56th/50th STREET CORRIDOR STUDY

PURPOSE AND NEEDS

FDOT DISTRICT SEVEN

December
2021

INTRODUCTION

This purpose and needs statement identifies both the underlying needs and intended purpose of proposed solutions for the 56th Street/50th Street Corridor. This purpose and needs statement is intended to provide an understanding of the needs of each roadway user type on the corridor and establish a framework and criteria for evaluating a range of possible project alternatives.

The purpose and need statement for the 56th Street/50th Street Corridor Planning Study was developed following extensive data gathering and analysis as outlined in the Existing Conditions Report of this Study. In addition to being used to develop and evaluate alternatives for this Study, it is envisioned that the efforts of this Study and the associated purpose and needs could be used in some capacity by individual agencies or other public entities in their future evaluation of various mobility or multimodal improvements in the Study corridor.

The following sections provide a summary of the purpose and need statements that were developed as part of this Study effort. It should be noted that the components of the purpose and need statements are a result of a collaborative effort between the Florida Department of Transportation (FDOT) and members of the Study's Project Advisory Group (PAG) including Hillsborough County, the City of Tampa, the City of Temple Terrace, the Hillsborough Transportation Planning Organization (TPO), and the Hillsborough Area Regional Transit Authority (HART).

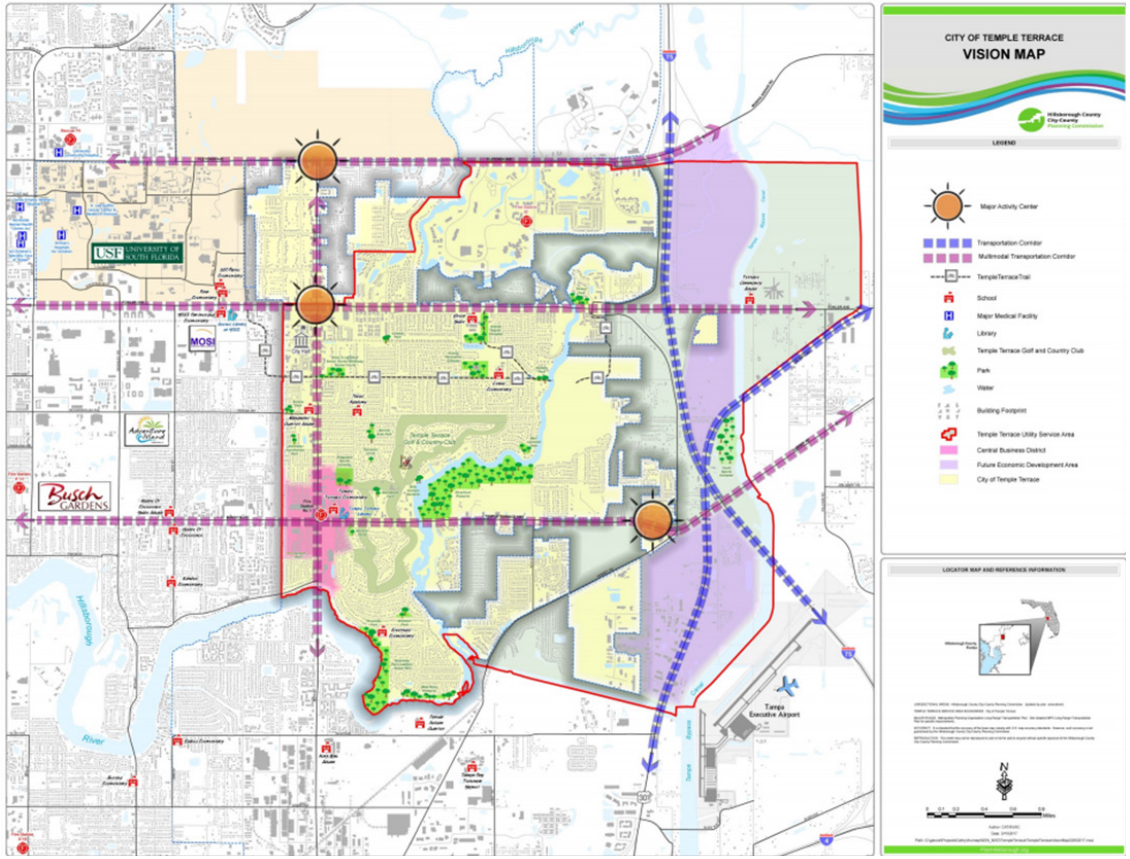
The section below details the purpose statement for this corridor planning study, and the distinct needs for which alternatives will be developed to address. To evaluate alternatives between each other, specific measures are identified for each need. The measures will be used to determine the alternative concept that best achieves the multimodal outcomes needed to address the issues on the corridor.

Study Purpose

Eliminate fatal and severe injury crashes and prioritize accessibility of multimodal options through design and operational strategies that support existing and future places.

Needs Statements

This section describes the multimodal needs that were identified for the 56th Street/50th Street Corridor Planning Study based on observed issues identified in a walking review, through the analysis of existing data, and through stakeholder discussions.



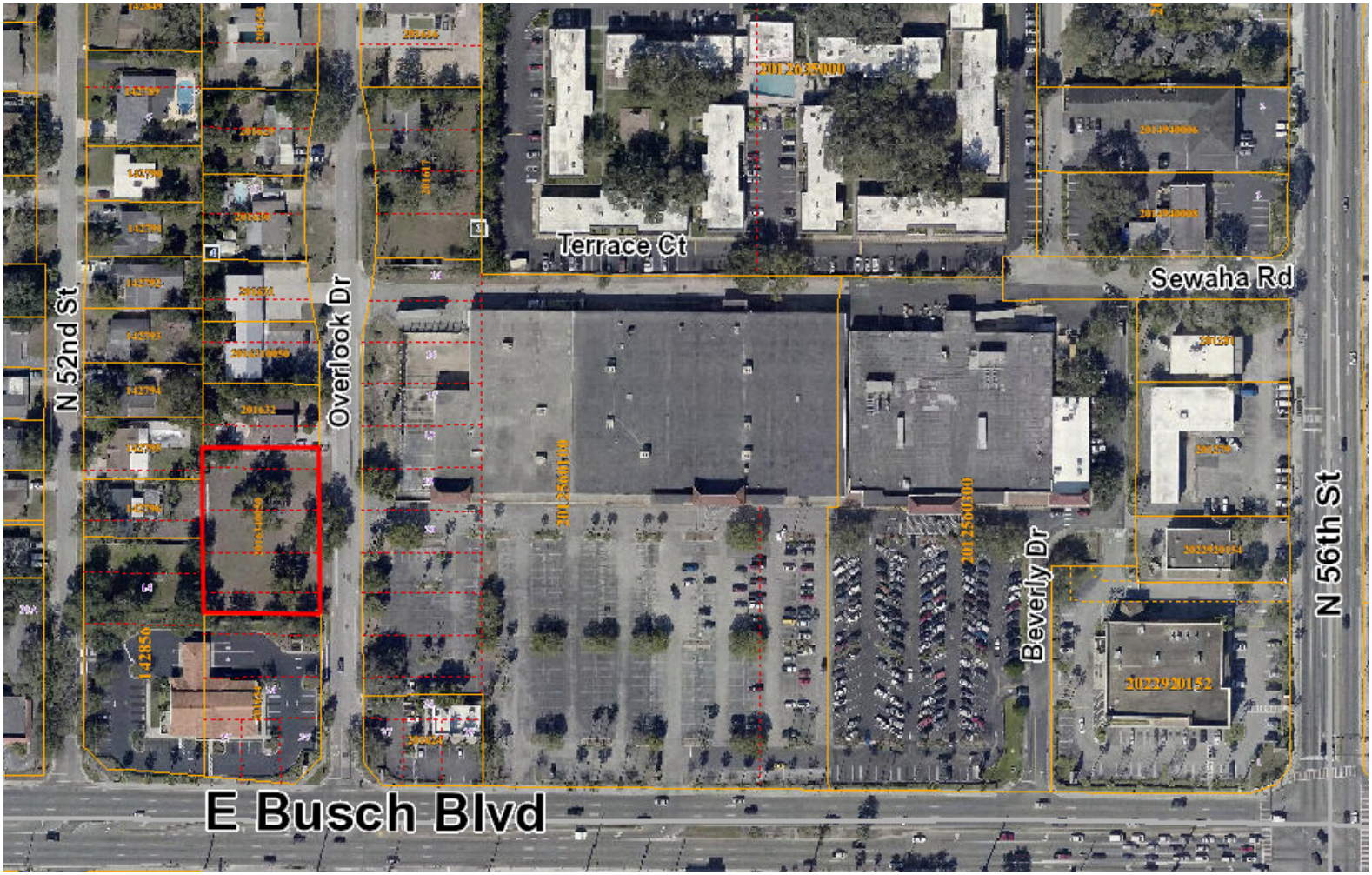
56th Street in Temple Terrace is identified as a Multimodal Transportation Corridor in the Temple Terrace Vision Map.The intersections of 56th Street with Fowler Avenue and Fletcher Avenue are identified as Major Activity Centers.

Design and operate street consistent with surrounding land uses to support existing and future destinations.

There is a unique challenge in enhancing multimodal connectivity between industrial areas and the suburban and urban contexts adjacent to them. From Selmon Expressway to Sligh Avenue, the existing land uses are mostly industrial with a residential area near Dr. Martin Luther King Jr. Boulevard. North of Sligh Avenue the land uses transition to become primarily residential with light commercial fronting the corridor. The current land use types are generally expected to remain, especially in City of Tampa where there is a desire to preserve some of the last industrial space in the City, with an increase in allowable densities in the future. North of Dr. Martin Luther King Jr. Boulevard, some industrial land uses are expected to transition to general mixed-use developments.

Despite the changes in land uses along the corridor, there is little to no change in the roadway design to alert drivers that they are traveling through different communities. The posted speed throughout the corridor ranges from 35 to 50 MPH, with most of the corridor having a 45 MPH posted speed limit. The highest posted speed is in a residential area near Myrtle Hill Memorial Park. Even in areas where the posted speed is lower today, the 85th percentile speed is 53 MPH to 57 MPH. These high speeds can increase crash severity, especially for people walking and biking.

While the corridor is generally expected to maintain its current land use types, Temple Terrace, which has traditionally followed a suburban development pattern, is in the process of being redeveloped with a more urban character. Within the Temple Terrace CRA boundaries, there are ongoing plans to redevelop parcels to increase development density and encourage multimodal traffic. Developments near the corridor like Hope Village will create multifamily residences that must be supported by multimodal transportation facilities accessible for people with limited vision and other disabilities. High density and mixed-use developments will further increase the need for safe transportation options.



The Subject Site for Hope Village adjacent to the Study Corridor will include marked crossings and Accessible Pedestrian Signals (APS) at marked crosswalks to help residents access the destinations on 56th Street.

Increase the frequency and safety of crossing opportunities for bicyclists and pedestrians.

Segments of 56th/50th Street are ranked the #9 and #15 Severe Crash Corridor in the Hillsborough TPO 2017 Vision Zero Action Plan. A key challenge to walking and biking on 56th/50th Street today is the limited crossing opportunities, as evidenced by more than 50 crashes involving pedestrians and bicyclists in long segments without controlled crossings. From 2016 through 2020, there were a total of 56 pedestrian crashes and 57 bicycle crashes. Sixty-one percent (61%) of pedestrian crashes occurred outside of a marked crosswalk either at an unsignalized intersection, near a signalized intersection away from a crosswalk, or midblock. Fifty-four (54%) percent of bike crashes occurred outside of a marked crosswalk. Throughout the corridor, there are areas with long distances between marked crossing opportunities, such as the 0.8-mile gap from East 21st Avenue to Dr. Martin Luther King Jr. Boulevard and the 1.2-mile gap between Dr. Martin Luther King Jr. Boulevard and Hillsborough Avenue.

In addition to the lack of safe crossing opportunities, high speeds make it more challenging for people trying to cross the street outside of signalized intersections. As mentioned in the previous need, the posted speed varies between 35 mph and 50 mph; however, the 85th percentile speed is approximately 52 mph throughout the corridor. At speeds greater than 35 MPH, the risk of a fatality for a pedestrian and bicycle involved in a crash greatly increases. Reducing speeds can make the corridor safe for all users.

61%
Pedestrian Crashes Occurred
Outside a Marked Crosswalk

46%
Bicycle Crashes Occurred
Inside a Marked Crosswalk

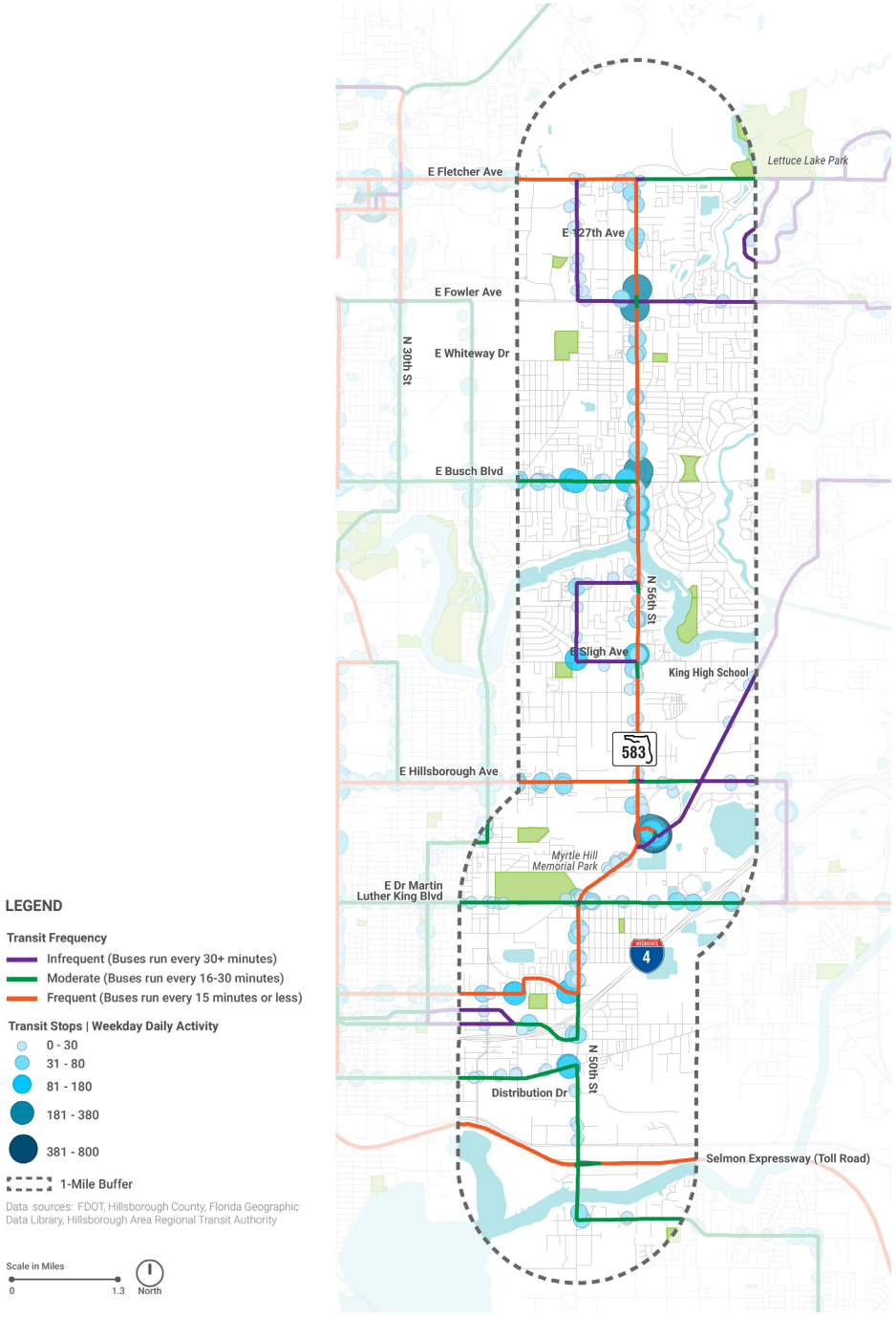
34 Pedestrian Crashes
61% reported at an intersection

34 Bicycle Crashes
60% reported at an intersection

Improve transit access and service efficiency.

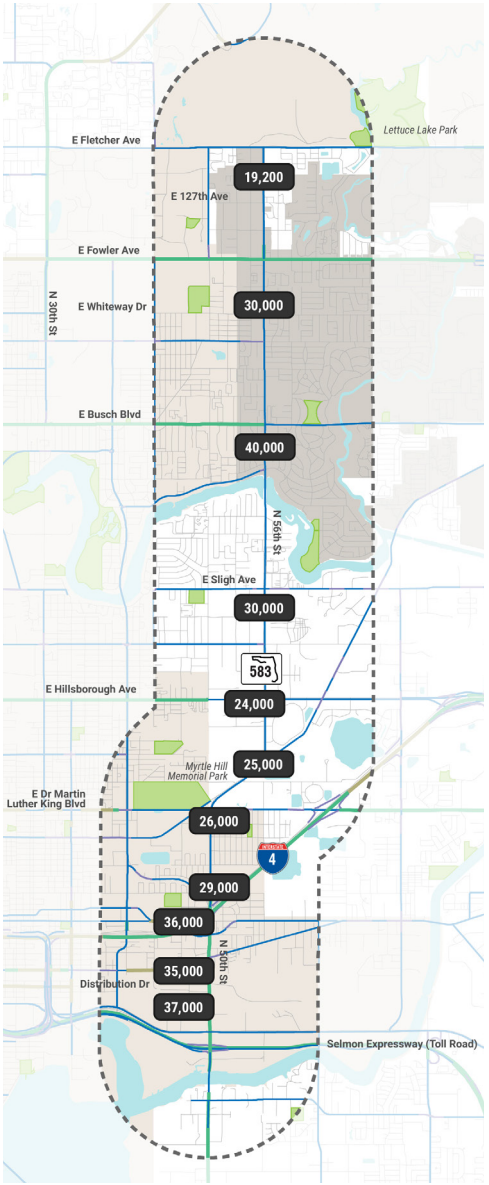
Some of HART's highest ridership routes run along and across the Study corridor. HART Route 6, which runs along the majority of Study corridor, has some of the highest ridership in HART's system. For most of the corridor (north of 21st Street), there is high frequency (15 minutes or less) transit service. There are over 25 stops with more than 100 people getting on and off the bus each day. According to StreetLight data, pedestrian activity is highest around the Netpark Transfer Center near Harney Road, highlighting the need to enhance access to transit, especially for people walking to biking.

Several stops are located near side before signalized intersections. Particularly at near stop locations with bus bays, transit vehicles often have to wait for a break in traffic to renter the travel lane and then may also have to wait for the signal to turn green, leading to delays and reduced travel time reliability.



Balance freight and vehicle mobility with the needs of vulnerable users at conflict points.

The roadway design must balance the freight traffic with the needs of non-motorized users. Freight access is needed for the entire Study corridor. The highest freight volumes were observed on the southern end of the corridor, near the Selmon Expressway and I-4 ramps with 12% trucks. This same segment also has pedestrian and bicycle activity in the top 20 percent for the District, according to StreetLight data.



LEGEND

Number of Bidirectional Lanes

- 1
- 2
- 3
- 4

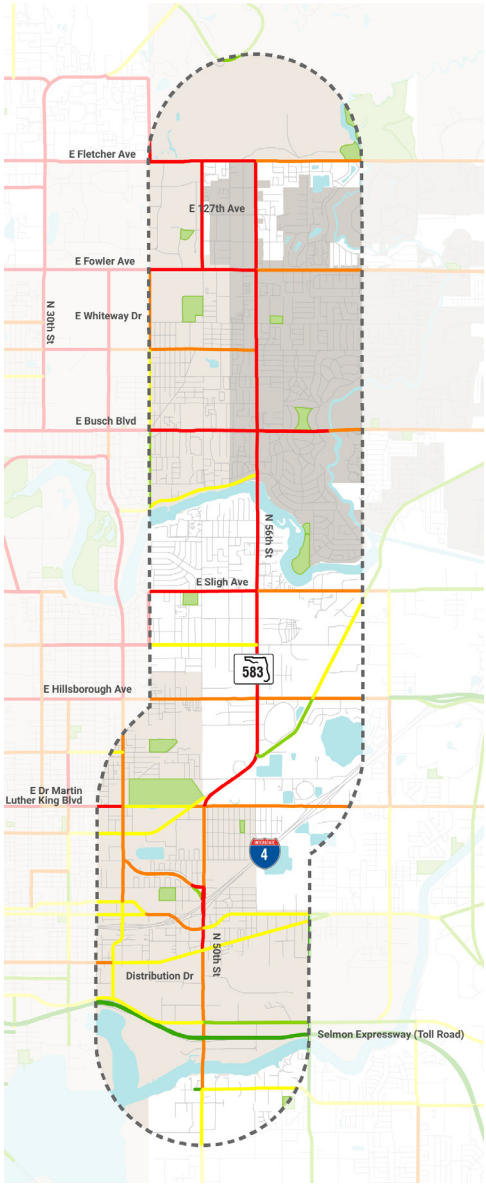
X,XXX Annual Average Daily Traffic

- City of Temple Terrace
- City of Tampa
- 1-Mile Buffer

Data sources: FDOT, Hillsborough MPO, Pinellas County, Forward Pinellas, City of St. Petersburg, Florida Geographic Data Library, 2019: ACS 5-Year Estimates Detailed Tables

Scale in Miles 0 1.3 North

In other parts of the corridor, freight access remains high as many cross streets provide direct access to I-275 and I-75. Long crossing distances and high-speed vehicle turns (i.e., from channelized right turn lanes) pose challenges to people crossing the road on foot or wheels. As the corridor redevelops into higher density mixed land uses, freight will continue to be important for the delivery of goods and will need to access businesses along the entire corridor. There will continue to be interactions between freight and non-motorized users and a balance must be struck to make these interactions safe for all.



LEGEND

Bicycle Percentile Ranking

- <20%
- 20.1%-40%
- 40.1%-60%
- 60.1%-80%
- >80%
- City of Temple Terrace
- City of Tampa
- 1-Mile Buffer

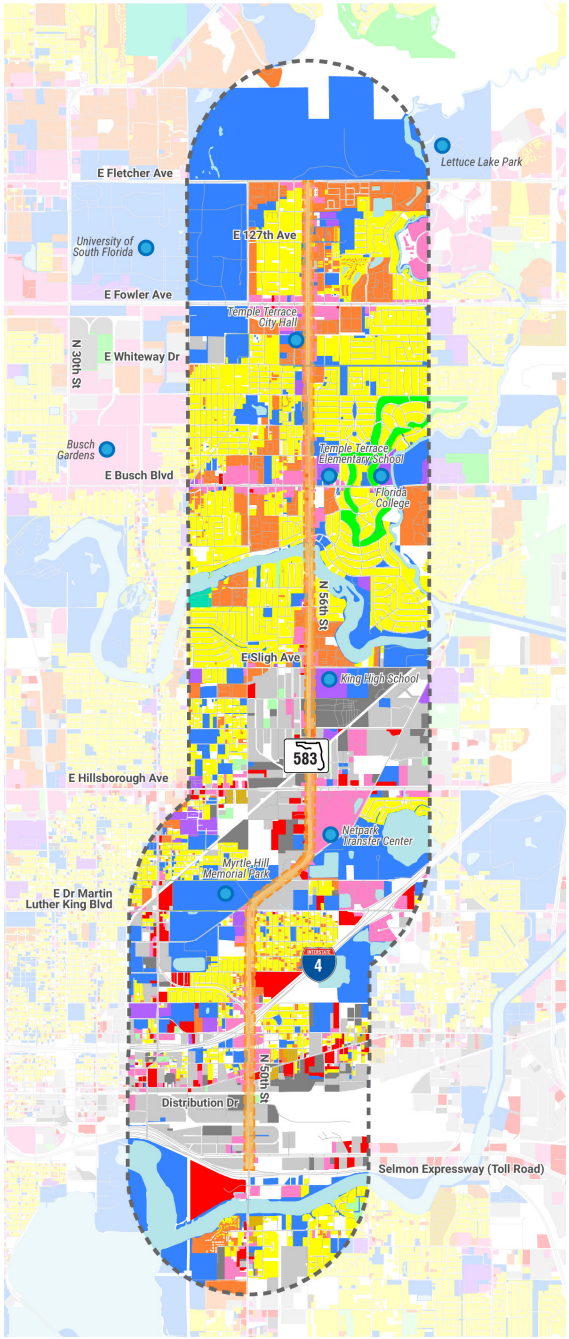
Data sources: FDOT, Hillsborough County, City of Tampa, City of Temple Terrace, Florida Geographic Data Library, 2019 StreetLight Data

Scale in Miles 0 1.3 North

Support safe local resident and business access needs.

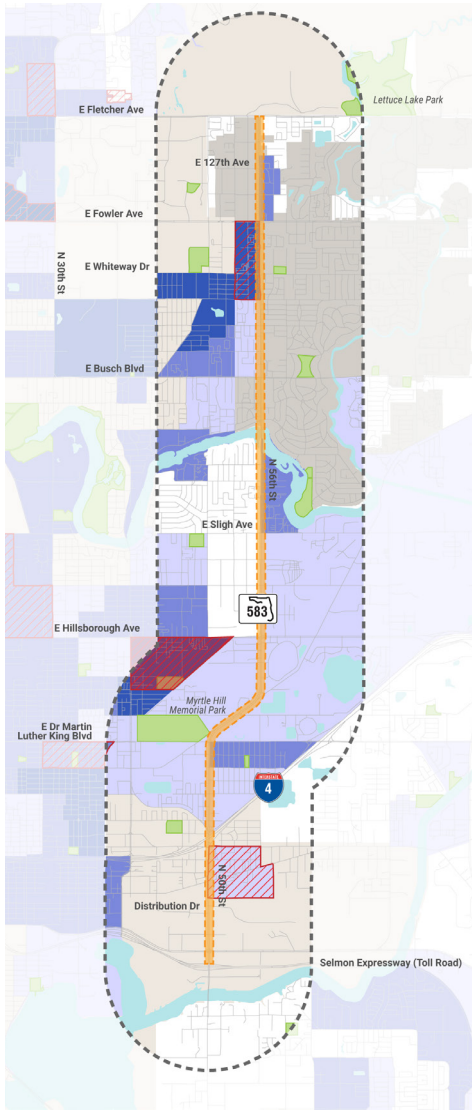
From Selmon Expressway to Sligh Avenue, the land uses are mostly industrial and commercial with some residential interspersed and behind fronting uses. North of Sligh Avenue the land uses transition to become primarily residential with light commercial fronting the corridor. The Study area contains some parks and green spaces, including Myrtle Hill Memorial Park north of Dr. Martin Luther King Jr. Boulevard. There are 27 schools in the Study area including King High School on Sligh Avenue, Temple Terrace Elementary School and Florida College on Busch Boulevard, and USF west of Study area. The Netpark Transfer Center on Harney Road is also a major multimodal generator and attractor in the Study area.

With redevelopment plans underway in Temple Terrace and the future land uses expected to transition to general mixed-use developments throughout the corridor, providing accessible and continuous multimodal routes to business and destinations along the corridor will remain key to meeting local residents' and visitor's needs.



Provide better multimodal access for Communities of Concern.

The Corridor has a diverse population. The corridor is predominantly made up of Black residents and about a quarter of residents are Hispanic/Latinx. For most of the households in the Study area, the median household income is at or below the county median of $53,000 per year. Some households' median household income is less than $17,000. The residences southeast of I-4 around Broadway Avenue, Northview Hills, and around Normandy Park apartments north of Whiteway Drive are considered to be in extreme poverty (block groups that have a significant percentage of households living with $2.00 or less per day).



LEGEND

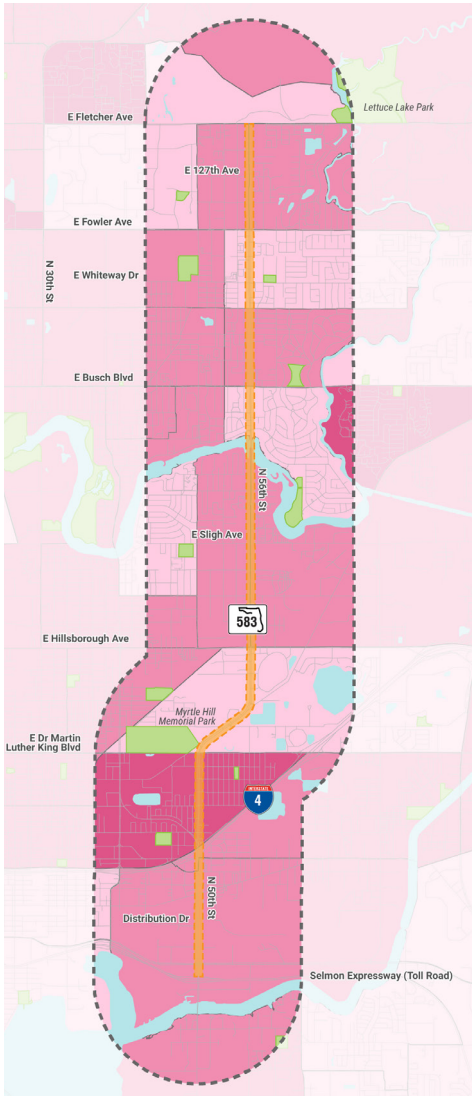
Communities of Concern

- Extreme Poverty (Block groups that have a significant percentage of households living with $2.00 or less per day)
- 5 Characteristics (Most Disadvantaged)
- 4 Characteristics
- 3 Characteristics
- 2 Characteristics (Least Disadvantaged)
- Study Corridor
- City of Temple Terrace
- City of Tampa
- 1-Mile Buffer

Data sources: FDOT, Hillsborough TPO, Hillsborough County, City of Tampa, City of Temple Terrace, Florida Geographic Data Library

Scale in Miles 0 1.3 North

A majority of the census block groups in the Study area have greater than 43% of households with one or zero vehicles available. These communities rely on walking, biking, carpooling, and taking the bus to meet their daily transportation needs. The majority of block groups in the Study area already have over 10% of workers commuting using alternative modes to driving alone.



LEGEND

Percentage of Households with Zero or One Vehicle

- <43% (county median)
- 43%-56%
- 57%-69%
- >69%
- 1-Mile Buffer

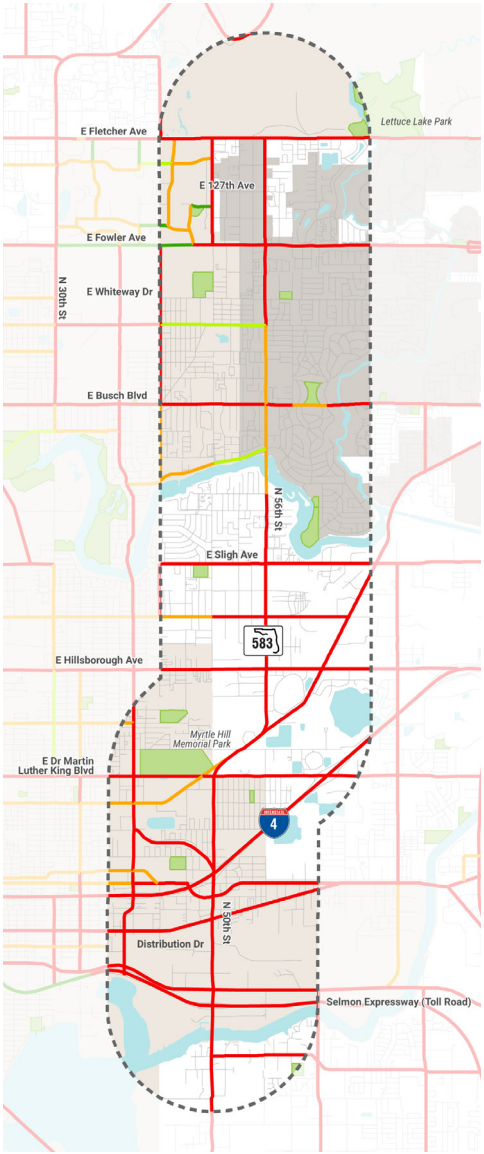
Data sources: FDOT, Hillsborough County, Florida Geographic Data Library, 2019 American Community Survey 5-Year Estimates

Scale in Miles 0 1.3 North

Improve bicyclist and pedestrian safety and comfort along the corridor.

The Hillsborough TPO's Bicycle Level of Traffic Stress (LTS) methodology uses street characteristics to evaluate the perceived comfort of people riding a bicycle on a particular street or facility. The LTS scores range from an LTS 1, which is comfortable for most of the general population, to an LTS 4, which is uncomfortable for even experienced bicyclists.

The bicycle LTS score for the Study Corridor is LTS 4 for all segments except between Puritan Road and Serena Drive where it is LTS 3. The pedestrian LTS score on the corridor is predominantly a 4. The bicycle and pedestrian LTS throughout the entire Study Corridor is generally high.



LEGEND

Bicycle Level of Traffic Stress

- 1
- 2
- 3
- 4

City of Temple Terrace

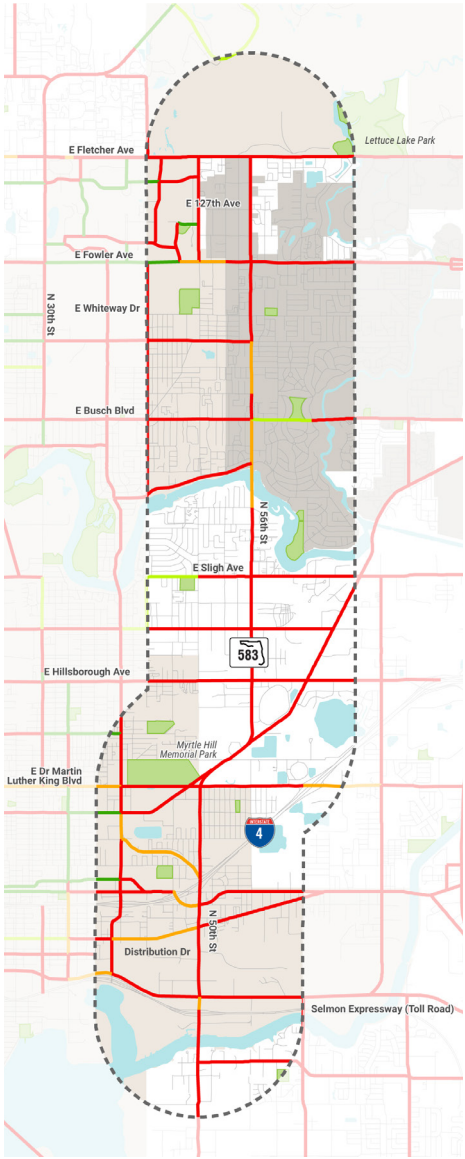
City of Tampa

1-Mile Buffer

Data sources: FDOT, Hillsborough TPO, Hillsborough County, City of Tampa, City of Temple Terrace, Florida Geographic Data Library

Scale in Miles 0 1.3 North

From SR 60 (Adamo Drive) to 10th Avenue there are no bicycle facilities. There are different types of on-street bicycle facilities north of 10th Avenue up to Puritan Road. There are sharrows in Temple Terrace from Puritan Road to Maroldy Drive, where they transition to on-street bicycle lanes to Fletcher Avenue. The on-street bicycle lanes are not buffered and are on segments of the corridor with posted speeds of 40 to 50 MPH. There are sidewalks along the entirety of the corridor. Sidewalks widths range from 4 to 6 feet wide, with the narrowest sections between 21st Avenue and 23rd Avenue, and on the Hillsborough River Bridge. Despite high posted speeds and speeding throughout the corridor, there is still moderate to high bicycle and pedestrian activity throughout the majority of the corridor.



LEGEND

Pedestrian Level of Traffic Stress

- 1
- 2
- 3
- 4

City of Temple Terrace

City of Tampa

1-Mile Buffer

Data sources: FDOT, Hillsborough TPO, Hillsborough County, City of Tampa, City of Temple Terrace, Florida Geographic Data Library

Scale in Miles 0 1.3 North

EVALUATION MEASURES

For each of the needs that have been identified for 56th Street/50th Street, quantifiable measures have been developed, as shown in the following table.The alternative conceptual designs that are developed as part of the 56th Street/50th Street Corridor Planning Study will be evaluated against each other by how well they meet the identified needs based on the measures outlined.

NEED	MEASURES
Design and operate street consistent with surrounding land uses to support existing and future destinations	Number of modes with the safest FDM criteria
	Average pedestrian delay at intersections
	Number of proven speed management strategies to achieve target speed
Increase the frequency and safety of crossing opportunities for bicyclists and pedestrians	Frequency of controlled crossings
	Average out of direction walking time/distance
	Maximum length of exposure at crossing locations
Improve transit access and service efficiency	Number of transit stops with controlled crossings
	Completeness of sidewalk around transit stops (within a 1/2 mile)
	Completeness of bicycle facilities around transit stops (within a 1/2 mile)
	Percentage of transit stops with lighting
Balance freight and vehicle mobility with the needs of vulnerable users at conflict points	Number of uncontrolled conflict points
	Number of intersections with turning radii consistent with FDOT D7 freight design consideration
Support safe local resident and business access needs	Number of unsignalized full median openings per mile
	Driveway Radius
	Number of golf cart crossings

NEED	MEASURES
Provide better multimodal access for Communities of Concern	Level of traffic stress in Communities of Concern
	Frequency of controlled crossings in Communities of Concern
	Numbers of proven speed management strategies to achieve target speed in Communities of Concern
	Percentage of the corridor with upgraded LED lighting in Communities of Concern
Improve bicyclist and pedestrian safety and comfort along the corridor	Level of Traffic Stress
	Width of pedestrian facility
	Buffer type/width of pedestrian facility
	Percentage of the corridor with upgraded LED lighting
	Amount of space available for streetscape amenities on walking paths