CITY OF OLDSMAR

SAFE STREETS FOR ALL (SS4A) FINAL REPORT

January 20, 2025



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INTRODUCTION

The City of Oldsmar is one of 24 incorporated municipalities in Pinellas County, located at the top of Tampa Bay along its north shore and bordering the Hillsborough County line. Oldsmar's population is just under 14,000 residents and the city is home to numerous parks, boasting the highest ratio of park to city land area in Florida.⁵

The city was named after Ransom Eli Olds, founder of an automobile manufacturing company in Michigan called Olds Motor Works, which is widely known for the Oldsmobile cars produced there. Mr. Olds moved from Michigan to Florida in the early 20th century, eventually purchasing over 30,000 acres of land in the area in and around Oldsmar with the intent to build a planned community modeled after Washington DC and Detroit, with a diagonal street layout. Mr. Olds originally named the town Olds-on-the-Bay, but it was later renamed Oldsmar. The diagonal street pattern envisioned by Mr. Olds

is evident today, particularly in the area south of SR 580, or Tampa Road.

Forward Pinellas, the Metropolitan Planning Organization (MPO) for Pinellas County, Florida, oversees land use and transportation planning activities for the county, serving as both the MPO and land use planning agency for Pinellas. The county is the most densely developed county in the state of Florida, with 972,800⁶ residents and approximately 434,700⁷ jobs. Its geographical context is a uniquely situated peninsula between Tampa Bay and the Gulf of Mexico, connecting to neighboring Tampa to the east and one of the biggest Florida tourist destinations in the pristine gulf beaches to the west (Figure 1).

In 2021, Forward Pinellas developed a safety action plan, called the Safe Streets Pinellas Action Plan. The ultimate goal of the plan is to eliminate fatalities and serious injuries resulting from vehicle collisions. The planning process

Figure 1. Study Area

Pinellas County City of Oldsmar Study Area

⁵ https://www.visitstpeteclearwater.com/communities/oldsmar#:~:text=Oldsmar%20has%20some%20great%20events,roll%2C%20a%20carnival%20and%20parade.

⁶ https://www.bebr.ufl.edu/wp-content/uploads/2023/04/projections_2023.pdf

^{7 &}lt;a href="https://www.pced.org/wp-content/uploads/2023/03/Pinellas-Employment-Demographics-and-Commuting-Patterns-May-2022.pdf">https://www.pced.org/wp-content/uploads/2023/03/Pinellas-Employment-Demographics-and-Commuting-Patterns-May-2022.pdf

involved analysis of historical crash data and identification of the factors contributing to fatalities and serious injuries; development of a planning framework to identify both geometric and policy solutions; and a framework to prioritize improvements to the transportation network. Subsequent to the adoption of Safe Streets Pinellas, Forward Pinellas and the City of Oldsmar jointly submitted a Safe Streets and Roads for All (SS4A) grant application to the United States Department of Transportation (USDOT) to fund supplemental safety planning activities in the City of Oldsmar.

SAFE STREETS FOR ALL (SS4A)

The purpose of the grant submitted by Forward Pinellas and the City of Oldsmar was to obtain funding to support additional planning and ultimately identify safety improvements needed in the portion of Oldsmar south of Tampa Road (Oldsmar SS4A). Figure 2 depicts the study area defined for the additional study. The project involves an updated analysis of historical crash data within the Oldsmar study area; an interagency walking audit of high injury roadway segments and/or intersections; identification of safety improvement needs; community engagement; development of a traffic control study methodology for identification and warrant of all-way stop control at intersections; and preparation of conceptual designs of improvements for the consideration of the Oldsmar City Council.

Figure 2. Study Area



EXISTING CONDITIONS

Population & Employment

Compared to the rest of Pinellas County, the study area has a relatively low population density (Figure 3), with approximately 1,500 residents per square mile and a total of over 800 residents in the area.

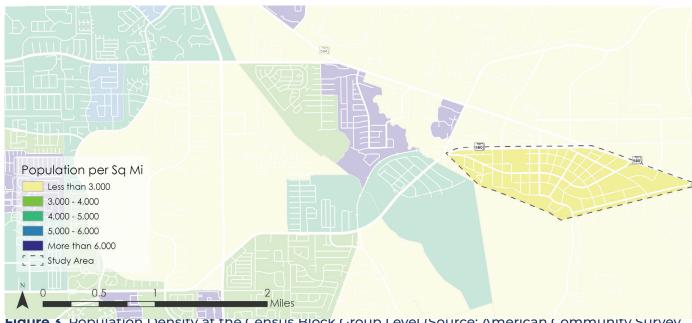


Figure 5. Population Density at the Census Block Group Level (Source: American Community Survey 2018-2022).



Figure 4. Employment in Oldsmar (Source: LEHD, 2021).

Non-Residential Land Uses

Figure 5 shows different types of land uses within the study area. Residential land use comprises most of the study area. However, a handful of non-residential land uses, including public parks, schools, and commercial/retail establishments are concentrated along St Petersburg Dr, State St, and SR 580 in the northeastern portion of the study area. Primarily commercial and industrial land uses are located just outside the study area to the north.

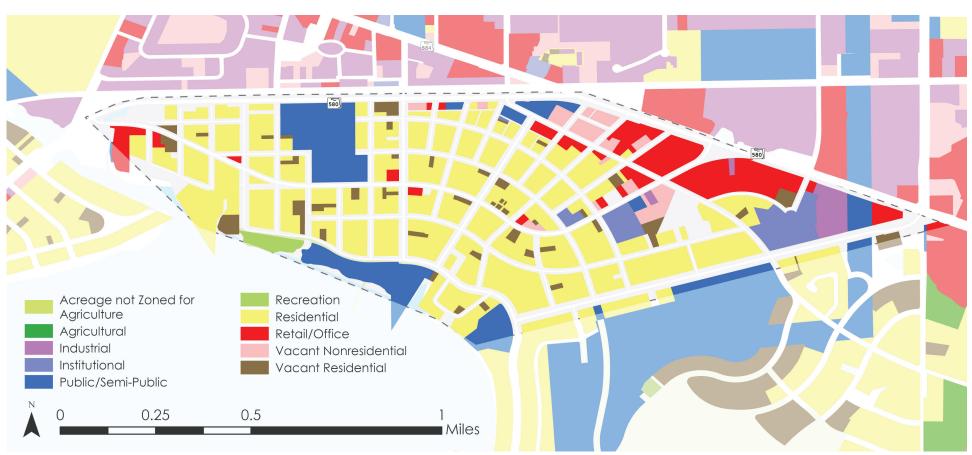


Figure 5. Land Use (Source: FGDL, 2024).

Transit Routes & Ridership

Figure 6 illustrates Pinellas County Transit Authority (PSTA) public transit services within and adjacent to the study area. Within the study area, route 67 traverses St. Petersburg Dr and SR 580 with a frequency of 60 minutes, while Route 812 traverses SR 580 with a frequency of 60 minutes.



Figure 6. PSTA Bus Routes and Stops by Ridership (Source: Pinellas County Transit Authority, 2024).

Stop Control

A stop control inventory was conducted to document existing stop control devices, including traffic signals and stop signs, within the study area (See Figure 7). There are 86 stop controlled intersections within the study area, 13 of which are all-way stop controls and five of which are signalized intersections. St Petersburg Dr is a

primary roadway for east-west travel in the city, with only one intersection (other than its terminal limits at SR 580 on either end) that stops vehicle flow along its length – an intersection on the east end of the study area at State St. Signalized intersections are located along the northern perimeter of the study area at the following intersections:

- SR 580 & Forest Lake Blvd
- SR 580 & Bayview Blvd
- SR 580 & Tampa Rd
- SR 580 & St. Petersburg Dr
- SR 580 & Lafayette Blvd

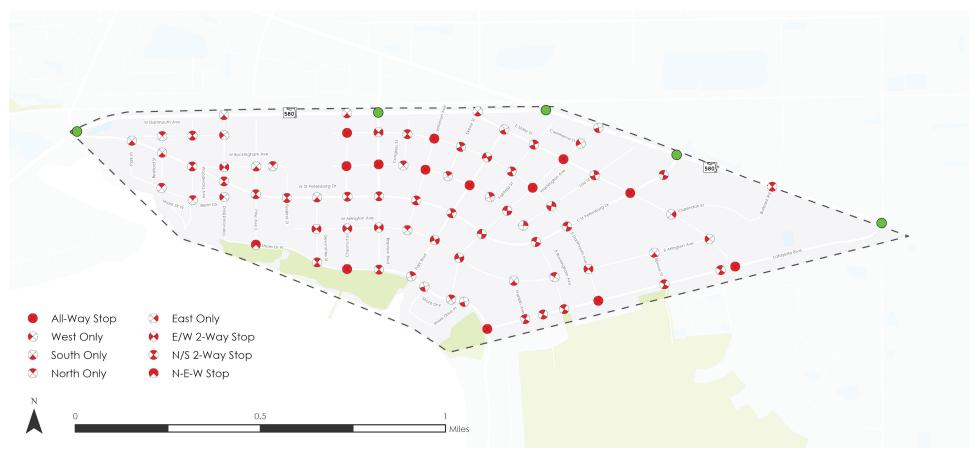


Figure 7. Stop Control Inventory (Source: Google Earth)

Crosswalks

A crosswalk inventory was conducted to document existing crosswalks and identify potential new crossing opportunities or enhancements. Figure 8 depicts existing standard and special emphasis crosswalks within the study area.

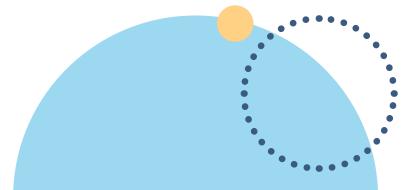




Figure 8. Crosswalk Inventory (Source: Google Earth)

Sidewalks and Bike Lanes

An inventory of sidewalks and bicycle lanes was conducted to document existing opportunities for multimodal activity as well as to identify potential multimodal gaps within the study area. Figure 9 depicts existing sidewalks, bicycle lanes, and on-street parking.

Bicycle lanes are present along approximately 19% of roadway miles within the study area, including Bayview Rd, Park Blvd, Lafayette Blvd, and SR 580/Tampa Rd. SR 580 is an eightlane facility east of Tampa Rd with relatively high vehicular speed and volume, whereas other roadways with bicycle lanes are primarily residential facilities with lower vehicular speed and volume.

Nearly all roadways within the study area include a sidewalk, with approximately 92% of the network including sidewalks on both sides and 7% of the network including a sidewalk on one side of the road only.

On-street parking is available along portions of State St and St. Petersburg Dr, providing access to essential downtown destinations including Oldsmar City Hall, Oldsmar Public Library, and various businesses.



Figure 9. Sidewalks, Bike Lanes, & On-Street Parking Inventory (Source: Google Earth)

Existing Projects

FOREST LAKES BLVD WIDENING PROJECT

Located just north of the study area, Forest Lakes Blvd between SR 580 to north of Tampa Rd (Figure 10) will be widened from two to four lanes, with a center turn lane and two right turn lanes and one through/right turn lane at SR 580. The project will include a 10' sidewalk on the west side of the street and a 6' sidewalk on the east side of the street. The project will also include drainage, signalization, and rail crossing improvements. As of October 2024, the project is currently in the design phase. Construction is set to take place between Fall 2027 – Fall 2029.

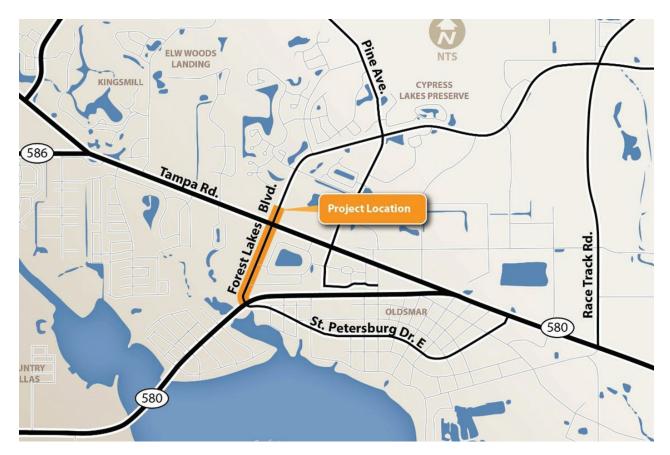


Figure 10. Forest Lakes Blvd Widening Project Map (Source: Pinellas County, 2024).

ST. PETERSBURG DR COMPLETE STREETS AND ROUNDABOUT PROJECT

In April 2018, the City of Oldsmar received a Complete Streets construction grant from Forward Pinellas to improve multimodal connectivity along St. Petersburg Dr from Bayview Blvd to Dartmouth Ave. The project is currently under re-evaluation, but tentatively will include a 10' trail on the south side of the road, an 8' sidewalk on the north side, and on-street parking between Bayview Blvd and Park Blvd. The project will also include the narrowing of traffic lanes to 11' to encourage slower vehicular speeds and accommodate golf carts. Finally, the project includes installation of a roundabout at the intersection of St. Petersburg Dr and Bayview Blvd. Figure 11 illustrates these multimodal improvements.



Figure 11. St. Petersburg Dr from Bayview Blvd to Dartmouth Ave Complete Streets Project.

STUDY METHODOLOGY

The Oldsmar SS4A study was specifically designed to address the requirements and criteria of the SS4A grant program, with the goal to obtain implementation funding through a future SS4A grant cycle. There are three primary categories of criteria in the SS4A program, including:



Safety Impact.

Specific safety impact criteria include the need to describe safety problems based on historical crash analysis and the identification of a high injury network; a safety impact assessment; and analysis of the costs associated with mitigating the safety problem.



Equity, Engagement and Collaboration.

Equity criteria require that the public is engaged to ensure buy-in to the identified safety improvements; that specific vulnerable population groups are considered; and that investment in safety improvements are equitable and do not disproportionately burden transportation disadvantaged populations.



Effective Practices and Strategies.

This category of criteria deals with the need to improve safety at the policy level and consideration of the Safe System Approach in the National Roadway Safety Strategy. This criterion also requires that behavioral safety issues are considered, that technologies improving safety and equity are incorporated, and that a holistic approach is taken that considers the impacts of land use and surrounding development.

Safety Impact Assessment

Initiating the safety assessment requires the acquisition and analysis of crash data. This process is crucial to identify locations where fatalities and serious injuries are most prevalent. The Forward Pinellas Crash Data Management System (CDMS) provides historical crash data for this purpose, spanning a 6-year period from 2018 to 2023.

A comprehensive analysis of the crash data was conducted, considering factors such as level of severity, type of collision, lighting conditions, time of day, and geographical location. Each category was cross tabulated with severity, providing insights into the impacts of various dimensions on crash severity.

The analysis unveiled that SR 580 is the corridor with the majority of crashes, including those involving pedestrians and bicycles. A heat map and an injury severity map were generated to

visualize the concentration and severity of crashes across the study area. Through this mapping, St Petersburg Dr, State St, and Lafayette Blvd emerged as the city roadways with the highest concentration of crashes, in addition to SR 580.

Figure 12 depicts the heat map, illustrating the areas with the highest concentration of crashes in the study area.

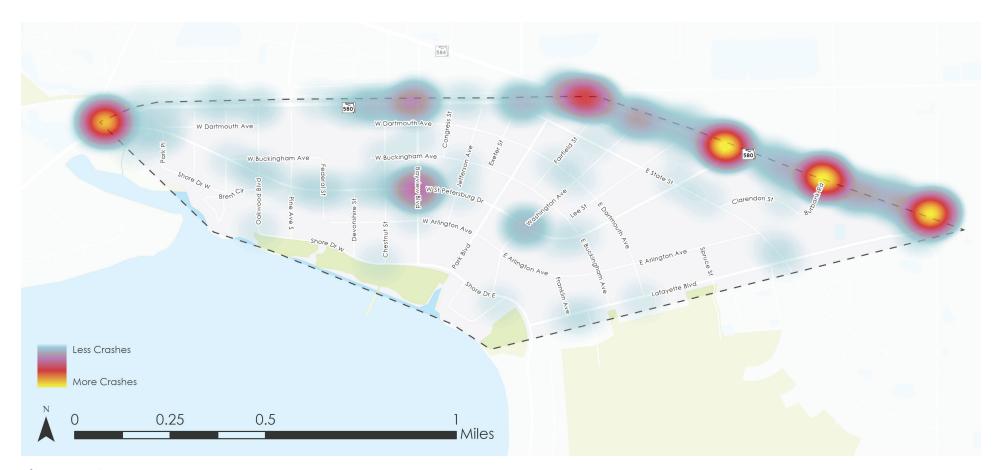


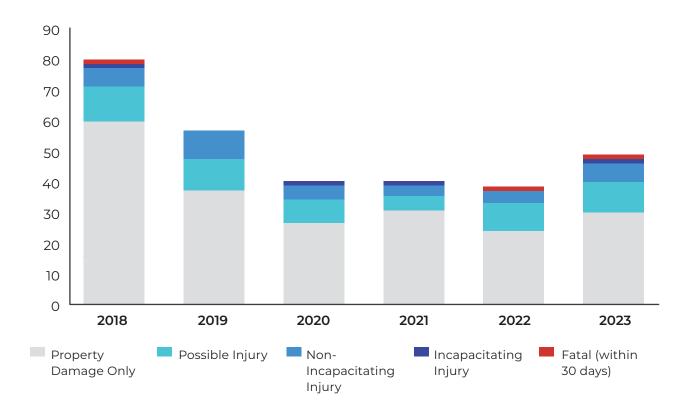
Figure 12: Total Crashes Heat Map 2018-2023

STUDY AREA CRASHES

A total of 312 crashes were reported for the calendar years 2018 through 2023 in the study area. Of the 312 crashes, 92 (30%) resulted in at least one injury, six crashes resulted in serious injuries and four crashes resulted in four fatalities (three pedestrians and one motorist). As shown in Figure 13, the number of crashes fluctuates from 2018 to 2019 and remains relatively steady throughout the remaining years. Crashes decreased by 28 percent between 2018 (81 total crashes) and 2019 (58 total crashes), with that trend continuing through 2020. It is possible that the reduction in the period between 2020 and 2022 is partially the result of reduced travel during the COVID19 pandemic. The sixth year of crash data (2023) saw an increase in crashes, relative to all three previous years.

Figure 14 displays crashes in the study area by level of severity from 2018 to 2023. There were 6 serious injuries: three along SR 580, one along St. Petersburg Dr, and one along State St and Lafayette Blvd. There were four fatal crashes, three of which involved pedestrians and one involving a motorist. Three of these fatalities occurred along SR 580, while the remaining pedestrian fatality occurred along St. Petersburg Dr.

Figure 13. Crashes by Year and Severity



Of the 312 crashes from 2018-2023, **30%** resulted in at least one injury

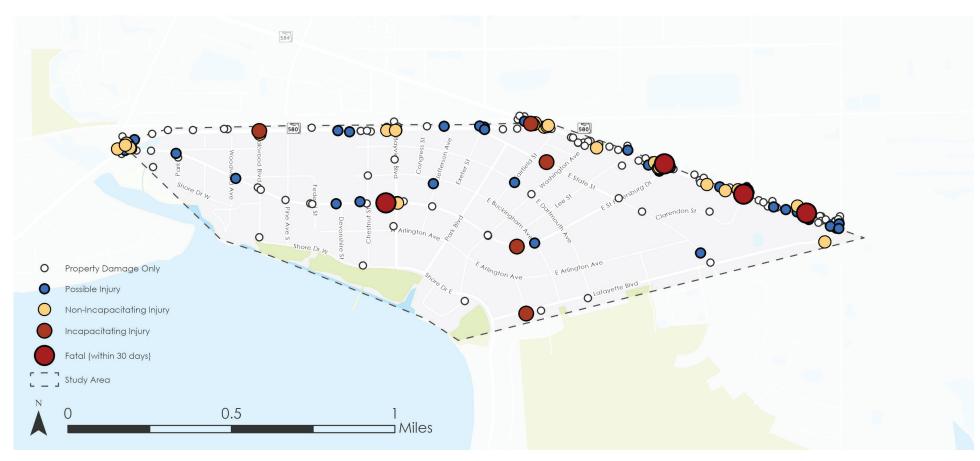


Figure 14. Crash Severity Map

Figure 15 summarizes crashes by type and severity for the six-year period. The most common crash type observed was rear-end, comprising 38 percent of the total crashes. Angle crashes represent 21 percent of all crashes and sideswipe and fixed object/run-off road crashes each represent 13 percent of all crashes, making them the second and third most common crash types, respectively. Together, these four crash types account for 85 percent of the total crashes. Left turn, right turn, head-on, pedestrian, bicycle, and U-turn crashes account for the remaining 15 percent of total crashes.

Figure 16 displays the crashes in the study area by lighting conditions for the six-year period. 70 percent (217 crashes) of the crashes occurred in daylight conditions, 23 percent (71 crashes) in dark-lighted conditions and the remaining seven percent (24 crashes) occurred during dawn, dusk and in dark not lighted conditions.

Figure 17 displays the serious injury crashes by lighting conditions. 50 percent (five crashes) of the serious injury crashes occurred during daylight, 40 percent (four crashes) occurred in dark-lighted conditions, and ten percent (one crash) occurred in dark-not lighted conditions.

Figure 15. Crash by Type and Severity

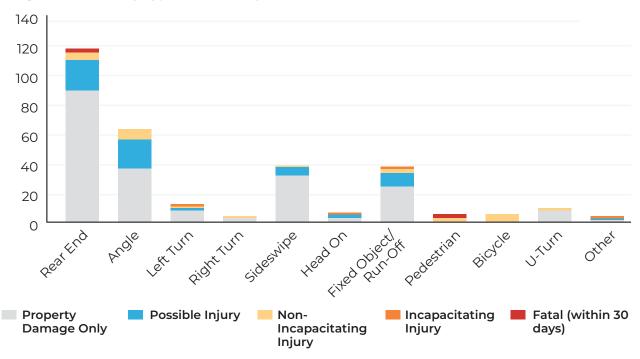
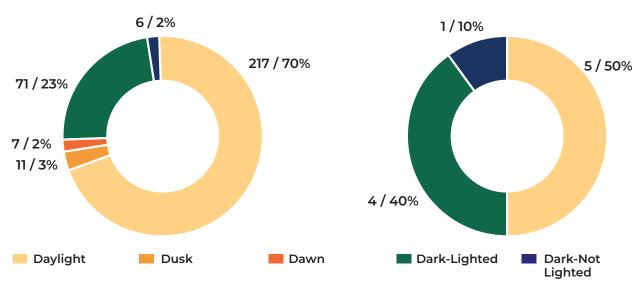


Figure 16. Crashes by lighting Conditions

Figure 17. Serious Injuries Crashes by lighting Conditions

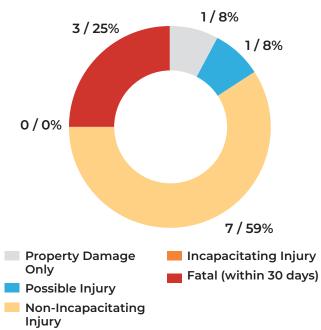


NON-MOTORIZED CRASHES

A total of twelve non-motorized crashes were reported for the calendar years 2018 to 2023, including six crashes involving pedestrians and six crashes involving bicyclists, which, together, account for four percent of total crashes. Although this is a relatively low percentage compared to the other types of crashes, it is important to note that 75 percent of total fatal crashes involved pedestrians. Furthermore, 67 percent of non-motorized crashes resulted in fatalities and injuries compared to only 31 percent of crashes not involving non-motorized users. These data underscore the vulnerability of pedestrians and bicyclists in the study area.

Figure 18 summarizes crashes in the study area involving pedestrians and bicyclists by level of severity.

Figure 18. Non-Motorized and Motorized Crashes



FATAL AND SERIOUS INJURY CRASHES

A total of ten serious injury and fatal crashes occurred in the study area from 2018 to 2023: four fatal crashes and six serious injuries. The crash types were as follows:

- Left Turn Crashes: Two crashes resulted in serious injuries.
- Rear-End Crash: One crash resulted in a fatality.
- Fixed Object Crashes: Two crashes resulted both in serious injuries.
- Run-Off: One crash resulted in serious injuries
- Head-On Crashes: One crash resulted in serious injuries.
- Pedestrian Crashes: Three crashes, all resulting in fatalities.

A professional engineer reviewed and summarized individual crash reports, revealing several key factors contributing to crash severity:

- **Failure to Yield:** The two left turn crashes were caused by failure to yield, resulting in three serious injuries.
- **Speed:** The rear end crash was caused by a vehicle at a speed in excess of 80 mph resulting in six non-serious injuries, one serious injury and one fatality.
- Dark lighted/ Dark not lighted: Two pedestrian crashes, one left turn crash, and one run off road crash occurred in dark lighted areas resulting in a total of two fatalities and two serious injuries. One head-on crash occurred in a dark, not lighted area, resulting in one serious injury and two possible injuries.
- **Weather Conditions and Roadway** conditions: One pedestrian crash and one fixed object crash occurred in rainy



weather and wet roadway conditions, one run off road crash occurred in wet roadway conditions resulting in one fatality, three serious injuries, and one non-serious injury.

Crossing/ Crossing outside of Crosswalk: One pedestrian crash involved a pedestrian crossing outside of a marked crosswalk where no crosswalk was present. The other two pedestrian crashes occurred while pedestrians were trying to cross but it was not specified whether they were in a marked crosswalk or not, despite marked crosswalks being present at these locations. These three pedestrian crashes have resulted in four fatalities and two serious injuries (all pedestrians). In total, there were three simple injuries, eight non-serious injuries, ten serious injuries and four fatalities in crashes involving fatalities or serious injuries. The findings suggest that a multifaceted approach addressing speed management, yielding behavior, pedestrian infrastructure, and lighting and road surface conditions could help improve road safety within the study area.

HIGH INJURY NETWORK

A High Injury Network (HIN) was identified by investigating corridors with fatal or serious injury crashes within the study area. SR 580, State St, Lafayette Blvd, and St. Petersburg Dr, were identified as corridors with the highest incidence

of dangerous crashes and were consequently designated as the HIN for the study area.

Within the HIN, the intersection of St. Petersburg Dr and SR 580, St. Petersburg Dr from Oakwood Blvd to Bayview Blvd, and SR 580 from St Petersburg Blvd to Lafayette Blvd were identified as the areas with the most serious injuries.



WALKING AUDIT

In response to the crash findings, the study team conducted a walking roadway safety audit of portions of the HIN. The audit aimed to identify challenges and discuss potential solutions with a multidisciplinary team of professionals. The audit team was assembled to ensure a diverse range of perspectives and areas of expertise, as it relates to transportation safety. Members of the audit team included representatives from the following organizations:

- City of Oldsmar Fire Department
- City of Oldsmar Planning and Redevelopment Department
- City of Oldsmar Public Works Department
- City of Oldsmar Police Department
- Florida Department of Transportation
- Forward Pinellas
- Oldsmar Christian School
- Pinellas County Public Works Department

- Pinellas County Sheriff's Department
- Pinellas Suncoast Transit Authority

The audit was conducted on June 4, 2024. The objective was to identify needed improvements to mitigate safety issues along the HIN corridors in the study area. The study team identified 1.3 miles of roadways and the intersection of SR 580 and St Petersburg Dr/Forest Lakes Blvd to evaluate in the field during the walking audit. This included 0.8 miles along St Petersburg Dr from SR 580 to Bayview Blvd, and 0.5 miles on SR 580 between St Petersburg Dr and Lafayette Blvd. These selected locations are shown in Figure 20.



Figure 20. Walking Audit Corridors and Intersections

During the walking audit each participant shared their observations and insights. The unedited notes from the audit are included in Appendix B. The audit findings collectively provide a comprehensive understanding of the current conditions of each evaluated area. The summary of these observations, categorized by segment and seen through the lens of the various participants' area of expertise is presented in the following section.

SR 580 at Forest Lakes Blvd

The walking audit conducted on the intersection of SR 580 and Forest Lakes Blvd revealed several areas of concern and potential improvement. The map in Figure 21 was provided to all audit team members for reference as to crashes involving pedestrians and bicyclists in the intersection and for note taking purposes. The main issues noted by audit team members were related to the crossing distance from St Petersburg Blvd to Forest lakes Blvd and pedestrian safety.

- There were several concerns noted at the intersection, particularly regarding issues observed with turn lanes, turn radii, and pedestrian signals. A vandalized left turn arrow sign was noted. Suggestions were made for a Leading Pedestrian Interval (LPI), median extension, and additional signage. A driver passing by during the audit expressed the need for a left turn lane from St Petersburg Dr onto SR 580.
- Pedestrian safety was another area of concern. Issues include short pedestrian phases in the signals, lack of good sidewalk options for vulnerable users, and short signal timings for pedestrians. A truck was observed running over a pedestrian refuge, and there was a long wait time to cross SR 580.

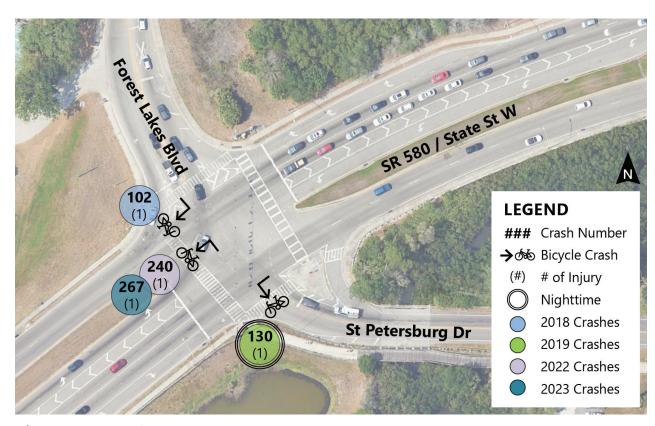


Figure 21. Crash Diagram - SR 580 at Forest Lakes Blvd

 Sidewalks and road conditions were also a concern. Observations included super elevation on the northeast sidewalk of SR 580, lack of paint on the northwest and southwest corners of the intersection, and heavy traffic volumes on SR 580. All corners of the SR 580 and St Petersburg Dr intersection appear to have new pedestrian ramps.

SR 580 from St. Petersburg Dr to Lafayette Blvd

The walking audit conducted on SR 580 from St. Petersburg Dr to Lafayette Blvd revealed several areas of concern and potential improvement. The maps in through were provided to all audit team members for reference as to crashes involving pedestrians and bicyclists along the audit corridor and for note taking purposes. The main issues were related to crossings and intersections, sidewalks and driveways, ADA compliance, and road conditions.

- Crossing opportunities lack midblock crossings, crosswalk markings, and include significant crossing distances. Some crosswalks need repainting, and a proposal was made for a pedestrian overpass at the St. Petersburg Dr and SR 580 intersection.
- Sidewalks and driveways present several challenges, including pooling water, vegetation obstruction, uneven sidewalks, and driveways with a grade greater than 2%. There are also issues with narrow sidewalks and lack of separation of sidewalks and roadway travel lanes.
- ADA compliance was another area of concern, with several issues identified, including ADA Pads with a grade greater than two percent and missing ADA Pads at several locations.
- Road conditions were observed to be subpar, with broken concrete and dangerous speeds.
 There were also issues with thermoplastic markings and buffers.



Figure 22. Crash Diagram - SR 580 at St Petersburg Dr

- Crossings and intersections have issues with safe crossing places, refuge at intersections, and crosswalk markings. Proposals were made to add signals and modify medians at certain intersections. Pedestrians were observed crossing without using crosswalks and getting impatient with pedestrian signals.
- Sidewalks and driveways present several challenges, including sidewalks being too close to the road, slopes of sidewalks being difficult to maneuver (ADA), and wide driveways. There are also issues with missing ADA Pads and tripping hazards at certain locations.
- Road conditions are another area of concern, with issues such as lack of buffers, faded markings, and right-turning vehicles. A multiuse path leading to an intersection and a parklet at a corner were also noted.
- Several propositions for improvements were made, including signalizing the Burbank Rd intersection, and addressing faded crosswalks. Other propositions include reducing lane widths, adding delineation to bike lanes, establishing slow zones, and installing more school signals.



Figure 23. Crash Diagram - SR 580 west of Burbank Rd



Figure 24. Crash Diagram - SR 580 at Burbank Rd

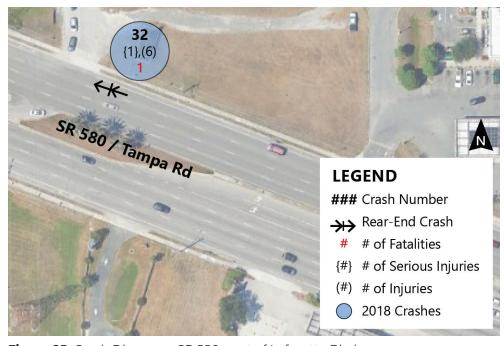


Figure 25. Crash Diagram - SR 580 west of Lafayette Blvd

St Petersburg Dr W/ From Oakwood Blvd to Bayview Blvd

The walking audit conducted on St Petersburg Dr, from Oakwood Blvd to Bayview Blvd revealed several areas of concern and potential improvement. The map in Figure 26 was provided to all audit team members for reference as to crashes involving pedestrians and bicyclists along the audit corridor and for note taking purposes. The main issues noted by the audit team were related to crossings and intersections, sidewalks and driveways, vegetation, conditions, and ADA compliance.

- Crossings and intersections lack proper ADA Pads and crosswalk markings, and several crosswalks are missing altogether.
 Sidewalks were found to be too close to the road, leaning towards the ditch, and in poor condition. Overhanging bushes, pooling water in driveways, and sidewalks dropping off into the side were additional concerns.
- Vegetation along the sidewalks is thorny and in some areas trees block the sidewalk path. There are also shrubs impeding sidewalks, indicating a need for trimming or removal of certain plants. Road conditions were another area of concern, with issues such as lack of curbs at intersections, static signals on Bayview Blvd, and inconsistent crosswalk pavement markings.
- Sidewalk conditions were a significant concern, with issues observed across from Oakwood Blvd. Sidewalks were noted to be narrow but felt safe from Oakwood Blvd to Federal St. However, a broken segment of the sidewalk with a high grade was observed east of Oakwood Blvd.



Figure 26. Crash Diagram - St Pete Dr at Bayview Blvd

- Vegetation was another area of concern.
 Bush trimming is needed east of Oakwood
 Blvd, and a bush was observed blocking the sidewalk east of Oakwood Blvd.
- Signage issues were noted, with a speed limit sign being very high (vertical) and light over tracing at the Federal St intersection. A static sign, not high emphasis, was observed at the Federal St intersection with a suggestion to add bar/tape to stop signs.
- Crosswalks are also a concern. A new painted crosswalk was suggested at the Pine Ave intersection. However, ADA compliance was lacking, with an ADA Pad missing at the Federal St intersection.

- A multi-use path sidewalk was observed on St Petersburg Dr from Oakwood Blvd to SR 580.
- Several propositions for improvements were made, including sidewalk refurbishment, addressing ADA compliance issues, maintenance of broken sidewalks, and lack of a handrail along sidewalks. These findings provide a comprehensive understanding of the current conditions and highlight the need for targeted interventions to enhance safety and accessibility.

Equity, Engagement, and Collaboration

The collaborative planning process undertaken by the study team to identify needed safety improvements in the study area included a multiagency community walking audit, a community workshop, and continuous coordination between Forward Pinellas and the City of Oldsmar, the lead agencies, and partner agencies at Pinellas County and FDOT.

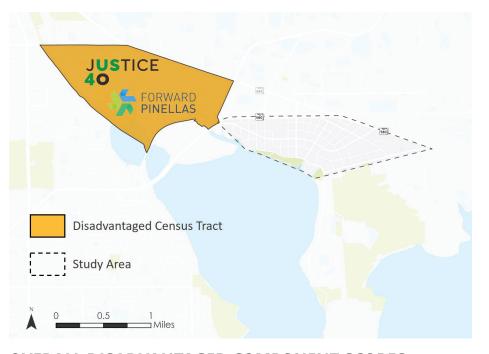
The communities in and near the study area include numerous vulnerable and/or disadvantaged populations identified in the Forward Pinellas Equity Assessment completed in 2022. The study team compared the disadvantaged populations identified by Forward Pinellas with those identified in the USDOT Climate and Economic Justice Screening Tool in the vicinity of the study area. This analysis was used by the team to contextualize the safety issues in the study area and ensure that recommended improvements address the safety and mobility needs of those populations.

EQUITY ANALYSIS

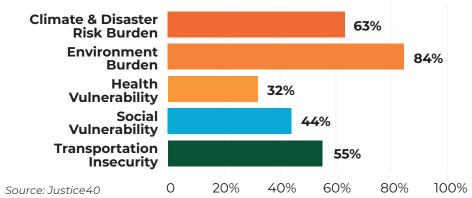
A key component in assessing safety is equity. Incorporating equity into how projects and strategies are executed addresses the needs of underserved communities and ensures accessibility for all users. Although the study area does not include disadvantaged populations, communities adjacent to the study area have been identified as disadvantaged by Forward Pinellas and/or the United States Department of Transportation's USDOT Climate and Economic Justice Screening Tool (CEJST). Children in these communities attend Oldsmar Elementary school in the study area. Other community destinations in the study area include Oldsmar City Hall, several churches and parks, and the Oldsmar Public Library.

Figures 27 through 31 illustrate the Forward Pinellas and CEJST disadvantaged areas north and west of the study area. The census tract shown in Figure 27 is considered disadvantaged by both Forward Pinellas and USDOT. According to USDOT Justice40 data, this tract scores highest in terms of climate and disaster risk (63rd percentile), and environmental burdens (84th percentile compared to other census tracts nationally. The tract is also ranked highly in terms of: (1) proximity to toxic/hazardous sites, (2) proximity to high volume roadways and railroads, (3) high number of mobile homes, and (4) vulnerability to sea level rise. According to the Forward Pinellas analysis, this tract is deemed disadvantaged because it has an above average minority population (24%).

Figure 27. Transportation Disadvantaged Census Tract Example #1 (Sources: USDOT Justice40, Forward Pinellas).

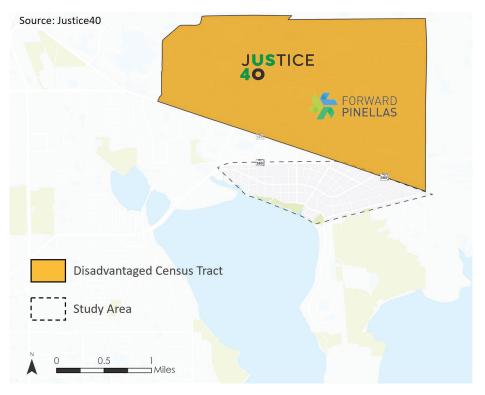


OVERALL DISADVANTAGED COMPONENT SCORES - PERCENTILE RANKS

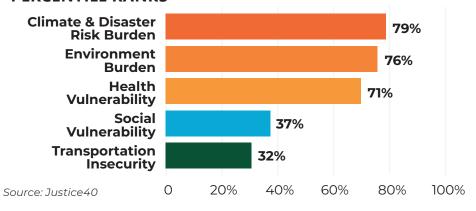


The census tract shown in Figure 28 is also considered disadvantaged by both Forward Pinellas and USDOT. According to USDOT Justice40 data, this tract scores highest in terms of climate and disaster risk (79thpercentile), environmental burdens (76h percentile), and health vulnerability (71st percentile) compared to other census tracts nationally. The tract is also ranked highly in terms of: (1) proximity to toxic/hazardous sites, (2) health risks (i.e., cancer, high blood pressure), (3) vulnerability to sea level rise, and (4) vulnerability to extreme heat days. According to the Forward Pinellas analysis, this tract is deemed disadvantaged because it has an above average minority population (23%) and an above average population that speaks limited English (7%).

Figure 28. Figure 28: Transportation Disadvantaged Census Tract Example #2 (Sources: USDOT Justice40, Forward Pinellas).

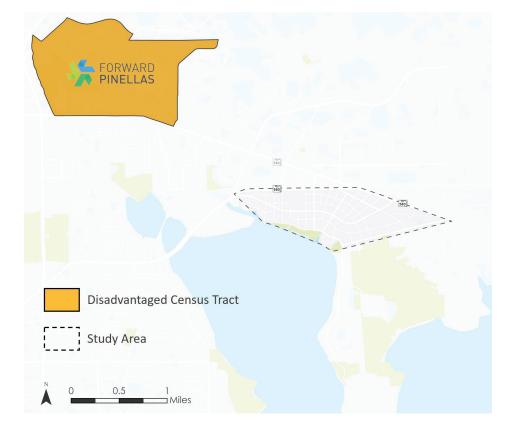


OVERALL DISADVANTAGED COMPONENT SCORES - PERCENTILE RANKS



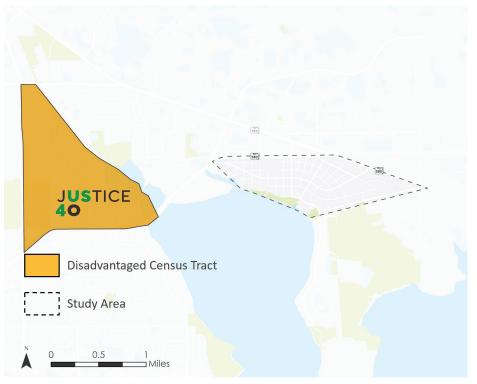
The census tract shown in Figure 29 is only considered disadvantaged by USDOT. This tract scores highest in terms of social vulnerability (73rd percentile) and environmental burden (68h percentile) compared to other census tracts nationally. The tract is also ranked highly in terms of: (1) number of mobile homes, (2) vulnerability to sea level rise, (3) population 65 and older, and (4) income inequality.

Figure 29. Transportation Disadvantaged Census Tract Example #3 (Sources: USDOT Justice40, Forward Pinellas).

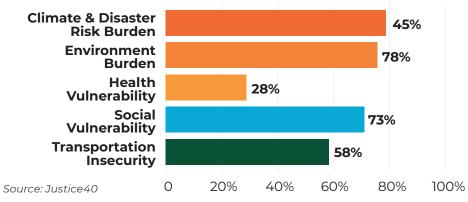


The census tract shown in Figure 30 is considered disadvantaged by Forward Pinellas only. This tract is deemed disadvantaged because it has an above average minority population (22%).

Figure 30. Transportation Disadvantaged Census Tract Example #4

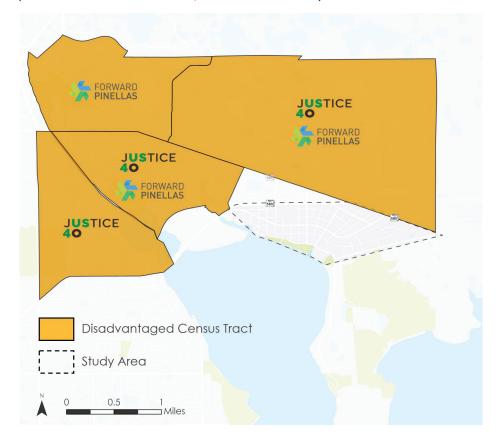


OVERALL DISADVANTAGED COMPONENT SCORES - PERCENTILE RANKS



The Transportation Disadvantaged area definition for this study represents a combination of the Forward Pinellas and USDOT analysis and is depicted in Figure 31.

Figure 31. Figure 31: Transportation Disadvantaged Census Tracts (Sources: Forward Pinellas, USDOT Justice40).



MULTIMODAL EMPHASIS CORRIDORS

A multimodal accessibility analysis was conducted to identify potential multimodal connections between the disadvantaged areas surrounding the study area and essential destinations within the study area. Essential destinations include schools, grocery stores, parks, libraries, churches, and several other destination types, defined by the Federal Transit Administration as "opportunities and services essential to daily life."





The multimodal accessibility analysis used a GISbased process to trace the shortest paths between the disadvantaged areas and the identified destinations, yielding a number of roadways in and near the study area. The resulting roadways are considered multimodal emphasis corridors in the study area which, together with other data sources, including historical crash data, was used to identify corridors for further analysis. Figure displays the multimodal emphasis corridors identified in this analysis. W Dartmouth Ave W Dartmouth Ave W Buckingham Ave Multi-Modal Emphasis Corridor 0.25 0.5 Miles

Figure 33. Multimodal Emphasis Corridors.

Effective Practices and Strategies

TRAFFIC CONTROL ANALYSIS

As part of best practice safety planning, the study team considered the development of a standardized process that the City can use to evaluate intersections for potential stop control installation or removal. The study team developed a unique warranting framework for the City for this purpose, based on MUTCD and other standards. The team applied the framework to streets identified in this study as high injury roadways to test it and to inform study recommendations. It is important to note that the framework is a sketch level planning tool and all recommendations from the warranting system require additional evaluation and shall be further verified by an engineering study before consideration for implementation. The warranting system has three parts: Triggers, Points, and the Manual of Uniform Traffic Control Devices (MUTCD) evaluation. For the Trigger and Points sections, the City of Oldsmar's values of pedestrian mobility were strongly considered to improve safety for vulnerable users.

Trigger Warrants

Trigger Warrants identify specific conditions that may necessitate an immediate All-Way stop condition, including:

- Two or more crashes susceptible to correction by all-way stops have occurred in a twelve-month period on a local street.
- Two bicycle or pedestrian crashes over a fiveyear period within the immediate vicinity of the intersection.

- Any crash that results in a fatality or severe injury.
- A school in itself is not considered to be sufficient justification for all-way stops, but an intersection with a high emphasis school crossing is, or at an intersection with a crosswalk that is part of an identified route for children walking or biking to school. In these cases, either an all-way stop condition is warranted, or just stop conditions for the movements that conflict with the pedestrian movement.

Point System

The Points System assigns point values to different intersection conditions. These point values are summed and can be compared to warrant value ranges (See Table 1). Depending on the sum of the points, the intersection can be recommended for No Action, Additional Study Warranted, or All-Way Stop Control Warranted. The scoring criteria include:

- Crash Experience maximum 15 points.
 Three points are assigned for each correctable crash that occurred in the preceding five-year period.
- Unusual Conditions maximum 15 points.
 The intersection has a combination of unusual conditions, and engineering judgment determines that the location would be best served by All-Way Stops. Examples of unusual conditions are a school, fire station, playground, bus route, steep hill, geometry, and visibility limitation. Points are assigned by judgment.
- Traffic Volume Difference maximum 10 points. This warrant considers only the difference between the 4-hour volumes of two intersecting streets. All-way stops function best when the difference between the volumes is small. A small traffic volume

difference is assigned maximum points. The point assignment table for this warrant is shown in the table below.

Table 1. Points Warrant - Traffic Volume Difference

Volume Difference	Points
0%	10
5%	8
10%	6
15%	4
20%	2

Pedestrian Volumes - maximum 15 points.

The volume of pedestrians crossing the major street is of concern when evaluating for all-way stops. 5 points are assigned for each set of 5 pedestrians in 4 hours, as shown in Table 2.

Table 2. Points Warrant - Pedestrian Volumes

Pedestrians in 4 hours	Points
0-5	5
6-10	10
11+	15
15%	4
20%	2

Block Size – Maximum 10 points.

Blocks are broken up into no more than 1000' sections. A point is added for every 100' past 1000' to the next block, to a maximum of 10 points.

 Pedestrian Crossing Separation - Maximum 10 points.

Marked Pedestrian Crosswalks are no more than 500' apart. A point is added for every 100' past 500' to the next crossing. Should an All-Way Stop be warranted, marked pedestrian crosswalks shall be added to the intersection on all legs.

MUTCD Warrants

The MUTCD should be used for Minor Road Stop Control and can be used for All-Way Stop Control. Stop control warrants include:

- All-Way Stop Control Warrant A: Crash Experience (see Section 2B.13)
- All-Way Stop Control Warrant B: Sight Distance (see Section 2B.14)
- All-Way Stop Control Warrant C: Transition to Signal Control or Transition to Yield Control at a Circular Intersection (see Section 2B.15)
- All-Way Stop Control Warrant D: 8-Hour Volume (Vehicles, Pedestrians, Bicycles) (see Section 2B.16)
- All-Way Stop Control Warrant E: Other Factors (see Section 2B.17)

This analysis was applied on the HIN and was the basis for recommended all-way stop control or some other form of traffic calming and protected pedestrian crossings at the intersections of St Petersburg Dr and Federal St and St Petersburg Dr and Oakwood Blvd. Federal St. was selected primarily due to it functioning as a major school crossing. The additional improvements at the intersection should serve to protect children walking to school, as well as parents driving to pick up or drop off their children. Oakwood Blvd was selected as being part of the route school children take to school, as well as its function as a major city roadway that travels south before it turns to follow the water and provide direct access to R.E. Olds Park. The traffic control analysis for these intersections, and all others, is available in Appendix D.

RECOMMENDED IMPROVEMENTS

Safety improvements recommended in the Oldsmar study area are based on a data-driven approach to define safety issues, ensure benefit to disadvantaged communities, and focus on vulnerable road users and their safety needs. The benefit to disadvantaged communities and focus on vulnerable road users are addressed in the previous sections on **Equity Analysis** and **Multimodal Emphasis Corridors**. The defined safety issues are based on crash history analysis summarized in the **Safety Impact** section of this report. In addition to the data used to identify improvements at specific locations, the input from a multi-disciplinary team of engineers,

planners, law enforcement officials, and school representatives who participated in a roadway safety audit is a key factor used to inform the recommendations.

The improvements themselves are proven safety countermeasures, particularly for non-motorized users, and are supported by the community based on feedback provided at a community workshop. The specific history, safety countermeasure strategy, and expected benefits are summarized below.

Design concepts are included as thumbnails in this section, with full size versions in Appendix C.

SR 580 at Forest Lakes Blvd

The signalized intersection of SR 580 and Forest Lakes Blvd is an important gateway into the study area from the disadvantaged areas north of SR 580, providing a direct connection to Oldsmar Elementary School off of St Petersburg Dr. SR 580 is a four-lane divided arterial in this location with a 45 mph posted speed. Forest Lakes Blvd, which is also St Petersburg Dr to the south of the intersection is currently a two-lane undivided roadway with a 35 mph posted speed. St Petersburg Dr currently has a ten-foot separated shared use path on the west/south side of the road, providing a safe and comfortable path for students and other non-motorized users to walk along St Petersburg Dr. However, for pedestrians and bicyclists crossing SR 580 on the west/south side of St Petersburg Dr, the crossing distance is 130 feet, without pedestrian refuge at the centerline.



CRASH HISTORY (2018-2023)

- 36 total crashes
- Four crashes involving pedestrians/ bicyclists



TREATMENTS (SEE FIGURE)

- Reduce curb radii at northeast and northwest corners
- Extend medians into crosswalks, move crosswalks back
- Add Leading Pedestrian Interval (LPI) to signal



Figure 34. SR 580 and Forest Lakes Blvd Improvement Concept



BENEFITS

- Improve crossing safety for vulnerable users.
- Reduce turning vehicle speeds.
- Improve connection from disadvantaged area to the north to Oldsmar Elementary.
- Establish a safe connection from the north to existing multi-use path to the south.
- Slower speeds for left and right turning vehicles to reduce both crashes and crash severity if they do happen.
- Shorter crossing distances for pedestrians to reduce exposure and improve signal timing for vehicles.
- LPI has a proven 17% reduction of fatal and serious injury crashes.⁵



OPINION OF PROBABLE COST

TBD

St Petersburg Dr from Oakwood Blvd to Bayview Blvd

St Petersburg Dr is a two-lane roadway with 35 mph posted speed. There is currently a ten-foot separated shared use path on the south side of St Peterburg Dr from SR 580 to Oakwood Blvd. East of that point there is an overgrown sidewalk. There are no major street stop controls on St Petersburg Dr between SR 580 and Washington Ave to the east. Oldsmar Elementary School is one block north of St Petersburg Dr, with pick-up and drop-off for the school occurring on Federal St. There are three bus stops (PSTA route 67) located on St Petersburg Dr, at Pine Ave, Devonshire St, and Bayview Blvd.



CRASH HISTORY (2018-2023)

- Eight total crashes
- One crash involving pedestrians/bicyclists
- One fatality and two serious injuries



TREATMENTS (SEE FIGURE)

Three improvement alternatives were considered for this roadway section. The differences between the three alternatives are limited to the specific treatments at the intersections of St Petersburg Dr and Oakwood Blvd and Federal St. The first alternative includes allway stop control and crosswalks at those intersections. The second alternative includes raised crosswalks and RRFBs at those intersections and the third alternative includes raised intersections and RRFBs at those intersections. Alternative two is tentatively the recommended alternative, based on feedback from the community meeting, summarized in the following section. After re-evaluation of the St Petersburg Dr improvement east of Bayview Blvd, this project will be adjusted accordingly.

- Continuous eight-foot sidewalk on north side of St Petersburg Dr
- Continuous ten-foot sidewalk on south side of St Petersburg Dr
- Raised crosswalks and RRFBs at Oakwood Blvd and Federal St



Figure 35. St Petersburg Dr Improvement Concept



BENEFITS

- Improve crossing safety for vulnerable users on corridor with no major street stop controls, crosswalks, or protected crossings on 1.2-mile seament from SR 580 to Washington Ave.
- Improve connection from disadvantaged area north of SR 580 and west of St Petersburg Dr to Oldsmar Elementary School and other essential destinations.
- Close gap in multi-use path between Oakwood Blvd and Bayview Blvd, improving multimodal connection to Oldsmar Elementary School and Clearwater Adult Education Center.
- Improved access to bus route 67 bus stops along St Petersburg Dr.
- RRFB's can reduce crashes up to 47% for pedestrian crashes and increase driver yield rates up to 98%.
- Raised crosswalks by themselves can reduce vehicle/pedestrian crashes by up to 46%.8



OPINION OF PROBABLE COST

TBD

^{6 (}CMF ID: 9024) NCHRP Research Report 841 Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, (2017).

⁷ Fitzpatrick et al. "Will You Stop for Me? Roadway Design and Traffic Control Device Influences on Drivers Yielding to Pedestrians in a Crosswalk with a Rectangular Rapid-Flashing Beacon." Report No. TTI-CTS-0010. Texas A&M Transportation Institute, (2016).

SR 580 from St Petersburg Dr to Lafayette Blvd

SR 580 is an eight-lane divided arterial with a 45 mph posted speed. The 0.5-mile section of SR 580 between currently has two signalized intersections (at St Petersburg Dr and Lafayette Blvd) and no other protected crossings for pedestrians and bicyclists. Oldsmar Christian School is located one block south of SR 580 on Burbank Rd. There are four bus stops (PSTA routes 67 and 812) located on SR 580, east of St Petersburg Dr, west of Burbank Rd, and two at Lafayette Blvd.



CRASH HISTORY (2018-2023)

- 143 total crashes
- Four crashes involving pedestrians/ bicyclists
- Three total fatalities and three serious injuries



TREATMENTS (SEE FIGURES)

- Medians extensions into crosswalks at St Pete Dr and Lafayette Blvd
- Intersection study to consider signalizing Burbank Rd, add crosswalk with median extensions



Figure 36. SR 580 Improvement Concepts



BENEFITS

- Improve crossing safety for vulnerable users.
- Improve connection from Oldsmar Christian School south of SR 580 to destinations north of SR 580.
- Median extensions both provide a refuge for pedestrians that might get trapped in the intersection, as well as slow the speed of left turning drivers. Lower speeds result in fewer and less severe collisions.
- Improved access to bus routes 67 and 812 bus stops along SR 580.
- Installing a traffic signal can result in a 44% reduction in all crashes at an intersection.





Figure 36. SR 580 Improvement Concepts continued



COMMUNITY ENGAGEMENT

The project team held a public meeting to share the results of the study and recommended improvements with the community on September 5, 2024. The meeting was held at the Oldsmar public library at 400 St Petersburg Dr, within the study area, at 6pm and consisted of a presentation describing the purpose and analysis results of the study, and the recommended improvements. Attendees were then given the opportunity to ask questions of the project team, followed by an opportunity to view the recommended improvements in graphical concepts mounted on boards. Community members were also encouraged to share their comments and their opposition or support for the various safety treatments proposed in the study.

Thirteen people attended the meeting to learn about the project and share their ideas. The general sentiment of attendees, with a few exceptions, was positive and supportive of safety improvements of roadways in the study area. There was also a general lack of support for stop controls to be added to St Petersburg Dr, but support for crosswalks and RRFB's on St Petersburg Dr and median extensions at intersections along SR 580. Several attendees also shared disagreement with any treatments slowing down cars on St Petersburg Dr during non-school hours or days.

Specific comments for each improvement alternative shared at the meeting are summarized below, including input on whether or not people support the specific recommended treatments. For the St Petersburg Dr concept, attendees applied stickers to the boards to signify which treatments they support or oppose, the results of which are summarized in Error! Reference source not found...

SR 580 and Forest Lakes Blvd

- Concern about vehicle safety issues relative to median extensions
- Supportive of median extensions, but concern about whether they are needed, given the existing grass median
- Against LPI during non-school hours
- Additional suggested improvement Addition of a left turn signal from St Pete Dr onto SR 580

St Petersburg Dr from Oakwood Blvd to Bayview Blvd

- Supportive of RRFB's to improve pedestrians' visibility
- Supportive of RRFB's to slow cars down
- Supportive of wider sidewalks
- Supportive of intersection controls, but only during school pick-up/drop-off
- Against stop controls on St Pete Dr, but supportive of RRFB's or school crossing quards
- Against additional speed bumps of any type

SR 580 from St Petersburg Dr to Lafayette Blvd

- Supportive of median extensions.
- Against signalization of SR 580 at Burbank Rd but supportive of RRFB or HAWK signal.
- Additional suggested improvements
 - Caution or gateway signage east of Lafayette Blvd to alert drivers entering Oldsmar to slow down.
 - Pedestrian overpass at Burbank Rd or Lafayette Blvd



APPENDIX A: COMMUNITY ENGAGEMENT

The project team held a public meeting to share recommended improvements with the community on September 5, 2024. The meeting was held at the Oldsmar public library at 400 St Petersburg Dr, which is located between 0.3 and 1.2 miles from the various improvement locations.



RECOMMENDED PROJECTS SR 580

from St Pete Dr to Lafayette Blvd

- Extend medians into crosswalks at St Pete Drive and Lafayette Blvd
- Intersection study to consider signalizing Burbank Road, add crosswalks, extend median



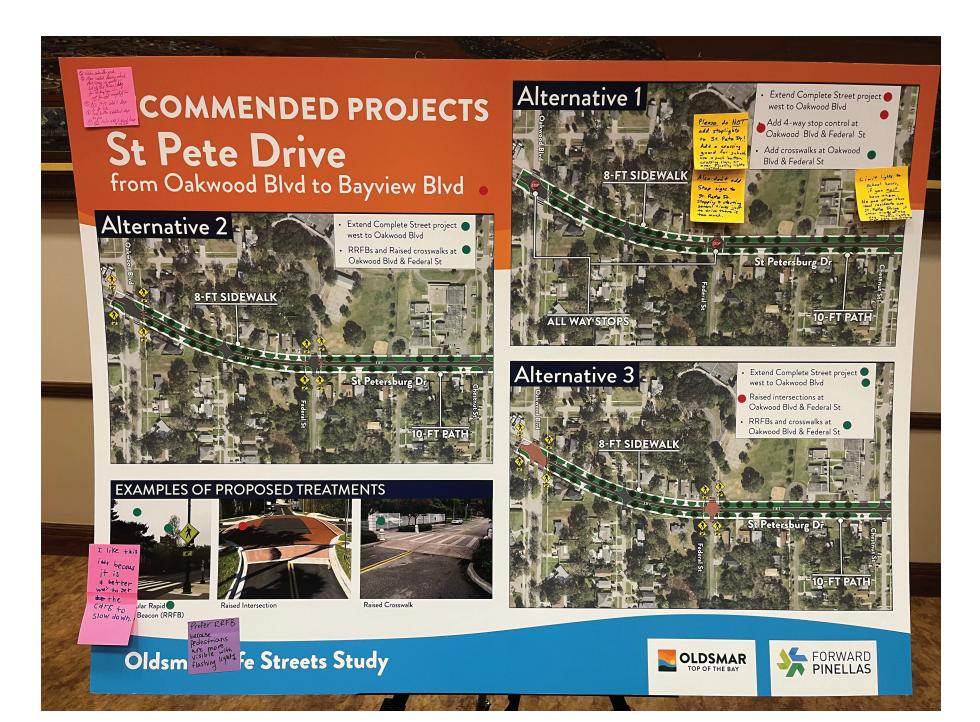




Oldsmar Safe Streets Study







APPENDIX B: SAFETY WALKING AUDIT RESULTS

SR 580 from St Petersburg Dr to Lafayette Blvd

- Is there a possibility of adding a midblock crossing near SR 580 and Burbank Rd intersection?
- Pooling water near the median nose on the east side of SR 580 at St. Petersburg Dr and SR 580 intersection
- The SR 580/Burbank Rd intersection likely experiences Oldsmar Christian School students crossing SR 580.
- ADA Pads >2% grade driveway east of St.
 Petersburg Dr, driveway west of Burbank Rd, and at gas station west of Burbank Rd
- ADA Pads missing at plaza entrance between St Petersburg Dr and Burbank Rd, at driveways at east corner of Burbank Rd, at plaza entrance east of Burbank Rd
- Missing Crosswalk markings on both sides of SR 580 and Burbank Rd Intersection
- Old driveway >2% grade approximately 300 feet east of Burbank Rd
- Vegetation obstruction on sidewalk on south side of SR 580 east of Burbank Rd and SR 580 intersection
- Cluttered corner with traffic box and utilities at southeast corner at St. Petersburg Dr
- Long crossing distance St. Petersburg Dr and SR 580 intersection
- Wide, broken driveway on south side of SR 580 approximately 300 feet east of St. Petersburg Dr

- Buffer between roadway and sidewalk gone midway between St. Petersburg Dr and Burbank Rd, and at SR 580 and Burbank Rd intersection
- Pedestrian observed crossing, midblock just east of Burbank Rd
- No ADA pads at crossings, no pedestrian island, 8-lane with speeders (not safe), sidewalks too close to road at St. Petersburg Rd and SR 580 intersection
- 8-lane with speeders (not safe), sidewalk too close to road with no buffer midway between St. Petersburg Dr and Burbank Rd
- 8-lane with speeders (not safe), sidewalk too close to road with no buffer, crosswalk lines faded at Burbank Rd and SR 580 intersection
- Not comfortable to cross, proposed pedestrian overpass needed at St. Petersburg Dr and SR 580 intersection
- Narrow sidewalks and dangerous speeds on SR 580 between St. Petersburg Dr and Burbank Rd
- Crosswalk needs repainting at Burbank Rd and SR 580
- Propositions: Don't let people turn left out of school, don't let people turn right out of Burbank Rd, slow zone at Burbank Rd and SR 580 intersection, signs for looking for bikes/ pedestrians
- Crosswalk similar to Fletcher/USF crosswalks.
 Senior Zone similar to Waters to lower the speed, maybe also a school zone at Burbank
 Rd and SR 580 intersection
- More school signals needed along SR 580 east of Burbank Rd, kids travel to school on bikes from east of Burbank Rd

- Small buffer between roadway and sidewalk at southeast corner of SR 580/St Petersburg Dr, ROW looks further back at St. Petersburg Dr
- Handrail and LED lights observed on north side of SR 580 between St Petersburg Dr and Burbank Rd
- Long/wide driveway approximately 300 feet east of St. Petersburg Dr
- Buffer between sidewalk and roadway ends approximately 500 feet west of Burbank Rd, missing ADA Pads by intersection at school (Burbank Rd and SR 580)
- Propositions: reduce lane widths, add delineation to bike lanes between St.
 Petersburg Dr and Burbank Rd on SR 580.
 Proposed MPS and full signal at Burbank Rd and SR 580 intersection
- Concrete in poor condition on south side of SR 580 between St. Petersburg Dr and Burbank Rd
- Distances between crosswalks and signals is substantial. Bikers can be better protected.
 Possible painted green bike lanes and consider reducing lane widths, providing delineators, etc.
- Need left turn signal out of Wendy's or extend the median. Consider signalizing the intersection at SR 580 and Burbank Rd
- Detectable warning mat damaged at driveway on south side of SR 580 approximately 600 feet east of St. Petersburg Dr. Sidewal on south side of SR 580 is uneven between St. Petersburg Dr and Burbank Rd
- Faded crosswalk at Burbank Rd and SR 580 intersection. No crosswalk markings at Burbank Rd

- Cable warning stick down on south side of SR 580 approximately 400 feet east of Burbank Rd
- No pedestrian signal on east side of Burbank Rd, crosswalk faded to Porkchop on northwest corner of Burbank Rd
- No safe place to cross along entire stretch of SR 580
- No buffer between sidewalk and roadway on south side of SR 580 between Bob's Carpet and Lafayette Blvd
- No paint at northwest corner of Race Track Rd and SR 580. No median refuge at Race Track Rd and SR 580 intersection. Lots of people cross this intersection to get to the Publix
- Possibly add a signal, MPS, median modification, at Burbank Rd and SR 580 intersection
- Transit stops far from safe crossing on both sides of SR 580
- Faded markings at northwest corner of Racetrack Rd and SR 580
- Missing crosswalk and pedestrian signal at Racetrack Rd/Lafayette Blvd and SR 580 intersection
- Need to signalize Burbank Rd for school and McDonalds. Too far to the next crosswalk, faded crosswalk lines and no shelter for bus stop at Burbank Rd and SR 580 intersection
- Sidewalk too close to road west of Lafayette Blvd and SR 580 intersection (south side of SR 580)

- Slope of sidewalk with curves is difficult to maneuver (ADA). No pedestrian island. Right turn vehicles. Possible crosswalk to other side at Race Track Rd/Lafayette Blvd and SR 580 intersection
- Dangerous crossing at Lafayette Blvd, people don't use the crosswalk, and there is a very small standing area for a group at Race Track Rd/Lafayette Blvd and SR 580 intersection
- People cross without crosswalk from driveways along SR 580
- Missing ADA Pads at Burbank Rd and SR 580 intersection
- Tripping hazard at drainage/handrail along north side of SR 580 approximately 500 feet east of Burbank Rd
- Wide driveways along south side of SR 580 approximately 300 feet west of Lafayette Blvd. Trail south of SR 580 ends at intersection leg (Lafayette Blvd and SR 580). No refuge in medians, no crosswalk across SR 580 on east side of Lafayette, faded/missing crosswalk on northwest corner of Race Track Rd and SR 580
- LPI would be good at Race Track Rd/Lafayette Blvd and SR 580 intersection
- Pedestrians are getting impatient with the ped signal at crosswalk on the northwest corner of SR 580 and Race Track Rd
- Consider a crosswalk across SR 580 on the east side of intersection at Lafayette as opposed to the west side. Noted faded crosswalk at northwest corner.

St Petersburg Dr from Oakwood Blvd to Bayview Blvd

- No detectable warning mat at intersection of St Petersburg Dr and Federal St
- Small grass strip in between sidewalk and road Devonshire St in crossing (maintenance issue)
- Unmarked crosswalk across St Petersburg Dr on west side of Chestnut St
- Overhanging bushes, sidewalk has a break/ crack between Chestnut St and Bayview Blvd
- Pooling water in the driveway on north side of St Petersburg Dr at Sunshine Food Mart
- Inconsistent crosswalk pavement markings along St Petersburg Dr
- Detectable warning mats missing at Federal St intersection, Devonshire St intersection, and Chestnut St intersections
- Thorny vegetation along sidewalk on south side of St Petersburg Dr between Federal St and Devonshire St. Vegetation in sidewalk drop off on south side of St Petersburg Dr between Chestnut St and S Bayview Blvd
- Sidewalk to road entrance on south side of St Petersburg Dr at Devonshire St intersection needs maintenance
- Crosswalk missing at on east side of Chestnut St intersection
- Between Devonshire St and Chestnut St there are no detectable warning mats. The sidewalk leans towards the ditch.

- Shrubs impeding sidewalk along south side of St Petersburg Dr east of Devonshire St
- No crosswalks at Chestnut St intersection (school), detectable warning mats need to be replaced at intersection, and there are shrubs impeding the sidewalks
- Sidewalks are in bad shape and no detectable warning mats between Chestnut St and S Bayview Blvd
- Sidewalk drops off into swale on south side of St Petersburg Dr between Chestnut St and S Bayview Blvd
- Sidewalks narrow, broken, and very close to ditch on south side of St Petersburg Dr from Chestnut St to S Bayview Blvd
- No curbs at Chestnut St intersection and no cross walk at school
- Trees block sidewalk on south side of St Petersburg Dr from Chestnut St to S Bayview Blvd
- Static Signals (not RRFB) at Bayview Blvd intersection
- Sidewalk refurb/ADA compliance issues (clear width over sidewalk) between Chestnut St and S Bayview Blvd on south side of St Petersburg Dr
- Busted sidewalk, maintenance needed.
 Sidewalk slope issues between Chestnut
 St and S Bayview Blvd on south side of St
 Petersburg Dr
- Need to trim/cut remove trees from roadway and place a handrail for sidewalk between Chestnut St and S Bayview Blvd on south side of St Petersburg Dr
- Sidewalk in poor condition on north side of St Petersburg Dr east of Oakwood Blvd

- Bushes need to be trimmed on south side of St Petersburg Dr east of Oakwood Blvd
- Speed limit sign very high (vertical) on south side of St Petersburg Dr between Pine Ave and Federal St
- Low traffic volume, vehicle moved over for bikes in road
- Detectable warning mat missing at Federal St intersection
- Narrow sidewalk on south side of St
 Petersburg Dr between Oakwood Blvd and
 Federal St (but feels safe)
- Bush on south side of St Petersburg Dr just east of Oakwood Blvd blocks the sidewalk
- Broken segment of the sidewalk with a high grade on south side of St Petersburg Dr between Oakwood Blvd and Pine Ave
- New painted crosswalk suggested at Pine Ave intersection
- Static pedestrian crossing sign (not high emphasis) at Federal St intersection. Can add bar/tape to stop signs

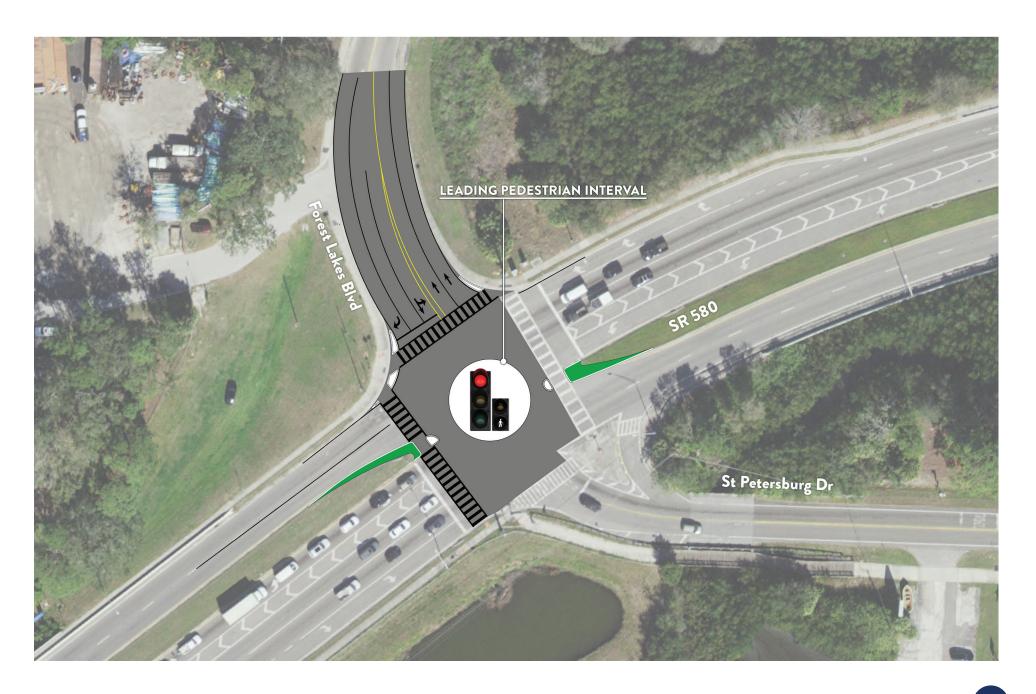
SR 580 at Forest Lakes Blvd

- Driver shouted at St Petersburg Dr W and SR 580 intersection, wants left turn lane. (protected LT)
- Vandalized left turn arrow sign at southwest corner
- Suggestions: LPI, median extension, add R10-15/R10-15a signs (turning vehicles, yield to pedestrian) at northwest and southwest corners

- Super wide turn radii on all intersection legs.
 A truck ran over the pedestrian refuge at the northwest corner during audit.
- There is no paint on the northwest and southwest corners
- Trucks enter the intersection at St Petersburg Dr W and SR 580 once a week, there are super short pedestrian phases in signals, and there is super elevation on the northeast sidewalk of SR 580
- The east side of the intersection at SR 580 and St Petersburg Dr W is the much calmer side for pedestrian crossings. There is less activity (left/right turns). There are no good sidewalk options for kids from the north to cross to the south
- Short signal for pedestrians at SR 580 and St Petersburg Dr W intersection
- All corners of SR 580 and St Petersburg Dr W intersection look like new pedestrian ramps.
- There is a long wait time to cross SR 580 and it takes approximately 40 seconds to cross (more time may be needed)
- There is no refuge/hardened centerline, guidelines should be added
- Heavy volumes on SR 580. Right turns with a wide radius from Forest Lakes Blvd
- Suggested protected left turn from WB St Petersburg Dr W onto SR 580

APPENDIX C: CONCEPT DESIGN

SR 580 and Forest Lakes Blvd Improvement Concept



St Petersburg Dr Improvement Concept



SR 580 Improvement Concepts







APPENDIX D: TRAFFIC CONTROL EVALUATION FRAMEWORK

