56th Street Redevelopment Area

Infrastructure Assessment

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Executive Summary

In 2016, the Hillsborough County Economic Development Department created the Targeted Redevelopment Program to enhance and encourage development within several pilot areas. The primary objective of the program is to encourage private sector investment in sites and buildings that will encourage retention and attraction of businesses and jobs for the communities identified as pilot areas. One of these pilot areas is the 56th Street Redevelopment Area. The purpose of the Infrastructure Assessment is to evaluate how well the current transportation, utility, and stormwater infrastructure will support infill, redevelopment, and economic development in the 56th Street Redevelopment Area, consistent with the Targeted Redevelopment Program goals.

This Infrastructure Assessment includes a Transportation Assessment (page 16) identifying locations for capacity, safety, mobility, and roadway condition improvements based on context sensitive users including pedestrians, cyclists, commuters, freight and commercial vehicles. The improvements identified in the Transportation Assessment seek to improve the roadway conditions of users and connections that promote development in the study area. Improvements in the highest areas of need include intersection safety improvements, complete street improvements including speed management and dedicated user facilities, and pavement rehabilitation or preventative treatments.

The Utility Assessment (page 38) estimates the available water and wastewater treatment plant capacity and potential transmission line upgrades necessary to better serve the existing development and support infill and redevelopment in the study area. Improvements in the highest areas of need include sewer system extension, converting septic to sewer facilities, and water system extension or replacement.

The Vulnerability Assessment (page 46) identifies areas with the highest flood potential. These locations should be a focus of flood mitigation and adaptation strategies to improve conditions for the existing development and promote redevelopment in the study area. Improvements in the highest areas of need should include roadway and area flood exposure treatments which could include but is not limited to hardening and elevating infrastructure, additional stormwater storage, bioswales, and landscaping.

The recommended actions (page 54) are a summary of the assessment findings and identification of the highest areas of need and respective recommended infrastructure improvements. A map of the recommended improvements is shown on page 57, Figure 20. A summary of assessment measures and improvement benefits is provided in the Assessment Matrix in Appendix A. The matrix may be used to further prioritize and identify improvement projects following more detailed project scope definition through analyses, public outreach and coordination with responsible parties including Hillsborough County departments, City of Tampa, Florida Department of Transportation and CSX.

Section 1 Introduction and Context

Introduction and Context

Background

In 2016, the Hillsborough County Economic Development Department created the Targeted Redevelopment Program to enhance and encourage development within several pilot areas. The primary objective of the program is to encourage private sector investment in sites and buildings that will encourage retention and attraction of businesses and jobs for the community identified as pilot areas. One of these pilot areas is the 56th Street Redevelopment Area.

The 56th Street Redevelopment Area, located in central Hillsborough County, is comprised of approximately 1,030 gross acres of land. As shown in Figure 1, the redevelopment area is bounded by E. Sligh Avenue to the north, Hillsborough Avenue/State Road 580 to the south, Orient Road to the east, and 50th Street/State Road 583 to the west. Key elements within the study area include NetPark Tampa Bay (formally known as the Eastlake Square Mall) and a freight rail line that diagonally traverses the study area. The redevelopment area also borders the Seminole Hard Rock Hotel & Casino that is located south of Hillsborough Avenue and east of Orient Road. The expansion of NetPark and the Seminole Hard Rock Hotel & Casino will require thoughtful planning for the future.

Project Purpose

The purpose of this assessment is to evaluate the current infrastructure in terms of how well the 56th Street Redevelopment Area will support infill and redevelopment consistent with the economic development goals for the area. The infrastructure assessment, including a resiliency analysis, is the starting point to determine future investment and make infrastructure decisions. Another consideration of this study is the relationship between the redevelopment area as a whole and the surrounding major activity centers and future expansion opportunities. This infrastructure assessment provides recommendations that Hillsborough County can consider and implement as part of continued planning efforts in the 56th Street Redevelopment Area. The recommendations focus on identifying current inadequacies in the existing critical infrastructure, as well as opportunities to plan for enhanced infrastructure. A critical element in the assessment will be providing recommendations to improve the resiliency of the existing infrastructure in the redevelopment area.



Figure 1. 56th Street Redevelopment Area

Study Area Context

Study Boundary

The study boundary was developed based on the Redevelopment Area, as shown in Figure 2. The study boundary shown in the dashed black line is bounded north of E. Sligh Avenue, south of Hillsborough Avenue/State Road 580, east of Orient Road, and west of 50th Street/State Road 583.

Existing Land Use

There are numerous categories of existing land uses within the redevelopment area which are primarily non-residential. Shown in **Figure 3**, the majority of existing land uses include industrial, commercial, public/quasi-public/institutions, and vacant land. There are some residential uses, single-family and multi-family, located near the southeast and northwest corners of the redevelopment area.

Community Facilities

The 56th Street Redevelopment Area includes several community facilities within the redevelopment area boundary. The community facilities include schools, libraries, parks, and emergency management/police/fire. The community facilities in the redevelopment area are identified in Figure 3. The area contains two high schools, one fire station, and one large park which also includes a community center.

The two high schools located in the redevelopment area are King High School and Tampa Bay Technical High School. King High is located near N 56th Street and E Sligh Avenue, and Tampa Bay Tech is located near Orient Road and E Sligh Avenue. **Table 1** shows existing and projected school capacities to the 2024-2025 school year based on Florida Department of Education Florida Inventory of Schools Houses (FISH) data. Both high schools have available capacity and are not projected to reach maximum capacity through 2025.

School	Actual 2019- 2020 FISH Capacity	Actual 2019-2020 Utilization	Projected 2024-2025 Utilization
King High	2,401	74%	75%
Tampa Bay Tech	2,404	88%	88%

Table 1. Existing and Projected School Capacities

The sole emergency management/police/fire facility in the redevelopment area is Fire Station 32, located off Harney Road near E Hillsborough Avenue. All People's Park and All People's Life Center are located on E Sligh Avenue next to King High School. All People's Park is currently under construction and recent enhancements include ADA improvements, playground improvements, and an expansion of the park (CIP Project #83306002 and #83323000).



Figure 2. Study Area Boundary



Figure 3. Existing Land Use and Community Facilities



An estimated 249 businesses are located in the study area that support 3,680 employees, based on 2021 ESRI Business Analyst data. The breakdown of businesses by North American Industry Classification System (NAICS) category are shown in **Table 2**. Retail Trade and Wholesale Trade businesses, and Other Services make up the largest percent of total businesses in the study area at 36.1%, and 30.4% of the employees. These trades include the businesses across the study area including supply and food stores, repair and maintenance shops, and other commercial and personal services. The other significant businesses in the area include construction and engineering services, and warehousing and distribution centers. Many of the businesses are accessed by freight and truck, requiring a large footprint for parking lots and rail right-of-way.

The United States Census Bureau tool, OnTheMap, was used to identify employee inflow and outflow within the study area based on most recently available data (2019). According to the OnTheMap application, approximately 97% of the labor market (employees in the area or residents in the area) comes from outside of the study area. The remaining labor market includes 3% who leave the study area for work, and less than 1% who live and work in the study area.

The 56th Street Redevelopment Area has an estimated population of 397 people and 124 households, based on ESRI 2021 projections. Residential uses are located on the edge of the study area including single-family homes on Orient Road, and multifamily homes on Sligh Avenue and 50th Street. Vulnerable populations in the study area include those 65 years old or older, and households with a median income less than the county average or income less than \$25,000. When compared to Hillsborough County as a whole, the study area has a higher percentage of population that is 65 years old or older, a lower median household income, and higher percentage of households with income below \$25,000, than that of Hillsborough County. A comparison of socioeconomic statistics for the study area and Hillsborough County is provided in Table 4.

Table 2. NAICS Business Types

2021 ESRI Forecast	Total Business	Total Employees	
2021 ESRI Forecasi	249	3,680	
NAICS Code	Percent of Total Business	Percent of Total Employees	
Retail Trade	13.70%	9.60%	
Other Services (except Public Administration)	11.60%	7.70%	
Wholesale Trade	10.80%	13.10%	
Construction	9.60%	11.10%	
Unclassified Establishments	9.20%	0.80%	
Professional, Scientific & Tech Services	8.80%	9.70%	
Manufacturing	6.80%	11.40%	
Real Estate, Rental, & Leasing	5.60%	3.10%	
Administration & Support & Waste Management & Remediation	5.20%	8.00%	
Accommodation & Food Services	4.40%	4.50%	
Health Care & Social Assistance	3.60%	2.00%	
Transportation & Warehousing	2.80%	8.00%	
Education Services	2.00%	8.00%	
Information	2.00%	0.80%	
Finance & Insurance	1.60%	0.40%	
Public Administration	0.80%	1.20%	
Arts, Entertainment & Recreation	0.80%	0.40%	
Utilities	0.40%	0.20%	
Agriculture, Forestry, Fishing & Hunting	0.00%	0.10%	
Mining	0.00%	0.00%	
Management of Companies & Enterprises	0.00%	0.00%	

Source: ESRI Business Analyst (2021)



Table 3. Employment and Population Statistics

	2021 ESRI Forecast
Total Employees	3,680
Total Population	397
Employee/Residential Population Ratio	9.27

Source: ESRI Business Analyst (2021)

Table 4. Socioeconomic Data

Socioeconomic Statistics	N 56th Street Redevelopment Area	Hillsborough County	
Income			
Median Household Income	\$45,691	\$60,625	
Percent of Households with Income Below \$25,000	25.8%	18.1%	
Age			
Percent of Population 65 Years Old and Older	23.9%	15.7%	
Percent of Population Younger than 15 Years Old	11.9%	18.1%	
Race			
Percent of Population - Minority	72.9%	32.4%	
Percent of Population - Hispanic Origin	17.9%	31.0%	

Source: ESRI Business Analyst (2021)

Future Land Use and Planned Development

The primary future land use in the redevelopment area is identified as Light Industrial. There is a portion of the redevelopment area that is categorized as office commercial and community mixed-use at Orient Road and Hillsborough Avenue. The Public/Quasi-Public future land uses are government-owned land which includes King High, Tampa Bay Tech, and the Hillsborough County Schools Logistics Warehouse.

Currently, there are approximately 224 acres of Planned Development (PD) within the redevelopment area. One PD area includes a 27-acre industrial site that is currently under development construction, located along Harney Road between Hillsborough Avenue/US 92 and Hanna Avenue. This site is an example of a Competitive Site, defined by the Hillsborough County Economic Development Department. The Competitive Sites Program identifies locations with the capacity to support targeted industry office/industrial development and crafts policies and programs to guide public sector engagement and investment to meet economic development objectives. Most competitive sites have an approved Planned Development or Development of Regional Impact (DRI) Development Order with a minimum of 100,000 square feet of office and/or industrial entitlements or the site has appropriate zoning that allows for a minimum of 100,000 square feet.

The redevelopment project locations shown in Figure 5 are part of Hillsborough County's Targeted Redevelopment Grant program. The grant program targets development and uses in areas that are traditionally seen as declining in value or are underutilized relative to their location and existing built infrastructure. In the 56th Street Redevelopment Area, these sites include site development and construction for manufacturing and warehouse uses.

In the 2017 Market Analysis for the redevelopment area, five Key Vacant Buildings were identified as qualified sites for multiple incentives including site permitting review and fee assistance, grants for site development and improvements, and intentional marketing strategies for qualified properties. Of the five vacant properties identified in the analysis, all five are now occupied warehouse spaces and one property is a part of the redevelopment grant program. In addition to vacant space becoming leased, the market analysis estimated an additional demand of 100,000 to 325,000 square-feet of net new industrial space by 2023. These estimates are based on job growth forecasts by the Florida Department of Economic Opportunity and do not include redevelopment generated through the County's Targeted Redevelopment Grant Program.



Figure 4. Future Land Use Map



Figure 5. Planned Development and Competitive Sites

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Section 2 Transportation Assessment

Transportation Assessment

The 56th Street Redevelopment Area is bounded by state owned principal arterial Hillsborough Avenue to the south, County owned collector roadways Orient Road and Sligh Avenue on the east and north, and 50th Street on the west. Arterial roadways 56th Street and Harney Road bisect the study area and provide access to employment areas for vehicles and trucks but present barriers for vulnerable users like pedestrians and cyclists. Hanna Avenue is also a collector roadway and a designated truck route between 56th Street and Harney Road. The roadways within the study area have a Suburban Residential, Commercial or Town context classification which is envisioned to include user facilities for higher non-vehicle activity. The roadway classifications and characteristics are described further in the following Transportation Assessment.

Congestion Management

Roadway Level of Service

Peak volume to capacity (v/c) data from the 2019 Level of Service (LOS) Report was reviewed as the most recently available data due to COVID-19 impacts to traffic conditions. Capacity is based on the adopted LOS for each roadway. A v/c ratio of 1.00 or greater indicates that the volume exceeds the capacity of the road and indicates areas with a high amount of peak congestion. The roadway v/c ratios and average daily traffic are shown in **Table 5** and **Figure 6**.

Roadway	Limits	Peak V/C	AADT
56th Street	Hillsborough Avenue to Riverhills Drive	1.25	46,500
Hanna Avenue	43rd Street to Harney Road	0.41	7,191
Harney Road	56th Street to Sligh Avenue	0.37	5,021
Hillsborough Avenue	h Avenue 50th Street to US HWY 301		46,000
Orient Road	Hillsborough Avenue to Sligh Avenue	0.96	9,562
Sligh Avenue	43rd Street to 56th Street	0.67	10,000
	56th Street to Orient Road	0.67	11,985

Table 5. Roadway V/C Ratios

Travel Time Reliability

To measure travel time reliability, Travel Time Index (TTI) data was documented from Iteris Clearguide for 2019. The Travel Time Index is the ratio of the travel time during the peak period to the time required to make the same trip at free-flow speeds. The TTI was documented for the a.m. peak-hour period (7 a.m. to 9 a.m.) and the p.m. peak-hour period (4 p.m. to 6 p.m.).

The morning and evening TTI indicate travel times greater than 20% of the free-flow speed travel time in both directions for all study roadways except Sligh Avenue. Sligh Avenue has travel times greater than 10% in the westbound direction and typical travel times in the eastbound direction in the morning and evening.

Trucking and Freight

As defined in the Hillsborough TPO's 2016 Freight Logistics Zone Strategic Plan, the 56th Street Redevelopment Area is within a logistics cluster as an existing center of freight activity. As a result of the industrial uses and freight-oriented businesses, several truck routes and rail lines connect into the redevelopment area. To best serve those uses, it is important for the routes to be reliable from a travel time and pavement condition perspective. Truck routes are shown in Figure 9 with underlying p.m. peak-hour TTI, and in Figure 10 with the underlying pavement condition. Pavement condition is discussed further beginning on page 24.

As noted in the Market Study for the redevelopment area, CSX representatives have determined several of the existing tracks and spurs in the area are not maintained or owned by CSX. The mix of CSX and private ownership limits the ability to improve rail connections that can ultimately improve the shipping activity in the area and region, an expressed interest by CSX. The tracks and spurs owned by CSX are shown in Figure 10.

Based on rail volumes from the Federal Railroad Administration, 1 train per week operates on the CSX track (Neve Spur) in the 56th Street Redevelopment Area. This spur has low utilization compared to the activity countywide which may be attributed to the termini within the redevelopment area and the close proximity to the Tampa Terminal rail yard. The CSX freight rail use has been reviewed by agencies throughout the region for potential passenger use for over 10 years. Although this segment of the CSX track would not be recommended for passenger use, it connects to other segments that may provide regional commuter rail potential.



Figure 6. Peak Volume to Capacity



Figure 7. AM Travel Time Index (TTI)



Figure 8. PM Travel Time Index (TTI)



Figure 9. Truck Routes and PM Travel Time Index (TTI)



Figure 10. Truck Routes and Pavement Conditions

Planned and Programed Projects

Funded and unfunded planned projects aimed to manage congestion within the redevelopment area were reviewed from the Hillsborough County Captial Improvement Program (CIP), Hillsborough Transportation Planning Organization (TPO), and Florida Department of Transportation (FDOT).

- Hillsborough County CIP 63520000: Orient Road & E Sligh Avenue installation of new signals and additional turn lanes
- Hillsborough County Unfunded: Orient Road from E Sligh Avenue to Columbus Avenue widening the roadway from two lanes to four lanes
- FDOT 2022 to 2026 Work Program: Hillsborough Avenue Intelligent Transportation System (ITS) installation

Adopted as part of the Comprehensive Plan, the Corridor Preservation Plan (CPP) identifies right-of-way, general alignments and standards for transportation corridors to support development patterns as defined in the Future Land Use Element over the 30-year time frame. The CPP will be updated in 2022. The roadways in the redevelopment area as defined in the Corridor Preservation Plan include the following laneage:

- Sligh Avenue (2 lane enhanced)
- Hanna Avenue (2 lane enhanced)
- Hillsborough Avenue (6 lanes)
- Harney Road (4 lanes)

Resurfacing

Roadway pavement condition inventory for all non-state roadways within the study area boundary is based on pavement condition data from July 2021. Roadway pavement condition is scored out of 100 to indicate the pavement condition index (PCI). Hillsborough County's pavement condition target is 55. Approximately 9,343 feet of roadway in the study area are below the target condition. This is approximately 15% of the total linear feet of roadway (63,297 ft) in the study area with a PCI score below 55. Figure 11 shows roadways with the following score categories: Good, Fair to Satisfactory, Poor to Very Poor, and Serious to Failed.

Figure 11 also shows the planned, unfunded resurfacing projects within the redevelopment area including Hanna Avenue from 50th Street to Harney Road, Parke E Boulevard, and Pine Grove Road.



Table 6. Pavement Condition and Improvements

Good		Routine Maintenance
	Roadways identified in good condition are not recommended for improvements at this time.	
Fair to Satisfactory	The following roadways are identified as fair to satisfactory conditions and are recommended to be considered for preventative treatments:	Preventative Treatments
	 50th Street from Hillsborough Avenue to Sligh Avenue 	
	Sligh Avenue from Wildwood Oak Drive to Rivertrace Road	and the second second
and south	 Sligh Avenue from Harney Road to Orient Road 	
	Harney Road from E Hillsborough Avenue to Parke E Boulevard	
	Harney Road from Badger Drive to Sligh Avenue	
	Hanna Avenue from N 54th Street to Harney Road	
2	 Local streets – Parke E Boulevard, and Golden Groves Lane/Badger Drive 	
Poor to Very Poor	The following roadways are identified as poor to very poor conditions and	Major Rehabilitation
	 are recommended to be considered for major rehabilitation: Hanna Avenue from 50th Street to 54th Street 	Contraction of the second
	 Hanna Avenue from Pine Grove Road to Orient Road 	
	Diana Street from 50th Street to 56th Street	11
Serious to Failed		Reconstruction
	No roadways in the study area are identified as serious to failed condition	

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Figure 11. Pavement Condition and Planned Improvements

Mobility and Safety

Multimodal Facilities

Multimodal facilities provide non-vehicle connections to destinations and activity centers. Multimodal facilities in the redevelopment area include sidewalks, bicycle lanes, and connections with Hillsborough Area Regional Transit Authority (HART) routes and stops. Sidewalks are available along E Sligh Avenue, N 50th Street, and Orient Road. There are also fragmented portions of the sidewalk located along Harney Road shown in Figure 12. Bicycle facilities are not as readily available as sidewalks in the study area but are available on state roads N 56th Street and Hillsborough Avenue.

FDOT is currently conducting a planning study along N 56th Street to evaluate potential multimodal solutions and it is anticipated to be complete in October 2022. Another ongoing study for multimodal improvements includes 56th Street from Sligh Avenue to Busch Boulevard. This roadway has been identified by the Hillsborough Transportation Planning Organization (TPO) as one of the top high injury network facilities and a priority for Vision Zero. The high injury network is based upon the highest numbers of fatalities and injuries per mile.

Additional planned and programed multimodal and safety improvements in the redevelopment area include funded School Route Safety Improvements for King High School. Unfunded pedestrian improvements include Orient Road from Hillsborough Avenue to Sligh Avenue, Sligh Avenue from Harney Road to Oakdale Drive, and Harney Road from Hillsborough Avenue to Hanna Avenue.

HART provides transit service in the redevelopment area via Route 6 and Route 39 on N 56th Street, Route 38 on E Hillsborough Avenue, and Route 48 on Harney Road. Along these routes, the stops at the intersection of Hillsborough Avenue & Orient Road have the highest daily average ridership activity in the redevelopment area. The stop located south of Sligh Avenue & N 56th Street on the west side of 56th Street also experiences high ridership activity compared to other stops in the redevelopment area, shown in **Figure 13**. Funded transit improvements identified in HART's Transit Development Plan (TDP) in the redevelopment area include 15-minute frequency enhancements for Route 6 and Route 39.



Figure 12. Existing and Planned Pedestrian and Bicycle Facilities



Figure 13. HART Routes with Stop Activity

Safety

Peak hour crash data from 2015 to 2019 was reviewed for the redevelopment area based on Hillsborough County data. During this time frame, 444 crashes were reported within the redevelopment area, shown in **Table 7**. Of those crashes, one crash resulted in a fatality at the intersection of Hillsborough Avenue & Orient Road. Three crashes resulted in serious injury at the intersections of N 50th Street & Diana Street, N 56th Street & Hillsborough Avenue, and Hillsborough Avenue & a private driveway, shown in **Table 8**.

Table 7. Crashes by Crash Type (Peak Hour, 2015 – 2019)

Crash Type	2015	2016	2017	2018	2019	Total	Percent
Angle	12	13	10	16	11	62	14%
Bike	0	1	1	0	1	3	1%
Head On	3	0	1	1	5	10	2%
Hit Fixed Object	3	2	1	4	3	13	3%
Hit Non-Fixed Object	1	0	0	0	0	1	0%
Left Turn	6	10	7	9	6	38	9%
Pedestrian	1	0	1	1	0	3	1%
Rear End	40	47	53	60	61	261	59%
Right Turn	2	2	2	1	2	9	2%
Run Off Road	0	0	0	0	1	1	0%
Sideswipe	10	7	5	5	8	35	8%
U-Turn	2	1	1	0	1	5	1%
Unknown	1	1	0	0	1	3	1%
Total	81	84	82	97	100	444	100%

Source: Hillsborough County Crash Data Management System
Highest Crash Severity	2015	2016	2017	2018	2019	Total
Fatal	0	0	0	1	0	1
Incapacitating	0	0	2	1	0	3
Non-Incapacitating	9	7	11	8	10	45
Possible Injury	16	24	19	20	21	100

Table 8. Crashes by Highest Severity (Peak Hour, 2015 - 2019)

Source: Hillsborough County Crash Data Management System

Intersection safety improvements are recommended at the following intersections based on a pattern of crash types identified at the locations. Improvements for state road-to-state road intersections are not included.

- N 50th Street & Diana Street: due to the reported angle crashes, including one resulting in a serious injury, intersection safety improvements could include access management strategies and lane geometry including review of the intersection skew.
- Sligh Avenue & N 56th Street: based on the high number of reported angle and left turn crashes, intersection safety improvements could include signal timing and phasing adjustments and review of sight distances and traffic control visibility. Improvements should also take into consideration existing conditions of pedestrian facilities at the intersection as there was a pedestrian involved crash.
- Harney Road & Sligh Avenue: based on the high number of reported angle and left turn crashes, intersection safety improvements could include geometric improvements due to the intersection skew and signal adjustments to include protected left-turn phases.
- Harney Road & Hillsborough Avenue: based on the high number of reported left turn crashes, intersection safety improvements could include signal timing adjustments and review of sight distances and traffic control visibility. Improvements should also take into consideration existing conditions of pedestrian facilities at the intersection as there was a pedestrian involved crash.
- Orient Road & Hillsborough Avenue: based on the high number of reported sideswipe and left turn crashes, intersection safety improvements could include signal timing and phasing adjustments and review of sight distances and traffic control visibility. It should be noted that the fatal crash was reported at this intersection.



Figure 14. Crash Hot Spot Map (Peak-Hour, 2015 - 2019)

Context Classification

Context Based Classifications have been defined for all the County maintained roadways and prioritize the users of the roadway to best serve them and support the adjacent land use and development patterns. Context Based Classifications provide a link between land use and transportation planning efforts by defining overall development patterns and form for Collector and Arterial roadways.

Along with Context Based Classifications, the Complete Street Guidebook and County Design Manual provide guidance to implement appropriate street improvements for the context of the roadway, travel modes, and community environment. Hillsborough County's Context Based Classification system includes five contexts derived from Future Land Use Community Plans - Rural, Suburban Residential, Commercial, Town, and Urban General.

The context classifications of County roads in the 56th Street Redevelopment Area include Suburban Residential, Suburban Commercial, and Suburban Town. As indicated in **Table 9**, Harney Road and Orient Road currently have a posted speed limit that is greater than the target speed for their respective context classifications. It is recommended to implement speed management strategies in order to reduce the posted speed limit based on the target context classification speed. Each context classification includes typical section design elements that are designated as high and low priority. The missing required elements identified in **Table 9** are considered high priority for each context classification and are recommended improvements for the roadways.

Roadway	Context Classification	Posted Speed	Target Speed	Missing Required Elements
Hanna Road	Suburban Commercial	35 MPH	25 – 35 MPH	Shared Use Path
Sligh Avenue	Suburban Residential	35 MPH	25 – 35 MPH	Sidewalk (fill gaps) and shared lane markings
Harney Road	Suburban Commercial	45 MPH	25 – 35 MPH	Shared Use Path
Orient Road	Suburban Town	40 MPH	20 – 25 MPH	Dedicated pedestrian and bike facilities

Table 9. 56th Street Redevelopment Area Context Classification



Figure 15. Context Classification Map

Transportation Infrastructure Assessment Findings

The Transportation Assessment included a review of the existing roadway conditions along Hillsborough County maintained roadways and state facilities based on available data. The review of congestion, mobility, and safety conditions included data for volume to capacity ratios, travel time index, Context Classifications, pavement conditions, existing truck routes, existing HART routes, and crash patterns.

Based on a review of the existing volume to capacity ratios and Context Classification considerations, the following roadways are recommended for complete street and safety improvements which could include speed reduction, improved facilities for all modes, and congestion reduction measures:

- 50th Street from Clifton to Hanna Avenue
- Hanna Avenue from 50th Street to Harney Road
- Harney Road from Hillsborough Avenue to Sligh Avenue
- Orient Road from Hillsborough Avenue to Sligh Avenue
- Sligh Avenue from 52nd Street to Orient Road
- 56th Street from Hillsborough Avenue to Sligh Avenue
- Hillsborough Avenue from 56th Street Orient Road

Intersection safety improvements are recommended at the following intersections based on a pattern of crash types. Improvements should take into consideration access management strategies, lane geometry, existing pedestrian and bike facilities, and sight distance, following a detailed safety analysis at the intersection locations.

- N 50th Street & Diana Street
- Sligh Avenue & N 56th Street
- Harney Road & Sligh Avenue
- Harney Road & Hillsborough Avenue
- Orient Road & Hillsborough Avenue

Based on the pavement condition index of County maintained roadways in the study area, the following roadways have poor to very poor pavement condition and are recommended to be considered for major rehabilitation:

- Hanna Avenue from 50th Street to 54th Street
- Hanna Avenue from Pine Grove Road to Orient Road
- Diana Street from 50th Street to 56th Street

To further identify the project scopes for the transportation improvements, identifying the required funding sources, public engagement, and coordination with partner agencies including the City of Tampa and Florida Department of Transportation, should be completed.



Section 3 Utilities and Services Assessment

Utilities and Services Assessment

Central Services

This analysis identifies the water/sewer service provider, water and wastewater treatment plant permitted capacities, and locations of large water/ sewer transmission infrastructure within the 56th Street Redevelopment area. Traffic Analysis Zone (TAZ) data and future land use data from 2015 to 2045 were used to determine future population growth in the study area. Hillsborough County and City of Tampa utility GIS files, 2018 City of Tampa Howard F. Curren AWTP Phase 2 Master Plan Report, 2018 City of Tampa Master Plan Report – Potable Water Master Plan, Florida Department of Environmental Protection (FDEP) permit data, and 2018 Hazen and Sawyer Hillsborough County Septic Tank Conversion – Neighborhood Prioritization Report were used to analyze the existing utility infrastructure. The projected water demand and wastewater flow increase was estimated from the future population growth to determine if there is enough capacity available to support the anticipated growth in the redevelopment area.

The 56th Street Redevelopment Area existing water and wastewater collection and transmission systems are both managed by the City of Tampa. Hillsborough County utilities does not serve this service area. The David L. Tippin water treatment plant (WTP), managed by the City of Tampa, provides treated potable drinking water to the 56th Street Redevelopment Area. Wastewater flows in the study area are collected and treated at the Howard F. Curren Advanced Wastewater Treatment Plant (AWWTP), managed by the City of Tampa.

Future Land Use/Growth

A map showing the future land use of the 56th Street Redevelopment Area is included in **Figure 4**. The primary land use of the 56th Street Redevelopment Area is light industrial. There are also large sections of research corporate park, public/quasi-public, and office commercial land; community mixed use and heavy industrial land account for only a small portion of the study area. Based on the future land use from the provided TAZ data, Hillsborough County population projections in the 56th Street redevelopment area are not expected to have an increase in population from 2015 to 2045 and the water and wastewater system flow is not anticipated to increase due to population increase as shown in **Table 10**.



Existing Public Water and Wastewater Capacity

Water Treatment Plant Capacity

The 56th Street Redevelopment Area water is served by the David L. Tippin WTP. As reported in the 2018 City of Tampa Master Plan Report – Potable Water Master Plan, this potable water treatment facility has a maximum flow of 120 million gallons per day (MGD) and an annual average daily flow of 81 MGD. There is 39 MGD of available potable water production capacity at the water treatment plant.

Wastewater Treatment Plant Capacity

The 56th Street Redevelopment Area wastewater is treated by the City of Tampa Howard F. Curren AWWTP. As reported in the 2018 City of Tampa Howard F. Curren AWTP Phase 2 Master Plan Report, the treatment plant has a permitted capacity of 96 MGD, with an annual average flow of 60 MGD and a maximum hourly flow of 190 MGD. This leaves 36 MG of available wastewater treatment plant capacity (annual average flow) for new development or redevelopment if needed.

See Table 10 below for a summary of the capacity analysis.

Facility				Annual Average	Max Flow (MGD)	Available Annual
Name	Туре		(MGD)	Flow (MGD)		Average Flow Capacity (MGD)
David L. Tippin	WTP	FLR20EB89	120	81	120	39
Howard F. Curren	AWWTP	FL0020940	96	60	190	36

Table 10. System Capacity Analysis

Existing Public Water and Wastewater Large Transmission Mains

Water

The water infrastructure in the 56th Street Redevelopment Area is owned and managed by the City of Tampa. The study area has one major water main: 42" water main running east on E Hanna Avenue, turning south on N 56th Street, and continuing east on E Hillsborough Avenue. According to City of Tampa GIS records, this transmission main is ductile iron and was installed in 1989. Since ductile iron pipe has a service life expectancy of 50 or more years so this main should have a fair amount of remaining useful life. Figure 16 is a map of the existing water distribution infrastructure in this area.

Wastewater

Several wastewater force mains owned by the City of Tampa run along the boundaries of the redevelopment area ranging from 12-inch to 4-inch. A 12-inch cast iron force main runs along E Sligh Avenue on the north edge of the redevelopment area. Cast iron force main stopped production/ installation in the 1980's and was replaced with ductile iron pipe/PVC pipe. It is expected the 12-inch cast iron force main is nearing the end of its useful life and needs to be replaced.

A 12-inch PVC force main runs along Orient Road on the east edge of the redevelopment area, and a 12-inch force main of ductile iron and PVC runs along E Hillsborough Avenue on the south edge of the redevelopment area. The installation dates of the force mains are unknown however, a few observations can be made. The 12-inch force main composed of ductile iron and PVC may have issues with H2S gas corrosion, which is why this force main could be pieced together with both PVC and ductile iron. Ductile iron and PVC force mains have an expected useful life of 50 to 60 years and are assumed to be in fair condition.

Only a few gravity mains are located in the redevelopment area, which is mainly comprised of small lift stations and force mains. The only Lift Station owned by the City of Tampa is located on the eastern portion of the area and feeds into the force main along Orient Road. Figure 17 is a map of the existing wastewater infrastructure in this area.

Septic Tanks

The study area has a mix of sewer and septic systems to treat the wastewater. Existing County data lists a total of 61 tanks, most of them located in the western portion of the redevelopment area. Locations of the septic tanks are shown on the wastewater infrastructure map (Figure 17). Based on the existing available data provided by the County there are no current plans to convert septic to sewer in this study area.

The 2018 Hazen and Sawyer Hillsborough County Septic Tank Conversion - Neighborhood Prioritization Report, identifies areas that should be prioritized for septic to sewer conversion. In this report, parcels that already had wastewater service were removed from the study and only parcels that were single family residential were labeled as a priority for conversion. Therefore, the 56th Street Redevelopment Area was not prioritized for conversion and it is unknown at this time if there are plans for future septic to sewer conversion. One location with existing single family residential and septic at Orient Road and Zeimis Drive may be a candidate for septic to sewer conversion.



Figure 16. Water Infrastructure Map



Figure 17. Wastewater Infrastructure Map



Water and Wastewater Infrastructure Assessment Findings

The Traffic Analysis Zone (TAZ) data and future land use data provided by Hillsborough County for the 56th Street Redevelopment Area shows no increase in population or change in land use from 2015 to 2045. The City of Tampa David L. Tippin WTP has 39 MGD of available treatment capacity and the City of Tampa Howard F. Curren AWWTP has 36 MGD of available treatement capacity, which may support any potential growth if population projections change. This capacity analysis is based on available permitted capacities of the water and wastewater treatment facilities; no hydraulic capacity analysis of water/sewer transmission mains was completed.

Based on the available information and understanding of the existing water transmission mains, additional water and fire flow service should be available from the 42" transmission main along Hanna Avenue.

Based on the water and wastewater infrastructure assessment completed for the 56th Street Redevelopment Area, potable water is available to all redevelopment project sites identified in Figure 5 of the report. Sewer collection is available for all redevelopment project sites except for the two projects located along E Hanna Ave, and one project along Harney Road, which have septic systems. Further evaluation of the City of Tampa's water, sewer, and septic systems need to be studied prior to redevelopment. The following action items have been identified for the 56th Street Redevelopment Area:

- Coordination between the County and City of Tampa utility departments to identify capacity issues in the potable water and sewer collection/ transmission systems
 - Study existing potable water hydraulic model to determine pipe capacity and sizing needs of future developments with new water demands
 - Study existing wastewater collection, transmission, and wastewater treatment plant capacity to determine if the increased wastewater flow will affect the system
- Extend sewer collection/transmission system to the redevelopment projects on E Hanna Ave and Harney Road to eliminate septic to sewer system
- Provide water and sewer service connections along street areas that are not currently served to promote redevelopment:
 - Orient Road and N 56th Street areas were identified as areas that the County will need to coordinate water transmission main extensions
 - 50th Street, E Hanna Avenue, and 56th Street area were identified as areas the County will need to coordinate sewer collection/ transmission system extensions to eliminate septic to sewer systems



Section 4 Vulnerability Assessment

Vulnerability Assessment

Exposure Analysis

This analysis evaluates the exposure of Hillsborough County assets within the redevelopment area. The exposure analysis is the first step in completing a vulnerability assessment identifying potential flood threats and assets exposed to flooding.

As part of this analysis, Asset Threat Matrices were developed to identify the flood exposure for the following assets:

- County Maintained Roads
- Hospitals

Schools

• Public Pump Stations

- Evacuation Routes
- Shelters

Libraries

There are no pump stations, libraries, hospitals, or shelters within the 56th Street study area.

The County assets within this area are analyzed based on four flood threats: 100-year event, FEMA Flood Zone, Category 1 Hurricane, and Category 3 Hurricane. The 56th Street Redevelopment Area is within the Hillsborough / East Lake Watershed so the SWFWMD Board Certified Hillsborough / East Lake Watershed 100-year floodplain is used for the 100-Year Floodplain analysis.

To determine if an asset is exposed to flooding, the flood data is overlayed on top of the asset location. If the flood area intersects the asset footprint, then the asset is considered exposed. It was determined that neither of the Hurricane flood threats exposed any assets within this project area.

County Maintained Roads

There are 21 County maintained roads identified within the 56th Street Redevelopment Area. Out of all the flood threats evaluated, the 100-Year Event exposed approximately 90% of the County maintained roads. The FEMA Flood Maps were found to expose approximately 24% of County maintained roads exposed. These percentages refer to how many roads were impacted out of the total number of roads, not the total length of roadways submerged. Integrating flood depths is the next step of the vulnerability analysis. The asset threat matrix **Table 11** identifies each County maintained road and its exposure to flooding during each flood threat.

The results of this analysis were compared to the results of the USF Hillsborough County Community Vulnerability Study. The USF study maps showed there is no exposure in this project area for Category 1 and Category 3 Hurricanes with Intermediate-Low and High SLR. Additionally, the USF maps showed exposure of N 56th Street by the 100-Year Event. The maps for the 100-Year Event and FEMA Flood Map are shown in Figure 18 and Figure 19.



Table 11. County Maintained Roads Asset Threat Matrix

County Maintained		Exposure		
Roads	Hillsborough River and East	FEMA Flood	Category 1	Category 3
	Lake Watershed 100-Year Event	Maps	Hurricane	Hurricane
Badger Dr	O			
Bonacker Dr	Ø	Ø		
Boran Pl	Ø			
E Diana St	O	S		
E Hanna Ave	Ø	\checkmark		
E Henry Ave	Ø			
E Hillsborough Ave	Ø			
E Powhatan Ave	0			
E Sligh Ave	Ø			
Golden Groves Ln	Ø			
Harney Rd	0			
N 50th St	Ø			
N 51st St				
N 53rd St	Ø			
N 54th St	O	\checkmark		
N 56th St	Ø	\checkmark		
N 59th St	O			
Orient Rd	O			
Parke East Blvd	Ø			
Pine Grove Rd				
Zeimis Dr	Ø			

Table 12. Summary of County Maintained Roads Exposure

	Delaney Creek Watershed 100-Year Event	FEMA Flood Maps	Category 1 Hurricane	Category 3 Hurricane
% County Maintained Roads Exposed	90.48	23.81	N/A	N/A

Evacuation Route

The evacuation route is E Hillsborough Avenue, is found to be exposed for the 100-Year Event as shown in Figure 18 and Table 13.

Table 13. Evacuation Route Asset Threat Matrix

	Exposure								
Evacuation Routes	Hillsborough River and East Lake Watershed 100-Year Event	FEMA Flood Maps	Category 1 Hurricane	Category 3 Hurricane					
East Hillsborough Avenue	O								

Schools

There are two schools within the 56th Street Redevelopment Area, King High and Tampa Bay Tech. These schools are not exposed to flooding by any of the flood threats analyzed in this assessment.

Fire Stations

There is one fire station located in the 56th Street Redevelopment Area. The East Lake Square fire station is only exposed by the 100-Year Event as shown in Figure 18 and Table 14.

Table 14. Fire Station Asset Threat Matrix

	Exposure								
Evacuation Routes	Hillsborough River and East Lake Watershed 100-Year Event	FEMA Flood Maps	Category 1 Hurricane	Category 3 Hurricane					
East Lake Square Station 32	⊘								



Figure 18. 100-Year Flood Event Map



50 Hillsborough County 56th Street Redevelopment Area Infrastructure Assessment

Table 15. Adaptation Strategies



populations

Vulnerability Assessment Findings

The 100-Year Event and the FEMA Flood are the only scenarios out of the four assessed threats evaluated which expose assets within the 56th Street Redevelopment Area. The 100-Year Event exposes several roads throughout the area, whereas the FEMA Flood exposes a few roads within one concentrated area near Hanna Avenue and 56th Street. Overall, the assets in this redevelopment area have a low risk of exposure. It was determined that the area near the intersection of Hanna Avenue and 56th Street is considered the most exposed within the study area.

Potential improvements for addressing flooding within the 56th Street Redevelopment Area include a combination of gray, green and blue infrastructure such as raising roads and adding storage in local and regional stormwater ponds. Improvement strategies should seek to protect or extend the duration from which assets may be exposed. These adaptation strategies and examples are included in **Table 15**.


Section 5 Recommended Improvements

Recommended Improvements

Recommended improvements are identified for the study area based on the infrastructure assessments documented in this report. The assessment measures are used to identify locations for improvements and prioritize improvements based on an overlay of all measures to identify the highest areas of need. The recommended improvements are prioritized based on the following assessment measure categories to prioritize locations and prioritize improvements. A map of all projects is shown in **Figure 20** and the recommended improvement matrix is shown in **Appendix A**.

Assessment Measures

- Congestion and Mobility measures identify locations that should be prioritized based on high travel time index or volume to capacity ratio, fair to serious pavement condition, incomplete or missing user facilities based on the roadway's context classification, and locations on truck routes or HART routes.
- Safety measures identify locations that should be prioritized based on correctable crash patterns or severe crashes including fatal and injury crashes, and roadways with a posted speed greater than the context classification target speed.
- Utility measures identify locations where water or sewer mains should be replaced due to its useful life or locations where a new water or sewer connection would promote redevelopment.
- Flood Exposure measures identify locations where there is vulnerability to flooding due to storm events or sea level rise.
- Land Use measures identify locations that are or connect into Competitive Sites, Redevelopment Sites, or community amenities including schools, fire stations, and hospitals.

Improvement Benefit

Improvement Benefit factors are indicated for each recommended improvement based on the project's ability to improve Mobility, Safety, Resiliency, or Site Redevelopment.

- Mobility: project improves conditions for pedestrians, cyclists, passenger cars, or trucks on roadway facilities
- Safety: project improves conditions for vulnerable users accessing community amenities including schools or using roadway facilities
- Resiliency: project improves potential flooding conditions at community amenities, utility connections, or roadways
- Site Redevelopment: project improves redevelopment opportunities at Competitive Sites or Redevelopment Sites identified by the county, or provides opportunity for new development due to new infrastructure connections

Recommended Actions

Based on the infrastructure assessment and an overlay of all measures, improvements and the highest areas of need are identified. The following locations are recommended focus areas to improve existing critical infrastructure based on the current conditions. The improvements are recommended to serve community amenities and encourage redevelopment of competitive sites, redevelopment sites, and existing industrial and vacant properties.

	Transportation Improvements	Utility Improvements	Vulnerability Improvements
50th Street	 Clifton Street to Hanna Avenue – Complete street improvements including dedicated pedestrian facilities (pg. 33-34) Clifton Street to Sligh Avenue – Pavement repair (preventative treatment) (pg. 24-26) 	• Clifton Street to Sligh Avenue – Sewer system extension (septic to sewer conversion) (pg. 40-42)	 Diana Street to Pocahontas Avenue – Roadway flood exposure improvements (pg. 47- 51)
Hanna Avenue	 50th Street to Harney Road – Complete street improvements including shared use path (pg. 33-34), and major pavement rehabilitation (pg. 24-26) Pine Grove Road to Orient Road – Major pavement rehabilitation (pg. 24-26) 	 50th Street to Harney Road – Sewer system extension (septic to sewer conversion) (pg. 40- 42) 	• 54th Street to Tampa Truck Entrance – Roadway flood exposure improvements (pg. 47- 51)
Harney Road	• Hillsborough Avenue to Sligh Avenue – Complete street improvements including speed reduction and shared use path (pg. 33-34), intersection safety improvements (pg. 31-32), and pavement repair (preventative treatment (pg. 24-26))		• East Lake Square Station 32 – Area flood exposure improvements (pg. 47-51)
Orient Road	 Hillsborough Avenue to Sligh Avenue – Complete street improvements including speed reduction and dedicated pedestrian and bike facility (pg. 33-34), and intersection improvements at Hillsborough Avenue (pg. 31-32) Hanna Avenue to Sligh Avenue – Pavement repair (preventative treatment) (pg. 24-26) 	 Hillsborough Avenue to Sligh Avenue – Water system extension (pg. 40-42) 	 Park E Boulevard to Tampa Bay Technical Entrance Roadway flood exposure improvements (pg. 47-51)

Recommended Actions

	Transportation Improvements	Utility Improvements	Vulnerability Improvements
Sligh Avenue	• 52nd Street to Orient Road – Complete street improvements including dedicated pedestrian facilities and shared lane markings (pg. 33-34), and pavement repair (preventative treatment) (pg. 24-26)	• 50th Street to Orient Road – Water force main replacement (pg. 40-42)	• 52nd Street to All Peoples Life Center – Roadway flood exposure improvements (pg. 40- 42)
56th Street	• Hillsborough Avenue to Sligh Avenue – Complete street improvements including capacity and congestion improvements (pg. 33-34)	 Hillsborough Avenue to Hanna Avenue – Sewer system extension (septic to sew conversion) (pg. 40-42) Hanna Avenue to Sligh Avenue – Water system extension (pg. 40-42) 	• Hanna Avenue to King High School – Roadway flood exposure improvements (pg. 47- 51)
Hillsborough Avenue*	• 56th Street to Orient Road – Complete street improvements including capacity and congestion improvements (pg. 33-34)		Harney Road to Suncoast Credit Union – Roadway flood exposure improvements (pg. 47- 51)

*Evacuation Route

Next Steps

- Complete detailed safety analysis of high crash areas identified in matrix
- Complete hydraulic capacity analysis of water/sewer transmission mains, including coordination with City of Tampa based on collection and transmission systems ownership
- Evaluate a combination of gray, green and blue infrastructure techniques to mitigate flood exposure
- Coordinate with County departments, including Public Works, to identify ongoing projects and plans in the area
- Further identify infrastructure project scopes and related funding sources, including public engagement and coordination with leading and coordinating agencies based on infrastructure and right-of-way ownership including:
 - Florida Department of Transportation
 - City of Tampa
 - CSX



Figure 20. Recommended Improvement Map



Appendix A Assessment Matrix

Table 16. Assessment Matrix

		Imp	orovem	ient Be	enefit	
Location	Recommended Improvement	Mobility	Safety	Resiliency	Site Redevel- opment	Ongoing Project or Planned Improvement
50th Street						
50th Street from Clifton Street to Hanna Avenue	Sidewalk on westside of roadway					
50th Street from Clifton Street to Sligh Avenue	Pavement repair - prevenative treatment	0			Ì	
50th Street from Clifton Street to Sligh Avenue	Sewer collection/transmission system extension (septic to sewer conversion)				Ø	
50th Street from Diana Street to Pocahontas Avenue	Flood exposure improvements	Ø		0		
Hanna Avenue						
Hanna Avenue from 50th Street to Harney Road	Shared use path				0	
Hanna Avenue from 50th Street to Harney Road	Sewer collection/transmission system extension (septic to sewer conversion)				0	
Hanna Avenue from N 54th Street to Harney Road	Pavement repair - preventative treatment					Unfunded - Resurfacing from 50th Street to Harney Road
Hanna Avenue from 54th Street to Tampa Truck Entrance	Flood exposure improvements			I		CIP/ARP Funding - 56th & Hanna Regional Drainage Improvements
Hanna Avenue from 50th Street to 54th Street	Pavement repair - major rehabilitation				I	Unfunded - Resurfacing from 50th Street to Harney Road
Hanna Avenue from Pine Grove Road to Orient Road	Pavement repair - major rehabilitation					Unfunded - Resurfacing from Pine Grove to Orient Road

Assessment Measure																
	Conç	gestion and	d Mobility			Sa	afety	fety Utilities			Exposure			Adjacent Land Use		
High TTI or V/C	Serious/Poor Pavement Condition	Fair Pavement Condition	Incomplete User Facilities	Truck Routes	HART Route	Crash Pattern	Above Target Speed	Water Connection	Sewer Connection	100-Year Flood	FEMA Flood Zone	CAT 1 or 3 Hurricane	Competitive Site	Redevelop- ment Project Site	Community Amenity	
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		Improvement Benefit				
Location	Recommended Improvement	Mobility	Safety	Resiliency	Site Redevel- opment	Ongoing Project or Planned Improvement
Harney Road						
Harney Road from E Hillsborough Avenue to Sligh Avenue	Speed reduction and Shared use path	0	Ø		0	Unfunded - Pedestrian safety project from Hillsborough Avenue to Hanna Avenue
Harney Road & Hillsborough Avenue	Intersection safety improvements				Ø	
Harney Road & Sligh Avenue	Intersection safety improvements		Ø			
Harney Road from E Hillsborough Avenue to Park E Blvd	Pavement repair - preventative treatment	0			I	
Harney Road from Badger Dr to Sligh Avenue	Pavement repair - preventative treatment					
East Lake Square Station 32	Flood exposure improvements					
Orient Road						
Orient Road from Hillsborough Avenue to Sligh Avenue	Speed reduction and dedicated pedestrian and bike facility	0	0			Unfunded - Complete Street with Road Widening from Sligh Avenue to Columbus Boulevard
Orient Road from Hillsborough Avenue to Sligh Avenue	Speed reduction and dedicated pedestrian and bike facility				Ø	
Orient Road from Park E Boulevard to Tampa Bay Technical Entrance	Flood exposure improvements	0		0		
Orient Road from Hanna Avenue to Sligh Avenue	Pavement repair - preventative treatment					
Orient Road & Hillsborough Avenue	Intersection safety improvements		Ø			

	Assessment Measure															
	Congestion and Mobility						Sa	afety	Util	ities Exposure			e	Adjacent Land Use		
	High TTI or V/C	Serious/Poor Pavement Condition	Fair Pavement Condition	Incomplete User Facilities	Truck Routes	HART Route	Crash Pattern	Above Target Speed	Water Connection	Sewer Connection	100-Year Flood	FEMA Flood Zone	CAT 1 or 3 Hurricane	Competitive Site	Redevelop- ment Project Site	Community Amenity
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		Imp	orovem	ient Be	enefit	Ongoing Project or Planned Improvement			
Location	Recommended Improvement	Mobility	Safety	Resiliency	Site Redevel- opment				
Sligh Avenue									
Sligh Avenue from 50th Street to Orient Road	Utility Force Main Replacement				I				
Sligh Avenue from Harney Road to Orient Road	Sidewalk (fill gaps) and shared lane markings	Ø	0			Unfunded - Pedestrian safety project from Harney Road to Orient Road			
Sligh Avenue from Harney Road to Orient Road	Pavement repair - preventative treatment	Ø							
Sligh Avenue from 52nd Street to Rivertrace Road	Pavement repair - preventative treatment	Ø			I				
Sligh Avenue from All Peoples Life Center to Vulcan Entrance	Sidewalk (fill gaps) and shared lane markings	Ø	Ø						
Sligh Avenue & 56th Street	Flood exposure improvements	Ø							
Sligh Avenue & All Peoples Life Center	Flood exposure improvements	Ø		I					
Sligh Avenue & 52nd Street	Flood exposure improvements	Ø							
56th Street									
56th Street from Hillsborough Avenue to Sligh Avenue	Roadway capacity and complete street improvements	Ø	0		I	FDOT Corridor Planning Study from Fletcher Avenue to Selmon Expressway			
56th Street from south of Hanna Avenue to King High School	Flood exposure improvements	Ø							
6th Street from south of Hanna Avenue to Hillsborough Avenue	Sewer collection/transmission system extension (septic to sewer conversion)				0				
56th Street form E Hanna Avenue to E Sligh Avenue	Water transmission extension				I				
Hillsborough Avenue									
Hillsborough Avenue from 56th Street to Orient Road	Roadway capacity and congestion improvements	Ø	I		I	FDOT Work Plan - ITS corridor			
Hillsborough Avenue from Harney Road to Suncoast Credit Union	Flood exposure improvements	0		0	Ø				

	Assessment Measure															
Congestion and Mobility						Sa	afety	Utili	ities		Exposur	e	Adja	Adjacent Land Use		
High TTI or V/C	Serious/Poor Pavement Condition	Fair Pavement Condition	Incomplete User Facilities	Truck Routes	HART Route	Crash Pattern	Above Target Speed	Water Connection	Sewer Connection	100-Year Flood	FEMA Flood Zone	CAT 1 or 3 Hurricane	Competitive Site	Redevelop- ment Project Site	Community Amenity	
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