City of Port St.Lucie

121 SW Port St. Lucie Blvd. Port St. Lucie, Florida 34984



Special Meeting Agenda

Monday, June 17, 2019 1:30 PM

Council Chambers, City Hall

Special City Council

Gregory J. Oravec, Mayor

Stephanie Morgan, Councilwoman, District I John Carvelli, Councilman, District II Shannon Martin, Vice Mayor, District III Jolien Caraballo, Councilwoman, District IV

- 1. Meeting Called to Order
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Public to be Heard
- 5. New Business

5.a City Council discussion and consensus on two elements of the Port St.

Lucie Boulevard South Widening Project: 1) Revising the typical roadway section, and 2) A potential path to expedite the construction schedule.

Attachments: PSL Blvd South Map

PSL Blvd South Redesign 1

5.b Discussion of revisions to the City of Port St. Lucie Neighborhood Traffic

Calming Policy

<u>Attachments:</u> DRAFT - Traffic Calming Resolution CAO Edits by EMG on 5.28.2019.docx

Exhibit A - Traffic Calming Policy (STRIKETHROUGH 06.17.19).pdf

FINAL - Traffic Calming Policy June 17, 2019.pptx

5.c Discussion to determine City Council consensus on elements of the

Florida Department of Transportation Multimodal Master Plan for Interstate

95

Attachments: Ex A - FDOT Proposed Conceptual Plan I-95, SLW Blvd-Peacock Blvd Intersect

EXHIBIT B - BRAIDED RAMPS CONCEPTUAL PLAN.pdf

EXHIBIT C - BRAIDED RAMPS WITH TEXT.pdf

EXHIBIT D - 195 Master Plan-Braided Ramps Memo v07 2019-06-04.pdf

5.d Annual update of the Strategic Plan

Attachments: 2019 Strategic Plan Update 053119 ocr

Strategic Plan 2019 GANTT draft 053119 ocr

5.e Golf Cart Ordinance update and discussion

Attachments: Golf Cart Ordinance Update 6-19

Ord 18- Golf Cart Authorization

 $\underline{\text{Ord 19- Golf Cart Authorization on Multi Use Pathways - Sandpiper, St. Lucie W}}$

Ord 19- Golf Cart Authorization -- Sandpiper, St. Lucie West and Tradition

AARP Case Study

6. Adjourn

Notice: No stenographic record by a certified court reporter will be made of the foregoing meeting. Accordingly, if a person decides to appeal any decision made by the City Council, board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. (F.S. 286.0105)

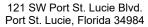
Notice: Public and Press are invited to review all the backup for Council Meetings. Copies are available in the City Clerk's Office on Wednesday, Thursday, Friday, and Monday before Council Meetings. On Meeting nights, a copy of backup material is available in the reception area of City Hall for public review. Please leave the agenda and backup material in good order for others to review.

Notice: Anyone wishing to speak during Public to be Heard is asked to fill out a yellow Participation Card and submit it to the City Clerk. Anyone wishing to speak on any Agenda Item is asked to fill out a green Participation Card and submit it to the City Clerk. Participation Cards are available on the side table in Council Chambers, at the reception desk in City Hall lobby, and in the City Clerk's Office.

Notice: In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodation to participate in this proceeding should contact the City Clerk's Office at 772-871-5157.

As a courtesy to the people recording the meeting, please turn all cell phones to silent or off. Thank you.

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City of Port St.Lucie



Agenda Summary

Agenda Date: 6/17/2019 Agenda Item No.: 5.a

Placement: New Business

Action Requested: Motion / Vote

City Council discussion and consensus on two elements of the Port St. Lucie Boulevard South Widening Project: 1) Revising the typical roadway section, and 2) A potential path to expedite the construction schedule.

Submitted By: Clyde Cuffy, E.I., Project Manager

Strategic Plan Link: The City's Goal of high-quality infrastructure and facilities.

Executive Summary (General Business): Staff has received inquiries from members of the City Council about two elements of the Port St Lucie Boulevard South Widening Project: 1) the possibility of amending the Typical Roadway Section to one that is more pedestrian friendly along with other Complete Street elements, and 2) a potential path to expedite the construction schedule.

Presentation Information: Brief presentation by Clyde Cuffy and Jeff Snyder.

Staff Recommendation: Move that the Council provide consensus on: 1) Maintaining the existing or revising the Typical Roadway Section for the design of Port St. Lucie Boulevard from Becker Road to Darwin Boulevard, and 2) Expediting the construction schedule of Port St. Lucie Boulevard from Alcantarra Boulevard to Darwin Boulevard from FY 2023/24 to FY 2021/22.

Alternate Recommendations:

1. Move that the Council provide staff direction.

Background: In July 2010, City Council approved an Access Management Plan and Typical Section for Port St. Lucie Boulevard from Becker Road to Gatlin Boulevard. In June 2013, FDOT began the Project Development and Environment (PD&E) Study. As part of the PD&E process, two Typical Section Alternatives were presented at two Public Information Meetings (PIMs). Alternative 1 duplicated the concepts approved by City Council in 2010, while Alternative 2 provided a bike lane in lieu of the 4-foot wide utility/grass strip. Based on public comment, Alternative 2 was selected as the preferred alternative and this was used by FDOT to design the corridor.

FDOT held a PIM in March 2019 to present the 90% roadway plans to the public. After this meeting, Staff received inquiries from members of City Council regarding the ability to alter the typical roadway section to one that is more pedestrian friendly and includes Complete Street elements. Additionally, members of City Council expressed their desire to provide relief to the residents who travel the congested roadway as well as

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provide much needed pedestrian improvements sooner than FDOT's current construction schedule for FY 2023/24.

Issues/Analysis: To investigate City Council member inquiries about the Port St Lucie Boulevard South Widening Project, Staff met with the FDOT District 4 Secretary and his Staff to discusses the issues and identify options for the following.

- 1. Typical Roadway Section FDOT Staff offered the following path to update and revise the roadway section.
 - a. The City and FDOT would prepare and execute a Funding Agreement for the City to provide FDOT with the funds to pay for the redesign. FDOT estimates that the redesign cost will be in the range of \$750,000 to \$800,000. The agreement is anticipated to take about six months to complete.
 - b. The City, FDOT, and the St Lucie Transportation Planning Organization (TPO) would conduct a Public Information Meeting (PIM) to present the existing and proposed roadway typical sections to the public. FDOT will gather comments from the public and develop a typical section that meets the needs of the public, City, and current design standards. The selected roadway section will be used to complete the design for the corridor extending from Darwin Boulevard to Becker Road. The PIM process and determination of a typical section is anticipated to take about three months.
 - c. The redesign will take approximately one year to complete.
 - d. The total time for developing the Funding Agreement, conducting the PIM, and completing the redesign is 18 to 24 months. If the process is started in July 2019, the redesign would be completed by July 2021.
 - e. Construction could be expedited as explained below or occur in FY 2023/24 per the current FDOT schedule.
- 2. Expedited Construction FDOT Staff advised that reimbursement of programmed funding for a project is possible in accordance with the Local Government Advance/Reimbursement Program. Currently, the FDOT Five Year Work Program only shows programmed funding for the construction of Alcantarra Boulevard to Darwin Boulevard, Segment 2.1, in FY 2023/24. FDOT advised that expedited construction of this segment could be accomplished by a Reimbursement Funding Agreement.

The agreement would allow the City to provide FDOT with the total cost of construction, estimated and programmed as \$8.5M, prior to advertisement of the construction. With the redesign, FDOT would begin construction of Segment 2.1 in July 2022 (estimated) and then the City would be reimbursed for the programmed amount in July 2023. Should construction costs exceed the programmed funding, the City would be responsible for covering the additional costs without reimbursement.

Although a defined path to expedite construction of the next two segments of the corridor is not feasible at this time, Staff believes that several important building blocks are being established. Staff has applied for a Transportation Regional Incentive Program (TRIP) Grant and County Incentive Grant Program (CIGP) Grant for the construction of the segment from Paar Drive to Alcantarra Boulevard, Segment 2.2, for FY 2023/24. These potential grants, additional funding allocated by FDOT, as well as the return of the reimbursement funding in July 2023, will provide a good start to expediting the construction of Segment 2.2. Likewise, a similar situation is possible for the segment from Becker Road

Agenda Date: 6/17/2019 Agenda Item No.: 5.a

to Paar Boulevard, which is scheduled to begin design in May 2020.

Financial Information:

- 1) Revised Typical Section: FDOT indicated that, based on information from their design consultant, the estimated total cost of redesign is \$750,000 to \$800,000 and these funds along with a Funding Agreement will need to be in place prior to FDOT proceeding with the redesign. The funds for the redesign will be from the City's General Fund Undesignated Reserves. The cost of the redesign is not eligible for reimbursement.
- 2) Expedited Construction: A Reimbursement Funding Agreement between FDOT and the City will be prepared and executed. This agreement will stipulate that the City provides FDOT with the funds to complete the construction of the widening project from Alcantarra Boulevard to Darwin Boulevard, estimated to be \$8.5M prior to advertising for construction. Additionally, FDOT will construct the project and then reimburse \$8.5M to the City in July 2023. The estimated cost to carry the \$8.5M advancement for two years is \$452,383.81. The funds will be from the City's General Fund Undesignated Reserves.

Special Consideration:

- FDOT has put their design consultant for Port St Lucie Boulevard South on hold until a resolution is reached on the roadway typical section.
- The design of the northern portion of Port St Lucie Boulevard from Gatlin Boulevard to Darwin Boulevard will be put on hold until the typical roadway section is finalized to minimize redesign of the connection point near Darwin Boulevard. The northern section of the corridor is currently under design, 85% complete, by the City's design consultant. The scheduled design completion was July 2019. Construction is partially funded by a FDOT TRIP Grant and is currently scheduled to begin in March 2021. The design schedule for this project could be extended to November 2019 to accommodate a revised typical section, without impacting the scheduled construction date.

Location of Project: Port St. Lucie Boulevard from Becker Road to Darwin Boulevard.

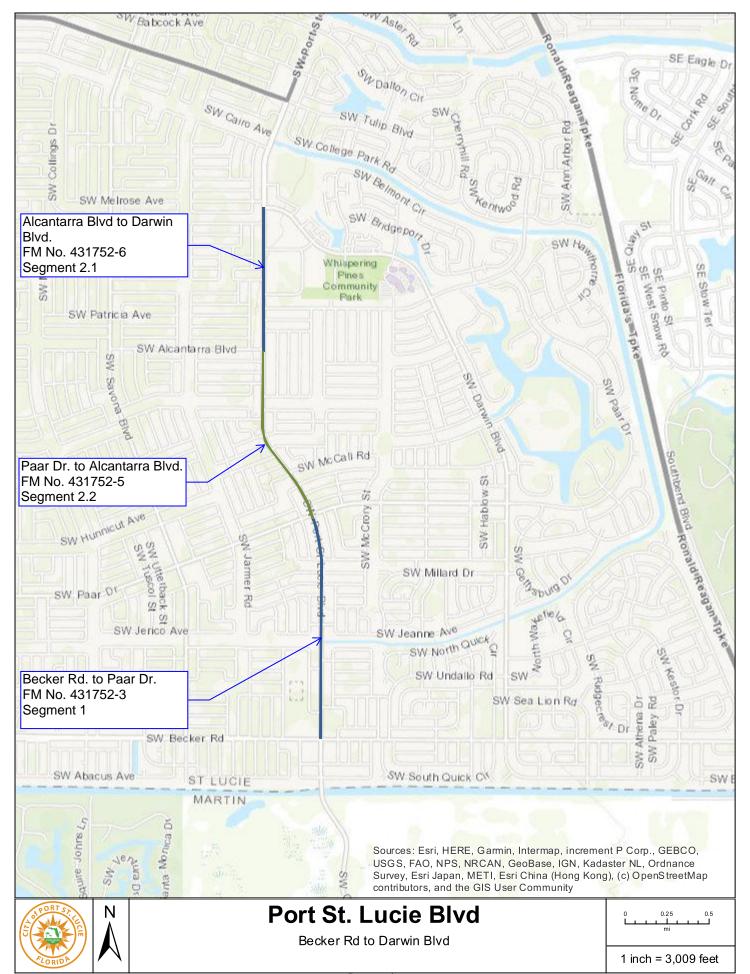
Attachments: Location Map, PowerPoint Presentation

NOTE: All of the listed items in the "Attachment" section above are in the custody of the City Clerk. Any item(s) not provided in City Council packets are available upon request from the City Clerk.

Legal Sufficiency Review:

Approved as to Legal form and sufficiency by James D. Stokes, City Attorney. (Reference Legistar database for authorizing City Attorney representative.)

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PUBLIC WORKS DEPARTMENT



Port St. Lucie Boulevard South

Dedicated to maintaining and improving the quality of the community through the preservation and creation of environmentally and economically sound infrastructure while providing outstanding service to our customers.

Project History

- 2010: Access Management Plan and Typical Section Approved by City Council
- 2013 2014: Project Development and Environment (PD&E) Study
- 2014: Two typical section alternatives presented to public through PD&E process
 - Alternative 1 duplicated concepts approved by City Council in 2010
 - Alternative 2 provided bike lane in lieu of 4-foot wide utility/grass strip
 - Alternative 2 selected as preferred alternative
- 2016: Resolution 16-R55, Supporting roadway improvement from Becker to Darwin.
- 2018: Resolution 18-R05, Authorized FDOT to conduct property acquisitions.
 Resolution 18-R42, Maintenance Memorandum of Agreement
- 2019: Public Information Meeting presented 90% plans to public





Alcantarra Blvd. to Darwin Blvd.

Segment 2.1

0.713 Mile

Design – 90%

Const. - \$8.5M, programmed FY 2023/24

Paar Dr. to Alcantarra Blvd.

Segment 2.2

1.076 Mile

Design – 90%

Const. - \$11M estimated, date TBD

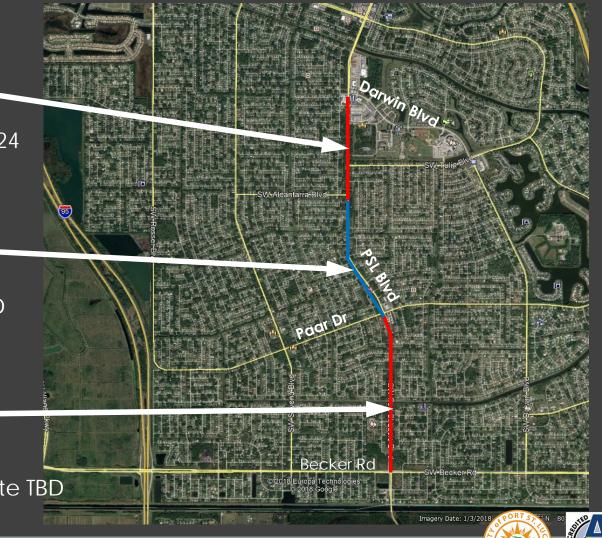
Becker Rd. to Paar Dr.

Segment 1

1.119 Mile

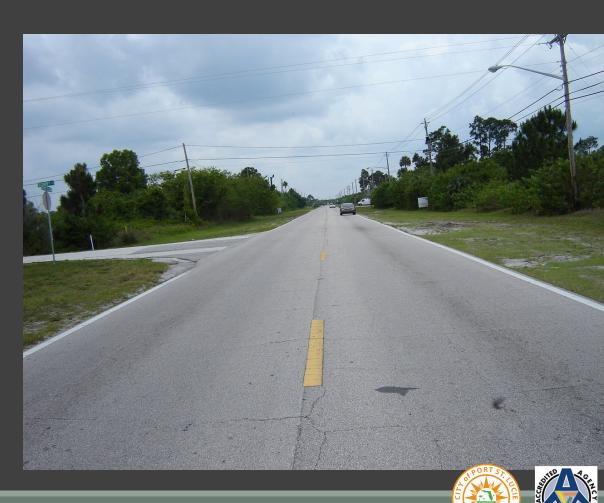
Design - May 2020

Const. - \$13.4M estimated, date TBD



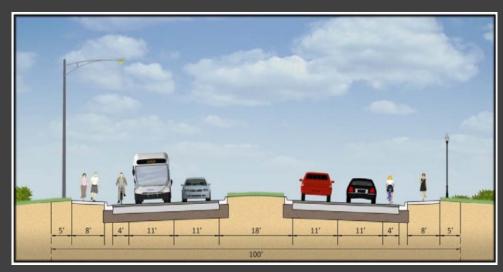
Discussion and Consensus

- 1. Revising Typical Roadway Section
- Expediting Construction –
 Alcantarra Blvd to Darwin Blvd



Typical Roadway Section

Current



Proposed







Revising the Typical Roadway Section

- City and FDOT execute a Funding Agreement (est. 6 months)
- FDOT manages project
- Estimated redesign cost to City is \$660,000 + \$43,000 (Utility redesign)
- Public Information Meeting (PIM)
- FDOT will develop Typical Section per public and City comments as well as current design standards
- New roadway section will be adopted for entire corridor
- Redesign Schedule is 12 months following Funding Agreement (Includes required PIM)
- Redesign will not alter current FDOT construction schedule





Expediting Construction

- FDOT's Local Government Advance/Reimbursement Program allows reimbursement of programmed funds
- \$8.5M programmed by FDOT for construction of Segment 2.1 in FY 2023/24
- Reimbursement Funding Agreement With Redesign of Typical Section
 - City to contribute \$8.5M to FDOT in 2021(estimated)
 - FDOT to begin construction in Oct Nov 2021 (estimated)
 - FDOT to reimburse City \$8.5M in July 2023 (estimated)
- City's Funding Considerations
 - \$8.5M from the City's General Fund Undesignated Reserves
 - Cost to carry \$8.5M for two years is approximately \$452,400
- Potential grants, additional funding allocated by FDOT, and return of reimbursement funding in July 2023 will provide potential path to expedite Segment 2.2, Paar Drive to Alcantarra Boulevard



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^{*} Assumption is made that reimbursement from completed segments is available and full funding is identified in FDOT's 5-Year Work Plan



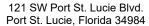


Questions / Action Items

- City Council Consensus on Redesign of Typical Roadway Section
- City Council Consensus on Expediting the Construction of Alcantarra Boulevard to Darwin Boulevard







City of Port St.Lucie



Agenda Summary

Agenda Date: 6/17/2019 Agenda Item No.: 5.b

Placement: New Business

Action Requested: Discussion

Discussion of revisions to the City of Port St. Lucie Neighborhood Traffic Calming Policy

Submitted By: Heath Stocton, P.E., Transportation Engineer, Public Works

Strategic Plan Link: The City's Vision to have great neighborhoods.

Executive Summary (General Business): Staff is presenting for discussion revisions to the City's existing Traffic Calming Policy to allow more applications to be considered for Traffic Calming.

Presentation Information: 10-minute PowerPoint presentation by Staff

Staff Recommendation: Move that the Council provide Staff direction to finalize revisions to the Traffic Calming Policy and associated draft Resolution.

Alternate Recommendations:

- 1. Move that the Council provide additional comments on the Traffic Calming Policy revisions and provide Staff direction to finalize the Traffic Calming Policy and associated draft Resolution
- 2. Move that the Council reject the revisions to the Traffic Calming Policy and provide Staff direction.

Background: The City's Neighborhood Traffic Calming Policy was adopted via Resolution 15-R86 on September 28, 2015. The Traffic Calming Policy was subsequently amended via Resolution 17-R38 on June 26, 2017. The policy provides a process for identifying and addressing problems related to speeding, excessive volumes, and safety on local neighborhood streets.

Issues/Analysis: These revisions are proposed to allow for consideration of more traffic calming projects annually. Also, this revision removes Arterial Roadways from consideration under this Policy but allows them to be considered on a case-by-case basis. Since the inception of the Traffic Calming Policy, one (1) project has met the existing minimum criteria and received physical traffic calming measures. There is a desire for more traffic calming projects to be completed annually and as such there is currently one (1) application that meets the existing criteria and one (1) application that meets the revised criteria for consideration and will be brought forward to City Council for discussion if the proposed revisions are accepted.

Financial Information: \$150,000 is budgeted annually in Public Works' Road and Bridge Capital Improvement Program.

Agenda Date: 6/17/2019 Agenda Item No.: 5.b

Special Consideration: N/A

Location of Project: Citywide

Attachments: Draft Resolution, Revised Traffic Calming Policy, PowerPoint Presentation

NOTE: All of the listed items in the "Attachment" section above are in the custody of the City Clerk. Any item(s) not provided in City Council packets are available upon request from the City Clerk.

Legal Sufficiency Review:

Approved as to Legal form and sufficiency by James D. Stokes, City Attorney. (Reference Legistar database for authorizing City Attorney representative.)

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RESOLUTION -R19

A RESOLUTION OF THE CITY OF PORT ST. LUCIE, FLORIDA AMENDING THE CITY OF PORT ST. LUCIE NEIGHBORHOOD TRAFFIC CALMING POLICY TO REMOVE ARTERIAL ROADS FROM CONSIDERATION UNDER THIS POLICY AND CLARIFY THE APPROVAL PROCESS; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Port St. Lucie is committed to ensure the overall safety and livability of residential neighborhoods; and

WHEREAS, this policy is a collaboration of City staff and property owners to minimize the impact of traffic on neighborhoods; and

WHEREAS, the City Council of the City of Port St. Lucie adopted a Neighborhood Traffic Calming Policy for the benefit of the health and safety of its residents; and

WHEREAS, the City Council approved the City of Port St Lucie Neighborhood Traffic Calming Policy on September 28, 2015; and

WHEREAS, the City Council amended the Neighborhood Traffic Calming Policy to allow the study and construction of traffic calming measures on collector and arterial roads on a case by case basis, simplified the process and made the document user friendly pursuant to Resolution 17-R38 on June 26, 2017; and

WHEREAS, the Neighborhood Traffic Calming Policy is amended to remove arterial roads from consideration under this Policy, clarify the process, and to allow City Council to approve Traffic Calming features upon recommendation from the Traffic Calming Committee.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE, THAT:

<u>Section 1.</u> <u>Ratification of Recitals</u>. The foregoing recitals are hereby ratified and confirmed as true and correct and are hereby made a part of this Resolution.

<u>Section 2.</u> <u>Adoption of Policy</u>. The City of Port St. Lucie City Council hereby amends the Neighborhood Traffic Calming Policy with the attached Exhibit "A" (strikethrough and underline version of the policy).

<u>Section 3.</u> <u>Implementation</u>. The City Manager or his designee is hereby authorized to take all actions necessary to implement this Policy.

<u>Section 4.</u> <u>Conflict</u>. If any resolutions, or parts of resolutions, are in conflict herewith, this Resolution shall control to the extent of the conflicting provisions.

<u>Section 5</u>. <u>Severability</u>. The provisions of this Resolution are intended to be severable. If any part of this Resolution is determined to be void or is declared illegal, invalid, or

RESOLUTION -R19

unconstitutional by a Court of competent jurisdiction, the remainder of this Resolution shall remain in full force and effect.

<u> </u>	Section 6.	Effective Date.	This Resolut	ion shall become effective immediately upon
adoption	n.			
]	PASSED A	ND ADOPTED I	by the City Co	uncil of the City of Port St. Lucie, Florida, this
	day of		, 2019.	
				CITY COUNCIL CITY OF PORT ST. LUCIE
ATTES	T:			By:
Karen A	A. Phillips,	City Clerk		Gregory J. Oravec, Mayor APPROVED AS TO FORM:
				James D. Stokes, City Attorney

Exhibit A

City of Port St. Lucie Neighborhood Traffic Calming Policy

Adopted June 26 17, 2019-2017

INTRODUCTION

The City of Port St. Lucie is committed to ensuring the overall safety and livability of residential neighborhoods. One way to meet this commitment is through a collaboration of City staff and property owners to manage traffic in neighborhoods and address documented traffic concerns. The City of Port St. Lucie Neighborhood Traffic Calming Policy provides a process to request, evaluate, and implement appropriate traffic calming measures.

CONSIDERATIONS

Traditional transportation improvements have generally focused on capacity, speed and safety. While these are still concerns, another dimension, traffic calming, is often added to maintain or restore the livability of a neighborhood. This is done by incorporating physical elements that prohibit and/or slow vehicular traffic. The Institute of Transportation Engineers (ITE) defines traffic calming as:

"....the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users."

Unlike traffic control devices such as stop signs and speed limit signs which require enforcement, traffic calming measures ¹ are self-enforcing. Traffic calming measures generally serve one of the following three functions²:

- Precludes through-traffic and only allows local traffic
- Discourages, but still allows through-traffic
- Allows through- and local traffic

Determining the appropriate type of traffic calming for a roadway requires coordination and consideration of how the existing roadway network functions. The City's existing roadway network is a traditional layout³ which:

- Allows distribution of traffic over a network of streets, thus reduces the need to widen roads;
- Creates a highly interconnected network that provides a choice of routes, thus providing options for detour routes and accessibility for emergency services;

¹ Traffic Calming Measure - an element of a traffic calming plan selected from among those devices authorized herein for use within the city.

² Federal Highway Administration "Traffic Calming State of the Practice" (FHWA-RD-99-135)

³ "Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways", commonly referred to as "The Florida Greenbook,"

- Provides the ability to choose the most direct route to a destination, thus reducing the travel distance and the associated time and fuel;
- Creates smaller blocks of development that can be highly supportive of pedestrian, bicycle, and transit modes of travel;
- Provides a block structure that allows greater flexibility for land use to evolve over time.

Because of the layout of the City's road network, traffic calming measures that hinder the distribution of traffic may result in the need for widening other roadways, delaying emergency response time, or causing drivers to seek routes to bypass the traffic calming. For that reason, consideration of the function and type of roadway is necessary. Within the City's roadway network, the streets and roads are classified as local, collector, or arterial, depending on the use and function as described below:

- Local streets allow direct access to abutting property and characteristically have lower volume, lower speed, shorter trip lengths, and less through-traffic (e.g., Starfish Avenue, Carnation Road, Best Street, etc.).
- Collector streets provide both access and traffic movement between the local streets and arterial roads. A collector street provides moderate volume, speeds, trip lengths, and volume of through-traffic (e.g., Morningside Boulevard, Paar Drive Rosser Boulevard, Mariposa Avenue, etc.).
- Arterial roads focus on the movement of higher volumes, speeds, trips lengths, and throughtraffic (e.g., Port St Lucie Boulevard, Prima Vista Boulevard, Southbend Boulevard, etc.).

Due to the functional nature of the roadways, traffic calming measures are commonly used on local streets, occasionally used on collector streets, and in rare circumstances arterial roads.

GOALS AND GUIDELINES

To balance the community's need for transportation mobility, efficiency, safety, and livability, the City's Neighborhood Traffic Calming Policy will be based upon the following goals and guidelines:

Goals

- Provide and maintain a safe traditional roadway network.
- Maintain and/or improve neighborhood livability by reducing the impact of vehicular traffic on residential streets.
- Encourage citizen involvement in the neighborhood traffic calming process.

Guidelines

- Encourage, but not require, through-traffic to use higher classification roads (i.e., collector streets and arterial roads).
- Re-route traffic from one street to another of equal classifications if, and only if, the result is a more equal distribution of the traffic volumes. Shifting a traffic problem from one street to another or one neighborhood to another is not an acceptable alternative.
- Reduce the average speed of motor vehicles within neighborhoods to acceptable levels.

- Implement cost-effective measures for solving identified traffic problem(s).
- Improve safety for non-motorists in the City right-of-way.
- Preserve reasonable emergency vehicle ingress/egress.
- Maintain reasonable vehicular access. Traffic calming measures should encourage and enhance pedestrian and bicycle access to and throughout the neighborhood.
- City-owned local streets⁴ and collector streets⁵ are eligible to be considered for traffic calming measures following this policy, guidelines, and criteria.
- City-owned arterial roads⁶ will <u>only</u> be considered for traffic calming measures on a case by case basis <u>and must be sponsored (nominated) by a City Council member, the City Manager, or the City Engineer. The following petition and application process does not apply to arterial roads.</u>
- The City may employ traffic calming measures, including but not limited to the ones listed in Appendix A, to achieve the objectives identified.
- The City shall follow the Neighborhood Traffic Calming Policy to ensure there is consistency and collaborative process for the community while maintaining the efficient use of funding.
- The City shall ensure that all projects receive input from area property owners and affected organizations.
- All projects shall receive City Council approval before installation of permanent traffic calming devices.
- An application for traffic calming on a road or street which does not qualify for traffic calming may be resubmitted after three years.

TRAFFIC CALMING PROCESS

The four-step process to request the <u>a traffic calming</u> study, review and consider the request, obtain consensus from the property owners within the traffic study area, and to implement the project is described below. The Applicant is responsible for the first and third steps.

Step 1 – Neighborhood Contact Person or Applicant⁷ **Requests Study:** A Neighborhood Contact Person or Applicant may request a traffic calming study <u>for a local or collector roadway</u>. To request a study, the Applicant completes and submits a request form and petition to the Public Works Department. The petition—will need to <u>must</u> include the signatures of at least 50% of <u>the</u> property owners fronting the street on which the traffic calming study is requested. A copy of the request form and petition is provided in Appendix B. <u>Please note that only roadways classified as</u>

⁴ As defined by the "Port St. Lucie Functional Classification" provided in the Transportation Element of the City's Comprehensive Plan.

⁵ As defined by the "Port St. Lucie Functional Classification" provided in the Transportation Element of the City's Comprehensive Plan.

⁶ As defined by the "<u>Port St. Lucie Functional Classification</u>" <u>provided in the</u> Transportation Element of the City's Comprehensive Plan.

⁷ Neighborhood Contact Person or Applicant – a property owner along the requested street who has submitted a request for the Traffic Calming Study and serves as a liaison between the City and the community.

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local or collector are eligible to be considered for traffic calming measures under this policy. Traffic calming on arterial roadways will be considered individually on a case-by-case basis.

Step 2 - Review and Consideration of the Request by City Staff: City Staff will review the petition and application to evaluate and determine the eligibility of the project request. During this process, Staff will keep the Applicant informed—about of the findings of the review. Staff will review the petition to ensure an adequate number of signatures have been obtained and also gather data on site conditions. If both criteria are met, Staff will conduct a traffic study, and research traffic incidents for—eligible the subject roadway. The data will be used by Staff to classify the roadway and determine if traffic calming measures are appropriate. After determining that traffic calming measures are appropriate, Staff will prepare a conceptual traffic calming plan and hold a public information meeting. Based upon the results of the public information meeting, Staff will prepare a recommended traffic calming plan. These actions by City Staff are further described below.

Eligibility: To be eligible for traffic calming, all the following criteria must be met. If all criteria are met, in addition to the minimum number of signatures on the petition, the application continues in the review process. If all the criteria-listed below are not met, the application is closed, and the Applicant is notified that the road does not meet the requirements for traffic calming. To be eligible for traffic calming, the roadway shall:

- Be classified as a local or collector roadway
- Not be designated an emergency and evacuation route.
- Have no more than two travel lanes.
- Be under the jurisdiction of the City.
- Be at least 1,000 feet in length.

Data Collection: If the eligibility criteria <u>mentioned above</u> is met, the following data will be collected to determine roadway conditions.

- Site conditions: Visual survey to confirm that the roadway has proper signage, pavement markings and sight distance. Any irregularities will be corrected.
- Traffic Study: A traffic count⁸, speed study⁹, and classifications of vehicles using the roadway will be collected and recorded.
- Incident records: Crash records and other traffic incident reports will be collected.

Traffic Conditions: The collected data will be reviewed and used to document traffic conditions and determine if traffic calming measures are appropriate for the roadway. The four types of traffic conditions and recommended traffic calming are outlined below.

<u>Type I - Minor Excessive Speed and Volume:</u> This designation is provided for <u>local</u> roadways with traffic that meet the following conditions:

-

⁸ Traffic Count - a manual or automated count of the number of vehicles traversing a street.

⁹ Speed Study - a study using equipment to measure, collect, and statistically analyze the speeds of vehicles.

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- The measured 85th percentile speed¹⁰ is between 5 and 8 miles per hour above the posted speed limit and;
- Average annual daily trips (AADT) are between 300 and 800 vehicles per day (vpd).

Roadways with minor excessive speed and volume (Type I) will be addressed through enforcement and education. The Port St. Lucie Police Department and/or St. Lucie County Sheriff's Office will be notified of the situation and requested to increase enforcement on a random basis during the hours when most the speeding violations occur. Additionally, neighborhood flyers or other such means of informing drivers using this road may be provided.

<u>Type II - Excessive Speed-or and Volume:</u> This designation is for-local roadways with traffic volumes greater than 800 average annual daily trips (AADT) and one of the following:

- The measured 85th percentile speed is 9 miles per hour or greater more than the posted speed limit, or;
- The hourly volume is greater than 12% of the average daily traffic, or more than 10 daily trips per household.

Roadways classified as having excessive speed or volume (Type II) will continue to the conceptual traffic calming plan phase.

Type III – Other: Any local or collector roadway that does not meet the minimum criteria to be classified as Type II, but the collected volume and speed data are both within 20% of the minimum criteria required (2 mph and 160 vpd), and any of the following extenuating circumstances are present:

- a large number or high frequency of accidents,
- numerous bus stops,
- numerous residential driveways,
- roadway geometry issues, or
- <u>a lack of sidewalks</u>, and other factors may be considered when identifying streets or roads that may benefit from traffic calming.

a roadway may be classified Classifying a local or collector as Type III shall be made by the City Council upon recommendation by the Traffic Calming Committee. City Engineer or designee. The Traffic Calming Committee will present these recommendations to City Council semi-annually for their consideration.

Roadways classified as Type III will continue to the conceptual traffic calming plan phase.

<u>Type IV – None of the Above</u>: Roadways that do not exhibit Type I, Type II, or Type III conditions are not eligible for traffic calming.

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¹⁰ 85th Percentile Speed - speed at which 85% of the vehicles are traveling at or below. <u>For the purposes of</u> this Policy, the 85th Percentile Speed considered will be the average 85th Percentile Speed of both directions.

Conceptual Traffic Calming Plan: Roadways that are classified as having excessive speed or volume (Type II) or other (Type III) will be further analyzed to define a Study Area¹¹ and to create a conceptual traffic calming plan.

Public Information Meeting: A public information meeting will be conducted to present the conceptual traffic calming plan and to obtain input from the public and affected agencies. Property owners within the study area will be given notice of the public information meeting. Means of notification may include door hangers, newspaper, Public Service Announcements on PSLTV Channel 20, City's Webpage http://www.cityofpsl.com/, mailings, or variable message boards located within the study area.

Any property owner who is unable to attend the meeting may submit comments, in writing, for consideration. Additionally, the following agencies will be notified that traffic calming measures are being considered: St. Lucie County Fire Rescue, Port St. Lucie Police Department, St. Lucie County Sheriff's Office, and the St. Lucie County School Board.

Recommended Traffic Calming Plan: Based upon the input received from the public and agencies, Staff will develop a recommended traffic calming plan for the study area.

Step 3 - Applicant Petition for Recommended Traffic Calming Measures: After completion of the recommended plan for traffic calming measures, the Public Works Department will provide a petition form and a map highlighting the study area, as well as the type and locations of the recommended traffic calming devices to the Applicant. The Applicant will need to obtain signatures of 75% of the property owners within the study area indicating that they support the construction of the proposed traffic calming measures.

Step 4 - Project Implementation by City Staff: City Staff will implement the mechanisms needed to fund, design, obtain City Council approval, construct, and evaluate the project after construction—is completed as further described below.

Funding: The design and construction of traffic calming measures will not begin until a funding source is identified and secured. Potential funding options may include, but are not limited to: private sources, public/private partnerships, City's Five Year Capital Improvement Program Budget, Community Development Grant Block Program, Neighborhood Planning Programs, and/or grants.

Design: A professional engineer licensed to work in Florida will prepare the traffic calming construction plans and estimate of construction cost based upon the recommended plan.

City Council Consideration: The petition with the signatures of 75% of the property owners in support of the traffic calming plan, the construction plans, probable cost estimates, construction funding sources, and a construction schedule will be submitted to City Council for review and consideration.

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¹¹ Study Area - the defined area which has been determined to be impacted by proposed traffic calming measures. The Study Area may cross traditional neighborhood boundaries.

Construction: Upon City Council approval and funding availability, the traffic calming measures will be constructed within one year.

Project Evaluation: Approximately six months after the traffic calming project is completed, traffic data will be collected and compared to the previously collected "before" data. The comparison will evaluate the traffic calming measures to determine if corrective measures or other actions are needed.

REMOVAL OF TRAFFIC CALMING MEASURES

With the approval of City Council, traffic calming measures may be removed or altered at any time for the following reasons:

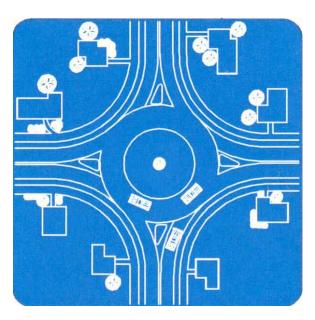
- Emergency response is significantly impacted.
- The traffic count for the street exceeds 5,000 vehicles per day.
- Determination by the City Engineer that it is in the best interest of public safety.

Property owners within the traffic calming area may request removal of the traffic calming measures after the measures have been in place for two years by submitting a petition to the City. The petition shall request removal of the traffic calming measures, acknowledge that the property owners will pay for the removal, and include the signatures of at least 75% of the property owners within the calming area. Upon receipt of the petition, the City will assess the property owners within the traffic calming area for the costs and then remove the traffic calming measures.

Appendix A

Examples of Traffic Calming Measures

Roundahouts



A raised circular structure that deflects the flow of traffic in a counter-clock-wise direction around the circle. The objectives of roundabouts are to slow traffic and reduce the number and severity of crashes. Roundabouts are designed to accommodate all sizes of vehicles. Unlike traffic circles, roundabouts are used on higher volume streets.

Good for: Locations with a history of accidents, intersections with irregular approaches or high u-turn volumes.

Advantages:

- Moderate traffic speeds
- Landscaping and hardscape can make it aesthetically pleasing
- Enhanced safety compared to traffic signals
- Minimizes queuing at the approaches
- Less expensive to operate than traffic signals.

Disadvantages:

- May be difficult for large vehicles to circumnavigate
- May require the elimination of some onstreet parking
- Landscaping must be maintained by the property owners or by the municipality.
- Requires more right-of-way than signalized intersection

Cost Estimate: \$250,000 - \$1,250,000

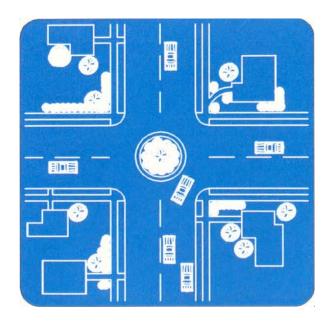
Effectiveness:

• Average 29% reduction in accidents, with a reduction from 9.3 to 5.9 accidents per year (from a sample of 11 sites; source: *Roundabouts: An Informational Guide*)

Similar Measures:

• By constructing a small island in a neighborhood intersection and leaving the existing curbs, you have a Traffic Circle

Traffic Circles



Traffic circles are raised islands, placed in intersections, around which traffic circulates. Not intended for high volume or large vehicle traffic. Traffic circles sometimes employ stop or signal control or give priority to entering vehicles. Some traffic circles impose control measures within the circulating roadway or are designed with weaving areas to resolve conflict movement.

Good for: Calming intersections, especially within neighborhoods, where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems.

Advantages:

- Very effective in moderating speeds and improving safety
- If designed well, they can have positive aesthetic value
- Placed at an intersection, they can calm two streets at once

Disadvantages:

- Difficult for large vehicles (such as fire trucks) to circumnavigate
- May require the elimination of some onstreet parking
- Landscaping must be maintained by the property owners or by the municipality

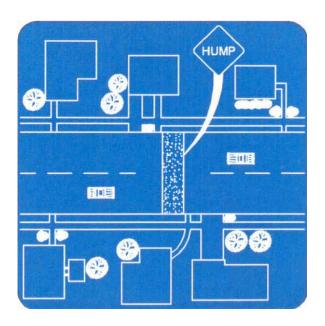
Cost Estimate: \$25,000 - \$150,000

Effectiveness:

- Average of 11% decrease in the 85th percentile travel speeds, or from an average of 34.1 to 30.2 miles per hour (from a sample of 45 sites)
- Including a large sample from Seattle, an average of 73% decrease in accidents, or from an average of 2.2 to 0.6 accidents per year (from a sample of 130 sites)

- By placing a raised island in a midblock location, you have a Center Island Narrowing
- By enlarging the intersection and the center island, inserting splitter islands at each approach, setting back the crosswalks away from the circulating lane, and implementing yield control at all approaches, you have a Roundabout

Speed Humps



Speed humps are rounded raised areas generally 10 to 14 feet long (in the direction of travel), making them distinct from the shorter "speed bumps" found in many parking lots, and are 3 to 4 inches high. Speed humps shall not be used on primary access routes. The objective is to slow traffic and reduce the number and severity of crashes.

Good for: Locations where very low speeds are desired and reasonable and where noise and exhaust fumes are not a major concern.

Advantages:

- Relatively inexpensive
- Relatively easy for bicycles to cross if designed appropriately
- Very effective in slowing travel speeds

Disadvantages:

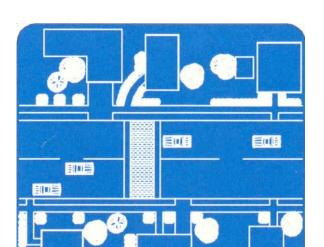
- Causes a "rough ride" for drivers, and can cause severe pain for people with skeletal disabilities
- Forces large vehicles, such as emergency vehicles, to travel at slower speeds
- Increases noise and air pollution
- Questionable aesthetics

Cost Estimate: \$5,000 - \$12,000 each

Effectiveness (12' Hump):

- Average of 22% decrease in the 85th percentile travel speeds, or from an average of 35.0 to 27.4 miles per hour; (from a sample of 179 sites)
- Average of 11% decrease in accidents, or from an average of 2.7 to 2.4 accidents per year (from a sample of 49 sites)

- By lengthening the hump with a flat section in the middle, you have a Speed Table
- By turning an entire crosswalk into a speed hump, you have a Raised Crosswalk; and
- By raising the level of an entire intersection, you have a Raised Intersection



Speed Tables

Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. The tables are generally 3 to 4 inches high, have a six-foot sloped approach, with a ten-foot top, and a six-foot sloped departure profile. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. The long flat areas with gently sloped ramps give speed tables higher speeds than speed humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction.

Good for: Locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.

Advantages:

- Smoother on large vehicles (such as fire trucks) than speed humps
- Effective in reducing speeds, though not to the extent of speed humps

Disadvantages:

- Questionable aesthetics if textured materials are not used
- Textured materials, if used, can be expensive
- May increase noise and air pollution

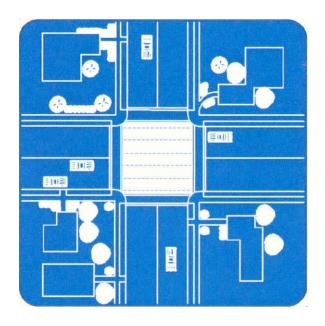
Cost Estimate: \$10,000 - \$15,000 each

Effectiveness (22' Table):

- Average of 18% decrease in the 85th percentile travel speeds, or from an average of 36.7 to 30.1 miles per hour; (from a sample of 58 sites)
- Average of 45% decrease in accidents, or from an average of 6.7 to 3.7 accidents per year (from a sample of 8 sites)

- By removing the flat section in the middle, you have a Speed Hump
- By placing a crosswalk on the flat section, you have a Raised Crosswalk; and
- By raising the level of an entire intersection, you have a Raised Intersection

Raised Intersections



Raised intersections are flat raised areas (3 to 4 inches) that cover an entire intersection with ramps on all approaches and often with brick or other textured materials on the flat section. By modifying the level of the intersection, crosswalks are more readily perceived by motorists to be "pedestrian territory". The objectives are to slow traffic and reduce the number and severity of crashes.

Good for: Intersections with substantial pedestrian activity and areas where parking spaces need to be retained

Advantages:

- Improves safety for both pedestrians and vehicles
- Can have positive aesthetic value
- Calms two streets at once

Disadvantages:

- Expensive, varying by materials used
- Impacts to drainage need to be considered
- Less effective in reducing speeds than speed humps, speed tables, or raised crosswalks

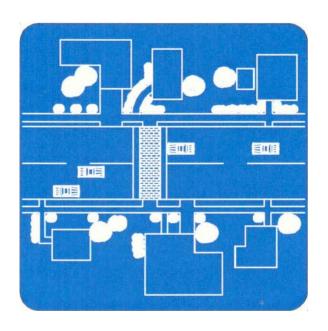
Cost Estimate: \$25,000 - \$50,000

Effectiveness:

• Average of 1% decrease in the 85th percentile travel speeds, or from an average of 34.6 to 34.3 miles per hour; (from a sample of 3 sites)

- By raising only a single crosswalk, you have a Raised Crosswalk
- By raising only a short section to a flat level (without a crosswalk), you have a Speed Table; and
- By raising an even shorter section and constructing it without a flat top, you have a Speed Hump

Raised Crosswalks



Raised crosswalks are speed tables outfitted with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. Also, by raising the level of the crossing, pedestrians are more visible to approaching motorists.

Good for: Locations where pedestrian crossings occur at haphazard locations and vehicle speeds are excessive.

Advantages:

- Improve safety for both pedestrians and vehicles
- Can have positive aesthetic value
- Effective in reducing speeds, though not to the extent of speed humps

Disadvantages:

- Textured materials, if used, can be expensive
- Impacts to drainage need to be considered
- May increase noise and air pollution

Cost Estimate: \$10,000 - \$15,000

Effectiveness:

- For a 22-foot Speed Table (the most similar device for which data is available):
 - Average of 18% decrease in the 85th percentile travel speeds, or from an average of 36.7 to 30.1 miles per hour; (from a sample of 58 sites)
 - Average of 45% decrease in accidents, or from an average of 6.7 to 3.7 accidents per year (from a sample of 8 sites)

- By removing the crosswalk markings and signage, you have a Speed Table; and
- By removing the crosswalk and the flat section in the middle, you have a Speed Hump
- By raising the level of an entire intersection, you have a Raised Intersection

Less Common Traffic Calming Measures

Semi-Diverter Island: Installed on the ingress side of the street in which entry is being prohibited. Vehicles are still allowed to exit from the street but entrance is prohibited. This feature prohibits cut-through traffic.

Mid-Block Island: Constructed mid-block in the center of the roadway separating travel lanes and may reduce lane widths. Mid-block islands slow traffic. These features address vehicle speeds and may discourage cut-through traffic

Splitter Island: May provide landscaping and channelization to lanes at the entrances to a neighborhood. Splitter islands slow traffic and discourage cut-through traffic.

Roadway Narrowing: Reduces the width of pavement while maintaining two- way traffic. Landscaping planted in conjunction with the narrowing may further enhance the feature and impact driver behavior by reinforcing the impression that the pavement area is limited. Roadway narrowing slows and may discourage cut-through traffic.

Chicanes: Changes the alignment of the roadway so that the street is not straight. This eliminates driver tendencies to accelerate on a straight street and may add beautification opportunities without significantly impacting emergency services. Two-way traffic and full access for larger vehicles and emergency services is maintained. These features address vehicle speeds and may discourage cut-through traffic.

Appendix B

Traffic Calming Request Form and **Petition Form**



121 SW Port St. Lucie Blvd, Building B

Port St. Lucie, FL 34984

CITY OF PORT ST. LUCIE PUBLIC WORKS DEPARTMENT

TRAFFIC CALMING REQUEST FORM

Name:				
Address:				
Street for Review ((From/To):			
Day Phone No.: _		Email Address		
	□ Homeowner			
If a homeowner, do	o you belong to a neighborh	nood association?	☐ Yes ☐ No	
If yes, which one?				
☐ Yes ☐ No*			ing request in your neighborhoo	
Please check any	issues that apply to your st	reet:		
☐ Speed of auto	mobile traffic	☐ Cut-through	n traffic	
□ Volume of aut	omobile traffic	☐ High pedes	trian volume	
☐ Number of acc	idents	☐ Lack of am	enities (sidewalks, crosswalks, e	tc.)
Please elaborate o	on the specific problems on	your street or in your ne	ighborhood:	
Once completed, p	olease send your completed	request form AND peti	tion sheet(s) to:	
City of Port St. Lu	ıcie Public Works			

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Signature								
Phone Number								
Address								
Name (Print)								

By signing this petition, you acknowledge that the physical location for traffic calming measures will be determined solely by the City Engineer and/or Public Works staff and that no public input will be accepted in regards to the location of proposed traffic calming measures.

Appendix C Roadway Classifications – Transportation Element Of The Comprehensive Plan

Table 2-1 Local Roadway System

	AD. 1	I able 2-1 Local Noadway System	SIGILI	
Local Name	From	То	Federal Functional Classification System	Port St. Lucie Functional Classification
Airoso Boulevard	St. James Drive	Port St. Lucie Boulevard	Urban Principal Arterial	Urban Principal Arterial
Alcantarra Boulevard	Savona Boulevard	Port St. Lucie Boulevard	NDA	Urban Collector
Bayshore Boulevard	St. James Drive	Port St. Lucie Boulevard	Urban Minor Arterial	Urban Principal Arterial
,	Port St. Lucie Boulevard	Oakridge Boulevard	Urban Collector	Urban Minor Arterial
	Village Parkway	Savona Blvd	Urban Collector	Urban Principal Arterial
Becker Road	Savona Boulevard	Port St. Lucie Boulevard	Urban Minor Arterial	Urban Principal Arterial
	Port St. Lucie Boulevard	Florida Turnpike	Urban Principal Arterial	Urban Principal Arterial
	Florida Turnpike	Gilson Road	Urban Minor Arterial	Urban Principal Arterial
Biltmore Street	S. Macedo Boulevard	Thornhill Drive	NDA	Urban Collector
	Del Rio Boulevard	Savona Blvd	Urban Collector	NDA
California Boulevard	Savona Boulevard	St. Lucie West Blvd	Urban Minor Arterial	U-PA south SLW Blvd to Crosstown Pkwy
	St. Lucie West	West Torino Parkway	Urban Minor Arterial	Urban Minor Arterial
Cameo Boulevard	Crosstown Parkway	Port St. Lucie Boulevard	NDA	Urban Collector
Cane Slough Road	U.S. 1	Lennard Road	Urban Minor Arterial	Urban Minor Arterial
	Del Rio Boulevard	Crosstown Parkway	Urban Collector	Urban Minor Arterial
Cashmere Boulevard	Crosstown Parkway	St. Lucie West Blvd	Urban Collector	Urban Principal Arterial
	St. Lucie West Blvd	East Torino Parkway	Urban Collector	Urban Principal Arterial
Commerce Center Parkway	North City Limit	Crosstown Parkway	Urban Minor Arterial	Urban Minor Arterial
Community Boulevard	Westcliffe Lane	Discovery Way	NDA	Urban Principal Arterial
Crosstown Parkway	Village Parkway	Manth Lane	Urban Minor Arterial	Urban Principal Arterial

2-2

2-3

Local Name	From	70	Federal Functional Classification System	Port St. Lucie Functional Classification
Darwin Boulevard	Becker Road	Port St. Lucie Boulevard	Urban Collector	Urban Principal Arterial
Pacyoling oid lou	Port St. Lucie Boulevard	California Boulevard	Urban Collector	Urban Principal Arterial
Del Rio Doulevalu	California Boulevard	McKenzie Street	Urban Collector	Urban Minor Arterial
Discovery Way	Community Boulevard	Village Parkway	NDA	Urban Principal Arterial
East Torino Pkwy/Torino Pkwy	California Boulevard	Midway Road	Urban Minor Arterial	Urban Minor Arterial
			Urban Minor Arterial from Prima Vista Boulevard to	
Floresta Drive	Bayshore Boulevard	Prima Vista Boulevard	Urban Collector from Airoso Boulevard to Bayshore Boulevard	Urban Collector
	Prima Vista Boulevard	Port S. Lucie Blvd	Urban Minor Arterial	Urban Principal Arterial
	Port S. Lucie Blvd	Southbend Boulevard	Urban Minor Arterial	Urban Principal Arterial
Florida Tumpike	South City Limit	North City Limit	FIHS	FIHS
Gatlin Boulevard	1-95	Port St. Lucie Blvd	Urban Principal Arterial	Urban Principal Arterial
Glades Cut-Off Road (SLC)	Range Line Road	Midway Road	Urban Minor Arterial	Urban Minor Arterial
Gowin Drive	Port St. Lucie Boulevard	Westmoreland Blvd	NDA	Urban Collector
Grand Drive	Jennings Road	Walton Road	NDA	Urban Collector
Green River Parkway	Walton Road	Martin County Line	Urban Collector	Urban Minor Arterial
Heatherwood Boulevard	California Boulevard	Cashmere Boulevard	NDA	Urban Collector
Hillmoor Drive	Tiffany Avenue	Lennard Road	NDA	Urban Collector
Import Drive	Salvateirra Boulevard	Gatlin Boulevard	Urban Collector	Urban Collector
Indian River Drive	South City Limit	North City Limit	Urban Minor Arterial	Urban Minor Arterial
Interstate 95	South City Limit	North City Limit	FIHS	FIHS
Jennings Road	U.S. 1	Lennard Road	Urban Collector	Urban Minor Arterial

Local Name	From	То	Federal Functional Classification System	Port St. Lucie Functional Classification
boot brosse	U.S. 1	Walton Road	Urban Minor Arterial	Urban Principal Arterial
Lennaid Road	Walton Road	North City Limit	NDA	Urban Minor Arterial
LTC Parkway	Midway Road	Glades Cut-Off Road	NDA	NDA
Lyngate Drive	Veteran's Memorial Parkway	U.S. 1	Urban Collector	Urban Minor Arterial
Manville Drive	Selvitz Road	St. James Drive	NDA	Urban Collector
Mariposa Avenue	Lennard Road	Calais Street	Urban Collector	Urban Collector
Melaleuca Boulevard	Lennard Road	Green River Parkway	Urban Collector	Urban Principal Arterial
Midway Doad(1)	West City Limit	McCarty Road	Rural Principal Arterial	NDA
Milaway Rodu	McCarty Road	East City Limit	Urban Principal Arterial	NDA
Morningside Boulevard	Lyngate Drive	River Vista Drive	Urban Collector to Westmoreland, Urban Local to end	Urban Collector
North Macedo Blvd	Selvitz Road	Bayshore Boulevard	NDA	Urban Collector
North Torino Parkway	Torino Parkway	West Blanton Road	Urban Collector	Urban Minor Arterial
Oakridge Boulevard	Bayshore Boulevard	Southbend Boulevard	Urban Collector	Urban Minor Arterial
Paar Drive	Rosser Boulevard	Darwin Boulevard	Urban Collector	Urban Principal Arterial
Peacock Boulevard	Cashmere Boulevard	St. Lucie West Boulevard	Urban Collector	Urban Principal Arterial
Port St. Lucie Boulevard	South City Limit	U.S. 1	Urban Principal Arterial	Urban Principal Arterial
Prima Vista Boulevard	Bayshore	U.S. 1	Urban Principal Arterial	Urban Principal Arterial
Range Line Road ⁽¹⁾	South City Limit	Midway Road	Urban Minor Arterial	Urban Minor Arterial
Rosser Boulevard	Gatlin Boulevard	Paar Drive	Urban Collector	Urban Collector
Savage Boulevard	Import Drive	Gatlin Boulevard	Urban Collector	Urban Collector
Savona Boulevard	Becker Road	California Boulevard	Urban Minor Arterial	Urban Principal Arterial

Local Name	From	То	Federal Functional Classification System	Port St. Lucie Functional Classification
Colvita Dood	Midway Road	Bayshore Boulevard	Urban Minor Arterial	Urban Principal Arterial
SEIVILZ RUAU	Bayshore Boulevard	Floresta Drive	Urban Collector	Urban Principal Arterial
Southbend Boulevard	Becker Road	Floresta Drive	Urban Minor Arterial	Urban Principal Arterial
South Macedo Boulevard	Bayshore Boulevard	Thornhill Drive	NDA	Urban Collector
St. James Drive	Airoso Boulevard	Midway Road	Urban Principal Arterial	Urban Principal Arterial
St. Lucie West Blvd	96-1	Bayshore Boulevard	Urban Principal Arterial	Urban Principal Arterial
Thornhill Drive	Bayshore Boulevard	Floresta Drive	Urban Collector	Urban Minor Arterial
Tiffany Avenue	U.S. 1	Grand Drive	Urban Collector	Urban Collector
Tradition Parkway	Stony Creek Way	1-95	AGN	Urban Principal Arterial
Tulip Boulevard	Port St. Lucie Boulevard	Port St. Lucie Boulevard	Urban Collector	Urban Minor Arterial
U.S. 1	South City Limit	North City Limit	Urban Principal Arterial	Urban Principal Arterial
Veterans Memorial Parkway	U.S. 1	Port St. Lucie Boulevard	Urban Minor Arterial	Urban Principal Arterial
Village Green Drive	U.S. 1	Tiffany Avenue	Urban Collector	Urban Principal Arterial
Village Parkway	Crosstown Parkway	Becker Road	Urban Principal Arterial	Urban Principal Arterial
Walton Road	U.S. 1	Indian River Drive	Urban Minor Arterial	Urban Principal Arterial
Westcliffe Lane	SW Community Boulevard	Village Parkway	NDA	Urban Principal Arterial
Westmoreland Boulevard	U.S. 1	Port St. Lucie Boulevard	Urban Collector	Urban Minor Arterial
West Torino Parkway	West Blanton Road	California Boulevard	Urban Collector	Urban Minor Arterial

Source: FDOT, City of Port St. Lucie, 2012

(1) Not maintained by City of Port St. Lucie. NDA - No data available





CITY OF PORT ST. LUCIE PUBLIC WORKS DEPARTMENT



TRAFFIC CALMING POLICY PRESENTATION

CITY COUNCIL SPECIAL MEETING

JUNE 17, 20146

POLICY GOALS

- Provide and maintain a safe traditional roadway network.
- Maintain and/or improve neighborhood livability by reducing the impact of vehicular traffic on residential streets.
- Encourage citizen involvement in the neighborhood traffic calming process.







TRAFFIC CALMING STATISTICS

(since Sept 2015)

- Traffic Calming Packets provided = 113
- Applications Received/Submitted = 35
- Incomplete = 19
- Not Approved = 13
- TC Completed/Installed = 1 (Carter Ave)
- Currently under Review = 1 (Sultan Dr)
- Progressing to Design = 1 (Salvatierra Blvd)







IMPLEMENTED TRAFFIC CALMING

- SW Dalton & SW Abingdon Avenues
- Westmoreland Boulevard
- SW Belmont Circle
- SW Trenton Lane & SW Chapman Ave
- SW Carter Ave
- Woodland Trails Neighborhood
- Mariposa Avenue & SE Hallahan Street









POLICY REVISION GOALS

- Arterial roadways will be sponsored and will be considered on a case-by-case basis.
- Allow City Council to consider traffic calming applications, if;
 - recommended by Traffic Calming Committee
 - within newly recommended tolerances of minimum requirements
- Completion of more traffic calming projects





PROPOSED REVISIONS

• City-owned local streets⁴ and collector streets⁵ are eligible to be considered for traffic calming measures following this policy, guidelines, and criteria.

 City-owned arterial roads⁶ will <u>only</u> be considered for traffic calming measures on a case by case basis <u>and must be sponsored (nominated) by a City Council member, the City Manager,</u> or the City Engineer. The following petition and application process does not apply to arterial <u>roads.</u>





PROPOSED REVISIONS

<u>Type III – Other:</u> Any local or collector roadway that does not meet the minimum criteria to be classified as Type II, but the collected volume and speed data are both within 20% of the minimum criteria required (2 mph and 160 vpd), and any of the following extenuating circumstances are present:

- Aa large number or high frequency of accidents.
- nnumerous bus stops 15
- numerous residential driveways,
- -roadway geometry issues, or
- <u>a</u> lack of sidewalks, and other factors may be considered when identifying streets or roads that may benefit from traffic calming.

a roadway may be Cclassifyingied a local, collector as Type III shall be made by the City Council upon recommendation by the Traffic Calming Committee. City Engineer or designee. The Traffic Calming Committee will present these recommendations to City Council semi-annually for their consideration.

Roadways classified as Type III will continue to the conceptual traffic calming plan phase.





FUNDING OPTIONS

- Private Funding
- Public Funding: Through the City's Capital Improvement Program or possibly through a Community Development Block Grant (CDBG). Staff recommends CIP Funding to be <u>doubled to \$150,000</u> annually.
- Public/Private Funding







MOVING FORWARD

- Incorporate City Council Comments and Finalize Traffic Calming Policy Revision
- If no comments, City Council may approve the revised Policy
- If revised Policy is approved, there is one (1) current application that meets the new criteria, which will be presented to City Council at an upcoming meeting.





QUESTIONS



CITY OF PORT ST LUCIE
PUBLIC WORKS DEPARTMENT







City of Port St.Lucie

Agenda Summary

Agenda Date: 6/17/2019 Agenda Item No.: 5.c

Placement: New Business

Action Requested: Motion / Vote

Discussion to determine City Council consensus on elements of the Florida Department of Transportation Multimodal Master Plan for Interstate 95

Submitted By: Roxanne M. Chesser, P.E. - Assistant Public Works Director

Strategic Plan Link: The City's Goal of high-quality infrastructure and facilities.

Executive Summary (General Business): Mayor Oravec has requested that this item be brought forward for discussion and consideration by the City Council. The two items for consideration are: 1) Does the City Council desire to submit a letter to the Florida Department of Transportation (FDOT) expressing the City's concern with the proposed Braided Ramp concept for the Crosstown Parkway and St Lucie West Boulevard Interchanges? And 2) Is there value in expediting the proposed conceptual improvements to the Peacock Boulevard/St. Lucie West Boulevard intersection to coincide with the FDOT improvements to the St. Lucie West Boulevard/I-95 Interchange in FY 2021/22?

Presentation Information: N/A

Staff Recommendation: Move that the Council direct staff to prepare and send a letter to FDOT that expresses the City's concern about the proposed Crosstown Parkway and St. Lucie West Boulevard Braided Ramp Interchanges and direct staff to re-allocate funding and commence with property acquisition and design of additional southbound right turn lane on Peacock Boulevard for completion in FY 2021/22.

Alternate Recommendations:

1. Move that the Council amend the recommendation and provide Staff with direction.

Background: The FDOT Multimodal Master Plan for I-95 identifies conceptual plans for widening the Interstate from six to eight lanes, as well as improvements to interchanges and intersections within the City.

The purpose of the Master Plan is to identify needed improvements and recommendations that will carry through to the Project Development and Engineering (PD&E) Study/Design. The PD&E will thoroughly investigate, identify, and define the impacts of the recommended improvements as well as make recommendations for mitigating impacts to existing facilities. The conceptual projects identified in the Master Plan are not currently funded in the FDOT Work Program.

As part of the Master Plan, braided ramps are being considered between Crosstown Parkway and St Lucie West Boulevard Interchanges. The braided ramps will prohibit vehicles from making local trips between Crosstown Parkway and St Lucie West Boulevard. The estimated time for implementation of the northbound braided ramp is 56 Agenda Date: 6/17/2019 Agenda Item No.: 5.c

the year 2030 and the southbound braided ramp is the year 2045. FDOT's basis for the need of the ramps is based upon "weaving" that occurs as vehicles from Crosstown Parkway are attempting to enter I-95northbound or stay on the ramp and exit at St. Lucie West Boulevard while northbound traffic on I-95 is also attempting to exit to St. Lucie West Boulevard. The short distance between the Crosstown Parkway entrance ramp and the St. Lucie West Boulevard exit ramp makes merging more difficult. It is believed this situation will be exacerbated as traffic on I-95 increases. The braided ramps will remove the weaving by separating vehicles that are attempting to enter and exit I -95 onto different ramps. However, it will no longer allow access between Crosstown Parkway and St. Lucie West Boulevard via I-95.

The Master Plan also includes the concept of improving the Peacock Boulevard/St Lucie West Boulevard Intersection in the year 2045 to include the following which are also shown on Exhibit A:

- Northern Side: new southbound left turn lane, new southbound through lane, new southbound right turn lane, new northbound through lane.
- Eastern Side: new westbound right turn lane, new westbound bike lane, new westbound through lane, new westbound left turn lane, new eastbound through lane, new eastbound bike lane.
- Southern Side: new northbound through lane, new southbound through lane.
- Western Side: new westbound through lane, new westbound bike lane, new eastbound left turn lane, new eastbound through lane, new eastbound bike lane.

All of the aforementioned improvements will require right-of-way acquisition. The Planning, Design, and Environmental (PD&E) study, right-of-way acquisition, design, and construction of the improvements have not been budgeted by FDOT and fall outside the current Work Plan.

Improvements to the St Lucie West Boulevard/I-95 Interchange, including a new eastbound bridge, are fully funded in the FDOT Work Program. The design is underway and is scheduled for completion in April 2020 with construction in FY 2021/22.

Issues/Analysis: The proposed braided ramps will not allow local trips on I-95 between Crosstown Parkway and St. Lucie West Boulevard and will thus increase trips on the adjacent roadways (i.e., California Boulevard and Commerce Center Drive) and inconvenience drivers. Due to these impacts, the City has significant concerns about the recommendation to use braided ramps at the Crosstown Parkway and St Lucie West Boulevard Interchanges. However, a recently published memorandum by FDOT's consultant RS&H that summarizes traffic models with and without the braided ramps states that levels of service (LOS) on parallel roadways (Commerce Centre Drive and California Boulevard) will be at acceptable LOS's through 2045 with braided ramps (memo attached as Exhibit D).

To provide a complete intersection at a major gateway into the City, it is desirable to construct the proposed improvements at the Peacock Boulevard/St Lucie West Boulevard Intersection as part of the improvements to the St Lucie West Boulevard/I-95 Interchange in FY 2021/22 rather than 2045.

A potential path to complete the intersection improvements with the interchange improvements would be for the City to fund and complete the property acquisition, design, and construction. Design and construction costs are anticipated to be at least \$3M. The improvements identified by FDOT will require new mast arms and considerable widening east, west, north, and south of the intersection, which contribute to the above-average cost. Due to the limited time frame and the absence of funding in the Work Program, FDOT would not be able to complete the PD&E, property acquisition and design in time for construction in FY 2021/22.

Agenda Date: 6/17/2019 Agenda Item No.: 5.c

It appears a more immediate need is the addition of a southbound right-turn lane from Peacock Boulevard to St. Lucie West Boulevard, which could be accomplished without extensive widening. This improvement could theoretically be completed by the City in line with the FY 2021/22 FDOT improvements.

Financial Information: Improvements to Interstate I-95, St Lucie West/I-95 Interchange and the St Lucie West Boulevard/Peacock Boulevard Intersection completed by FDOT are or will be funded through the FDOT Work Program. If the City completes the improvements to the St Lucie West Boulevard/Peacock Boulevard Intersection, a reallocation of funds or new funding source will need to be programed into the City's Road and Bridge Budget for FYs 2019/2020, 2020/21 and 2021/22. Additionally, since this project is not in FDOT's Work Program, the cost would be fully borne by the City and would not be reimbursable. Construction of a single southbound right-turn lane would cost between \$250,000 and \$500,000, depending upon the required property's value.

Special Consideration: N/A

Location of Project: Interstate 95 between Crosstown Parkway and St Lucie West Boulevard and Peacock Boulevard/St Lucie West Boulevard Intersection.

Attachments: Exhibit A - Peacock Boulevard 2045 Master Plan Improvements

Exhibit B - Braided Ramps Conceptual Plan

Exhibit C - Braided Ramps with Text

Exhibit D - FDOT Memo on LOS

NOTE: All of the listed items in the "Attachment" section above are in the custody of the City Clerk. Any item(s) not provided in City Council packets are available upon request from the City Clerk.

Legal Sufficiency Review:

N/A (Reference Legistar database for authorizing City Attorney representative.)

EXHIBIT A

FDOT Proposed Conceptual Plan
Multimodal Master Plan for Interstate 95
St Lucie West Boulevard and Peacock Boulevard Intersection

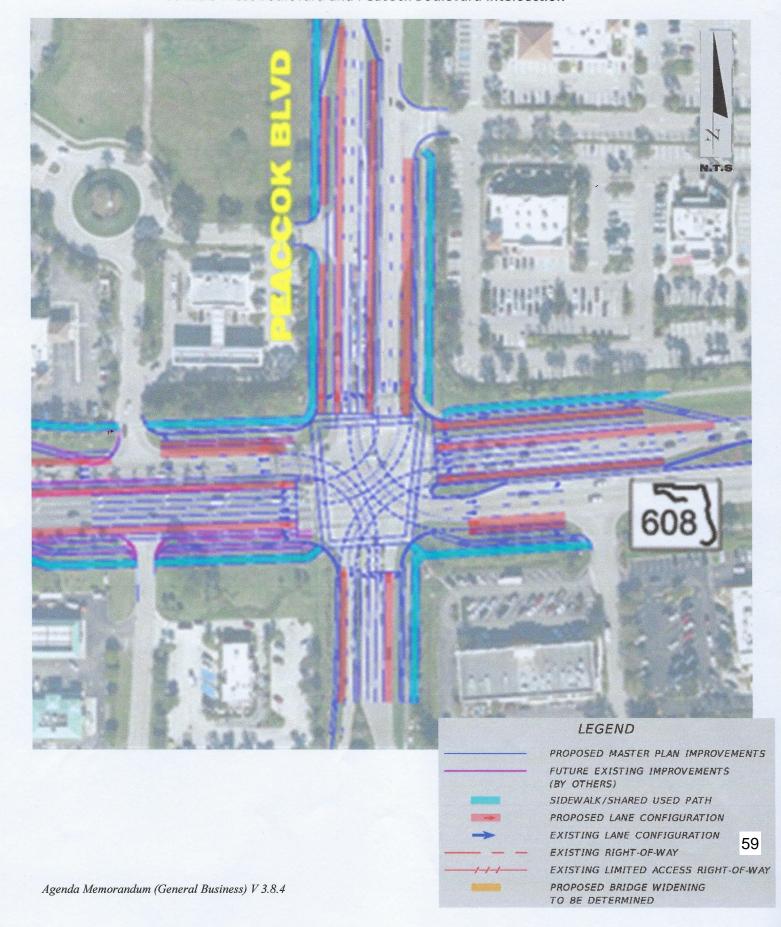


Exhibit B - Braided Ramps Conceptual Plan

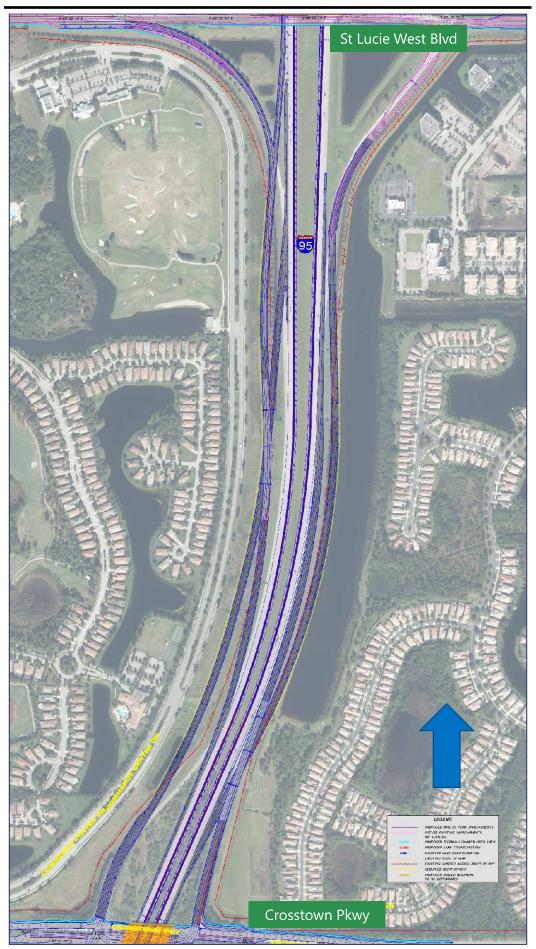


Exhibit C - Braided Ramps with Text

Braided Ramps between Crosstown Pkwy and St Lucie West Blvd Braid NB & SB Onand Off-ramps - Need by 2030 Heavy Weaving Noted by County & City Officials » Local Interchangeto-interchange Trips » Parallel Access via Local Road Network

Currently, a weaving section exists on I-95 between Crosstown Parkway and St Lucie Boulevard. Analysis indicates that this portion of I-95 does not have enough capacity to accommodate the future merge and diverge movements.

Analysis indicated braided ramps that physically separate the on-ramps from the off-ramps will provide sufficient capacity to the I-95 movements by eliminating the weaving maneuvers. Braided ramps are needed for the northbound direction of I-95 by the 2030s, and for the southbound directions by 2045.

Local inter-to-interchange trips would be satisfied by the local roadway network.

TECHNICAL MEMORANDUM

I-95 TREASURE COAST MULTIMODAL MASTER PLAN

To: Min-Tang Li, PhD, PE, FDOT D4 FDOT Financial

ID No.: 436577-1-22-02

CC: Eric Penfield, PE, RS&H, Inc. **Contract No.:** C9U82

From: Lisa Dykstra, PE, RS&H, Inc.

Date: June 4, 2019

Subject: I-95 Braided Ramps between Crosstown Parkway and St. Lucie West

Boulevard – Local Street Traffic Impacts

The purpose of this technical memorandum is to document an evaluation of the potential traffic volume impacts upon California Boulevard and Commerce Center Drive, located respectively east and west of I-95, resulting from the proposed braided ramps concept on I-95 between Crosstown Parkway and St. Lucie West Boulevard. Commerce Center Drive is an existing 4-lane divided north-south local roadway with signalized intersections at Crosstown Parkway and at St. Lucie West Boulevard. California Boulevard is a local north-south roadway that is planned to be widened to 4 lanes by the City of Port St Lucie from SW Del Rio Boulevard to St. Lucie West Boulevard. This committed capacity project is funded with revenues derived from the one-half cent sales tax referendum that was passed in November 2018, and is expected to be constructed prior to 2030.

In St. Lucie County, there is an existing weaving area along I-95 between Crosstown Parkway and St. Lucie West Boulevard. By 2030 the northbound weaving section will operate at an unacceptable LOS F during both the AM and PM peak hours. However, the southbound weaving section on I-95 will operate at LOS B and LOS D during the 2030 AM and PM peak hours, respectively. By 2045, the northbound weaving section will continue to operate at LOS F in both peak hours without improvements, and the southbound I-95 weaving section will degrade to LOS D and LOS F during the 2045 AM and PM peak hours, respectively.

The traffic volume increases along the I-95 mainline and the Crosstown Parkway and St. Lucie West Boulevard on- and off-ramps show the need for improvements to keep traffic flowing smoothly and safely on I-95 between the two interchanges. Braiding the on- and off-ramps between Crosstown Parkway and St. Lucie West Boulevard would address the I-95 operational deficiencies. The northbound braided ramps would allow traffic to first exit to St. Lucie West Boulevard, followed by traffic entering I-95 from Crosstown Parkway, without having to weave on the I-95 mainline. Similar movements would eliminate the weave maneuver in the southbound direction. This braided ramp configuration can improve operations on I-95 to acceptable levels of service through 2045.

Further, the braided ramp concept improves safety for motorists traveling along I-95 between Crosstown Parkway and St Lucie West Boulevard.

LOCAL STREET IMPACT ANALYSIS

To evaluate the traffic volume changes on adjacent roadways resulting from the braided ramp concept, the 2045 travel demand model was run with and without braided ramps on I-95 between Crosstown Parkway and St Lucie West Boulevard. A project-specific version of the Treasure Coast Regional Planning Model (TCRPM 4.0) was developed and used for travel demand forecasting for the I-95 Master Plan study. The model has a base year of 2010 and a horizon year of 2045.

California Boulevard

Assuming that I-95 between Crosstown Parkway and St Lucie West Boulevard operates with braided ramps, the future 2045 diversion of daily traffic onto California Boulevard due to the braided ramps is estimated to be approximately 3,000 vehicles per day. With this minor traffic diversion, California Boulevard is projected to operate at an acceptable level of service in 2045.

Commerce Center Drive

Future daily traffic volumes on Commerce Center Drive are projected to increase by about 4,000 vehicles by 2045 as a result of the braided ramps concept. Analysis indicates that this diversion of traffic onto Commerce Center Drive will not significantly degrade operations. Overall, the roadway segment will operate acceptably in 2045 if I-95 has braided ramps between St Lucie West Boulevard and Crosstown Parkway.

SUMMARY OF FINDINGS

The I-95 braided ramp's impact upon local streets is expected to be insignificant. Based on future year model analysis, the future diversion of traffic to local streets due to the braided ramps concept is projected to be minimal. Analysis reveals that the addition of a relatively minor amount of traffic volume due to the I-95 braided ramp concept can be accommodated by California Boulevard and Commerce Center Drive and each facility will operate at an acceptable level of service through 2045.



City of Port St.Lucie

Agenda Summary

2019-564

Agenda Date: 6/17/2019 Agenda Item No.: 5.d

Placement: New Business

Action Requested: Motion / Vote

Annual update of the Strategic Plan

Submitted By: Kate Parmelee, Strategic Initiatives Director

Strategic Plan Link: The City's Goal of a high-performing city government organization.

Executive Summary (General Business): The annual update of the strategic plan outlines the City's most important strategic goals, initiatives and projects for the upcoming fiscal year and beyond, based on strategic planning sessions held with the Mayor and City Council, staff and citizen input.

Presentation Information: 10-minute PowerPoint presentation will be provided by Strategic Initiatives Director Kate Parmelee.

Staff Recommendation: Move that the Council Move that the Council adopt the Strategic Plan Top Priority Projects.

Alternate Recommendations:

- 1. Move that the Council amend the recommendation and adopt the Strategic Plan Top Priority Projects.
- 2. Move that the Council provide staff direction.

Background: The Mayor and City Council have long utilized the strategic planning process to determine the priorities of the City. Earlier this year the Council held a strategic planning session to begin to plan for the next fiscal year and beyond and identified the top priority projects. Staff has reviewed and developed project deliverables and milestones for the Council's review and final direction. Once the top priority project list is adopted, staff will provide an updated summary document.

Issues/Analysis: The Strategic Plan is a living document and it is anticipated that future updates will be needed to account for changing needs and priorities of the City. Staff will report quarterly on the progress of the plan.

Financial Information: The City's annual budget is in the process of development and budget recommendations will be in alignment with the Strategic Plan.

Special Consideration: N/A

Location of Project: N/A

Agenda Date: 6/17/2019 Agenda Item No.: 5.d

Attachments:

- 1. PowerPoint Presentation Outlining FY 19-20 Strategic Plan Top Priority Projects.
- 2. FY2020 Strategic Plan GANTT Chart.

NOTE: All of the listed items in the "Attachment" section above are in the custody of the City Clerk. Any item(s) not provided in City Council packets are available upon request from the City Clerk.

Legal Sufficiency Review:

N/A

65



#lamPSL



A SAFE



BEAUTIFUL



&
PROSPEROUS
CITY



FOR ALL PEOPLE

STRATEGIC PLAN FY 2019-FY2022



DRAFT | May 28, 2019



OUR VISION

Port St. Lucie has Great Neighborhoods;
excellent Educational Opportunities for lifelong learning;
a Diverse Local Economy and Employment options;
Convenient Transportation;
Unique Natural Resources including the St. Lucie River;
and Leisure Opportunities for an Active Lifestyle.

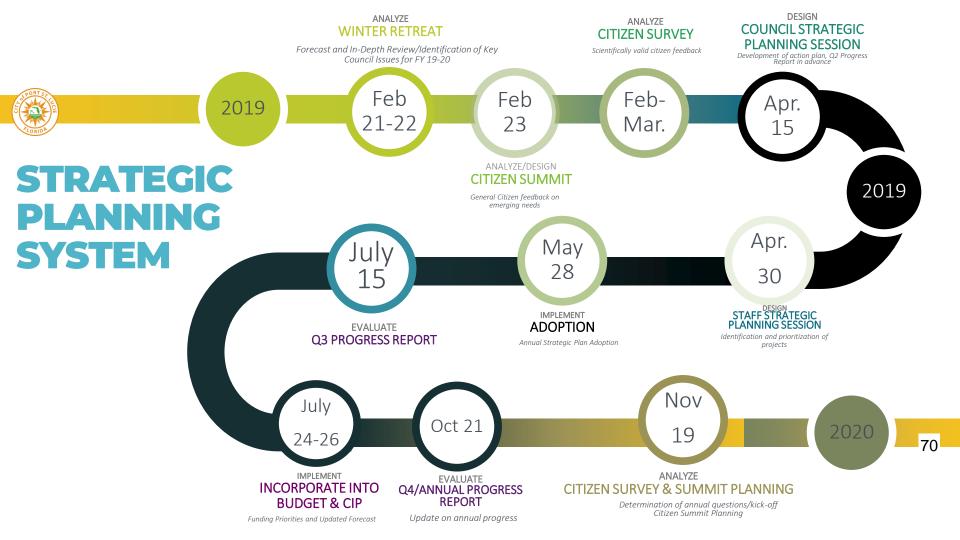
"Port St. Lucie is a Safe, Beautiful, and Prosperous City for All People – Your Hometown."

OUR MISSION

To provide Exceptional Municipal Services that are Responsive to our Community while Planning for Smart and Balanced Growth that is managed in a Financially Responsible Manner.









THE NCS[™] The National Citizen Survey[™]

PSL CITIZENS TOLD US:

- Residents continue to enjoy a high quality of life, and safety is a key feature.
- Mobility continues to be a challenge.
- Residents applaud affordability and feel positively about the economy.
- While Port St. Lucie residents are more engaged with the community and feel more positively about the City government in 2019, they want more opportunities to participate.







CITIZEN SUMMIT







LOVE YOUR CITY







l a m P S L 72

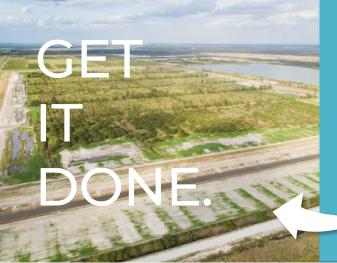




- STRATEGIC INITIATIVES
- PROJECTS



INTRODUCING PROJECT CHARTERS



STRONG PROJECT MANAGEMENT & TRAINING



GOAL 1: Safe, Clean & Beautiful

FLORIDA'S SAFEST LARGE CITY

- Safety was a top priority of residents in the Citizen Survey and Summit
- The population of Western Port
 St. Lucie is growing rapidly, and
 a new policing district is needed
 to keep pace with growth.
- Resident satisfaction with overall appearance continues to grow, and this year's priorities will address the beautification of two gateways to the City.





Safe, Clean & Beautiful:

Key Project Deliverables & Milestones

POLICE DISTRICT 5 IMPLEMENTATION PLAN

DELIVERABLES: 24 patrol police officers, 6 Sergeants, and 1 Lieutenant are planned to be hired over the next five years to minimally staff a new district

MILESTONES: The District will be built by incrementally adding patrol zones to existing districts:

- FY 19/20: Add 6 patrol officers and vehicles, uniforms, computer, weapons and equipment
- FY 20/21: Add 4 patrol officers and vehicles, uniforms, computer, weapons and equipment
- FY 21/22: Add 5 patrol officers and vehicles, uniforms, computer, weapons and equipment
- FY 22/23: Add 6 Sergeants, 1 Lieutenant and vehicles, uniforms, computer, weapons and equipment

US HIGHWAY 1 BEAUTIFICATION FROM
ST. LUCIE COUNTY TO MARTIN COUNTY LINES

DELIVERABLES: Phase 1 & 2 Beautification project is fully designed. Phase 1 is funded at \$1.5 million and additional funding is required to construct Phase 2.

MILESTONES:

 Funding plan for Phase 2 to be developed by 9/2019

ST. JAMES BLVD. BEAUTIFICATION FROM AIROSO BLVD. TO ST. LUCIE COUNTY LINE

DELIVERABLES: Interlocal agreement, design and construction of beautification project.

MILESTONES:

- Interlocal agreement: 9/2019
- Design: 7/2020*
- Construction:4/2021*
- *pending agreement/funding



INITIATIVES



VIBRANT GOAL NEIGHBORHOODS Neighborhood Planning & **Capital Projects Engagement** Neighborhood

PRIORITY PROJECTS

Community Engagement (Continued from FY19)

Entry Signs (Continued from FY19)

Vibrant Neighborhoods: Key Project Deliverables & Milestones

COMMUNITY ENGAGEMENT

DELIVERABLES: Promotion of the formation of Civic Associations/Neighborhood Focus Groups

MILESTONES: Neighborhoods to be engaged over a two-year period in determining neighborhood priorities through the Neighborhood Improvement and Community Engagement (N.I.C.E.) program.

NEIGHBORHOOD ENTRY SIGNS

DELIVERABLES: Neighborhood Entry signs for 27 neighborhoods.

MILESTONES: Signs for 27 neighborhoods are scheduled to be installed by March 2020 (2-year priority, continued from FY19)

GOAL 3: Quality Education for All Residents

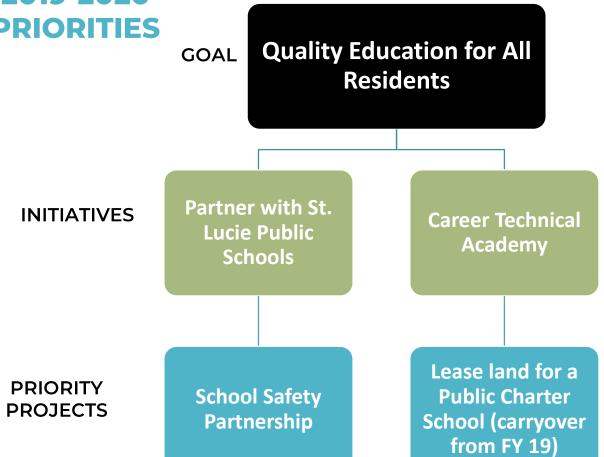
- Resident satisfaction with K-12 education increased in 2019 to 58%, rating it positively as compared to 46% in 2018 and 31% in 2009, but ratings are lower than national benchmarks.
- Almost all community members showed support for the career technical academy in this year's Citizen Survey.
- School grades and third-grade reading scores continue to rise. 68% of Elementary and K-8 schools in Port St. Lucie are rated "A" or "B."

SOMERSET CAREER TECHNICAL ACADEMY









Quality Education for All Residents Key Project Deliverables & Milestones

SCHOOL SAFETY PARTNERSHIP

DELIVERABLES: Request a partnership with the School District to address school safety

MILESTONE: June 2019

CAREER TECHNICAL ACADEMY

DELIVERABLES: Lease Agreement for public charter school

MILESTONES:

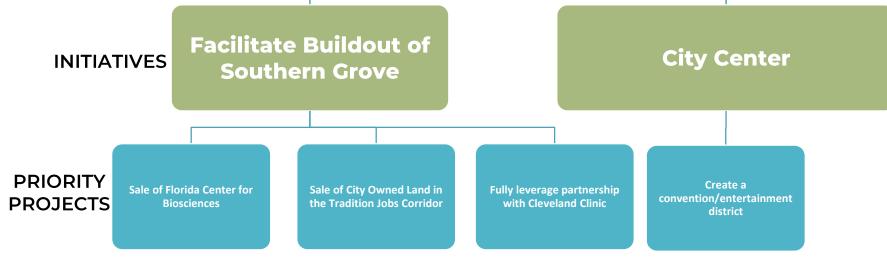
- April 30, 2019 St. Lucie Public Schools grants tentative charter approval to Somerset Career Academy, Port St. Lucie
- Summer 2019 pending charter from St. Lucie Public Schools



- •The economy was identified as a priority for the community in the coming two years in the 2019 citizen's survey. Scores for Port St. Lucie as a place to visit and economic development increased from 2018 to 2019. Although assessments of vibrant downtown/commercial area were lower than the national benchmarks, marks for overall quality of business and services and shopping opportunities were positive.
- Evaluations of Port St. Lucie as a place to work were below-average; yet, employment opportunities received marks similar to comparison communities nationwide.
- •The approximate 1,145 acres located within the Southern Grove Development of Regional Impact, south of Tradition Parkway, north of Becker Road, west of Interstate 95 and east of Village Parkway, provides an unparalleled opportunity for the growth of jobs, industry and to provide a stronger commercial center.
- The City Center site has the potential to serve as an entertainment and cultural hub for the residents, visitors and businesses of the City of Port St. Lucie







Diverse Economy & Employment Opportunities

Key Project Deliverables & Milestones

SALE OF FLORIDA CENTER FOR BIOSCIENCES

DELIVERABLES: Sale of the Florida Center for Biosciences

MILESTONES: Ongoing as viable offers are received.

FULLY LEVERAGE PARTNERSHIP WITH CLEVELAND CLINIC

DELIVERABLES: Recommended strategy/partnerships to fully leverage partnership.

MILESTONES: Recommendations to City Council by October 2019.

SALE OF CITY OWNED PARCELS IN SOUTHERN GROVE JOBS CORRIDOR

Development Management Agreement with Tambone Companies for sale of 84 acres. Closing on 9.75 acres with Oculus in July 2019; Contract for execution with Publix; Contract for execution with Accel. Complete Master Plan for remaining parcels to support sales and development goals for remaining parcels.

MILESTONES

- · Ongoing: Sale of City parcels
- March 2020: Review of Master Plan to include proposed uses, development plan, priority projects, funding strategy and staff recommendation to Council.

Diverse Economy & Employment Opportunities

Key Project Deliverables & Milestones

CITY CENTER REIMAGINED: CREATE A CONVENTION/ENTERTAINMENT DISTRICT

DELIVERABLES/KEY MILESTONES:

- Proposed Action Plan for City Center Reimagined, City Council Review: September 2019
- •Finalize Cost Benefit Analysis: January 2020
- •Review of Master Plan; to include proposed uses, development plan, priority projects, funding strategy and staff recommendation to Council: June 2020
- •Evaluate and provide recommended amendments to CRA Agreement: July 2020

GOAL 5: HIGH QUALITY INFRASTRUCTURE & FACILITIES

FORTOR

- •Residents' scores for travel around Port St. Lucie tended to be lower than the national averages, including evaluations for the availability of paths and walking trails and most modes of travel (by foot, public transit and bicycle). Compared to other communities, fewer residents reported they had used alternative modes (public transit, carpooling, walking or biking) in place of driving alone.
- •Moreover, when asked to identify a desired service not currently offered by the City, half of residents stated they would like the City to provide a service related to mobility. These assessments show an area of opportunity for Port St. Lucie regarding overall ease of travel and alternate forms of transportation.

2019-2020





High Quality Infrastructure & Facilities Key Project Deliverables & Milestones

ACCELERATE AND REDESIGN PSL BLVD. SOUTH

DELIVERABLES/MILESTONES:

PORT ST. LUCIE BOULEVARD SOUTH – SEGMENT 1 (Becker Road to Paar Drive):

- •Deliverable/Milestone: Presentation of a plan including the process, costs, timeline to revise the typical section and expedite the design/construction of the roadway to City Council.
- •Construction currently scheduled for 6/30/2029. Working to accelerate schedule with FDOT. Presenting options to Council at Summer Retreat.

PORT ST. LUCIE BOULEVARD SOUTH – SEGMENT 2 (Paar Drive to Darwin Boulevard):

- •May 10, 2019 Staff met with FDOT to request use of the revised typical section and discuss potential ways to expedite the design and construction.
- •July 25/26, 2019 Staff to present findings from FDOT Meeting to City Council at the Summer Retreat. After the meeting, staff will update the project charter, as appropriate, per Council direction.

High Quality Infrastructure & Facilities Key Project Deliverables & Milestones

BUS SHELTER/PUBLIC ART IMPROVEMENTS

DELIVERABLES/MILESTONES:

- Public Art Improvements for 7 existing bus shelters and potential future shelters
- May 31, 2019 Prepare Call to Artists for existing bus shelter public art
- •August 19, 2019 Review submittals with PAAB
- •September 23, 2019 Provide PAAB's recommendation to City Council
- •October 11, 2019 Finalize contracts with selected artists and begin work

MULTI-MODAL STREET IMPROVEMENTS

DELIVERABLES/ KEY MILESTONES

- Development of a Multi-Modal Street Improvements Plan (includes incorporating beautification plan, street section plan)
- Presentation to Council on project approach: November 2019
- Adoption by City Council (finalizing final plan by staff, presentation to Council and adoption): August 2020

High Quality Infrastructure & Facilities Key Project Deliverables & Milestones

MCCARTY RANCH WATER QUALITY PROJECT

DELIVERABLES: Completion of all seven phases of the water quality restoration project

MILESTONES (contingent on funding):

•2019: Area 1 online

•2020: Area 2 online

•2021: Area 3 online

•2022: Area 4 online

•2023 Area 5 online

•2024: Area 6 online

•2025: Area 7 online

SEPTIC TO SEWER

DELIVERABLES: Reduce the number of septic tanks properties near water bodies leading to the river, pending City Council Policy, in support of clean rivers. Provide policy recommendations to the City Council.

INITIAL MILESTONES: Policy recommendations to be provided to the City Council at the Summer Retreat.

SALES TAX PROJECTS: Previously Prioritized

- St. Lucie West
- Sidewalks
- Repaying
- Traffic Signal Coordination
- Floresta
- U.S. Improvements
- Torino Roundabouts



YOUR HALF-CENT SALES TAX AT WORK



BETTER ROADS,
MORE SIDEWALKS,
AND CLEANER RIVERS.

THANK YOU VOTERS!







GOAL

CULTURE, NATURE & FUN ACTIVITIES



Culture, Nature & Fun Activities Key Project Deliverables & Milestones

RIVERWALK MASTER PLAN

DELIVERABLES/MILESTONES:

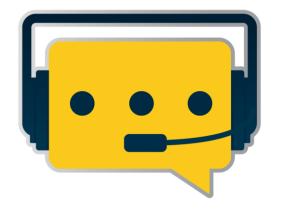
•A cohesive Master Plan for the Riverwalk that will encompass what is currently known as Riverwalk North and Riverwalk South has been proposed in the draft Ten Year Parks Master Plan, scheduled for adoption by Council in July 2019.

TORINO/TRADITION REGIONAL PARK

DELIVERABLES/MILESTONES:

A Regional Park and Sports
 Complex in Torino and/or Tradition
 has been proposed in the draft Ten
 Year Parks Master Plan, scheduled
 for final adoption by Council in July
 2019.





GOAL 7: HIGH PERFORMING GOVERNMENT ORGANIZATION





High Performing Government Organization Key Project Deliverables & Milestones

REDUCE MILLAGE

DELIVERABLES: A budget will be developed for FY 2019-20 which limits spending to allow for a decrease in the overall millage rate of the City.

MILESTONES: Budget will be developed by June 27, 2019.

1PSL

DELIVERABLES: Streamlined customer service system.

KEY MILESTONES:

September 30, 2019: Public Launch

ORGANIZATIONAL DEVELOPMENT

DELIVERABLES: Include leadership and project management training, succession planning, employee development (including improved training, a stronger employee communication process, reimagined employee performance reviews, a value-based recognition program, new on-boarding process and more).

MILESTONES: Organizational Development Strategic Plan by Winter Retreat 2020, other milestones outlined in charter.

99



DISCUSSION/QUESTIONS

STAFF RECOMMENDATION:

Move that the Council adopt the FY2020 Strategic Plan Top Priority Projects.

CITY OF PORT ST. LUCIE 2019-2020 STRATEGIC PLA	N UPDATE																										
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Legend: Contract, RFP or Bidding Cycle							8-2019 Q 3Q 4Q	2019-2			0-2021		1-2022		22-2023		-2024		2025 0130140		2026	40 10	2027 2Q 3Q 4		2028		029
Planning & Design				+		10, 20	2 30 70	10 20	30 70	10, 20	x 3Q 4G	100 20	2 00 7	Q IQ	20 30 70	x 10 20	300 70	2 10 2	Q 3Q 7	Q 1Q 2	.Q 0Q	70 10	20 00 7	Q 1Q 20	<u> </u>	10 10	120
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STRATEGIC GOALS INITIATIVES PROJECTS	PROJECT MANAGER	START DATE	TARGETED COMPLETION DAT	ESTIMATED COST	FUNDED/ UNFUNDED																						
G	OAL 1: SAFE, CLE	EAN & BEAUTIFU	JL - INITIATIVES & PI	ROJECTS			+ +				+ + -									+ +							+
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	John Bolduc,			FY 19/20: \$2.5 M Total Cost for 5-Year Plan: \$5.8 M	Unfunded. To be included in proposed																						
Improve Safety: District 5 Implementation Plan	Chief of Police	10/1/2019	10/1/2024		budget.																						
			10/ 1/ = 0 = 1	· · · ·	Phase 1: Fully funded																				1 1		
	John Dunton	7/1/2021	12/1/2021		via sales tax Phase 2:																						
Beautify Landscaping of Roadways, Public Parks and		7/1/2021	12/1/2021	Currently unfunded	Funding plan in																						
Gateways: US Highway 1 Corridor Beautification	Public Works				development								+					+		+					+		+
			Interlocal																								
			agreement:9/2019																								
		7/1/2019	Design: 7/2020*	Design: \$200,000 Construction:	Unfunded																						
	laba Danita	7/1/2019	Construction:4/2021*	\$4 million	Omanaea																						
Beautify Landscaping of Roadways, Public Parks and	John Dunton,		*pending																								
	Public Works		agreement/funding																								
GOAL 2: VIBRANT NEIGHBORHOODS - INITIATIVES &																											+
	Carmen																										
	Capezzuto,																										
Capital Projects: Neighborhood Entry Signs for 27	Neighborhood Services																										
neighborhoods	Director	10/1/2018	3/31/2020	\$800,000	Funded																						
	Carmen		0,0,1,2020	, , , , , , , , , , , , , , , , , , , ,							1 1		1 1			1											\Box
Neighborhood Planning and Engagement:	Capezzuto,																										
Community engagement on STAR projects and long-	Neighborhood		Diamaian will and inv																								
·	Services Director	3/1/2019	Planning will continu through 2020	e \$654,480	Funded																						
GOAL 3: QUALITY EDUCATION FOR ALL RESIDENTS			11100g112020	φουτ, του	Tunded						+ +														+		+
	John Bolduc,			Annual expenditure of approximately																							
Support St. Lucie Public Schools: School Safety Partr	Chief of Police	Ongoing	Ongoing		Funded in budget																						
			Lease agreement to																								
	David Graham,		be finalized following proposed charter	Academy will be funded by public																							
	Assistant City		approval in summer																								
charter school	Manager	7/30/2018	2019.	into land lease with the City	Land Lease																						
GOAL 4: DIVERSE ECONOMY & EMPLOYMENT OPPO		TATIVES & PROJ	IECTS																								
	Wes McCurry, CRA Director				Appual corning costs																						
	and Teresa				Annual carrying costs funded in budget.																						
	Lamar-Sarno,				Master Plan is																						
	Interim Planning				currently unfunded.																						
	& Zoning	10/1/00/10	0/4/0000		Pursuing \$40,000																						
Tradition Jobs Corridor	Director	10/1/2018	3/1/2020	Master Plan: \$150,000	DEO Grant																						
Southern Grove: Sale of Florida Center for	Russ Blackburn,				Annual carrying cost																						
	City Manager	8/11/2017	TBD	Annual carry costs	funded in budget																						
	Kate Parmelee,																										
	Strategic																										<u> </u>
Southern Grove: Fully leverage partnership with Cleveland Clinic	Initiatives Director	5/28/2019	9/30/2019	TBD	TBD																						
	Teresa Lamar-	3/20/2019	3/30/2019	100	טטו																						4
	Sarno, Interim			\$80,000 Estimated cost of planning																							
City Center: Create a convention/entertainment	Planning &			and financial consultants to execute																							
district	Zoning Director	6/1/2019	7/1/2020	plan	Unfunded																						

CITY OF PORT ST. LUCIE 2019-2020 STRATEGIC PLA DRAFT GANTT CHART	N UPDATE																									
Legend:						8-2019 Q 3Q 4Q 1	2019-2	2020	2020	0-2021	202	1-2022	202	22-2023	2023-			025		2026	40.40	2027	40 40	2028	140 4	2029
Contract, RFP or Bidding Cycle Planning & Design					Q ZG	30 40 1	Q ZQ .	3Q 4Q	10 20	1 3Q 4Q	1 10 20	2 3Q 4G	10/2	Q 3Q 4C	10 20	3Q 4Q	10/20	30 40	אן זען צו	Q 3Q	4Q 1Q	2Q 3Q	4Q 1Q	2Q 3Q	4Q 1	پا کرا
Construction																										坦
Ongoing Last Updated: 5/21/19					-	+++				++								++		+					\vdash	+
Last Opuated. 3/21/19	PPO IECT		TARCETER	EUNDED/		+++			+	++						+		++								+
STRATEGIC GOALS INITIATIVES PROJECTS	PROJECT MANAGER	START DATE	TARGETED ESTIMATED COST COMPLETION DATE	FUNDED/ UNFUNDED																						
GOAL 5: HIGH QUALITY INFRASTRUCTURE & FACILI						+			+	++	+					+	++	++							++	++
Roadways: Accelerate and Redesign PSL Boulevard South (Segment 1 - Becker Road to Paar Drive)	Clyde Cuffy, E.I.	7/1/2020	Currently: 6/30/2029 Working to accelerate schedule with FDOT. Presenting options to Council 07/25/19	Project design and right-of-way acquisition is fully funded by FDOT in FY 19/20 and FY22/23, respectively. Construction is unfunded.																						
Roadways: Accelerate and Redesign PSL Boulevard South (Segment 2 - Paar Drive to Darwin Boulevard)	Clyde Cuffy, E.I.	2/1/2015 (confirm)	Currently: 6/30/2024 (confirm). Working to schedule with FDOT. Presenting options to Council 07/25/19	Project design and right-of-way acquisition is fully funded by FDOT and is at a 90% level of completion. Construction of Segment 2.1 (Alcantarra Blvd to Darwin Blvd) is fully funded in FY 23/24. Construction of Segment 2.2 (Paar Dr to Alcantarra Blvd) is unfunded.																						
Multi-Modal Street Improvements	Teresa Lamar- Sarno, Interim Planning & Zoning Director	4/30/2019	8/1/2020 Total estimated costs are dependent on a final scope of the work required to accomplish the goals and objectives of the project.	This project is currently unfunded.																						
Bus Shelter Public Art Improvements	Patricia Tobin, Long Range Planning Administrator	4/30/2019	Total estimated costs are dependent on a final scope of the work required to accomplish the goals and objectives of the project.	Public art at the existing bus shelters can be funded through the Public Art fund.																						
and choice I also yat improvements	Brad Macek,																	+								+
Water Quality: McCarty WQ Project: Area 1	Utility Systems Director	12/1/2017	Construction substantially complete, 4/28/2019 awaiting final permits.	Funded																						
Tracor squarry, modulty free i loject. Alea i	Brad Macek,	12/1/2017	TIZO/2010 ATTAINING ITTAIN POTTING.					\dashv	\dashv	++					 	\dashv		++		+			\dashv	\dashv	++	+-
Water Quality: MCCarty WO Brainet: Area 2	Utility Systems Director	E/1/2010	12/1/2010 Awaiting parmits	Funded																						
Water Quality: MCCarty WQ Project: Area 2	Brad Macek,	5/1/2019	12/1/2019 Awaiting permits	Funded						++						\dashv		++		++			\dashv	\dashv	++	+
Water Quality, McCorty, WO Brainsty Arra 2	Utility Systems	4/4/0000	Design began in June 2019,	Unfunded, seeking																						
Water Quality: McCarty WQ Project: Area 3	Director Brad Macek,	1/1/2020	10/1/2020 contingent on funding	grants												-	+	++		++			\dashv		++	+
Water Quality, McCarty MC Broinst, Area 4	Utility Systems Director	1/1/2021	10/1/2021 Continuont on finding	Unfunded, seeking grants																						
Water Quality: McCarty WQ Project: Area 4	Brad Macek,	1/1/2021	10/1/2021 Contingent on funding	grants	+	++										\dashv		++		++			\dashv	\dashv	++	+
Water Quality McCarty M/O Business Area 5	Utility Systems	4/4/0000	10/1/2022 Continuent on time din a	Unfunded, seeking																						
Water Quality: McCarty WQ Project: Area 5	Director Brad Macek,	1/1/2022	10/1/2022 Contingent on funding	grants	+	++	++									\dashv	+	++		++			\dashv	\dashv	++	+
Water Quality: McCarty WQ Project: Area 6	Utility Systems Director	1/1/2022	10/1/2022 Contingent on funding	Unfunded, seeking grants																						
The same of the trajection of the same of	Brad Macek,	., .,	John Igon on Iding		+	 	++		\top	++						\top	\dagger	++		+			+		+	+
Water Quality: McCarty WQ Project: Area 7	Utility Systems Director	1/1/2023	10/1/2023 Contingent on funding	Unfunded, seeking grants																						
Water Quality: Septic to Sewer	Brad Macek, Utility Systems Director	2/1/2019	Total estimated costs to be determined following Council policy 6/30/2019 direction in summer 2019.	Currently unfunded, funding options to be discussed as part of the Council policy direction.																						

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CITY OF PORT ST. LUCIE 2019-2020 STRATEGIC PLAN UPDATE DRAFT GANTT CHART																							
Legend:					201	18-2019	2019-202	20	2020-20)21	2021-202	22	2022-2023	2023	-2024	2	025		2026		2027	2028	2029
Contract, RFP or Bidding Cycle							1Q 2Q 3Q													1Q 1Q			4Q 1Q 20
Planning & Design																							+
Construction																1							
Ongoing																							
Last Updated: 5/21/19																							
STRATEGIC GOALS INITIATIVES PROJECTS PROJECT MANAGER	START DATE	TARGETED COMPLETION DA	TE ESTIMATED COST	FUNDED/ UNFUNDED	Ц	Ш																	
GOAL 6: CULTURE, NATURE & FUN ACTIVITIES							 	++	+													++	+++
Sherman Conrad, Park and Recreation	n		\$10 M prioritized in Draft Ten Year	TBD pending adoption of Parks and Recreation Master																			
Riverwalk and Westmoreland Park: Riverwalk Master Director Sherman	8/1/2019	TBD	Parks Master Plan	Plan TBD pending adoption					++							+	+	+				 ++	++
Conrad, Park and Recreation	n		\$20 Million prioritized in Draft Ten Year Parks and Recreation Master	of Parks and Recreation Master																			
Parks Facilities: Tradition and/or Torino Regional Park	8/1/2019	TBD	Plan	Plan					\bot	+						+	+						++
GOAL 7: HIGH PERFORMING GOVERNMENT ORGANIZATION	. T							++		++			+										+
Jeffrey Snyde Chief Financi Reduce the Millage Officer		9/24/2018	To be proposed in initial budget	To be considered by the City Council																			
Kristina Ciuperger, Special Assistant to the Companizational Development Kristina Ciuperger, Special Assistant to the City Manager	e 5/1/2019	Ongoing	\$120,000 for Training Manager and additional training budget	FY20 Budget Request																			
Bill Jones, Ch Information Enhance Customer Service: 1PSL Officer	ef 2/1/2019	9/30/2019	\$20,000 plus \$1500 monthly charge	Funded in IT Budget																			



City of Port St.Lucie

Agenda Summary

Agenda Date: 6/17/2019 Agenda Item No.: 5.e

Placement: Unfinished Business Action Requested: Discussion

Golf Cart Ordinance update and discussion

Submitted By: John A. Bolduc, Chief of Police

Strategic Plan Link: The City's Mission to be responsive to our community.

Executive Summary (General Business): The Golf Cart Committee Members were tasked with exploring the possibility of creating a City Ordinance which would allow the residents of the City of Port St. Lucie to utilize golf carts for travel along public roads or city streets, as well as sidewalks that are at least eight (8) feet wide. This item was previously presented, and Council directed staff to create an interactive connectivity map to aid in the discussion of possible routes and gaps in connectivity. A connectivity map has been created by the IT Department that will depict feasibility of utilizing golf carts for travel through the City.

Presentation Information: Chief John Bolduc will provide a 15-minute presentation.

Staff Recommendation: Move that the Council direct staff to propose an ordinance allowing the use of golf carts on multi-use paths with a minimum width of eight feet in specified neighborhoods.

Alternate Recommendations:

- 1. Move that the Council amend the recommendation and direct staff to propose an ordinance allowing golf carts on roadways with a speed limit of less than 30 mph in specified neighborhoods.
- 2. Move that the Council provide a recommendation and not proceed with the new Golf Cart Ordinance.

Background: The use of golf carts on city roadways has been an ongoing discussion. The appeal has been recently brought to our attention again by a citizen who is requesting to utilize a golf cart on city roadways. The committee has researched the best practices of other similarly situated cities to provide information needed to develop a golf cart ordinance.

Issues/Analysis: The City of Port St. Lucie has the authority to adopt this Ordinance pursuant to Article VIII of the Constitution of the State of Florida and Chapter 166 and §316.212, Fla. Stat. (2018). The committee wishes to add Article III to Chapter 73 of the Code of Ordinances of the City of Port St. Lucie to allow for the City Council to consider and approve resolutions authorizing the operation of golf carts within specified residential communities on sidewalks with a minimum width of 8 feet. The staff has also compiled information on the feasibility of allowing golf cart operations on roadways meeting threshold safety requirements under state and federal law. The use of electric powered low speed vehicles and golf carts for local travel within neighborhoods is a growing trend throughout the nation, but their use does raise some serious safety 104

Agenda Date: 6/17/2019 Agenda Item No.: 5.e

considerations. Staff has provided as an attachment a study conducted by the AARP which is very informational on this topic.

Financial Information: Each sign to delineate area where golf carts would be allowed and/or prohibited would cost approximately \$125. The number of signs needed will depend on the size and number of areas covered. Additional patrol resources are not anticipated at this time, however there will be a negligible amount of training to address any changes in the law.

Special Consideration: N/A

Location of Project: Citywide

Attachments:

Golf Cart Presentation;

Proposed Golf Cart Ordinance - Golf Cart Authorization;

Proposed Golf Cart Ordinance for use on multi-use pathways in Sandpiper, St. Lucie West and Tradition; Proposed Golf Cart Ordinance for use on specified roadways in Sandpiper, St. Lucie West and Tradition; AARP Case Study.

NOTE: All of the listed items in the "Attachment" section above are in the custody of the City Clerk. Any item(s) not provided in City Council packets are available upon request from the City Clerk.

Legal Sufficiency Review:

Approved as to Legal form and sufficiency by James D. Stokes, City Attorney. (Reference Legistar database for authorizing City Attorney representative.)

Golf Cart Ordinance Update and Discussion

City Attorney, Public Works, Risk Management and Police Department



Golf Cart Committee

Golf Cart Committee

- Patricia Roebling, Assistant City Manager
- Keri Norbraten, Senior Assistant City Attorney
- Roxanne Chesser, Assistant Public Works Director
- Renee Major, Risk Management Director
- Heath Stocton, Traffic Engineer
- Raluca Taylor, IT
- John Bolduc, Police Chief



Requested Follow-Up

- Interactive Connectivity Map
 - Possible Routes, Gaps, Etc.
- Legality (Golf Carts, Low Speed Vehicles, Scooters)
- Driver's License, Insurance, and Liability
- Cost (additional resources, signage)
- Case Studies



Interactive Connectivity Map

INCORPORATED

Source: Raluca Taylor, IT Department



Legality

- 316.212 Operation of golf carts on certain roadways.-The operation of a golf cart upon the public roads or streets of the State of Florida is prohibited, except as provided herein:
- (1) A golf cart may be operated only upon a county road that has been designated by a county, a municipal street that has been designated by a municipality, or a two-lane county road located within the jurisdiction of a municipality designated by that municipality, for use by golf carts.

INCORPORATED



Definitions and Legal Requirements

Golf Cart - If Municipal Ordinance Enacted

- > Top speed is less than 20mph
- ➤ Equipped with Brakes, Reliable Steering, Safe Tires, Mirror, Reflectors (front and back)
- > Can be driven by anyone over the age of 14
- > Can only be driven between sunrise and sunset
 - ➤ Unless equipped with headlights, brake lights, turn signals
- > Can be driven on Sidewalks at least 8 feet wide





Definitions and Legal Requirements

Low Speed Vehicle - Approved by State Law

- ➤ Top speed of more than 20mph and less than 25mph
- > Fully Equipped with Brakes, Lights, etc.
- ➤ Operators License Required
- > Registration with DMV Required (with tag)
- > Must be insured comparable to a Motor Vehicle
- ➤ Can be driven on any road where the Speed Limit is less than 35mph



Definitions and Legal Requirements

Micromobility Device - Approved by State Law

- > Top speed of less than 20mph
- ➤ Electric Scooters and Bicycles
- ➤ No Operators License Required
- ➤ No Registration with DMV Required
- ➤ No Insurance Required
- > Operator has Rights and Duties of Bicycle
- Can be further restricted by Local Ordinance, however; it can not be more restrictive then the City's regulation of bicycles.

Source: HB 453

CityofPSL.com

Driver's License

Cities and Counties that Require Driver's License

- 1. City of Tallahassee
- 2. Bay County
- 3. City of Winter Haven
- 4. City of Dunedin
- 5. City of Vero Beach
- 6. City of Clewiston





Driver's License

A driver's license is not required to operate a golf cart on a public road pursuant to §§ 316.212(8)(a), 322.04(e), Fla. Stat. (2018)

- ➤ See AGO 2002-11
- ➤ See AGO 2003-58
- ➤ See AGO 2004-60
- >See AGO 2016-07





Proposed Golf Cart Ordinance Discussion Port St. Lucie Police Department, City Attorney, Public Works and Risk Management

Counties or Cities that require a Waiver of Claims and Indemnification

- 1. City of Winter Haven
- 2. City of Tallahassee
- 3. City of Dunedin
- 4. City of Vero Beach
- 5. City of Tampa





Proposed Golf Cart Ordinance Discussion Port St. Lucie Police Department, City Attorney, Public Works and Risk Management

Counties and Cities that require Liability Insurance:

- 1. City of Tallahassee
- 2. City of Winter Haven
- 3. City of Cedar Key
- 4. City of Dunedin
- 5. City of Vero Beach
- 6. City of Clewiston





Proposed Golf Cart Ordinance Discussion Port St. Lucie Police Department, City Attorney, Public Works and Risk Management

Golf Carts not allowed on roads with speed limits of:

- 1. City of Winter Garden = 25mph
- 2. Bay County = 30mph
- 3. City of Winter Haven = 25mph
- 4. Brevard County, City of Viera = 30mph
- 5. City of Dunedin = 35mph





Case Studies

AARP

Policy and Design Considerations for Accommodating Low-Speed Vehicles and Golf Carts in Community Transportation Networks

- The Villages, FL
- Peach Tree City, GA
- Western Riverside Council of Governments, CA
- Linton, IN

Conclusions

Each of these communities made substantial investments in facilities, trails, and roadways to make LSV and Golf Cart travel safe.



The Proposed Ordinance

How?

- The City Council could designate, though an ordinance, a neighborhood or community as a Golf Cart Community upon its own initiative or upon citizen petition.
 - >After making a determination, it is Safe to Operate
 - ➤ Designating the Boundaries and Placing Signage





The Proposed Ordinance

When?

 Between Sunrise and Sunset unless properly equipped for night time operation.

Where?

 On designated roadways with a Speed Limit of 30mph or less and/or just on approved multiuse pathways. Not state or federally funded right of ways.

Who?

Persons 14 years of age and older



Staff Recommendation

- Direct Staff to propose an ordinance allowing the use of Golf Carts on multi-use paths with minimum width of 8 feet. To operate on roadways they would need to become LSVs.
 - Would permit connectivity to privately owned roadways and shopping in Tradition and St. Lucie West.

Alternative

 Direct Staff to propose an ordinance allowing Golf Carts on roadways with a Speed Limit of less than 30mph in specified neighborhoods.





Interactive Connectivity Map

INCORPORATED

Source: Raluca Taylor, IT Department

CityofPSL.com

Related Cost

- Each sign would cost approximately \$125
 - > The number of signs would depend on the area covered.
- Additional Patrol Resources are not anticipated at this time.

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CityofPSL.com

Discussion

 The Committee needs direction on how to proceed with formulating the ordinance to be brought back for approval.

INCORPORATED



ORDINANCE 19-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE. FLORIDA, CREATING ARTICLE III. - GOLF CARTS OF CHAPTER 73. -RECREATIONAL AND OFF-ROAD VEHICLES OF THE CODE OF ORDINANCES OF THE CITY OF PORT ST. LUCIE; CREATING SECTIONS 73.100-73.111.; PROVIDING FOR DEFINITIONS; PROVIDING FOR THE OPERATION OF GOLF CARTS; REQUIRING GOLF CARTS TO BE EQUIPPED WITH STATUTORILY MANDATED SAFETY DEVICES; PROVIDING FOR HOURS OF OPERATION OF GOLF CARTS ON CITY ROADWAYS; PROVIDING FOR SIGNAGE; PROVIDING FOR THE AUTHORIZATION TO OPERATE GOLF CARTS ON CITY ROADS OR STREETS; PROVIDING FOR THE APPROVAL OF GOLF CART OPERATION WITHIN SPECIFICALLY IDENTIFIED COMMUNITIES AND/OR ROADWAYS **RESOLUTION**; **PROVIDING FOR PROCEDURES FOR CITY** COUNCIL CONSIDERATION AND APPROVAL OF GOLF CART COMMUNITIES AND ROADWAYS; PROVIDING FOR PROHIBITED HIGHWAYS, STREETS, ROADS, AND MULTI-USE PATHWAYS; PROVIDING FOR PARKING; PROVIDING FOR GATED COMMUNITIES; PROVIDING FOR CITY-OWNED GOLF PROVIDING FOR COMPLIANCE WITH TRAFFIC LAWS; PROVIDING FOR ENFORCEMENT; PROVIDING FOR INDEMNIFICATION AND INSURANCE; PROVIDING FOR REVOCATION; PROVIDING FOR CODIFICATION; PROVIDING FOR CONTROL IN EVENT OF CONFLICTS: PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Council has the authority to authorize the operation of golf carts and regulate such operation within its jurisdictional boundaries pursuant to Article VIII, §2(b) of the Florida Constitution, Chapter 166 and §316.212, Fla. Stat. (2018); and

WHEREAS, citizens of the City have expressed an interest in allowing golf carts to be driven upon city streets and roads within some communities located within the City; and

WHEREAS, the operation of golf carts upon public roads is ordinarily prohibited unless otherwise authorized by the City pursuant to §316.212, Fla. Stat. (2018); and

WHEREAS, the City Council desires to add Article III to Chapter 73 of the Code of Ordinances of the City of Port St. Lucie to allow for the City Council to consider and approve resolutions authorizing the operation of golf carts within specified residential communities and on roadways meeting threshold safety requirements under state and municipal law; and

WHEREAS, to protect the health, safety, and welfare of its citizens, the City desires to prohibit the operation of golf carts along roads and thoroughfares incompatible with such

operation and regulate the manner and times of the operation of golf carts upon city streets where such operation is authorized.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE, FLORIDA:

SECTION 1: Authority: The City of Port St. Lucie has the authority to adopt this Ordinance pursuant to Article VIII of the Constitution of the State of Florida and Chapter 166 and §316.212, Fla. Stat. (2018).

SECTION 2: Adoption: Article III of Chapter 73 of the Code of Ordinances of the City of Port St. Lucie is hereby created to add the following Sections 73.100-73.111:

Sec. 73.100. Legislative intent.

(a) It is the intent of this article to permit and regulate the use of golf carts upon the city streets, designated multi-use pathways, and designated trails of the City of Port St. Lucie.

Sec. 73.101. Definitions

- (a) Bicycle path shall mean any road, path, or way that is open to bicycle travel, which road, path or way is physically separated from motorized vehicular traffic (excluding golf carts) by an open space or by a barrier and is located either within the highway right-of-way or within an independent right-of-way.
- (b) <u>City manager shall mean the individual appointed by the City Council of the City of Port St. Lucie pursuant to Section 4.01 of the Charter of the City of Port St. Lucie, Florida.</u>
- (c) <u>Community Association shall mean any legally recognized homeowners',</u> property owners', or condominium association.
- (d) Condominium Association shall mean, in addition to any entity responsible for the operation of common elements owned in undivided shares by unit owners, any entity which operates or maintains other real property in which unit owners have use rights, where membership in the entity is composed exclusively of unit owners or their elected or appointed representatives and is a required condition of unit ownership.

- (e) Designated pedestrian crossing shall mean that portion of a roadway at an intersection or mid-block crossing that is distinctly indicated as a crosswalk for pedestrian crossing by striping or signage or other markings on the road surface or along the roadway.
- (f) Designated multi-use pathways shall mean all sidewalks approved for use by pedestrians, bicycles, and golf carts and designated as such by appropriate signs.

 Multi-use pathways shall have a minimum unobstructed width of eight feet, be located not less than five feet from the outside edge of the nearest traffic lane of any adjacent road or street and have one adjoining grassed shoulder which is relatively flat and not less than four feet wide.
- (g) Designated streets or designated roads shall mean all streets or roads or portions of roads or streets upon which golf carts shall be allowed to operate, under the conditions as provided for herein.
- (h) Golf cart shall mean a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes and that is not capable of exceeding speeds of 20 miles per hour pursuant to §320.01(22), Fla. Stat. (2018). "Golf cart" shall not be construed to mean neighborhood electric vehicle ("NEV"). Golf carts are generally prohibited from operation on public streets. Unless otherwise expressly authorized pursuant to this Article or state law, golf carts shall not be operated upon public roadways located within the City.
- (i) Homeowners' Association shall mean a Florida corporation responsible for the operation of a community or a mobile home subdivision in which the voting membership is made up of parcel owners or their agents, or a combination thereof, and in which membership is a mandatory condition of parcel ownership, and which is authorized to impose assessments that, if unpaid, may become a lien on the parcel. The term "homeowners' association" does not include a community development district or other similar special taxing district created pursuant to statute.
- (j) <u>Property Owners' Association shall mean a Florida corporation responsible for the operation of a community or a mobile home subdivision in which the voting membership is made up of parcel owners or their agents, or a combination</u>

thereof, and in which membership is a mandatory condition of parcel ownership, and which is authorized to impose assessments that, if unpaid, may become a lien on the parcel. The term "property owners' association" does not include a community development district or other similar special taxing district created pursuant to statute.

- (k) Sidewalk shall mean that portion of a street between the curbline, or the lateral line, of a roadway and the adjacent property lines, intended for use by pedestrians.
- (l) Trail(s) shall mean a paved path, at least ten feet in width, which is constructed for the purpose of operation of golf carts, as well as bicycle and pedestrian use, approved for use by golf carts by the city manager and designated for golf cart use by appropriate signs, which signs shall be provided and maintained by the City of Port St. Lucie.

Sec. 73.102. Operation of Golf Carts

- (a) The operation of any golf cart on city roads/streets/multi-use pathways/trails in the City is allowed under the following conditions:
 - (1) Operation between the hours of sunrise and sunset except as otherwise provided for herein.
 - A golf cart must be equipped with efficient brakes, reliable steering apparatus, safe tires, a rearview mirror, red reflectorized warning devices on both the front and rear of the golf cart, and a horn when operated on roads/streets, multi-use pathways or trails designated for golf cart use in accordance with this section.
 - (3) Every golf cart operated on City street or road shall display a triangular slow-moving vehicle emblem, "SMV".
 - (4) Operation between the hours of sunset and sunrise may be permitted if the golf cart is equipped with functional headlights, brake lights, turn signals, and a windshield pursuant to §316.212 (5), Fla. Stat. (2018), as well as the equipment specified in subsection (2) above.

- (5) <u>In accordance with §316.217, Fla. Stat. (2018), a golf cart must be equipped with lighted headlights when operated between the time of sunset to sunrise and/or during conditions of rain, smoke, or fog.</u>
- (6) Operation of a golf cart by a person without a valid driver's license is prohibited.
- (7) <u>Golf cart operators must comply with state, county, or city traffic</u> regulations.
- (8) Golf carts are prohibited on bicycle paths or sidewalks; however, golf carts may be operated up to a maximum speed of 15 miles per hour on multi-use pathways and trails, as defined in section 73.101 herein, designated for use by golf carts as provided for herein.
- (9) Golf cart operators shall not transport more passengers than the number of passengers which the golf cart was designed to carry or transport or any passenger who is not seated in a position intended by the golf cart manufacturer.
- (10) Children under the age of five, who require the use of a crash-tested, federally approved child restraint device specified in §316.6013(1)(a), Fla. Stat. (2018) are prohibited from riding in golf carts on public streets.
- (11) Operation of a golf cart on any city road or street, multi-use pathway, or trail in the City of Port St. Lucie which the city has not designated for the use or operation of golf carts, as provided for herein, is prohibited.
- (12) Operation of a golf cart on any city road or street with a speed limit of more than thirty (30) miles per hour is prohibited.
- (13) A golf cart shall yield to regular motor vehicle traffic when it is apparent that traffic congestion is occurring and shall, in every event, yield to police and emergency vehicles.
- (14) A golf cart shall yield to pedestrians, wheelchair operators, and bicyclists while in use on multi-use pathways or trails.

Sec. 73.103. – Signage

(a) The City Manager shall designate the department which shall post appropriate signs to indicate that operation of golf carts is allowed.

Sec. 73.104. – Authorization to Operate Golf Carts on City Roads or Streets

- (a) Golf carts operated in compliance with Section 73.102 above, shall be allowed to operate upon the streets, roads, multi-use pathways and trails designated for operation as follows:
- (b) Authorization to operate golf carts within and between "golf cart communities" and on specified roadways shall be by resolution. Golf carts meeting the definition set forth in Section 73.101 may be operated on city roadways within the defined boundaries of residential communities when such communities are approved by resolution as "golf cart communities." To receive City approval, any such resolution must be accompanied by the requisite legislative findings as required by §316.212(1), Fla. Stat. (2018) and shall include a plan for the placement of the requisite signage within the "golf cart community." Golf carts may also be operated between "golf cart communities" that are adjacent, if such provision is specifically included by the City Council in the approving resolution. Golf carts may also be operated on roadways outside of "golf cart communities" when such roadways have been approved by resolution for golf cart use. The City Council may reject a resolution or otherwise revoke a previously approved resolution if the Council determines that the operation of golf carts within any such community or roadway would constitute or has become a danger or detriment to the health, safety, welfare, or character of the community or the surrounding area or the City Council otherwise determines that it cannot or will not be able to determine that such community or roadway continues to meet statutory requirements.
- (c) Application for "golf cart community" authorization. A "golf cart community" resolution as described in subsection (b) may be proposed pursuant to one of the following methods:
 - (1) <u>Community associations.</u> A community governed by a community association such as a homeowners', condominium, or property owners' association must have the governing body of such association adopt and

- submit a request in writing to the city that its community be considered for approval as a "golf cart community." Such request shall contain an affirmative statement from the community association that golf carts may safely be operated upon the streets of such community given the speed, volume, and character of motor vehicle traffic using the road or street and any additional information and/or evidence supporting such statement.
- Other communities. The City Council may also, upon its own initiative or upon citizen petition, direct city staff to create a map or other diagram delineating the boundaries of a "golf cart community" or roads upon which golf carts may be operated and a resolution authorizing such roadways or communities for golf cart use to be presented to the City Council for approval.

Sec. 73.105. – Prohibited Highways, Roads, Streets, and Multi-Use Pathways

- (a) Golf Carts are prohibited on the following multi-use pathways within the right-ofway of state or federally funded roads, including, but not limited to:
 - (1) <u>Crosstown Parkway.</u>
 - (2) Port St. Lucie Boulevard.
 - (3) U.S. Highway 1 (S.R. 5).
 - (4) Nothing in this article shall be deemed to authorize the operation of a golf cart on a state or county road.
 - (5) No golf carts shall be operated upon those roads that the city has identified as arterial or collector roads unless otherwise authorized by the enabling resolution.
 - (6) A golf cart shall not be operated upon a state highway unless otherwise authorized pursuant to §316.212(2), Fla. Stat. (2018), or any other applicable state statute.

Sec. 73.106. - Parking

(a) Golf carts operated on designated city streets, when parked in public parking spaces, carts shall be parked in a manner within such space side by side or in another fashion that allows either golf cart to leave the space when desired. It shall be the obligation of each golf cart operator to park the golf cart in a manner that will allow the use of

the public parking space by another golf cart. This section shall be applicable to such areas as are specifically designated for vehicle parking use either on city streets or off the right-of-way of city streets, in parking lots owned and controlled by the city, or in such other areas as are designated by signage or ground marking for such usage, and on public lands specifically allowing such use. Identified handicapped parking spaces may be used by golf carts complying with the law for use of these spaces by vehicles.

Sec. 73.107.- Gated Communities

(a) This ordinance does not regulate operation of golf carts in gated communities with private roads.

Sec. 73.108 – City Owned Golf Carts

(a) This ordinance does not regulate the operation of City owned golf carts by City staff in conjunction with routine maintenance and/or special events.

Sec. 73.109. – Compliance with Traffic Laws

- (a) Compliance with traffic laws. Golf carts shall comply with all applicable local and state traffic laws and may be ticketed for traffic violations in the same manner as motor vehicles.
- (b) Enforcement. The City shall have the authority to enforce the provisions set forth herein and applicable traffic laws, provided however, that the enforcement of rules and regulations created and established by community associations shall be the sole responsibility of each community.

Sec. 73.110. – Indemnification and Insurance

(a) Hold harmless. Any person operating a golf cart on any designated street does so at his/her own risk and must operate such vehicle with due regard for the safety and convenience of other motor vehicles, bicyclists, and pedestrians. The City, in designating certain city streets for the operation of golf carts, extends such operating privileges on the express condition that the operators of any golf carts under this article undertakes such operation at their own risk and assumes sole liability for operating the vehicle on the designated streets and by such operation agrees to defend, release, indemnify, and hold harmless the City, its officials and employees for and regarding any and all claims, demands, or damages of any nature whatsoever arising from such operation by any person.

(b) Liability insurance required. Any operator of a golf cart on the designated streets shall be covered by motor vehicle or other liability insurance that includes operation of the golf cart insuring the owner and/or operator against loss from liability for bodily injury, death, and property damage arising out of the ownership, maintenance, or use of a motor vehicle of not less than the limits described in §324.021(7), Fla. Stat. (2018).

Sec. 73.111. – Revocation

- (a) The operation of a golf cart on designated city streets shall be deemed to be a licensed use of those streets and to be revocable upon the will of the City Council in its legislative capacity based on its consideration of the health, safety, and welfare of the public arising from such use.
- (b) Permission for the operation of golf carts on city streets shall not limit or otherwise preclude the City Council from the amendment of this article, revocation of this article, contracting or expanding the streets or roads on which golf carts can be operated, or the designation of crossing points for state and county roads. All persons operating golf carts on city streets under this license from the city shall do so on the condition that there shall be no claim for any monetary loss or other claim for the loss of allowed golf cart operation on such streets or any monetary claim therefore based on a claim for action in reliance on the provisions of this article. The City Council retains the unlimited legal authority to revoke, amend or to otherwise legislate as to the operation of golf carts on city streets without liability of any kind arising from its legislative decisions.

SECTION 3. Ratification of Recitals: The City Council of the City of Port St. Lucie, Florida, hereby adopts and ratifies those matters as set forth in the foregoing recitals.

SECTION 4: Conflict: If any ordinances, or parts of ordinances, or if any sections, or parts of sections, of the Code of Ordinances of the City of Port St. Lucie, Florida, are in conflict herewith, this Ordinance shall control to the extent of the conflicting provisions.

SECTION 5: Severability: The provisions of this Ordinance are intended to be severable. If any provision of this Ordinance is determined to be void or is declared illegal, invalid, or unconstitutional by a Court of competent jurisdiction, the remainder of this Ordinance shall remain in full force and effect.

SECTION 6: Codification: It is the intention of the City Council of the City of Port St. Lucie, and it is hereby ordained, that the provisions of this Ordinance shall become and made a part of the Code of Ordinances of the City of Port St. Lucie, Florida, that the sections of this Ordinance may be renumbered or re-lettered to accomplish such intentions, and the word "Ordinance" may be changed to "Section" or other appropriate word as may be necessary.

SECTION 7: Effective Date: This Ordinance shall become effective ten (10) days after final adoption on second reading.

PASSED AND APPROVED by the City Council of the City of Port St. Lucie, Florida,	
this day of	, 2019.
	CITY COUNCIL CITY OF PORT ST. LUCIE
ATTEST:	By: Gregory J. Oravec, Mayor
Karen A. Phillips, City Clerk	
	APPROVED AS TO FORM:
	James Stokes, City Attorney

ORDINANCE 19-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE. FLORIDA, CREATING ARTICLE III. - GOLF CARTS OF CHAPTER 73. -RECREATIONAL AND OFF-ROAD VEHICLES OF THE CODE OF ORDINANCES OF THE CITY OF PORT ST. LUCIE; CREATING SECTIONS 73.100-73.110.; PROVIDING FOR DEFINITIONS; PROVIDING FOR THE OPERATION OF GOLF CARTS; REQUIRING GOLF CARTS TO BE EQUIPPED WITH STATUTORILY MANDATED SAFETY DEVICES; PROVIDING FOR HOURS OF OPERATION OF GOLF CARTS ON CITY ROADWAYS; PROVIDING FOR SIGNAGE; PROVIDING FOR THE AUTHORIZATION TO OPERATE GOLF CARTS ON MULTI-USE PATHWAYS LOCATED WITHIN THE NEIGHBORHOODS OF SANDPIPER, ST. LUCIE WEST, AND TRADITION: PROVIDING FOR PROHIBITED HIGHWAYS, STREETS, ROADS, AND MULTI-USE PATHWAYS; PROVIDING FOR PARKING; PROVIDING FOR GATED COMMUNITIES; PROVIDING FOR CITY-OWNED GOLF CARTS; PROVIDING FOR COMPLIANCE WITH TRAFFIC LAWS; PROVIDING FOR ENFORCEMENT: PROVIDING FOR INDEMNIFICATION AND INSURANCE; PROVIDING FOR REVOCATION; PROVIDING FOR CODIFICATION; PROVIDING FOR CONTROL IN EVENT OF CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Council has the authority to authorize the operation of golf carts and regulate such operation within its jurisdictional boundaries pursuant to Article VIII, §2(b) of the Florida Constitution, Chapter 166 and §316.212, Fla. Stat. (2018); and

WHEREAS, citizens of the City have expressed an interest in allowing golf carts to be driven upon multi-use pathways and trails within Sandpiper, St. Lucie West, and Tradition located within the City; and

WHEREAS, the operation of golf carts upon multi-use pathways and trails is ordinarily prohibited unless otherwise authorized by the City pursuant to §316.212(8)(b), Fla. Stat. (2018); and

WHEREAS, the City Council desires to add Article III to Chapter 73 of the Code of Ordinances of the City of Port St. Lucie to allow for the City Council to consider and approve authorizing the operation of golf carts on multi-use pathways and trails within Sandpiper, St. Lucie West, and Tradition meeting threshold safety requirements under state and municipal law; and

WHEREAS, to protect the health, safety, and welfare of its citizens, the City desires to

prohibit the operation of golf carts along multi-use pathways and trails incompatible with such operation and regulate the manner and times of the operation of golf carts upon multi-use pathways and trails where such operation is authorized.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE, FLORIDA:

SECTION 1: Authority: The City of Port St. Lucie has the authority to adopt this Ordinance pursuant to Article VIII of the Constitution of the State of Florida and Chapter 166 and §316.212, Fla. Stat. (2018).

SECTION 2: Adoption: Article III of Chapter 73 of the Code of Ordinances of the City of Port St. Lucie is hereby created to add the following Sections 73.100-73.111:

Sec. 73.100. Legislative intent.

(a) It is the intent of this article to permit and regulate the use of golf carts upon the designated multi-use pathways and and designated trails located within the communities of Sandpiper, St. Lucie West, and Tradition located within the City of Port St. Lucie.

Sec. 73.101. Definitions

- (a) Bicycle path shall mean any road, path, or way that is open to bicycle travel, which road, path or way is physically separated from motorized vehicular traffic (excluding golf carts) by an open space or by a barrier and is located either within the highway right-of-way or within an independent right-of-way.
- (b) <u>City manager shall mean the individual appointed by the City Council of the City of Port St. Lucie pursuant to Section 4.01 of the Charter of the City of Port St. Lucie, Florida.</u>
- (c) Designated pedestrian crossing shall mean that portion of a roadway at an intersection or mid-block crossing that is distinctly indicated as a crosswalk for pedestrian crossing by striping or signage or other markings on the road surface or along the roadway.
- (d) Designated multi-use pathways shall mean all sidewalks approved for use by pedestrians, bicycles, and golf carts designated as such by appropriate signs.
 Multi-use pathways shall have a minimum unobstructed width of eight feet, be

- located not less than five feet from the outside edge of the nearest traffic lane of any adjacent road or street and have one adjoining grassed shoulder which is relatively flat and not less than four feet wide.
- (e) Golf cart shall mean a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes and that is not capable of exceeding speeds of 20 miles per hour pursuant to §320.01(22), Fla. Stat. (2018). "Golf cart" shall not be construed to mean neighborhood electric vehicle ("NEV"). Golf carts are generally prohibited from operation on public streets. Unless otherwise expressly authorized pursuant to this Article or state law, golf carts shall not be operated upon public roadways located within the City.
- (f) <u>Sidewalk shall mean that portion of a street between the curbline, or the lateral line, of a roadway and the adjacent property lines, intended for use by pedestrians.</u>
- (g) Trail(s) shall mean a paved path, at least ten feet in width, which is constructed for the purpose of operation of golf carts, as well as bicycle and pedestrian use, approved for use by golf carts by the city manager and designated for golf cart use by appropriate signs, which signs shall be provided and maintained by the City of Port St. Lucie.

Sec. 73.102. Operation of Golf Carts

- (a) The operation of any golf cart on city multi-use pathways and trails in the neighborhoods of Sandpiper, St. Lucie West or Tradition is allowed under the following conditions:
 - (1) Operation between the hours of sunrise and sunset except as otherwise provided for herein.
 - A golf cart must be equipped with efficient brakes, reliable steering apparatus, safe tires, a rearview mirror, red reflectorized warning devices on both the front and rear of the golf cart, and a horn when operated on multi-use pathways or trails designated for golf cart use in accordance with this section.
 - (3) Every golf cart operated on a designated multi-use pathway or trail shall display a triangular slow-moving vehicle emblem, "SMV".

- (4) Operation between the hours of sunset and sunrise may be permitted if the golf cart is equipped with functional headlights, brake lights, turn signals, and a windshield pursuant to §316.212 (5), Fla. Stat. (2018), as well as the equipment specified in subsection (2) above.
- (5) <u>In accordance with §316.217, Fla. Stat. (2018), a golf cart must be equipped with lighted headlights when operated between the time of sunset to sunrise and/or during conditions of rain, smoke, or fog.</u>
- (6) Operation of a golf cart by a person without a valid driver's license is prohibited.
- (7) Golf cart operators must comply with state, county, or city traffic regulations.
- (8) Golf carts are prohibited on bicycle paths or sidewalks; however, golf carts may be operated up to a maximum speed of 15 miles per hour on multi-use pathways and trails, as defined in section 73.101 herein, designated for use by golf carts as provided for herein.
- (9) Golf cart operators shall not transport more passengers than the number of passengers which the golf cart was designed to carry or transport or any passenger who is not seated in a position intended by the golf cart.
- (10) Children under the age of five, who require the use of a crash-tested, federally approved child restraint device specified in §316.6013(1)(a), Fla. Stat. (2018) are prohibited from riding in golf carts on designated multiuse pathways or trails.
- (11) Operation of a golf cart on any multi-use pathway or trail in the City of Port St. Lucie which the city has not designated for the use or operation of golf carts, as provided for herein, is prohibited.
- (12) A golf cart shall yield to pedestrians, wheelchair operators, and bicyclists while in use on multi-use pathways or trails.

Sec. 7<u>3.103. – Signage</u>

(a) The City Manager shall designate the department which shall post appropriate

signs to indicate that operation of golf carts is allowed.

Sec. 73.104. – Authorization to Operate Golf Carts on Multi-Use Pathways and Trails Located in the Communities of Sandpiper, St. Lucie West, and Tradition

- (a) Golf carts operated in compliance with Section 73.102 above, shall be allowed to operate upon multi-use pathways and trails located in the communities of Sandpiper, St. Lucie West, and Tradition designated for operation as follows: (1) Golf carts meeting the definition set forth in Section 73.101 may be operated on multi-use pathways and trails within the defined boundaries of the residential communities of Sandpiper, St. Lucie West, and Tradition, which are designated as "golf cart communities." To receive City approval, this ordinance must be accompanied by the requisite legislative findings as required by §316.212(1), Fla. Stat. (2018). City Council has determined that golf carts may safely travel on multi-use pathways or trails located in Sandpiper, St. Lucie West, and Tradition. The City shall include a plan for the placement of the requisite signage within these golf cart communities.
- (b) Sandpiper is the following described property (Legal Description to be Provided)
- (c) St. Lucie West is the following described property, situate, lying and being in St. Lucie County, Florida: All of Section 24, 25, and 36, Township 36 South, Range 39 East. That portion of Sections 23, 26, 34 and 35, Township 36 South, Range 39 East, lying East of the I-95 right-of-way. That portion of Sections 19 and 30, Township 36 South, Range 40 East, lying West of the Florida Turnpike right-of-way. That portion of Section 31, Township 36 South, Range 40 East, lying West of the Florida Turnpike right-of-way. Containing 4614.345 acres more or less.
- (d) <u>Tradition is the following described property (Legal Description to be Provided)</u>

Sec. 73.105. – Prohibited Highways, Roads, Streets, and Multi-Use Pathways

- (a) Golf Carts are prohibited on the following multi-use pathways within the right-ofway of state or federally funded roads, including, but not limited to:
 - (1) Crosstown Parkway.
 - (2) <u>Port St. Lucie Boulevard.</u>
 - (3) U.S. Highway 1 (S.R. 5).
 - (4) I-95

- (5) <u>Florida's Turnpike</u>
- (6) Nothing in this article shall be deemed to authorize the operation of a golf cart on a state or county road.
- (7) No golf cart shall be operated upon those roads that the city has identified as arterial or collector roads unless otherwise authorized by ordinance.
- (8) A golf cart shall not be operated upon a state highway unless otherwise authorized pursuant to \$316.212(2), Fla. Stat. (2018), or any other applicable state statute.

Sec. 73.106.- Gated Communities

(a) This ordinance does not regulate operation of golf carts in gated communities with private roads.

Sec. 73.107 – City Owned Golf Carts

(a) This ordinance does not regulate the operation of City owned golf carts by City staff in conjunction with routine maintenance and/or special events.

Sec. 73.108. – Compliance with Traffic Laws

- (a) Compliance with traffic laws. Golf carts shall comply with all applicable local and state traffic laws and may be ticketed for traffic violations in the same manner as motor vehicles.
- (b) Enforcement. The City shall have the authority to enforce the provisions set forth herein and applicable traffic laws, provided however, that the enforcement of rules and regulations created and established by community associations shall be the sole responsibility of each community.

Sec. 73.109. – Indemnification and Insurance

(a) Hold harmless. Any person operating a golf cart on any designated multi-use pathway or trail does so at his/her own risk and must operate such vehicle with due regard for the safety and convenience of other motor vehicles, bicyclists, and pedestrians. The City, in designating certain multi-use pathways and trails for the operation of golf carts, extends such operating privileges on the express condition that the operators of any golf carts under this article undertakes such operation at their own risk and assumes sole liability for operating the vehicle on the designated multi-use pathways or trail and by such operation agrees to defend, release, indemnify, and hold harmless

- the City, its officials and employees for and regarding any and all claims, demands, or damages of any nature whatsoever arising from such operation by any person.
- (b) Liability insurance required. Any operator of a golf cart on the designated multi-use pathways or trail shall be covered by motor vehicle or other liability insurance that includes operation of the golf cart insuring the owner and/or operator against loss from liability for bodily injury, death, and property damage arising out of the ownership, maintenance, or use of a motor vehicle of not less than the limits described in §324.021(7), Fla. Stat. (2018).

Sec. 73.110. – Revocation

- (a) The operation of a golf cart on designated multi-use pathways or trails shall be deemed to be a licensed use of those multi-use pathways or trails and to be revocable upon the will of the City Council in its legislative capacity based on its consideration of the health, safety, and welfare of the public arising from such use.
- (b) Permission for the operation of golf carts on multi-use pathways or trails shall not limit or otherwise preclude the City Council from the amendment of this article, revocation of this article, contracting or expanding the multi-use pathways or trails on which golf carts can be operated, or the designation of crossing points for state and county roads. All persons operating golf carts on multi-use pathways or trails under this license from the city shall do so on the condition that there shall be no claim for any monetary loss or other claim for the loss of allowed golf cart operation on such multi-use pathways or trails or any monetary claim therefore based on a claim for action in reliance on the provisions of this article. The City Council retains the unlimited legal authority to revoke, amend or to otherwise legislate as to the operation of golf carts on multi-use pathways or trails without liability of any kind arising from its legislative decisions.

SECTION 3. Ratification of Recitals: The City Council of the City of Port St. Lucie, Florida, hereby adopts and ratifies those matters as set forth in the foregoing recitals.

SECTION 4: Conflict: If any ordinances, or parts of ordinances, or if any sections, or parts of sections, of the Code of Ordinances of the City of Port St. Lucie, Florida, are in conflict herewith, this Ordinance shall control to the extent of the conflicting provisions.

SECTION 5: Severability: The provisions of this Ordinance are intended to be

severable. If any provision of this Ordinance is determined to be void or is declared illegal, invalid, or unconstitutional by a Court of competent jurisdiction, the remainder of this Ordinance shall remain in full force and effect.

SECTION 6: Codification: It is the intention of the City Council of the City of Port St. Lucie, and it is hereby ordained, that the provisions of this Ordinance shall become and made a part of the Code of Ordinances of the City of Port St. Lucie, Florida, that the sections of this Ordinance may be renumbered or re-lettered to accomplish such intentions, and the word "Ordinance" may be changed to "Section" or other appropriate word as may be necessary.

SECTION 7: Effective Date: This Ordinance shall become effective ten (10) days after final adoption on second reading.

PASSED AND APPROVED by the City Council of the City of Port St. Lucie, Florida,	
this day of	, 2019.
	CITY COUNCIL CITY OF PORT ST. LUCIE
ATTEST:	By: Gregory J. Oravec, Mayor
Karen A. Phillips, City Clerk	
	APPROVED AS TO FORM:
	James Stokes, City Attorney

ORDINANCE 19-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE. FLORIDA, CREATING ARTICLE III. - GOLF CARTS OF CHAPTER 73. -RECREATIONAL AND OFF-ROAD VEHICLES OF THE CODE OF ORDINANCES OF THE CITY OF PORT ST. LUCIE; CREATING SECTIONS 73.100-73.111.; PROVIDING FOR DEFINITIONS; PROVIDING FOR THE OPERATION OF GOLF CARTS; REQUIRING GOLF CARTS TO BE EQUIPPED WITH STATUTORILY MANDATED SAFETY DEVICES; PROVIDING FOR HOURS OF OPERATION OF GOLF CARTS ON CITY ROADWAYS; PROVIDING FOR SIGNAGE; PROVIDING FOR THE AUTHORIZATION TO OPERATE GOLF CARTS ON CITY ROADS OR STREETS LOCATED WITHIN THE NEIGHBORHOODS OF SANDPIPER, ST. LUCIE WEST, AND TRADITION: PROVIDING FOR PROHIBITED HIGHWAYS, STREETS, ROADS, AND MULTI-USE PATHWAYS; PROVIDING FOR PARKING; PROVIDING FOR GATED COMMUNITIES; PROVIDING FOR CITY-OWNED GOLF CARTS; PROVIDING FOR COMPLIANCE WITH TRAFFIC LAWS; PROVIDING FOR ENFORCEMENT: PROVIDING FOR INDEMNIFICATION AND INSURANCE; PROVIDING FOR REVOCATION; PROVIDING FOR CODIFICATION; PROVIDING FOR CONTROL IN EVENT OF CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Council has the authority to authorize the operation of golf carts and regulate such operation within its jurisdictional boundaries pursuant to Article VIII, §2(b) of the Florida Constitution, Chapter 166 and §316.212, Fla. Stat. (2018); and

WHEREAS, citizens of the City have expressed an interest in allowing golf carts to be driven upon city streets and roads within Sandpiper, St. Lucie West, and Tradition located within the City; and

WHEREAS, the operation of golf carts upon public roads is ordinarily prohibited unless otherwise authorized by the City pursuant to §316.212, Fla. Stat. (2018); and

WHEREAS, the City Council desires to add Article III to Chapter 73 of the Code of Ordinances of the City of Port St. Lucie to allow for the City Council to consider and approve authorizing the operation of golf carts within Sandpiper, St. Lucie West, and Tradition and on roadways meeting threshold safety requirements under state and municipal law; and

WHEREAS, to protect the health, safety, and welfare of its citizens, the City desires to prohibit the operation of golf carts along roads and thoroughfares incompatible with such operation and regulate the manner and times of the operation of golf carts upon city streets

where such operation is authorized.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PORT ST. LUCIE, FLORIDA:

SECTION 1: Authority: The City of Port St. Lucie has the authority to adopt this Ordinance pursuant to Article VIII of the Constitution of the State of Florida and Chapter 166 and §316.212, Fla. Stat. (2018).

SECTION 2: Adoption: Article III of Chapter 73 of the Code of Ordinances of the City of Port St. Lucie is hereby created to add the following Sections 73.100-73.111:

Sec. 73.100. Legislative intent.

(a) It is the intent of this article to permit and regulate the use of golf carts upon the city streets, designated multi-use pathways, and designated trails located within the communities of Sandpiper, St. Lucie West, and Tradition located within the City of Port St. Lucie.

Sec. 73.101. Definitions

- (a) Bicycle path shall mean any road, path, or way that is open to bicycle travel, which road, path or way is physically separated from motorized vehicular traffic (excluding golf carts) by an open space or by a barrier and is located either within the highway right-of-way or within an independent right-of-way.
- (b) <u>City manager shall mean the individual appointed by the City Council of the City of Port St. Lucie pursuant to Section 4.01 of the Charter of the City of Port St. Lucie, Florida.</u>
- (c) <u>Designated pedestrian crossing shall mean that portion of a roadway at an intersection or mid-block crossing that is distinctly indicated as a crosswalk for pedestrian crossing by striping or signage or other markings on the road surface or along the roadway.</u>
- (d) Designated multi-use pathways shall mean all sidewalks approved for use by pedestrians, bicycles, and golf carts designated as such by appropriate signs.

 Multi-use pathways shall have a minimum unobstructed width of eight feet, be located not less than five feet from the outside edge of the nearest traffic lane of

- any adjacent road or street and have one adjoining grassed shoulder which is relatively flat and not less than four feet wide.
- (e) Designated streets or designated roads shall mean all streets or roads or portions of roads or streets upon which golf carts vehicles shall be allowed to operate, under the conditions as provided for herein.
- (f) Golf cart shall mean a motor vehicle that is designed and manufactured for operation on a golf course for sporting or recreational purposes and that is not capable of exceeding speeds of 20 miles per hour pursuant to §320.01(22), Fla. Stat. (2018). "Golf cart" shall not be construed to mean neighborhood electric vehicle ("NEV"). Golf carts are generally prohibited from operation on public streets. Unless otherwise expressly authorized pursuant to this Article or state law, golf carts shall not be operated upon public roadways located within the City.
- (g) <u>Sidewalk shall mean that portion of a street between the curbline, or the lateral</u> line, of a roadway and the adjacent property lines, intended for use by pedestrians.
- (h) Trail(s) shall mean a paved path, at least ten feet in width, which is constructed for the purpose of operation of golf carts, as well as bicycle and pedestrian use, approved for use by golf carts by the city manager and designated for golf cart use by appropriate signs, which signs shall be provided and maintained by the City of Port St. Lucie.

Sec. 73.102. Operation of Golf Carts

- (a) The operation of any golf cart on city roads/streets/multi-use pathways/trails in the neighborhoods of Sandpiper, St. Lucie West or Tradition is allowed under the following conditions:
 - (1) Operation between the hours of sunrise and sunset except as otherwise provided for herein.
 - A golf cart must be equipped with efficient brakes, reliable steering apparatus, safe tires, a rearview mirror, red reflectorized warning devices on both the front and rear of the golf cart, and a horn when operated on roads/streets, multi-use pathways or trails designated for golf cart use in accordance with this section.

- (3) Every golf cart operated on City street or road shall display a triangular slow-moving vehicle emblem, "SMV".
- (4) Operation between the hours of sunset and sunrise may be permitted if the golf cart is equipped with functional headlights, brake lights, turn signals, and a windshield pursuant to §316.212 (5), Fla. Stat. (2018), as well as the equipment specified in subsection (2) above.
- (5) <u>In accordance with §316.217, Fla. Stat. (2018), a golf cart must be equipped with lighted headlights when operated between the time of sunset to sunrise and/or during conditions of rain, smoke, or fog.</u>
- (6) Operation of a golf cart by a person without a valid driver's license is prohibited.
- (7) Golf cart operators must comply with state, county, or city traffic regulations.
- (8) Golf carts are prohibited on bicycle paths or sidewalks; however, golf carts may be operated up to a maximum speed of 15 miles per hour on multi-use pathways and trails, as defined in section 73.101 herein, designated for use by golf carts as provided for herein.
- (9) Golf cart operators shall not transport more passengers than the number of passengers which the golf cart was designed to carry or transport or any passenger who is not seated in a position intended by the golf cart.
- (10) Children under the age of five, who require the use of a crash-tested, federally approved child restraint device specified in §316.6013(1)(a), Fla. Stat. (2018) are prohibited from riding in golf carts on public streets.
- (11) Operation of a golf cart on any city road or street, multi-use pathway, or trail in the City of Port St. Lucie which the city has not designated for the use or operation of golf carts, as provided for herein, is prohibited.
- (12) Operation of a golf cart on any city road or street with a speed limit of more than thirty (30) miles per hour is prohibited.
- (13) A golf cart shall yield to regular motor vehicle traffic when it is apparent

- that traffic congestion is occurring and shall, in every event, yield to police and emergency vehicles.
- (14) A golf cart shall yield to pedestrians, wheelchair operators, and bicyclists while in use on multi-use pathways or trails.

<u>Sec. 73.103. – Signage</u>

(a) The City Manager shall designate the department which shall post appropriate signs to indicate that operation of golf carts are allowed.

Sec. 73.104. – Authorization to Operate Golf Carts on City Roads and Streets Located in the Communities of Sandpiper, St. Lucie West, and Tradition

- (a) Golf carts operated in compliance with Section 73.102 above, shall be allowed to operate upon the streets, roads, multi-use pathways and trails located in the communities of Sandpiper, St. Lucie West, and Tradition designated for operation as follows: (1) Golf carts meeting the definition set forth in Section 73.101 may be operated on city roadways within the defined boundaries of the residential communities of Sandpiper, St. Lucie West, and Tradition, which are designated as "golf cart communities." To receive City approval, this ordinance must be accompanied by the requisite legislative findings as required by §316.212(1), Fla. Stat. (2018). City Council has determined that golf carts may safely travel on or cross public roads or streets located in Sandpiper, St. Lucie West, and Tradition. The City shall include a plan for the placement of the requisite signage within these golf cart communities.
- (b) Sandpiper is the following described property (Legal Description to be Provided)
- (c) St. Lucie West is the following described property, situate, lying and being in St. Lucie County, Florida: All of Section 24, 25, and 36, Township 36 South, Range 39 East. That portion of Sections 23, 26, 34 and 35, Township 36 South, Range 39 East, lying East of the I-95 right-of-way. That portion of Sections 19 and 30, Township 36 South, Range 40 East, lying West of the Florida Turnpike right-of-way. That portion of Section 31, Township 36 South, Range 40 East, lying West of the Florida Turnpike right-of-way. Containing 4614.345 acres more or less.
- (d) Tradition is the following described property (Legal Description to be Provided)

Sec. 73.105. – Prohibited Highways, Roads, Streets, and Multi-Use Pathways

- (a) Golf Carts are prohibited on the following multi-use pathways within the right-ofway of state or federally funded roads, including, but not limited to:
 - (1) <u>Crosstown Parkway.</u>
 - (2) Port St. Lucie Boulevard.
 - (3) <u>U.S. Highway 1 (S.R. 5).</u>
 - (4) I-95
 - (5) Florida's Turnpike
 - (6) Nothing in this article shall be deemed to authorize the operation of a golf cart on a state or county road.
 - (7) No golf cart shall be operated upon those roads that the city has identified as arterial or collector roads unless otherwise authorized by ordinance.
 - (8) A golf cart shall not be operated upon a state highway unless otherwise authorized pursuant to \$316.212(2), Fla. Stat. (2018), or any other applicable state statute.

Sec. 73.106. – Parking

(a) Golf carts operated on designated city streets, when parked in public parking spaces, shall be parked in a manner within such space side by side or in another fashion that allows either golf cart to leave the space when desired. It shall be the obligation of each golf cart operator to park the golf cart in a manner that will allow the use of the public parking space by another golf cart. This section shall be applicable to such areas as are specifically designated for vehicle parking use either on city streets or off the right-of-way of city streets, in parking lots owned and controlled by the city, or in such other areas as are designated by signage or ground marking for such usage, and on public lands specifically allowing such use. Identified handicapped parking spaces may be used by golf carts complying with the law for use of these spaces by vehicles.

Sec. 73.107.- Gated Communities

(a) This ordinance does not regulate operation of golf carts in gated communities with private roads.

Sec. 73.108 – City Owned Golf Carts

(a) This ordinance does not regulate the operation of City owned golf carts by City staff in conjunction with routine maintenance and/or special events.

Sec. 73.109. – Compliance with Traffic Laws

- (a) Compliance with traffic laws. Golf carts shall comply with all applicable local and state traffic laws and may be ticketed for traffic violations in the same manner as motor vehicles.
- (b) Enforcement. The City shall have the authority to enforce the provisions set forth herein and applicable traffic laws, provided however, that the enforcement of rules and regulations created and established by community associations shall be the sole responsibility of each community.

Sec. 73.110. – Indemnification and Insurance

- (a) Hold harmless. Any person operating a golf cart on any designated street does so at his/her own risk and must operate such vehicle with due regard for the safety and convenience of other motor vehicles, bicyclists, and pedestrians. The City, in designating certain city streets for the operation of golf carts, extends such operating privileges on the express condition that the operators of any golf carts under this article undertakes such operation at their own risk and assumes sole liability for operating the vehicle on the designated streets and by such operation agrees to defend, release, indemnify, and hold harmless the City, its officials and employees for and regarding any and all claims, demands, or damages of any nature whatsoever arising from such operation by any person.
- (b) Liability insurance required. Any operator of a golf cart on the designated streets shall be covered by motor vehicle or other liability insurance that includes operation of the golf cart insuring the owner and/or operator against loss from liability for bodily injury, death, and property damage arising out of the ownership, maintenance, or use of a motor vehicle of not less than the limits described in §324.021(7), Fla. Stat. (2018).

Sec. 73.111. – Revocation

- (a) The operation of a golf cart on designated city streets shall be deemed to be a licensed use of those streets and to be revocable upon the will of the City Council in its legislative capacity based on its consideration of the health, safety, and welfare of the public arising from such use.
- (b) Permission for the operation of golf carts on city streets shall not limit or otherwise

preclude the City Council from the amendment of this article, revocation of this article, contracting or expanding the streets or roads on which golf carts can be operated, or the designation of crossing points for state and county roads. All persons operating golf carts on city streets under this license from the city shall do so on the condition that there shall be no claim for any monetary loss or other claim for the loss of allowed golf cart operation on such streets or any monetary claim therefore based on a claim for action in reliance on the provisions of this article. The City Council retains the unlimited legal authority to revoke, amend or to otherwise legislate as to the operation of golf carts on city streets without liability of any kind arising from its legislative decisions.

SECTION 3. Ratification of Recitals: The City Council of the City of Port St. Lucie, Florida, hereby adopts and ratifies those matters as set forth in the foregoing recitals.

SECTION 4: Conflict: If any ordinances, or parts of ordinances, or if any sections, or parts of sections, of the Code of Ordinances of the City of Port St. Lucie, Florida, are in conflict herewith, this Ordinance shall control to the extent of the conflicting provisions.

SECTION 5: Severability: The provisions of this Ordinance are intended to be severable. If any provision of this Ordinance is determined to be void or is declared illegal, invalid, or unconstitutional by a Court of competent jurisdiction, the remainder of this Ordinance shall remain in full force and effect.

SECTION 6: Codification: It is the intention of the City Council of the City of Port St. Lucie, and it is hereby ordained, that the provisions of this Ordinance shall become and made a part of the Code of Ordinances of the City of Port St. Lucie, Florida, that the sections of this Ordinance may be renumbered or re-lettered to accomplish such intentions, and the word "Ordinance" may be changed to "Section" or other appropriate word as may be necessary.

SECTION 7: Effective Date: This Ordinance shall become effective ten (10) days after final adoption on second reading.

	PASSED AND	APPROVED by the	e City Council	of the City	of Port St.	Lucie,	Florida,
this _	day of		, 2019.				

CITY COUNCIL CITY OF PORT ST. LUCIE

ATTEST:	By: Gregory J. Oravec, Mayor
Karen A. Phillips, City Clerk	
	APPROVED AS TO FORM:
	James Stokes, City Attorney



Amanda Taylor Poncy and Hannah Twaddell, Renaissance Planning Group Jana Lynott, AARP Public Policy Institute

Low-speed vehicles (in particular, neighborhood electric vehicles) and golf carts have become increasingly popular, especially among older adults, as motorized alternatives to passenger cars. Numerous states and communities are grappling with legislative proposals that aim to address the increasing use of such vehicles for everday travel on local streets and paths. Safety considerations need to play a more central role in the design of the transportation networks that will accommodate these vehicles and in the regulation of their use.

Study Purpose

The purpose of this study is to assess current trends and identify key issues and best practices for safely accommodating golf carts and low-speed vehicles (LSVs), particularly neighborhood electric vehicles (NEVs), within community transportation networks. The study was commissioned by the AARP Public Policy Institute (PPI) in response to increasing requests for information on the topic from state AARP offices and city planners. Numerous states and communities are grappling with legislative proposals to address the increasing use of LSVs and golf carts for everyday travel on local streets and paths. These policies are relevant to all age groups but have a particular significance to older adults.

Unfortunately, little information exists on national trends and issues regarding the use of LSVs and golf carts as modes of local transportation. More urgently, there are few practical resources for planners and engineers who are trying to address the issue in their communities. To help address this lack of information, the AARP

PPI prepared this Insight on the Issues to provide a basic overview of the topic, including the following elements:

- A description of existing federal and state regulations governing LSV and golf cart use;
- Relevant local experiences and insights from selected case study communities; and
- Recommendations for consideration by local, state, and national agencies.

What Are LSVs, NEVs, and Golf Carts?

LSVs are small electric or gas-powered cars designed for low-speed, local trips in areas such as planned communities, resorts, college campuses, and even large industrial parks. LSVs are typically one- or two-passenger vehicles, though some models are equipped to carry up to six passengers.

An NEV is a commonly used type of LSV. NEVs are powered by rechargeable batteries and typically provide a driving range of up to 40 miles on a single charge.



Golf carts are not legally defined as LSVs. While some models of LSVs are similar to golf carts in size and carrying capacity, and only a little faster, they offer superior performance, safety, and comfort. A lower center of gravity, frontwheel drive, and carlike suspension give LSVs better stability and maneuverability than golf carts, especially when making turns. Compared to golf carts, LSVs also have higher and more visible profiles. In accordance with federal safety standards, LSVs are required to have more safety features than golf carts, such as windshields, side view mirrors, seat belts, and lights.

Figure 1
An LSV (left) and a Golf Cart (right) May
Look Quite Similar, but They Differ in
Terms of Overall Safety and Performance



Photo courtesy of LincolNEV.

Vehicle Definitions and Safety Standards

On June 17, 1998, the National Highway Traffic Safety Administration (NHTSA) created a new class of motor vehicle, the Low-Speed/Neighborhood Electric Vehicle, defined in 49 CFR 571.3. The NHTSA ruling identifies several types of vehicles:

A *fleet golf cart* is a vehicle with a maximum speed of less than 20 mph that is used solely to carry people and golf equipment. Fleet golf carts are intended for use on golf courses and are not considered LSVs in the NHTSA ruling.

A personal golf cart is a vehicle with a maximum speed of less than 20 mph that is for personal use. Personal golf carts may be gas powered or electric. In addition to golf course use, personal carts may be driven on public roads (subject to provisions in state and local law) for purposes unrelated to golf. However, they are still not classified as motor vehicles under federal law and are not considered LSVs. As such, they are not regulated by NHTSA.

A speed-modified golf cart is a cart adapted by an individual, after its purchase, to increase its speed. "Street-legal" carts that can go at least 20 mph are considered LSVs, and are thus subject to state or local regulations that adhere to federal LSV standards.

An *LSV* or *NEV* is any four-wheeled motor vehicle with a gross vehicle weight rating of less than 3,000 lbs. whose top speed is greater than 20 miles per hour, but not greater than 25 miles per hour on a paved level surface.

How Are LSVs and Golf Carts Used in Community Transportation Networks?

LSVs and golf carts have been used for many years in gated communities, resorts, college campuses, and large industrial campuses. In recent years, however, their use on public roadways has become more popular. They provide a motorized alternative to larger, fossil-fueled passenger cars and trucks for short trips.

LSVs Compared to Automobiles

Several trends and forces are converging to enhance the environmental, economic, and social attractiveness of LSVs. The current economic slowdown, coupled with rising fuel costs, is motivating many people to cut their transportation budgets. Electric-powered LSVs and golf carts require no gasoline at all—just a standard 110 volt electrical outlet

Figure 2
Evolution of Golf Carts and LSVs in the United States

SV	Golf Cart	First Generation LSV	Second Generation LSV	Third Generation LSV
Type of LSV	Golf function only	Golf cart "FMVSS 500" Minimal equipment	LSV with a "golf" look but with design geared to use on the road – Equipment exceeding the requirements of FMVSS500	LSV with the look of an urban car. Equipment exceeding the requirements of FMVSS500
Examples of manufacturers	EZ-Go Yamaha, Club Car Columbia ParCar	Columbia ParCar (NEV)	GEMcar, Big Man EV, Think Neighbor, Bombardier NV	Dynasty, ENN
Photos types				
Speed	20 mph (32km/h)	25 mph (40 km/h)	25 mph (40 km/h)	25 mph (40 km/h)
Propulsion	Gas or electrical	Electrical 4 HP	Electrical 4 HP	Electrical 5 HP
Characteristics	No seat belt, often no headlights/ signals/rearview mirror, just rear brake – with cables, often no windshield, low seat without head support.	A golf cart "base" with added headlights, rear view mirrors, turn signals, often AS5 windshield, no windshield wipers, rear brakes, regular parking brake, 2-point seatbelt, roof and minimalist safety cage, fabric doors, low seat.	Laminated windshield (AS1), windshield wipers, 3-point seatbelt, often rigid safety cage, often high seats, independent parking brake, hydraulic brake on the 4 wheels, master cylinder with two compartments, 3rd stoplight, better acceleration than the first Gen LSV, optional or vinyl doors.	Automobile type technologies offered for standard equipment (doors, heating, defogging, etc.) Prestressed, shock—absorbent aluminum, instrument panel indicator (pads wear, brake fluid level).

Photos courtesy of Institut du transport avancé du Québec.

for power. And without all of the parts and labor associated with gas-powered vehicles, they cost little to maintain.

Operating costs for LSVs range from one to three cents per mile, depending on the rate charged by the electrical company² and the time of day the

vehicle is recharged. By comparison, the fuel costs associated with operating a gas-powered personal automobile (as of 2010) range from nine to thirteen cents per mile, depending on factors such as vehicle size and fuel efficiency.³

The Growing Demand for LSVs

The National Household Travel Survey reported nearly 70,000 light electric vehicles and golf carts in operation on the nation's roadways in 2009, the first year the Federal Highway Administration began tracking this vehicle type. Americans took more than 180 million trips and drove nearly 65 million miles on these vehicles that year. Forty-five percent of these trips were taken by persons age 65 and older, a surprisingly high number given that older adults comprise just 13 percent of the U.S. population and account for 12 percent of all trips in the United States.

The nation's growing population of older adults is likely to generate an increasing demand for mobility options beyond the automobile. LSVs and street-legal golf carts could provide a convenient, cost-effective, and clean local transportation alternative for older adults, students, commuters, and government fleet operators.

A number of recently enacted state laws aim to reduce greenhouse gas emissions and vehicle miles traveled. This fact has created an immediate market for zeroemission vehicles, especially in California.

More than three-quarters (76%) of all American vehicle trips are 10 miles or less.⁴ The use of LSVs for a larger share of these short trips could play an important part in reducing America's greenhouse gas emissions.

The benefits of LSVs are significant enough that the Energy Improvement and Extension Act of 2008 allowed select qualifying vehicles purchased on or before December 31, 2009, to be eligible for the Qualified Plug-In Electric Drive Motor Vehicle Credit (Internal Revenue Code 30D).⁵ While this particular credit does not apply to vehicles purchased after December 31, 2009, another tax credit equal to 10 percent of the cost of a qualified plugin electric vehicle (up to \$2,500) was made available through January 2012. Numerous states are offering similar incentives beyond the federal credit.

Safety Concerns

As a class of motor vehicles, LSVs differ from conventional passenger cars in significant ways. Although federal motor vehicle safety standards require that they be equipped with many standard safety features, they do not need to conform to the safety standards of a conventional car, and they do not require crash testing. For example, NHTSA does not require LSVs to have airbags. Seat belts are required for ejection protection, but since LSVs are intended for "low-risk" driving, NHTSA does not require frontal crash protection.

That said, the Insurance Institute for Highway Safety (IIHS) is quite vocal about the hazards of LSVs, advocating for improved safety standards and/

LSVs and Golf Carts vs. Automobiles - A Brief Comparison

Advantages	Disadvantages
Relatively inexpensive to own and operate	Limited travel speed (approx 25 mph), which
Particularly well suited for trip lengths of 10 miles	restricts the types of roads on which they are allowed
or less	Limited range (up to 40 miles on a single charge) –
Non-polluting	sufficient for trips within a city or gated community
Silent	but not regional travel
Maneuverable and easy to drive	LSVs have lower safety standards than passenger cars
Takes little room in traffic and parking areas	Golf carts lack a generally accepted safety rating
Easy to recharge from a standard electrical outlet	system

or greater restrictions on their use. As David Zuby, the IIHS's chief research officer, stated in a 2010 IIHS report, "There's a world of difference between vehicles that meet crashworthiness standards and those that don't. It may be time for Congress to step in to extend federal passenger vehicle safety standards to LSVs or else restrict them to the low-risk traffic environments they were designed to navigate."

In 2010, the IIHS ran crash tests to study the effects of LSV operation on public roadways. Institute researchers conducted side crash tests of two GEM e2 electric vehicles. In one test, IIHS crashed a moving deformable barrier into the side of a GEM e2; in the other test, a Smart Fortwo (the smallest passenger vehicle on U.S. roads that meets crashworthiness standards) struck the LSV at 31 mph. Since LSVs are not designed to meet the crash and energy attenuation requirements of passenger cars, it is not surprising that they did not perform well in the tests. In every instance, the dummies recorded indications of seriously debilitating or fatal injuries to drivers in real-world crashes.⁷

In addition to the IIHS tests, Transport Canada conducted frontal crashes at 40 km/h (25 mph) that clearly show the potential for serious head and chest injury even with lap-shoulder belts. Without crumple zones, energyabsorbing steering columns, or airbags, there is no protection for the driver from injurious contact with the steering column. Furthermore, lap-only belts are permitted in LSVs, so there is a possibility of the driver hitting his/her head or chest against the steering wheel even in slower-speed crashes. Added to this risk is the potential for seat belts to degrade after being exposed to the elements (sun, rain, etc.), as they might be in an LSV.

Ejection is a common problem when golf-cart-like vehicles crash, because most do not have doors. Serious ejection injuries have been recorded even in low-speed crashes (10–25 mph).⁹

LSVs are vulnerable because they are smaller and lighter than conventional cars, which makes their passengers more likely to be injured in collisions with cars. A University of California study notes that LSVs are typically shorter in length, width, and wheelbase than the American Association of State Highway and Transportation Officials (AASHTO) design for passenger cars, and they have slower acceleration.¹⁰ Smaller-mass vehicles absorb the brunt of the force in collisions with heavier vehicles, resulting in greater damage to the smaller vehicle and, potentially, its passengers.

Slower acceleration rates in LSVs can make it more difficult for drivers to react quickly enough to avoid a crash. The combination of slower acceleration rates and smaller vehicle mass make LSVs particularly vulnerable on public roads that intersect with high-speed highways.

The safety issues with golf carts are even greater. NHTSA does not consider them motor vehicles and thus does not regulate them. Thus they usually lack even the minimum safety features of LSVs.

Mixing LSVs or golf carts on roads with higher-speed vehicles can be dangerous for all users of the roadway, including automobile drivers. A recent study conducted for the Oregon Transportation Research and Education Consortium points out that the presence of vehicles moving as little as 10 to 20 mph faster or slower than the general traffic stream tends to impede traffic flow and increase collision rates. ¹¹ If most of the vehicles on a corridor are traveling 35 mph or faster, introducing vehicles that cannot exceed 25 mph could cause congestion and safety problems.

Assessing LSV and Golf Cart Safety Issues and Trends

In general, data on crashes involving LSVs and golf carts in America are sparse. National, state, and local vehicle crash databases do not have reliable, consistent statistics. This lack of information may be due in part to a lack of clarity and consistency among state and local law enforcement agencies in addressing or reporting issues with LSV and golf cart safety. For example, database coding limitations can make it difficult to classify LSV and golf-cart-related crashes correctly and consistently.

As part of the 1998 ruling, NHTSA evaluated 1993–1998 crash statistics from the Fatal Analysis Reporting System (FARS) and the Consumer Product Safety Commission (CPSC). The NHTSA study concluded that deaths and serious injuries resulting from the on-road use of golf carts were not numerous, but were occurring. The agency anticipated that the number of serious injuries and deaths would grow with the numbers of vehicles on the roads. In 1998, only 12 states permitted LSVs to operate on public roads. Today, 46 states do.

In 2009, Congress charged NHTSA with studying the safety and fuel-economy ramifications raised by the expanded use of low-speed vehicles on 40 mph or slower roads. ¹³ Information from the NHTSA report was not available at the time this Insight on the Issues was developed.

A variety of media reports, professional journals, and anecdotal reports indicate that crashes involving golf carts are occurring, and that they often result in serious injury or fatalities. The June 2008 issue of the *American Journal of Preventive Medicine* reports that golf-cart-related injuries skyrocketed more than 132 percent between 1990

and 2006. More than 147,000 people, ranging in age from 2 months to 96 years, were injured in golf cart crashes over that 17-year span. Seven people died, according to the journal. The 15 percent of injuries that occurred on streets resulted in more concussions and hospitalizations than injuries that occurred in other locations. 14

Falls from golf carts and overturns were the leading cause of injury (47.2 percent). ¹⁵ Another study found that golf carts moving at speeds as low as 11 miles per hour can readily eject a passenger during a turn. ¹⁶ Both sets of researchers strongly advise that golf carts be equipped with seat belts and four-wheel brakes.

A study by the Center of Injury Sciences at the University of Alabama, Birmingham, examined nationwide emergency room data from 2002 through 2005. The report determined that there are approximately 1,000 golf cart injuries in the United States each month. The highest injury rates were observed in males age 10–19 and those over 80. Head trauma and fractures were the most common injuries.¹⁷

Current LSV and Golf Cart Standards and Regulations

Federal Standards

As described earlier, LSVs are required to comply with the NHTSA "Federal Motor Vehicle Safety Standards No. 500." LSV manufacturing standards, defined in 49 CFR 571.500,18 were implemented in 1998 under pressure from various communities, certain states, and manufacturers that wanted to market LSVs in the southern United States.

NHTSA identifies LSVs as appropriate for "short trips for shopping, social, and recreational purposes primarily within retirement or other planned communities with golf courses." LSVs must be able

to go at least 20 mph. The maximum speed attainable at any given point in a distance of one mile cannot exceed 25 mph.

The NHTSA ruling further states that an LSV must be equipped with an automotive safety glass windshield, turn signals, mirrors, wiper blades, head- and taillights, brake lights, parking brakes, seat belts, and a vehicle identification number.¹⁹ The standards do not apply to golf carts unless they have been modified to travel 20 mph or faster.

NHTSA defines appropriate performance and safety standards for LSVs, but it has no say in the types of roadways on which LSVs may be driven. Those decisions are left to state and local governments.

State and Local Regulations

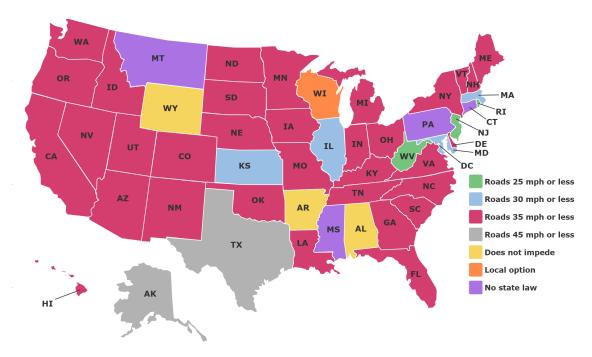
State and local regulations regarding LSVs and golf carts have evolved gradually over the past 30 years. NHTSA

recognizes that while some states and local governments have taken steps to permit on-road use of golf carts and LSVs, others have not. In the agency's view, the final rule does not alter the authority of state and local governments to make regulatory decisions regarding on-road use of golf carts and LSVs. Similarly, the rulemaking has no effect on any other aspect of state or local regulation of golf carts and LSVs, including classification for taxation, vehicle and operator registration, and conditions of use on state and local roads

Use of LSVs on Roadways

Recent legislative activity has expanded the use of LSVs on public roads. Almost every state has adopted legislation accepting the NHTSA ruling on LSVs. Today, 46 states and the District of Columbia allow them. Connecticut, Mississippi, Montana, and Pennsylvania are the exceptions.²⁰

Figure 3
States with Laws Allowing Low-speed Vehicles on Public Roads, as of May 2011



Courtesy of the Insurance Institute for Highway Safety.

Use of Golf Carts on Roadways

For years, a common practice among the relatively few states that permitted on-road use of golf carts was to allow such use only within a limited range outside of a golf course (generally one to two miles). In the 1990s, however, a growing number of states, from California to Florida, passed legislation eliminating or establishing exceptions to this rule. The new regulations usually authorize local jurisdictions to permit general on-road use of golf carts, subject to speed and/or operational limitations. Some states authorize general onroad use, provided the golf cart meets equipment safety requirements.

Use of Golf Carts on Pathways

Because of their larger size and weight and higher speeds, the operation of golf carts and LSVs on multiuse pathways can present hazards to bicyclists, pedestrians, and other users. Even when golf carts and LSVs are driven with care, their size and speed can be intimidating to other users, especially older pedestrians who may have a legitimate fear of falling.

Appropriately, federal law prohibits the use of motorized vehicles (including golf carts and LSVs) on federally funded trails and pedestrian walkways, except in limited circumstances (U.S.C. §217(h) (5)). Exceptions can be granted where trails are funded under the Recreational Trails Program and designed for motorized use and on limited segments of a trail funded under the federal-aid highway program, such as for 90 degree crossings, short doglegs, crossing structures such as bridges, and other exceptional circumstances.

The use of golf carts on multiuse pathways may be acceptable in some additional circumstances. Their use appears to work in planned retirement communities such as The Villages, Florida, where pathways were originally designed for these vehicles and where golf carts are predominantly driven by mature, experienced drivers (see discussion below). As the trail network was built with private funding, the developer had latitude in setting the rules governing trail use.

A mix of low-speed motorized and nonmotorized users may also work in rural areas where the volume of pedestrians, bicyclists, and golf carts is low.

Vehicle Definitions

Many states have recently updated their definitions of golf carts and LSVs. Traditionally, golf carts were defined as having a top speed of 15 mph or less. Several states have recently changed their laws to reflect the existence of sub-25 mph vehicles that are faster than most golf carts. Some have replaced old statutory provisions that limit the defined top speed of a golf cart from 15 to 25 mph. Others have added a new class of vehicles capable of achieving 25 mph.

Required Safety Features

There is no generally accepted safety-rating system for golf carts. For golf carts with a maximum speed of less than 20 mph, state and local governments may adopt their own equipment safety standards. But any vehicles that travel 20 mph or more, including modified golf carts, must usually be equipped with the federally defined LSV safety features.

Licensing and Registration

Golf cart and LSV licensing and registration rules vary by state. Most states require a valid driver's license and insurance for all vehicles—golf carts or LSVs—that travel on public roads. Some states, such as Florida, do not require a golf cart operator to hold a driver's license, but they may establish a minimum age (typically 16) for legal operation of a golf cart on public roads.

States may impose registration requirements and additional regulations governing LSV operation. These additional requirements generally address one or two topics: the maximum speed limit of public roadways upon which an LSV can legally operate, and the types of intersections that LSVs can legally cross.

Speed Limits

Most states allow LSVs to operate on roadways with a maximum speed limit of 35 mph. Alaska and Texas allow LSVs to operate in certain localities on highways with a maximum speed limit of 45 mph. Other states restrict LSV use to lower-speed roads. Illinois, Kansas, Maryland, Massachusetts, and District of Columbia regulations specify a maximum of 30 mph, while New Jersey, West Virginia, and Rhode Island restrict LSVs to roadways with a maximum speed limit of 25 mph.

Intersection Crossings

With some exceptions, such as Washington and Idaho, most states allow LSVs to cross roadways with higher speed limits than the maximum allowable for LSV use. Few regulations, however, specify whether the intersection must be controlled. Those that do, such as Maryland, usually restrict LSV crossings to intersections that have a traffic signal or stop sign.

Case Studies

The Villages, Florida, Golf Course Network

Overview

The Villages is a master-planned, agerestricted (55+) retirement community located within three counties in central Florida, about 45 miles northwest of Orlando. Development began in the 1970s as a mobile home park in the northwestern corner of Lake County. The

development was renamed The Villages in 1992. It is still largely controlled by families of the original landholders.

The development of the community's now-extensive network of golf cart paths began in the early 1980s, as a strategy to boost flagging sales. The developers noted that successful retirement communities offered residents well-maintained amenities and easy access to a variety of nearby commercial activities. Thus, they began to significantly upgrade the development with recreational centers, town squares, and numerous golf courses, allowing them to market the offer of "free golf for the rest of your life." As retirees flocked to The Villages for lifelong free golf, the developers and the community began to operate on the principle that everything should be accessible by golf cart.²¹

Usage Patterns

Today, golf carts are an integral part of the transportation system within The Villages and an important element of the community's lifestyle and social network. It is quite common for people to take their golf carts to the grocery store, the recreation center, and to concerts, shops, and restaurants in the various town centers throughout the community.

As of December 2008, 38,000 golf carts accommodated more than 75,000 residents in approximately 40,000 homes.²² More recently, The Villages estimates from surveys that 50,000 golf carts zip along its trails and streets. In addition, LSVs are a small but growing proportion of the small electric vehicle "fleet."

While there is no specific study of the number of golf cart and LSV trips, local planners estimate that the community's internal trip capture rate is between 75 and 80 percent. In other words, residents make more than three-fourths of their

Figure 4
Golf Carts are Used as Everyday Functional Vehicles in The Villages, Florida





Photos by Jana Lynott.

daily trips within the community, largely because of its extensive accessibility for golf carts and LSVs.

Facilities

The Villages features an 87-mile network of concrete golf cart trails that connect all of its golf courses and communities. In addition, golf carts and NEVs can use designated on-road facilities and shared traffic lanes.

Tunnels have been built into most of the locations where a path intersects with a highway, except across US 27/US 441, where an overpass was built. The tunnels and bridges were designed specifically to fit golf carts, but the size of golf carts is steadily increasing—a recent model available from Sam's Club is six inches wider than previous models. Not all of the tunnels and bridges can now properly accommodate two of the larger vehicles at the same time.

The wide variety of routes reflects the evolution of the network over time. When the community was built in the 1970s, carts and cars shared the same lanes. As development progressed, golf carts were separated from traffic within the roadway, and now there are separate pathways for LSVs.

LSVs are allowed on the golf cart paths, as are pedestrians and cyclists. The community has not reported significant conflicts among different path users. Perhaps because the paths were designed from the beginning for golf carts, residents are accustomed to accommodating a variety of travelers throughout the network. They expect to encounter one another, so they may operate with a bit more awareness than they would on a path designed primarily for pedestrians and bicyclists.

Safety Issues and Programs

Many, if not most, of the people who live in The Villages had been driving

Figure 5
A Golf Cart Trail Underpass in The Villages



Photo by Jana Lynott.

carts on golf courses for years before they moved there. Some have difficulty realizing that driving golf carts on paths and roads requires greater alertness and caution. Believing, mistakenly, that golf carts are nothing like cars makes it easier for people to operate them in ways they would never consider when behind the wheel of an automobile, including driving while intoxicated, maneuvering one-handed or with a leg dangling over the door, not using seat belts, and parking on sidewalks.

Perhaps the most challenging safety problem with cart drivers is the propensity to try to make their vehicles go faster than their design permits. Owners will "soup up" their carts to go faster than 20 mph, but the brake, suspension, and restraint systems on golf carts are not designed to handle those speeds—especially when it comes to turns, stops, and collisions. This practice has led to some significant injuries. Public safety officials report the number is not statistically large, but it is still a troubling issue.

Florida law does not require that golf carts be equipped with seat belts, and vehicle owners receive no insurance benefit from installing them.

People of all ages drive or ride in golf carts, including a fair number of young people and children from the many family visitors in the community on any given day. Children under the age of 14 are not permitted to drive carts on public roads or streets, and it is the responsibility of the residents to ensure that younger drivers understand the "rules of the road." But the propensity of teen drivers to drive any vehicle too fast is an ongoing safety issue, especially given the relative instability of golf carts operating at high speeds.

Drivers of golf carts are not required to be licensed. On the one hand, this affords those who have given up driving cars continued independence and mobility; on the other hand, it raises safety concerns. The same physical and cognitive declines that affect driving skill (e.g., reduced vision and reaction time) are likely applicable to the onroad and on-trail golf cart environments. While their speed is lower, the vehicles are less protective in a crash.

Another challenge faced by The Villages is the issue of golf cart parking. Within each village there are central areas with shopping, restaurants, gazebos, and a center square with nightly entertainment. Thousands of people come in by golf cart, parking on the sidewalk so they can get closer to the venue rather than having to walk from the parking lot. Florida regulations state that motorized vehicles are not allowed to run or park on sidewalks, but the rules are enforced and interpreted somewhat differently from county to county.

Safety Enforcement and Education

A number of separate entities work to ensure that golf cart use is safe and enjoyable. The roads and golf cart paths within The Villages are developed and maintained by 12 Community Development Districts (CDDs), a form of special-purpose local government available under Florida law. Because of the CDD's limited powers, and because the roadways are public, the CDD has no law enforcement jurisdiction. All roadway laws are enforced by the three county sheriff's departments and one municipal police department. However, the sheriffs may not go onto the paths to enforce safe driving and prevent problems unless they observe reckless or intoxicated driving.

The CDD and The Villages Homeowners Association (VHA) are working hard with public safety officials to increase awareness of the safety issues of golf cart use and to educate people about making

Figure 6
Examples of Golf Cart Accommodations in The Villages







Photos by Jana Lynott.

wise choices. An educational blitz in late 2010 served as a wake-up call to golf cart users that speeding will not be tolerated. Over a two-month period, the Sumter County sheriff's department issued about 70 golf cart speeding violations, technically categorized as operating a vehicle without a license, because they exceeded 19 mph. In some cases, that resulted in a \$1,500 fine and court costs. The project heightened awareness of the seriousness of the issue.

In addition, the VHA works to inform and educate residents about safe golf cart use. Since 1998, the VHA has sponsored a Golf Cart Safety Clinic taught by local law enforcement officers. It is a vital tool for promoting traffic safety in The Villages. In January 2011, the VHA and CDDs launched a joint communication and education campaign related to golf cart safety.

Peachtree City, Georgia, Golf Cart Network

Overview

Peachtree City, Georgia, is a masterplanned community located 29 miles southwest of Atlanta. Founded in 1959, the development was envisioned as a community that would offer residents a better way of life through careful planning and design. The city consists of a series of linked villages, each containing its own shopping areas, recreational areas, and schools, with approximately 20 percent of the land dedicated as open space.²³

While paths were not part of the plan when the city was incorporated in 1959, the developers built a golf course in the 1960s, and paths were added for residents who wanted a way to take their own carts to the course. More paths were added as more neighborhoods were built, and the city adopted an ordinance requiring that new development include a connection to the system. In 1974, Georgia adopted legislation allowing local communities to permit golf carts on public streets specifically to accommodate Peachtree City.

Usage Patterns

Today, many of Peachtree City's roughly 34,000 residents (about 13,600 households) use golf carts. More than 10,000 golf carts are registered within the city, and residents use them as an extra vehicle for local transportation.²⁴ Many students at McIntosh High School drive their golf

carts to school because of limited carparking facilities. Families use them to visit the 250-acre lakes, and golfers can ride from home to any of the three golf courses in town. Several businesses have created designated golf cart parking spaces in front of their stores.

Like The Villages, Peachtree City does not require a driver's license for golf cart operators over 16. People whose license has been suspended or revoked may not drive a golf cart in the city.

Facilities

Peachtree City's five villages are connected not only by standard roads, but also by more than 90 miles of wooded paths for a variety of users. The extensive network provides a secondary means of access to almost any destination within city limits.

The design of the path system has evolved over time. Some of the older paths, originally designed for walking, are only five or six feet wide. Today, a 10-foot minimum width is specified in the city's ordinance, based on national bicycle facility design guidelines developed by AASHTO.²⁵

Most paths are designed for nearly all modes of travel that do not exceed 20 mph (i.e., pedestrians, bicyclists, and golf carts). LSVs are allowed on

the paths "provided that the vehicle is operated only in a mode or other restriction which does not allow the vehicle to exceed 20 miles per hour." Local officials do not report significant conflict among different path users.

All LSVs and golf carts are prohibited from major arterials and collectors with speed limits greater than 35 mph. On residential streets, golf carts and LSVs mix with vehicular traffic. Travel lanes are typically 12 feet wide (24 feet curb to curb). There are very few special markings for bicycles, and none for golf carts and LSVs. Local officials report few problems with this arrangement because all drivers are accustomed to it.

There are no on-road accommodations to separate golf carts from LSVs, but a local ordinance requires golf carts to use a path instead of a road if one is available. By state law, LSVs are entitled to full use of a travel lane.

A growing challenge for golf cart and LSV users is travel within commercial parking lots. Several retail centers have designated golf cart spaces, but they have not modified the design of the entire lot to ensure safe passage of golf carts and LSVs from the entrance to the designated parking areas.

Design standards for developing alternative vehicle pathways in shopping

Figure 7
Examples of Golf Cart facilities in Peachtree City, Georgia







Photos courtesy of City of Peachtree City.

center lots were recently proposed by a group of graduate students at Georgia Institute of Technology. One retail center recently enhanced its entrance area and added up-front parking for golf carts as part of a major renovation, which was well received by customers. Another developer is working with the city on this approach to attract more golf cart drivers to its stores.

Planning and Building the Network

The city is in the process of updating the multiuse path master plan to include a ranking system, connectivity requirements, and much more detail on planning and prioritizing projects. The plan will help guide the development of more paths as funds become available.

To date, most of the network infrastructure has been installed by developers. The city assumes ownership and maintenance of paths once they are constructed. Most of the paths are on city-owned property, but some are on private property. In these situations, the city gains easements that relieve the property owner of the burden of liability. This strategy has made it easier for the city to convince property owners to grant the easements. The standard easement is

Figure 8 Golf Cart Parking at McIntosh High School in Peachtree City



Photo courtesy of City of Peachtree City.

20 feet wide, which makes it possible to widen the path if needed.

City officials have learned that it is much easier to install the infrastructure before development takes place. Even in places like Peachtree City, where alternative modes of transportation are highly valued, adding new path connections in established neighborhoods or partially developed areas is challenging. People do not want paths behind their homes or across their property, but they do want access to them. The foresight of the city to require developers to connect into the system as part of the original projects was extremely valuable in getting large portions of the network built up front.

Another lesson Peachtree City officials learned is the importance of working with the state department of transportation (DOT) early and continuously before major roadways near the paths are improved. This proactive approach has gained the city two multiuse bridges over state highways, 27 tunnels under major roads, and a bridge over a major rail line. City leaders started working with the state DOT years ago to incorporate these improvements into the roadway widening plans. City officials advise other communities to be vigilant for possibilities to incorporate tunnels and crossings into widening projects early in the planning process.

Safety Issues and Programs

To supplement local ordinances governing the use and design of golf cart paths, the city provides residents with an informational brochure describing the rules associated with golf cart and LSV use.

All golf carts and LSVs in Peachtree City must be registered. State law requires liability insurance for LSVs; the city highly encourages it for golf carts. Children age 12 or over may operate a cart on local paths with a

parent, grandparent, or guardian in the front seat. Unaccompanied 15-year-olds with valid Georgia learner's permits are allowed to operate golf carts alone.

LSVs are permitted to operate on roadways with speed limits under 35 mph and to cross higher-speed streets. Treated as licensed vehicles, LSVs have a toggle switch for a flashing light, which is required when driving on public streets. Golf carts are not required to have flashing lights.

The Peachtree City Police Department has several golf carts that patrol the paths. A 2007 Traffic Safety Report published by the department reported 106 golf cart citations (6 percent of all vehicle citations). Of the nearly 1,200 vehicle accidents reported in 2007, only 56 were golf-cart-related. Of these, 25 resulted in injury.

In general, police say there are 60 to 70 golf-cart-related accidents each year, about a third of which result in injuries, including a fatality several years ago.²⁶ The fatality, as well as many of the injuries, occurred because a passenger was thrown from the golf cart when the driver tried to maneuver a curve too fast and lost control.

As with automobiles, one of the biggest safety challenges for golf carts is reckless driving by young people. In 2009, Peachtree City officers responded to 64 reported golf cart crashes, 31 of which involved injuries and 33 of which involved a driver 16 years of age or younger. In July 2010, the city began enforcing "no texting" laws on golf carts.²⁷ Since the city began allowing 15-year-olds to drive alone with a learner's permit, it has received more complaints about teen drivers.

Few golf cart drivers (of any age) have gone through any formal training in operating the vehicles. The Peachtree

Figure 9 A Peachtree City Golf Cart Bridge over a State Highway



Photo courtesy of City of Peachtree City.

City Police Department has designed a Golf Cart Safety Course to help educate young drivers on the proper use of the vehicles on Peachtree City's paths. Students must take an online course and pass a quiz before they are eligible to take the practical road course.²⁸ The program is designed for drivers age 12 to 16, but anyone may participate in the program.

Western Riverside Council of Governments, California, Regional NEV Plan

Overview

The Western Riverside Council of Governments (WRCOG) represents 16 cities, the Riverside County Board of Supervisors, and the Eastern and Western Municipal Water Districts (together more than 1.6 million people) in Southern California.

In response to a number of statewide planning initiatives related to greenhouse gas reductions, the WRCOG undertook a multijurisdictional approach to evaluate near-term and long-range transportation network plans. Scalable implementation strategies to deploy LSVs were chosen rather than golf carts as the subject for the WRCOG Four-City LSV Transportation Plan because of their

superior safety features, and registration and licensing requirements.

The study area included four cities in the northern portion of the county, each with unique characteristics:

- Norco a small rural community (pop. 27,370), often dubbed "Horse City, USA"
- Corona a large, fairly dense city (pop. 150,416), with two MetroLink stations
- Moreno Valley a larger but less dense community (pop. 188,537), with no MetroLink station
- Riverside the region's largest city (pop. 304,051), with two MetroLink stations

The June 2010 plan was funded by the Southern California Association of Governments' (SCAG) Compass Blueprint Demonstration Project Program, which assists Southern California cities and other organizations in evaluating planning options and stimulating development consistent with regional goals. The LSV plan is seen as a model for future intercity planning efforts.

Usage Patterns

LSVs are currently in use within the study area. While it does not have specific demographic data, WRCOG estimates that existing and potential LSV users are people looking to replace one of their vehicles or add a third vehicle for short trips. They tend to be affluent and middle-aged or older. LSVs are also used on larger lots and farms to carry hay, dogs, and so on.

Planned Facilities

Because the cities are already connected via traditional transportation networks, this plan identifies low-speed connectors and potential LSV/bike lane backbone

facilities to leverage existing and future public street networks for maximum transportation benefit.

California law allows LSVs to operate on streets posted at 35 mph or below, but the WRCOG recognized that people are using LSVs to cross or access streets with a higher speed limit. Also, some of the 35 mph streets are not ideal for LSV use, either for safety or connectivity reasons. The plan provides routes that would allow people to travel legally and safely on these routes.

Short-term recommendations focus on promoting LSV usage on priority routes that can be used without any changes, and discouraging travel on streets inappropriate for LSVs. Longer-term recommendations emphasize improvements that could be made if state legislation were passed to allow LSV use on higher-speed routes. The plan also includes a long-term recommendation to establish a fine for LSV use on streets not in the plan.

The plan includes design standards for three classes of LSV facilities: separate off-road paths, designated on-road facilities, and shared on-road facilities. Standards were largely based on design standards adopted by Rocklin and Lincoln, California, as part of local LSV plans completed in 2006.

The preferred on-street design includes a separate seven-foot-wide lane for LSVs and bicycles, especially on streets with buses and heavy vehicle use. Previous planning efforts looked at having LSVs operate on bike trails, but this plan was based on a general principle of keeping LSVs on roadways instead of putting them on separate paths.

Plan Development and Implementation

Preparation of the WRCOG Four-City LSV Transportation Plan was a cooperative effort that involved the study

Figure 10
Cross Sections of LSV Accommodations as Drawn by Urban Crossroads for the WRCOG Four-City LSV Transportation Plan

Classification	Description	Example Cross-Section
Class I	Completely separate pathway; adjacent to major roadways. NEVs can share a path with bicycles and pedestrians. See Exhibit 3-2 for path options.	Travel Lanes Shoulder/ NEV/Bike/Ped Planter
Class II	Collector streets and minor arterials where speeds are typically greater than 35 mph. NEVs share lane with bicycles.	Landscape Strip / Sidewalk NEV/ Bike Lane Landscape Strip / Sidewalk NEV/ Bike Lane Landscape Strip / Sidewalk NEV/ Bike Lane
Class III	Shared travel lane. Residential and low volume roads, low-speed commercial streets. Posted speed limits of up to 35 mph.	Landscape Strip / Sidewalk Parking (if appropriate) Landscape Strip / Sidewalk Parking Lane (if appropriate) Landscape Strip / Sidewalk Parking Lane (if appropriate)

Courtesy of Western Riverside Council of Governments.

cities, a variety of stakeholder agencies including the California Department of Transportation (CALTRANS), Riverside Transit Agency, Riverside County Transportation Commission, March Joint Powers Authority, and the County of Riverside Transportation Department. With guidance from WRCOG, an Oversight Committee and Stakeholders' Working Group were formed to review and provide input regarding data collection, design considerations, and route selection. The Oversight Committee comprised representatives

from WRCOG, SCAG, and each of the four cities.

In addition to working with the Oversight Committee and stakeholder groups, the WRCOG employed a public input process, largely devoted to education and outreach. Local print, television, and radio coverage provided broad exposure. Planners also offered an online survey and a series of public outreach meetings in each city. Turnout at meetings was not very high, but the process yielded useful ideas.

The city councils and city managers were engaged throughout the process, which, planners say, was valuable in helping them apply the plan concepts to their own situations, needs, and unique contexts. For example, traffic calming was a big issue for one of the cities, so the city manager emphasized the speed reduction benefits of LSV use. Each jurisdiction has formally supported the plan and has requested the necessary state legislation to enact it.

WRCOG is currently advocating for state enabling legislation that would allow the other jurisdictions within Riverside County to develop an LSV plan. With hindsight, WRCOG planners say they would have engaged state legislators earlier and more frequently in the process, since this legislation is a critical component of plan implementation.

Another challenge to implementation is that people, including public safety officials, are not clear about the difference between LSVs and golf carts. Education is needed to make sure the LSV plan is implemented safely. The plan encourages working closely with public safety officials, who may not have a clear strategy for addressing LSV use. As part of the planning process, WRCOG produced an educational PowerPoint presentation and a fact sheet, but for the most part the cities will be developing their own educational programs.

Once state legislation is adopted, each city's planners and traffic engineers will move forward with incorporating the recommendations into their local plans and policies, in coordination with local stakeholder groups. For example, each city can promote wider (minimum seven-foot) on-street bike lanes that comfortably accommodate both LSVs and bicycles. Each city will need to engage the cycling community to be comfortable with this approach.

Cities may also have to work with business owners to evaluate the pros and cons of removing on-street parking to accommodate wider travel lanes for LSVs. In addition, the cities will have to work with Caltrans to address crossings of bridges and freeways.

Linton, Indiana, Golf Cart Ordinance

Overview

Linton is a rural community located near the Illinois state line in southeastern Indiana. It is surrounded by three major cities: Terre Haute, Vincennes, and Bloomington. With a population of roughly 5,800, Linton is the largest community in Greene County. Mining and agriculture have traditionally been the main sources of income in the community, and the city is known for its recreational amenities and its relaxed, small-town atmosphere.

In 2009, Indiana passed enabling legislation to allow local municipalities to establish "golf cart" ordinances. Several communities, including as Linton, moved forward quickly to adopt an ordinance.

The Linton ordinance helped the city build upon themes established in its recently adopted comprehensive plan: "a good place to grow up and a good place to grow old." It also complemented other age-friendly community work.

Usage Patterns

In 2010, 86 licensed golf carts were operating within the city. They are used year-round, primarily by adults and families for recreational purposes such as taking kids to the park and visiting friends.

Before adopting the ordinance, the city had problems with children driving golf carts. The new requirement for a driver's license to operate a cart has quelled the issue and helped the city to regulate onstreet golf cart use more effectively.

Ordinance Development Process

As part of a pilot study designed to demonstrate the potential of online surveys to gauge older adults' opinions on key issues, the Center on Aging and Community of the Indiana Institute on Disability and Community marketed to the Linton area an eight-minute online survey on mobility issues called "Getting Around." Between March 1 and March 15, 2010, the survey was completed by 239 respondents.

The survey was well timed to attract respondents who held strong opinions, both positive and negative, around the pending ordinance for the use and regulation of golf carts on city streets. It played an important role in the mayor's positive position on the issue, and in the decision to approve a city council ordinance in the spring of 2010.

In January 2011, the city began designing a "Complete Street" along E Street, NE. It is anticipated that the design will include space for bicycles and golf carts within the existing right of way by converting an eight-foot parking lane to a shared bike/cart lane.

Safety Regulations and Programs

Provisions in the current state legislation require an on-road driver of a golf cart to have a valid driver's license and for the vehicle to have insurance, as well as a revolving red or amber light or slow-moving vehicle sign. On-street golf carts must travel on the far right-hand side of the road, not directly in travel lanes.

In addition to the state requirements, the Linton ordinance requires lighted headlights and taillights at all times, specifies the locations where golf cart operation is prohibited, and requires the city to put appropriate signage in place before issuing golf cart permits. Golf carts may not be driven on public roads after dark.

To date, no accidents have been reported. The mayor has been impressed by how well people are following the rules and believes the increased golf cart use has been a pleasurable experience for all, though the city has received some complaints about the \$50 annual licensing fee.

The mayor feels strongly that the enthusiasm with which the community has embraced safe golf cart use is a product of the vibrant, ongoing civic engagement process that began a few years ago with a series of "EngAge" meetings. The ongoing dialogue is a grassroots effort, developed and conducted by volunteers within the community.

Summary of Case Studies

Each of the four communities discussed above approaches the accommodation of golf carts and LSVs in a different manner, based on state law, community history, and context.

The Villages and Peachtree City are planned communities that designed cart pathways into the community fabric in the 1970s. Both allow carts and LSVs, along with pedestrians and bicyclists, on their pathway system. Peachtree City requires that LSVs be operated in slowspeed golf cart mode (less than 20 mph).

Golf carts and LSVs may also use designated low-speed roads. Access across major roads is accommodated through a system of grade-separated underpasses and bridges.

More recently, WRCOG and Linton have aimed to integrate accommodations into existing communities. WRCOG's planning efforts emphasize safety along with the environmental benefits of electric vehicles. The plan primarily accommodates LSVs on roads, but does provide an option for their

use on appropriate pathways along with bicyclists and pedestrians. The WRCOG plan does not address golf carts; however, Riverside County's Municipal Code allows carts to travel on LSV-designated roads provided that they are equipped with additional safety features.

Linton allows golf carts to travel on roads provided they are registered, insured, and meet minimum safety requirements. The ordinance does not specify whether golf carts can be used on multiuse trails, nor does it speak to LSV accommodations. However, Indiana state law allows LSVs to travel on highways with posted limits no greater than 35 miles per hour.

Additional items of comparison may be found in table 1.

Recommendations

This section outlines a few basic findings and recommendations drawn from this analysis of issues related to the use of LSVs and golf carts as a meaningful form of transportation in the United States. AARP does not have policy in this emerging area of study. These recommendations reflect the authors' professional perspective with the hope that they might serve as a starting point for more in-depth analyses by, and dialogue among, organizations, agencies, and institutions that can play a part in making America's transportation networks safe, convenient, and efficient for people of all ages and abilities.

Safety Education and Enforcement

Ensure that policy makers, law enforcement officials, city planners, and the public are fully aware of the vulnerability of golf carts compared to LSVs and LSVs compared to passenger cars.

Many people are unaware of the significant safety differences between golf carts and LSVs, even in

communities where they are widely used. Golf carts are not designed to operate on roads, nor are they designed to operate above 19 mph. They tip easily and offer no protection to occupants in crashes with other vehicles. LSVs, with their stable wheel base, are undoubtedly safer, even at slightly higher speeds. Their required safety features, while certainly not those of passenger cars, provide more protection to occupants.

Many golf cart drivers are used to driving on golf courses and do not realize that driving on streets requires a higher level of attention and a firmer hand on the wheel. Injuries and fatalities from golf cart accidents are often caused by people driving too fast to maneuver safely, especially around corners. Some crashes involve drunk drivers who would never operate a car when intoxicated, but who mistakenly assume they can steer a golf cart safely in that condition.

Policy makers, law enforcement officials, city planners, and the public should also be aware that the safety features that NHTSA requires for LSVs are based on the use of such vehicles in low-speed "retirement or other planned communities with golf courses." The only required occupant protection features are seat belts and shatterproof windshields. Seat belts alone offer protection only against ejection. NHTSA requires no protection from frontal crashes. Consequently, even LSVs provide inadequate occupant projection at speeds many people would consider slow to moderate (less than 31 mph).

Programs should educate the public on the safety limitations of both golf carts and LSVs. State and local laws governing the roads LSVs are permitted on should reflect these limitations, and transportation networks should be designed for their safe accommodation.

 Provide law enforcement agencies with the resources necessary to enforce laws governing LSV and golf cart use.

Modifying golf carts to operate faster than 20 mph puts them into a different vehicle class. At that point, they are defined as LSVs and must be equipped as such. Speed-modified golf carts that do not meet LSV safety standards are illegal and pose a true hazard to their drivers, passengers, and other travelers. Enforcing laws against these types of violations is essential for maintaining a safe transportation system.

Private trails essentially function as a public network. The public sector should be granted access easements onto privately built and maintained multiuse trails so that law enforcement officers can enforce speed limits and other safety laws.

Engage law enforcement officials actively in the development and implementation of golf cart and LSV policies, regulations, and educational programs.

It is important to educate law enforcement agencies, as well as the general public, about the differences between LSVs and golf carts.

Law enforcement agencies are accustomed to conducting educational and enforcement programs about safe driving and bicycling, but few conduct similar programs about LSV or golf cart use. Communities that want to promote the use of these vehicles would be wise to include safety officials early and continuously in the planning and implementation process.

Licensing

A valid driver's license should be required to operate both LSVs and golf carts on a public or private road²⁹ or trail.

Legally, LSVs are generally treated like small automobiles: They must be insured and operated by licensed drivers,

and they must have seat belts, lights, and other safety features. In contrast, some communities allow golf carts to be operated by unlicensed drivers, despite the fact that they generally lack basic safety features and pose greater risk to drivers and passengers.

Licensing requirements for golf cart drivers will help to educate the community about the risks of driving golf carts and underscore drivers' responsibility to maintain a safe travel environment. Lax licensing requirements may encourage public tolerance for reckless driving and continued driving of golf carts by older drivers whose licenses have been revoked owing to ailments such as macular degeneration or dementia. There is no research evidence that people can safely drive a golf cart when they can no longer safely drive an automobile.

It may be appropriate in some communities to allow drivers younger than 16 to operate a golf cart on a multiuse trail with a learner's permit under the supervision of an adult.

Registration and Insurance

 All golf carts and LSVs should be registered with the appropriate local or state government agency.

This is important not only to ensure that basic safety requirements of the vehicles are met but also to help law enforcement officials and planning staff track vehicle use.

Require that both golf carts and LSVs be appropriately insured before their use on public and private roads and trails.

Most homeowner's insurance policies do not cover golf carts. This can pose a significant liability to golf cart owners involved in a crash. It is appropriate for state and local governments to require that both golf carts and LSVs be appropriately insured before their use on public and private roads and trails.

The American Association of Motor Vehicle Administrators' model legislation for low-speed vehicles includes requirements for registration, titling, and insurance.³⁰

Vehicle Safety Features

 State and local governments should require minimum golf cart safety features for on-road driving.

LSVs are regulated as motor vehicles by NHTSA, and thus are required to have basic safety features.

NHTSA does not view golf carts as motor vehicles but rather as small passenger vehicles intended exclusively for recreational off-road use. Thus, the agency does not regulate them. Nonetheless, golf carts are now routinely used for transportation purposes on public and private rights of way. If they are to be driven on roads, they should, at a minimum, be required to have seat belts, front-wheel brakes, brake lights, turn signals, and a windshield. If operated before sunrise or after sunset, their safety features should also include headlights and reflective devices on the sides of the cart.

Planning and Designing Safe Facilities

On-street Facilities

 Allow LSVs and golf carts to mix with traffic only on low-speed streets.

Communities should limit LSV use in mixed-vehicle traffic to roads with posted speeds no greater than 25 mph and golf carts to roads with posted speeds no greater than 20 mph.

Customary engineering practice is to design a road for speeds 10 to 15 mph above the posted speed limit. This practice often induces drivers to speed. Keeping slower vehicles on slower roads helps to ensure that other vehicles

will not be traveling faster than the golf cart or LSV. Research has shown that vehicles traveling more than 10 mph slower than the general traffic flow can present a safety hazard to all drivers and can contribute to congestion problems. On lower-speed streets, all roadway users have more time to react to, and avoid, potential collisions. The widespread state policy of allowing LSVs on roads with posted speed limits of up to 35 mph needs serious reexamination.

Safe accommodation of LSVs and golf carts is not only a matter of speed limit but of the general character of the road. Roads with lower design speeds are the types of local roads underlying the intent of NHTSA's LSV rulemaking. LSVs and golf carts offer their passengers very little protection. Passengers are essentially as vulnerable as pedestrians and bicyclists in the road environment. Pedestrian safety research reveals that the human body is at greatly elevated risk of death if hit by a motor vehicle traveling at speeds above 20 mph.³¹ Older road users, because of their increased fragility and frailty, are most vulnerable. Given that IIHS's side crash tests have revealed fatal outcomes for the LSV driver even in collisions at only 31 mph, their use should be restricted to the lowestspeed, lowest-risk traffic environments they have been designed to navigate.

Provide marked travel lanes for LSVs and golf carts on 30- to 35-mph roads.

Communities should make a point of establishing seven- to eight-foot marked travel lanes for use by lower-speed vehicles (LSVs, golf carts, and bicycles), especially on roads with speed limits of 30 to 35 mph. Wider lanes are not desirable, as autos may be tempted to use them. Separate lanes

are usually not needed on slower local streets.

 Use traffic-calming strategies and other design treatments to enforce speed limits and improve safety for all travelers.

Drivers have a tendency to go as fast as the roadway design permits, regardless of posted speeds. Design elements such as narrower travel lanes, medians, sidewalks, landscaping, and access controls provide visual and physical cues that encourage (or, in some cases, force) drivers to travel at the appropriate speed. Many communities are adopting "complete streets" policies³² and applying "context-sensitive solutions" design strategies to improve safety for all travelers on multimodal streets. These strategies are appropriate for roads traveled by LSVs, golf carts, and other low-speed users.

 Ensure adequate room and appropriate signage for LSVs and golf carts.

Post signs and conduct educational programs to make sure drivers know to watch out for LSVs and golf carts, whether they mix with traffic on local roads or share marked lanes with bicyclists on higher-speed roads.

Make parking lots safer for all users.

Communities can work with local businesses to encourage safe and attractive parking areas for LSVs and golf carts. A number of retail centers are establishing special preferred parking spaces for electric vehicles in order to attract shoppers. Communities can encourage them to go further by incorporating safe travelways for golf carts, LSVs, cyclists, and pedestrians into the design of the entire parking lot. Making lots safer for these users tends to make them safer for drivers as well.

Off-road Facilities

Provide separate pathways for LSVs and golf carts as an alternative to routing them onto higher-speed (above 25–35 mph) roads, and to improve their overall viability.

To make LSVs or golf carts a viable means of travel, communities should plan complete low-speed networks that connect residential areas with the places people typically go, such as shopping centers, recreation areas, workplaces, and schools, without requiring that these users access major roads. Ideally, a community's road network should be designed to make it possible to complete an entire trip on existing lowspeed streets. But, given the dispersed development patterns in most American communities, access to at least some destinations is likely to require traveling on high-speed roadways.

Comparable accessibility for lowerspeed vehicles could be achieved through a combination of strategies such as building separate pathways and creating alternative access points (essentially a "back entrance") to activity centers that front major highways.

 Tailor trail design specifications appropriate for the physical environment and expected mix of users.

There is little research or guidance on methods and strategies to integrate golf carts safely onto existing bicycle and pedestrian paths. Federal law prohibits doing so on most federally funded trails. Building separate paths for golf carts, rather than routing them onto existing bicycle/pedestrian trails, may be the safest strategy for many communities. However, this could be quite an expensive proposition. More research and guidance is needed on strategies to design and implement safe multiuse pathways for pedestrians, cyclists, and motor vehicles traveling under 20 mph.

The minimum 10-foot width recommended by AASHTO for multiuse trails is insufficient to accommodate golf carts and LSVs. WRCOG recommends a 20- to 26-foot cross section of pavement surface, with 4 feet of this space marked for pedestrians. LSVs and bicyclists may share the remaining 16 feet of space. A wider alternative provides LSVs with 14 feet of width separate from an 8-foot bike lane and a 4-foot pedestrian lane.

In determining the appropriate width, particular attention must be given to time-of-day and seasonal user volumes, sight distances, vegetation clearance, sign placement, gradients, ramps, surfacing, grade crossings, and other trail design considerations. The mix of users is another important design consideration. For example, children's bike trailers and unpredictable child pedestrians and bicyclists themselves dictate wider lanes. Furthermore, planners and engineers must design for recently introduced golf carts that are six inches wider than standard carts.

 Consider carefully the safety implications of introducing golf carts and LSVs onto existing bicycle/pedestrian paths.

In places such as The Villages and Peachtree City, golf carts have shared on-road and off-road networks with walkers and cyclists for many years. Relatively few conflicts are reported among users, perhaps because they are all accustomed to accommodating each other. But introducing golf carts onto paths that have traditionally been used only by walkers and cyclists has the potential for serious negative consequences, especially for older pedestrians and cyclists who tend to move less quickly and who may have slower reaction times than younger people.

Existing trails have not been designed for larger, higher-speed passenger vehicles. Turn radii, sight distances, and pavement durability may not be safe and appropriate for these vehicles.

Furthermore, the vehicles themselves may present safety risks to nonmotorized users. Electric vehicles generate little engine noise and may overtake other users by surprise. Should a pedestrian or bicyclist suddenly turn in front of a near-silent golf cart or LSV traveling 20 mph, a serious crash may result.

Enforce 20 mph speed limits on multiuse trails.

Most of the research and experience available to date indicates that LSVs and other vehicles that travel faster than 20 mph should not share paths with slower-moving travelers. They should operate on their own pathways, or on low-speed public streets with appropriate design and signage. LSVs may be allowed to operate on properly designed shared-use pathways in slow speed mode, as is the case in Peachtree City. The community should ensure adequate resources for enforcement

Intersections

Allow LSVs and golf carts to cross higher-speed roads only at controlled intersections identified by state and local governments as safe.

Both LSVs and golf carts are limited in their power to accelerate, thereby increasing the risk when crossing major highways. Many states appropriately regulate where LSVs and golf carts can cross major roads. Ideally these crossings should be at signalized intersections, where engineers have timed traffic lights to allow sufficient crossing time for lower-speed vehicles.

 LSVs and golf carts should be accommodated across high-speed roads via bridges and tunnels or by reducing the traffic speed in the intersection.

Hardly any communities or states permit the use of LSVs or golf carts on roads with travel speeds of more than 35 mph. However, provisions can and should be made to allow these vehicles to cross high-speed roadways at controlled intersections or via bridges or tunnels. Communities should work proactively with state DOTs and other relevant agencies to include these facilities in planning and programming highway improvements.

Design techniques that make intersections safer for pedestrians and bicyclists should work well for LSVs and golf carts. Some of the most commonly used treatments include clearly marked, lighted crosswalks, countdown pedestrian crossing signals. and median refuges in the middle of large highways. Roundabouts, which have successfully accommodated multimodal traffic in many other countries for years, are increasingly being employed in American communities. Essential to ensuring roundabout safety is designing tight circles that force drivers to travel smoothly but slowly (15 to 20 mph).

Planning Complete Networks

Integrate land development and transportation plans in order to develop complete networks for all travel modes.

The market is growing for planned communities that feature a mix of homes, shops, and restaurants linked by multiuse trails and public green spaces such as golf courses and parks. Many such communities are designed specifically for active adults and retirees. Cities that adopt policies and plans for community-wide networks of golf cart

paths and LSV routes can use these development projects as opportunities to get significant portions of their networks built. They can complete their networks by investing relatively small amounts of public funds in pathway links and selected road improvements that connect new developments with other important activity centers such as schools and downtown shopping districts.

Communities can also enhance existing developed areas by integrating routes for LSVs and golf carts into their urban fabric. These kinds of investments can boost economic development efforts to attract demographic groups such as "creative class" young professionals and active older adults.

The creation of a network of slower-speed roads, designed to safely accommodate LSVs and golf carts, will also increase the general livability of a community. Pedestrians, bicyclists, and transit users all feel more comfortable sharing the road network with motor vehicles when vehicle speeds are under 30 mph. Retail establishments also benefit from the increased foot traffic of a walkable environment and slower streets where drivers can notice shopping and service opportunities, parallel park, and exit their vehicles safely.

Research and Data Collection

Invest in data collection, analyses, and research that will help American communities safely integrate golf carts and LSVs into their transportation networks.

There is woefully little data and information available for planners and engineers to use in designing and managing multiuser systems that include golf carts and LSVs.

Coordinated by NHTSA, states and localities should establish workable methods for tracking crashes involving golf carts and LSVs, in both on-road and

off-road settings. These methods could include strategies such as modifying police reporting and coding systems to differentiate LSV- and golf-cartrelated incidents more clearly. Data collection methods should be integrated with existing FARS, CPSC, and the National Electronic Injury Surveillance System. Data are needed that distinguish LSV crash-induced injuries from those involving golf carts. This sort of initiative would provide a valuable opportunity for states and localities to ensure that law enforcement agencies understand and can consistently enforce the existing safety standards for golf carts and for LSVs. It would also give planners and policy makers better data with which to evaluate existing laws and regulation.

In addition, the research team was able to find little specific information on how to design roadways and off-road trails for golf carts and LSVs, particularly when the facilities are shared with other users. The communities studied for this report largely drew upon AASHTO standards for bicycle facility design when establishing standards for key elements such as lane or path widths and on-street pavement markings.

Although bicycles are (technically) capable of moving as fast as golf carts

and even LSVs, they are utterly different from these vehicles. They are much smaller, much more maneuverable, and are usually operated at speeds around 5 to 15 miles per hour. While some aspects of bicycle facility design may work for golf carts and LSVs, they are all unique types of vehicles and should be subject to their own design standards.

Conclusion

Well-designed networks for LSVs and golf carts could help fill a gap in the existing array of transportation options. They could serve as useful alternatives to gas-powered automobiles, particularly for the many short trips most Americans make every day. They provide a convenient way for people to travel farther and faster than they would on foot or by bicycle, without having to use a car.

Nonetheless, community planners, law enforcement officials, local decision-makers, and users of these vehicles should not lose sight of the fact that these vehicles are much less safe to ride in than passenger cars.

With proper planning, education, regulation, and enforcement, communities can safely accommodate LSVs and golf carts and improve the quality of life for residents of all ages.

Table 1 Case Study Summary

							Western Rivers	Western Riverside Council of
	The Vill	The Villages, FL	Peachtree	Peachtree City, GA	Lintc	Linton, IN	Governments	Governments (WRCOG), CA
				Population				
Total	81,0	81,000	34,300	300	5,7	5,700	650,000	000
							(four communities c NEV Plan)	(four communities covered by NEV Plan)
Age 55 and above	predom	predominantly	10,800 (32%)	(32%)	2,400	2,400 (42%)	136,000	136,000 (21%)
	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles
Estimated number of golf carts and LSVs in circulation	50,000 (estimate	50,000 (estimated from surveys)	10,000+ registered		98			
State policies or regulations regarding state and local authority to regulate LSVs or golf carts	Title XXIII, Chapter 316.312 (Florida Statutes) Operation of a golf cart upon public roads or streets prohibited except where designated by municipality. State DOT must approve location and design of designated crossings.	Limited to roads where the posted speed limit does not exceed 35 mph. A county or municipality may prohibit the operation of lowspeed vehicles or mini trucks on any road under its jurisdiction if the [local] governing body determines that such prohibition is necessary in the	\$40-6-331 (Georgia Code) Local governing bodies have the authority, by ordinance, to designate certain public streets for the combined use of motorized carts and regular vehicular traffic. Crossing of state and local highways only at designated intersections.	§40-6-362 Low-speed vehicles shall be operated only on any highway where the posted speed limit does not exceed 35 mph.	\$9-21-8-57 (Indiana Code) Only on local roads where local ordinance in place.	\$9-21-8-8.5 A person may not drive a low- speed vehicle on a highway that has a speed limit in excess of 35 mph.	Golf carts may not be operated on any highway with a posted speed limit of over 25 mph, except by ordinance or resolution by a local authority.	California Vehicle Code 385.5 and 21250-21266 The operator of a low-speed vehicle may not operate the vehicle on any roadway with a posted speed limit greater than 35 mph except to cross a roadway at an intersection, unless roadway designated in a local NEV plan.
		interest of safety.						

Table 1 (continued)

					/-			
	The Villages, FL	ages, FL	Peachtree City, GA	City, GA	Linton, IN	N.	Western Riverside Council of Governments (WRCOG), CA	ide Council of (WRCOG), CA
	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles
			Road	Road Type Limitations	40			
State	30 miles per hour or less	35 miles per hour or less	Not addressed	35 mph or below LSVs entitled to full use of a lane	Speed not specified in state law	35 mph or less	25 mph or less, except by resolution or ordinance by local authority	35 mph or less
Local	Not addressed	35 mph or less	Not addressed	35 mph or below	Cannot exceed posted speed limit Must travel with flow of traffic on "extreme right side of the roadway."	LSVs not addressed in ordinance	n/a WRCOG Plan limited to LSVs	Streets identified in NEV Plan. Generally restricted to streets with posted speed limits of 35 mph or less. Streets with posted limits of 40 mph or greater require separate lanes for NEV operation.
			Operator Licer	Operator Licensing Regulations/Policies	s/Policies			
State	Not required, but must be 14+ to operate on public road or street	Required	\$ 40-5-20 and \$ 40-5-21 Required on state highways \$40-6-331 Grants authority to local government.	\$ 40-5-20 Required	Required	Required	Required	Required
Local	Marion County only: Must be age 14+	Not applicable	Persons age 16 or older with or without driver's license (unless license has been suspended or revoked) Persons age 12 to 15 with limitations.	Not applicable	State law requires provision in local ordinance	Not applicable	n/a	Not applicable

Table 1 (continued)

	The Villages, FL	ges, FL	Peachtree City, GA	City, GA	Linton, IN	<u>z</u>	Western Riverside Council of Governments (WRCOG), CA	de Council of NRCOG), CA
	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles
			Vehicle Registi	Vehicle Registration Regulations/Policies	s/Policies			
State	Š	Required	\$40-6-331 State law allows local governing authority to require local registration and licensing of carts by ordinance.	Required	Not addressed	Required	Exempt	Required
Local	No	Required	Required	Not applicable	Required	not applicable	n/a	Not applicable
			Insurance	Insurance Regulations/ Policies	icies			
State	No	Required	No	Required	Not addressed	Not addressed	State law requires that local golf cart transportation plans include insurance requirements.	Required
Local	No	Required	Encouraged	Required	Required	Required	n/a	n/a
		0	ther Local Polici	Other Local Policies, Regulations and Programs	nd Programs			
Specific vehicle types addressed	Golf Carts - ALL	LSVs - Lady Lake Only	Motorized carts	Low-speed motor vehicles	Golf carts only	s only	LSVs only through NEV Plan	ıgh NEV Plan
Use of LSVs or carts on multiuse trails	Yes Yes 20 mph max. speed	Yes 20 mph max. speed	Allowed	Allowed provided it does not exceed 20 mph	Not specified	cified	n/a	Allowed on designated trails that meet design design design
Use of LSVs or carts on sidewalks	State law allows if sidewalk 8' wide and local government deems safe in consultation with state DOT.	Not addressed	Prohibited by municipal code	Prohibited by municipal code	Prohibited	Not addressed	Not mentioned in municipal code	Not addressed in NEV Plan

Table 1 (continued)

The Villages, FL Golf Carts Golf Carts Golf Carts Other Local Policies Calif Carts Other Local Policies Calif Carts Other Local Policies Other Local Policies Other Local Policies Golf Carts Other Local Policies Other Policies Other Local Policies Other Local Policies Other Policies Other Local Policies Other Po								
Coolf Carts	The	Villages, FL	Peachtree	City, GA	Linton, IN	Ž,	Western Riverside Council of Governments (WRCOG), CA	ide Council of WRCOG), CA
Not known Safety	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles	Golf Carts	Low-Speed Vehicles
Safety		Other	Local Policies, Re	gulations and Pr	rograms (continu	ed)		
equipment standards established by the Florida statutes: headlights, brake lights, turn signal, reflex reflectors, windshield, reliable parking brakes, safe tires, rearview mirrors, safe tires, rearview mirrors, and red reflectorized reflectorized warning devices in front and rear. Local requirements also include reflective devices on sides of cart if operated before sumrise and after sunset. Homeowner's Association volunteerdriven website. Orientation class in partnership with municipal sherrifs.		dot known	Required with ne Min. 10' with 4' \$20' eas.	w development. aggregated base, ement	None	a	7' min. shared use NEV/bike lanes on roads with posted speeds > 35 mph Shared use on streets with a posted speed limit not greater than 35 mph 20-26' shared use trails. Pedestrians given 4' of marked lane space.	VEV/bike lanes on speeds > 35 mph with a posted speed r than 35 mph ls. Pedestrians given lane space.
Homeowner's Association volunteer-driven website. Orientation class in partnership with municipal sherrifs.	Minimum equipment stand established by Florida statutt headlights, brz lights, turn sigr windshield, relisteering appara safe tires, rearv mirror, and re reflectorized warning device front and rear. I requirements a include reflect devices on sic of cart if opera before sunrise after sunset			Regulated by NHTSA Municipal code requires use of seat belts.	Slow Moving-Vehicle sign or flashing lamp, lights and headlights on day or night, rearview mirror.	Regulated by NHTSA	State laws requires at least one headlamp, tail lamp, and stop lamp; a rear reflector; front/rear turn signals; front/ side reflectors; a mirror (located in a position to allow the driver a rear view of at least 200 feet); a hom; fenders; safety glazed windshield; windshield wipers. State law allows municipalities to require seatbelts.	Regulated by NHTSA
Minicipal sherrifs can patrol streets	Homeowner's driven websi	Association volunteer- e. Orientation class in ith municipal sherrifs.	Online course , qu road test oriente	uiz, and practical ed to teenagers.	N	c	No	0
Cannot patrol trails, but can enter if a problem is observed.	Municipal sh Cannot patrol probl	errifs can patrol streets. trails, but can enter if a im is observed.	City police patrol 1 and issue citation Enforce no t	pathways on carts s (100+ in 2007) exting law.	Not addressed	Iressed	Not addressed	ressed

Endnotes

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Policy and Design Considerations for Accommodating Low Speed Vehicles and Golf Carts in Community Transportation Networks

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