After the registration is completed, a confirmation will be emailed containing instructions for joining the webconference. Public comments may be provided through the webconference chatbox during the meeting.

Written and Telephone Comments: Comment by email to <u>TPOAdmin@stlucieco.org</u>; by regular mail to the St. Lucie TPO, 466 SW Port St. Lucie Boulevard, Suite 111, Port St. Lucie, Florida 34953; or call 772-462-1593 until 1:30 pm on November 16, 2022.

#### AGENDA

- 1. Call to Order
- 2. Pledge of Allegiance
- 3. Roll Call/Self-Introductions
- 4. Comments from the Public
- 5. Approval of Agenda
- 6. Approval of Meeting Summary
  - August 17, 2022 Regular Meeting

#### 7. <u>Action Items</u>

**7a. Election of Vice Chairperson:** The Vice Chairperson for 2023 will be elected.

Action: Nominate candidates and elect a Vice Chairperson.

**7b. 2023 Meeting Schedule:** The dates and times of LCB meetings for 2023 will be determined.

Action: Approve the 2023 Meeting Schedule, approve with conditions, or do not approve.

**7c. 2022 Annual Operating Report (AOR):** The results of the 2022 Annual Operating Report (AOR) which summarizes trip-related statistics for the coordinated system will be reviewed.

Action: Approve the 2022 AOR, approve with conditions, or do not approve.

#### 8. <u>Discussion Items</u>

8a. Advantage Ride Program Report: Staff will present statistics on Advantage Ride, a program to increase transportation options for persons with intellectual or developmental disabilities

Action: Discuss and provide comments to Staff.

**8b.** Electric Vehicle Charging Station Plan Update: Review of a plan to identify the need for electric vehicle super-charging stations at various locations in the TPO area.

Action: Discuss and provide comments to Staff.

8c. Sustainable Transportation Plan Scope of Services: Review of a scope of services for consultant assistance to develop a Plan to implement an electric vehicle charging network along 1-95.

Action: Discuss and provide comments to Staff.

#### 9. Recommendations/Comments by Members

- 10. Staff Comments
- 11. Comments from the Public

**12. Next Meeting:** The next LCB meeting is scheduled for February 15, 2023, subject to approval of the 2023 meeting schedule.

#### 13. Adjourn

#### NOTICES

The St. Lucie TPO satisfies the requirements of various nondiscrimination laws and regulations including Title VI of the Civil Rights Act of 1964. Public participation is welcome without regard to race, color, national origin, age, sex, religion, disability, income, or family status. Persons wishing to express their concerns about nondiscrimination should contact Marceia Lathou, Title VI/ADA Coordinator, St. Lucie TPO, 772-462-1593 or <u>lathoum@stlucieco.org</u>.

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Items not included on the agenda may also be heard in consideration of the best interests of the public's health, safety, welfare, and as necessary to protect every person's right of access. If any person decides to appeal any decision made by the St. Lucie TPO Advisory Committees with respect to any matter considered at a meeting, that person shall need a record of the proceedings, and for such a purpose, that person may need to ensure that a verbatim record of the proceedings is made which includes the testimony and evidence upon which the appeal is to be based.

Kreyol Ayisyen: Si ou ta renmen resevwa enfòmasyon sa a nan lang Kreyòl Aysiyen, tanpri rele nimewo 772-462-1593.

Español: Si usted desea recibir esta información en español, por favor llame al 772-462-1593.

## ST. LUCIE LOCAL COORDINATING BOARD FOR THE TRANSPORTATION DISADVANTAGED (LCB)

# **REGULAR MEETING**

Date: Wednesday, August 17, 2022

**Time:** 2:00 pm

Location: St. Lucie TPO Coco Vista Centre 466 SW Port St. Lucie Boulevard, Suite 111 Port St. Lucie, Florida

# MEETING SUMMARY

#### 1. Call to Order

Chairwoman Townsend called the meeting to order at 2:00 pm.

# 2. Pledge of Allegiance

Chairwoman Townsend led the Pledge of Allegiance.

#### 3. Roll Call

Self-introductions were made, and a quorum was noted with the following members present:

#### Members Present

Commissioner Cathy Townsend, Chair Carolyn Niemczyk, Vice Chair Noah Brown Robert Dadiomoff Dalia Dillon Robert Driscoll

#### **Representing**

Elected Official, TPO-appointed Elderly Community FDOT District 4 Veterans Community Florida Dept. of Elder Affairs Local Private For-Profit Transportation Industry Children at Risk Debbie Hawley Stacy Malinowski Nelson Merchan-Cely Stefanie Myers Anastasia Saint-Jean

Milory Senat

#### **Others Present**

Kyle Bowman Peter Buchwald Yi Ding Marceia Lathou Rachel Harrison Lakeshia Brown Adolfo Covelli Melody Hearn Tracy Jahn Anthony Johnson Cathi Petagno Anthony Rodriguez Public Education Community Economically Disadvantaged Citizen Advocate Local Medical Community Florida Division of Vocational Rehabilitation Agency for Persons with Disabilities

#### **Representing**

St. Lucie TPO St. Lucie TPO St. Lucie TPO St. Lucie TPO Recording Specialist MV Transportation St. Lucie County Family Care Council St. Lucie County MV Transportation St. Lucie County MV Transportation

4. Comments from the Public – Ms. Hearn introduced herself as a Family Care Council regional office Governor-appointee, a Port St. Lucie resident, and a parent. She noted that October was National Disability Employment Awareness Month (NDEAM) and commended the TPO, the St. Lucie Board of County Commissioners, the LCB, and the transit agency for supporting transportation for persons living with multiple disabilities.

In response to Mr. Buchwald's request, Ms. Hearn indicated that she would send the promotional materials for NDEAM to TPO staff so they could be posted on the TPO's social media accounts. Ms. Hearn further noted that her organization was celebrating more than 30 years since the passage of the Americans with Disabilities Act.

#### 5. Approval of Agenda

- \* **MOTION** by Ms. Myers to approve the agenda.
- \*\* SECONDED by Mr. Driscoll

Carried UNANIMOUSLY

#### 6. Approval of Meeting Summary

- May 4, 2022 Regular Meeting
- \* **MOTION** by Ms. Myers to approve the Meeting Summary.
- **\*\* SECONDED** by Mr. Dadiomoff

Carried UNANIMOUSLY

#### 7. <u>Action Items</u>

**7a. By-Laws Update:** A review of the annual update of the By-Laws, which provide a framework for the operation of the LCB.

Ms. Lathou described how the By-Laws govern the operation of the LCB. She indicated that the By-Laws had been reviewed by TPO staff and that no changes were being recommended for the current update.

- \* **MOTION** by Ms. Hawley to approve the By-Laws.
- **SECONDED** by Ms. Dillon
- \*\* The motion was approved by all members except Mr. Brown, who abstained.
  - **7b. Grievance Procedures Update:** A review of the annual update of the Grievance Procedures, which are used in dispute resolutions regarding the provision of transportation disadvantaged services, and consideration of appointments to the Grievance Committee.

Ms. Lathou described the Grievance Procedures as consisting of a twostep process. She indicated that no changes to the Procedures were presently being recommended and then noted the current membership of the Grievance Committee.

Vice Chairwoman Niemczyk inquired about the possibility of reappointing the previous year's Grievance Committee members. Ms. Lathou explained that the LCB could appoint the same members if they were willing to serve again.

In answer to Chairwoman Townsend's question, Mr. Covelli indicated that the County expected to receive in the coming weeks a status update regarding the construction grant for the Transit Operations Center.

#### DRAFT

- \* **MOTION** by Ms. Senat to approve the Grievance Procedures and reappoint Vice Chairwoman Niemczyk, Stacy Malinowski, and Debbie Hawley as members of the Grievance Committee, with Mr. Sanders acting as Ms. Hawley's alternate.
- \*\* SECONDED by Mr. Dwyer
- \*\* The motion was approved by all members except Mr. Brown, who abstained.
  - **7c. Coordination Agreements:** A presentation by the Community Transportation Coordinator (CTC) of coordination agreements with transportation providers.

Ms. Petagno explained that the LCB annually approves Community Transportation Coordinator (CTC) agreements for organizations providing transportation trips within the County. She indicated that the County attorney was still working on the language of the CTC agreements and noted that eight contractors had been approved for the current year.

Chairwoman Townsend commented that she had recently invited Ms. Petagno to discuss the topic of transit and public transportation on the *Inside St. Lucie* talk show. She encouraged the members to watch the show and commended the rebranding of the Area Regional Transit (ART) service, noting the positive feedback she had received from members of the community. Ms. Petagno explained the significance of the new ART color scheme, and Mr. Buchwald recounted the history of the rebranding as well as the LCB's role in those efforts.

Upon Chairwoman Townsend's invitation, Ms. Saint-Jean introduced herself as a new member of the LCB, noting that many of her Vocational Rehabilitation clients use public transit.

- \* **MOTION** by Mr. Dadiomoff to approve the coordination agreements.
- **\*\* SECONDED** by Ms. Dillon
- \*\* The motion was approved by all members except Mr. Brown, who abstained.

#### 8. <u>Discussion Items</u>

8a. Transit Development Plan (TDP) Annual Progress Report: A review of the status of public transportation improvements outlined in the Transit Development Plan Major Update adopted in 2019.

Mr. Covelli described the Transit Development Plan and its key elements before outlining the goals and objectives for the transit service. He provided several updates regarding infrastructure improvements as well as plans for service improvements, and then invited Ms. Jahn to continue. Ms. Jahn summarized the accomplishments made during the previous fiscal year, presented several examples of the new branding materials, and concluded with upcoming initiatives.

In answer to Chairwoman Townsend's question regarding the expansion of the micro-mobility service to the White City area, Mr. Covelli explained that it was not possible with the present grant funding because it was not contiguous with an existing service area.

Referencing the recent increase in commercial activity along the Midway Road, Kings Highway, and St. Lucie Boulevard corridors, Vice Chairwoman Niemczyk inquired as to how new transit services were selected for implementation. Mr. Covelli described the years-long process by which new services were added and prioritized. Mr. Buchwald further explained the process behind the TDP Major Update, noting that amendments could be made in response to new needs. Chairwoman Townsend indicated that bus service had already been expanded to St. Lucie Boulevard.

Responding to Vice Chairwoman Niemczyk's comment regarding service near Becker Road, Ms. Jahn explained the micro-transit service operating in the vicinity. Ms. Petagno then described how a rider might travel from Becker Road to St. Lucie West using various St. Lucie County transit services. Chairwoman Townsend noted that it was possible to travel to the Florida Keys using only public transit, indicating that Ms. Petagno had previously mapped out the route.

Mr. Buchwald remarked on the challenge of balancing existing needs with future needs.

Ms. Petagno explained that St. Lucie County Transit had provided its route and schedule information to Google, so that a rider might search for directions using the bus. She also announced two upcoming travel training sessions to be held at the Havert L. Fenn Center.

#### DRAFT

In answer to Vice Chairwoman Niemczyk's question, Mr. Buchwald indicated that the discussion regarding a potential service expansion to the Kings Highway corridor had been noted for later consideration. Chairwoman Townsend commented that route adjustments had been made in the past to accommodate concerns expressed by LCB members or the general public. Vice Chairwoman Niemczyk cited the bus stop in front of the school district administration building as an example of such an adjustment.

Mr. Driscoll remarked on the significant length of time currently required for the delivery of new buses.

Ms. Saint-Jean asked how micro-transit rides were summoned, and Ms. Petagno indicated that riders could use the app or call on the phone.

In response to Mr. Brown's questions, Mr. Covelli explained that the TDP Annual Progress Report would be submitted in October, while the expansion of the micro-transit service would occur in March or April of 2023. Mr. Brown then provided an update regarding several South Florida Commuter Services initiatives in St. Lucie County.

**8b.** Electric Vehicle Charging Station Plan Update: A review of the scope of a plan to identify the need for electric vehicle super-charging stations in the TPO area.

Ms. Lathou began with an overview of the current state of electric vehicle (EV) manufacturing, consumption, and charging. She described the elements of the original EV Charging Station Plan, noting how it supported various TPO plans and programs, and then explained how the provisions of the National Electric Vehicle Infrastructure (NEVI) Program would be implemented in Florida. Ms. Lathou displayed a map of the Level 3 public charging stations located in St. Lucie County, presented the screening criteria for the Charging Station Plan Update, and concluded with several examples of charging facilities.

Responding to Vice Chairwoman Niemczyk's questions, Ms. Lathou indicated that the Gatlin Boulevard Jobs Express Terminal featured six Level 3 EV charging ports. Ms. Lathou then clarified that the NEVI funding was targeted toward the establishment of a national network of charging stations along the Interstate Highway System, with funding potentially available later for the construction of charging facilities along other public roadways. Mr. Buchwald subsequently elaborated that the Federal and State goal for the network was a charging station every 50 miles, and because St. Lucie County already had two network-compliant

charging stations, it would have to wait for future funding to fill in local charging gaps.

Chairwoman Townsend noted that the TPO and St. Lucie Fire District had repeatedly been acknowledged as leaders at statewide conferences she had attended. She also commended Ms. Lathou on her presentation.

Vice Chairwoman Niemczyk inquired as to how Amazon and FedEx would charge their electric fleets. Ms. Lathou indicated that both outfits would likely charge their vehicles overnight using Level 2 charging ports. Chairwoman Townsend affirmed that Amazon had arranged its own charging facilities. Mr. Buchwald noted Amazon's recent investment in electric vehicle manufacturer Rivian.

Mr. Dadiomoff commented on the reduction in gas tax revenues caused by an increase in EV ownership. Mr. Buchwald explained that any actions to mitigate the loss of such revenues had to be undertaken at the State level, while Chairwoman Townsend noted that discussions on the matter were in progress.

In response to Chairwoman Townsend's question, Ms. Hawley indicated that the St. Lucie Public Schools administration building did not yet have EV charging facilities.

Mr. Driscoll remarked on the infrequency of EV charging facilities along the route from southern Florida to Alabama, asking about the timeline for the NEVI implementation. Mr. Buchwald indicated that the network was expected to be implemented within one or two years.

Noting the challenge of working out who would pay for the electricity for EV charging stations, Mr. Buchwald explained that the coming Update would consider various models of public/private partnerships.

Mr. Driscoll reported that he had seen a number of local high-end restaurants offering EV charging as an amenity to diners. Ms. Senat remarked that several parking garages in South Florida also had EV charging facilities, subsequently describing her experiences charging a family-owned vehicle. Chairwoman Townsend likewise noted that her acquaintances with EVs preferred to use them for local driving than for long-distance trips.

**9. Recommendations/Comments by Members –** Mr. Brown described the South Florida Commuter Services (SFCS) Guaranteed Ride Home program, which provides registered users of transit a guaranteed ride home in cases of emergency.

Ms. Lathou reported that SFCS would be conducting a user survey for the Jobs Express Terminal park-and-ride lot, noting that September would mark the first anniversary of the facility's grand opening. She explained that current users tended to utilize the Hayworth Avenue end of the parking lot, which caused the facility to appear sparsely used from the perspective of Gatlin Boulevard. She further commented that the future service to West Palm Beach was being delayed by supply chain issues preventing the timely delivery of new buses.

**10. Staff Comments –** Mr. Buchwald wished Ms. Hawley luck in the coming election and thanked the members for their participation.

Chairwoman Townsend again welcomed Ms. Saint-Jean and indicated that she could contact herself or Ms. Lathou with any questions.

11. Comments from the Public – Ms. Hearn announced that the Family Care Council, Stand Up for Independence, and APD were jointly hosting a provider forum at the Port St. Lucie Community Center. She indicated that organizations interested in hosting a table could contact her directly. In response to Chairwoman Townsend's question, Ms. Hearn affirmed that her son was raising funds for Care Net Treasure Coast, an organization that had assisted with his birth and adoption. Chairwoman Townsend commended Ms. Hearn's son for his charitable work.

Mr. Dwyer announced his upcoming retirement after 26 years on the LCB and indicated that his replacement would be attending the next meeting. The members expressed their appreciation of his many years of service and wished him a happy retirement.

- **12.** Next Meeting: The next St. Lucie LCB meeting is a regular meeting scheduled for 2:00 pm on November 16, 2022.
- **13.** Adjourn The meeting was adjourned at 3:05 pm.

Respectfully submitted:

Approved by:

Rachel Harrison Recording Specialist Commissioner Cathy Townsend Chairwoman



#### AGENDA ITEM SUMMARY

- Board/Committee: St. Lucie LCB
- Meeting Date: November 16, 2022
- Item Number: 7a
- Item Title: Election of Vice Chairperson
- Item Origination: Florida Commission for the Transportation Disadvantaged (FCTD)
- **UPWP Reference:** Task 3.8 Transportation Disadvantaged (TD) Program
- **Requested Action:** Nominate candidates and elect a vice chairperson.
- **Staff Recommendation:** Because the election of the Vice Chairperson meets the requirements of the LCB By-Laws and facilitates the conduct of business by the LCB, it is recommended that the LCB nominate candidates and elect a Vice Chairperson.

#### Attachment

• Staff report



#### **MEMORANDUM**

- TO: St. Lucie Local Coordinating Board for the Transportation Disadvantaged (LCB)
- THROUGH: Peter Buchwald Executive Director
- FROM: Marceia Lathou Transit Program Manager
- DATE: November 3, 2022

#### SUBJECT: Election of Vice Chairperson

#### BACKGROUND

The LCB By-Laws require the election of a Vice Chairperson each year. In the event of the Chairperson's absence, the Vice Chairperson shall assume the duties of the Chairperson and conduct the meeting.

#### **ANALYSIS**

The current LCB Vice Chairperson is Ms. Carolyn Niemczyk.

#### RECOMMENDATION

Because the election of the Vice Chairperson meets the requirements of the LCB By-Laws and facilitates the conduct of business by the LCB, it is recommended that the LCB nominate candidates and elect a Vice Chairperson.



#### AGENDA ITEM SUMMARY

- Board/Committee: St. Lucie LCB
- Meeting Date: November 16, 2022
- Item Number: 7b
- Item Title: 2023 Meeting Schedule
- Item Origination: Florida Commission for the Transportation Disadvantaged (FCTD)

#### **UPWP Reference:** Task 3.8 – Transportation Disadvantaged (TD) Program

- **Requested Action:** Approve the 2023 Meeting Schedule, approve with conditions, or do not approve.
- **Staff Recommendation:** Because the draft 2023 Meeting Schedule meets the requirements of Florida law and facilitates the conduct of business by the LCB, it is recommended that the draft 2023 Meeting Schedule be approved.

#### Attachments

- Staff Report
- Draft 2023 Meeting Schedule



#### **MEMORANDUM**

- TO: St. Lucie Local Coordinating Board for the Transportation Disadvantaged (LCB)
- THROUGH: Peter Buchwald Executive Director
- FROM: Marceia Lathou Transit Program Manager
- DATE: November 3, 2022
- SUBJECT: 2023 Meeting Schedule

#### BACKGROUND

As required by Florida law, the LCB meets at least quarterly at accessible locations as required by the Americans with Disabilities Act (ADA).

#### <u>ANALYSIS</u>

LCB meetings generally are held on Wednesdays, once a quarter. Although all LCB meetings are open to the public, the LCB traditionally also schedules an annual public hearing to coincide with the first, regular LCB meeting of the year to comply with Florida statutes. In 2023, the first, regular LCB meeting and annual public hearing are scheduled for Wednesday, February 15, 2023.

#### RECOMMENDATION

Because the draft 2023 Meeting Schedule meets the requirements of Florida law and facilitates the conduct of business by the LCB, it is recommended that the draft 2023 Meeting Schedule be approved.



Type

**Regular Meeting** 

Regular Meeting

**Regular Meeting** 

Regular Meeting

Annual Public Hearing/

# DRAFT

# Local Coordinating Board for the Transportation Disadvantaged (LCB) 2023 Meeting Schedule

February 15, 2023

May 3, 2023

August 16, 2023

November 8, 2023

Meeting Notes

LCB meetings generally start at 2:00 p.m. Meetings are subject to change and/or cancellation.

#### Location

In-person meetings generally are held at the St. Lucie TPO, 466 SW Port St. Lucie Boulevard, Suite 111, Port St. Lucie, Florida.

#### NOTICES

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Kreyol Ayisyen: Si ou ta renmen resevwa enfòmasyon sa a nan lang Kreyòl Aysiyen, tanpri rele nimewo (772) 462-1593.

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Florida's coordinated system, it is recommended that the 2022 Annual Operating Report be

#### AGENDA ITEM SUMMARY

**Board/Committee:** St. Lucie LCB Meeting Date: November 16, 2022 Item Number: 7c Item Title: 2022 Annual Operating Report (AOR) Community Transportation Coordinator (CTC) Item Origination: **UPWP Reference:** Task 3.8–Transportation Disadvantaged Program **Requested Action:** Approve the 2022 AOR, approve with conditions, or do not approve. **Staff Recommendation:** the AOR assists Community Because the the Florida Transportation Coordinator and Commission for the Transportation Disadvantaged in monitoring the performance of

approved.

#### Attachments

- TPO Staff Report
- CTC Staff Report



#### **MEMORANDUM**

TO:	St. Lucie Local Coordinating Board for the Transportation Disadvantaged (LCB)
THROUGH:	Peter Buchwald Executive Director
FROM:	Marceia Lathou Transit Program Manager
DATE:	November 3, 2022
SUBJECT:	2022 Annual Operating Report (AOR)

#### BACKGROUND

Each Community Transportation Coordinator (CTC) must submit an Annual Operating Report (AOR) to the Florida Commission for the Transportation Disadvantaged (FCTD). The FCTD uses each CTC's operating data to provide a statewide operational profile of the Florida Coordinated Transportation System and to evaluate performance aspects of the System. The FCTD also uses data collected to substantiate the need to seek additional funds.

#### ANALYSIS

The St. Lucie County Transit Department performs the daily functions of the CTC in St. Lucie County. Transit Department Staff prepares the AOR and submits it to the FCTD for incorporation into the State's reporting system. The AOR is prepared using information provided by the contracted public transportation provider and coordination contractors.

#### RECOMMENDATION

Because the AOR assists the Community Transportation Coordinator and the Florida Commission for the Transportation Disadvantaged in monitoring the performance of Florida's coordinated system, it is recommended that the 2022 Annual Operating Report be approved.



# TRANSIT MEMORANDUM 23-008

TO:	Members of the Local Coordinating Board
THROUGH:	Adolfo Covelli, Transit Director
FROM:	Cathi Petagno, Transit Senior Program Specialist
DATE:	November 16, 2022
SUBJECT:	Florida Commission for the Transportation Disadvantaged (FCTD) 2022 Annual Operating Report (AOR)

#### **Background:**

In St. Lucie County, the Board of County Commissioners is the designated Community Transportation Coordinator (CTC). As such, the Transit Department prepares and submits the Annual Operating Report (AOR) as required by the Florida Commission for the Transportation Disadvantaged (FCTD). The data contained within the report is one of the many factors incorporated into the allocation formula for the Trip and Equipment Grant, which provides funding for transportation-disadvantaged individuals.

Annually, the County compiles a multitude of trip-related data such as the number of passengers, trip purpose, revenues, expenses, etc. all of which is contained in the attached AOR Detailed Summary Report for State Fiscal Year (SFY) 21/22.

The data is generated from several sources including those agencies with current coordination agreements with the county, known as coordinated contractors. Coordinated contractors are contractually obligated to collect and report the information to the county and must maintain accurate records on a daily basis and transmit yearly reports.

#### Analysis:

The figures below are a summary from the AOR, which is currently under review by the FCTD. For SFY 21/22, the St. Lucie CTC submitted the following:

•	Master Contract Service Provider	=	135,574 trips
•	Coordinated Contractors	=	25,204 trips
•	Total trips	=	160,778 trips

#### Adolfo Covelli | Director | Transit Department

437 North 7th Street | Fort Pierce, FL 34950

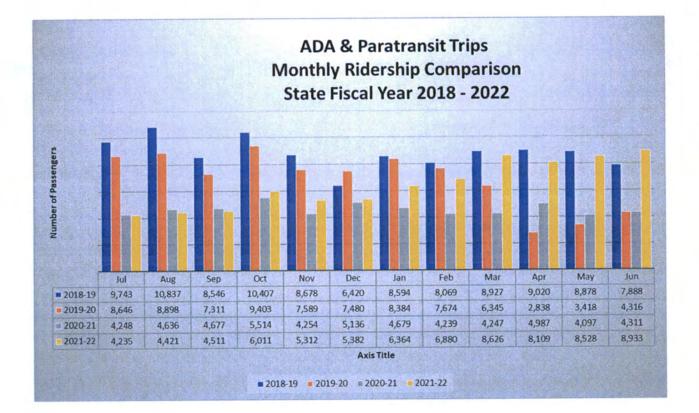
**\$** (772) 462-1798

(772) 462-1428

(772) 462-2094

In SFY 21-22, the county's Transportation Disadvantaged (TD) ridership trends have slight dips and elevations due to the impact of the Covid-19 decline and resurgence. The current trend for ridership is increasing as riders are utilizing the service options offered by Area Regional Transit (ART). St. Lucie County is providing trips in compliance with the Federal Transit Administration (FTA) mandates in place. The trip data above only reflects trips that qualify through the state Transportation Disadvantaged (TD) program.

The St. Lucie County Transit system, which includes the fixed-route/ADA and paratransit has experienced an increase in overall ridership.



#### **STAFF RECOMMENDATION:**

Staff recommends Board approval of the SFY 21-22 Annual Operating Report with the ability to revise figures as requested by the CTD and authorize the Chair to sign all documents as approved by the county attorney.

County:	Saint Lucie			Demograp	hics	Number A	orido Commission for the	
CTC: Contact:	St. Lucie County Board of County Commissioners Adolfo Covelli 437 North 7th Street			Total Cour	ty Population	0	11	-
	Fort Pierce, FL 34950 772-462-1798			Unduplicat	ed Head Count		ransportation	
Email:	covellia@stlucieco.org	1						2022
Trips By	Type of Service	2020	2021	2022	Vehicle Data	2020	2021	1,440,348
Fixed Rou	ute (FR)	0	0	0	Vehicle Miles	721,210	778,697 97	1,440,548
Deviated	FR	0	0	0	Roadcalls	41	12	25
Complem	entary ADA	0	0	0	Accidents	0	139	123
Paratrans		134,349	97,411	135,574	Vehicles	184	139	125
TNC		0	3,907	10,984	Drivers	110	144	115
Taxi		3,301	7,426	14,220				
School Bo	oard (School Bus)	0	0	0				
Volunteer	IS	0	0	0				
TOTAL T	RIPS	137,650	108,744	160,778				
Passen	ger Trips By Trip Pu	irpose			Financial and General D			
Medical		39,584	39,638	76,716	Expenses	\$3,899,934	\$4,284,700	\$4,233,028
Employm	ient	8,370	12,502	11,617	Revenues	\$3,899,929	\$4,290,394	\$4,233,028
Ed/Train/		27,932	24,189	31,285	Commendations	16	45	86
Nutritiona		6,232	1,636	1,671	Complaints	1	3	24
	aining/Other	55,532	30,779	39,489	Passenger No-Shows	3,304	4,484	3,769
TOTAL T		137,650	108,744	160,778	Unmet Trip Requests	5,081	5,762	4,952
Passen	ger Trips By Reven	ue Source			Performance Measures	1		
CTD	gei inpe af inter	33,660	47,174	27,567	Accidents per 100,000 Miles	0	1.54	1.74
AHCA		34,913	200	756	Miles between Roadcalls	17,590	8,028	10,995
APD		697	22,377	19,791	Avg. Trips per Passenger	12.17	13.41	24.83
DOEA		2,950	829	3,625	Cost per Trip	\$28.33	\$39.40	\$26.33
DOE		0	0	0	Cost per Paratransit Trip	\$28.68	\$31.50	\$22.84
Other		65,430	38,164	109,039	Cost per Total Mile	\$5.41	\$5.50	\$2.94
TOTAL 1	TRIPS	137,650	108,744	160,778	Cost per Paratransit Mile	\$5.45	\$3.94	\$2.54
Trips b	y Provider Type							
CTC	Trease offer	0	0	0				
	tation Operator	87,817	72,982	122,555				
	ation Contractor	49,833	35,762	38,223				
TOTAL		137,650	108,744	160,778				

3



# AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie LCB
Meeting Date:	November 16, 2022
Item Number:	8a
Item Title:	Advantage Ride Program Report
Item Origination:	Community Transportation Coordinator (CTC)
UPWP Reference:	Task 3.8–Transportation Disadvantaged Program
Requested Action:	Discuss and provide comments to Staff.
Staff Recommendation:	Because the Advantage Ride Program enhances mobility for persons with intellectual or developmental disabilities and their caregivers, it is recommended that the Program be discussed, and comments be provided to Staff.

## Attachments

- TPO Staff Report
- CTC Staff Report



#### **MEMORANDUM**

SUBJECT:	Advantage Ride Program Report
DATE:	November 3, 2022
FROM:	Marceia Lathou Transit Program Manager
THROUGH:	Peter Buchwald Executive Director
TO:	St. Lucie Local Coordinating Board for the Transportation Disadvantaged (LCB)

#### BACKGROUND

Through the Advantage Ride Program, transportation disadvantaged-eligible riders can travel throughout St. Lucie, Martin, Indian River, or Okeechobee Counties if the trip begins or ends in St. Lucie County. Advantage Ride started as a pilot program funded by a Florida Commission for the Transportation Disadvantaged grant. St. Lucie County received the grant award because of Advantage Ride's focus on filling regional service gaps through innovative on-demand transportation service.

#### <u>ANALYSIS</u>

Staff from the St. Lucie County Transit Department and Senior Resource Association, Inc. will provide a status report on the Advantage Ride Program.

#### RECOMMENDATION

Because the Advantage Ride Program enhances mobility for persons with intellectual or developmental disabilities and their caregivers, it is recommended that the Program be discussed, and comments be provided to Staff.



# TRANSIT MEMORANDUM 23-003

TO:	Members of the Local Coordinating Board	
THROUGH:	Adolfo Covelli, Transit Director 🝥	
FROM:	Tracy Jahn, Fiscal and Grants Supervisor	
DATE:	November 3, 2022	
SUBJECT:	Advantage Ride Program Report	

#### **Background:**

On February 2, 2021, the County entered into an agreement with Senior Resource Association, Inc. (SRA) to provide transportation services for a regional program known as Advantage Ride. The program is designed for the transportation disadvantaged population and is funded in part by the Innovation and Service Development (ISD) Grant Program which is administered by the Florida Commission for the Transportation Disadvantaged (FCTD).

State funding for the Innovation and Service Development Grant Program was eliminated last year with the adoption of Senate Bills 100 and 1126. The county's Transit Division identified other funding sources for the provision of trips under the agreement but negotiated a revised rate schedule with SRA to ensure the continuation of the program with available funding for as long as possible.

During the 2022 legislative session, the state-approved funding to reinstate the FCTD competitive grant program which began July 1, 2022. Through collaboration with the designated Community Transportation Coordinators (CTC's), the Senior Resource Association applied on behalf of St. Lucie and Indian River counties for the competitive, Innovation and Service Development Grant, which would only require a 10% match by St. Lucie County should the grant be awarded.

On August 18<sup>th</sup>, 2022, the grant was awarded with a total project cost of \$1,382,300, requiring a local match of \$138,230. This program which originally started in November of 2020 has provided more than 55,000 trips along the Treasure Coast and recently received the 2022 Innovation of the Year Award at FCTD's annual conference in August of 2022.

#### **Recommendation:**

This item is being presented for discussion. It is recommended that the LCB provide feedback on the Advantage Ride Program, which has increased transportation for persons with intellectual or developmental disabilities.

#### Adolfo Covelli | Director | Transit Department

437 North 7th Street | Fort Pierce, FL 34950



#### AGENDA ITEM SUMMARY

- Board/Committee: St. Lucie LCB
- Meeting Date: November 16, 2022
- Item Number: 8b
- Item Title:Electric Vehicle Charging Station Plan Update
- Item Origination: Unified Planning Work Program (UPWP)

#### UPWP Reference: Task 3.10 – Automated/Connected/Electric/ Shared-Use (ACES) Vehicles Planning

- **Requested Action:** Discuss and provide comments to Staff.
- Staff Recommendation: vehicles Because electric have significant environmental quality benefits and because the enhancement of electric vehicle charging infrastructure supports the increased use of electric vehicles consistent with a variety of local, and federal planning efforts, it state, is recommended that the Electric Vehicle Charging Station Update be discussed, and comments provided to Staff.

#### Attachments

- TPO Staff Report
- Electric Vehicle Charging Station Plan Update



#### MEMORANDUM

TO:	St. Lucie Local Coordinating Board for the Transportation
	Disadvantaged (LCB)

- THROUGH: Peter Buchwald Executive Director
- FROM:Marceia LathouTransit Program Manager
- DATE: November 3, 2022

#### SUBJECT: Electric Vehicle Charging Station Plan Update

#### BACKGROUND

The Electric Vehicle Charging Station Plan Update resulted from the FY 2022/23 – FY 2023/24 Unified Planning Work Program (UPWP) Call for UPWP Projects. The purpose of the Plan is to update the 2021 Electric Vehicle Charging Station Plan with a focus on incorporating Level 3 electric vehicle (EV) supercharging stations throughout the TPO area.

Level 3 charging is the fastest type of charging available. Although EV owners do the majority of their charging at home or at the workplace, public charging stations are needed for the traveling public and for times when home or workplace charging is inconvenient.

#### <u>ANALYSIS</u>

The Electric Vehicle Charging Station Plan Update identified the location of Level 3 public charging stations and assessed the need for additional stations. The Update also identified innovations in EV charging. Level 3 EV charging station gaps were identified in the following areas: north of Orange Avenue, Hutchinson Island, near Port St. Lucie Boulevard, and east of U.S. 1.

The Plan identified the need for additional Level 3 EV charging stations. Because night-time activity enhances personal security, the Plan explored the possibility of co-locating EV stations with extended hours facilities such hospitals, hotel districts, 24-hour gyms or Walmart stores. The attached map depicts existing charging stations and the potential for the build out of additional stations co-located with extended hours facilities and the availability of such a network for Historically Disadvantaged Communities.

The Electric Vehicle Charging Station Plan Update developed the following considerations to support EV ownership:

- Assist in the development of Level 3 charging stations near extended hours facilities.
- Conduct a study of the Fort Pierce hotel district (Okeechobee Road between I-95/Turnpike) to determine the feasibility of establishing an ACES (Automated/Connected/Electric/Shared-Use) Network hub as identified in the 2045 SmartMoves LRTP.
- Require developers of large-scale multifamily housing to set aside an area(s) for an EV charging station(s). Charging at multifamily housing may be more like public charging but with restrictions for use by residents only.
- Encourage FPUA (Fort Pierce Utilities Authority) to initiate a program to help offset the cost of installing charging equipment for residents and businesses similar to programs currently in place by other utilities.
- Continue to raise awareness of EVs and EV charging station needs.
- Continue to identify available funding or financing to assist with EV infrastructure projects.
- Consider the needs of the rural community.

#### RECOMMENDATION

Because electric vehicles have significant environmental quality benefits and because the enhancement of electric vehicle charging infrastructure supports the increased use of electric vehicles consistent with a variety of local, state, and federal planning efforts, it is recommended that the Electric Vehicle Charging Station Update be discussed, and comments provided to Staff.

# ELECTRIC VEHICLE CHARGING STATION PLAN UPDATE

#### PURPOSE OF THE PLAN

The purpose of this plan is to identify the location of public charging stations for electric vehicles (EVs) that allow for rapid charging and to assess the need for additional stations. Rapid charging stations are known as DC Fast Chargers or Level 3. The plan also will examine innovations in EV battery and charging station technology that could allow for less frequent and faster EV charging. Partnership strategies for the installation of public charging stations and funding options will be explored.

#### BACKGROUND

As part of the development of the TPO's FY 2022/23 – FY 2023/24 Unified Planning Work Program (UPWP), a Call for UPWP Projects was announced publicly. The Call resulted in several project ideas, one of which was the Electric Vehicle Charging Station Plan Update, described as an update of a previous plan. The update focus is on incorporating Level 3 supercharging stations throughout the TPO area.

#### **EXISTING PLANS AND STUDIES**

Throughout the years the TPO has conducted planning projects related to ACES (Automated/Connected/Electric/Shared-Use) vehicle technologies. These include the following:

#### Micro-Mobility Study (2022)

The Micro-Mobility Study analyzed the deployment of micro-transit, escooters, car sharing, and bike sharing in the Gatlin Boulevard/Tradition Parkway, Torino Parkway, and downtown Fort Pierce areas.

#### ACES Vehicles for Transit Study Update (2022)

The ACES Vehicles for Transit Study Update provided considerations with regard to the future electrification of the public transportation bus fleet.

#### EV Charging Station Plan (2021)

The original EV Charging Station Plan developed criteria for siting electric vehicle charging stations and identified appropriate locations based on the criteria. A secondary objective was to raise awareness of the need to incorporate EV charging station planning into major planning efforts.

# 2045 Smart Moves Long Range Transportation Plan (LRTP) (2021)

The Smart Moves 2045 LRTP called for the development of an ACES vehicle network along major highways that considers operational improvements as an alternative for addressing capacity issues.

# WHAT IS AN ELECTRIC VEHICLE?

There are three basic types of EVs: All-electric vehicles (AEVs), hybrid-electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).

AEVs run only on electricity; when the battery becomes depleted, it must be recharged. AEVs always operate in all-electric mode and currently have typical driving ranges exceeding 200+ miles. A driving range is the number of miles an EV can travel between battery charges.

HEVs are powered by an internal combustion engine and an electric motor that uses energy stored in a battery. The battery pack and electric motor provide supplemental power. The vehicle is fueled with gasoline to operate the internal combustion engine, and the battery is charged through regenerative braking, not by plugging in.

PHEVs use both gasoline and electricity as fuel sources, so they have a battery, an electric motor, a gasoline tank, and an internal combustion engine. This allows drivers to use electricity as often as possible while also being able to rely on gasoline-powered propulsion when needed. Most PHEVs can travel a specific range of mileage on electricity alone, and then will operate solely on gasoline.

# ELECTRIC VEHICLE CHARGING STATIONS

An EV charging station is a piece of equipment that allows for recharging EV batteries. EV charging stations are classified by how much power they bring to the vehicle and how fast. Stations are generally labeled Level 1, 2, and 3.

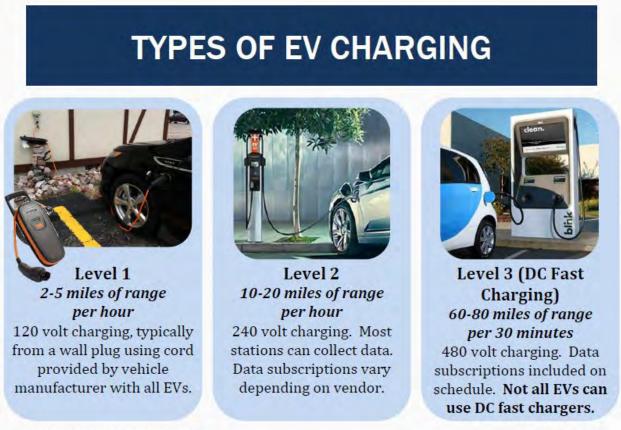
Level 1 charging is typically used when there is only a 120 volt outlet available, such as while charging at home. Many EV owners are able to meet their daily driving needs by charging overnight with Level 1 equipment, requiring no additional installation of equipment.

Level 2 offers charging through voltages typically available in homes or commercial establishments. Level 2 charging stations are appropriate for EV

drivers who will be in a particular location for extended periods. These include homes, workplaces, or hotels.

Level 3, sometimes referred to as DC Fast Charging, enables rapid charging at installed stations. These stations are usually available to the public.

The table below further describes the levels of EV charging.



GSA Fleet Charging Station Training Series

Generally, an EV driver uses the following steps to charge a vehicle at a public charging station:

- Download the network provider's app to a mobile device.
- Create an account on the app. Locate a nearby charging station. Once at the station, follow prompts on the charger screen and mobile device.
- Select the connector that is right for the vehicle, plug in and start charging.
- If the session ends while the driver is away from the car, the driver receives a mobile alert.

- Once fully charged, idle fees could accrue if the driver fails to unplug the vehicle after a certain amount of time; this ensures the plug is made available for others.
- Some apps can tell the user if plugs are in use and if there is some issue with a station's equipment before the user arrives at the station.

Use of the Tesla Supercharger network differs from the above description. Noted for its user-friendliness, there is no need for an app or credit card. Once the driver pulls up to the charger, opens the charge port cover and plugs the car in, charging begins automatically. Features of the Tesla vehicles allow the driver to monitor the charging status from the vehicle's interior and a built-in GPS shows the locations of nearby chargers and charger locations along planned routes.

# EV CHARGING COSTS

The energy efficiency of electric vehicles is expressed in miles per kWh (kilowatt hour). A kilowatt is 1,000 watts. A watt is a unit of electrical power.

Charging power for EVs varies by vehicle and battery state of charge. Older EVs have energy efficiencies of about two miles per kWh. Some newer EVs have energy efficiencies of over six miles per kWh under certain conditions.

#### Charging at Home

The U.S. Energy Information Administration estimates that Florida's average residential rate for electricity is about 14 cents per kWh. These rates can vary by time of use, day, season, and the region where a person lives.

To estimate the cost of charging at home for a person who drives 1,000 miles per month using an average 4 miles per kWh:

Divide 1,000 by 4 to get the kWh used monthly = 250 kWh

Multiply 250 x .14 = \$35

So a typical cost of charging using the above-described scenario would be \$35 per month if charging at home.

#### Charging at Public EV Charging Stations

The range of networks and prices at public charging stations make it difficult to estimate road trip costs. Costs are generally believed to be between \$10 and \$30 per charge.

The U.S. Department of Energy (DOE) estimate of Median Driving Range of All-Electric Vehicles for Model Year 2020 is approximately 250 miles. Using an average of \$15 per charge and a range of 250 miles between charges, it would require approximately four charges at public charging stations for a person who drives 1,000 miles per month, or a cost of approximately \$60.

Comparing public charging to charging at home, the least expensive way to charge an EV is almost always at home, overnight. Utilities often have lower rates at night when demand for electricity is lightest.

# PUBLIC CHARGING STATIONS – NEED

Although tens of thousands of EV charging stations exist in the United States with new chargers continually being added, available public charging infrastructure remains lacking.

According to a recent Florida Department of Agriculture & Consumer Services Survey:

1) The majority of users feel that Florida's public charging infrastructure is inadequate and the availability needs to be improved.

2) The locations EV drivers would most like to see additional public charging infrastructure is along highways or at shopping/entertainment centers.

A recent JD Powers survey of EV drivers likewise revealed dissatisfaction with EV charging systems, the exception being Tesla's network. Problems with chargers ranged from inadequate availability to malfunctioning equipment.

Thus, although public charging is increasingly available, reliability is a barrier to the mass adoption of EVs.

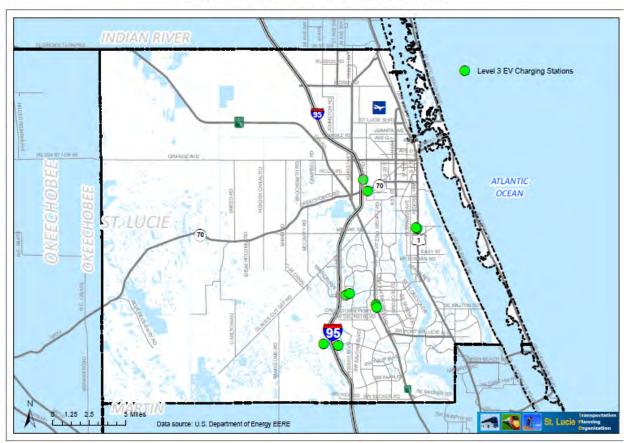
# EXISTING CHARGING STATIONS

The map below showing the locations of Level 3 public charging stations in St. Lucie County was sourced from the U.S. DOE Alternative Fuels Data Center (AFDC) website. The website allows users to find EV charging stations by charger type. In the graphic below, Level 3 (DC Fast) chargers in St. Lucie County has been selected.

Find alternative fueling stations in the United States and Canada. For U.S. stations, see <u>data by state</u>. For Canadian stations in French, see <u>Natural Resources Canada</u>.

<b>Q</b> Public Stations	Public Stations <b>T</b> Advanced Filters		Advanced Filters A Fuel Corridors		U.S. an	U.S. and Canada 🖨	
St. Lucie ( 🕲 🔍	Electric	\$	Charger Types	Connectors	Map a Route		
CA 3.4 mi MP ING			DC Fa ¢				
WO RL			orrid 🗹 DC Fast				

As the map below shows, although EV charging station availability exists both north and south of Midway Road, gaps exist in the following areas: north of Orange Avenue, Hutchinson Island, near Port St. Lucie Boulevard, and east of U.S. 1.



Location of Level 3 EV Charging Stations

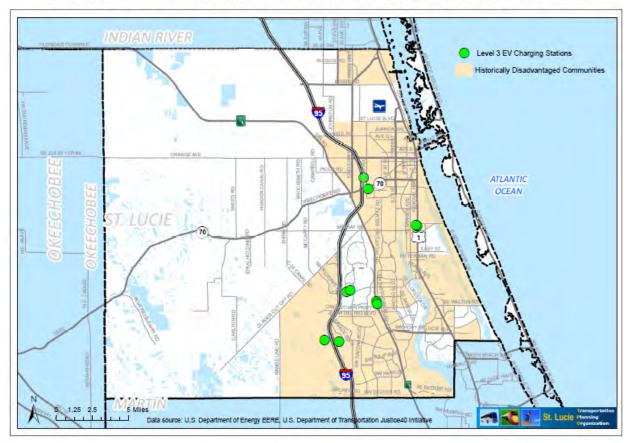
# HISTORICALLY DISADVANTAGED COMMUNITIES

The Justice40 Initiative is the federal government's goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities. These communities are defined as those that are marginalized, underserved, and overburdened by pollution. To assist in implementing Justice40, the federal government has mapped the location of Historically Disadvantaged Communities throughout the nation based on the following criteria:

- Low income, high and/or persistent poverty
- High unemployment and underemployment
- Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- Linguistic isolation
- High Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- Disproportionate environmental stressor burden and high cumulative impacts

- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- Jobs lost through the energy transition
- Access to healthcare

The locations of existing Level 3 EV stations were overlaid on a map of Historically Disadvantaged Communities in St. Lucie County. The results are shown on the map below. Gaps exist north of Orange Avenue, near Port St. Lucie Boulevard, and east of U.S. 1.



#### Location of Level 3 EV Charging Stations and Historically Disadvantaged Communities

The above map includes Tesla chargers. Although at present, Tesla's chargers only work with its own vehicles, the White House stated in a June 2022 press release, "Later this year, Tesla will begin production of new Supercharger equipment that will enable non-Tesla EV drivers in North America to use Tesla Superchargers."

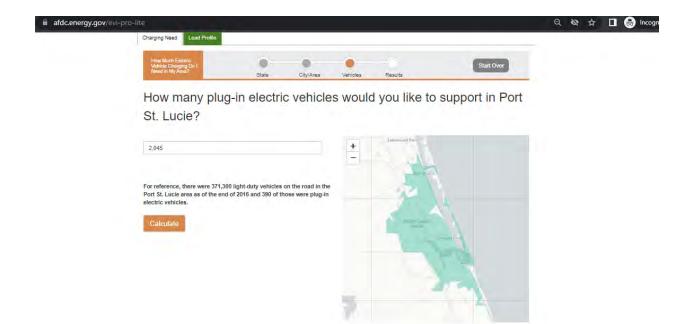
## HOW MANY EV CHARGING STATIONS ARE NEEDED?

The DOE's Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite helps estimate how much electric vehicle charging is needed for a state or urban area.

According to the AFDC, as of December 2021, Florida had approximately 95,600 electric vehicles and 32,200 plug-in hybrid electric vehicles, for a total of 127,800 vehicles potentially using public EV stations.

Energy Efficiency & Energy Efficiency & Renewable Energy		EERE Home   Programs & Offices   Consumer Information		
Alternative Fuel	s Data Center	Search the AFDC SEARCH		
FUELS & CONSERVE VEHICLES FUEL	LOCATE LAWS & Maps & Data Car STATIONS INCENTIVES Maps & Data Car	se Studies Publications Tools About Home		
EERE » AFDC » Tools		C Printable Version		
Florida Transportatio	on Data for Alternative Fuels and Vehicle	s		
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li badi.		Biodiesel 128,300 Ethanol/Fiex (E85) 1.154,600		

Since St. Lucie County's population is approximately 1.6% of the population of Florida, an estimate of the County's EVs and PHEVs might be 1.6% of 127,800 or 2,045. EVI-Pro Lite does not provide County-level data but does analyze at the urban area level, one of which is Port St. Lucie. As the screenshot below shows, the Port St. Lucie Urban Area includes the cities of Port St. Lucie, Fort Pierce, Jensen Beach, and Stuart.



Plugging 2,045 EVs into EVI-Pro Lite produces the following results:

afdc.energy.gov/evi-pro-lite			Q <b>Q</b>
Charging Need	Load Profile		
How Much Elect Vehicle Chargin Need in My Area		Start Over Results	
In the Port need: 46 V 37 F	r Results St. Lucie area, to support 2,045 plug-in electric vehicles you would Vorkplace Level 2 Charging Plugs Public Level 2 Charging Plugs here are currently 50 plugs with an average of 1.9 plugs per harging station per the Department of Energy's <u>Alternative Fuels</u> lata Center Station Locator.	Change Assumptions         Plug-in Electric Vehicles (as of 2016): 390         Light Duty Vehicles (as of 2016): 371,300         Number of vehicles to support         2,045         Vehicle Mix         Plug-in Hybrids         20-mile electric range         15         %         Plug-in Hybrids         50-mile - Vehicit range         35	•
7 c	Public DC Fast Charging Plugs here are currently 57 plugs with an average of 5.2 plugs per harging station per the Department of Energy's <u>Alternative Fuels</u> lata Center Station Locator	All-Electric Vehicles 15 % 100-mile electric range 35 % Total 100%	
Planners n above Lev	DO I Start? nay want to prioritize installation of fast charging infrastructure el 2 charging. Fast First: Establishing fast charging networks that enable long-	How much support do you want to provide for plug-in hybrid electric vehicles (PHEVs)? Full Support Most PHEV drivers wouldn't need to use gasoline on a typical day.	
distance tr without ho other alten Build Lev charging d	and in the Establishing has charging increment on the order of opperative of the set of	Partial Support     Calculate using half of full support assumption.     Do not count PHEVs in charging demand     estimates.     Percent of drivers with     access to home charging     %	

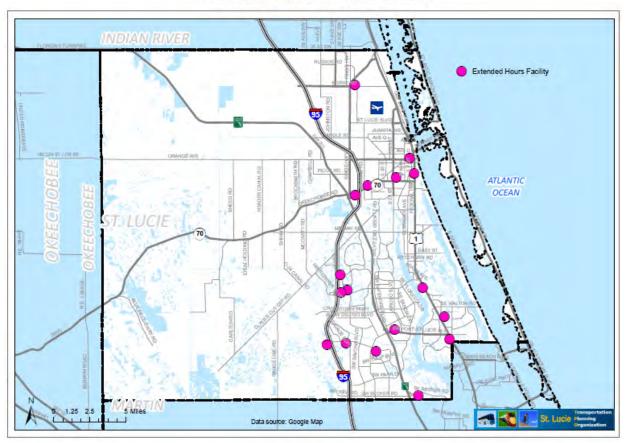
According to EVI-Pro Lite, to support the Port St. Lucie urban area's 2,045 EVs, 37 public Level 2 charging plugs and 7 DC Fast (Level 3) charging plugs are needed. Plugs are the equipment that deliver electricity to a vehicle; a station may have several plugs. Combining Level 2 and Level 3 results in 44 plugs needed, a need that should be addressed with fast chargers equitably distributed and located in places that are safe and convenient for the traveling public.

# EQUITABLE DISTRIBUTION

Imagine an EV driver needs to use a Level 3 public charger at night, a task that could take as long as 30 minutes. Drivers of gasoline-powered cars can easily locate night-time gas stations and since most gas stations double as convenience stores, a human attendant is present for an added touch of security. Consequently, gas stations are ideal locations for EV stations. In fact, co-locating EV charging with gas stations has already occurred across the nation, including in St. Lucie County. Other facilities that operate with extended hours are gyms, hospitals, hotel districts, and Walmart stores.

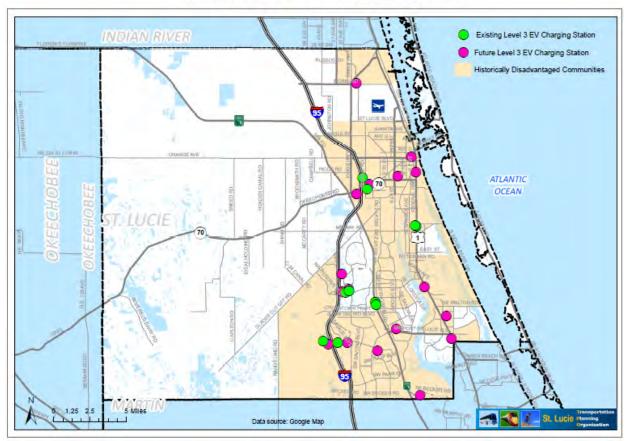
The map below identifies Extended Hours facilities that could be suitable for co-locating Level 3 EV charging stations. The map includes the following facilities:

- 24-hour gyms
- Walmart stores
- Hospitals
- St Lucie West hotel/entertainment district (Peacock Boulevard/NW Courtyard Circle)
- Fort Pierce hotel district (south side of Okeechobee Road between I-95/Turnpike)



Location of Extended Hours Facilities

The next step was to map the existing EV stations, potential future EV stations (co-located with Extended Hours facilities) and overlay that map onto the map of Historically Disadvantaged Communities to determine if significant EV charging station gaps would still exist. As shown on the map below, this distribution of EV charging stations would benefit residents of Historically Disadvantaged Communities.



## Existing and Future Level 3 EV Charging Stations

# **EV STATION OWNERSHIP**

Charging station ownership varies according to the site host. A site host is the owner or occupant of land on which an EV charging station is installed.

# Institutional/Commercial

Commercial/institutional site hosting typically falls into one of two categories: site host-owned or third party-owned. Site-host owned EV charging stations are purchased, installed, and maintained by the site host. Charging owned by a third party is installed and maintained by the third party. In some cases, the site host may also earn revenue by leasing the space occupied by the charging station to a third party.

Site hosts can provide public or private charging. A corporation may wish to only allow its employees to use the charging station. A municipality might want to offer free charging to the public while a commercial business may wish to charge user fees. Different models of ownership should be based on site conditions and market realities. Given the urgency of building out the charging network, flexibility is key.

To accelerate the pace at which drivers transition to EVs, charging network companies are increasingly partnering with retail businesses to place charging stations at supermarkets, restaurants, and banks. Bank of America, Starbucks, and IKEA are a few of the national chains that are offering EV charging for their customers.

# Florida Power & Light (FPL)

FPL is America's largest electric utility. FPL is owned by NextEra Energy, Inc, a company whose stock trades on the New York Stock Exchange.

FPL is installing Level 3 chargers throughout the state through its FPL Evolution program. The goal of the program is to allow drivers to plug in every 50 miles along major highways and corridors at commercial and institutional locations. FPL installs fast chargers that are compatible with all kinds of EVs. FPL provides EV chargers to site hosts and covers installation and maintenance.

FPL is looking for partners that:

- Can dedicate 4-6 parking spaces
- Are located in close proximity to the highway and local amenities

In St. Lucie County, FPL has installed chargers at the Port St. Lucie Turnpike Plaza and at the Jobs Express Terminal park-and-ride lot on Gatlin Boulevard. EV drivers pay to charge their vehicles at these stations.

# Fort Pierce Utilities Authority (FPUA)

FPUA is a community-owned electric utility. Besides providing electricity, FPUA also provides water, wastewater, natural gas, and Internet services. FPUA is a Component Unit of the City of Fort Pierce; decisions are made at public meetings. To meet the growing demand for EVs, the City of Fort Pierce, in partnership with FPUA, installed Level 2 EV charging in the City Hall Parking Garage in downtown Fort Pierce.

# <u>Residential</u>

Most EV drivers charge their vehicles at home and that trend is expected to continue. According to the Fuels Institute, a non-advocacy research organization dedicated to studying transportation-energy, about 70-80% of charging occurs at home or at a workplace parking lot.

To support residential charging FPL launched a program where the utility will install EV charging infrastructure in single family homes or townhouses with attached garages and Wi-Fi connections. The program, FPL Evolution Home, installs Level 2 chargers. There is no upfront cost for equipment or installation.

Electrify America, another charging station network, has a home charging program known as Electrify Home. The Electrify Home program sells Level 2 charging equipment; it is the responsibility of the users to install the chargers.

# FUNDING FOR PUBLIC CHARGING STATIONS

The federal government's Bipartisan Infrastructure Law (BIL) includes funding for EV charging: the National Electric Vehicle Infrastructure (NEVI) Formula Program and the Charging and Fueling Infrastructure Grants (Community Charging) Program.

Funding under the NEVI program is directed to a national network along the Interstate Highway System. When the national network is fully built out, funding may be used on other public roads. The NEVI Program requires each state to submit a plan to the U.S. Department of Transportation (DOT) describing how the state intends to use NEVI funds. The Florida DOT's plan identified the charging station located in St. Lucie West as compliant with NEVI requirements. The Plan identified charging stations within 50 miles north and south of the St. Lucie West station; these stations would require upgrades to be NEVI compliant.

The Community Charging Program provides competitive grants to support community and corridor charging, improve local air quality, and increase EV charging access in underserved and overburdened communities. According to the Program Fact Sheet, Charging Program grants can be used to install EV charging and alternative fuel stations in locations on public roads, schools, parks, and in publicly accessible parking facilities. These grants will be prioritized for rural areas, low-and moderate-income neighborhoods, and communities with low ratios of private parking, or high ratios of multiunit dwellings. Post-installation operating assistance is available. State and local governments, MPOs, and tribal governments are eligible to apply for the funds.

Public-private partnerships (P3s) are critical to the success of government EV initiatives. P3s involve partnerships between public agencies (such as local governments and transportation authorities) and private companies to produce publicly accessible EV charging stations. The NEVI Program allows

funds to be used to contract with private entities to acquire and install publicly accessible EV charging infrastructure and permits private entities to pay the non-federal share of a project funded under the program.

# TECHNOLOGY INNOVATION

EV technology is evolving rapidly. An example is the Nissan Leaf. Whereas a first-generation Leaf could range 75 miles between charges, the range of a current model Leaf exceeds 200 miles. EV models by rival carmakers boast ranges of 300+ miles.

## Batteries

One of the EV battery innovations being explored is the use of solid-state batteries. Most EVs are powered by lithium-ion batteries. According to the Clean Energy Institute (CEI) at the University of Washington, lithium-ion batteries are expensive, tend to overheat, and can be damaged at high voltages.

A company called Solid Power is developing a new low-cost, all-solid-state battery for EVs with greater energy storage capacity and a lighter, safer design compared to lithium-ion batteries. Commercialization could take a few years but could extend range to 600 miles. Solid state batteries also could reduce degradation of battery range that occurs with lithium-ion batteries after repeated charging.

# **Bi-directional Charging**

Bi-directional EV charging can take the form of vehicle-to-building (V2B), vehicle-to-vehicle (V2V), or vehicle-to-grid (V2G). An EV could be used as backup generation to support building loads in the event of an outage or to recharge depleted batteries of disabled EVs. Through V2G, bidirectional charging could be used in partnership with utility programs. Under these scenarios, the EV functions as a mobile battery.

# Other Innovations

Other charging innovations include:

- solar charging
- wireless charging
- in-road charging, vehicles charge by driving over enabled roadway segments
- pop-up charging, portable and relocatable

- mobile charging, alternatives to stationary Level 3 stations
- battery swapping, a method of leasing batteries
- chargeable on-street parking

These are just a few of the numerous innovations in EV charging. It should be noted as well that EVs are considered the launching pads for autonomous vehicles (AVs) because most if not all AVs are expected to be EVs in the future.

## Lost Revenue – Gasoline Taxes

EVs do not pay fuel taxes. According to the Florida Department of Revenue, highway fuel taxes constitute the oldest continuous source of dedicated funding for roadways. Fuel taxes are assessed on all gasoline products, or any product blended with gasoline, or any fuel placed in the storage supply tank of a gasoline-powered motor vehicle. Revenue collected from fuel taxes help fund transportation projects and keep roads and highways in good condition.

Since EVs do not use fuel, EV drivers do not contribute to the upkeep of roads. One proposal to solve this dilemma is increased registration fees for EVs. An issue with this strategy is that a flat tax rate disproportionately burdens drivers who drive less. Taxes on EV stations have been proposed but since EV drivers mostly charge at home or at the workplace, this proposal would generate relatively limited income.

Vehicle Miles Traveled (VMT) fees for all vehicles has also been proposed. VMT fees are distance-based fees levied on a vehicle user for use of a roadway system. These fees are also known as mileage-based user fees or road usage charges. An issue with VMT fees is that they could prove to be expensive to administer and enforce.

The issue of EVs and lost fuel taxes continues to be discussed at all levels of government throughout the nation. Currently, EV ownership comprises a relatively small percentage of vehicles owned. As EV ownership grows in popularity strategies to solve the fair-share taxation issue must be implemented.

## CONSIDERATIONS

Based on the need for a comprehensive approach to support EV ownership, the following considerations were developed:

- Assist in the development of Level 3 charging stations near extended hours facilities.
- Conduct a study of the Fort Pierce hotel district (Okeechobee Road between I-95/Turnpike) to determine the feasibility of establishing an ACES Network hub as identified in the 2045 Smart Moves LRTP.
- Require developers of large-scale multifamily housing to set aside an area(s) for an EV charging station(s). Charging at multifamily housing may be more like public charging but with restrictions for use by residents only.
- Encourage FPUA to initiate a program to help offset the cost of installing charging equipment for residents and businesses similar to programs currently in place by other utilities.
- Continue to raise awareness of EVs and EV charging station needs.
- Continue to identify available funding or financing to assist with EV infrastructure projects.
- Consider the needs of the rural community.



Transportation St. Lucie Planning Organization

## AGENDA ITEM SUMMARY

Board/Committee: St. Lucie LCB

Meeting Date: November 16, 2022

Item Number: 8c

Item Title: Sustainable Transportation Study Scope of Services

Item Origination: Unified Planning Work Program (UPWP)

### UPWP Reference: Task 3.10 – Automated/Connected/Electric/ Shared-Use (ACES) Vehicles Planning

### **Requested Action:** Discuss and provide comments to Staff.

**Staff Recommendation:** Because the Sustainable Transportation Study would support the development of an ACES Network and the Study is consistent with Task 3.10 of the UPWP, it is recommended that the Sustainable Transportation Study Scope of Services be discussed, and input provided to Staff.

## Attachments

- TPO Staff Report
- Sustainable Transportation Study Scope of Services



#### **MEMORANDUM**

SUBJECT:	Sustainable Transportation Study Scope of Services
DATE:	November 3, 2022
FROM:	Marceia Lathou Transit Program Manager
THROUGH:	Peter Buchwald Executive Director
TO:	St. Lucie Local Coordinating Board for the Transportation Disadvantaged (LCB)

### BACKGROUND

Sustainable transportation refers to any means of mobility that has low impact on the environment, and can include walking, cycling, transit, carpooling, car sharing, and low carbon footprint vehicles. As part of a systematic effort towards sustainable transportation, the St. Lucie TPO has initiated various plans and studies related to ACES (Automated/Connected/Electric/Shared-Use) vehicles. ACES vehicles are expected to make travel safer and more efficient, but most importantly, greatly improve mobility, particularly for vulnerable and underserved populations.

The 2045 SmartMoves Long Range Transportation Plan (LRTP) recommends the development of an ACES Network at major intersections along I-95. The ACES Network is the foundation of ACES because these are park-and-ride lots incorporating Electric Vehicle (EV) charging stations and connecting to transit.

The TPO's FY 2022/23 – FY 2023/24 Unified Planning Work Program (UPWP) includes a Sustainable Transportation Study. The Study will leverage and unify prior, current, and planned efforts to further develop the ACES Network by focusing on the most immediately relevant infrastructure needs.

### **ANALYSIS**

The Sustainable Transportation Study is subtitled "ACES Network Electric Vehicle Infrastructure Components". The Study will focus on Level 3 electric vehicle charging because EV charging is the most readily implementable infrastructure from the perspective of public need, technology acceptance, business model readiness, and funding potential. The Sustainable Transportation Study is to be a short-range work to coordinate existing efforts and identify new opportunities toward "shovel-ready" projects.

The Sustainable Transportation Study will be conducted by The Corradino Group, one of the TPO's general planning consultants. The Study will be completed in June 2023 with a lump sum budget of \$40,000.

#### RECOMMENDATION

Because the Sustainable Transportation Study would support the development of an ACES Network and the Study is consistent with Task 3.10 of the UPWP, it is recommended that the Sustainable Transportation Study Scope of Services be discussed, and input provided to Staff. ENGINEERS · PLANNERS · PROGRAM MANAGERS · ENVIRONMENTAL SCIENTISTS

# St. Lucie TPO Sustainable Transportation Study ACES Network Electric Vehicle Infrastructure Components

# Scope of Services

#### Prepared by The Corradino Group, Inc.

#### **INTRODUCTION**

CORRADINO

Sustainable transportation refers to any means of mobility that has low impact on the environment, and can include walking, cycling, transit, carpooling, car sharing, and low carbon footprint vehicles. The St. Lucie TPO continues to be at the forefront of planning for efficient and green mobility services. The TPO's Micro-Mobility Study (2022) analyzed the deployment of micro-transit, e-scooters, car sharing, and bike sharing in the Gatlin Boulevard/Tradition Parkway, Torino Parkway, and downtown Fort Pierce areas. The 2045 SmartMoves Long Range Transportation Plan (2021) called for the development of an ACES (Automated/Connected/Electric/Shared-Use) vehicle network along major highways that considers operational improvements as an alternative for addressing capacity issues. The TPO is in the process of developing the Electric Vehicle Charging Station Plan Update. The purpose of this plan is to identify the location of public charging stations for electric vehicles (EVs) that allow for rapid charging and to assess the need for additional stations.

The TPO now will continue to leverage and unify prior, current, and planned efforts to further develop the SmartMoves LRTP ACES plan by identifying the most immediately relevant infrastructure needs through the *St. Lucie TPO Sustainable Transportation Study, ACES Network Electric Vehicle Infrastructure Components*.

The most readily implementable infrastructure from the perspective of public need, technology acceptance, business model readiness, and funding potential is Electric Vehicle Supply Equipment (EVSE) commonly called charging stations. The study is to be a short range work to coordinate existing efforts and identify new opportunities toward "shovel-ready" projects that are eligible for high-priority funding through the Bipartisan Infrastructure Law (BIL), coordination with new development, and other sources.

Consistent with the short-term time horizon for implementable projects, the primary focus of the *St. Lucie TPO Sustainable Transportation Study*, *ACES Network Electric Vehicle Infrastructure Components* will be the EV infrastructure component of the SmartMoves 2045 Long Range Transportation Plan ACES Network, specifically public EVSE for in-road, enroute and destination locations.

### Task 1. Review and Inventory Existing ACES Plans

We will meet in-person or virtually with St. Lucie TPO staff and relevant City and County staff, as well as neighboring staff in Martin County and Indian River County to fully identify and review the ACES EVSE map, incorporate the results of the TPO's *Electric Vehicle Charging Station Plan Update*, and identify other relevant efforts. We will also inventory existing land uses and development to identify possible ACES gaps and opportunities for additional locations that meet the criteria for people to use the infrastructure within proximity to major in-road and en-route locations for private, shared and public vehicles. As part of this task, we will also review the BIL and other funding sources for funding priority criteria. The findings and mapping will be documented in a Technical Memorandum to include a summary of key findings and funding matrix.

Staff Meetings:	2 TPO staff virtual meetings: 1) kick-off meeting, 2) findings review
Product:	Technical Memorandum
Start:	immediately after Project Notice to Proceed (NTP)
Complete:	1-1/2 months after Notice to Proceed

### Task 2. Prioritize ACES EVSE Infrastructure

Based on the findings of Task 1, we will create a plan for an ACES EVSE network that accounts for: existing identification on the St. Lucie ACES network plan, nearby in-road EVSE plans in Martin County and Indian River County, ability for projects to be funded in the short-term, technology ready, existing latent demand, development opportunities, and barriers to implementation. The work will be mainly comprised of GIS analysis, then verified with on-ground field work. Priorities will be established on the basis of immediacy of need, opportunities for implementation, location characteristics, and potential for funding.

Staff Meetings:	1 meeting at the beginning of Task 2, and 1 meeting at the completion of the
	work to present and discuss the draft priorities matrix
Product:	Technical Memorandum with a project priority matrix
Start:	after completion of Task 1 and meeting with TPO staff
Complete:	3 months after Notice to Proceed

#### Task 3. Identify Gaps and Opportunities for Additional ACES EVSE Infrastructure

Concurrent with Task 2, we will identify additional nodes for the ACES EVSE network that accounts for: the same criteria as used in Task 2, with greater focus on using the criteria of the TPO's Electric Vehicle Charging Station Plan and Electric Vehicle Charging Station Plan Update to identify additional public EVSE. As with Task 2, the work will also be comprised of GIS analysis, then verified with on-ground field work and contact with property management as necessary. The added ACES network nodes will be prioritized and added to the final list.

Staff Meetings:	1 meeting with TPO staff to discuss lessons learned
Product:	Technical Memorandum summarizing key findings, GIS files, and presentation
Start:	after completion of Task 1 and meeting with TPO staff
Complete:	3 months after Notice to Proceed

#### Task 4. Priority Project List

Recommendations will be developed as a priority list with individual project tear-off sheets and bound into a single report. The draft report, along with a presentation will be provided to St. Lucie TPO staff for review by the fourth month after the Notice-to-Proceed, ready for inclusion on the agendas of the St. Lucie TPO Citizens Advisory Committee (CAC), Technical Advisory Committee (TAC) and Bicycle-Pedestrian Advisory Committee (BPAC). After receiving input from the advisory committees, we will include summaries of comments and requests from each committee and provide to the TPO staff for their input regarding any changes that should be made to the final report. The final priority list will be provided to the TPO staff by the fifth month after the Notice-to-Proceed for inclusion on the agenda of the next St. Lucie TPO board meeting.

Staff Meetings: Public Presentations:	<ul> <li>2 meetings: 1) review draft report; 2) review final advisory committee comments</li> <li>1) St. Lucie TPO Citizens Advisory Committee (CAC)</li> <li>2) St. Lucie TPO Technical Advisory Committee (TAC)</li> <li>2) St. Lucie TPO Piecelo Padasting Advisory Committee (TAC)</li> </ul>
	3) St. Lucie TPO Bicycle-Pedestrian Advisory Committee (BPAC)
	4) St. Lucie TPO Board
Products:	Draft Report, presentations and Final Report
Start:	at the completion of Tasks 2 and 3
Complete:	6 months after Notice to Proceed

#### PROJECT SCHEDULE

	e TPO Sustainable Transportation Plan etwork Electric Vehicle Infrastructure	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Task 1	Review & Inventory Existing ACES Plans						
Task 2	Prioritize ACES EVSE Infrastructure		►				
Task 3	Identify Gaps and Opportunities for Additional ACES EVSE Infrastructure		4				
Task 4	Project Priority List			<b>L</b>		$\star\star\star$	$\star$

St. Lucie TPO Advisory Committee Public Meetings: CAC, TAC, BPAC
St. Lucie TPO Board Meeting

#### PROJECT COST

Task 1.	Review and Inventory Existing ACES Plans	\$ 13,120
Task 2.	Prioritize ACES EVSE Infrastructure	\$ 11,040
Task 3.	Identify Gaps and Opportunities for Additional ACES EVSE Infrastructure	\$ 9,320
<u>Task 4.</u>	Priority Project List	<u>\$ 6,520</u>
TOTAL		\$ 40,000