# SR 60 Corridor Multimodal Implementation Strategies






FORWARD PINELLAS

# Executive Summary

The SR 60 corridor from Tampa Bay in the east to Downtown Clearwater and Clearwater Beach in the west, like much of the Tampa Bay area, has roadways that are dominated by automobiles, even in residential areas. However, improving multimodal connectivity by incorporating Complete Streets strategies like walking and biking paths, enhanced crosswalks, road diets, and aesthetic features such as landscaping creates a more balanced transportation system as well as a sense of place.

Forward Pinellas worked with its agency partners, Pinellas Suncoast Transit Authority (PSTA), City of Clearwater, Florida Department of Transportation (FDOT), and Pinellas County, to identify ways to improve the options, connections, and safety for all travelers, those in cars, on bikes, on foot, and using transit, throughout the SR 60 corridor. The study area primarily encompassed SR 60 from McMullen Booth Road to Clearwater Beach and the parallel roads of Drew Street and Druid Road. The study area extended across the bridge to Tampa International Airport (TIA) to include regional transit services to and from TIA.

## Short-term Strategies

The study analyzed existing conditions; identified gaps in the multimodal (walking, bicycling, and transit) network; evaluated the gaps based on performance measures; prioritized the gaps based on how well each could potentially impact mobility, safety, and land use and economic development; and then determined project cost estimates. These projects form the basis for the short-term implementation strategies. The top 10 short-term projects and their associated costs are shown in **Table 1**.

**Table 1: The top 10 projects and their costs**

| Facility | From | To | Network Gap | Estimated Capital Cost |
|---|---|---|---|---|
| 1a. Beach to TIA Express | TIA | Clearwater Beach | Premium Express Transit | $3.4 – 4.9 Million |
| 1b. Memorial Causeway Busway for trolleys and the planned TIA to Beach Express | Court Street | Clearwater Beach Transit Center | Premium Express Transit | $8.1 Million |
| 2. SR 60/Chestnut Street | Court Street | Martin Luther King Jr. Avenue | Bicycle Accommodations | $0.54 Million |
| 3. SR 60/Gulf to Bay Boulevard | US 19 | Highland Avenue | Multi-use Accommodations | $0.7 Million |
| 4. Missouri Avenue | Belleair Road | Drew Street | Bicycle Accommodations | $18.0 Million |
| 5. SR 60/Gulf to Bay Boulevard | McMullen Booth Road | US Highway 19 | Multi-use Accommodations | $1.9 Million |
| 6. Drew Street | North Myrtle Avenue | Saturn Avenue | Multi-use Accommodations | $3.4 Million |
| 7. SR 60/Gulf to Bay Boulevard | Court Street | Cleveland Street | Bicycle Accommodations | $2.8 Million |
| 8. Clearwater Beach Connector Trail | Pinellas Trail | Martin Luther King Jr. Avenue | Multi-use Accommodations | $0.3 Million |
| 9. Cleveland Street | Gulf to Bay Boulevard | Missouri Avenue | Bicycle Accommodations | $3.7 Million |
| 10. Martin Luther King Jr. Avenue | Chestnut Street | Lakeview Road | Bicycle Accommodations | $4.6 Million |

*Multi-use Accommodations are shared- use paths for non-motorized travel that may include bicyclists, walkers, skaters, and people with disabilities.*

## Long-term Strategies

Long term visions were developed based on land use character and public preference for specific Complete Streets strategies. The study area was divided into 13 distinct segments (**Figure 1**), each with its own vision of a more Complete Street (**Figure 2**). The long-term strategies build upon the short-term strategies and are designed to create a consistent multimodal network throughout the corridor. The long-term strategies also include additional features such as enhanced crosswalks, lighting, and transit stop amenities.

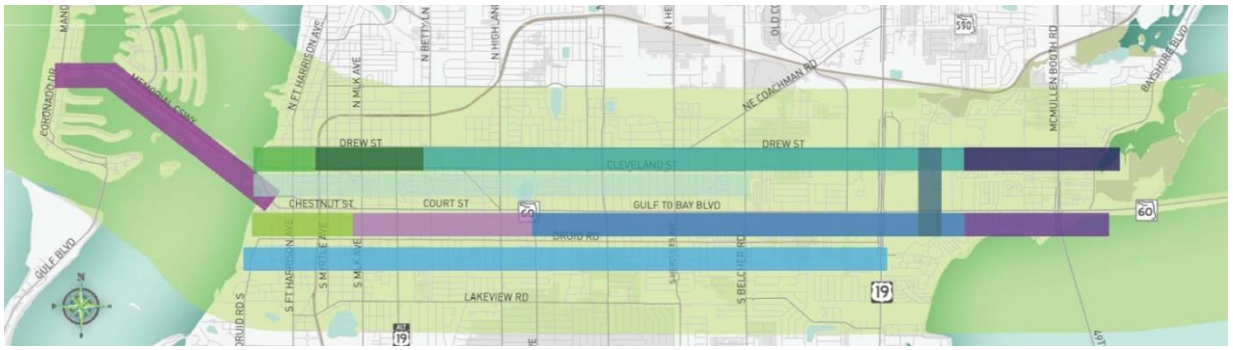



**Figure 1: Roadway segments based on surrounding land use and roadway profile**

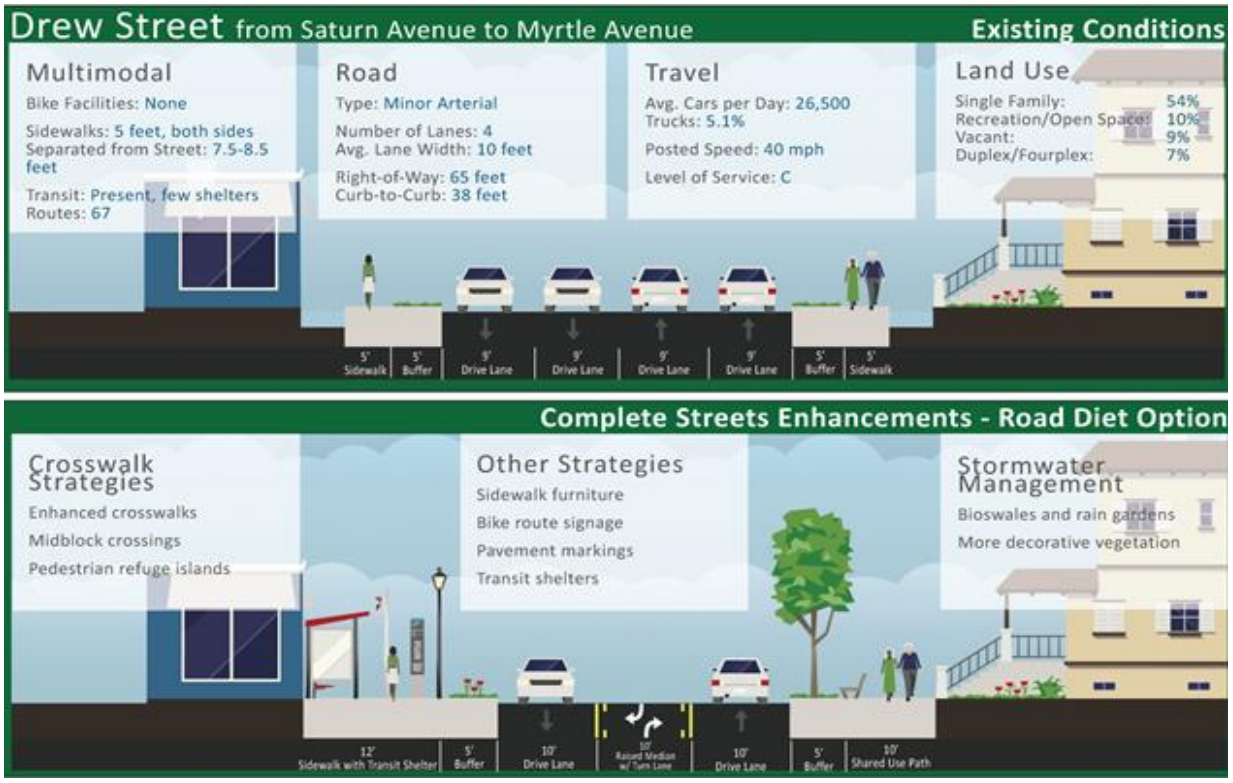



**Figure 2: An example of Long-term Strategy Typical Section**

Preliminary costs were developed for the long-term visions and are shown in **Table 2** in non-prioritized order.

**Table 2: Costs to Implement Long-term Vision**

| Facility | From | To | Cost |
|---|---|---|---|
| SR 60 | Courtney Campbell Causeway | Hampton Road | $4.52 Million |
| SR 60 | Hampton Road | Lake Drive | $1.38 Million |
| SR 60 | Lake Drive | Martin Luther King Jr. Avenue | $4.30 Million |
| SR 60 | Martin Luther King Jr. Avenue | Pierce Street | $1.80 Million |
| SR 60 | Pierce Street | Clearwater Beach | $8.10 Million |
| Drew Street | McMullen Booth Road | Hampton Road | $0.83 Million |
| Drew Street | Hampton Road | Saturn Avenue | $4.40 Million |
| Drew Street | Saturn Avenue | Myrtle Avenue | $4.90 - $10.60 Million |
| Drew Street | Myrtle Avenue | N. Osceola Avenue | $0.16 Million |
| Druid Road | US 19 | Orange Avenue | $23.4 Million |

It is envisioned that the responsible agency or municipality can consult the long-term vision and costing tool when opportunities arise. Instead of simply filling a gap in the network, additional strategies can be implemented more efficiently, and Clearwater will become safer and more enjoyable for its residents and visitors.

# Chapter 1: Introduction

SR 60 within Pinellas County is one of the County's most important transportation corridors, serving a number of destinations, communities, and mobility needs. The corridor is also a gateway from Hillsborough County, providing access to many residential and commercial uses and serves as the primary connection to activity centers such as Downtown Clearwater and Clearwater Beach.

This study seeks to identify ways to improve multimodal connectivity by implementing Complete Streets strategies for the SR 60 corridor linking Clearwater Beach, Downtown Clearwater, and Tampa International Airport (TIA). The identified multimodal strategies are designed to increase mobility options, encourage economic growth and redevelopment, and improve safety for all users.

**Complete vs Incomplete Streets**

*A Complete Street is safe for anyone, regardless of mode, age, or ability. An incomplete street favors one mode, typically vehicles, at the expense of all others.*

## Background

Forward Pinellas defined strategic initiatives or SPOTLight Emphasis Areas to address transportation issues in Pinellas County. One of these SPOTLight Emphasis Areas is Beach Access. Beach Access focuses on providing seamless multimodal access from the mainland to Pinellas County Beaches. In this case, improving access to Clearwater Beach via the SR 60 corridor is one of the primary goals of this study.

The SR 60 corridor, like much of the Tampa Bay area, has been designed solely for moving automobiles, even in residential areas. Despite numerous previous studies (**Appendix A**), minimal consideration has been given to alternative modes such as biking, walking, and transit, leading to fewer transportation options and increased safety risks for residents and visitors alike.

Tourism is a major contributor to Pinellas County's economy. Travelers from across the globe come to the area to enjoy one of the County's best assets, its beaches. As a result, access to these amenities is critically important. This is especially true of Clearwater Beach, repeatedly rated one of the best beaches in the country, most recently in 2016[1]. Visitors to Clearwater Beach have reached record numbers and continue to grow each year, resulting in an increase in traffic congestion and crashes. The Memorial Causeway Bridge (SR 60) is the only roadway

[1]www.tampabay.com/news/business/tourism/clearwater-beach-named-no-1-beach-in-the-country-by-tripadvisor/2265756

connection between Downtown Clearwater and Clearwater Beach, which creates a bottleneck during peak travel periods.

During spring break and some holiday weekends (e.g., Memorial Day and Labor Day), traffic often builds to the point of gridlock on the Causeway causing significant travel delays. Buses also find themselves impacted by this congestion. Despite the increase in trails, there is a shortage of safe biking and walking facilities. As a result, the need to provide additional transportation options has become paramount.

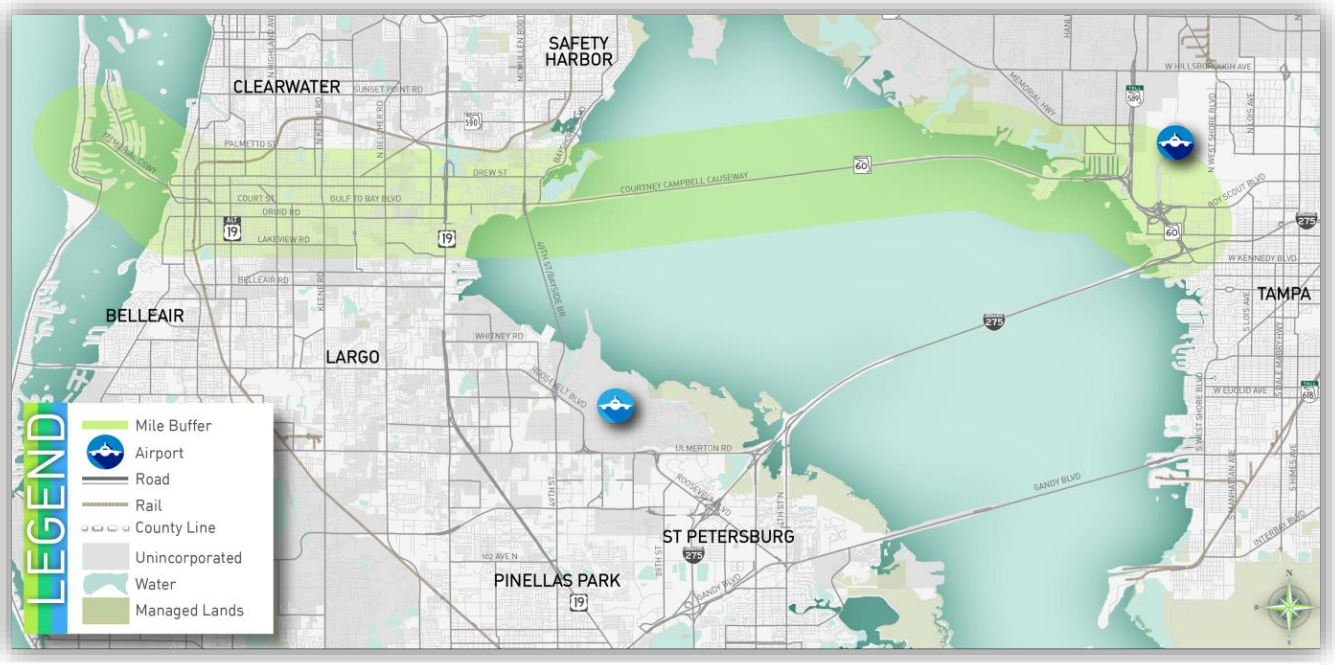
## Study Area

The study area stretches from Clearwater Beach in the west to Tampa International Airport in the east. However, the study primarily evaluates future multimodal options along the SR 60 corridor between McMullen Booth Road and Clearwater Beach. The study area extends one mile to the north and south of SR 60, to include the constrained parallel roads of Drew Street and Druid Road as well as the north-south connections between them. The study area is illustrated in **Figure 3**.

## Project Approach

The study was conducted using three screening phases, which ultimately resulted in a prioritized list of short-term implementation strategies as well as long-term corridor visions. The three screening phases are summarized as follows:

1. Existing Conditions and Concepts Development: Understand the current characteristics of the transportation network to identify gaps and



potential opportunities along the corridor. Develop a menu of strategies to address the gaps identified.

2. Alternatives Evaluation and Prioritization: Evaluate each project using performance criteria designed to promote mobility, safety, and economic stability and/or growth to identify the most critical projects. The prioritization process also considered public and stakeholder input.

3. Project Costs and Funding: Identify planning level estimated costs for the projects as well as potential funding sources.

The project approach is summarized in **Figure 4**.

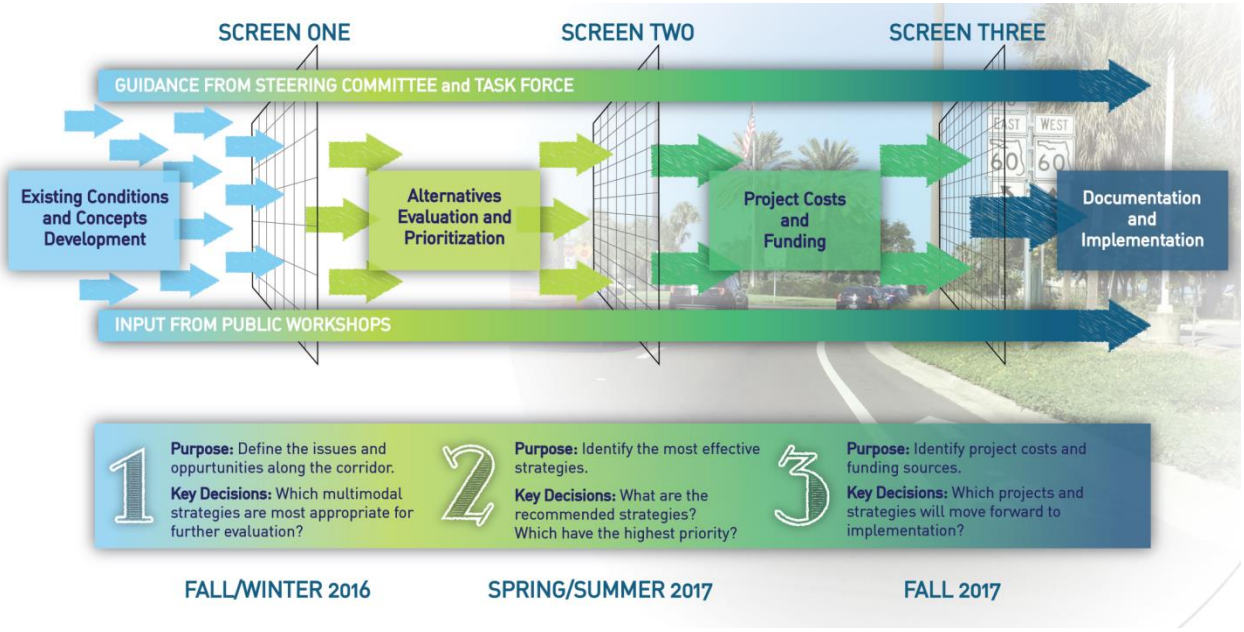



**Figure 4: Project Approach**

# Chapter 2: Existing Conditions

One of the first steps of this effort identified existing conditions in the SR 60 study area, population, employment, crashes, transit service, traffic, infrastructure, and land uses. This chapter reports the findings from the assessment.

**Figure 5.** The figure reflects the medium density housing patterns seen in much of Pinellas County.

## Population and Employment

One of the most important things to understand when trying to connect people and places is where they live and work. About 72,600 people live and 56,700 work within the study area. The geographic concentrations of where people live and some typical housing types are shown in


**Figure 5: Study Area Population**


**Figure 6: Study Area Employment**

The geographic concentrations where people work are shown in **Figure 6** and are more apparent than the concentrations of housing. Downtown Clearwater, the US 19 corridor, and, to a lesser extent, Clearwater Beach are hubs of employment.

## Crash Analysis

A primary focus of this study was to look for ways to improve safety within the SR 60 corridor. Therefore, it was critical to understand how many crashes occur and their locations.

> ***Vulnerable users*** *are road users who are most at risk in traffic, such as pedestrians, cyclists, and transit users. Children, older people and people with disabilities are also included in this category.*

Crash data reviewed for the four years from 2011 to 2014 show the primary cause of crashes within the study area is automobile driver(s) who operate their vehicle in a negligent manner. On average approximately 75 percent of the crashes within the study area resulted in an injury while approximately one percent resulted in a fatality. Over 500 crashes involved a vulnerable user and more than 40 percent of crashes occurred at an intersection within the study area. The results of the crash analysis are summarized in **Table 3**. The highest crash locations are illustrated in **Figure 7**.


**Figure 7: Crash Locations**

### Table 3: Crashes within the Study Area

| Year | Total Crashes | Vulnerable User* | Total Injuries | Fatalities | First Harmful Event | Intersection | |
|---|---|---|---|---|---|---|---|
| **2011** | 1156 | 110 | 923 | 8 | 458 - Operated motor vehicle in careless or negligent manner | 504 | 43% |
| **2012** | 1289 | 145 | 1006 | 17 | 458 - Operated motor vehicle in careless or negligent manner | 695 | 51% |
| **2013** | 1297 | 117 | 938 | 13 | 551- Operated motor vehicle in careless or negligent manner | 608 | 54% |
| **2014** | 1517 | 135 | 1109 | 5 | 579 - Operated motor vehicle in careless or negligent manner | 670 | 44% |

* Vulnerable users include motorcyclists, bicyclists, or pedestrians.

## Transit

Pinellas Suncoast Transit Authority (PSTA) provides public transportation within Pinellas County. The agency serves 21 of the county's 24 cities and covers approximately 243 square miles. PSTA operates 210 transit vehicles on 36 local bus routes, two express bus routes to Hillsborough County (Routes 100X and 300X), two North County Connector routes, and two trolley routes, which include the Central Avenue and Suncoast Beach Trolleys. PSTA also contracts three trolley routes and Demand Response Transportation (DART) paratransit service.[2,3]

Within the study area, PSTA runs a total of eight fixed transit routes with approximately 330 stops. These routes move an estimated 6,000 passengers on an average weekday. **Table 4** summarizes transit ridership by route.

**Table 4: Transit Ridership by Route (FY 2015)**

| Route | Annual Total | Average Weekday |
|---|---|---|
| 60 | 534,424 | 1,695 |
| 67 | 139,339 | 490 |
| 68 | 105,410 | 328 |
| 73 | 123,087 | 450 |
| 76 | 144,754 | 497 |
| 777/888* | 668,486 | 1,887 |
| **Beach** | 158,297 | 528 |
| **Coastal** | 49,420 | 165 |

* Jolley Trolley Beach Trolley

## Traffic

The three primary east-west facilities within the study area are described below:

- SR 60 (Gulf to Bay Boulevard): This facility is primarily a six-lane divided arterial with a posted speed limit of 40 miles per hour (mph). SR 60 accommodates significant travel with annual average daily traffic (AADT) of up to 49,500 vehicles, with up to 2,830 during the afternoon rush hour in the peak direction. This facility operates at an acceptable peak hour level of service (LOS) D or better for a majority of the corridor through Pinellas County. The exception is the segment between Highland Avenue and Martin Luther King Jr Avenue, which operates at LOS F in the PM peak hour.

> ***Level of Service*** *indicates the amount of delay drivers experience along a roadway, not how "good" or "bad" a road is; the grades are not akin to school grades. The majority of the roadway facilities within the study area operate at an acceptable LOS (B through D).*

- Drew Street: This facility is primarily a four-lane arterial with a posted speed limit of 40 mph. On average, Drew Street carries about 28,760 vehicles each day, with up to 1,870 during the afternoon rush hour in the peak direction. This facility operates at an acceptable peak hour LOS of D or better.

[2] PSTA Facts & Figures. 2016. www.psta.net/history.php

[3] FY 2016-2025 Transit Development Plan Major Update: Implementing the Community Bus Plan. December 2015.

- Druid Road: This facility is primarily a two-lane collector with a posted speed limit of 30 mph. Druid Road carries an average of 6,155 vehicles each day, with up to 322 vehicles during the afternoon rush hour in the peak direction. Currently, this facility is operating at an acceptable peak hour LOS of D or better.

Six facilities within the study area operate at an over-capacity LOS E/F:

- Court Street (from Gulf to Bay Boulevard to Martin Luther King Jr Avenue)
- Courtney Campbell Causeway (from the Hillsborough Co. Line to Bayshore Drive)
- Memorial Causeway (from the Clearwater Beach Roundabout to Island Way)
- Fort Harrison Avenue (from Belleair Road to Drew Street)
- McMullen Booth Road (from Gulf to Bay Boulevard to Main Street)
- Drew Street (from NE Coachman Road to US 19)

The LOS for roads within the project study area is displayed in **Figure 8**.

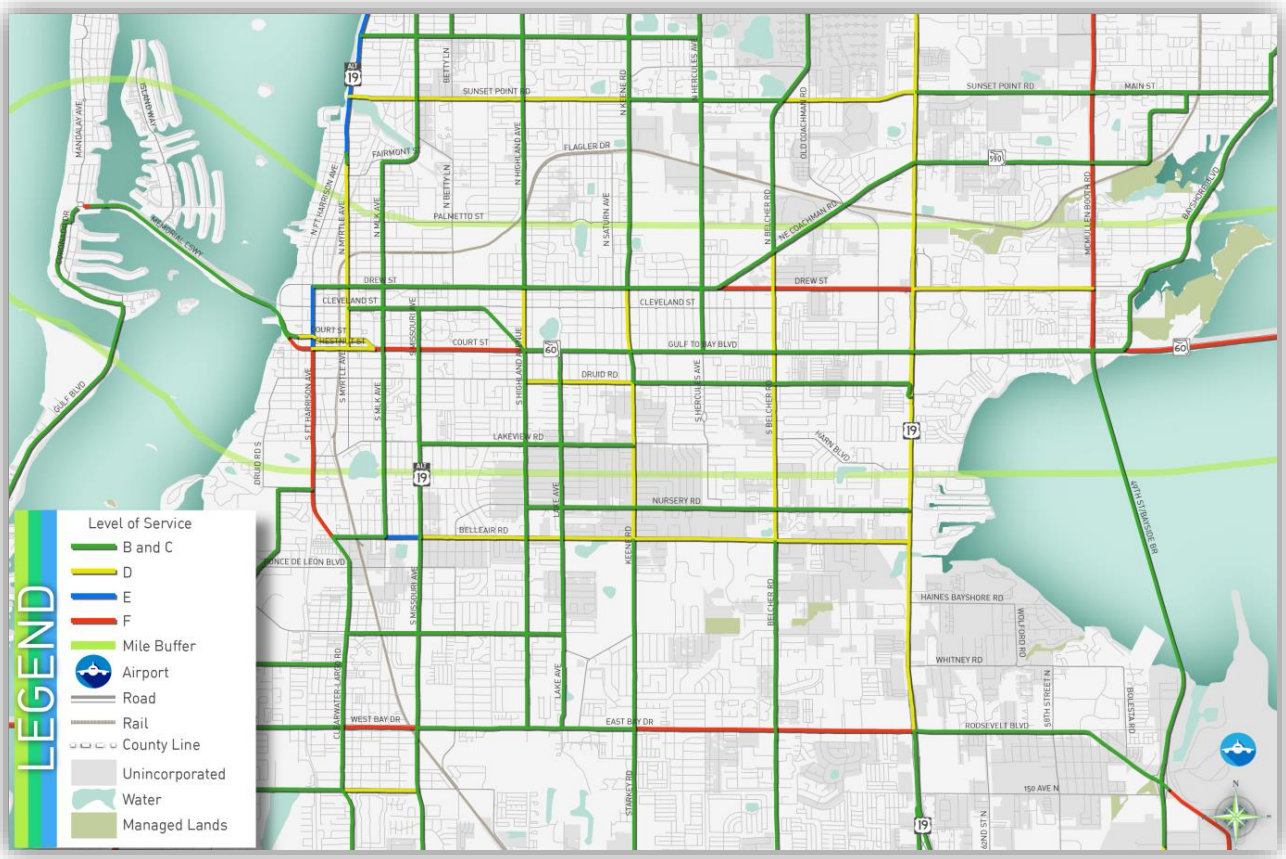



**Figure 8: Study Area Roadway Level of Service**

***Creating a Safe and Equitable Bicycling Network***

*The study area is home to a diverse population in terms of age, income, and race. A recent NACTO report looked at the relationship between building bike lanes and equitable bike safety in seven large US cities. The report found that municipal policies that encourage cycling make it safer for everyone on a bike as well as:*

- ***Riding a bike is getting safer as cities build better bike lane networks.*** *In five of the seven U.S. cities NACTO surveyed, the absolute number of bicyclists killed or severely injured declined from 2007 to 2014, even as bike ridership rates increased. Additionally, even in the cities where the absolute number of bicyclists killed or severely injured increased over the time period, that rate is rising at a slower pace than the increase in bicycling itself. This decline in risk comes at the same time as bike ridership rates in the cities surveyed have more than doubled. All seven cities have invested in high-comfort bike facilities.*
- ***Gains in bike safety are especially important for low-income riders and riders of color.*** *49 percent of the people who bike to work earn less than $25,000 per year, and Black and Hispanic bicyclists have a fatality rate 30 percent and 23 percent higher than white bicyclists, respectively. Building extensive protected bike lane networks benefits those who are most at risk.*
- ***More people ride when cities build protected bike lanes.*** *Studies from cities across North America show that adding protected bike lanes significantly increases bike ridership on those streets, with rates ranging from 21 percent to 171 percent.*
- ***Most people are "interested but concerned" about biking and would bike with higher-comfort facilities.*** *60 percent of the total population are "interested but concerned" about biking. Of those, 80 percent would be willing to ride on streets with a separated or protected bike lane. In particular, recent national research suggests that people of color are more likely than white Americans to say that adding protected bike lanes would make them ride more.*

# Chapter 3: Land Use

The transportation network's relationship with the surrounding land uses is critical to understanding future potential for infrastructure opportunities and economic development. This study aims to improve the multimodal links to various types of land uses in the study area in order to enhance mobility, safety, and promote economic stability and growth. As a result, the entire study area's land use and street frontage characters were analyzed to determine where Complete Streets investments might have the biggest positive impacts. In addition, the long range vision as well as the economic growth and redevelopment potential throughout the corridor have been analyzed and are included in **Appendix B**.

## Corridor Characteristics

The corridors highlighted in this study vary greatly in character and use. Some of the corridors function primarily as collector roads and are residential in character while others are almost entirely comprised of retail and office buildings. As part of the study's focus, special attention was paid to the roadway frontage of the defined corridor segments. Using geographic data and available image databases, the roadway character along these corridors was examined and compiled to describe the frontage character of these segments. The roadway segment groupings below are based on the Facility and Land Use Character Map (**Figure 9**).

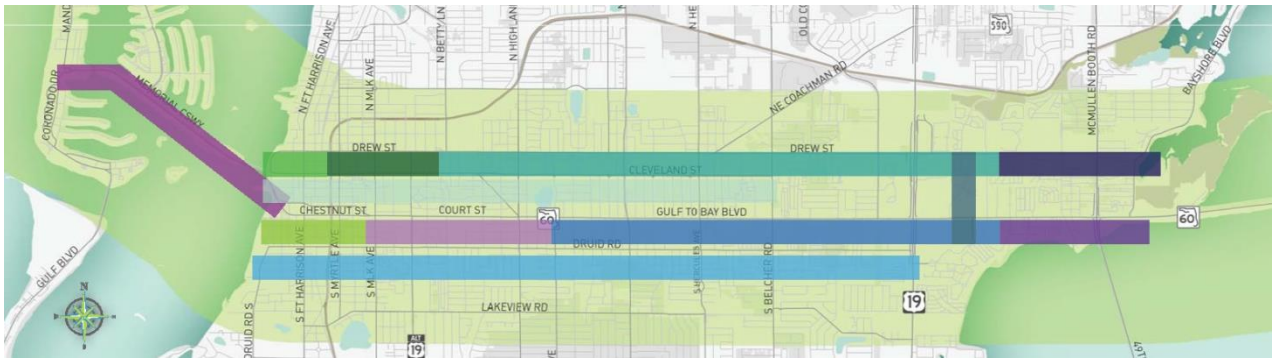


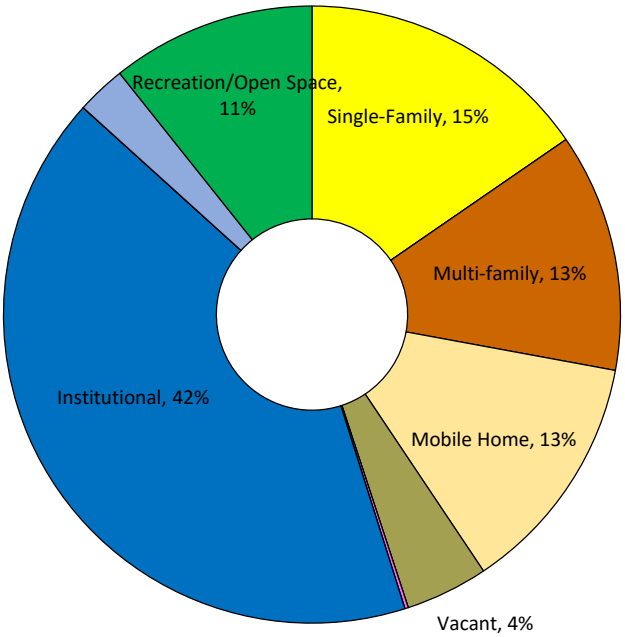

**Figure 9: Facility and Land Use Character Segments**

## Drew Street

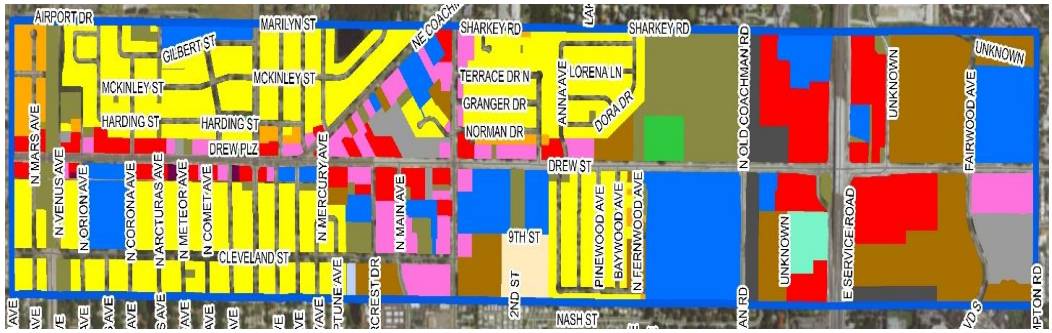
### McMullen Booth Road to Hampton Road

Drew Street from McMullen Booth to Hampton Road is classified as a minor arterial with a posted speed of 45 mph. In this section of Drew Street, the sidewalk runs along the edge of the road with no buffer between passing vehicles and pedestrians. Buildings in this section do not interact with pedestrians and are oriented towards their corresponding parking lots. On the opposite side of the road, public parks are set back from the road and separated by a large parking lot. Currently, the dominant land uses are Institutional (42 percent) and Single-Family (15 percent). Some of the current uses are Calvary Christian High School and BayCare Health System's 40-acre headquarters.


**Drew Street: Bayshore to Hampton**

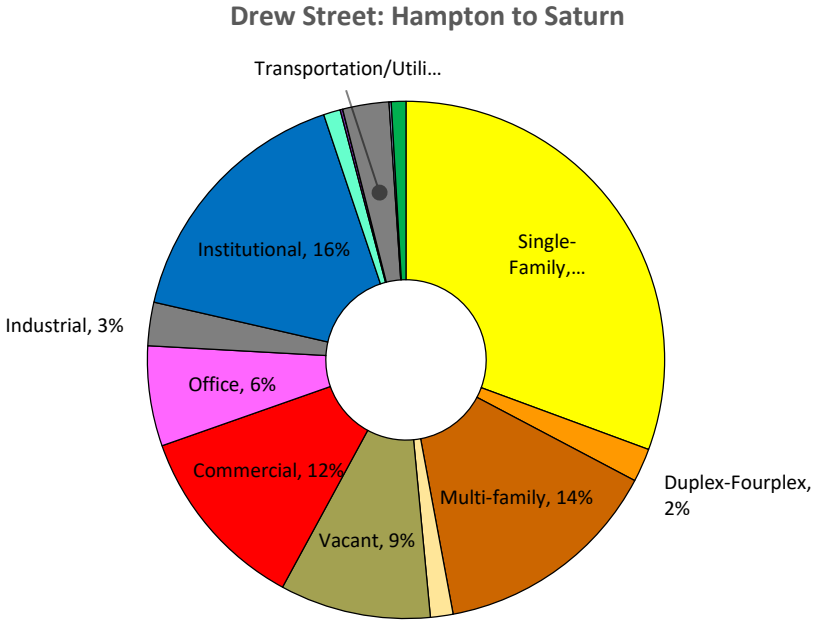


## Hampton Road to Saturn Avenue




Drew Street from Hampton Road to Saturn Avenue is classified as a minor arterial with a posted speed of 45 mph. The eastern end of this section maintains the same characteristics found in the previous section. All retail, office, and residential uses found in this section are oriented away from the road and interact very little with the surrounding uses as well as pedestrians and bicyclists. Many of the buildings have their own large dedicated parking lots. Sidewalks run along the road edge and do not offer any buffer between passing vehicles and pedestrians.

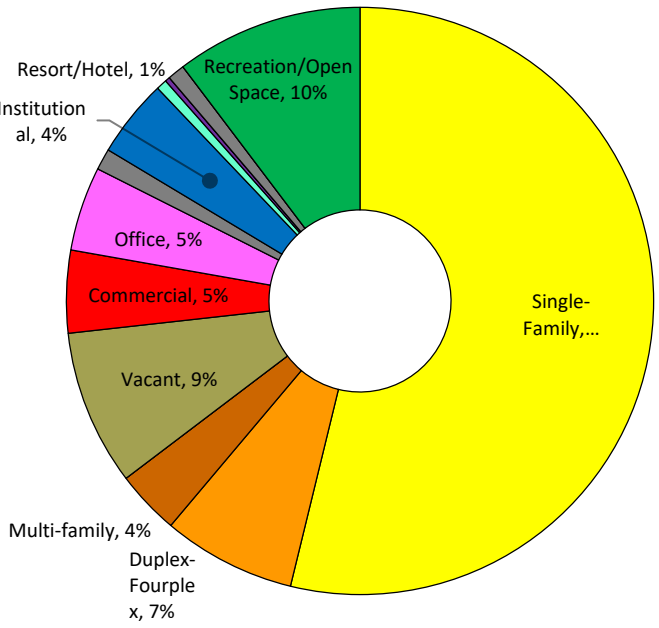
The western end of this section is primarily residential in character with single family homes fronting the road. The houses are entered and exited through the driveways which cut across the sidewalk in several places. The narrow sidewalks and constant disruption from driveways creates a difficult and dangerous path for pedestrians and cyclists. A small curb and grass strip provide minimal buffer between vehicles between the travel lane and sidewalk. Currently, the dominant land uses are residential (48 percent), Institutional (16 percent), and Commercial (12 percent). Some of the current uses in this section are St. Pete College Clearwater campus, City of Clearwater Joe DiMaggio Sports Complex, and Eastwood Terrace single-family subdivision.



Saturn Avenue to Myrtle Avenue

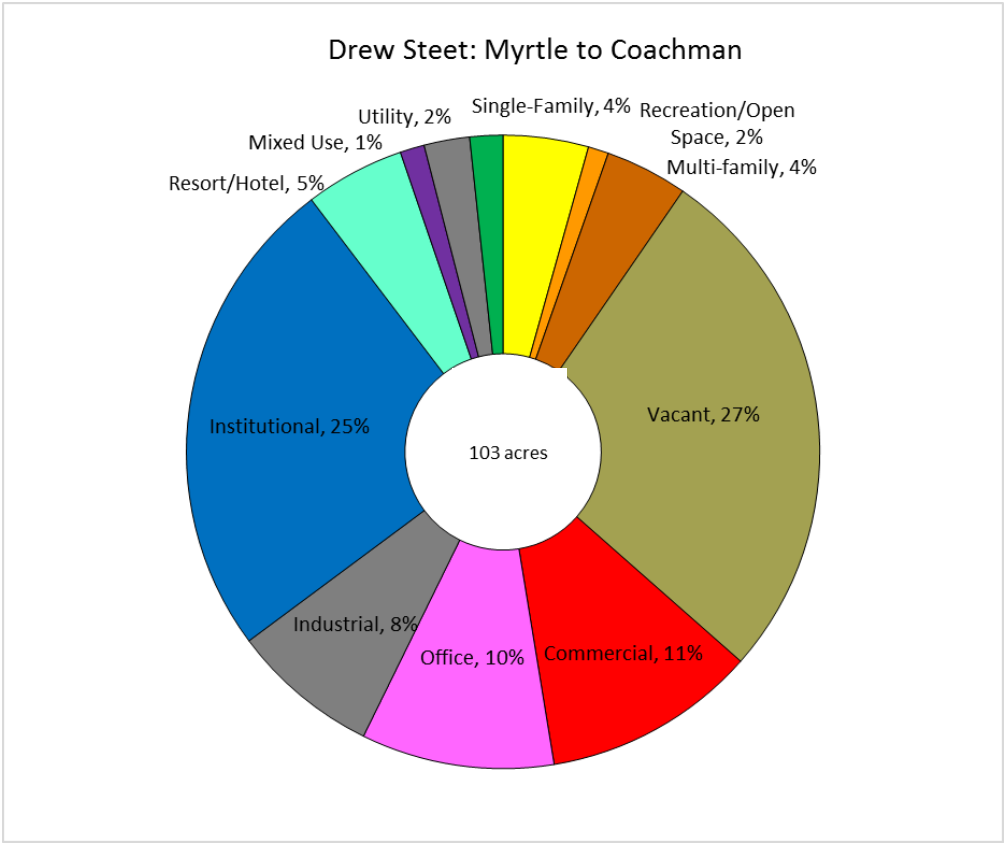

Drew Street from Saturn Avenue to Myrtle Avenue is classified as a minor arterial with a posted speed of 40 mph. After crossing Keene Road, the street frontage characteristics change from primarily office and retail uses to mainly residential. Along this stretch of the corridor buildings and homes are oriented towards the road and are no longer separated by parking lots and driveways. Parking lots are found either situated between buildings or on the backsides of businesses providing a more pedestrian-friendly environment. Currently, the dominant land uses are Residential (65 percent), and Recreation/Open Space (10 percent). Some of the current uses in this section are Clearwater Country Club, Skycrest Neighborhood, and Country Club Estates.

**Drew Street: Saturn to Myrtle**



Myrtle Avenue to Coachman Park


Drew Street from Myrtle Avenue to North Osceola Avenue is classified as a minor arterial with a posted speed of 30 mph. From Myrtle Avenue, Drew Street traverses through the north end of Downtown Clearwater and ends at Coachman Park. The east end near Myrtle Avenue is characterized by several warehouses, large tracts of vacant land, and offices. In this area, there are sidewalks separated from the travel lanes by on-street parking which provides a buffer when cars are parked. There are several pedestrian crosswalks that provide a striped and contrasted walking lane to raise awareness of the pedestrian crossing. Currently, the dominant land uses are Vacant (27 percent), Institutional (25 percent), and Commercial (11 percent). Some of the current uses in this section are the Church of Scientology hotels, the City of Clearwater Public Library, and Coachman Park.

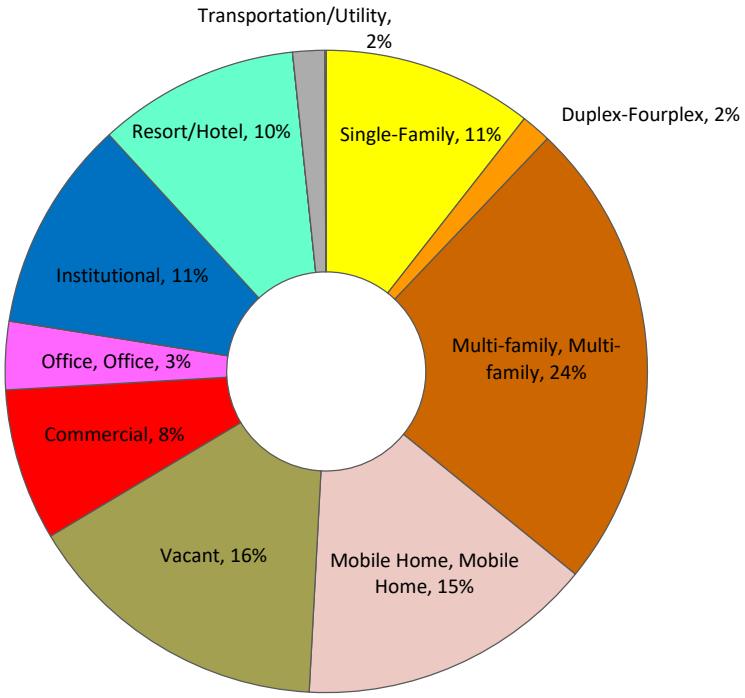


## SR 60

### Courtney Campbell Causeway to Hampton Road


SR 60 from the Courtney Campbell Causeway to Hampton Road is classified as a major arterial with a posted speed of 45 mph. The street frontage in this section is an extreme example of a poor pedestrian environment. Landscaping spills onto the existing sidewalk and office building entrances do not face the roadway. Furthermore, obstructions like signs, utilities, and light posts, between the sidewalk and the buildings make it difficult for pedestrians to enter the site without using the driveway in conflict with vehicles. There are narrow sidewalks close to the roadway and very few trees. Currently, the dominant land uses are Multi-family (24 percent), Vacant (16 percent), and Mobile Home (15 percent). Some of the current uses in this section are the Solaris Key Apartments, Grande Bay Apartments, and a mobile home park.

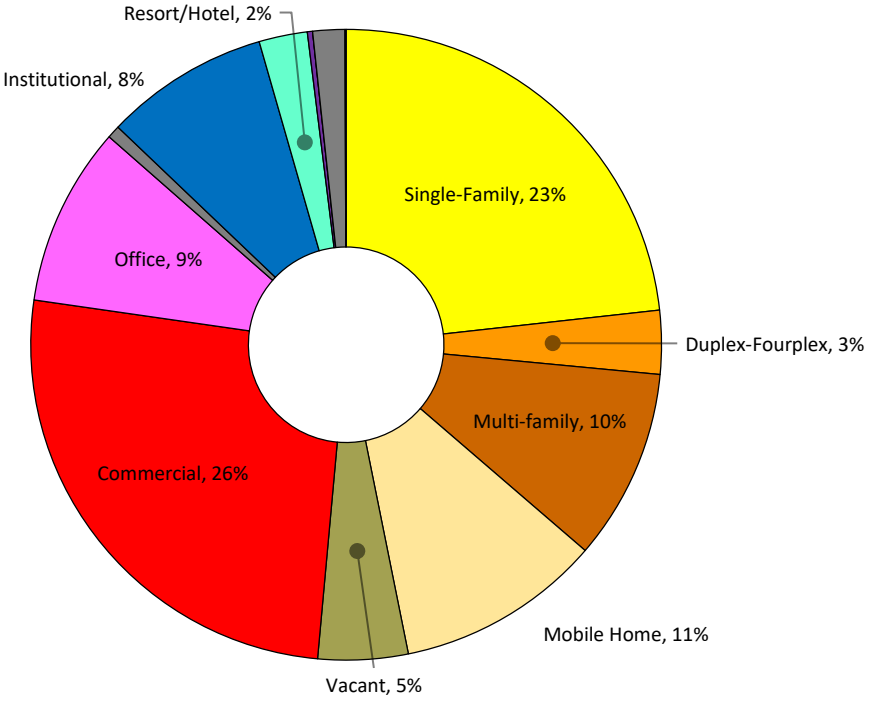
**SR 60: Causeway to Hampton Rd**



Hampton Road to Lake Drive

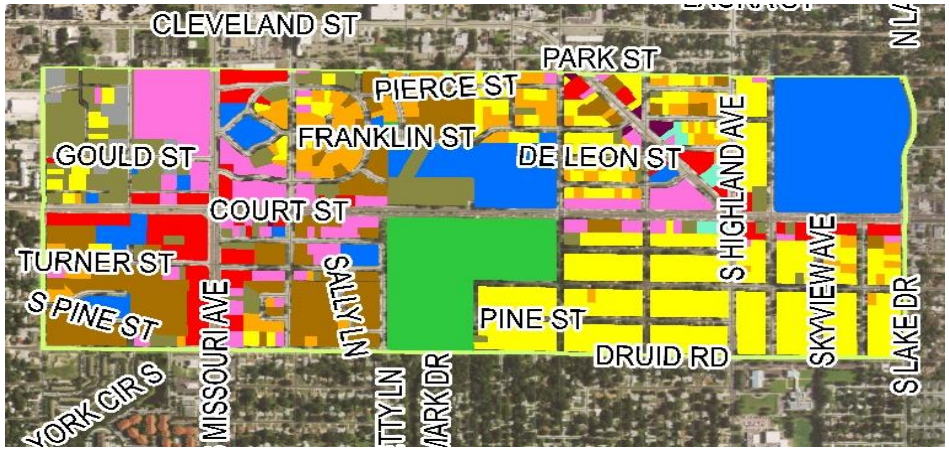
SR 60 from Hampton Road to Lake Drive is classified as a major arterial with a posted speed of 45 mph. The street frontage is characterized as primarily commercial with large surface parking areas and wide driveways, making for unsafe pedestrian conditions. Furthermore, single-family homes and mobile homes are located behind the commercial uses. Currently, the dominant land uses are Commercial (26 percent), Single-family (23 percent), and Mobile Home (11 percent). Some of the current uses in this section are the Clearwater Mall, Clearwater High School, and the Park Place office complex.


**SR 60: Hampton Rd to Lake Dr**

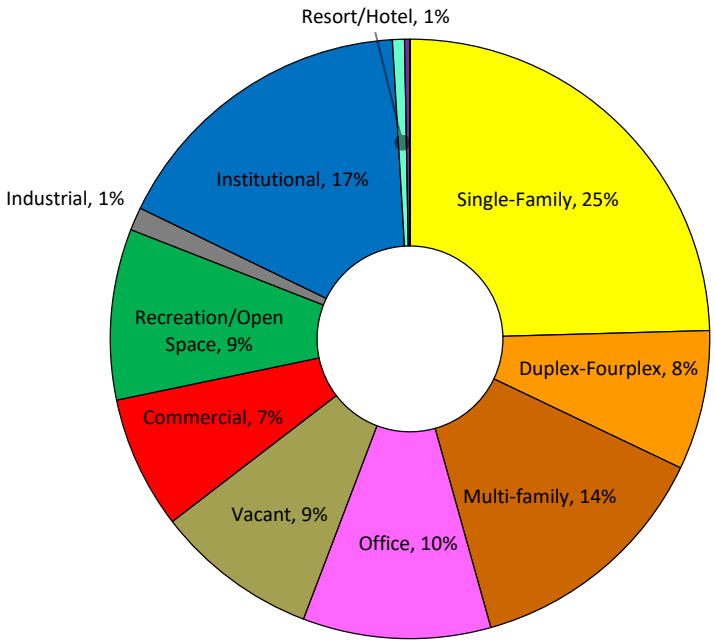


Lake Drive to MLK Jr. Avenue

SR 60 from Lake Drive to Martin Luther King, Jr Avenue is classified as a major arterial with a posted speed of 30 mph. The street frontage is characterized primarily by strip commercial and small offices. Many of the buildings are fronted with small row of parking and there are often no curbs or grass strips to act as barriers between pedestrians and traffic. Many non-retail buildings along this section are oriented away from SR 60 and are devoid of landscaping and pedestrian refuge. Currently, the dominant land uses are Single-family (25 percent), and Institutional (17 percent). Some of the current uses in this section are Glen Oaks Park, Crest Lake Park, and the Gateway Neighborhood.

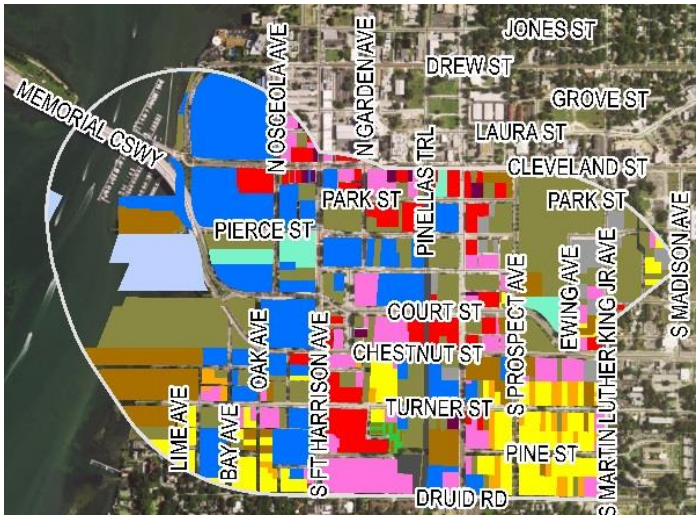



**SR 60: Lake Dr to MLK**

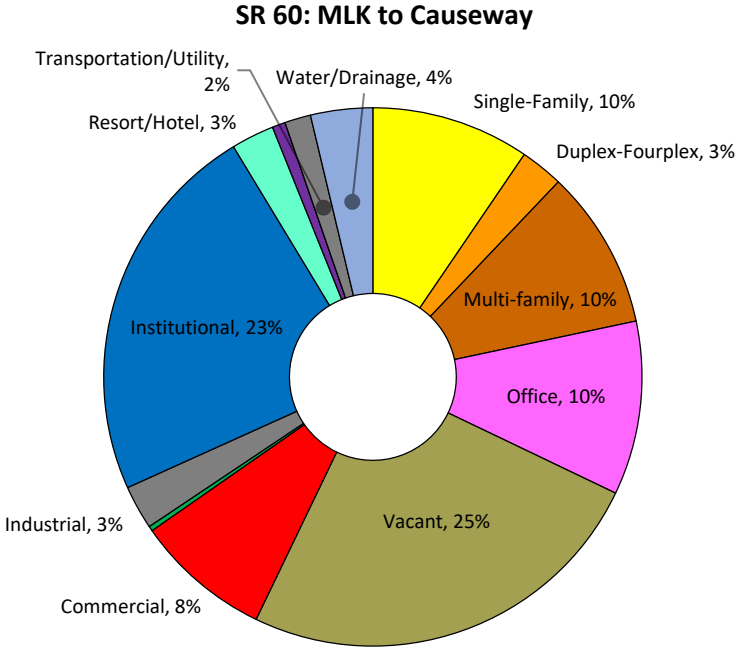


MLK Jr. Avenue to Memorial Causeway

SR 60 from Martin Luther King, Jr Avenue to Memorial Causeway is a major arterial with a posted speed of 30 mph. This section is highly urbanized with very little residential use. While the parking in this section becomes more scarce, the orientation of the buildings and the interactions between the building frontages and the roadway are much the same. Many of the businesses either contain parking in the front of the building or on the side, and the entry ways are oriented towards the parking lots.



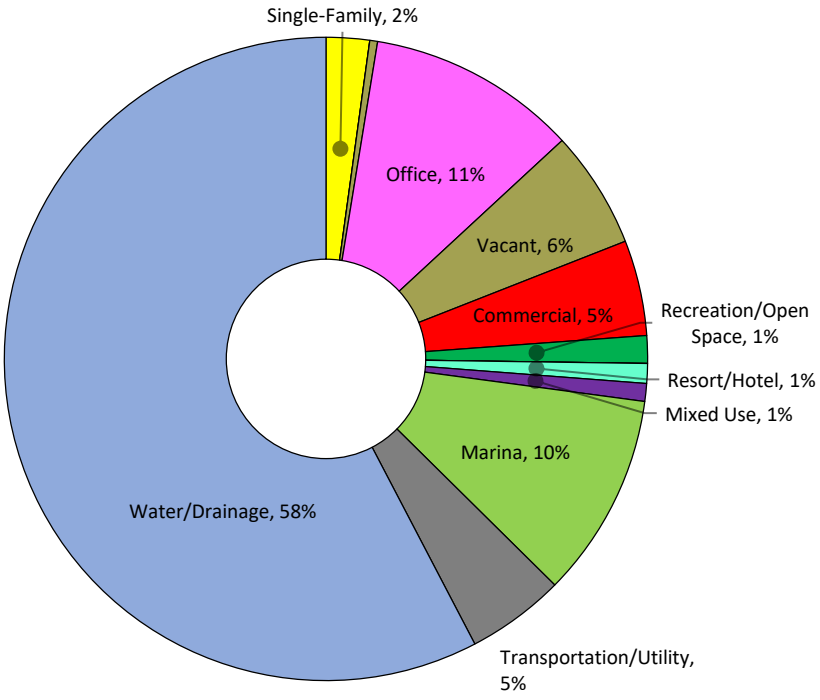

The road frontage character is very inconsistent between uses and design. Some businesses may front the road separated by a row of parking, others are oriented away from the road to a large parking lot either to the side of or behind the building. There is also a great variance in the sidewalk character and the roadway buffers offered. The frontage in this section also lacks any landscaping or tree coverage to shade pedestrians. Currently, the dominant land uses are Vacant (25 percent) and Institutional (23 percent). Some of the current uses in this section are The Church of Scientology headquarters and the Pinellas County Courthouse.



Memorial Causeway to Beach

SR 60 from the Memorial Causeway to Clearwater Beach is classified as a major arterial with a posted speed of 45 mph. This portion is characterized by a bridge from Downtown Clearwater to Clearwater Beach. It offers views of Coachman Park, marinas, and the bay. It is characterized by a linear park, marinas, and a multi-use path. Currently, the dominant land uses are Water (58 percent), and Office (11 percent). Some of the current uses in this section are the Clearwater Marine Aquarium and Clearwater Beach.


**SR 60: Causeway to Beach**

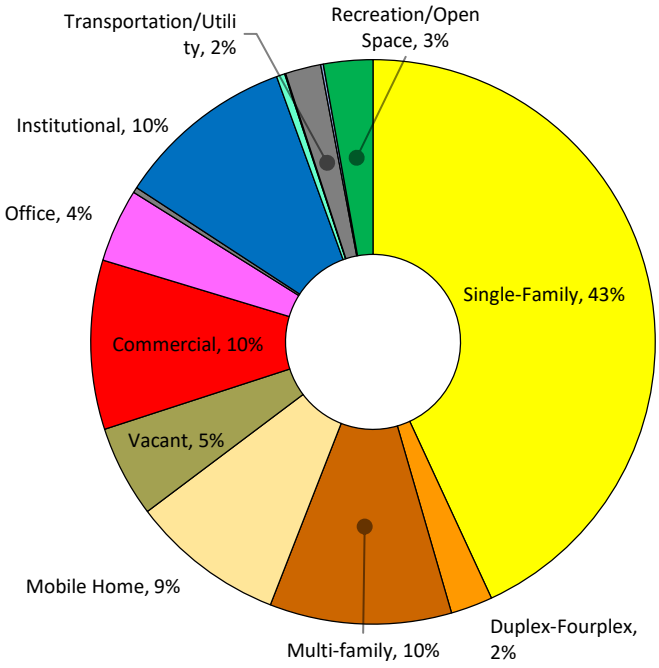


## Druid Road

### US 19 to Orange Avenue

Druid Road from US 19 to Orange Avenue is classified as a collector with a posted speed of 30 mph. The Druid Road corridor is primarily residential in character from US 19 to Missouri Avenue with a mix of mobile home parks, single-family houses, and multi-family complexes. Along this stretch of the corridor, individual lots are set back from the street. Narrow sidewalks, separated from the street by a grassy buffer, link single-family homes together and offer pedestrians a pathway along the neighborhood. However, sidewalks along this portion of Druid Road are discontinuous and oscillate from one side of the street to the other. Currently, the dominant land uses are Single-family (43 percent), and Multi-family (10 percent). Some of the current uses in this section are Clearwater High School and Glen Oaks Park.


**Druid Road: US 19 to Orange Ave**



# Chapter 4: Multimodal Network & Gap Analysis

## Multimodal Network

The following section describes the inventory for the existing multimodal transportation network within the SR 60 corridor study area. The multimodal network includes the existing sidewalk, bicycle, and multi-use trail network.

### Existing Sidewalk Network

Virtually all the roads within the study area have sidewalk coverage, including the major north-south intersecting roads. More than 70 percent of the roads have sidewalks on at least one side of the street for a total approximate mileage of 203 miles of sidewalks. Nearly all of the major thoroughfares have sidewalks on both sides of the street with the exception of Druid Road which has sidewalks predominantly on one side.

### Existing Bicycle Network

For this effort, the bicycle network consists of all paved and striped bicycle lanes as well as paved shoulders. It should be noted that although paved shoulders were considered, they are not considered a best practice for bicycle facilities. Less than seven percent of the roads in the study area have bicycle lanes, totaling approximately 19 miles.

### Existing Multi-Use Trail Network

In addition to the sidewalk and bicycle network, the study area includes several multi-use trail facilities. They are listed and described in the following:

- Bayshore Trail: This facility is nearly one mile, all of which is within the study area. The Trail extends north-south along Bayshore Boulevard from the Ream Wilson Trail at Del Oro Park to the Courtney Campbell Causeway.
- Clearwater Beach/Memorial Causeway Path: This facility is approximately three miles long, all of which are within the study area. The path connects Clearwater Beach to Downtown Clearwater. It runs north-south along Gulfview Boulevard from the Roundabout to south of 5th Street in Clearwater Beach, and east-west on SR 60/Memorial Causeway from the Fred Marquis Pinellas Trail across Mandalay Channel and Clearwater Bay to the Clearwater Beach Roundabout.
- Courtney Campbell Recreation Trail: This facility stretches east-west more than nine miles across Old Tampa Bay. Entirely within the study area, it is an eight-foot-wide paved trail on the south side

of SR 60/Courtney Campbell Causeway with an eastern endpoint at the Veterans Expressway in Hillsborough County and a western endpoint at Bayshore Boulevard in Pinellas County.

- Duke Energy Trail: This facility is a part of the paved Pinellas Trail Loop, which when completed will be a 75-mile trail connecting St. Petersburg in south Pinellas County on the west side of the county to Lake Tarpon in north Pinellas County and back to St. Petersburg on the east side of the county. The Duke Energy Trail currently extends for approximately 2.5 miles from Spectrum Field to Belleair Road; approximately two miles are within the study area.
- Fred Marquis Pinellas Trail: This facility is a part of the Pinellas Trail Loop. Named after a former Pinellas County Administrator, the Fred Marquis Pinellas Trail is approximately 45 miles long; approximately 2.5 miles are within the study area. The Trail stretches north-south along the west side of Pinellas County from Lake Tarpon to St. Petersburg. It passes through Gulfport, South Pasadena, Seminole, Largo, Clearwater, Dunedin, Palm Harbor, and Tarpon Springs.
- Ream Wilson Clearwater Trail: This facility is approximately four miles, of which approximately two miles are within the study area. It runs east-west from Del Oro Park to Coachman Ridge Park, and north-south from Veterans Memorial Lane in Safety Harbor to Del Oro Park.

Overall, there are nearly 20 miles of multi-use trails located within the study area.

## Gap Analysis

In order to ensure network connectivity, a gap analysis was completed throughout the SR 60 corridor. Using Geographic Information Systems (GIS), the existing bicycle network was identified and overlaid with the multimodal projects that are proposed in Forward Pinellas's 2040 Long Range Transportation Plan. Once the existing and proposed networks were mapped, any remaining gaps in the network were identified. The identified network gaps were then combined with the proposed projects to form the overall multimodal list of projects for this study.

Based on the analysis, a majority of the gaps are related to a need for bicycle facilities. In general, the sidewalk coverage is good for pedestrians, but there are opportunities for enhancements. Transit coverage is good for local service, but there is no direct, express service through the corridor. The network gaps are categorized as follows:

- Bicycle Accommodations: Improvements that could include dedicated bicycle lanes, pavement markings, and similar types of projects on one or both sides of the road
- Multi-use Accommodations: Shared-use paths for non-motorized travel that may include bicyclists, walkers, skaters, and people with disabilities.

- Premium Express Transit: Express bus service to provide faster service with limited stops and signal priority

The existing and proposed bicycle and pedestrian network as well as the identified multimodal network gaps are graphically depicted in **Figure 10**.

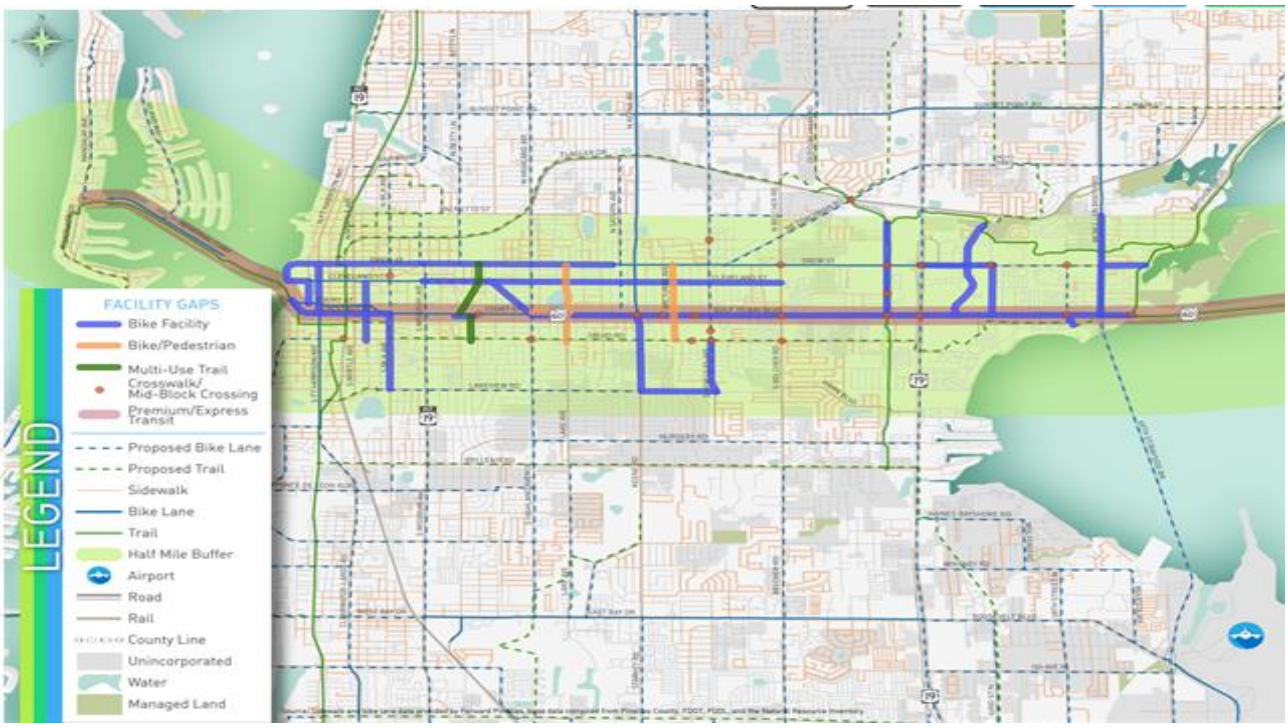



**Figure 10. Existing & Proposed Multimodal Facilities and Network Gaps**

The full list of network gaps identified in the analysis is summarized in **Tables 5** and **6**.

### Table 5: East-West Corridor Network Gaps

| Facility | From | To | Network Gap |
|---|---|---|---|
| **Clearwater Beach Connector Trail** | Pinellas Trail | MLK | Multi-use Accommodations |
| **Clearwater Beach Trail** | South of 5th Street | South of Sand Key Park Entrance | Multi-use Accommodations |
| **Cleveland Street** | Keene Road | Gulf to Bay Boulevard | Bicycle Accommodations |
| **Cleveland Street** | Belcher Road | Keene Road | Bicycle Accommodations |
| **Cleveland Street** | Hillcrest Avenue | Belcher Road | Bicycle Accommodations |
| **Courtney Campbell Connection** | Bypass Drive | Bayshore Boulevard | Multi-use Accommodations |
| **Drew Street** | North Myrtle Avenue | Saturn Avenue | Multi-use Accommodations |
| **Drew Street** | Betty Lane | Highland Avenue | Multi-use Accommodations |
| **Drew Street** | Myrtle Avenue | N Osceola Ave | Bicycle Accommodations |
| **Drew Street** | Madison Place Boulevard | McMullen Booth Road | Bicycle Accommodations |
| **Drew Street** | McMullen Booth Road | Bayshore Boulevard | Bicycle Accommodations |
| **Druid Road** | US 19 | Bypass Drive | Multi-use Accommodations |
| **Druid Road** | Orange Avenue | US 19 | Bicycle Accommodations |
| **Druid Road South** | Jeffords Street | Belleview Boulevard | Bicycle Accommodations |
| **Druid Road Southwest** | South Fort Harrison Avenue | Jeffords Street | Bicycle Accommodations |
| **Gulf to Bay Boulevard** | Court Street | Cleveland Street | Bicycle Accommodations |
| **Lakeview Road** | South Keene Road | West of S Dr. Martin Luther King Jr. Avenue | Bicycle Accommodations |
| **Lakeview Road** | South Hercules Avenue | South Keene Road | Bicycle Accommodations |
| **Landmark Trail** | Curlew Road | Fairwood Avenue | Multi-use Accommodations |
| **NE Cleveland Street** | Gulf to Bay Boulevard | Missouri Avenue | Bicycle Accommodations |
| **North Greenwood Loop** | Pinellas Trail | Pinellas Trail | Multi-use Accommodations |
| **Ream Wilson Clearwater Trail** | Pinellas Trail | Ream Wilson Trail | Multi-use Accommodations |
| **SR 60/Chestnut Street** | Bay Avenue (Court Street) | Martin Luther King Jr. Avenue | Bicycle Accommodations |
| **SR 60/Gulf to Bay Boulevard** | US 19 | Highland Avenue | Multi-use Accommodations |
| **SR 60/Gulf to Bay Boulevard** | McMullen Booth Road | Hampton Road | Multi-use Accommodations |
| **SR 60/Gulf to Bay Boulevard** | Stevenson Creek | Entrance to Saint Ceceila Catholic School | Bicycle Accommodations |
| **SR 60/Gulf to Bay Boulevard** | Highlands Avenue | South Lake Drive | Multi-use Accommodations |

### Table 6: North-South Network Gaps

| Facility | From | To | Network Gap |
|---|---|---|---|
| **Arcturas Avenue** | Drew Street | Druid Road | Bicycle Accommodations |
| **Bayview Avenue** | Drew Street | SR 60/Gulf to Bay Boulevard | Bicycle Accommodations |
| **Bayview Avenue** | SR 60/Gulf to Bay Boulevard | CR 31 | Bicycle Accommodations |
| **Clearwater Beach Trail** | South of 5th Street | South of Sand Key Park Entrance | Multi-use Accommodations |
| **Duke Energy Trail** | Sharkey Road | Ream Wilson Trail | Multi-use Accommodations |
| **Fairwood Avenue/Park Place Blvd** | Drew Street | Ream Wilson Trail | Bicycle Accommodations |
| **Hampton Road** | SR 60/Gulf to Bay Boulevard | Drew Street | Bicycle Accommodations |
| **Hercules Avenue** | Druid Road | Drew Street | Bicycle Accommodations |
| **Highland Avenue** | Druid Road | Drew Street | Bicycle Accommodations |
| **Island Way** | Memorial Causeway | Terminus | Bicycle Accommodations |
| **Landmark Trail** | Curlew Road | Fairwood Avenue | Multi-use Accommodations |
| **Martin Luther King Jr Avenue** | Court Street | Fairmont Street | Bicycle Accommodations |
| **Martin Luther King Jr. Avenue** | Court Street | Lakeview Road | Bicycle Accommodations |
| **Missouri Avenue** | Belleair Road | Drew Street | Bicycle Accommodations |
| **North Betty Lane** | Drew Street | Union Street | Bicycle Accommodations |
| **North Lake Avenue** | Drew Street | Druid Road | Multi-use Accommodations |
| **Park Place Boulevard** | SR 60/Gulf to Bay Boulevard | Drew Street | Bicycle Accommodations |
| **Ross Norton Connection** | Pinellas Trail | Lake Bellevue | Multi-use Accommodations |
| **Saturn Avenue** | Flagler Drive | Gulf to Bay Boulevard | Bicycle Accommodations |
| **South Keene Road** | SR 60/Gulf to Bay Boulevard | Lakeview Road | Bicycle Accommodations |
| **South Prospect Avenue** | Druid Road | Cleveland Street | Bicycle Accommodations |

# Chapter 5: Complete Streets Implementation Strategies

With the gaps identified, a multimodal toolbox of implementation strategies to fill those gaps could then be devised. To create a more balanced approach to transportation, a Complete Streets approach to implementation was used. This approach can lead to safe, convenient, and comfortable travel and access for all users of all ages and abilities regardless of their mode of choice. Complete Streets strategies, or design options, also help create places with personality, which then have a positive impact on economic development. The design options are described and illustrated on the following pages and are organized by mode or project type.

The study also identified the need for enhanced crossings at a number of intersections in the study area. Those enhancements can include better pavement markings, greater separation for pedestrians from vehicles, and even mid-block crossings where the pedestrian traffic and safety demands it.

**Figure 11** illustrates a conceptual enhanced crossing. These intersections will need to be studied individually and in greater detail to determine which enhancements are feasible and most effective.


**Figure 11: Enhanced crossing concept**

## AUTOMOBILE DESIGN OPTIONS

**ROAD DIETS** reduce the number of auto travel lanes or width of the road to allow space for additional travel modes. This strategy often includes adding bike lanes and/or sidewalks and improves the bicycle and pedestrian environment.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★★

**LANE NARROWING** reduces auto travel lanes by re-striping the road to allow space for additional travel modes. Lane narrowing helps in reducing auto speeds. This strategy often includes adding bike lanes and/or sidewalks and improves the bicycle and pedestrian environment.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**SPEED HUMPS/SPEED TABLES** are raised areas placed across auto travel lanes that are designed to reduce vehicle speeds.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★☆☆

## STORMWATER MANAGEMENT AND LANDSCAPING

**BIOSWALES** are shallow, landscaped depressions designed to capture, treat, and filter stormwater runoff. Bioswales are the most effective type of green infrastructure for slowing runoff, cleansing water, and recharging the water table. They can easily be integrated with medians, culdesacs, bulb outs, and other public space or traffic calming strategies.

MOBILITY NA SAFETY NA LAND USE NA

**FLOW THROUGH PLANTERS** are hard-edged stormwater management facilities with a permeable base. Appropriate for impervious surfaces or high-density urban areas, flow-through planters treat water by allowing runoff to soak through its soil matrix and filter into an underdrain system.

MOBILITY NA SAFETY NA LAND USE NA

**PERVIOUS PAVEMENT** effectively treats, detains, and infiltrates stormwater runoff where landscape-based strategies are restricted or less desired. Pervious pavements have multiple applications, including sidewalks, street furniture zones, and entire roadways.

MOBILITY NA SAFETY NA LAND USE NA

**PERVIOUS STRIPS** are long, linear landscaped areas or linear areas of pervious pavement that capture and slow runoff. Pervious strips are an inexpensive initial step in urban stormwater management.

MOBILITY NA SAFETY NA LAND USE NA

**DECORATIVE VEGETATION** helps create an enjoyable experience for bikers, walkers, and other users. Native plants are recommended as they add beauty and require little long-term maintenance if planted properly. Their longer root systems help reduce erosion and protect water quality.

MOBILITY NA SAFETY NA LAND USE NA

Photo Credits: (top to bottom) City of Charlotte/Flickr (2), Dan Burden/pedbikeimages.org, Travis Estall/Flickr, Philadelphia Water Department/Flickr Dan Burden/Flickr (3); Car and plant graphic design by Freepik

## BICYCLE DESIGN OPTIONS

**BIKE LANES** are dedicated for use by bicycles only. Lanes are typically 4 to 5 feet wide and are marked by a bicycle icon and/or sign. A bike lane in each direction is preferred along two-way streets. Updated guidance from FDOT is expected in April 2017.

MOBILITY ★★☆ SAFETY ★☆☆ LAND USE ★★☆

**CYCLE TRACKS** are protected bicycle lanes that physically separate motor vehicles from bicycle traffic by a physical barrier; e.g., bollards, planters, or concrete barrier. The barrier allows bicyclists to travel in a dedicated space. Protected bike lanes can be one-way or two-way.

MOBILITY ★★☆ SAFETY ★★☆ LAND USE ★★★

**BUFFERED BIKE LANES** are similar to conventional bike lanes but are paired with a designated painted buffer space that further separates bicycles from motor vehicle traffic. National design guidance recommmends that the buffer be at least 18 inches wide.

MOBILITY ★★☆ SAFETY ★★☆ LAND USE ★★☆

**SHARED USE PATHS** are typically used by bicyclists, walkers, and other non-motorized users. When next to the road, they are often called "sidepaths," which look and function like a wide sidewalk. Sidepaths are a good option for high-speed, high-volume corridors with wider block spacing. Shared-use paths should be at least 8 feet wide with widths of 12 to 14 feet preferred.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**CONTRA-FLOW BIKE LANES** are located on one-way streets, in the opposite direction from car traffic, with a yellow center line stripe. They typically allow cyclists to avoid long detours and use streets with fewer cars. Bike lane widths should be 4 to 5 feet wide and accompanied by arrows and signs indicating the direction of flow to warn cars of to their presence.

MOBILITY ★★☆ SAFETY ★★☆ LAND USE ★★☆

**BICYCLE BOULEVARDS** are sometimes referred to as neighborhood greenway or bikeway. They are low volume and low speed local streets that give bicyclists priority while maintaining access to local traffic. Traffic calming devices, signs, and pavement markings typically control traffic speeds and discourage through trips by vehicles.

MOBILITY ★★★ SAFETY ★★☆ LAND USE ★★★

**SHARED-LANE MARKINGS (SHARROWS)** consist of special arrows, or sharrows, and signs placed along the road to indicate to drivers that bicyclists may be on the road and in the travel lane. Sharrows should not be used with posted speed limits higher than 35 miles per hour.

MOBILITY ★★☆ SAFETY ★☆☆ LAND USE ★☆☆

**BICYCLE ROUTE SIGNAGE** should be included to inform bicyclists of the preferred bicycle route and upcoming destinations. Some route signage includes distance in time and miles to the destinations that the bicycle route connects to.

MOBILITY ★★☆ SAFETY ★☆☆ LAND USE ★★★

Photo Credits: (top to bottom) Jacobs (2), Seattle Department of Tansportation/Flickr, Jacobs, Dan Burden/Flickr, Payton Chung/Flickr, Lyubov Zyuova/pedbikeimages.org, District Department of Transportation/ Flickr; Bicycle graphic by Vectorcy

## PEDESTRIAN DESIGN OPTIONS

**SIDEWALKS** are the primary method of access for pedestrians in urban and suburban areas. They are typically constructed of concrete. FDOT requires that sidewalks that do not have a buffer zone be a minimum of 6 feet.

MOBILITY ★★☆ SAFETY ★★☆ LAND USE ★☆☆

**SIGNALIZED CROSSWALKS** for pedestrians at intersections play an important role in safety as they are designed to protect pedestrians from motorized traffic. Signalized crosswalks raise awareness of pedestrians by providing pedestrians a phase in the traffic cycle.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★☆☆

**MIDBLOCK CROSSINGS** are signalized and/or marked crossings providing direct and safe access for pedestrians between intersections.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**BUFFER ZONES** are the area between the road and sidewalk provided for pedestrian safety. This area may include decorative vegetation or stormwater management systems. Typically, Complete Streets standards include a minimum of a 2 feet buffer.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**CURB EXTENSIONS/BULB OUTS**, also referred to as "gateway treatment," are extensions of the curb that are intended to show the transition between the sidewalk area and road. Curb extensions limit pedestrian exposure to vehicle traffic by minimizing the crossing distances.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**REFUGE ISLANDS** are protected areas in the roadway median that reduce crossing distances and provides a safe place for pedestrians to wait for the next signal phase.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**GRADE SEPARATED CROSSINGS** are structures built to provide a pedestrian way across high-speed, high volume roadways by means of either an overpass (bridge) or underpass (tunnel).

MOBILITY ★★★ SAFETY ★★★ LAND USE ★★★

**SIDEWALK FURNITURE** includes benches, garbage cans, and other items that are desirable enhancements for commercial, commuter, neighborhood, and transit spine. Sidewalk furniture also helps give the community a sense of place.

MOBILITY ★★☆ SAFETY ★★☆ LAND USE ★★★

Photo Credits: Curb Extension by Richard Drdul/Flickr, Refuge Island by Michigan Municipal League/Flickr, all others by Jacobs; People graphic by Vectoezy

## TRANSIT DESIGN OPTIONS

**TRANSIT SHELTERS** provide a comfortable covered environment for passengers to gather while waiting to access transit services and have cover from the elements (e.g., sun, rain). Amenities may include seating and real-time travel information.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**BUS BULBS** are curb extensions that align the bus stop with the parking lane, allowing buses to stop and board passengers without leaving the travel lane. Bus bulbs increase transit reliability by eliminating the need for buses to pull out of and back into traffic after dropping off or picking up passengers. They also provide a shorter crossing distance for pedestrians if there is a crosswalk at the same location as the bus stop.

MOBILITY ★★☆ SAFETY ★★★ LAND USE ★★☆

**TRANSIT SIGNALIZATION PRIORITY** gives traffic light signal priority for transit vehicles, which provides travel time savings for passengers by recognizing when a bus is at the intersection and giving the bus a green light.

MOBILITY ★★★ SAFETY ★★☆ LAND USE ★★☆

**DEDICATED BUS LANES** are traffic lanes exclusively used by buses. Bus lanes remove transit vehicles from the normal traffic stream and ensure that buses can move quickly without being impeded by congestion. Dedicated lanes have the most impact in heavily congested areas.

MOBILITY ★★★ SAFETY ★☆☆ LAND USE ★★★

**BUS-BIKE LANES** are shared lanes limited to bus and bicycle traffic. The low traffic volume in these lanes makes them safer for bicyclists, while the dedicated lanes reduce congestion delays for buses, benefiting transit users. The recommended width for these lanes is 16 feet but can be as narrow as 14 feet in areas with lower speeds.

MOBILITY ★★★ SAFETY ★★☆ LAND USE ★★★

**QUEUE JUMP LANES** are used to provide preference to buses at intersections, often found in bus rapid transit systems. It consists of an additional travel lane on the approach to a signalized intersection. This lane is often restricted to transit vehicles only.

MOBILITY ★★★ SAFETY ★☆☆ LAND USE ★★☆

## ADDITIONAL TREATMENTS

**STREET LIGHTING** includes roadway and pedestrian-scale lighting in the public right of way near high pedestrian and bicycle activity locations, conflict areas, transit stops, etc. Lighting illuminates pedestrians, improves their safety and comfort, and enhances security.

MOBILITY ★☆☆ SAFETY ★★★ LAND USE ★☆☆

**PAVEMENT MARKINGS** are special paint materials, surface materials, and/or textures (cobbles, bricks, stamped pavement, color, etc.) that differentiate one part of the road from other parts. They can be used to highlight a pedestrian crossing, whole intersection, or entire street block. Pavement markings can also include instructions for motorists and be used as a tool to address safety issues.

MOBILITY ★☆☆ SAFETY ★★★ LAND USE ★☆☆

Photo Credits: (top to bottom) Jacobs, Dan Burden/pedbikeimages.org, Jacobs (3), Steven Vance/Flickr, Dan Burden/pedbikeimages.org, Shawn Turner/pedbikeimages.org; Graphic design by Freepik and Vecteezy

***Case Study: Orlando's Edgewater Drive***

*This 1.5-mile-long minor arterial has nine signals and 20,000 AADT. The road is near downtown and serves as a Main Street for College Park, a WWII era neighborhood. A new vision for the roadway began in 1999 and had the following objectives:*

- *Village Center Vision*
- *Beautification*
- *Pedestrian Friendly*
- *Bicycle Friendly*
- *Reduce Speeding*

*Orlando agreed to take over maintenance and control of the road from FDOT, and it also committed to test the road diet concepts using temporary tape then analyze the conditions with the public before and after the trial. The following data were tracked for three years prior to implementation and four months following, with positive results.*

- *Crash Rate: 34 percent reduction in crashes. Originally one crash every 2.5 days reduced to one crash every 4.2 days.*
- *Injury Rate: 68 percent reduction in injuries. Originally one injury every nine days reduced to one injury every 30 days.*
- *Speeding Analysis: The speed limit on Edgewater Drive is 30 mph. The percentage of vehicles traveling at more than 36 mph decreased in each segment of the road (see **Figure 12**).*

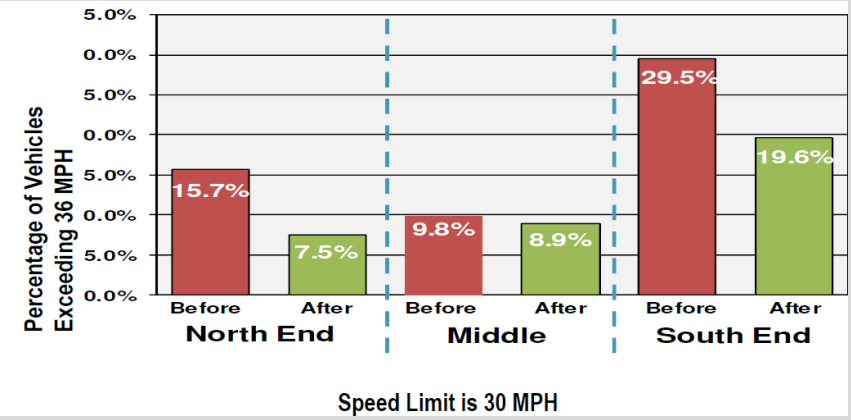



**Figure 12: Speeding Analysis Before and After a Road Diet on Edgewater Drive**

- *Edgewater Drive Traffic Volumes: Volume along Edgewater Drive reduced by 12 percent, from 20,500 AADT to 18,100 AADT.*
- *Parallel & Sidestreet Traffic Volumes: Parallel street that saw volume increase had traffic calming and has dropped back to its previous level.*
- *Pedestrian Volumes: Observed higher pedestrian activity. Ten years later, annual crashes involving pedestrians have been reduced from three to one, on average.*
- *Bicycle Volumes: Observed higher bicycling activity. Ten years later, annual crashes involving bicyclists have been reduced from three to one, on average.*
- *Corridor Travel Times: Afternoon travel times decreased for southbound traffic by 12 seconds, while travel times for northbound traffic increased by 13 seconds (see **Figure 13**).*

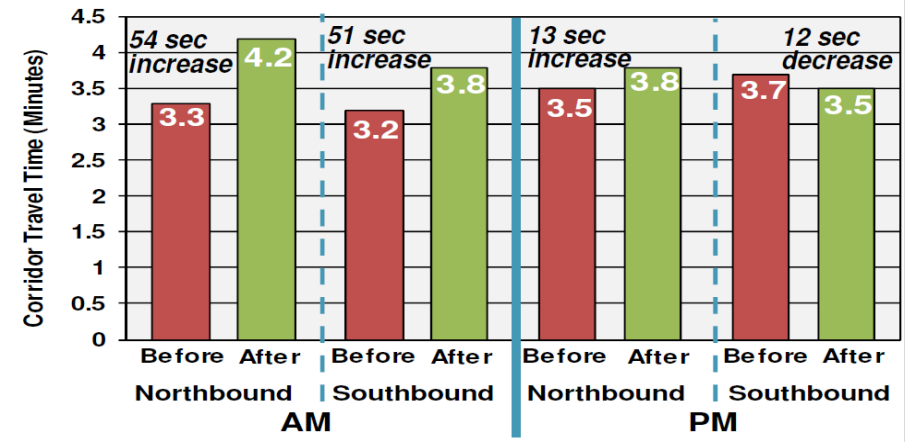



**Figure 13: Corridor Travel Times Before and After Retiming**

- *Economic Impact: Ten years later, businesses are thriving. There are 77 new businesses and 560 new jobs since 2008. The taxable value of parcels immediately adjacent to Edgewater Drive increased by 80 percent between 2000 and 2012, while those within one-half mile increased by 70 percent.*

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# Chapter 6: Evaluation Criteria & Scoring Methodology

The study's outcome is an implementation plan consisting of short-term and long-term projects.

Because funding is limited, a key step in the process is the evaluation of short-term projects using criteria that are consistent with the study's goals and objectives (**Table 7**) allowing projects to be built as funding becomes available.

**Table 7: Goals and Objectives**

| Goals | Objectives |
|---|---|
| **Mobility: Improve Accessibility and Connectivity to Key Destinations and Activity Centers** | Connect residential areas and activity centers within the corridor and the region |
| | Provide connections that quickly and efficiently move people within the corridor |
| **Land Use & Economics: Encourage Economic Growth and Redevelopment Potential** | Enhance economic competitiveness through better access to employment centers |
| | Create opportunities for transit oriented development and sustainable hubs around major station locations |
| | Enhance economic competitiveness through better access to tourist, recreational and educational destinations |
| **Safety: Improve Safety through Multimodal Investments** | Reduce the number of crashes that result in serious or fatal injuries |

The purpose of this step is to prioritize potential projects for implementation purposes. This section documents the technical process used to rank and prioritize the short-term multimodal projects identified. After approximately 54 short-term multimodal projects were identified, they were each evaluated to determine which would potentially demonstrate the largest benefit. Evaluation criteria were based on three overarching themes: Mobility, Land use and Economics, and Safety. **Table 8** defines the evaluation criteria and scoring methodology. The criteria were developed based on national best practices for designing Complete Streets.

## Evaluation Methodology

The short-term multimodal projects were identified from the gap analysis, previous planning studies, and input from stakeholders and the public during community workshops and neighborhood meetings (described in Chapter 7). Projects were assigned a score between 1 and 4 for each evaluation criterion, with 4 being the highest score earned and 1 the lowest. As detailed in **Table 8**, scores were assigned in one of two ways: by quarters or using a hierarchical scale.

Using the quarters method, a score was calculated by grouping the raw results into quarters based on the range of values for each criterion and assigning scores accordingly. For example, values that fall within the top 25 percent of the range were assigned a 4. Because some criteria are based on policy and could be quantified, a hierarchical scale was used when ranking projects under this category. Projects that served or connected to a facility that is more supportive of land use, economic development, and better mobility scored higher. For example, a project falling within a Special Activity Center received the highest score of 4; whereas, a project within a Major Activity Center received a score of 3 and so forth.

Once calculated, all scores were added for every category to arrive at a 'raw' total. Subsequently, each category's 'raw' score was averaged to eliminate the bias towards categories that have a greater number of criteria. Finally, the average scores were added to calculate a total composite score for each project.

### Table 8: Evaluation Criteria and Scoring

| Evaluation Criteria | | Scoring |
|---|---|---|
| **Mobility** | Existing population densities within 1/2 mile | 1st quarter = 4 points, 2nd quarter = 3 points, 3rd quarter = 2 points, and 4th quarter = 1 point |
| | Future (2040) population densities within 1/2 mile | |
| | Existing transit dependent population densities within 1/2 mile | |
| | Future (2040) transit dependent population densities within 1/2 mile | |
| | Provides or improves connection to activity centers | Special Centers = 4 points, Major Centers = 3 points, Community Centers = 2 points, Neighborhood Centers = 1 point |
| | Provides or improves a connection within a corridor of critical importance | Primary Corridor = 4 points, Secondary Corridor = 3 points, Regional Corridor = 2 points, Supporting Corridor = 1 point |
| **Land Use/ Economics** | Existing employment densities within 1/2 mile | 1st quarter = 4 points, 2nd quarter = 3 points, 3rd quarter = 2 points, and 4th quarter = 1 point |
| | Future (2040) employment densities within 1/2 mile | |
| | Makes a "first" or "last" mile connection to transit | Major Transfer/Intermodal Center = 4 points, Express Transit Station = 3 points, Local Transit Stop = 2 points, No transit connection = 1 point |
| | Presence of K-12, Colleges/Universities and Vocational/Technical Institutions within 1/2 mile | 1st quarter = 4 points, 2nd quarter = 3 points, 3rd quarter = 2 points, and 4th quarter = 1 point |
| | Local, State, and/or Federal Parks within 1/2 mile | |
| | Hotel/Motel Unit density within 1/2 mile of proposed project | |
| **Safety** | Fills a gap at a high crash location (crashes per mile on a segment) | 1st quarter = 4 points, 2nd quarter = 3 points, 3rd quarter = 2 points, and 4th quarter = 1 point |
| | Provides best practice safety measures | Major/Principal Arterial = 4 points, Minor Arterial = 3 points, Collector = 2 points, Local = 1 point |

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# Chapter 7: Implementation Plan

## Short-term improvements – fill the gaps

Once the scores were calculated, the projects' performance were compared and ranked. **Table 9** displays the top 10 projects out of the 54 projects based on the results from the effort. The projects were evaluated based on 14 evaluation criteria representing three key topics along the corridor: mobility, land use and economics, and safety. **Appendix C** provides the detailed scores with each evaluation criteria for all projects identified.

**Table 9: Top 10 Short-Term Implementation Projects**

| Facility | From | To | Network Gap | Composite Score |
|---|---|---|---|---|
| 1a. Beach to TIA Express | TIA | Clearwater Beach | Premium Express Transit | 9.33 |
| 1b. Memorial Causeway Busway for trolleys and the planned TIA to Beach Express | Court Street | Clearwater Beach Transit Center | Premium Express Transit | |
| 2. SR 60/Chestnut Street | Court Street | Martin Luther King Jr. Avenue | Bicycle Accommodations | 9.00 |
| 3. SR 60/Gulf to Bay Boulevard | US 19 | Highland Avenue | Multi-use Accommodations | 8.33 |
| 4. Missouri Avenue | Belleair Road | Drew Street | Bicycle Accommodations | 8.17 |
| 5. SR 60/Gulf to Bay Boulevard | McMullen Booth Road | US Highway 19 | Multi-use Accommodations | 7.83 |
| 6. Drew Street | North Myrtle Avenue | Saturn Avenue | Multi-use Accommodations | 7.33 |
| 7. SR 60/Gulf to Bay Boulevard | Court Street | Cleveland Street | Bicycle Accommodations | 7.17 |
| 8. Clearwater Beach Connector Trail | Pinellas Trail | Martin Luther King Jr. Avenue | Multi-use Accommodations | 7.00 |
| 9. Cleveland Street | Gulf to Bay Boulevard | Missouri Avenue | Bicycle Accommodations | 7.00 |
| 10. Martin Luther King Jr. Avenue | Chestnut Street | Lakeview Road | Bicycle Accommodations | 6.83 |

*Multi-use Accommodations are shared- use paths for non-motorized travel that may include bicyclists, walkers, skaters, and people with disabilities.*

## Regional Transit Service Recommendations

In order to develop a comprehensive set of multimodal implementation strategies within the SR 60 corridor, a set of express transit service alternatives were evaluated for their ridership potential. Currently, there is no transit service that can provide a one-seat ride across the corridor from Clearwater Beach to Clearwater Mall. Nor is there existing transit service providing regional connections to destinations in Hillsborough County. As a result, PSTA, in partnership with Forward Pinellas, proposed the Beach to TIA Express Bus service as a component of this study.

The initial corridor was designed to serve the four major activity centers – Clearwater Beach, Downtown Clearwater, Clearwater Mall, and TIA. Additional alternatives include adding a Park and Ride facility at the Clearwater Mall, adding two potential stations (one at SR 60/Belcher Road and another at SR 60/Rocky Point), and operating Express transit service along a dedicated lane between Clearwater Beach and Downtown Clearwater. Four alternatives were evaluated and are summarized in **Table 10**.

**Table 10: Alternative Express Transit Operations**

| Name | Description | Stop Locations | Frequency | Park-N-Ride |
|---|---|---|---|---|
| Alternative 1 | Express Bus Service | TIA, Clearwater Mall, Downtown Clearwater, & Clearwater Beach | 30 minutes | N/A |
| Alternative 2 | Express Bus Service | TIA, Clearwater Mall, Downtown Clearwater, & Clearwater Beach | 30 minutes | Clearwater Mall |
| Alternative 3 | Express Bus Service | TIA, N. Rocky Point Drive, Clearwater Mall, Belcher Road, Downtown Clearwater, & Clearwater Beach | 30 minutes | Clearwater Mall |
| Alternative 4 | Express Bus (Fixed Guideway: Downtown Clearwater to Clearwater Beach) | TIA, N. Rocky Point Drive, Clearwater Mall, Belcher Road, Downtown Clearwater, & Clearwater Beach | 30 minutes | Clearwater Mall |

The ridership forecasting was conducted using the Federal Transit Administration's Simplified-Trips-on-Project Software (STOPS) version 2.0. Ridership estimates were prepared for the four alternatives described above for both the base year 2016 and the horizon year 2040. The annual weekday ridership estimates for each alternative are summarized in **Table 11.**

**Table 11: Forecasted Annual Ridership**

| Name | 2016 Annual Weekday Ridership | 2040 Annual Weekday Ridership |
|---|---|---|
| Alternative 1 | 115,700 | 125,580 |
| Alternative 2 | 134,680 | 146,120 |
| Alternative 3 | 216,320 | 233,740 |
| Alternative 4 | 264,680 | 286,000 |

In addition to developing ridership estimates, an operations plan was developed for each alternative for the purposes of estimating annual operations and maintenance (O&M) costs as well as transit vehicle requirements. For all alternatives, it was assumed the Express Bus Service operates at 30-minute frequencies from 5 a.m. until midnight. Peak period cycle times equal 150 minutes, while off-peak and weekend cycle times equal 120 minutes. Travel time variations between the alternatives do not vary enough during peak and off-peak periods to influence the cycle times, therefore operating requirements (i.e., vehicles, miles and hours) and O&M costs remain constant across all alternatives. The operating requirements and costs are summarized in **Table 12**. Refer to **Appendix D** for a detailed description of the ridership forecasting and operational analysis.

**Table 12: Operating Assumptions**

| Span of Service | Frequency | Total Travel Time (Peak) | Total Travel Time (Off-Peak) | Annual Operational Cost |
|---|---|---|---|---|
| 7 Days a Week 5am to Midnight | Every 30 minutes | 52 Minutes | 47 Minutes | $2.8 Million |

## Critical Intersections

As previously mentioned, safety is a major focus of this effort. The crash analysis revealed that a significant number of crashes occur at intersections. Since most of the projects evaluated are linear in nature, it is imperative that the high crash intersections be identified for future safety treatments. As a result, the study area intersections were evaluated based on the following criteria: Total crashes within the intersection and total daily intersection volume. The most critical intersections for safety are shown in **Table 13.**

**Table 13: Critical Intersections**

| Intersections |
|---|
| Drew Street at US 19 |
| Gulf to Bay Boulevard at S. Belcher Road |
| Gulf to Bay Boulevard at S. Keene Road |
| Gulf to Bay Boulevard at US 19 |
| Gulf to Bay Boulevard at S. Arcturas Avenue |
| Drew Street at Belcher Road |

## Area of Special Concern:

Bike Routes and Wayfinding


Source: NACTO Urban Bikeway Design Guide

A bicycle wayfinding system consists of comprehensive signing and/or pavement markings to guide bicyclists to their destinations along preferred bicycle routes. Signs are typically placed at decision points along bicycle routes – typically at the intersection of two or more bikeways and at other key locations leading to and along bicycle routes. Designating bicycle routes and marking them through pavement markings and wayfinding signs increases the visibility of the available safe facilities, and improves confidence for people bicycling in a new area or for the first time. Wayfinding signs inform users of the direction and distance to key destinations, including neighborhoods, commercial districts, transit hubs, schools and universities, and connecting trails. Signs and pavement markings alone do not create a safe and effective bicycle boulevard, but act as reinforcements to other traffic calming and operational changes made to the roadway. Bicycle wayfinding signs were adopted as part of the 2009 MUTCD which offers guidance on required and recommended features for signs including placement, height, color, and font.

Wayfinding Benefits:

- Familiarizes users with the bicycle network
- Identifies the best routes to destinations
- Overcomes a "barrier to entry" for infrequent bicyclists
- Includes mileage and travel time to destinations on signage may minimize the tendency to overestimate the amount of time it takes to travel by bicycle
- Visually indicates to motorists that they are driving along a bicycle route and should use caution
- Passively markets the bicycle network by providing unique and consistent imagery throughout the jurisdiction


Current wayfinding across Drew Street

## Area of Special Concern

### Cleveland Street as a Bicycle Boulevard

Complete Streets options are limited along SR 60; the amount of vehicles and the speeds at which they travel require a greater separation between vehicles and vulnerable users, those walking, biking, and accessing transit. Drew Street can also be uncomfortable for less confident cyclists. Cleveland Street is a two-lane road parallel to these two facilities and is a prime candidate to be transformed into a world-class bicycle boulevard. Bicycle boulevards are streets with lower speeds and low numbers of vehicles, designated and designed to give bicycle travel priority. Bicycle boulevards use signs, pavement markings, and speed and volume management measures to discourage through trips by motor vehicles. Cleveland Street already has many of the basic components of a safe bicycling environment, and others are being studied for implementation. Cleveland Street connects residential uses, schools, and parks on the east to downtown and the Pinellas Trail on the west (**Figures** on next page).

Ideal candidates for Bicycle Boulevards, typically have the following characteristics:

- Streets with 85th percentile speeds at 25 mph or less (20 mph or less preferred) and with traffic volumes of fewer than 3,000 vehicles per day (below 1,500 vehicles per day preferred). These conditions should either exist or be established with speed and volume management techniques.
- Lower motor vehicle volume and speed streets that are parallel and in close proximity to major thoroughfares, which also provide a similar level of land use connectivity and travel demand function.
- Streets where a relatively continuous route for bicyclists exists and/or where treatments can provide wayfinding and improve crossing opportunities at offset intersections (often streets where people are already bicycling).
- Streets where bicyclists have the right-of-way at intersections or where the right-of-way can be established.


Source: NACTO Urban Bikeway Design Guide

## Area of Special Concern

### Safe Facilities around Schools

This study area contains many schools, from elementary to college, which offer opportunities to increase transportation choices for students of all ages. Safe crossings and sidewalks will help make walking and biking to school legitimate options for families, increasing health and the feeling of community while removing vehicles from the roads.

***SR 60 and Druid Road at Hercules Avenue and Arcturas Avenue***

Clearwater High School can benefit from enhanced crossings on all sides of the campus which will connect its students and staff to the surrounding neighborhoods as well as to immediately adjacent retail services. While there are bike lanes on Hercules Avenue, the road's width allows space for buffered bike lanes, and they should be continuous. A recent NACTO report on bike safety[4] found that in cities that are building protected bike lane networks, cycling is increasing, and the risk of injury or death is decreasing.

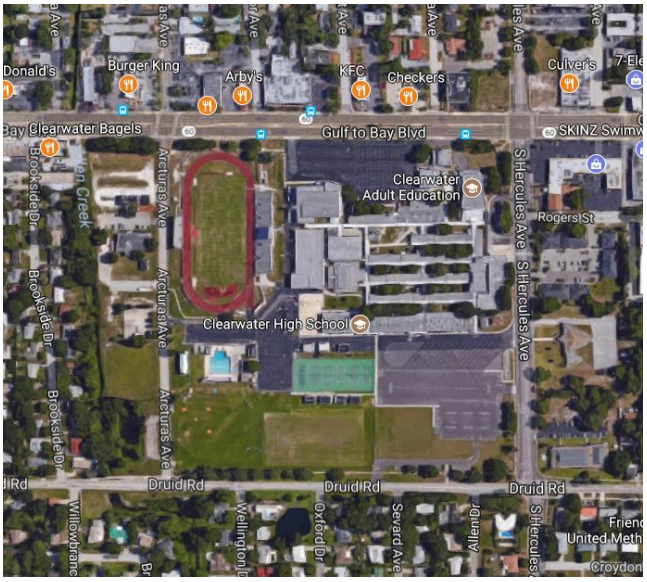



Figure 14. SR 60 and Druid Road at Hercules Avenue and Arcturas Avenue

Other schools in the study area (shown in **Figures 15** and **16)** were identified through field work or stakeholder input as having critical needs for safe facilities, such as protected bike lanes and enhanced crossings.

[4] https://nacto.org/wp-content/uploads/2016/07/NACTO_Equitable_Bikeshare_Means_Bike_Lanes.pdf

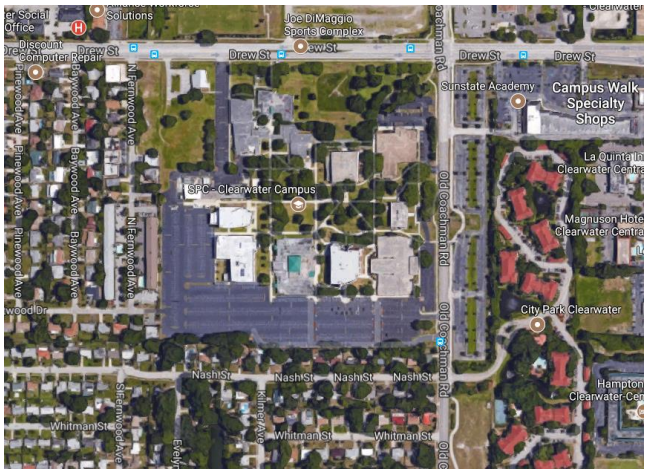



Figure 15. Drew Street at Old Coachman Road: St Pete College

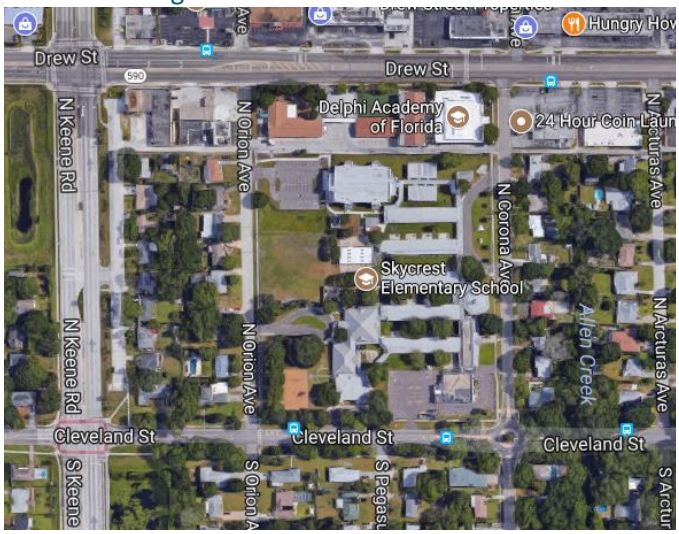



Figure 16. Drew Street near Keene Road: Skycrest Elementary and the Delphi Academy of Florida

## Area of Special Concern

### Technology

Planning for advancements in technology is by its very nature unpredictable. However, this study's team kept abreast of local and national conversations surrounding advances in transportation technology.

Currently, there is extensive information concerning autonomous vehicle technology development, enthusiastic promotion in popular publications and by business interests, and criticisms. However, only recently have transportation practitioners seriously explored how soon the vehicle fleet will become

**Figure 17: Testing of automated vehicles, including buses, has begun in Florida.**

autonomous and how they will affect planning decisions such as roadway design, parking costs, and public transit demand. Studies are beginning to critically examine autonomous vehicles' potential benefits and costs, predict their development and deployment based on

**Figure 18: Aerial Propelled Transit is an example of emerging technology that can complement other modes of transportation.**

experience with previous vehicle technologies, and discuss implications for transportation planning issues such as road and parking supply and public transit demand.

How this impacts the transportation network in general and the implementation of Complete Streets specifically is unknown. Yet that doesn't mean planning, investing, and implementing should stop or even pause until then. Autonomous transportation, whether it is an automated gondola from downtown Clearwater to Clearwater Beach, a driverless express bus from Tampa's airport, or some other yet-to-be developed mode, can and will implemented and subsequently integrated with the multimodal recommendations from this study to create a truly comprehensive multimodal network in the SR 60 corridor.

## Long-term vision – turning gaps into opportunities for Complete Streets

The long-term vision of Complete Streets strategies were developed through public input and were based on the character of the surrounding land use and roadway context. The vision helps define which Complete Streets strategies are appropriate and which make it safer and more comfortable for all users of all modes in the entire corridor. The packages of strategies for each segment will be provided as conceptual designs as well as a menu of strategies with unit costs. This tool – a menu of strategy options specific to each segment - can be used when planning future improvements in this study area.

**Figure 19** is a key to the segments within the study area, and the individual conceptual design sheets are on the following pages.

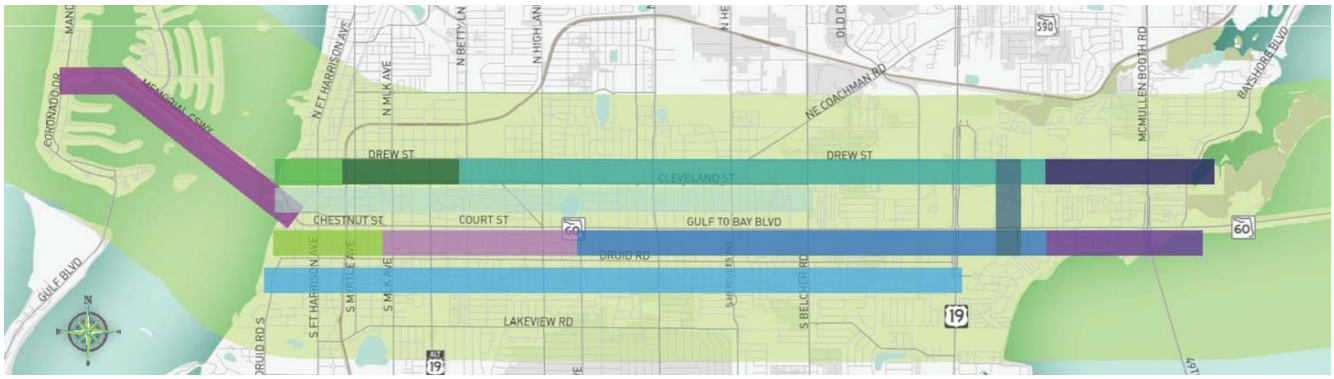
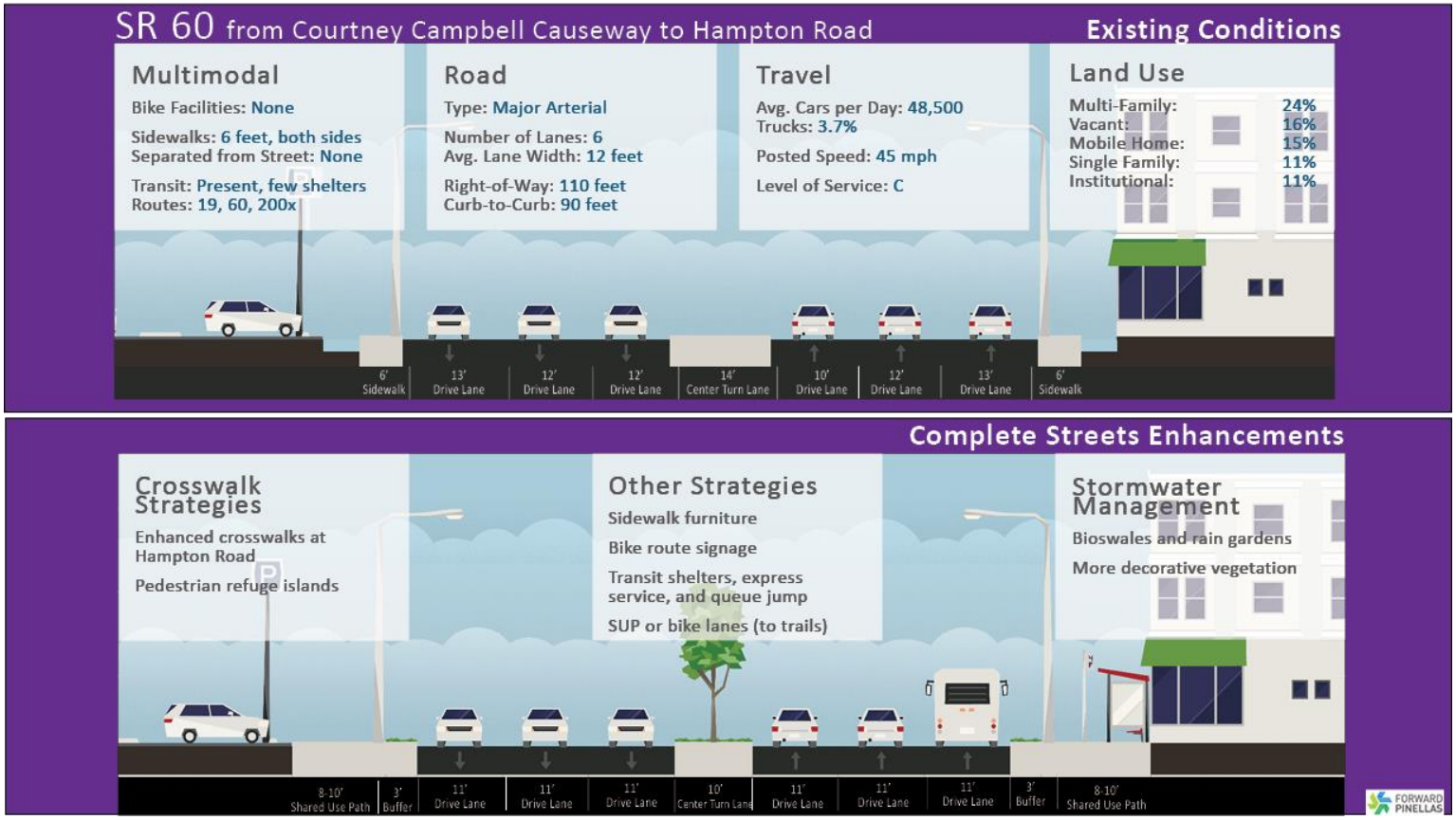



**Figure 19: Long-term vision segments**

## SR 60 from Courtney Campbell Causeway to Hampton Road

SR 60 is not an ideal road for on-road bike lanes, yet a buffered shared use path is a good option to move people on bikes from the Courtney Campbell Causeway trail to Park Place Boulevard and then on to other trails like the Ream Wilson Clearwater Trail. Complete Streets strategies will make the road more comfortable for people walking, biking, or accessing transit while also serving as a gateway to the community. Other strategies:

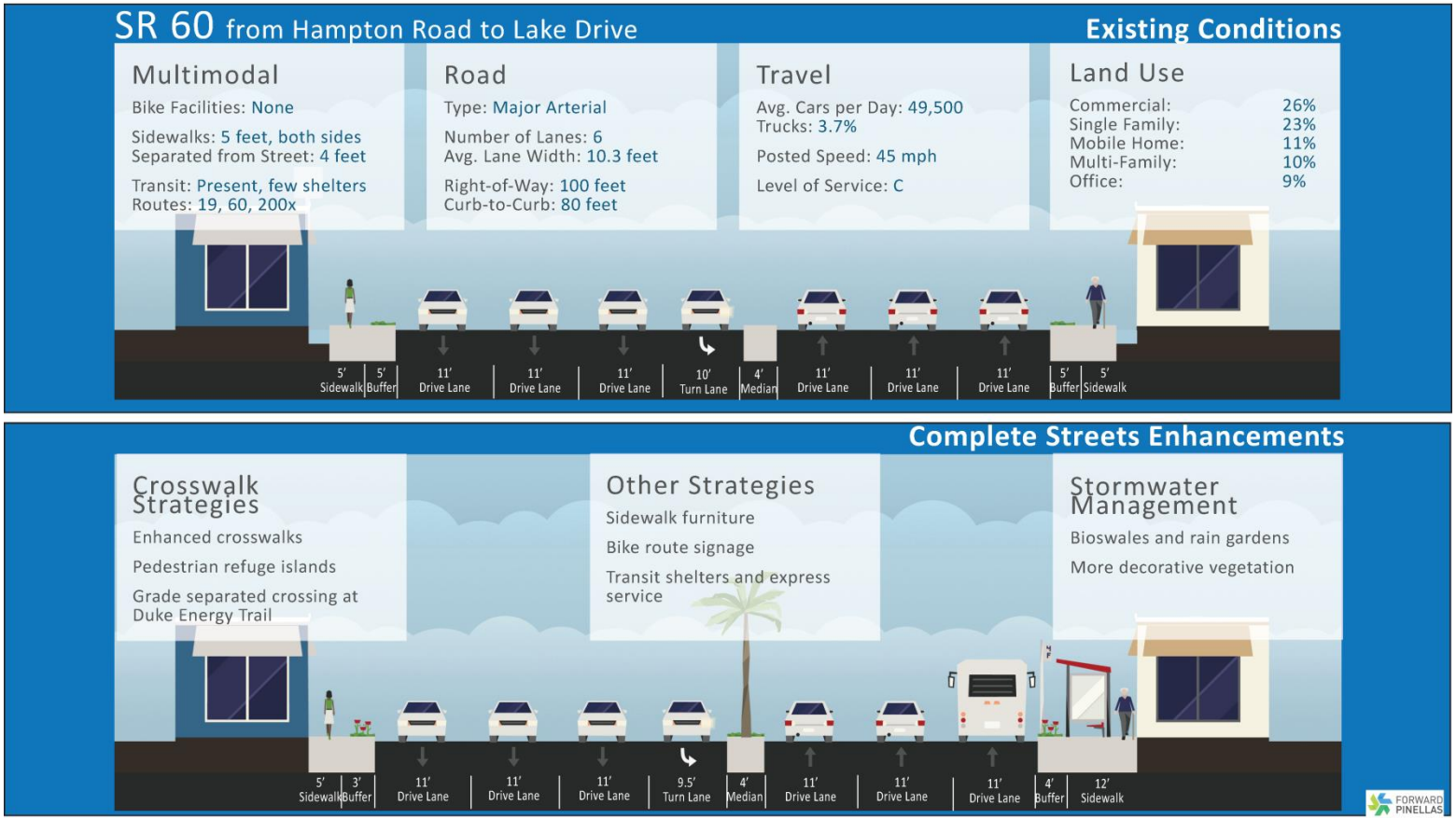
- Narrowed travel lanes
- Enhanced landscaping
- Shared use path
- Enhanced crosswalks
- Transit queue jumps at intersections
- Bioswales
- Transit shelters and express service
- Buffered sidewalks



## SR 60 from Hampton Road to Lake Drive

The challenges of implementing Complete Streets strategies in constrained roadways are illustrated particularly well in this section of SR 60. The road moves large numbers of vehicles at relatively high speeds, and right-of-way is not available for other facilities. Increasing the sidewalk width where possible allows room for transit shelters and other amenities that can make walking and using transit more comfortable. Other strategies:

- Enhanced landscaping
- Enhanced crosswalks
- Midblock crossings near CHS
- Transit queue jumps at intersections
- Transit shelters and express service
- Multi-use path/Wider Sidewalk



## SR 60 from Lake Drive to Martin Luther King Jr Avenue

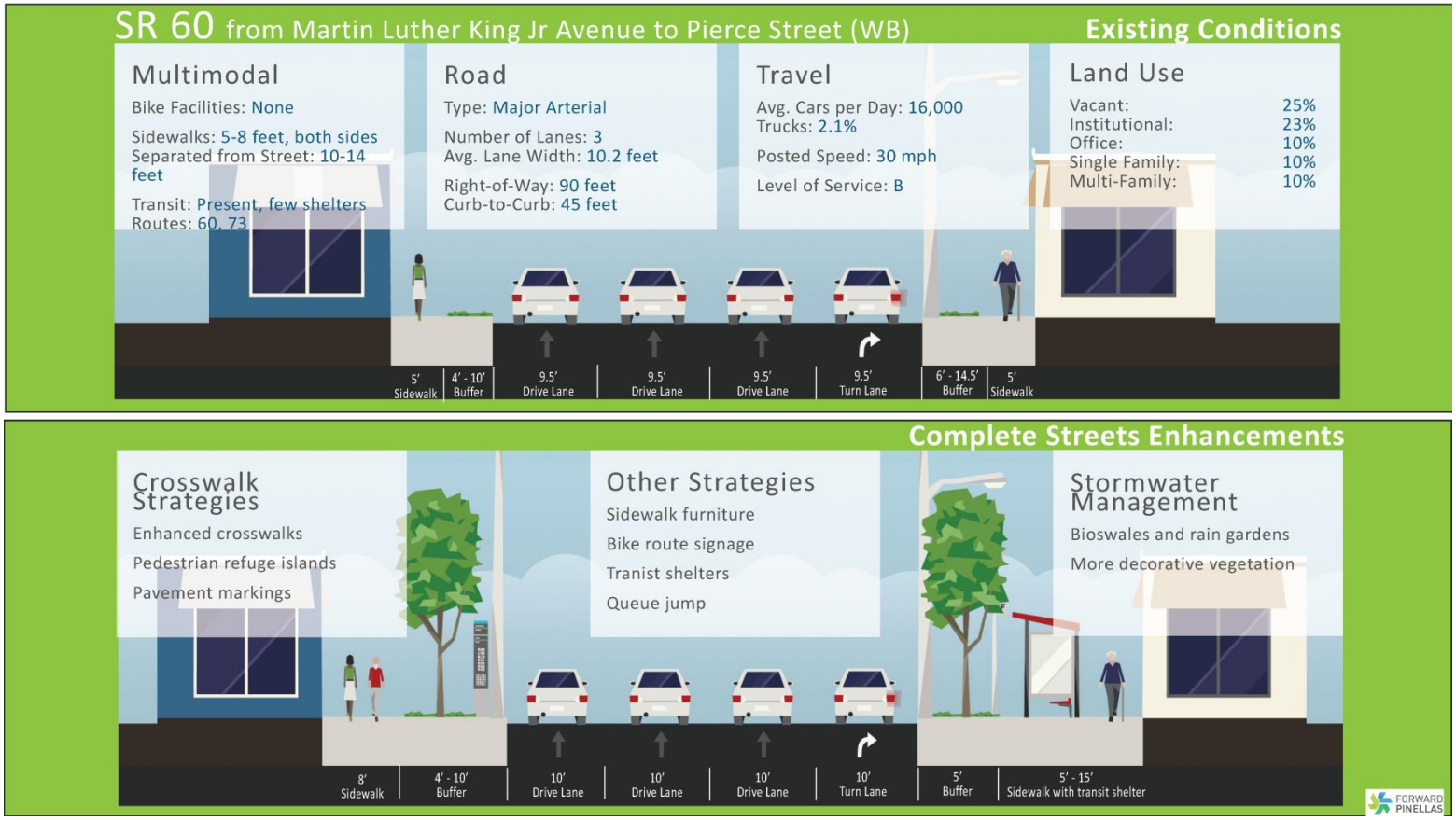
This section currently has a stretch of sharrows (marking indicating that bicyclists and cars can share the same line) which have shown to be ineffective at best and unsafe at worst, particularly where travel speeds are higher than 30 mph. Instead, bike lanes provide space that more clearly belongs to people traveling by bicycle. Other strategies:

- Narrowed travel lanes
- Enhanced landscaping
- On-street painted bike lanes
- Enhanced crosswalks, esp. near the parks and St Cecilia's School
- Transit queue jumps at intersections
- Transit shelters and express service
- Multi-use path/Wider Sidewalk

## SR 60 from Martin Luther King Jr Avenue to Pierce Street

This section is particularly constrained. It currently has narrow lanes and standard sidewalks with buffers between the sidewalks and the road. However the right-of-way does vary in width allowing for wider sidewalks that can more comfortably accommodate enhanced transit shelters, people walking, and less confident cyclists. Other strategies:

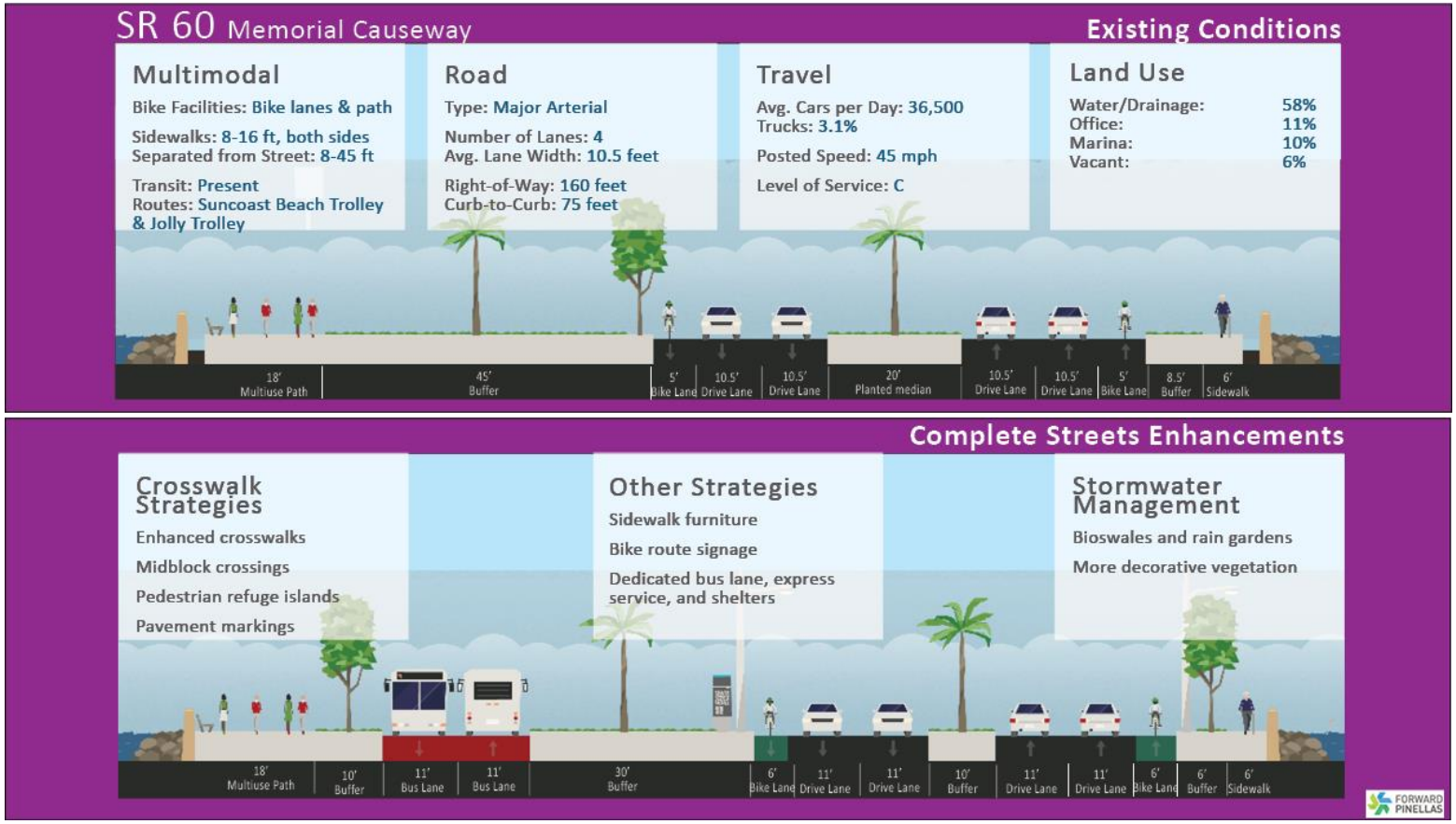
- Enhanced landscaping
- Enhanced crosswalks,
- Transit queue jumps at intersections
- Bioswales where applicable
- Transit shelters and express service
- Signage for bike routes
- Multi-use path/Wider sidewalks



## SR 60 Memorial Causeway

The bridge from downtown Clearwater to Clearwater Beach is currently a good example of accommodating multiple modes. The vision explores how express buses can cross the causeway in a dedicated lane. This concept and alignment is being studied further by FDOT and PSTA. Other strategies:

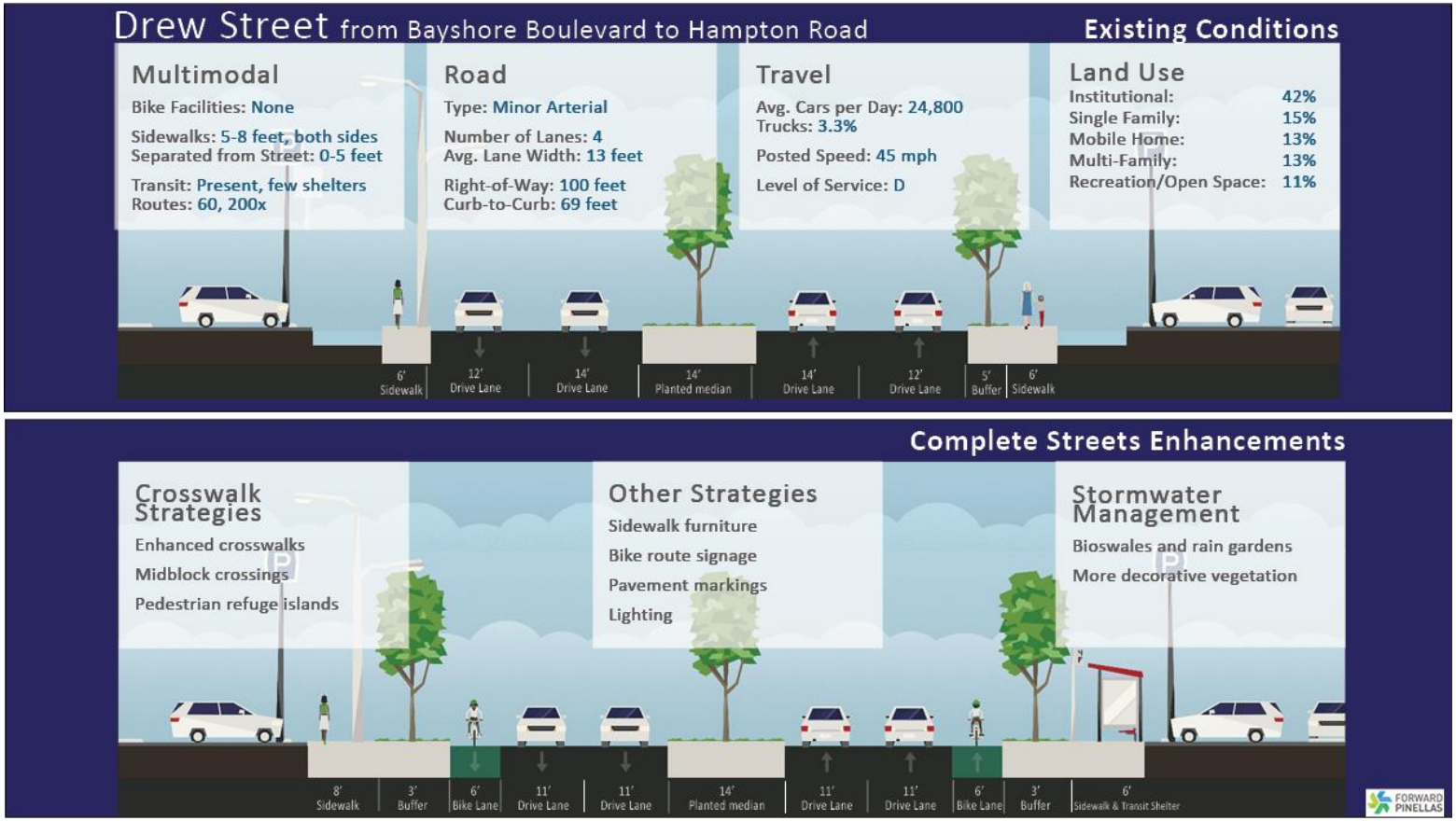
- Narrowed travel lanes
- Enhanced landscaping
- On-street painted bike lanes
- Express transit service
- Transit queue jumps at intersections
- Transit shelters
- Bike route signage



## Drew Street from Bayshore Boulevard to Hampton Road

The vision responds to the context of Drew Street with its large employers, parks, and other institutions. These destinations can be connected with enhanced bike lanes, wider sidewalks, and bike route signage to encourage cyclists to travel on Drew Street rather than SR 60. Other strategies:

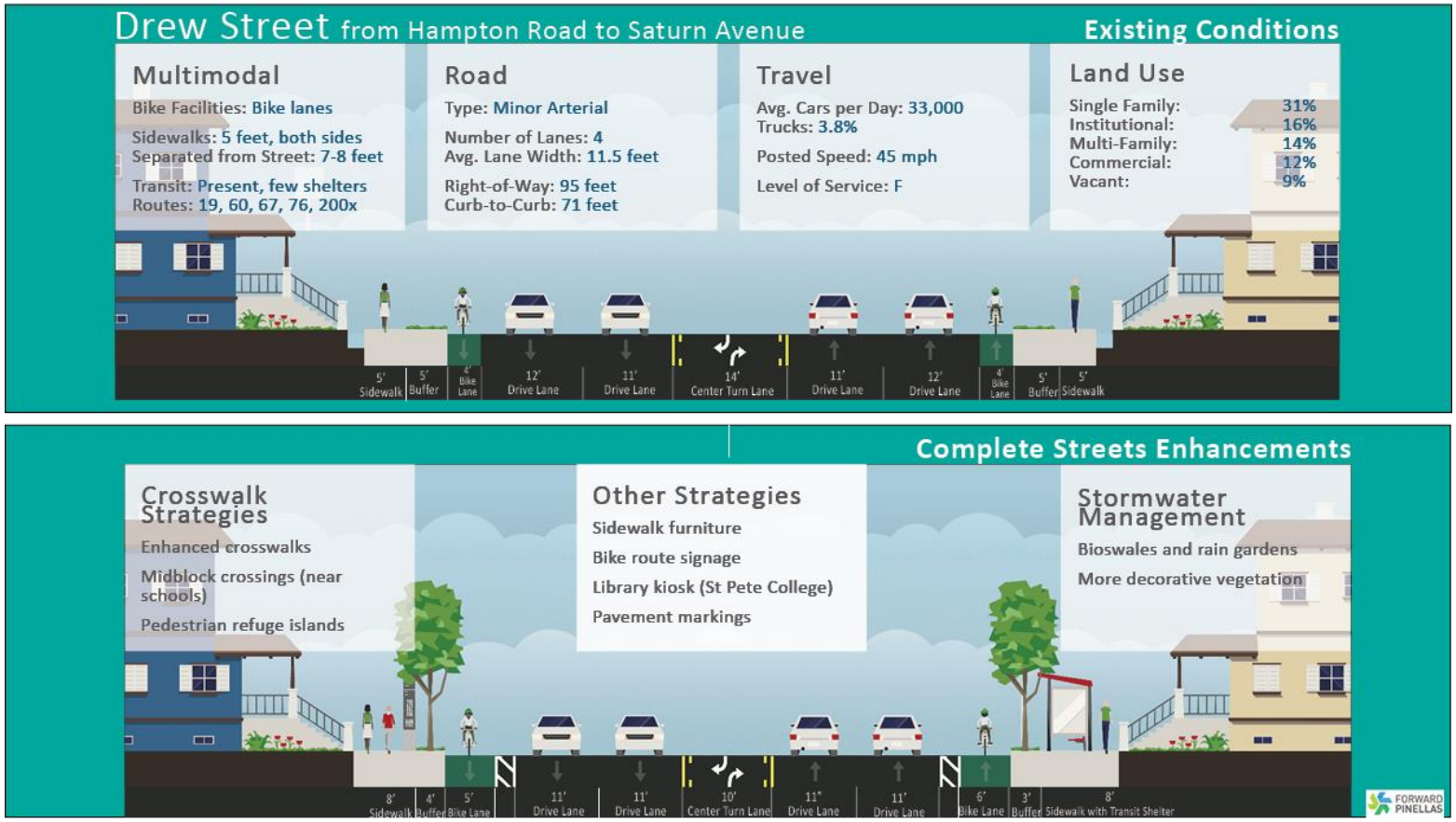
- Narrowed travel lanes
- Enhanced landscaping
- On-street painted bike lanes
- Enhanced crosswalks, esp. near parks and large employer
- Bioswales where applicable
- Transit shelters
- Wider sidewalks



## Drew Street from Hampton Road to Saturn Avenue

Narrowing the travel lanes allows for buffered bike lanes; greater separation between modes is desired with higher vehicle speeds. St Pete College's campus is a logical place for a future bike share location and enhanced pedestrian crossings. Further to the west, where it is more residential, channelized medians can help control access and increase safety. Other strategies:

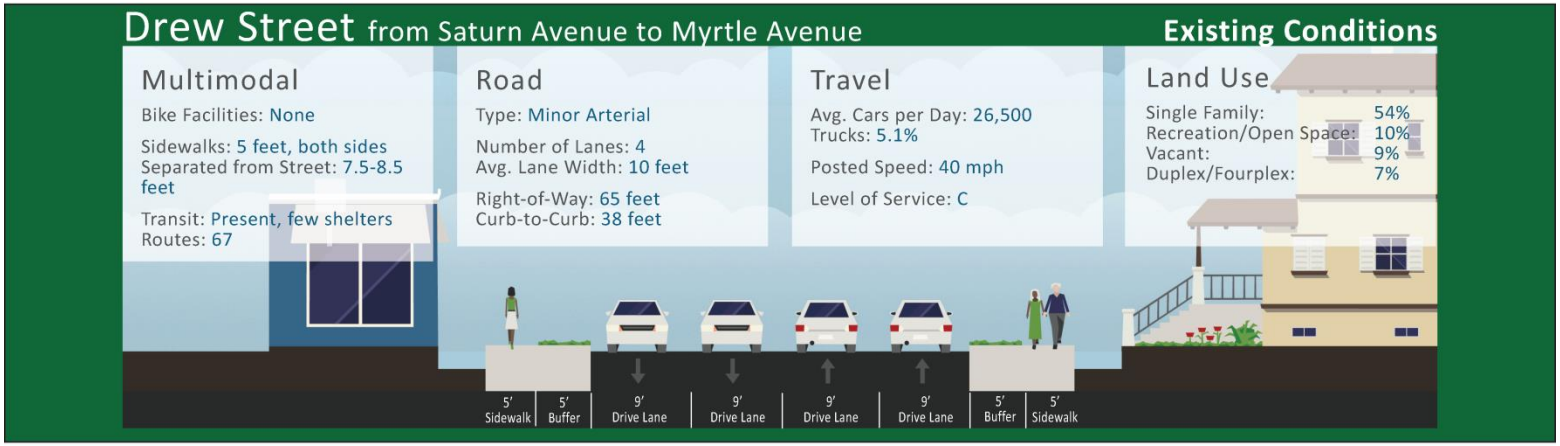
- Narrowed travel lanes
- Enhanced landscaping
- On-street painted and buffered bike lanes
- Enhanced crosswalks, esp. near parks and St Pete College
- Midblock crossings near schools
- Library kiosk (on campus)
- Bioswales where applicable
- Transit shelters
- Multi-use path/Wider Sidewalk

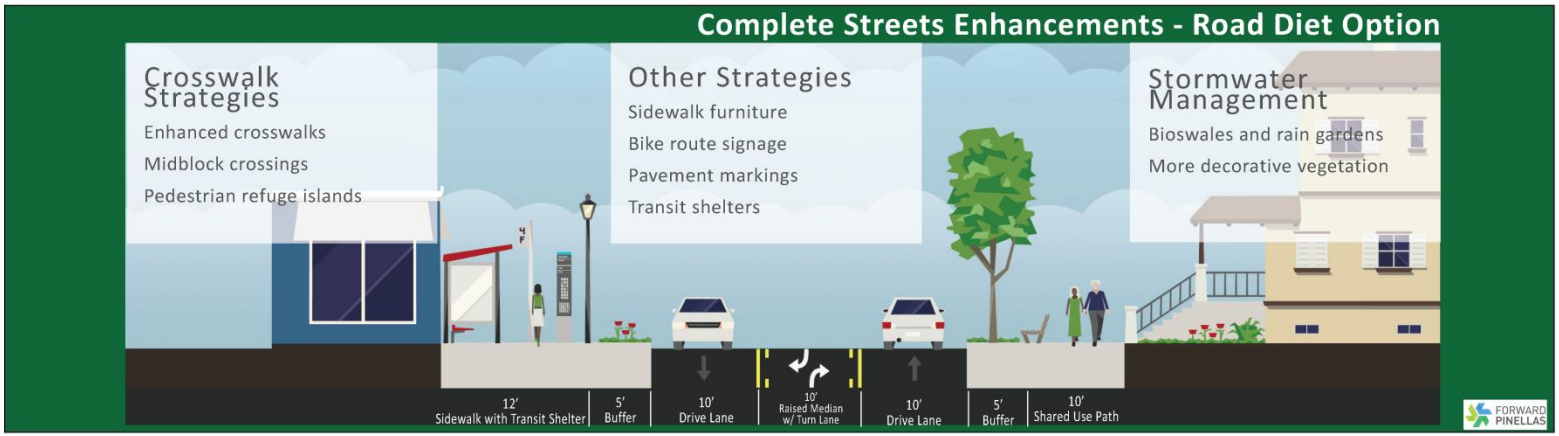


## Drew Street from Saturn Avenue to Myrtle Avenue – Road Diet Option

Drew Street is currently undergoing a more specific Complete Streets study. This conceptual design illustrates one possibility based on neighborhood association comments. Removing a travel lane allows other modes to be more safely accommodated with a large shared use path on both sides of the road. Other strategies:

- Narrowed travel lanes
- Enhanced landscaping
- On-street painted and buffered bike lanes
- Enhanced crosswalks
- Channelized median to control access
- Midblock crossings near parks
- Bioswales where applicable
- Transit shelters
- Multi-use path/Wider Sidewalk

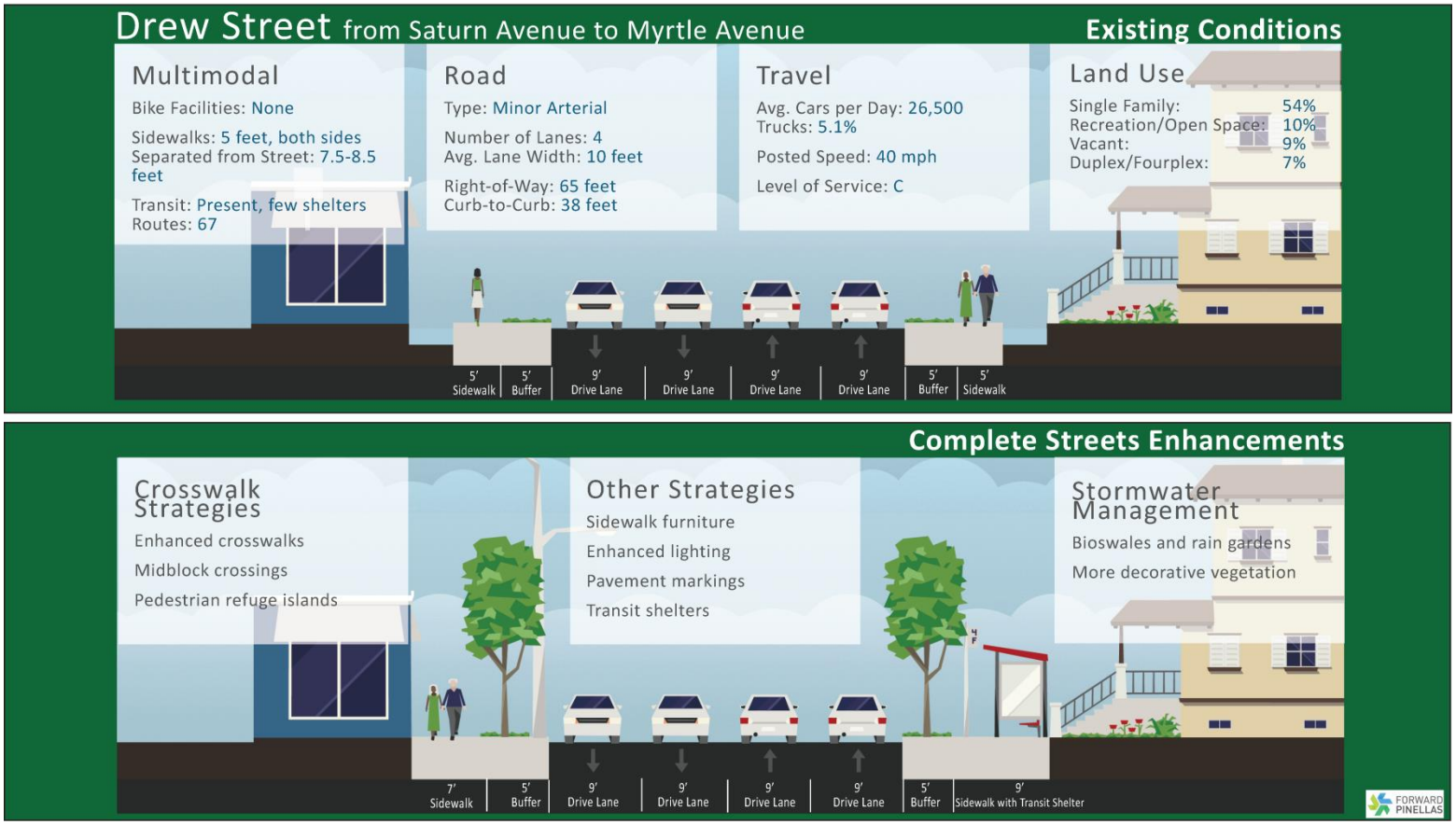


## Drew Street from Saturn Avenue to Myrtle Avenue – Complete Streets Option

As another, lower cost option to the Road Diet, this section also has a conceptual design based solely on Complete Streets strategies that can fit within the existing Right-of-way. Because the right-of-way is so constrained, the options are limited, and bicyclists are not accommodated with separate facilities. Other strategies:

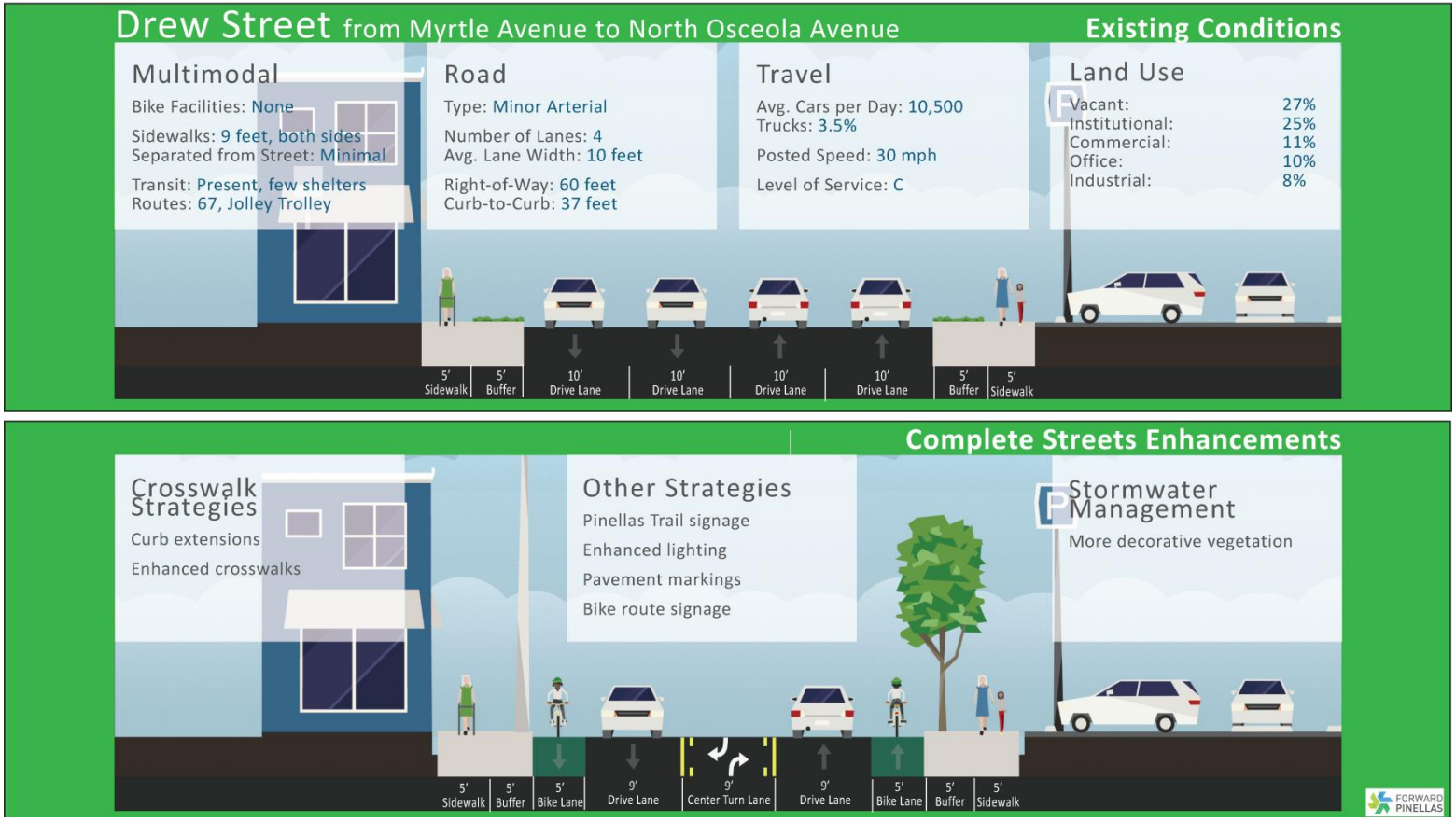
- Narrowed travel lanes
- Enhanced landscaping
- Sidewalk furniture
- Bioswales where applicable
- Enhanced crosswalks
- Midblock crossings near parks
- Transit shelters
- Multi-use path/Wider Sidewalk



## Drew Street from Myrtle Avenue to North Osceola Avenue

Vacant lands in this section of Drew Street (almost 27 percent of the existing land use) offer redevelopment opportunities, and continuing the road diet allows safe accommodation for people on bikes as well as connections to the Pinellas Trail. The context shifts from residential to a potentially lively downtown gathering area. Other strategies:

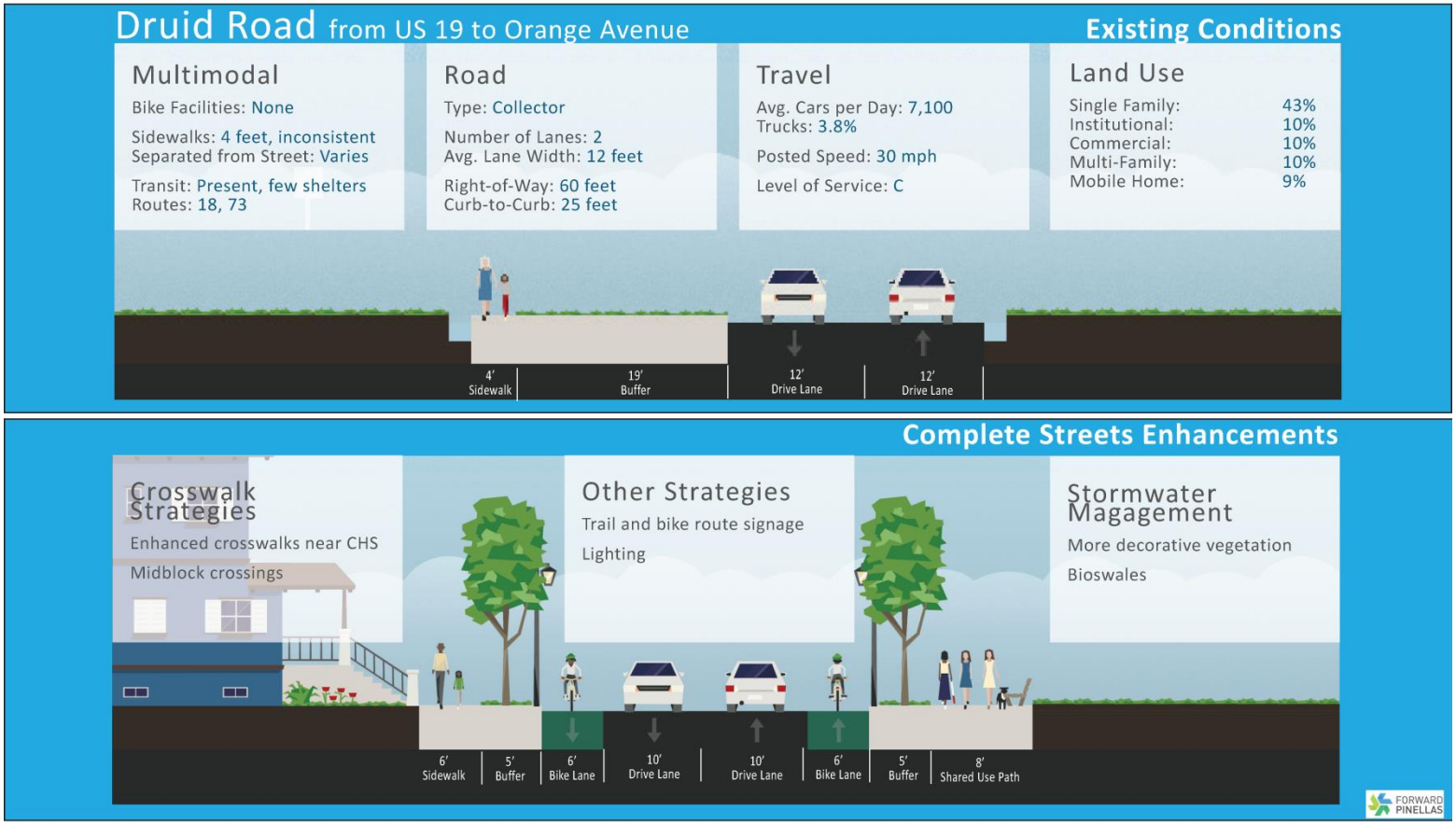
- Narrowed travel lanes
- Enhanced landscaping
- On-street painted bike lanes
- Channelized median to control access
- Enhanced crosswalks



## Druid Road from US 19 to Orange Avenue

Druid Road's context is more uniform. In addition to the already-committed shared use trail, on-road bike lanes can provide connections to parks, trails, and Clearwater High School. Other strategies:

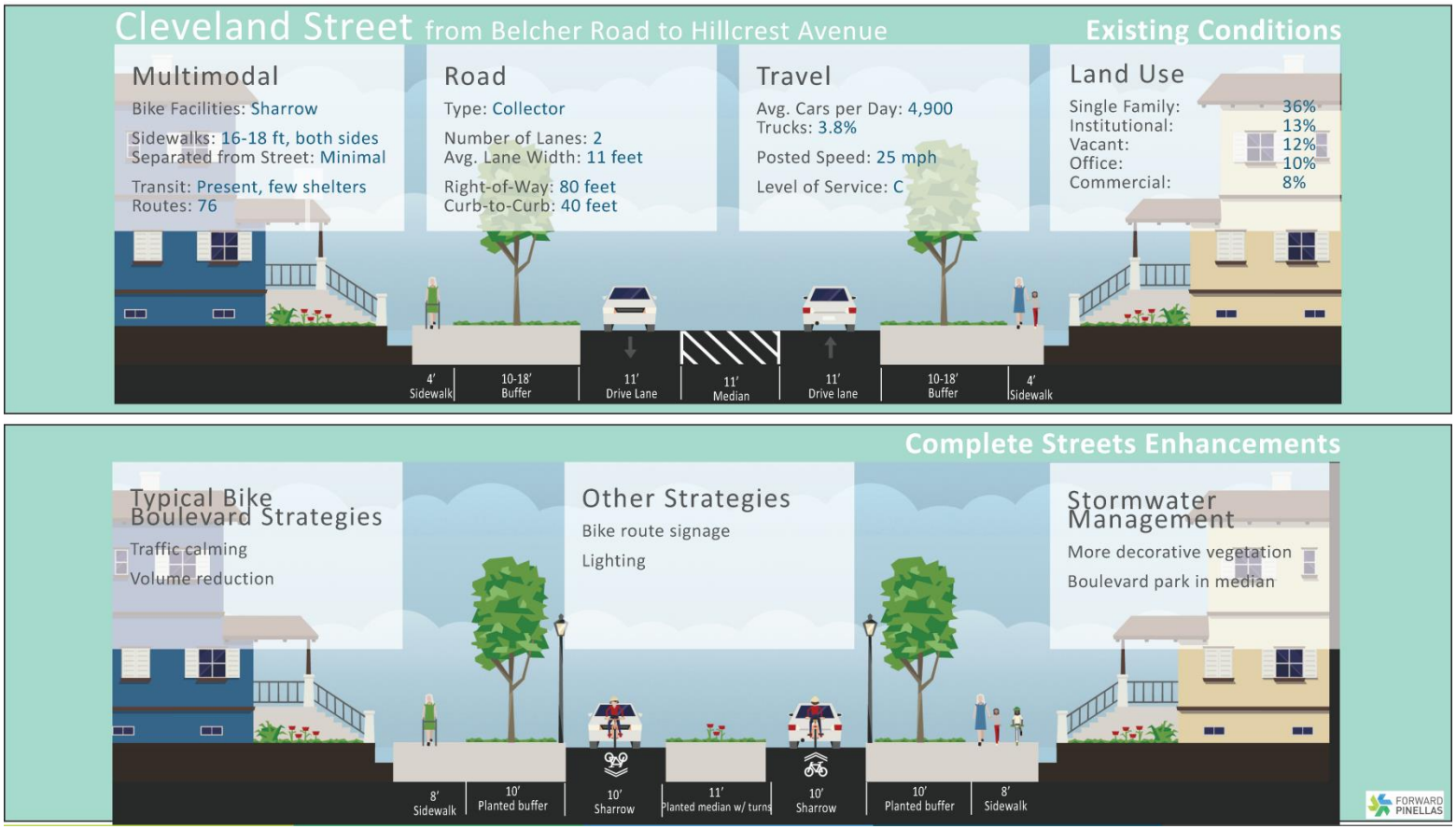
- Narrowed travel lanes
- Enhanced landscaping
- On-street painted bike lanes
- Enhanced crosswalks
- Mid-block crossings near CHS
- Wide shared use path
- Trail and bike route signage
- Widened sidewalks



## Cleveland Street from Belcher Road to Hillcrest Avenue

Cleveland Street, with its low traffic volumes and slow travel speeds, is an ideal candidate for a bicycle boulevard with sharrows, enhanced bike route signage, and well-marked crossings. Other strategies:

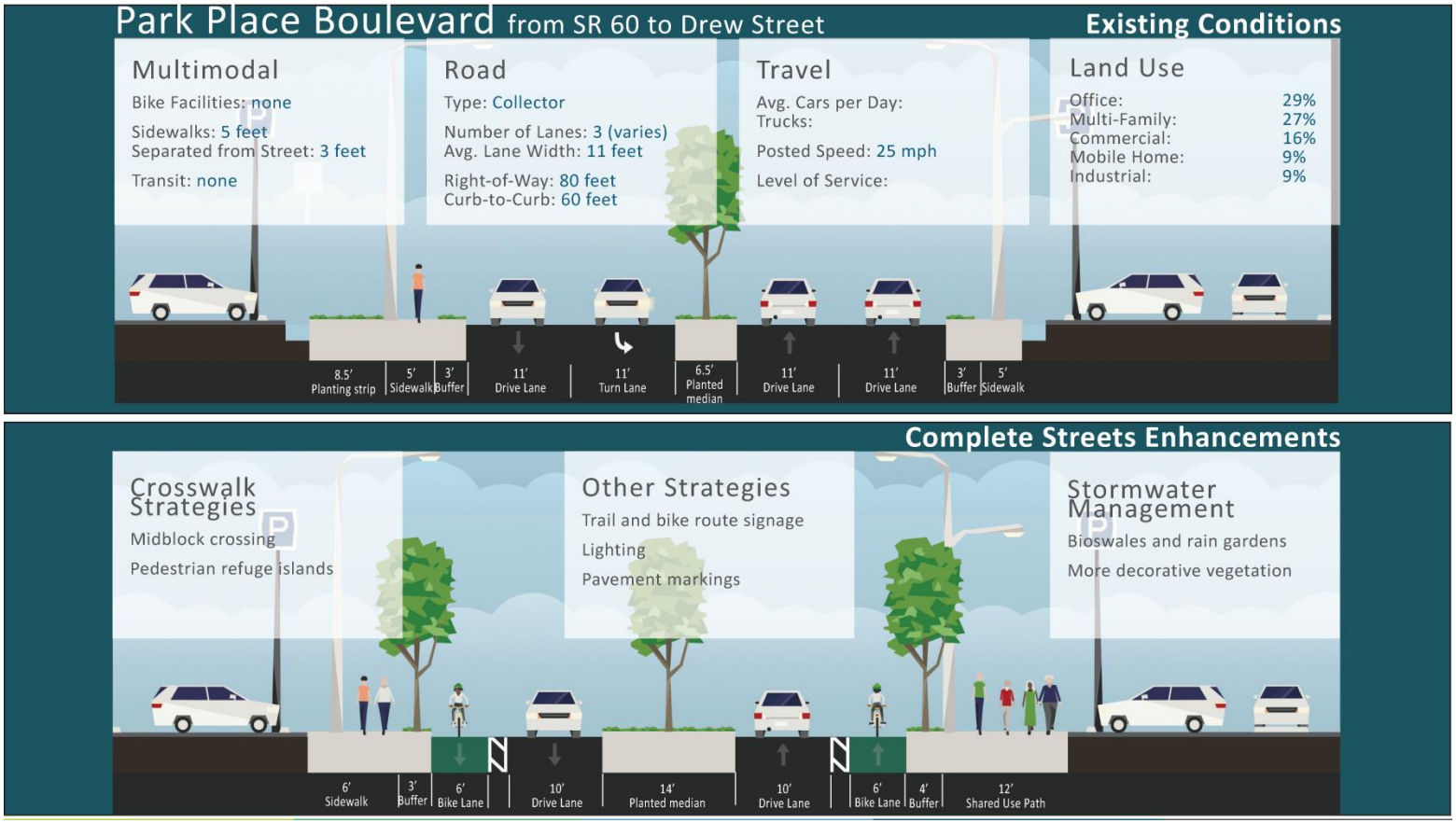
- Narrowed travel lanes
- Enhanced landscaping
- Consistent sharrows
- Bike route signage
- Widened sidewalks
- Boulevard park in the median
- Pedestrian scaled lighting



## Park Place Boulevard from SR 60 to Drew Street

Park Place Boulevard is an ideal north-south connection in the study area that connects offices, multifamily housing, parks, and trails. The road is sufficiently wide to accommodate on-road, buffered bike lanes, and it currently lacks marked crossings. Other strategies:

- Narrowed travel lanes
- Enhanced landscaping
- On-street painted and buffered bike lanes
- Traffic calming
- Bike route signage
- Multi-use path/Wider Sidewalk
- Pedestrian scaled lighting



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# Chapter 8: Public Engagement

While public engagement is essential to every planning project, those involving multimodal solutions rely heavily on the solutions that neighboring communities want to see and will support. This study used multiple venues to engage with stakeholders and communities.

## Stakeholders

The study was guided by regular meetings with agency stakeholders. Representatives for PSTA, FDOT, Forward Pinellas, City of Clearwater, and Pinellas County reviewed the research and results at milestones.

A coordination meeting was also conducted at TIA with its planning staff, PSTA, Forward Pinellas, and other study team members. TIA is undergoing major renovations, and coordinating accommodations for express transit service is essential. TIA is a participant in the regional transit conversation and a partner for this study.

The team also met with business interests represented by the Clearwater Chamber of Commerce and the Beaches Chamber of Commerce early in the study's development. The resulting conversations focused on traffic congestion, particularly during spring break or festival events; parking availability; and multimodal access for beach employees.

## Neighborhood Associations

The study team met with a number of neighborhood associations in the study area through the life of the study. The meetings happened as part of regularly scheduled association meetings, which was a successful public engagement approach. Piggybacking on existing meetings and going to the public instead of asking the public to come to a project-specific workshop resulted in higher numbers of contacts and conversations that built on neighbors' comments. The conversations differed depending on each neighborhood's location, but multimodal safety and access were consistent themes. The team described the study, the identified gaps, and gave a menu of possible solutions. Participants suggested additional gaps and stated which solutions they would most like to see and use in their neighborhoods.

The following neighborhood association groups influenced the study's outcomes:

- Skycrest Neighborhood Association
- Coachman Ridge Neighborhood Association
- Clearwater Neighborhoods Coalition

## Public Workshops

Two public workshops were held to offer another method of engagement and to encourage participation in hands-on activities. Attendance was light but the workshops resulted in valuable feedback and suggestions that were incorporated into the study results. Participants had the chance to hear a presentation on the study's purpose and the objective of the workshop, to identify on maps any additional perceived gaps in the multimodal network, to select the best strategies to fill those gaps from a full menu of solutions, to try their hand at building a Complete Street, to react to draft typicals showing each segment as it currently is and how it could appear as a Complete Street, and to speak with members of the study team.

The public workshops were held at the following locations on the following dates:

St Petersburg College, Clearwater Campus
2465 Drew Street
February 28, 2017, 5:30 – 7:00 pm

Downtown Clearwater Public Library
100 N Osceola Aveune
March 7, 2017, 5:30 – 7:00 pm

## Other presentations

The study team also presented to Forward Pinellas's committees: Technical Coordinating Committee, Citizens Advisory Committee, and Bicycle and Pedestrian Advisory Committee. The Forward Pinellas Board is scheduled to hear the presentation in December 2017.

# Chapter 9: Project Cost Estimates & Funding

## Cost Methodology

Costs were estimated with multiple resources, including information obtained from FDOT Long Range Estimates (LRE) System, FDOT Statewide Average Unit Cost, and FDOT Area 8 Average Unit Cost.

### Estimating Approach

Cost estimates were developed using two basic approaches: "bottom up" and "top down." The bottom up approach is best applied to developing unit costs where quantities are defined based on engineering data. Unit costs are developed and work item components are combined using typical sections to estimate costs for each category of work. This approach results in more accurate estimates due to the use of quantifiable data but relies on specific engineering information that is not available in its entirety during the feasibility study and may not be available until later phases of the project. The top down approach derives unit costs from historic cost data. Accuracy is less achievable with this method; therefore, this method is applied only when necessary. Through a combination of these two estimating approaches, reasonably accurate cost estimates are developed during the planning stages and revised during final design.

For example, some of the existing two-lane projects do not have paved shoulders or bike lanes and nominal drainage capacity. Using FDOT's LRE System composite report for New Construction 2-Lane Undivided Urban Arterial with 4' Bike Lanes Cost-Per-Mile Model, cost were developed for roadway improvements based on percentage length of one mile (i.e. if the project is 2640 feet in length, quantities are calculated at 50 percent of the cost-per-mile quantities). However, if the project is 1.3 miles in length, quantities are calculated at 130 percent of the cost-per-mile quantities. The cost-per-mile model uses 12-foot lane width as a basis for calculating quantities, however because of existing right-of-way constraints, the use of six- or seven-foot buffered bikes and 10- or 11-foot lanes some quantities are adjusted accordingly.

Cost estimates require the use of typical sections, preliminary concept plans, existing as-built plans, if available, and the use of aerial photography to identify the infrastructure elements needed to prepare the preliminary and final cost estimates. Quantitative data to calculate unit costs is derived from typical sections and plan sheets. Cost estimates will be computed using a Microsoft Excel spreadsheet to describe the pay item, unit cost, quantity and final cost.

Costs were calculated in 2017 dollars, and existing construction technology was assumed.

### Short-term Cost Estimates

Using the methodology and assumptions documented above, cost estimates were developed for each short-term multimodal project. The total project costs are summarized in **Table 14**. The detailed cost estimates by project phase are provided in **Appendix E**.

**Table 14: Short-Term Multimodal Project Capital Cost Estimates**

| Project | From | To | Network Gap | Jurisdictional Agency | Total Cost |
|---|---|---|---|---|---|
| **Beach to TIA Express** | TIA | Clearwater Beach | Premium Express Transit | PSTA | $3,419,213 |
| **Memorial Causeway Busway for trolleys and the planned TIA to Beach Express** | Court Street | Clearwater Beach Transit Center | Premium Express Transit | PSTA, City of Clearwater | $8,090,938 |
| **SR 60/Chestnut Street** | Bay Avenue (Court Street) | Martin Luther King Jr. Avenue | Bicycle Accommodations | FDOT | $543,584 |
| **SR 60/Gulf to Bay Boulevard** | US 19 | Highland Avenue | Multi-use Accommodations | FDOT | $721,638 |
| **Missouri Avenue** | Belleair Road | Court Street (SR 60) | Bicycle Accommodations | FDOT | $14,054,470 |
| **Missouri Avenue** | Court Street (SR 60) | Cleveland Street | Bicycle Accommodations | City of Clearwater | $2,842,151 |
| **Missouri Avenue** | Cleveland Street | Drew Street | Bicycle Accommodations | City of Clearwater | $1,119,269 |
| **SR 60/Gulf to Bay Boulevard** | McMullen Booth Road | Hampton Road | Multi-use Accommodations | FDOT | $1,865,666 |
| **Drew Street** | North Myrtle Avenue | Saturn Avenue | Multi-use Accommodations | FDOT | $3,382,304 |
| **Gulf to Bay Boulevard** | Court Street | Cleveland Street | Bicycle Accommodations | City of Clearwater | $2,797,004 |
| **Drew Street** | Betty Lane | Highland Avenue | Multi-use Accommodations | FDOT | $1,876,317 |
| **Clearwater Beach Connector Trail** | Pinellas Trail | Martin Luther King Jr. Avenue | Multi-use Accommodations | City of Clearwater | $297,746 |
| **NE Cleveland Street** | Gulf to Bay Boulevard | Missouri Avenue | Bicycle Accommodations | City of Clearwater | $3,697,917 |
| **Martin Luther King Jr. Avenue** | Court Street | Lakeview Road | Bicycle Accommodations | City of Clearwater | $4,570,073 |
| **Drew Street** | Myrtle Avenue | N Osceola Ave | Bicycle Accommodations | City of Clearwater | $158,261 |
| **Martin Luther King Jr Avenue** | Court Street | Fairmont Street | Bicycle Accommodations | City of Clearwater | $9,736,892 |
| **Clearwater Beach Trail** | South of 5th Street | South of Sand Key Park Entrance | Multi-use Accommodations | City of Clearwater | $735,666 |
| **SR 60/Gulf to Bay Boulevard** | Highlands Avenue | South Lake Drive | Multi-use Accommodations | FDOT | $65,365 |

| Project | From | To | Network Gap | Jurisdictional Agency | Total Cost |
|---|---|---|---|---|---|
| **South Prospect Avenue** | Druid Road | Cleveland Street | Bicycle Accommodations | City of Clearwater | $3,861,068 |
| **North Betty Lane** | Drew Street | Union Street | Bicycle Accommodations | City of Clearwater/Pinellas County | $11,397,645 |
| **Druid Road** | Orange Avenue | US 19 | Bicycle Accommodations | City of Clearwater | $23,387,770 |
| **South Keene Road** | SR 60/Gulf to Bay Boulevard | Lakeview Road | Bicycle Accommodations | Pinellas County | $358,613 |
| **Ream Wilson Clearwater Trail** | Pinellas Trail | Ream Wilson Trail | Multi-use Accommodations | City of Clearwater | $1,298,418 |
| **Highland Avenue** | Druid Road | Drew Street | Bicycle Accommodations | City of Clearwater/Pinellas County | $3,950,218 |
| **North Greenwood Loop** | Pinellas Trail | Pinellas Trail | Multi-use Accommodations | City of Clearwater | $552,518 |
| **Drew Street** | Madison Place Boulevard | McMullen Booth Road | Bicycle Accommodations | Pinellas County | $481,146 |
| **Duke Energy Trail** | Sharkey Road | Ream Wilson Trail | Multi-use Accommodations | Pinellas County | $79,279 |
| **Druid Road Southwest** | South Fort Harrison Avenue | Jeffords Street | Bicycle Accommodations | City of Clearwater | $106,396 |
| **Park Place Boulevard** | SR 60/Gulf to Bay Boulevard | Drew Street | Bicycle Accommodations | City of Clearwater | $3,135,791 |
| **Cleveland Street** | Belcher Road | Keene Road | Bicycle Accommodations | City of Clearwater | $23,938 |
| **Cleveland Street** | Hillcrest Avenue | Belcher Road | Bicycle Accommodations | City of Clearwater | $4,645,261 |
| **Courtney Campbell Connection** | Bypass Drive | Bayshore Boulevard | Multi-use Accommodations | Pinellas County | $693,961 |
| **Hampton Road** | SR 60/Gulf to Bay Boulevard | Drew Street | Bicycle Accommodations | City of Clearwater | $1,968,650 |
| **North Lake Avenue** | Drew Street | Druid Road | Multi-use Accommodations | City of Clearwater | $1,849,064 |
| **Lakeview Road** | South Keene Road | West of S Dr. Martin Luther King Jr. Avenue | Bicycle Accommodations | City of Clearwater | $8,847,017 |
| **Hercules Avenue** | Druid Road | Drew Street | Bicycle Accommodations | City of Clearwater | $5,164,429 |
| **Saturn Avenue** | Flagler Drive | Gulf to Bay Boulevard | Bicycle Accommodations | City of Clearwater | $8,959,343 |
| **Ross Norton Connection** | Pinellas Trail | Lake Bellevue | Multi-use Accommodations | Pinellas County | $233,545 |
| **Lakeview Road** | South Hercules Avenue | South Keene Road | Bicycle Accommodations | City of Clearwater | $2,514,804 |
| **Arcturas Avenue** | Drew Street | Druid Road | Bicycle Accommodations | City of Clearwater | $4,589,687 |
| **Druid Road South** | Jeffords Street | Belleview Boulevard | Bicycle Accommodations | City of Clearwater | $13,299 |

| Project | From | To | Network Gap | Jurisdictional Agency | Total Cost |
|---|---|---|---|---|---|
| **Island Way** | Memorial Causeway | Terminus | Bicycle Accommodations | City of Clearwater (Island Estates) | $23,073 |
| **Bayview Avenue** | Drew Street | SR 60/Gulf to Bay Boulevard | Bicycle Accommodations | City of Clearwater | $3,293,476 |
| **Bayview Avenue** | SR 60/Gulf to Bay Boulevard | CR 31 | Bicycle Accommodations | City of Clearwater | $824,333 |

## Long-term Cost Estimates

Using the methodology and assumptions documented above, cost estimates were developed for each long-term corridor segment. The long-term cost estimates include the cost for the short-term plus the additional Complete Streets features that comprise the overall corridor vision. The total long-term vision costs are summarized in **Table 15**. The detailed, line-item cost estimates are provided in **Appendix F**.

**Table 15: Long-Term Corridor Vision Capital Cost Estimates**

| Facility | From | To | Cost |
|---|---|---|---|
| SR 60 | Courtney Campbell Causeway | Hampton Road | $4.52 Million |
| SR 60 | Hampton Road | Lake Drive | $1.38 Million |
| SR 60 | Lake Drive | MLK Jr. Avenue | $4.30 Million |
| SR 60 | MLK Jr. Avenue | Pierce Street | $1.80 Million |
| SR 60 | Pierce Street | Clearwater Beach | $8.10 Million |
| Drew Street | McMullen Booth Road | Hampton Road | $0.83 Million |
| Drew Street | Hampton Road | Saturn Avenue | $4.40 Million |
| Drew Street | Saturn Avenue | Myrtle Avenue | $4.90 - $10.60 Million |
| Drew Street | Myrtle Avenue | N. Osceola Avenue | $0.16 Million |
| Druid Road | US 19 | Orange Avenue | $23.4 Million |

## Funding Options

As Forward Pinellas identifies needs for improving its active transportation network in the SR 60 area, funding availability will partly determine when projects can be built. Forward Pinellas is not unique: there are more needs than available local funding can pay for and state and federal grants remain competitive.

The good news is that city, local, state, and federal sources do exist for paying for multimodal projects. The City of Clearwater and Pinellas County have dedicated funding sources for sidewalks and bicycle lanes. Despite the consolidation and cutbacks of federal funding that pays for bicycle and pedestrian facilities, Florida has opted to maintain programs that legislation has allowed states to cut, such as Safe Routes to School. Florida has also committed annual funding to building a state-wide regional trail, the Shared-Use Non-motorized (SUN) Trail network.

This chapter summarizes local, state, and federal funding sources that are available for funding bicycle and pedestrian projects.

## Local Funding

The City of Clearwater receives much of its funding for capital projects from a portion of its property taxes and county sources, such as Penny for Pinellas, the local option gas tax, and a multimodal impact fee. The following sections describe those sources.

### Road Millage

The City of Clearwater sets aside a portion of the total property tax millage rate, or road millage, to pay for road maintenance and capital projects, which includes sidewalks. In fiscal year 2016/2017, this made up approximately 7 percent, or $3.1 million of the $44.4 million generated from property tax revenue. Between fiscal years 2016 and 2022, the total funding from the road millage is estimated to be $13.32 million

### Penny for Pinellas

The Penny for Pinellas is a voter-approved one cent sales tax applied to the first $5,000 of purchases. Groceries and medicine are excluded. Officially named the Local Government Infrastructure Sales Surtax, voters first approved Penny for Pinellas in November 1989 for the period of 1990 to 2000. Voters extended the tax three more times from 2000 to 2010, 2010 to 2020 and 2020 to 2030.

Penny for Pinellas revenue is distributed between the county and its municipalities. In addition to funding projects such as flood control, new fire trucks and police vehicles, emergency operations, and parks, a large share of Penny for Pinellas revenue funds roads, bridges, trails, and sidewalks. The development of the Pinellas Trail is a key accomplishment funded by the tax. In the first ten years, approximately 71.7 percent of Penny for Pinellas paid for transportation projects

totaling $458 million. The share for transportation projects dropped to 47.5 percent over the second ten-year period, totaling $350 million. The share is projected to rise to 51.4 percent for the current period; however, the estimated amount is less at $330 million.[5]

For the City of Clearwater, more than $2.42 million of Penny for Pinellas is budgeted for a Downtown Intermodal Facility and $1.89 million for sidewalk construction in the fiscal year 2016-2020 budget.

## Gas Taxes

Pinellas County collects a local option gas tax of six cents per gallon gas. Of the revenue collected, the County distributes 40 percent to the local municipalities for transportation projects, including public transportation operations and maintenance, street lighting, traffic signs, and pavement markings. Between Fiscal Year 2017 and 2022, the projected revenue is estimated to be $1,535,350. The local option gas tax can be used to pay for maintenance projects.

Pinellas County also collects additional fuel taxes that are applied to county projects but do not get distributed to the cities, even though the County has the option. Those taxes include a:

- Constitutional Fuel Tax (two cents per gallon)
- County Fuel Tax (one cent per gallon)
- Ninth Cent Fuel Tax (one cent per gallon)

The total revenue for those fuel taxes is estimated to be $240.8 million between 2020 and 2040. The County's share of the local option gas tax is estimated to be $230.5 million over the same period.

## Multimodal Impact Fee

In 2016, Pinellas County renamed the Transportation Impact Fee Ordinance (TIFO) to Multimodal Impact Fee Ordinance (MIFO) to reflect local priorities of funding projects that support travel for bicyclists, pedestrians, and motorists. The formula for the fee, which has been in existence since 1986, did not change. It is calculated using land use (e.g., average trip length) and transportation demand (e.g., trip generation rate, percent new trips, and capacity) variables. MIFO allows local governments to manage moderate to large scale projects by requiring new development to reduce car demand while increasing mobility through transportation management plan strategies, transportation improvements incorporated into the project, and/or by paying the multimodal impact fee (MIF). The MIF can only be applied to designated multimodal

[5] Compiled from Pinellas County's Comprehensive Plan's Transportation Element and Penny for Pinellas data

impact fee districts and applied to capital improvement projects and transportation expansion projects.

Between Fiscal Year 2017 and 2022, the MIF is expected to fund $890,000 in transportation projects in the City of Clearwater for major intersection improvements, traffic calming, and new signal installations.

## State Sources

In Florida, transportation funding is generally raised from vehicle and truck fuel taxes, motor vehicle fees, aviation fuel taxes, documentary stamp tax, and rental car fees. The revenue is deposited into the State Transportation Trust Fund (STTF), where it is distributed to the Florida Department of Transportation (FDOT) districts, which further distribute funding to local projects. The fuel tax accounts for the majority, or 30.8 percent, of the transportation revenues in 2017 (**Table 16**), and federal aid reimbursement accounts for another 30.4 percent of revenue. Authorized under 206.46 (3), F.S., the FDOT must commit at least 15 percent of the revenues deposited into the STTF to public transportation projects. The FDOT must also dedicate funding from the motor vehicle tax for building the Shared-Use Non-motorized (SUN) Trails network.

**Table 16: 2017 Transportation Revenues**

| Revenues | Amount (millions) |
|---|---|
| Fuel Tax | $2,243.20 |
| Aviation Fuels | $29.50 |
| Motor Vehicle License/Tag Fees | $1,163.10 |
| Rental Car Surcharge | $139.50 |
| Documentary Stamp Tax | $281.80 |
| Miscellaneous Revenue | $176.30 |
| Reimbursements | $1,028.00 |
| Interest | $6.90 |
| Federal Aid Reimbursement | $2,216.50 |
| **Total** | **$7,284.70** |

While state programs budget specifically for bicycle and pedestrian projects, it is difficult to pinpoint exactly how much the state fully funds bicycle and pedestrian facilities. Some road projects may include a multimodal facility as a part of the project, but the cost of the facility; e.g., bicycle lane, may not be itemized. As new roads (especially regional roads) are built, there should be opportunities to incorporate bicycle and pedestrian facilities into the design and costs through different funding opportunities, such as the Transportation Regional Incentive Program (TRIP). FDOT also provides grant funding to programs that target improving safety on roads through its transportation safety sub-grant program.

The following sections describe the SUN Trail program, TRIP funding, and the FDOT Safety Sub-Grant program.

### SUN Trail

Passed into law in 2015, 339.81, F.S. requires the FDOT to include SUN Trail projects in its work program, spending approximately $25 million annually to build a statewide multi-use trail system that will ultimately connect the Gulf Coast, Central Florida, and the East Coast. SUN Trail is paid for by the State's motor vehicle tax. SUN Trail funding will not pay for trail amenities, such as benches, bicycle racks, restrooms, landscaping, parking areas, artwork, and water fountains. Projects are identified for funding based on project identification, project prioritization, and project selection. Florida Greenways and Trails Council (FGTC) makes a recommendation on which eligible projects receive priority for funding based on selection criteria.

To be eligible for SUNTrail funding, projects must meet the following four criteria:

1. Be part of the SUNTrail Network; this is the portion of the FGTS Priority Land Trails Network planned as paved trails
2. Be a MPO priority, if the project is located inside the MPO boundary; or be a county and where applicable city, tribal government, or federal state managing agency priority, if the project is located outside the MPO boundary
3. Have a formal commitment from an entity to maintain the project
4. Be consistent with the applicable comprehensive or long-term management plan

Individual projects that are eligible and compete for SUNTrail funding are ranked based on the following criteria:

- Enhances safety for bicyclists, pedestrians, and motorists
- Is recognized as having regional significance
- Will receive additional, committed funding from another source
- Improves mobility by completing, improving, or enhancing existing facilities
- Is shovel-ready
- Is supported by the public
- Improves economic opportunities and serves key destinations
- Enhances or preserves environmental resources
- Closes a gap in the SUNTrail Network
- Includes cost-saving elements

In 2015, the State legislature required that FDOT budget $25 million annually for SUNTrail projects. Pinellas County is receiving $7.1 million in funding to close two gaps on the Pinellas Trail Loop, which is a part of the SUNTrail network. No projects within the study area are currently eligible for this effort.

### Transportation Regional Incentive Program (TRIP) Funds

In 2005, the Florida Legislation created the Transportation Regional Incentive Program (TRIP) with Senate Bill 360. TRIP funds are used to match up to 50 percent of local or regional funding, which can include federal funding, private money, and in-kind matches from right-of-way donations. Revenue from TRIP funding is

from the Documentary Stamps Tax. The first $60 million of the funds are allocated to Florida Rail Enterprise. Generally, TRIP funding pays for projects that are considered regionally significant on the Strategic Intermodal System.

TRIP funding for FDOT District 7 is estimated to be $29.7 million for 2020-2040. It is anticipated that Pinellas County will receive $9.3 million within the same time period.

### Florida Department of Transportation Safety Sub-Grants

In Florida, approximately $21.7 million funding is provided to program areas that include pedestrian and bicycle safety. The FDOT Safety Office awards start-up sub-grants to programs that address traffic safety in the following priority areas from the 2012 Strategic Highway Safety Plan and Pedestrian and Bicycle Strategic Safety Plan:

- Aging Road Users
- Community Traffic Safety
- Impaired Driving
- Motorcycle Safety
- Occupant Protection and Child Passenger Safety
- Pedestrian and Bicycle Safety
- Police Traffic Services
- Speed and Aggressive Driving
- Teen Driver Safety
- Traffic Records
- Traffic Record Coordinating Committee

Countermeasures, which are outlined in the Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices (Eighth Edition, 2015), are eligible for sub-grant funding. Those countermeasures generally target prevention through education and enforcement programs, not capital infrastructure and maintenance projects. For example, countermeasures education programs to children, outreach to the community about pedestrian safety, clinics on bicycle and pedestrian safety, and driver training. Different types of organizations can apply for funding, including state, county, and city governments; law enforcement agencies; state colleges and universities; schools; fire departments; and non-profits.

Organizations seeking project funding are required to turn in a concept paper that describes the project between January 1 and the last day of February for the next fiscal year beginning October 1st. Sub-grants are not guaranteed to continue beyond the first year, and they are generally limited to three consecutive years. The concept papers are evaluated on how well a project will target safety issues in areas with a high number of crashes, fatalities, and injuries; therefore, applicants need to provide data on a minimum three year history for crashes, fatalities, injuries, and police citations to demonstrate need. Funding comes from the National Highway Traffic Safety Administration (NHTSA)

and is allocated to states annually based on the state population and the state's road miles.

## Federal Sources

Federal funding for transportation projects is primarily raised through highway excise taxes comprised of motor fuel taxes or truck-related taxes. The revenue is deposited into the Highway Trust Fund and divided between the Highway Account and Mass Transit Account.

In 2005, the Safe Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) increased funding for multimodal projects. The SAFETEA-LU provided approximately $1.2 billion annually to bicycle and pedestrian projects through three programs: Transportation Enhancements (TE), Safe Routes to School, and the Recreational Trails Program (RTP). In 2012, Moving Ahead for Progress in the 21st Century (MAP-21) combined the three programs under one Transportation Alternatives Program (TAP). A concern among bicycle and pedestrian advocates was that Congress reduced funding by as much as 42 percent, depending on the fiscal year. MAP-21 also allowed states to spend up to 50 percent of TAP funding on projects unrelated to biking and walking, which would reduce available funding by as much as 70 percent. Competition for the funding grew because, in addition to combining the three programs, the types of eligible projects were expanded to include environmental mitigation projects and boulevard projects.

Signed into law on December 4, 2015, The FAST Act provides funding through 2020 for transportation infrastructure in the United States. While annual funding for bicycle and pedestrian projects increased slightly under The FAST Act, The FAST Act also further consolidated funding for bicycle and pedestrian projects. For example, the TAP became a set-aside program under the Surface Transportation Block Grant Program (STBGP). The following sections describe the main programs available under The FAST Act.

### Transportation Alternatives

The Transportation Alternatives (TA) set aside replaces the stand alone Transportation Alternatives Program (TAP), although states can continue to refer to the program as TAP. Funding for the TA program now comes from the budget for the Surface Transportation Block Grant Program (STBG), previously the Surface Transportation Program (STP). The change does not reduce the amount of funding for the multimodal projects. Under MAP-21, TAP funding was $808.76 million in fiscal year 2013 and $819.9 million in fiscal year 2014. Under The Fast Act, TA grants are funded at $835 million in fiscal years 2016 and 2017 and $850 million in fiscal years 2018, 2019, and 2020.

Total funding for the STBG Program is summarized in **Table 17**.[6,7]

**Table 17: STBG Program Funds**

| Fiscal Year | Total |
|---|---|
| **FY 2016** | $11.16 billion |
| **FY 2017** | $11.42 billion |
| **FY 2018** | $11.67 billion |
| **FY 2019** | $11.88 billion |
| **FY 2020** | $12.14 billion |

The TA program funds projects that are defined as a transportation alternative, or transportation other than driving alone. Eligible projects include bicycle and pedestrian facilities, recreational trails, and safe routes to school projects, which are also described in more detail under federal sources. Each state receives the same proportion that it received in fiscal year 2009 through the Transportation Enhancements program. TA funding is divided into two categories. Half of the money is awarded to areas based on population, and the other half is awarded to any area of Florida. For the former, population based category, approximately 38 percent of the total funding is awarded to transportation management areas (TMAs) serving populations larger than 200,000.

The Florida Department of Transportation (FDOT) manages TA funds for Florida. The funding is given to the FDOT, which distributes it to the districts to award to eligible projects through a competitive selection process administered by the Metropolitan Planning Organization (MPO). FDOT replaced the 20 percent local match requirement with toll credits. It is estimated that Pinellas County's share of TA funds will be approximately $50.2 million between 2020 and 2040.[8,9,10]

### Recreational Trails Program

Reauthorized with The FAST Act, the Recreational Trails Program (RTP) pays for the development and maintenance of recreational trails through 2020. It is part of the TA set aside, and each state manages its own program. Non-motorized and motorized trail projects are eligible; e.g., walking, biking, in-line skating, equestrian use, snowmobiling, off-road motorcycling, etc. Between 1993 and 2015, the RTP has provided more than $1 billion for 21,358 trail projects in all 50 states; at least 209

[6]Surface Transportation Block Grant Program. June 21, 2016. Retrieved from http://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm

[7] Fixing America's Surface Transportation Act or "FAST Act". February 2016. https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm

[8] Pinellas Transportation Plan Financial Resources Technical Memorandum, March 9, 2015

[9] Florida Department of Transportation Alternatives Program Guidance, February 25, 2014

[10] 2040 Long Range Transportation Plan (LRTP), Forward Pinellas

have been in Florida.[11] Between 1997 and 2015, 13 Pinellas County trail projects have received more than $1.5 million in RTP funds.[12]

### Safe Routes to School

With SAFETEA-LU, Safe Routes to School began as a way to fund projects that will make it safer for children to bike and walk to school and back home. Between 2005 and 2012, the Federal government provided more than $1.1 billion to projects that were capital infrastructure projects within a two-mile radius of a school and programs that encouraged and educated families about walking and biking. MAP-21 eliminated Safe Routes to School as a guaranteed stand-alone funding program and reduced the overall amount dedicated to bicycle and pedestrian projects. . In other words, it allowed states to opt out of a Safe Routes to School program, making those projects compete with other bicycle and pedestrian projects for funding. For states that opted to maintain a separate program, MAP-21 required a 20 percent local or state match. Those changes have continued under The FAST Act.[13,14]

The State of Florida dedicates TA funding specifically to Safe Routes to School projects. The program is managed by the Florida Department of Transportation (FDOT). Eligible projects compete for funding through an application process. For the fiscal year 2018 funding cycle, $7 million is available.

To receive funding, projects need to:

- Benefit public, private, and tribal schools kindergarten through high school
- Be supported by a local agency that is Local Area Program (LAP) certified
- Enter a legal agreement with FDOT
- Comply with all federal requirements for project design and/or construction
- Have a local agency committed to the project after it is finished

Eligible projects include (but are not necessarily limited to):

- Pedestrian facilities: new sidewalks on public right-of-way that meet requirements from the American with Disabilities Act
- Bicycle facilities: bicycle racks, shelters, and lockers on school grounds on public school

[11] 2016 Recreational Trails annual Report. https://www.fhwa.dot.gov/environment/recreational_trails/overview/report/2016/report_2016.pdf

[12] Recreational Trails Program Database. Accessed on October 3, 2017. http://recreationaltrailsinfo.org/database/search_results.php?state percent5B percent5D=fl&countyVal=Pinellas&congressDVal=&trailVal=&projVal=&project_year=&project_year2=&form_id=525625&submit=Search+the+Database

[13] America Bikes' Side-By-Side Comparison of Bicycle and Pedestrian Programs: SAFETEA LU vs. MAP-21. http://transportation.ky.gov/bike-walk/documents/SAFETEA-LU_vs_MAP-21.pdf

[14] Funding History of Safe Routes to School. http://www.saferoutespartnership.org/healthy-communities/101/history

property; special cases can be made for private schools

- Traffic control devices: New or improved crosswalks, pavement markings, traffic signs and signals, flashing beacons, bicycle-sensitive signal devices, pedestrian countdown signals, pedestrian-activated signal upgrades, and other related traffic control devices.

### Congestion Mitigation and Air Quality Improvement Program

Reauthorized under The FAST Act, the Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides funding to states for projects designed to reduce congestion and improve air quality in regions that do not comply with the Clean Air Act. Eligible projects for these regions, which are called non-attainment or maintenance areas of National Ambient Air Quality Standards, can include bicycle and pedestrian projects as long as there is quantified evidence that emissions will be reduced. Projects must be included in the MPO's Transportation Improvement Program and a conforming transportation plan. The federal share is up to 80 percent, and agencies are reimbursed for the project after it is built. Pinellas County is not in a designated non-attainment region or maintenance area. CMAQ funding is estimated to be $2.3 billion to $2.5 billion annually between 2016 and 2020.

### Highway Safety Improvement Program

Reauthorized under The FAST Act, the Highway Safety Improvement Program (HSIP) funds safety projects designed to reduce the number of traffic fatalities and injuries on all public roads. Eligible projects must be consistent with the state's Strategic Highway Safety Plan (SHSP) and include pedestrian hybrid beacons and road projects that separate pedestrians from vehicles; e.g., medians and pedestrian crossing islands. Annual funding for the program is between $2.3 and $2.5 billion between fiscal years 2016 and 2020.

### Transportation Investment Generating Economic Recovery Discretionary Grant

Referred to as TIGER grants, this federal grant program has provided $5.1 billion to 421 projects across the United States since it began in 2009; approximately $500 million of TIGER grant funding is available through fiscal year 2020.[15] The funding is authorized by the Consolidated Appropriations Act (2017). Local and state governments apply through a competitive process to receive federal funding for eligible transportation projects.

TIGER grants are distributed geographically across the United States, and no more than one

[15] About Tiger Grants. September 6, 2017. https://www.transportation.gov/tiger/about

grant will be awarded to projects in the same state during an award period. Projects are judged on how well they improve the condition of existing infrastructure, address public health and safety, promote regional connectivity, and facilitate economic growth. TIGER grants will not pay for more than 80 percent of a project located in an urban area (it will pay 100 percent for rural projects), so a local match is required. Complete Streets projects have been successful winning TIGER grants. The City of Mobile, AL, was awarded $14.5 million to reduce lane widths to slow travel speeds and add bicycle lanes and sidewalks. Lee County MPO was awarded a $10.5 million TIGER grant to build a series of multimodal pathway projects that fill gaps in the County's bicycle and pedestrian network.

Additional federal programs to fund projects exist although many are highly specialized (e.g., they fund projects on Native American Reservations).

# Appendix A – Background Studies

The following previous planning studies were reviewed as a part of this effort:

- Beach by Design: A Preliminary Design for Clearwater Beach
- Downtown Clearwater Market Study
- Pinellas MPO Clearwater Beach to Downtown Clearwater Evaluation of Transit Alternatives Project
- Forward Pinellas's 2040 Long Range Transportation Plan (LRTP)
- Hillsborough County MPO 2040 LRTP
- Pinellas Suncoast Transit Authority - Transit Development Plan FY 2015/24
- Forward Pinellas's The Countywide Plan Strategies
- Tampa Bay Area Regional Transportation Authority's Master Plan
- Florida Department of Transportation SR 60 Corridor Operations Study

The aforementioned studies are summarized below.

**Title: Beach by Design: A Preliminary Design for Clearwater Beach**
**Year**: 1998
**Purpose**: To implement the recommendations brought forth in the Clearwater Beach: Strategies for Revitalization study which was completed in 1998.

**Recommendations**:

- North Mandalay Blvd. between the Roundabout and Baymont – 2 way, 4 lanes with parallel parking on the western side
- Coronado to be improved as a three lane road in one of the following configurations: 1) two lanes south and one lane north, or 2) one lane south, one lane north and one lane for median, turn lanes or to be reversible according to peak directional demand. Beach by Design proposes a 45 foot wide cross-section with three travel lanes, direction to be decided, and a 9 foot sidewalk on one side of the new cross section.
- Beach by Design recommends that the City of Clearwater make a serious commitment to improving the pedestrian environment on Clearwater Beach. A central element of that commitment is the creation of Beach Walk, the proposed realignment and configuration of South Gulfview which contains a promenade, a bicycle/roller blade trail and a gulfront sidewalk.
- In addition, the recommended improvements to Coronado include a continuous sidewalk from Hamden to Pier 60.
- In the vicinity of Pier 60 Park, Beach by Design proposes that sidewalks be widened on the west side of the realigned Coronado and that the beach promenade be extended to the Beach Pavilion from the northern terminus of South Gulfview.

- North Mandalay - at least one sidewalk of at least 14 feet in width can be constructed between North Beach and the Pier 60 Park.
- The sidewalk system in the Clearwater Pass District should also be enhanced and connected with Beach Walk.
- The beach pedestrian network be fully linked to Downtown. The potential for connecting the Pinellas Trail to the Memorial Causeway and linking it to the beach network should be pursued.
- City needs to install convenient and safe pathways and racks for secure storage at key locations
- Beach by Design recommends an intra-island transit system to carry passengers between the public parking lot at Rockaway and the parking lot immediately to the north of the Adams Mark. The proposed transit system would be relatively slow moving vehicles, moving at 6-10 miles per hour – rubber wheeled or narrow gauge trolley – along a fixed guideway.
- Beach by Design recommends that North Mandalay should be narrowed to two wide travel lanes which would accommodate generous sidewalks on both sides, one lane of parallel parking, a 6 foot landscaped median and a fixed guideway.
- Beach by Design recommends the City implement relatively radical access rationing measures during the 40 or so peak days
- Beach by Design recommends that the City either implement controlled lane access (similar in concept to a high occupancy vehicle lane) or impose congestion pricing on access to the Beach road network.
- Beach by Design recommends that the City implement a transit program to carry visitors to and from Clearwater Beach and, potentially, to link with the proposed intra-beach transit system.
- Recently the Pinellas Suncoast Transit Authority (PSTA) established Trolley service between Sand Key and Pass-A-Grill. Beach by Design recommends that the City work with PSTA to extend the route to Clearwater Beach.

**Title: Downtown Clearwater Market Study**
**Year:** August 2005
**Purpose:** The purpose of the study is as follows:

- Identify Downtown Clearwater's existing economic base;
- Identify the market potential for future redevelopment within Downtown Clearwater (Downtown);
- Further, identify investments that could act as catalysts for further development Downtown;

**Recommendations:**
Recommendations as to how the Community Redevelopment Area (CRA) can continue to promote the revitalization of Downtown:

- Continue Resource Focus on Cleveland Street Corridor - Once the streetscape improvements are complete, the lower traffic volumes will provide an improved pedestrian experience, which is an important element to attracting restaurants and other entertainment venues
- Opportunity Exists in Promoting Certain Ancillary Development Ventures Downtown – These include the development of a Downtown hotel, a marina (primarily oriented to transient boaters), and related ancillary uses. Our hospitality demand analysis indicates that there is a gap in the market for a high quality limited service hotel that would be well-located within Downtown. Given the difficulty in permitting slips and continued growth in the number of boats in Central and Southwest Florida, the demand for marinas continues to increase at a rapid pace. A transient marina could serve as a key profit center for its owner and provide another opportunity to bring visitors to Downtown.
- We recommend the CRA undertake the following relatively modest parking improvements as it relates to retail Downtown:
  - The City should work with property owners and Pinellas County to redesign and fund improvements to the surface lots behind the south side of the 400 block of Cleveland Street. Improving the ingress and egress, lighting, and landscaping of these lots and making it clear to patrons that non-Pinellas County workers can park in Pinellas County parking spaces after hours and at no cost should significantly improve the utility of these parking lots and increase the number of spaces available to businesses along Cleveland Street.
  - Maintain and enhance pedestrian access to and line-of-sight views of Downtown activity from Coachman and the waterfront. Pedestrian access concerns should be considered with respect to planning of new development in the immediate area, as well as in future planning of streetscape improvements along those pedestrian thoroughfares designated as critical, and in the strategic location of businesses.

**Title: Pinellas MPO Clearwater Beach to Downtown Clearwater Evaluation of Transit Alternatives Project**
**Year:** June 2010
**Purpose:** The recommendation resulting from this effort is to develop bus rapid transit (BRT) service operating largely on an exclusive busway between Clearwater Beach and downtown Clearwater. The service would operate every 10 minutes during peak hours and every 15 minutes during off-peak

hours. Six stops are proposed. One would be located at the marina in Clearwater Beach, and the remaining five would be located in the downtown area. The proposed BRT service is expected to qualify as a Very Small Starts project and is estimated to Pinellas County MPO Clearwater Beach to Downtown Clearwater have total capital cost of less than $15 million, including vehicles. The recommended project was found to meet mobility needs and can be expected to be designed and constructed within a two- to three-year period, assuming funding is available.

**Recommendations:** BRT Locally Preferred Alternative (LPA) and Locally Preferred Downtown Circulation (routes and station locations are shown in Background Review Part 1 document).

**Title: Forward Pinellas's 2040 LRTP and Related Elements (e.g. Bike/Ped Element)**
**Year:** December 2013
**Purpose:** Developing a countywide network of bicycle and pedestrian facilities in Pinellas has been a long-standing objective of the MPO. It is critical to creating environments where bicycling and walking are viable alternatives to automobile travel. Through the efforts of local governments and FDOT, substantial progress has been made toward this goal as evidenced by the more than 678 miles of sidewalks, 134 miles of bike lanes, and 87 miles of trails that have been constructed throughout Pinellas County. The Facilities Element of the MPO Bicycle Pedestrian Master Plan is intended to further these efforts by facilitating the development of an extensive network of bicycle and pedestrian facilities that maximizes opportunities for people to get around the County by foot and bicycle.

**Recommendations:**
Trail connections and recommendations

- Highland Avenue from Druid Road to Gulf to Bay Blvd; Gulf to Bay Blvd to Sunset Pt Road
- Betty Lane from Drew St to Sandy Lane
- Cleveland St from Gulf to Bay Blvd to Missouri Ave
- Lake Ave from Gulf to bay Blvd to Lakeview Road
- Keene Road from Druid Rd to Belleair Rd
- Missouri Ave from Court St to Drew St; Drew St to Palmetto St
- Saturn Ave from Gulf to Bay Blvd to Flagler Dr
- Five connections to the Pinellas Trail (no mention of our corridor)

Bike Lane recommendations

- Bayview Ave from Drew St to Gulf to Bay Blvd
- Hercules Ave Sunset Point Road to Drew Street; Drew St to Gulf to Bay Blvd; Gulf to Bay Blvd to Druid Rd; Druid Rd to Lakeview Rd
- NE Coachman Rd from Drew St to Old Coachman Rd
- Bayside Bridge from Gulf to Bay Blvd to Sector 6/8 Line

**Title: Hillsborough County MPO 2040 LRTP**
**Year:** Adopted 2014
**Recommendations:** 2040 Cost Feasible: SR 60 north of Independence to I-275@Westshore – Interchange (10 lanes)

**Title: Pinellas Suncoast Transit Authority - Transit Development Plan FY 2015/24**
**Year:** November 2014
**Purpose:** The Ten-Year Transit Development Plan (TDP) is the strategic guide for public transportation in Pinellas County over the next ten years. The FDOT requires public transit providers that receive state funding to develop and adopt a TDP consistent with Chapter 14-73.001 of the Florida Administrative Code. A major update to a TDP is conducted every five years and includes a review of transit planning and policy documents, a documentation of study area conditions and demographic characteristics, an evaluation of existing Pinellas Suncoast Transit Authority (PSTA) services, a summary of market research and public involvement efforts, the development of a situation appraisal and needs assessment, and the preparation of a ten-year transit development plan. The previous TDP Major Update was adopted by the PSTA Board in September 2010. That TDP included a vision plan, which was informed by previous planning efforts that evaluated premium bus and rail services for Pinellas County.

**Recommendations:** The No New Revenue Core Scenario shows SR 60 as a piece of the "Core Network" with local service on Drew Street, and a Transit Center in Downtown Clearwater. The same scenario shows I-275 and then Ulmerton Road carrying a regional express route from Downtown Tampa, through Westshore, and to the proposed park and ride in Largo.

The Vision Plan shows SR 60 as a Regional Express Route from TIA to Downtown Clearwater with a Park and Ride at Clearwater Mall, and an Intermodal Center in Downtown Clearwater. Drew St carries local service. Other recommendations found in the ten year operating priorities include BRT on Gulf to Bay Blvd and the Regional Express Route (current 60x) expanded to TIA and Westshore.

**Title: Forward Pinellas's The Countywide Plan Strategies**
**Year:** August 2015
**Purpose**: "…the formulation and execution…of the strategies necessary for the orderly growth, development and environmental protection of Pinellas County as a whole, with the focus on those issues deemed to have an impact countywide." Defines countywide policies and criteria for identifying a hierarchy of multimodal corridors and activity centers as well as strategies for network connectivity.

**Recommendations:** Land Use Goal 3.0: Transit-Oriented Land Use Vision Map


- The Transit-Oriented Land Use Vision Map shall guide decisions regarding proposed Countywide Plan Map amendments by directing the future location of transit-oriented densities and intensities in the County. In addition, it depicts eligible locations for Activity Center or Multimodal Corridor designation under the Tier II amendment process.
- Transit-oriented Land Use Vision Map
  - SR 60 from east of US 19 to Hillsborough County designated as a Regional Corridor
  - SR 60 from east of US 19 to downtown Clearwater designated as a Primary Corridor
  - Downtown Clearwater and Clearwater Beach designated as Special Centers
  - US 19 & SR 60 (Clearwater Mall) designated as a Major Center
  - Drew Street from McMullen Booth Rd to downtown Clearwater designated as a Supporting Corridor

**Title: Tampa Bay Area Regional Transportation Authority Master Plan**
**Year:** August 2015
**Purpose:** The Master Plan outlines improvements for a balanced transportation system to improve mobility of passengers and freight. TBARTA recommends the incremental investment in our transportation infrastructure starting with the adopted TBARTA priorities, followed by the Future Priorities, 2040 Projects, and Longer Range Projects.

**Recommendations:**

The SR 60/Memorial/I-275 interchange is a 2015 TBARTA Priority Project:

1. The Project: The I-275/SR 60/Memorial Interchange was identified as a bottleneck in the 2011 Bottlenecks on Florida SIS study. Improving the interchange is critical to successful completion of the Howard Frankland Bridge replacement, I-275 Express Lanes, a multimodal interstate corridor, and Westshore Multimodal Center with a people mover connection to Tampa International Airport (TIA). Reconstruction of the interchange will provide sufficient space to accommodate future express lanes and premium transit. In the interim, FDOT has proposed a project that includes the construction of one additional through lane in each direction.

   Progress: Unfunded — $55 million is committed for right-of-way in the FDOT Work Program in FY15/16 and FY16/17.

   TBARTA Request: Secure remaining project funding for construction of the approximately $515 million interchange improvement. (Preliminary Engineering scheduled in 2015; right-of-way scheduled for 2016 and 2017)

1. The Beach Express is a 2015 TBARTA Future Priority Project. The TBARTA Board adopted 15 Future Priority Projects in June 2015. These projects represent priorities for the region; however they require additional analysis to define costs, technology, alignment, and/or design. Future Priority Projects could be identified as regional priorities at a later time with continued evaluation regarding the projects' feasibility.

   The Project: Currently, there is no service that efficiently links downtown Tampa to Pinellas County beaches. The Beach Express will be a new partnership between Hillsborough Area Regional Transit Authority and Pinellas Suncoast Transit Authority to implement regional express service connecting Clearwater Beach, TIA, and Downtown Tampa via Memorial Causeway and SR 60.

   Progress: HART recently applied for state funding totaling $3.8 million. PSTA received a $1 million legislative appropriation for a design study that is currently underway.

   TBARTA Request: Secure $3.8 million in funding for capital and operating costs of the beach express service.

**Title: Florida Department of Transportation SR 60 Corridor Operations Study Existing Conditions**
**Year:** April 2016 (next steps still underway)
**Purpose:** The purpose of the SR 60 corridor study is to evaluate the existing SR 60 and Drew Street conditions and projected future conditions to identify the specific issues and needs that currently exist along the corridor or that will be occurring in the future. The study will develop a set of potential alternatives for addressing the issues and improving conditions along the corridor, and recommend a set of effective operational improvements to address the needs and improve traffic operational conditions along the corridor.

**Recommendations:** Found in the Interim Report (follows).

**Title: Florida Department of Transportation SR 60 Corridor Operations Study, Interim Report**
**Year:** August 2016 (next steps still underway)
**Purpose:** The Florida Department of Transportation (FDOT) is conducting a Corridor Study along State Road (SR) 60 from Bay Avenue to McMullen Booth Road. The purpose is to identify potential improvements along the corridor including operational improvements that can be implemented in the short-term.

**Recommendations:** Specific engineering and operational changes were made for each of the 10 intersections. The intersections are:

| | |
|---|---|
| Gulf to Bay Blvd | S Ft Harrison Avenue |
| | S Missouri Avenue |
| | US 19 |
| | Park Place Blvd |
| | McMullen Booth Road |
| Drew Street | S Missouri Avenue |
| | N Keene Road |
| | N Belcher Road |
| | US 19 |
| | Hampton Road |

The report states the following as Next Steps: To fully develop these improvement options and to determine their cost and viability, the next step would be to coordinate with FDOT to identify the potential for these improvements. A final candidate list will be developed, with concept designs developed on aerial base photography. These concepts would provide a better understanding of utilities, right-of-way availability, geometrics, and cost. Once these items are fully known, then full implementation could proceed through a number of programs within the Department's operations

programs. Given that these are small scale projects, many of these would be targeted for implementation through the District's Push Button Design-Build Contracts. As part of the concept development phase, particular attention will be directed towards insuring these projects comply with these program requirements. In addition, FDOT will apply it's Complete Streets design classifications when implementing projects from this study.

# Appendix B – Land Use

## Development Trends

Development trends in the study area are described in terms of existing conditions, long range vision, and economic growth and redevelopment potential. Existing condition describes what uses and types of buildings are on the ground now and being developed. Next the long range vision represents the development density and intensity that is possible based on the long-term goals of the Countywide Plan updated in May 2016, and City of Clearwater plans including the US 19 Redevelopment Plan, Beach By Design, and the Clearwater Downtown Redevelopment Plan. Lastly, the economic growth and redevelopment potential of these areas are described.

The roadway segment groupings below are based on the Facility and Land Use Character within the Study Area Map. The series of maps show the Countywide Plan map colors according to future land use categories. Most of the land in the study area is within the City of Clearwater. Portions that are within unincorporated Pinellas County are shown with a white cross-hatch. Descriptions of the land use categories include the term Floor Area Ratio (FAR), which is the relationship between the total amount of usable floor area that a building has, or has been permitted for the building, and the total area of the lot on which the building stands. This ratio is determined by dividing the total, or gross, floor area of the building by the gross area of the lot.

### Drew Street – minor arterial

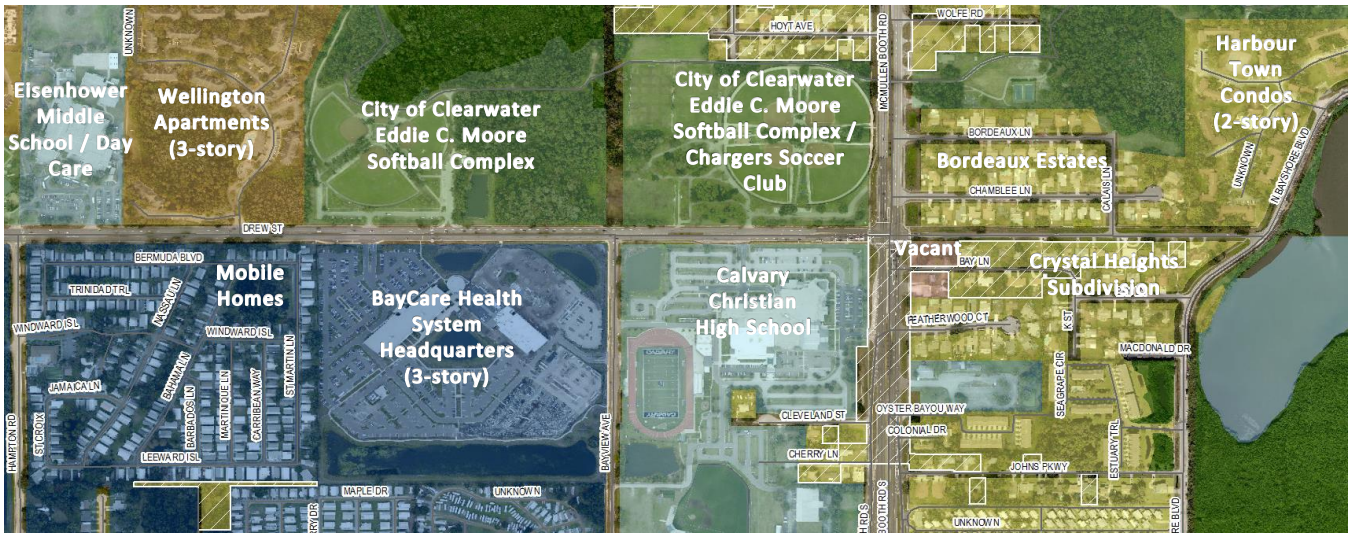
#### Drew Street: Bayshore Boulevard to Hampton Road (Recreation, office, medium density residential, education)

##### Existing Conditions

The frontage character changes dramatically after crossing McMullen Booth Road. The large setback that characterized the sidewalk found in the residential section of Drew Street, now runs along the roadside with no buffer between passing vehicles and pedestrians. Buildings in this section of Drew Street do not interact with pedestrians and are oriented towards their corresponding parking lots. On the opposite side of the road are public parks that are set back from the road and separated by a large parking lot.

As shown on the Map 1, there is a mix of uses within the segment of Drew Street between Bayshore Boulevard and Hampton Road. Harbour Town condos, Bordeaux Estates and Crystal Heights are neighborhoods with single-family housing on the east side of the corridor near Cooper Bayou. There is a small amount of vacant land at the southeast corner of Drew Street and McMullen Booth Road. West of McMullen Booth Road on the north side of Drew Street is the City of Clearwater Eddie C. Moore Softball complex which includes the Chargers Soccer Club. On the south side is Calvary Christian High School and its new 35,000 square foot building will enable the enrollment of 600 students. West of Bayview Avenue is the BayCare Health System's 40-acre headquarters with 153,000 square feet of buildings plus a new 147,000 square foot building.

Map 1. Drew Street: Bayshore Boulevard to Hampton Road




## Long Range Vision

The Countywide Plan anticipates that offices could be developed at the southeast corner of Drew Street and McMullen Booth Road. The Office plan category allows residential up to 15 UPA or a 0.6 FAR per the Countywide Plan. Residential areas here are designated as Low Medium which allows up to 10 units per acre (UPA). The high school is a public/semi-public use which allows a variety of public uses up to 0.85 FAR as well as housing up to 12.5 UPA. The Recreation and Open Space areas are planned to be maintained in the future. BayCare sits on the edge of the US 19/SR 60 Activity Center, which is defined as a Major Center in the Countywide Plan, and allows up to 75 UPA or 2.5 FAR.

### Economic Growth and Redevelopment Potential

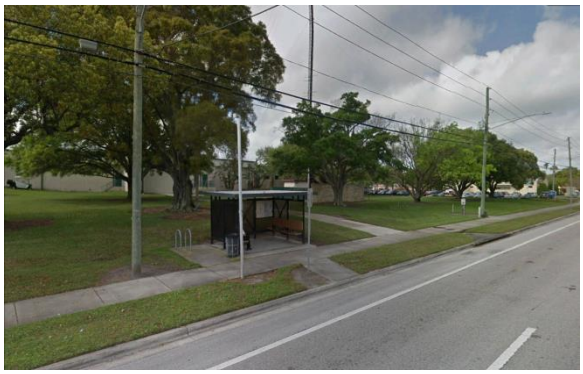
There are some opportunities for new development and infill development. While the area between the two softball complexes is heavily wooded, there is an opportunity to expand the public recreational facilities there. Although BayCare and Calvary Christian High School recently added buildings on their sites, there are surface parking lots which could be filled in with buildings with structured parking and vaulted stormwater at some point in the future. The BayCare site is located in an activity center appropriate for intensive growth with a mix of uses serving a significant number of people coming from more than one county. It is appropriate for this area to develop as a high-intensity, high-density multi-use area due to its proximity to US 19.

## Drew Street: Hampton Road to Saturn Avenue (Retail, education)

### Existing Conditions

This section of the Drew Street corridor maintains the same characteristics found earlier in the corridor. All the retail, office, and residential uses found in this section are oriented away from the road and interact very little with the pedestrian and bicyclists passing by. Many of the buildings have their own large dedicated parking lots and share very little space with surrounding uses. Sidewalks run along the road edge and do not offer any buffer between passing vehicles and pedestrians. On the south side of Drew Street, the businesses are setback quite a bit from the road and interact very little with the surrounding uses. The sidewalk on the north side of Drew is mostly setback from the road with a grass strip acting as a buffer between the road and sidewalk. In some places this grass strip is non-existent.

As with the other land uses along Drew Street, St. Petersburg College is not oriented towards the road. However, here the sidewalk is slightly buffered by a small strip of grass which is characteristic of both sides of Drew Street for most the remainder of the corridor. Large parking lots and open stretches of lawn separate the buildings from the roadway. Landscaping is found along the front of the school offering a break

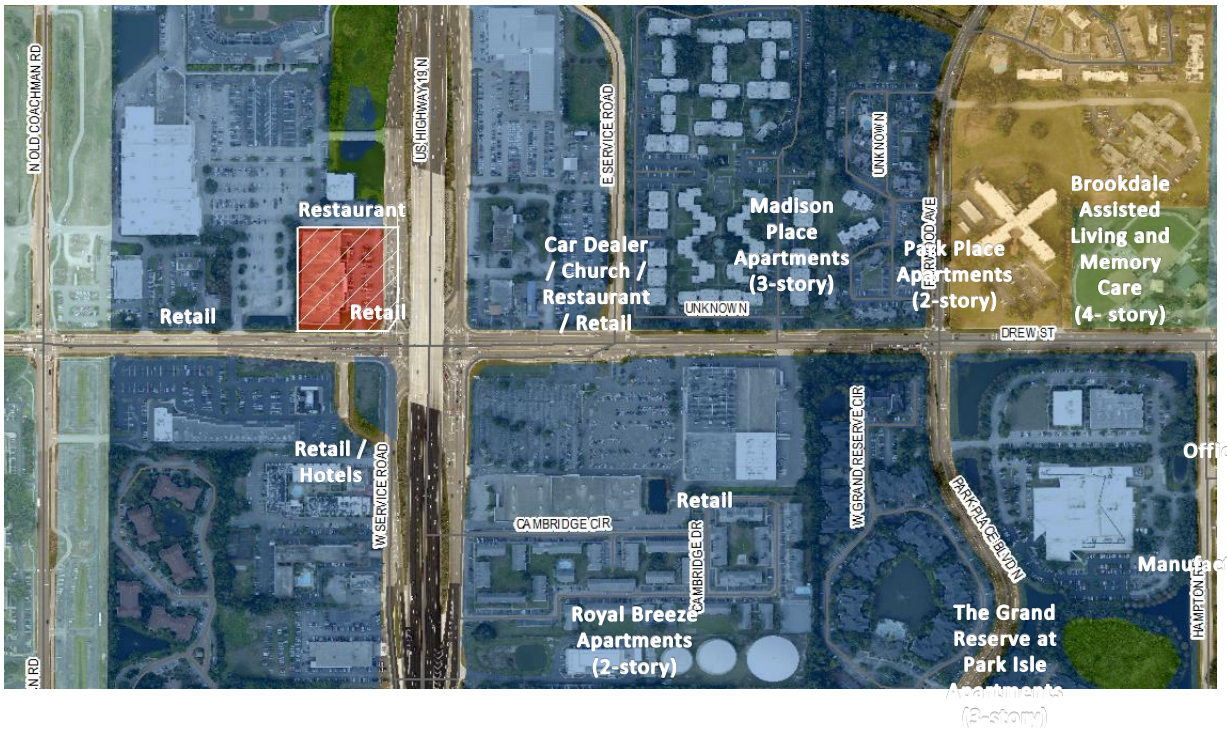


from the otherwise desolate frontages of many other buildings and businesses along the corridor.

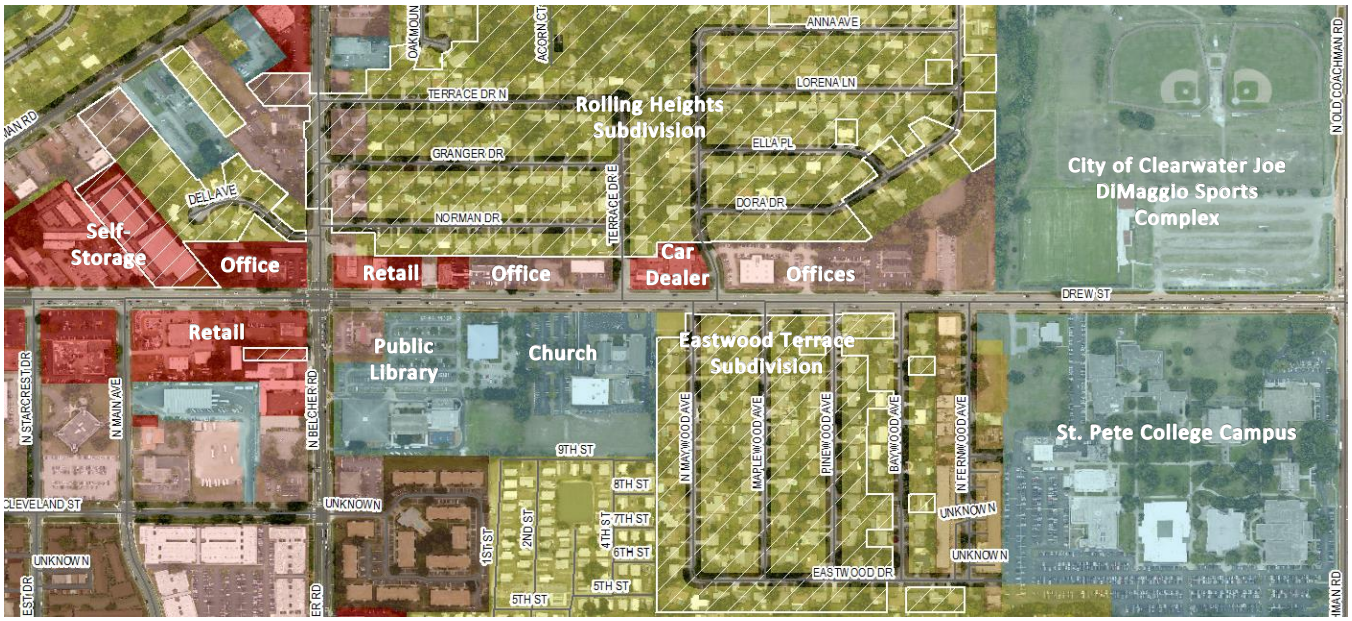
As shown in this photo, this section of Drew Street is primarily residential in character with single family homes fronting the road. The houses are entered and exited through the driveways which cut across the sidewalk in several places. The narrow sidewalks and constant disruption from driveways creates a difficult and dangerous path for pedestrians and cyclists. A small curb and grass strip provide minimal buffer between vehicles between the travel lane and sidewalk.

In this section of Drew Street between Hampton Road and Saturn Avenue, several uses exist and vary greatly depending on location along the corridor. On the north side of Drew Street, there are an assisted living facility, apartment complexes, a car dealership, several retail centers, self-storage, a large public park, auto repair and office buildings. The City of Clearwater Joe DiMaggio Sports Complex has four multipurpose fields and two regulation size baseball fields. Along the south side of Drew Street are offices, retail, hotels, St. Pete College main campus with its new 42,000 square foot two-story joint-use library, Eastwood Terrace single-family subdivision, two churches, child care, a public library, Delphi Academy, Skycrest Elementary School, and an auto repair shop. These existing uses are shown on Map 2, Map 3, and Map 4.

## Map 2. Drew Street: Hampton Road to Old Coachman Road




## Map 3. Drew Street: Old Coachman Road to Starcrest Drive



Map 4. Drew Street: Starcrest Drive to Saturn Avenue


## Long Range Vision

Along the Drew Street corridor from Hampton Road to Saturn Avenue there are several Countywide Plan categories. The intersection of US 19 and Drew Street is the northern edge of an Activity Center which is recognized as a Major Center that extends along the southern edge of Drew Street. This intersection allows up to 75 UPA and 2.5 FAR. Also near the intersection of US 19 and Drew Street are an assisted living center built in 1979 and the Wellington Apartment Complex, both of which fall in the Residential Medium category allowing future development of up to 15 UPA and .50 FAR. To the west of the US 19 and Drew Street intersection lies several blocks lined with Office and Retail & Services categories. Just behind these office and retail uses are several Residential Low Medium neighborhoods with a maximum of 10 UPA and .50 FAR. On the west side of Old Coachman Road lies St. Petersburg College and the Joe DiMaggio Sports Complex both of which are categorized as Public/Semi-Public which allows for 12.5 UPA and varying levels of FAR based on land use: .65 for institutional uses, .70 for transit/utility and 1.0 for hospitals.

## Economic Growth and Redevelopment Potential

There are opportunities for new development and infill development primarily on the east end of this segment of Drew Street near US 19. This area is part of an activity center that would be appropriate to develop as a high-intensity, high-density multi-use area due to its proximity to US 19. On the north side of Drew Street are Park Place and Madison Place apartments. These buildings are more than 40 years old sitting on large tracts of land in a Hurricane Storm Surge Area near Alligator Creek. Since it

is best to avoid residential development in storm surge areas, these sites may be suitable to redevelop with commercial or office uses.

West of US 19, St. Pete College could further expand its main campus by converting surface parking to structured parking and stormwater ponds to vaults. Other redevelopment opportunities are limited due to the small-sized parcels fronting Drew Street and single family uses near the corridor. There is only one small vacant lot near the intersection of North Corona Avenue; however, on both the north and south side of Drew Street, there are commercial buildings over 70 years old that are prime for redevelopment. The used car dealer on the north side of Drew Street at Terrace Drive is potentially a threat to new investment in the corridor due to its nuisance quality.

### Drew Street: Saturn Avenue to Myrtle Avenue (Recreation, some retail, residential)

#### Existing Conditions

After crossing Keene Road, the street frontage characteristics change from primarily office and retail uses to mainly residential. It's along this stretch of the corridor when buildings and homes are oriented towards the road and are no longer separated by parking lots and driveways. Pleasant landscaping offers shade to passing pedestrians. Parking lots are found either situated between buildings or on the backsides of businesses providing a greater aesthetic and more pedestrian environment. The sidewalk on the south side of Drew is found to be setback from the road providing a buffer between vehicles and pedestrians.

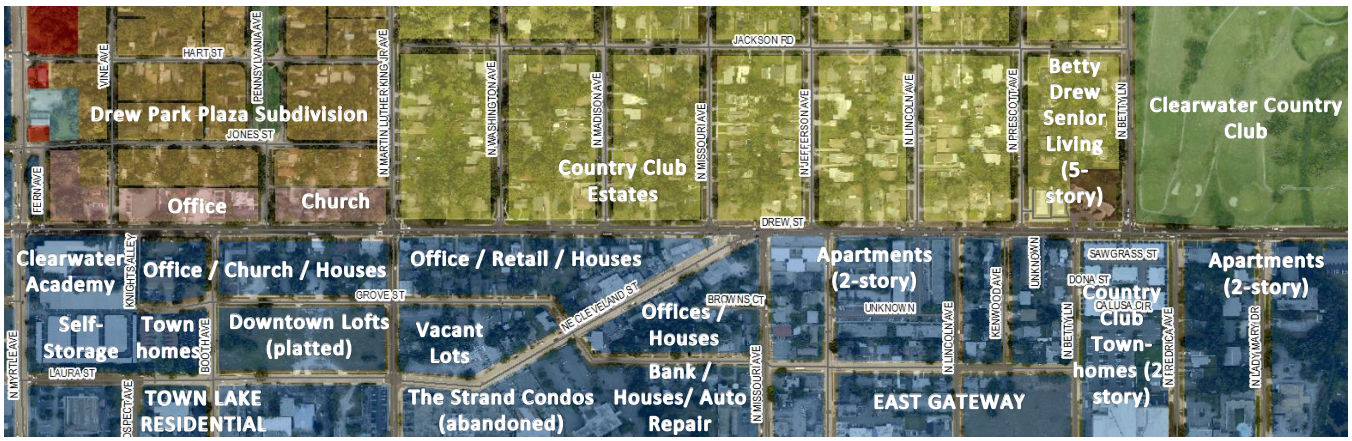
At the intersection of Drew Street and Myrtle Avenue on the east side of Downtown Clearwater, there are pedestrian passage ways to sidewalks and nearby bus stops. In this narrower section of Drew Street, not all buildings are oriented towards the road, but many have landscaping and entrances that interact with the street. There are shade trees and the sidewalk is mostly clear of obstacles; however, some utility poles protrude into the sidewalk decreasing the space available to pedestrians.

At the intersection of Drew Street and Saturn Avenue are office and retail uses. Skycrest, Grand View Terrace, and Hillcrest subdivisions of single-family homes comprise a large part of the corridor.

Clearwater Country Club is located on the north side of Drew Street west of Hillcrest Drive and for several blocks. Across from the country club, the character of the residential changes to older two-story apartment buildings. There is one new two-story development called County Club Townhomes. Just west of the park at the corner of Betty Lane is the Betty Drew Senior Living five-story residential building built in 1955. Further west are Country Club Estates and Drew Park Plaza single-family subdivisions. Where Cleveland Street ties in on the south side, there is a mix of uses including office, a bank, auto repair, houses, townhomes and a self-storage facility. Near Myrtle Avenue are Clearwater Academy, offices and two churches. Map 5 and Map 6 illustrate these existing uses.

Map 5. Drew Street: Saturn Avenue to Evergreen Avenue


Map 6: Drew Street: Evergreen Avenue to Myrtle Avenue



### Long Range Vision

The section of Drew Street from Saturn Avenue to Myrtle Avenue runs along the northern edge of the Clearwater Redevelopment Plan Area, specifically the East Gateway Character District. Beginning at North Highland Avenue, the Plan Area extends all the way to Coachman Park and Clearwater Harbor. This special district has its own uses and densities as determined by the Redevelopment Plan. As per the City's plan, the East Gateway Character District which extends from Highland Avenue to Missouri Avenue allows for future development of .55 FAR, 30 dwelling units per acre or 40 hotel units per acre.

The north side of Drew Street is mostly Residential Low Medium with maximum 10 UPA and .50 FAR. The Clearwater Country Club is categorized as Recreation/Open Space which does not allow for dwelling units and limits FAR to .25, the offices are categorized as Office and allow for up to 15 UPA and .50 FAR. Drew Park Plaza is designated as Residential Medium which allows for up to 15 UPA and .50 FAR.

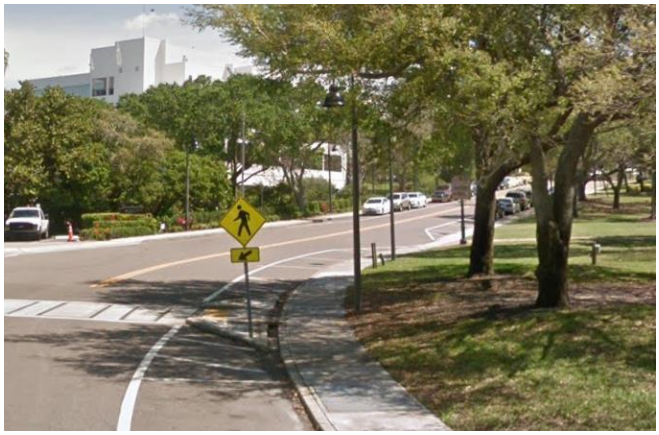
### Economic Development Potential

Redevelopment opportunities are limited due to the small-sized parcels fronting Drew Street and single family uses along this segment of Drew Street. One site that is prime for redevelopment is the Betty Drew five-story senior living facility that was built in 1955. Since the site falls within a Hurricane Storm Surge Area of Stevenson Creek, it site may be suitable to redevelop with commercial or office uses. Across the street on the south side of Drew Street are several two-story apartment buildings that are 50 to 70 years old. If parcels can be assembled, a good model for redevelopment is the recently-built Country Club townhome project across from the Clearwater Country Club.

The Nolen at Prospect Lake Park is a new four-story 257-unit apartment building in this segment of Drew Street. Interestingly, two multi-family projects were planned but not completed just south of Drew Street on Cleveland Street. Downtown Lofts was platted but not built and The Strand began construction but now sits abandoned. Since the south side of Drew Street is in the Downtown Redevelopment Plan area, there are some incentives for developers to invest in available properties when the market is ready.

## Drew Street: Myrtle Avenue to Coachman Park (Recreation, community gathering, some retail)

### Existing Conditions



From Myrtle Avenue, Drew Street traverses through the north end of Downtown Clearwater and ends at Coachman Park. In this area, there are sidewalks separated from the travel lanes by parking which provides a buffer when cars are parked. There are several pedestrian crosswalks that provide a striped and contrasted walking lane to raise awareness of the pedestrian crossing. While trees are shown in this picture, very little pedestrian refuge exists leaving pedestrians exposed to the elements while walking through the park and across the street to the Clearwater Harbor.

As shown in Map 7, this segment of Drew Street is entirely within the Redevelopment Plan Area. On the east end near Myrtle Avenue there are several warehouses, some large tracts of vacant land, offices, a private parking lot and two Scientology-owned hotels. The City of Clearwater Public Library and public parking are east of Coachman Park.

Map 7. Drew Street: Myrtle Avenue to Coachman Park

### Long Range Vision

The Myrtle Avenue to Coachman Park section of Drew Street lies entirely in the Clearwater Downtown Redevelopment Plan area. On the north side of Drew Street is the Old Bay Character District. West of North Garden Avenue, development is allowed at 25 UPA if the development is less than two acres. If the development is more than 2 acres, the maximum density is increased to 50 UPA. On the east side of Garden Avenue, the City of Clearwater allows for future developments taking up less than an acre to build at a density of 7.5 UPA and future developments of more than an acre allow for a density of 25 UPA. To the south side of Drew Street is the Downtown Core district which allows much higher densities than all other districts. The Downtown Core allows 4.0 FAR and up to 70 dwelling units per acre or 95 hotel units per acre.

### Economic Growth and Redevelopment Potential

This part of Drew Street offers tremendous redevelopment potential due to the amount of vacant land available, location on Clearwater Harbor, and a Redevelopment Plan which allows high density and intensity development with a mix of uses. The City of Clearwater's Imagine Clearwater master plan was adopted early this year to revitalize the City-owned properties in the Downtown Clearwater waterfront area. The plan proposes a design for an expanded and improved waterfront park, recommends a set of catalyst projects to activate the downtown and defines steps the city and community can take to implement the plan which will depend on approval of a voter referendum to fund various improvements. Highlights of the plan include an expanded Coachman Park and grand civic lawn with year-round programming. Along Osceola Avenue, there will be an active "Bluff Walk" with shaded pavilions, a grand staircase, outdoor seating, fountains, and a new mixed-use building to provide interesting views and active connection to downtown.

## SR 60 – major arterial, transit spine

### SR 60: Memorial Causeway to Hampton Road (Low density residential, some commercial)

#### Existing Conditions

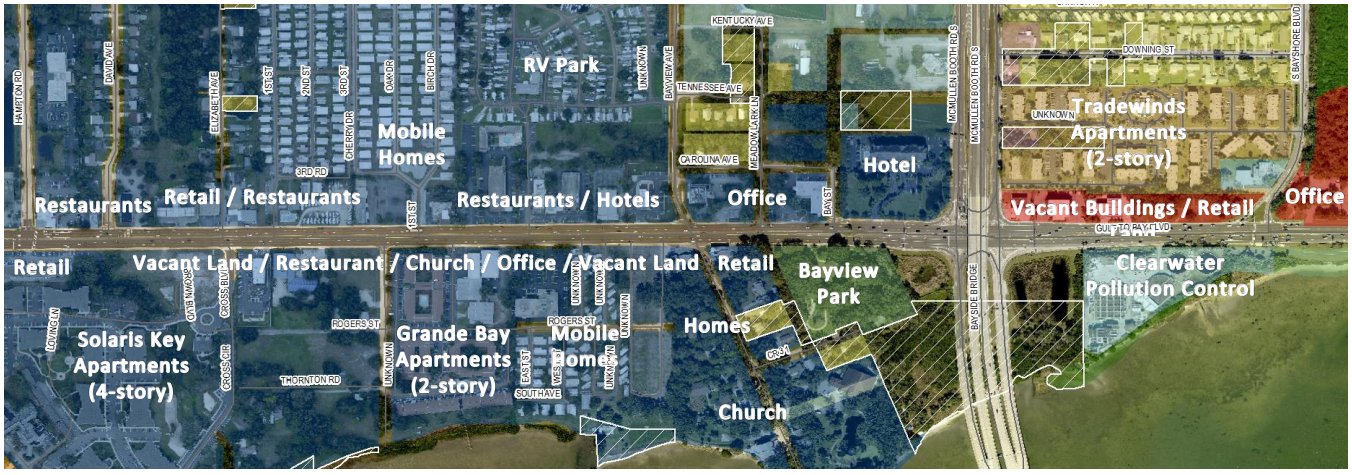
This street frontage is an extreme example of a poor pedestrian environment along SR 60. In this picture, a vacant gas station sits at the corner lot and Causeway Office Center's parking lot and landscaping spill onto the

sidewalk. While parking is on the sides and rear of the office building, its entrance does not face SR 60.

This picture shows a motel with surface parking and some landscaping in front of the building. Obstructions like signs, utilities, and light posts, between the sidewalk and the building make it difficult for pedestrians to enter the site without using the driveway in conflict with vehicles. There are narrow sidewalks close to the roadway and very few trees.


Where Memorial Causeway touches land, on the north side of SR 60 are offices, some vacant land, a gas station and a small two-story apartment complex called Tradewinds. A Clearwater Pollution Control station takes up most of the southeast corner of SR 60 and McMullen Booth Road. On the northwest corner is a hotel and offices. The City of Clearwater's Bayview Park, some retail, and a mobile home park are on the south side. A few homes and a church complex are set back from the road along the bay. The remaining portion of the segment has another hotel, several restaurants, a church and some vacant land. There are two mobile home parks, an RV park, a new four-story 426-unit apartment complex called Solaris Key, and the older two-story Grande Bay apartments.

Map 8. SR 60: Memorial Causeway/Bayshore Boulevard to Hampton Road




## Long Range Vision

Lands along SR 60 are categorized as Retail & Services on the north side and Public/Semi-Public on the south side of SR 60. Retail & Services allows for future development at 24 UPA and .55 FAR while Public/Semi-Public allows for 12.5 UPA and varying FAR depending on the use: .65 for institutional

purposes, .70 for transportation and utility, and 1.0 for hospitals. Lands east of McMullen Booth Road are Major Center Activity Center which allows for 75 UPA and 2.5 FAR. There are some small parcels of land that are categorized as Recreation/Open Space surrounded by the Activity Center.

### Economic Growth and Redevelopment Potential

The area between McMullen Booth Road and Bayshore Boulevard on the north side of SR 60 has great redevelopment potential. This corner site is in dire need of improvement. There sits a vacant gas station and an older office building with space for rent. Just west of Bayshore Boulevard sits a 1920 bungalow house on a large tract of land owned by the United Daughters of the Confederacy. Perhaps the historic bungalow could be moved to an appropriate location. North of it is the Tradewinds comprised of older two-story apartment buildings, and there are two vacant residential lots. To the east is an older building used as a seminary. These parcels combined could be redeveloped as a gateway to Pinellas County and Clearwater. This part of SR 60 is in a Hurricane Storm Surge Area; therefore, commercial or office redevelopment would be more suitable than residential.

West of Bayview Avenue, the mobile home parks and RV park also may be good candidate sites for redevelopment. There already sits a large vacant tract just east of the Bayside Gardens mobile home park on the south side of SR 60. There is another vacant lot in front of the new Solaris Key apartments next to an older strip retail plaza.

## SR 60: Hampton Road to Lake Drive (Heavy commercial, office)

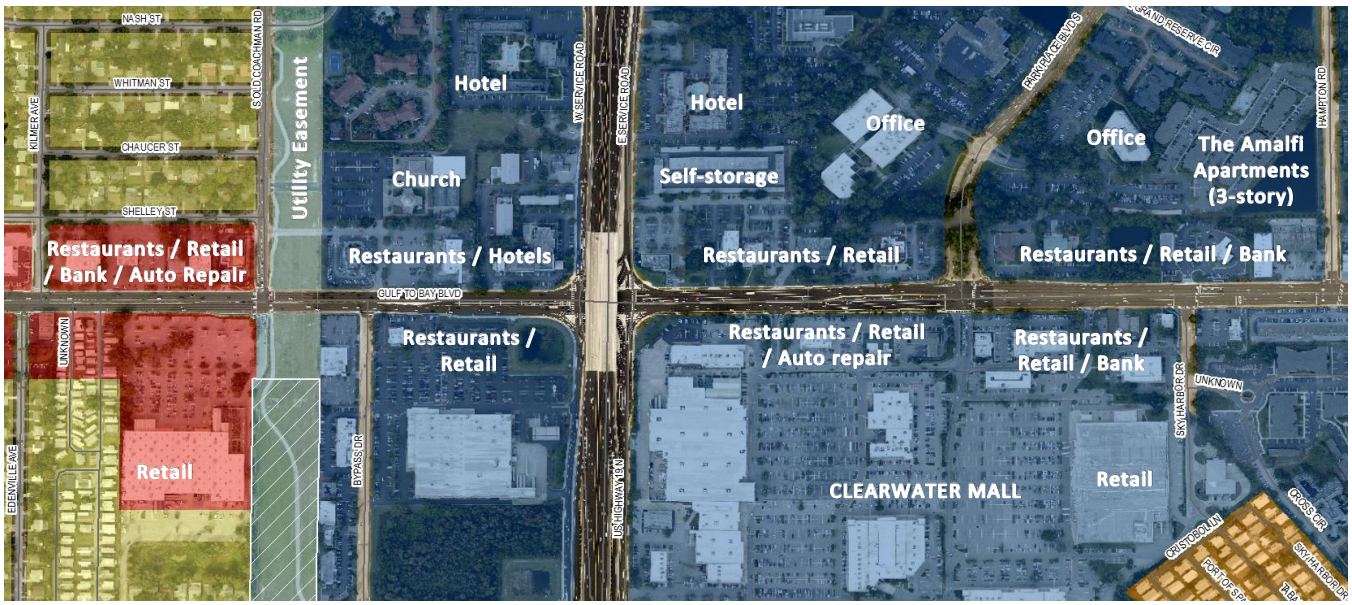
### Existing Conditions

Some older retail buildings along this street do not have designated sidewalks or landscaping. There is only parking and the driveway is extremely wide, making for a very unsafe pedestrian condition. The Hampton Road to Lake Drive portion of the SR 60 corridor is primarily commercial. Clearwater Mall sits at the southeast corner of the US 19 and SR 60 intersection and is surrounded by retail centers, restaurants, banks, and an auto repair shop. West of US 19 to Belcher Road are more retail and restaurants, a grocery store, auto repair, car dealer, motel, offices, banks,

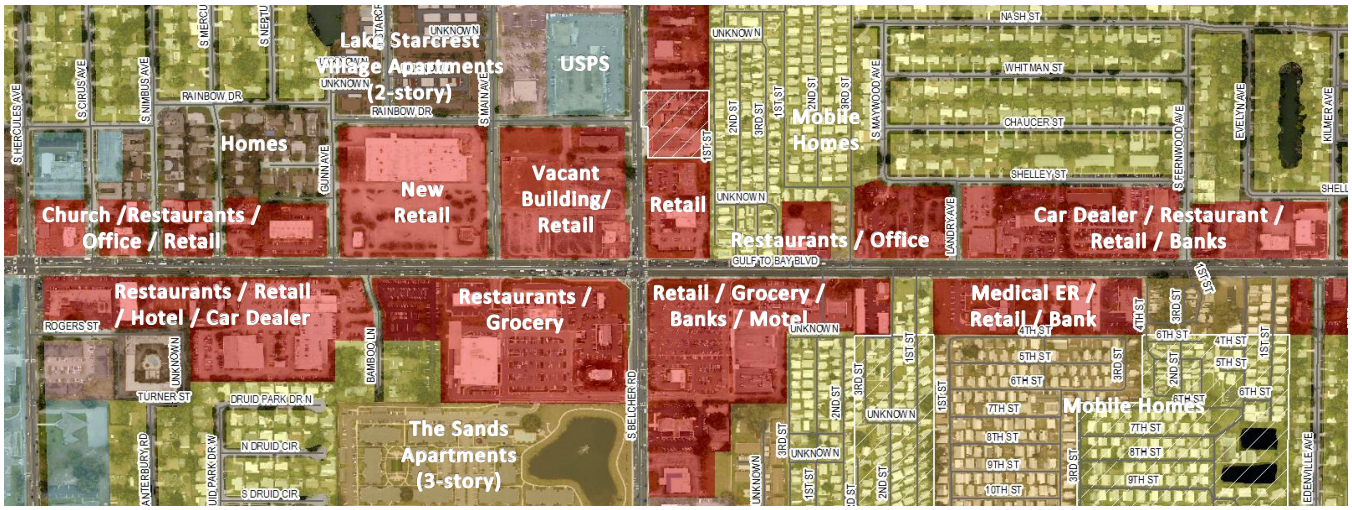
and a new urgent care medical center. Single-family homes and mobile homes are located behind the commercial uses.

West of Belcher Road are new restaurants and retail including a grocery store, and a new three-story apartment complex called the Sands of Clearwater. At the northwest corner of Belcher Road is the US Post Office, and an older two-story apartment complex called Lake Starcrest Village. Several restaurants and a medical center are located between Keene Road and Lake Drive. West of Hercules Avenue on the south side of SR 60 is Clearwater High School, some vacant land, retail, auto repair, a motel, restaurants, banks, the tax collector's office, and single-family homes. These uses are shown on Map 9, Map 10, and Map 11.

### Map 9. SR 60: Hampton Road to Edenville Avenue



## Map 10. SR 60: Kilmer Avenue to Hercules Avenue




## Map 11. SR 60: Hercules Avenue to Lake Drive


### Long Range Vision

Both north and south sections of SR 60 from Hampton Road to Old Coachman are included in the Major Center, Activity Center category. This area is home to the Clearwater Mall and its surrounding and supporting businesses. The Major Center subcategory allows for future development of 75 UPA and 2.5 FAR.

Except for Clearwater High School, which is Public/Semi-Public and a few small parcels which are Residential Low Medium and Residential Medium, all of SR 60 between Old Coachman and Lake Drive

is designated Retail & Services. Public/Semi-Public allows for future development at 12.5 UPA and the FAR varies based on the uses. If the development is an institutional development it is allowed a .65 FAR, if the development is a transit or utility use a .70 FAR is allowed and if the development is a hospital a 1.0 FAR is allowed. Land that is designated as Residential Low Medium and Residential Medium both have a FAR of .50 but Residential Low Medium allows 10 UPA, whereas Residential Medium allows 15 UPA.

#### Economic Growth and Redevelopment Potential

The area between Hampton Road west of US 19 is part of a designated activity center that is envisioned to redevelop as a high-intensity, high-density multi-use area. At Clearwater Mall, there are surface parking lots which could be filled in with buildings with structured parking and vaulted stormwater at some point in the future. Commercial redevelopment in some locations has been occurring, including at the former Kmart site west of Belcher Road. In that area, the older two-story apartment complex called Lake Starcrest Village may be ripe for redevelopment and there are some vacant commercial buildings available.

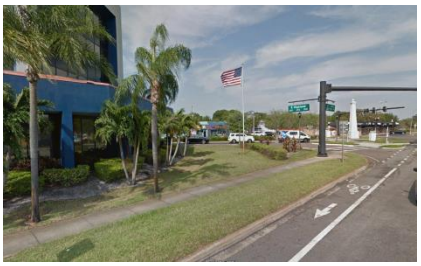
### SR 60/Court Street: Lake Drive to MLK Jr. Avenue (Residential, commercial, transition to CBD)

#### Existing Conditions

Like this auto repair shop, many non-retail buildings along SR 60 are oriented away from SR 60. The entrance is on the side next to the parking lot, and the small portion of the building that does front the road houses the utility meters and looks more akin to a back alley than a front yard.

The intersection of Highland Avenue, Gulf to Bay and Court Street acts as a small node for development and businesses. At the intersection, the street frontage character contains a large pedestrian buffer, some landscaping details, and a public monument. However, the buildings are either oriented away from the road or have parking in the front that necesitates cars entering and exiting across the sidewalk. Strip malls and small office buildings are a dominant use.

Strip malls and buildings are a dominant development type in this portion of SR 60. Many of the buildings are fronted with a small row of parking and there are often no curbs or grass strips to act as barriers between pedestrians and traffic. The strip malls also require cars to enter and exit across an extended stretch of sidewalk. While the buildings do interact with the road much more than the larger big box stores near US 19 frontage character is void of landscaping or pedestrian refuge.


The Lake Drive to MLK Jr. Avenue portion of SR 60/Court Street is primarily retail and office along the front with residential behind. There are auto repair shops, other shops, a motel, restaurants and offices, including a medical office, along the corridor. On the north side of SR 60 at Lake Drive lies Crest Lake Park which has a dog park in the southwest corner. Glen Oaks Park is west of Hillcrest Avenue on the south side and Saint Cecelia private school is located across the street. A fire rescue station sits at the northeast corner of Court Street and MLK Jr. Avenue.

## Map 12. SR 60/Court Street: Lake Drive to Hillcrest Avenue

Map 13. SR 60/Court Street: Hillcrest Avenue to Martin Luther King Jr. Avenue


## Long Range Vision

SR 60/Court Street from Lake Drive to MLK Jr. Avenue runs along the southern boundary of the Clearwater Downtown Redevelopment Plan Area. Between Highland Avenue and Missouri Avenue, the East Gateway Character District allows 0.55 FAR and a density of 30 dwelling UPA or 40 hotel UPA. To the east is a mixture of Retail & Services, Residential Low Medium and Recreation/Open Space. Crest Lake Park, a Recreation/Open Space designated area, allows for future development of up to .25 FAR but does not allow any dwelling units. The Retail & Services uses exist on both the north and south side of SR 60, between Highland Avenue and Lake Drive. The Residential Low Medium designation allows future development of 10 UPA and .50 FAR and Retail & Services allows up to 24 UPA and .55 FAR.

South of SR 60 and west of Highland Avenue, the land is designated Office, Residential Low Medium, Retail & Services and some Recreation/Open Space. Office uses are allowed development of 15 UPA and .50 FAR. Allowable development for Retail & Services is 24 UPA and .55 FAR. Recreation/Open Space does not allow future residential development but does allow a FAR of .25 on other types of development. The Residential Low Medium designation allows future development of 10 UPA and a FAR of .50.

### Economic Growth and Redevelopment Potential

There is one vacant lot for sale east of Lincoln Avenue. Some commercial buildings are 60 or more years old and prime for redevelopment, such as those located on both sides of the intersection of SR 60 and Highland Avenue, except for the America's Auction Network office building, and just east of MLK Jr. Avenue on the south side.

## SR 60: MLK Jr. Avenue to Memorial Causeway (Central Business District, mixed use)

### Existing Conditions

The MLK Jr. Avenue to Pierce Street section of SR 60 is a highly urbanized section of the corridor and contains little residential use. Even though the parking in this section becomes more scarce, the orientation of the buildings and the interactions between the building frontages and the roadway are much the same. Many of

very the businesses either contain parking in the front of the building or on the side and the entry ways are oriented towards the parking lots.

The road way splits shortly after passing MLK Jr. Avenue creating two three lane one way roads split by an island of retail, office, and county uses. The road frontage character is very inconsistent between uses and design. Some businesses may front the road separated by a row of parking, others are oriented away from the road to a large parking lot either to the side of or behind the building. There is also a great variance in the sidewalk character and the roadway buffers offered. In some areas, the road has a wide grass strip between the sidewalk and road while others offer a very little or no separation among the road. The frontage in this section also lacks any landscaping or tree coverage to shade pedestrians.

This segment of SR 60 between MLK Jr. Avenue and west end of Downtown Clearwater becomes the two-way pair of Court Street and Chestnut Street. There are a wide range of uses including Pinellas County Courthouse and offices, retail, restaurants, parking lots, residential towers, and other housing types. The Church of Scientology headquarters is on Fort Harrison Avenue. There are several vacant lots and at least one vacant building. These uses are shown in Map 14.

Map 14 - SR 60: Martin Luther King Jr. Avenue to Memorial Causeway


## Long Range Vision

The MLK Jr. Avenue to Memorial Causeway section of SR 60 lies almost entirely within the Clearwater Downtown Redevelopment Plan Area and contains several Plan Area Character Districts. Beginning at MLK Jr. Avenue, Court Street and Chestnut Street travel through the Town Lake Residential District until Myrtle Avenue. At Myrtle Avenue, the Downtown Core Character District begins and continues until Clearwater Harbor. Town Lake Residential allows future development of 30 dwelling units per acre and 40 hotel units per acre with a 1.0 FAR. The Downtown Core permits future development of 70 dwelling units per acre and 95 hotel units per acre with a 4.0 FAR.

Lying just south of Chestnut Street running to Druid Road and between Myrtle Avenue and Fort Harrison Avenue is the South Gateway Character District. This district has varying levels of development dependent on the size of the Parcel being developed. If the parcel is less than 2 acres, 25 dwelling units per acre are permitted. If the parcel is larger than 2 acres it is allowed 35 dwelling units per acre, however this only applies to residential only developments. If the parcel is larger than two acres and the development is a mixed-use project including residential, the permitted density is 50 dwelling units per acre.

To the west of Fort Harrison Avenue and south of Chestnut Street is land not included in the Redevelopment Plan Area. At the southwest quadrant of the Chestnut Street and Fort Harrison Avenue intersection is land designated as retail and services which permits future development up to

24 UPA and .55 FAR. Surrounding this use is land designated as Public/Semi-public which allows future development up to 12.5 UPA and a maximum FAR of .65 for institutional purposes, .70 for transportation/utility, and 1.0 for hospitals.

### Economic Growth and Redevelopment Potential

In this area is the core of the Clearwater Downtown Redevelopment Area where high-density developed is encouraged. There are several vacant lots and a vacant building, making the area well-suited for new development. All three of the residential towers were built in the 1970s and may be due for upgrades or redevelopment.

## SR 60: Memorial Causeway to Beach (Park, open space, connector)

### Existing Conditions

This portion of SR 60 is a bridge from Downtown Clearwater to Clearwater Beach. It offers interesting views of Coachman Park, marinas, buildings, and the bay. The side path is nicely landscaped and separated from vehicles by a concrete barrier.

When crossing the Memorial Causeway Bridge into Clearwater Beach, the sidewalk remains pedestrian friendly and well landscaped. The remainder of the corridor remains oriented away from SR 60 and therefore is void of retail or business frontage. The low speed limits and highly visible pedestrian crossings maintain a pleasant and safe pedestrian environment.

The west portion of SR 60 is the Memorial Causeway Bridge from Downtown Clearwater to Clearwater Beach. On the downtown side is a residential tower and marina, along the bridge on the south side is a parking lot and trail head for the Causeway trail, on the north side is the Clearwater Marine Aquarium, and a marina and parking lots are located at the western terminus of the bridge. These uses are shown in Map 15.

## Map 15. Memorial Causeway to Clearwater Beach


### Long Range Vision

The section of SR 60 is designated as Recreation/Open Space which does not allows for dwelling units but does allow for future development with a FAR of .25. The immediate land uses include the Island Estates which are designated Residential Low Medium, and the Clearwater Marine Aquarium which is surrounded by multiple land use designations such as Residential High (RH), Residential Medium, Retail & Services, and Public/Semi-Public. The Residential High category allows future development of 30 UPA and a FAR of .60. The Retail & Services category allows future development of 24 UPA and a FAR of .55. The Residential Medium allows future development of 15 UPA and a FAR of .50. Public/Semi-Public allows future development of 12.5 UPA and varying levels of FAR based on use. An institutional use allows for a FAR of .65, a FAR of .70 is allowed for transportation or utilities, and a FAR of 1.0 is allowed for hospitals.

### Economic Growth and Redevelopment Potential

Since this segment is a bridge, there is little growth potential. The Pierce 100 tower was built in 1974 may be due for upgrades or redevelopment. Perhaps the marina could be expanded.

## Druid Road – collector

### Druid Road: US 19 to Orange Avenue (Low density residential)

#### Existing Conditions

Between US 19 and Belcher Road, Druid consists of mostly low-density, single family residential properties. Along this stretch of the corridor, individual lots are set back from the street, adorned with manicured, green lawns. Narrow sidewalks, separated from the street by a grassy buffer, link single family homes together and offer pedestrians a pathway along the neighborhood. However, sidewalks along this portion of Druid lack any substantial tree canopy, leaving pedestrians without shade or protection from the sun.

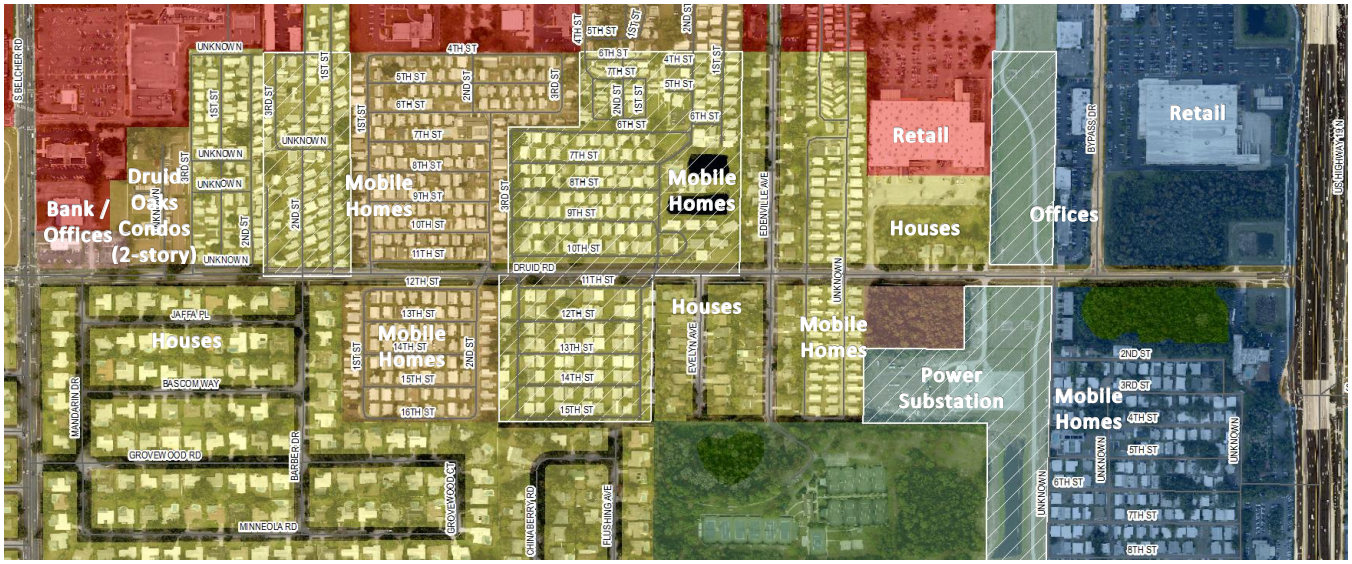
At the northwest corner of Belcher Road, an apartment complex called The Sands at Clearwater is laid out with buildings fronting Druid Road. They are set back from the road and protected by a sizable grassy buffer with narrow sidewalk with gated pedestrian entries. Although the complex is well landscaped, the general area is devoid of any trees or shade for pedestrians or cyclists.

Buildings along Druid Road from Myrtle Avenue to Fort Harrison Avenue are primarily oriented towards the street. Sidewalks line the street, connecting the smaller offices to the surrounding residential neighborhoods. Trees provides adequate shade for pedestrians or cyclists throughout this portion of the corridor; however, sidewalks are still only slightly set back from the roadway, offering minimal protection from motor vehicles.

The Druid Road corridor is primarily residential in character from US 19 to Missouri Avenue with a mix of mobile home parks and single-family houses. The Duke Energy Trail crosses Druid Road just west of US 19 next to a power substation on the south side. At the northwest corner of Belcher Road is a new three-story apartment complex called The Sands at Clearwater, and a bank and offices are located on the other side of Belcher Road. Another bank, retail, offices and restaurants are located further west at the intersection of Missouri Avenue.

Clearwater High School, Salvation Army office complex, and Glen Oaks Park are points of interest along the corridor. At the northeast corner of MLK Jr. Avenue are a nursing home and 12-story senior housing development, Barbee Tower; vacant land is at the corner across the street next to two-story Clearwater Oaks Townhomes. The west end of the corridor contains a mix of uses close to the Downtown Clearwater, including houses, retail, offices, bank, church, private school, five-story condos, three-story townhomes, and an assisted living facility. Maps 16-20 display the existing uses.

Map 16. Druid Road: US 19 to Belcher Road

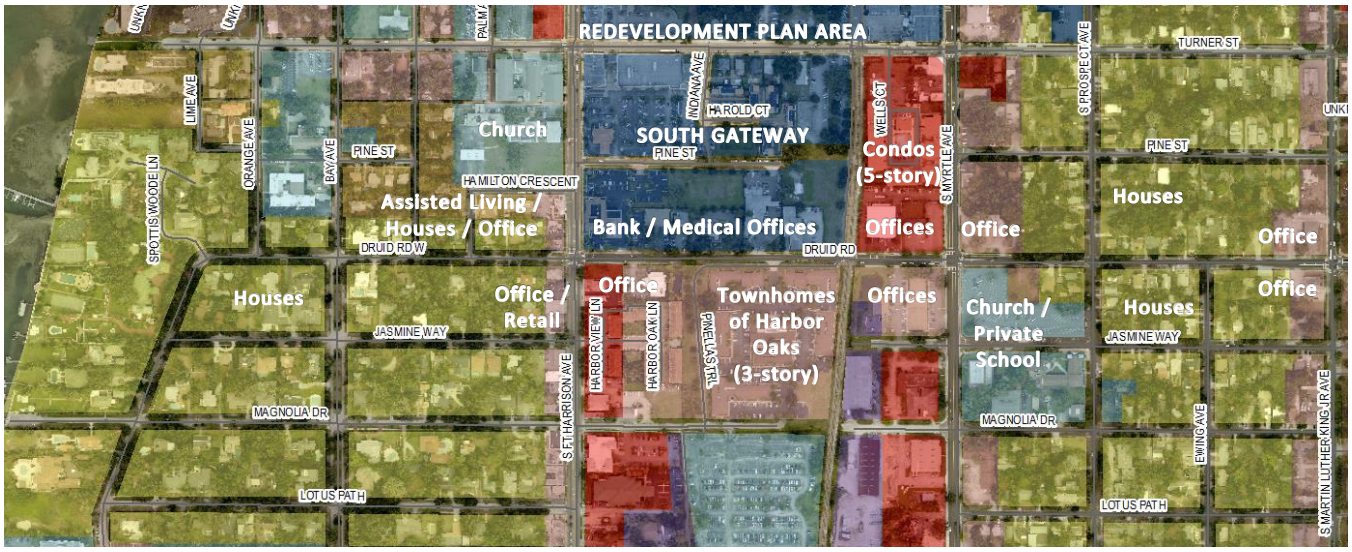


## Map 17. Druid Road: Belcher Road to Keene Road


## Map 18. Druid Road: Keene Road to San Remo Avenue

## Map 19. Druid Road: San Remo Avenue to Martin Luther King Jr. Avenue


## Map 20. Druid Road: Martin Luther King Jr. Avenue to Orange Avenue




### Long Range Vision

The Druid Road corridor extends from US 19 to the Clearwater Harbor. The corridor is primarily residential but several other uses exist to limited degrees. At the US 19 and Druid Road intersection is the southern edge of the US 19 and SR 60 Activity Center. This Major Center allows for future development up to 75 UPA and a 2.5 FAR. In this same area is a small parcel designated as Preservation which does not allow dwelling units but allows development of varying uses at varying

levels of FAR. The Preservation category allows a .10 FAR for Preservation uses and a .25 FAR for water supply uses. The next land use category is the Duke Energy Trail corridor which lies between Bypass Drive and Old Coachman Road. The Duke Energy Trail is designated as Public/Semi-Public allowing future development of 12.5 UPA and a FAR of .65 for institutional purposes, .70 for transportation and utilities, and 1.0 for hospitals.

To the west of the Duke Energy Trail and east of Belcher Road the land use categories include Office, Residential Low Medium and Residential Medium. The Office category allows future development of 15 UPA and a FAR of .50. The Residential Low Medium and Residential Medium designations allow future development with a FAR of .50 but the Residential Medium category allows a maximum UPA of 15 whereas the Residential Low Medium category allows up to 10 UPA.

Moving west from Belcher Road to Keene Road the uses are a bit more homogeneous with both north and south edges of Druid Road falling mostly under the Residential Low Medium category allowing development of 10 UPA and a FAR of .50. The northwest corner of Belcher Road and Druid Road is categorized as Residential Medium allowing future development of 15 UPA and a FAR of .50. Clearwater High School is categorized as Public/Semi-Public which allows future development of 12.5 UPA and a varying FAR of .65 for institutional purposes, .70 for transportation and utility, and 1.0 for hospitals.

The Keene Road to Betty Lane section of Druid Road contains mostly Residential Low Medium allowing future development of 10 UPA and a FAR of .50. The southeast corner of South Highland Avenue and Druid Road, where the Salvation Army offices are currently located is categorized as Public/Semi-Public which allows future development of 12.5 UPA and a .65 FAR for institutional purposes, .70 for transportation and utilities, and 1.0 for hospitals. There is also a small parcel of land in this general area categorized as Office allowing for future development of 15 UPA and .50 FAR. At the northeast corner of Betty Lane and Druid Road is the Glen Oaks Golf Club which is categorized as Recreation/Open Space which does not allow the development of dwelling units but allows for future development with a maximum .25 FAR.

On the south side of Druid Road from Betty Lane to Missouri Avenue the land is categorized as Residential Low Medium and allows for future development of 10 UPA and .50 FAR. The northern side of Druid Road is categorized as Residential High which allows future development of 30 UPA and .60 FAR. At the intersection of Druid Road and Missouri Avenue, the land is categorized as Retail & Services allowing future development of up to 24 UPA and .55 FAR. Immediately abutting the Retail &

Services land use category is land categorized as Residential High which is followed by the Office uses which runs along the western side of MLK Jr. Avenue.

Between MLK Jr. Avenue and the harbor, the land use categories vary between Residential Low Medium, Office, Public/Semi-Public, Retail & Services, and Activity Center. The South Gateway Character District of the Clearwater Downtown Redevelopment Plan Area runs along the northern edge of Druid between Fort Harrison Avenue and the Pinellas Trail. The South Gateway district has varying levels of development dependent on the size of the parcel being developed. If the parcel is less than two acres, 25 dwelling units per acre are permitted. If the parcel is larger than two acres it is allowed 35 UPA, however this only applies to residential only developments. If the parcel is larger than two acres and the development is a mixed-use project including residential, the permitted density is 50 UPA.

#### Economic Growth and Redevelopment Potential

Along this corridor, much of the commercial development is fairly new. The mobile home parks may be good candidate sites for redevelopment as well as the Clearwater Oaks Townhomes which were built in 1949.

## Cleveland Street – collector, bike boulevard

### Cleveland Street: Belcher Road to Hillcrest Avenue

#### Existing Conditions

Although the Cleveland Street corridor between Belcher Road and Hillcrest Road is primarily residential in character, there are a few non-residential uses such as the Pinellas County Health and Human Services office complex shown here. In this eastern part of corridor, there are wide yards between the buildings and the street and tree lined sidewalks which provide a good amount of shade. The many bus shelters along this street offer protection from the elements, along with seating and a waste container.

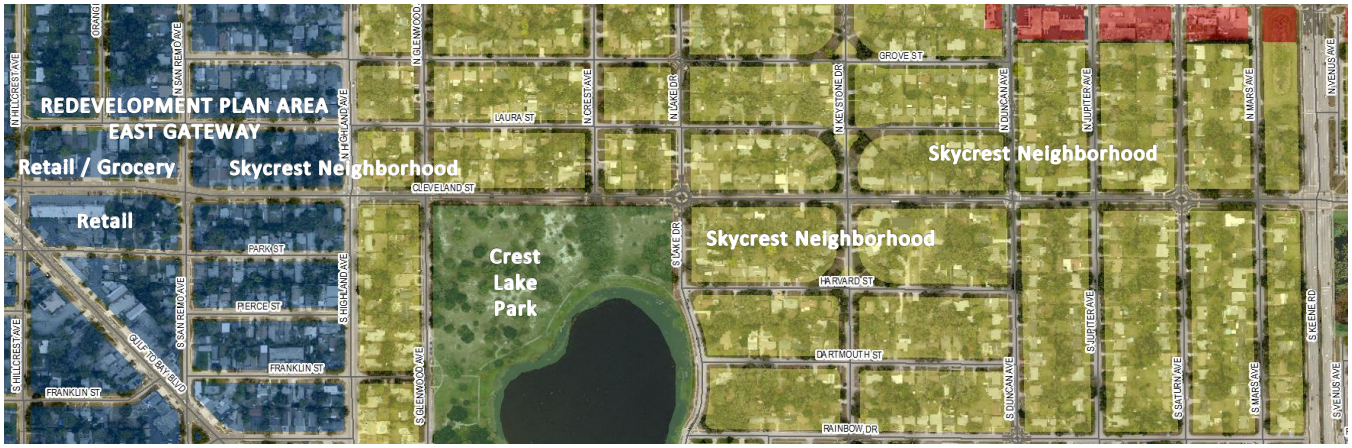
The houses along Cleveland Street are set back far from the road and are mostly single-family ranch style homes. The large front yards are separated from the road by a sidewalk. The road has decorative lighting, several croasswalks and roundabouts to help calm traffic and provide greater

levels of pedestrian safety. Closer to Downtown Clearwater, the frontage character of Cleveland Street changes to mostly pavement without sidewalks in some locations. As seen in the picture to the right, parking lots are in front of the buildings and there is no dedicated space for pedestrians.

The Cleveland Street corridor runs through the Skycrest Neighborhood. At Belcher Road, there are offices, public school bus parking, a bank, and two-story Lake Starcrest Apartments. West to San Remo Avenue are single-family houses, Skycrest Elementary School, Skycrest Park, and Crest Lake Park. At Hillscrest Avenue, there are shops including small grocery stores. These uses are shown in Map 20 and Map 21.

### Map 20. Cleveland Street: Belcher Road to Keene Road


### Map 21. Cleveland Street: Keene Road to Hillcrest Avenue



### Long Range Vision

The Countywide Plan categories found at the Cleveland Street and Belcher Road intersection include Residential High which allows future development of 30 UPA and.60 FAR, and Office which allows 15 UPA and a FAR of .50. The Office and Residential High land uses extend to Starcrest Drive where the land use category changes to Residential Low Medium which extends to the East Gateway Character District of the Clearwater Downtown Redevelopment Plan Area at Highland Avenue. The Residential Low Medium category allows future development up to 10 UPA and .50 FAR. The Cleveland Street corridor study area ends at Hillcrest Avenue which is located inside of the East Gateway Character District. The East Gateway Character District permits future development with .55 FAR and up to 30 dwelling units per acre or 40 hotel units per acre.

### Economic Growth and Redevelopment Potential

There are few areas with redevelopment potential in this corridor. Perhaps the public school bus parking area could be configured in a more efficient manner to free up some land. Commercial buildings at the Hillcrest Avenue intersection are older and could be redeveloped.

# Appendix C – Raw Data & Scoring Matrix

| | | | MOBILITY | | | | | | LAND USE AND ECONOMICS | | | | | | SAFETY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Facility | From | To | Existing population densities (per acre) within 1/2 mile | Future population densities (per acre) within 1/2 mile | Existing transit dependent population densities (per acre) within 1/2 mile | Future transit dependent population densities (per acre) within 1/2 mile | Provides or improves connection to activity centers | Provides or improves a connection within a corridor of critical importance | Existing employment densities (per acre) within 1/2 mile | Future employment densities (per acre) within 1/2 mile | Makes a "first" or "last"mile connection to transit | Presence of K-12, Colleges/ Universities and Vocational/ Technical Institutions within 1/4 mile* | Number of Local, State, and/or Federal Parks within 1/2 mile | Hotel/Motel Unit density (per acre) within 1/2 mile | Fills a gap at a high crash location (crashes per mile) | Provides best practice safety measures (Roadway Classification) |
| Arcturas Avenue | Drew Street | Druid Road | 5.66 | 6.08 | 0.47 | 0.49 | No Activity Center | No Corridor | 3.41 | 3.61 | No Transit Connection | 5 | 2 | 0.07 | 3.95 | 1.00 |
| Bayside Bridge | Gulf to Bay Boulevard | Sector 6/8 Line | 3.66 | 4.38 | 0.29 | 0.37 | No Activity Center | Regional Corridor | 2.25 | 2.33 | No Transit Connection | 0 | 1 | 0.23 | 28.07 | 4.00 |
| Bayview Avenue | SR 60/Gulf to Bay Boulevard | CR 31 | 3.66 | 4.38 | 0.29 | 0.37 | No Activity Center | No Corridor | 2.25 | 2.33 | No Transit Connection | 0 | 2 | 0.23 | 0.00 | 1.00 |
| Bayview Avenue | Drew Street | SR 60/Gulf to Bay Boulevard | 4.50 | 5.07 | 0.44 | 0.51 | No Activity Center | No Corridor | 2.09 | 2.15 | Local Transit Stop | 1 | 5 | 0.18 | 2.00 | 1.00 |
| Clearwater Beach Connector Trail | Pinellas Trail | South Betty Lane | 7.04 | 7.71 | 1.42 | 1.57 | Special Center | Supporting Corridor | 14.23 | 16.00 | Local Transit Stop | 1 | 2 | 0.02 | 25.77 | 2.00 |
| Clearwater Beach Trail | South of 5th Street | South of Sand Key Park Entrance | 6.60 | 6.94 | 0.26 | 0.28 | Special Center | Supporting Corridor | 9.13 | 9.29 | Local Transit Stop | 0 | 4 | 5.32 | 17.65 | 3.00 |
| Cleveland Street | Belcher Road | Keene Road | 5.66 | 6.03 | 0.54 | 0.57 | No Activity Center | No Corridor | 4.54 | 4.95 | Local Transit Stop | 4 | 4 | 0.09 | 10.58 | 2.00 |
| Cleveland Street | Keene Road | Gulf to Bay Boulevard | 2.87 | 2.98 | 0.81 | 0.84 | Special Center | No Corridor | 4.07 | 4.28 | Local Transit Stop | 3 | 3 | 0.15 | 13.86 | 2.00 |
| Cleveland Street | Gulf to Bay Boulevard | Missouri Avenue | 6.84 | 7.37 | 1.10 | 1.21 | Special Center | Primary Corridor | 4.97 | 5.60 | Local Transit Stop | 1 | 6 | 0.20 | 19.57 | 3.00 |
| Courtney Campbell Connection | Bypass Drive | Gulf to Bay Boulevard | 5.16 | 5.63 | 0.47 | 0.52 | Major Center | No Corridor | 4.60 | 4.79 | Local Transit Stop | 0 | 3 | 0.49 | 26.42 | 2.00 |
| Drew Street | Myrtle Avenue | Coachman Park (Drew St) | 4.84 | 5.57 | 0.69 | 0.86 | Special Center | Supporting Corridor | 14.28 | 16.58 | Premium/Express Transit Station | 1 | 6 | 0.10 | 22.95 | 3.00 |
| Drew Street | North Myrtle Avenue | Saturn Avenue | 5.68 | 6.12 | 0.82 | 0.92 | Special Center | Supporting Corridor | 7.93 | 9.14 | Local Transit Stop | 1 | 9 | 0.16 | 74.19 | 3.00 |
| Drew Street | US Highway 19 | McMullen Booth Road | 5.66 | 6.04 | 0.49 | 0.53 | Major Center | Supporting Corridor | 3.73 | 4.02 | Local Transit Stop | 2 | 6 | 0.38 | 31.78 | 2.00 |
| Drew Street | McMullen Booth Road | Bayshore Boulevard | 4.50 | 5.07 | 0.44 | 0.51 | No Activity Center | No Corridor | 2.09 | 2.15 | Local Transit Stop | 1 | 3 | 0.18 | 11.11 | 2.00 |
| Drew Street | Betty Lane | Highland Avenue | 6.54 | 7.16 | 1.00 | 1.13 | Special Center | Supporting Corridor | 4.54 | 5.09 | Local Transit Stop | 0 | 3 | 0.15 | 78.43 | 3.00 |
| Druid Road | Jeffords Street | Belleview Boulevard | 3.32 | 3.55 | 0.36 | 0.39 | No Activity Center | Supporting Corridor | 9.74 | 10.69 | Local Transit Stop | 0 | 2 | 0.02 | 3.13 | 1.00 |
| Druid Road Southwest | South Fort Harrison Avenue | Jeffords Street | 3.54 | 3.81 | 0.62 | 0.66 | Special Center | No Corridor | 13.55 | 15.10 | Local Transit Stop | 0 | 2 | 0.12 | 0.00 | 1.00 |
| Druid Trail | South Betty Lane | Bypass Drive | 7.20 | 7.57 | 0.84 | 0.88 | Special Center | Supporting Corridor | 5.21 | 5.51 | Local Transit Stop | 2 | 4 | 0.32 | 10.10 | 2.00 |
| Glen Oaks Park | Court Street | Druid Road | 8.45 | 8.91 | 1.24 | 1.33 | Special Center | No Corridor | 4.77 | 5.19 | Local Transit Stop | 1 | 1 | 0.11 | 7.41 | 1.00 |
| Hampton Road | SR 60/Gulf to Bay Boulevard | Drew Street | 6.29 | 7.09 | 0.64 | 0.73 | Major Center | No Corridor | 6.24 | 6.39 | No Transit Connection | 1 | 2 | 0.31 | 12.24 | 1.00 |

| | | | MOBILITY | | | | | | LAND USE AND ECONOMICS | | | | | | SAFETY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Facility | From | To | Existing population densities (per acre) within 1/2 mile | Future population densities (per acre) within 1/2 mile | Existing transit dependent population densities (per acre) within 1/2 mile | Future transit dependent population densities (per acre) within 1/2 mile | Provides or improves connection to activity centers | Provides or improves a connection within a corridor of critical importance | Existing employment densities (per acre) within 1/2 mile | Future employment densities (per acre) within 1/2 mile | Makes a "first" or "last"mile connection to transit | Presence of K-12, Colleges/ Universities and Vocational/ Technical Institutions within 1/4 mile* | Number of Local, State, and/or Federal Parks within 1/2 mile | Hotel/Motel Unit density (per acre) within 1/2 mile | Fills a gap at a high crash location (crashes per mile) | Provides best practice safety measures (Roadway Classification) |
| Hercules Avenue | Lakeview Road | Virginia Avenue | 6.58 | 7.13 | 0.35 | 0.38 | No Activity Center | No Corridor | 2.89 | 3.01 | Local Transit Stop | 3 | 1 | 0.06 | 21.15 | 2.00 |
| Highland Avenue | Belleair Road | Union Street | 7.41 | 7.61 | 0.74 | 0.77 | No Activity Center | Supporting Corridor | 1.72 | 1.80 | Local Transit Stop | 4 | 6 | 0.04 | 28.50 | 2.00 |
| Island Way | Memorial Causeway | Terminus | 3.62 | 3.82 | 0.18 | 0.19 | No Activity Center | No Corridor | 3.18 | 3.25 | Local Transit Stop | 0 | 2 | 1.76 | 8.81 | 2.00 |
| Lakeview Road | South Hercules Avenue | South Keene Road | 6.91 | 7.03 | 0.30 | 0.31 | No Activity Center | No Corridor | 1.29 | 1.35 | Local Transit Stop | 1 | 2 | 0.00 | 13.21 | 2.00 |
| Lakeview Road | South Keene Road | West of South Martin Dr. Martin Luther King Jr. Avenue | 6.58 | 6.82 | 0.61 | 0.64 | No Activity Center | No Corridor | 3.61 | 3.89 | Local Transit Stop | 1 | 1 | 0.01 | 21.39 | 2.00 |
| Landmark Trail | Curlew Road | Fairwood Avenue | 5.97 | 6.05 | 0.49 | 0.48 | No Activity Center | Regional Corridor | 3.50 | 3.61 | No Transit Connection | 0 | 5 | 0.21 | 4.35 | 1.00 |
| Mandalay Avenue | Clearwater Beach Roundabout | Juniper Street | 3.62 | 3.82 | 0.18 | 0.19 | Special Center | No Corridor | 3.18 | 3.25 | Premium/Express Transit Station | 0 | 5 | 1.76 | 21.60 | 2.00 |
| Martin Luther King Jr Avenue | Court Street | Fairmont Street | 6.99 | 7.53 | 1.23 | 1.36 | Special Center | Supporting Corridor | 6.38 | 7.56 | Local Transit Stop | 0 | 8 | 0.13 | 28.04 | 2.00 |
| Martin Luther King Jr. Avenue | Chestnut Street | Lakeview Road | 6.99 | 7.53 | 1.27 | 1.40 | Special Center | No Corridor | 9.29 | 10.64 | Local Transit Stop | 1 | 1 | 0.15 | 41.33 | 2.00 |
| McMullen Booth Road | Drew Street | SR 60/Gulf to Bay Boulevard | 7.65 | 8.33 | 0.44 | 0.51 | No Activity Center | Regional Corridor | 2.09 | 2.15 | Local Transit Stop | 1 | 5 | 0.18 | 121.57 | 4.00 |
| Missouri Avenue | Belleair Road | Palmetto Street | 7.69 | 8.17 | 1.22 | 1.32 | Special Center | Supporting Corridor | 3.61 | 4.02 | Local Transit Stop | 3 | 7 | 0.09 | 48.04 | 4.00 |
| North Betty Lane | Drew Street | Union Street | 7.23 | 7.82 | 1.07 | 1.19 | Special Center | No Corridor | 2.97 | 3.33 | Local Transit Stop | 3 | 5 | 0.09 | 2.49 | 2.00 |
| North Greenwood Loop | Pinellas Trail | Pinellas Trail | 5.70 | 6.36 | 0.96 | 1.13 | Special Center | No Corridor | 3.90 | 4.76 | Local Transit Stop | 1 | 4 | 0.03 | 14.29 | 2.00 |
| North Lake Avenue | Drew Street | Druid Road | 6.03 | 6.15 | 0.59 | 0.60 | No Activity Center | No Corridor | 2.52 | 2.66 | Local Transit Stop | 0 | 3 | 0.08 | 5.13 | 2.00 |
| Northeast Coachman Road | SR 590/Drew Street | McMullen Booth Road | 5.10 | 5.22 | 0.40 | 0.41 | Community Center | No Corridor | 3.69 | 3.95 | Local Transit Stop | 2 | 9 | 0.03 | 5.65 | 3.00 |
| Old Coachman Road | SR 60/Gulf to Bay Boulevard | South of NE Coachman Road | 6.23 | 6.43 | 0.50 | 0.52 | Major Center | No Corridor | 4.67 | 4.98 | Local Transit Stop | 1 | 3 | 0.38 | 13.13 | 2.00 |
| Park Place Boulevard | SR 60/Gulf to Bay Boulevard | Ream Wilson Trail | 6.19 | 6.70 | 0.55 | 0.60 | Major Center | No Corridor | 4.74 | 4.88 | Premium/Express Transit Station | 1 | 4 | 0.49 | 7.14 | 1.00 |
| Ream Wilson Clearwater Trail | Pinellas Trail | Ream Wilson Trail | 6.80 | 7.25 | 0.96 | 1.07 | Special Center | No Corridor | 5.99 | 6.94 | Local Transit Stop | 0 | 8 | 0.01 | 0.00 | 1.00 |
| Ross Norton Connection | Pinellas Trail | Lake Bellevue | 5.49 | 5.88 | 0.72 | 0.77 | No Activity Center | No Corridor | 5.63 | 6.10 | No Transit Connection | 0 | 1 | 0.00 | 8.33 | 2.00 |
| Saturn Avenue | Flagler Drive | Gulf to Bay Boulevard | 6.82 | 6.91 | 0.49 | 0.50 | No Activity Center | No Corridor | 2.79 | 2.92 | Local Transit Stop | 1 | 4 | 0.00 | 1.00 | 2.00 |

| | | | MOBILITY | | | | | | LAND USE AND ECONOMICS | | | | | | SAFETY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Facility | From | To | Existing population densities (per acre) within 1/2 mile | Future population densities (per acre) within 1/2 mile | Existing transit dependent population densities (per acre) within 1/2 mile | Future transit dependent population densities (per acre) within 1/2 mile | Provides or improves connection to activity centers | Provides or improves a connection within a corridor of critical importance | Existing employment densities (per acre) within 1/2 mile | Future employment densities (per acre) within 1/2 mile | Makes a "first" or "last"mile connection to transit | Presence of K-12, Colleges/ Universities and Vocational/ Technical Institutions within 1/4 mile* | Number of Local, State, and/or Federal Parks within 1/2 mile | Hotel/Motel Unit density (per acre) within 1/2 mile | Fills a gap at a high crash location (crashes per mile) | Provides best practice safety measures (Roadway Classification) |
| South Fort Harrison Avenue | Chestnut Street | Drew Street | 5.21 | 5.62 | 0.81 | 0.91 | Special Center | Primary Corridor | 13.28 | 15.29 | Local Transit Stop | 0 | 4 | 0.09 | 87.76 | 3.00 |
| South Keene Road | SR 60/Gulf to Bay Boulevard | Lakeview Road | 6.70 | 6.84 | 0.35 | 0.36 | No Activity Center | No Corridor | 2.05 | 2.13 | Local Transit Stop | 1 | 1 | 0.07 | 104.00 | 3.00 |
| South Osceola Avenue | Court Court | Cleveland Street | 5.00 | 5.37 | 0.74 | 0.83 | Special Center | No Corridor | 13.90 | 16.02 | No Transit Connection | 0 | 4 | 0.00 | 8.70 | 1.00 |
| South Prospect Avenue | Druid Road | Cleveland Street | 6.39 | 7.15 | 1.21 | 1.38 | Special Center | No Corridor | 12.95 | 14.92 | Local Transit Stop | 2 | 2 | 0.04 | 5.17 | 1.00 |
| SR 60/Chestnut Street | Court Street | Martin Luther King Jr. Boulevard | 6.89 | 7.60 | 1.21 | 1.36 | Special Center | Supporting Corridor | 14.04 | 16.19 | Local Transit Stop | 1 | 5 | 0.05 | 115.79 | 4.00 |
| SR 60/Court Street | Stevenson Creek | Entrance to Saint Ceceila Catholic School | 8.64 | 9.20 | 1.45 | 1.56 | Special Center | Supporting Corridor | 5.52 | 6.05 | No Transit Connection | 1 | 1 | 0.15 | 21.43 | 4.00 |
| SR 60/Gulf to Bay Boulevard | McMullen Booth Road | US Highway 19 | 5.16 | 5.63 | 0.47 | 0.52 | Major Center | Primary Corridor | 4.60 | 4.79 | Premium/Express Transit Station | 0 | 2 | 0.49 | 150.99 | 4.00 |
| SR 60/Gulf to Bay Boulevard | US 19 | Highland Avenue | 6.52 | 7.13 | 0.68 | 0.73 | Major Center | Primary Corridor | 4.82 | 5.02 | Local Transit Stop | 2 | 3 | 0.35 | 128.99 | 4.00 |
| SR 60/Gulf to Bay Boulevard | Court Street | Cleveland Street | 7.30 | 7.53 | 1.05 | 1.08 | Special Center | Primary Corridor | 3.36 | 3.49 | Local Transit Stop | 0 | 3 | 0.12 | 42.22 | 3.00 |
| SR 60/Gulf to Bay Boulevard | Gulf to Bay Boulevard/Highlands Avenue | South Lake Drive | 6.37 | 6.49 | 0.71 | 0.73 | No Activity Center | Primary Corridor | 2.40 | 2.50 | Local Transit Stop | 0 | 1 | 0.11 | 156.00 | 2.00 |
| Beach to TIA Express | TIA | Clearwater Beach | 6.05 | 6.59 | 0.72 | 0.79 | Special Center | Primary Corridor | 6.86 | 7.49 | Major Transfer/Intermodal Center | 5 | 15 | 0.70 | 85.30 | 4.00 |
| Stevenson Creek | Court Street | Cleveland Street | 7.92 | 8.43 | 1.32 | 1.42 | Special Center | No Corridor | 4.53 | 4.98 | Local Transit Stop | 1 | 2 | 0.12 | 0.00 | 1.00 |
| Stevenson Creek | Cleveland Street | Drew Street | 6.94 | 7.54 | 1.04 | 1.15 | Special Center | No Corridor | 4.48 | 4.99 | Local Transit Stop | 0 | 2 | 0.16 | 0.00 | 1.00 |
| US Highway 19 North | Curlew Road | Belleair Road | 6.01 | 6.30 | 0.49 | 0.53 | Major Center | Primary Corridor | 3.94 | 4.11 | Local Transit Stop | 0 | 7 | 0.14 | 136.41 | 4.00 |

## Appendix C – Scoring Matrix

| | | | | Mobility | | Land Use and Economics | | Safety | | Overall | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Project | From | To | Network Gap | Total Score | Average Score | Total Score | Average Score | Total Score | Average Score | Total Score | Average Score |
| Beach to TIA Express | TIA | Clearwater Beach | Premium Express Transit | 18 | 3.00 | 17 | 2.83 | 7 | 3.50 | 42.00 | 9.33 |
| SR 60/Chestnut Street | Court Street | Martin Luther King Jr. Boulevard | Bicycle Accommodations | 19 | 3.17 | 14 | 2.33 | 7 | 3.50 | 40.00 | 9.00 |
| SR 60/Gulf to Bay Boulevard | US 19 | Highland Avenue | Multi-use Accommodations | 17 | 2.83 | 9 | 1.50 | 8 | 4.00 | 34.00 | 8.33 |
| Missouri Avenue | Belleair Road | Palmetto Street | Bicycle Accommodations | 21 | 3.50 | 10 | 1.67 | 6 | 3.00 | 37.00 | 8.17 |
| US Highway 19 North | Curlew Road | Belleair Road | Bicycle Accommodations | 17 | 2.83 | 8 | 1.33 | 8 | 4.00 | 33.00 | 8.17 |
| South Fort Harrison Avenue | Chestnut Street | Drew Street | Bicycle Accommodations | 18 | 3.00 | 13 | 2.17 | 6 | 3.00 | 37.00 | 8.17 |
| SR 60/Gulf to Bay Boulevard | McMullen Booth Road | US Highway 19 | Multi-use Accommodations | 14 | 2.33 | 9 | 1.50 | 8 | 4.00 | 31.00 | 7.83 |
| Drew Street | North Myrtle Avenue | Saturn Avenue | Multi-use Accommodations | 16 | 2.67 | 13 | 2.17 | 5 | 2.50 | 34.00 | 7.33 |
| McMullen Booth Road | Drew Street | SR 60/Gulf to Bay Boulevard | Bicycle Accommodations | 12 | 2.00 | 8 | 1.33 | 8 | 4.00 | 28.00 | 7.33 |
| SR 60/Court Street | Stevenson Creek | Entrance to Saint Ceceila Catholic School | Bicycle Accommodations | 21 | 3.50 | 8 | 1.33 | 5 | 2.50 | 34.00 | 7.33 |
| SR 60/Gulf to Bay Boulevard | Court Street | Cleveland Street | Bicycle Accommodations | 21 | 3.50 | 7 | 1.17 | 5 | 2.50 | 33.00 | 7.17 |
| Drew Street | Betty Lane | Highland Avenue | Multi-use Accommodations | 17 | 2.83 | 8 | 1.33 | 6 | 3.00 | 31.00 | 7.17 |
| Clearwater Beach Connector Trail | Pinellas Trail | MLK | Multi-use Accommodations | 20 | 3.33 | 13 | 2.17 | 3 | 1.50 | 36.00 | 7.00 |
| Cleveland Street | Gulf to Bay Boulevard | Missouri Avenue | Bicycle Accommodations | 20 | 3.33 | 10 | 1.67 | 4 | 2.00 | 34.00 | 7.00 |
| Martin Luther King Jr. Avenue | Chestnut Street | Lakeview Road | Bicycle Accommodations | 18 | 3.00 | 11 | 1.83 | 4 | 2.00 | 33.00 | 6.83 |
| Drew Street | Myrtle Avenue | Coachman Park (Drew St) | Bicycle Accommodations | 13 | 2.17 | 15 | 2.50 | 4 | 2.00 | 32.00 | 6.67 |
| Martin Luther King Jr Avenue | Court Street | Fairmont Street | Bicycle Accommodations | 19 | 3.17 | 11 | 1.83 | 3 | 1.50 | 33.00 | 6.50 |
| Clearwater Beach Trail | South of 5th Street | South of Sand Key Park Entrance | Multi-use Accommodations | 13 | 2.17 | 14 | 2.33 | 4 | 2.00 | 31.00 | 6.50 |
| SR 60/Gulf to Bay Boulevard | Gulf to Bay Boulevard/Highlands Avenue | South Lake Drive | Multi-use Accommodations | 14 | 2.33 | 7 | 1.17 | 6 | 3.00 | 27.00 | 6.50 |
| South Prospect Avenue | Druid Road | Cleveland Street | Bicycle Accommodations | 18 | 3.00 | 14 | 2.33 | 2 | 1.00 | 34.00 | 6.33 |
| North Betty Lane | Drew Street | Union Street | Bicycle Accommodations | 18 | 3.00 | 10 | 1.67 | 3 | 1.50 | 31.00 | 6.17 |
| Druid Trail | South Betty Lane | Bypass Drive | Multi-use Accommodations | 18 | 3.00 | 10 | 1.67 | 3 | 1.50 | 31.00 | 6.17 |
| Glen Oaks Park | Court Street | Druid Road | Multi-use Accommodations | 20 | 3.33 | 9 | 1.50 | 2 | 1.00 | 31.00 | 5.83 |
| Stevenson Creek | Court Street | Cleveland Street | Multi-use Accommodations | 20 | 3.33 | 8 | 1.33 | 2 | 1.00 | 30.00 | 5.67 |
| South Keene Road | SR 60/Gulf to Bay Boulevard | Lakeview Road | Bicycle Accommodations | 8 | 1.33 | 7 | 1.17 | 6 | 3.00 | 21.00 | 5.50 |
| Ream Wilson Clearwater Trail | Pinellas Trail | Ream Wilson Trail | Multi-use Accommodations | 16 | 2.67 | 11 | 1.83 | 2 | 1.00 | 29.00 | 5.50 |
| Highland Avenue | Belleair Road | Union Street | Bicycle Accommodations | 13 | 2.17 | 11 | 1.83 | 3 | 1.50 | 27.00 | 5.50 |
| North Greenwood Loop | Pinellas Trail | Pinellas Trail | Multi-use Accommodations | 15 | 2.50 | 7 | 1.17 | 3 | 1.50 | 25.00 | 5.17 |
| South Osceola Avenue | Court Street | Cleveland Street | Bicycle Accommodations | 12 | 2.00 | 12 | 2.00 | 2 | 1.00 | 26.00 | 5.00 |
| Drew Street | US Highway 19 | McMullen Booth Road | Bicycle Accommodations | 12 | 2.00 | 9 | 1.50 | 3 | 1.50 | 24.00 | 5.00 |
| Duke Energy Trail | Sharkey Road | Ream Wilson Trail | Bicycle Accommodations | 13 | 2.17 | 8 | 1.33 | 3 | 1.50 | 24.00 | 5.00 |
| Northeast Coachman Road | SR 590/Drew Street | McMullen Booth Road | Bicycle Accommodations | 8 | 1.33 | 10 | 1.67 | 4 | 2.00 | 22.00 | 5.00 |
| Druid Road Southwest | South Fort Harrison Avenue | Jeffords Street | Bicycle Accommodations | 10 | 1.67 | 13 | 2.17 | 2 | 1.00 | 25.00 | 4.83 |
| Cleveland Street | Keene Road | Gulf to Bay Boulevard | Bicycle Accommodations | 11 | 1.83 | 9 | 1.50 | 3 | 1.50 | 23.00 | 4.83 |
| Stevenson Creek | Cleveland Street | Drew Street | Multi-use Accommodations | 16 | 2.67 | 7 | 1.17 | 2 | 1.00 | 25.00 | 4.83 |
| Park Place Boulevard | SR 60/Gulf to Bay Boulevard | Ream Wilson Trail | Bicycle Accommodations | 13 | 2.17 | 9 | 1.50 | 2 | 1.00 | 24.00 | 4.67 |

| | | | | Mobility | | Land Use and Economics | | Safety | | Overall | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Project | From | To | Network Gap | Total Score | Average Score | Total Score | Average Score | Total Score | Average Score | Total Score | Average Score |
| Cleveland Street | Belcher Road | Keene Road | Bicycle Accommodations | 8 | 1.33 | 11 | 1.83 | 3 | 1.50 | 22.00 | 4.67 |
| Courtney Campbell Connection | Bypass Drive | Gulf to Bay Boulevard | Multi-use Accommodations | 10 | 1.67 | 8 | 1.33 | 3 | 1.50 | 21.00 | 4.50 |
| Mandalay Avenue | Clearwater Beach Roundabout | Juniper Street | Multi-use Accommodations | 8 | 1.33 | 10 | 1.67 | 3 | 1.50 | 21.00 | 4.50 |
| Bayside Bridge | Gulf to Bay Boulevard | Sector 6/8 Line | Bicycle Accommodations | 6 | 1.00 | 6 | 1.00 | 5 | 2.50 | 17.00 | 4.50 |
| Hampton Road | SR 60/Gulf to Bay Boulevard | Drew Street | Bicycle Accommodations | 13 | 2.17 | 8 | 1.33 | 2 | 1.00 | 23.00 | 4.50 |
| North Lake Avenue | Drew Street | Druid Road | Multi-use Accommodations | 10 | 1.67 | 7 | 1.17 | 3 | 1.50 | 20.00 | 4.33 |
| Lakeview Road | South Keene Road | West of South Martin Dr. Martin Luther King Jr. Avenue | Bicycle Accommodations | 10 | 1.67 | 7 | 1.17 | 3 | 1.50 | 20.00 | 4.33 |
| Hercules Avenue | Lakeview Road | Virginia Avenue | Bicycle Accommodations | 8 | 1.33 | 9 | 1.50 | 3 | 1.50 | 20.00 | 4.33 |
| Saturn Avenue | Flagler Drive | Gulf to Bay Boulevard | Bicycle Accommodations | 9 | 1.50 | 7 | 1.17 | 3 | 1.50 | 19.00 | 4.17 |
| Ross Norton Connection | Pinellas Trail | Lake Bellevue | Multi-use Accommodations | 8 | 1.33 | 8 | 1.33 | 3 | 1.50 | 19.00 | 4.17 |
| Lakeview Road | South Hercules Avenue | South Keene Road | Bicycle Accommodations | 8 | 1.33 | 7 | 1.17 | 3 | 1.50 | 18.00 | 4.00 |
| Landmark Trail | Curlew Road | Fairwood Avenue | Multi-use Accommodations | 10 | 1.67 | 7 | 1.17 | 2 | 1.00 | 19.00 | 3.83 |
| Arcturas Avenue | Drew Street | Druid Road | Bicycle Accommodations | 7 | 1.17 | 9 | 1.50 | 2 | 1.00 | 18.00 | 3.67 |
| Drew Street | McMullen Booth Road | Bayshore Boulevard | Bicycle Accommodations | 6 | 1.00 | 7 | 1.17 | 3 | 1.50 | 16.00 | 3.67 |
| Druid Road | Jeffords Street | Belleview Boulevard | Bicycle Accommodations | 5 | 0.83 | 11 | 1.83 | 2 | 1.00 | 18.00 | 3.67 |
| Island Way | Memorial Causeway | Terminus | Bicycle Accommodations | 4 | 0.67 | 8 | 1.33 | 3 | 1.50 | 15.00 | 3.50 |
| Bayview Avenue | Drew Street | SR 60/Gulf to Bay Boulevard | Bicycle Accommodations | 6 | 1.00 | 8 | 1.33 | 2 | 1.00 | 16.00 | 3.33 |
| Bayview Avenue | SR 60/Gulf to Bay Boulevard | CR 31 | Bicycle Accommodations | 4 | 0.67 | 6 | 1.00 | 2 | 1.00 | 12.00 | 2.67 |

Appendix D – Modeling & Transit Operations

# Beach to TIA Express

# Operations Plan and Ridership Forecasting Methodology and Results Report

Developed by:
Connetics Transportation Group, Inc.

October 2017

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# List of Tables

# 1.0 Introduction

Forward Pinellas, the planning council and metropolitan planning organization for Pinellas County, initiated efforts in July 2016 to develop a comprehensive set of multimodal implementation strategies to improve transit connections in the Clearwater region. State Road 60 provides an efficient link between Clearwater Beach, Downtown Clearwater, and TIA. A transit service through this corridor could be a major component of the Forward Pinellas's comprehensive multimodal implementation strategy. As a result, Forward Pinellas collaborated with PSTA to enhance mobility in this corridor.

The proposed comprehensive multimodal implementation strategy included different strategies ranging from implementing an Intelligent Transportation System, improving the bicycle facilities, to providing Express bus service along the main corridors. After receiving public and agency input, a 20-mile long SR 60 Express corridor was identified for study. Ultimately, the initial corridor was designed to serve the four major activity centers – Clearwater Beach, Downtown Clearwater, Clearwater Mall, and Tampa International Airport (TIA). Additional alternatives include adding a Park and Ride (PNR) facility at the Clearwater Mall, adding two potential stations (one at SR 60/Belcher Road and another at SR 60/Rocky Point), and operating Express transit service along a dedicated lane between Clearwater Beach and Downtown Clearwater.

# 2.0 Description of Alternatives

The following four alternatives along the S.R. 60 corridor were identified for analysis:

- **Alternative 1** is the original proposed alternative with four stops: Clearwater Beach, Clearwater Downtown, Clearwater Mall, and Tampa International Airport (TIA). Headways are assumed to be 30 minutes throughout the day.

- **Alternative 2** has the same four stops as Alternative 1, but includes a park-ride facility at the Clearwater Mall. Headways are assumed to be 30 minutes throughout the day.

- **Alternative 3** has six stops in total, the same four stops as Alternative 1 with new stops at SR 60/Belcher Road and SR 60/Rocky point. It also includes a park-ride facility at the Clearwater Mall. Headways are assumed to be 30 minutes throughout the day.

- **Alternative 4** has the same six stops and park-ride facility as Alternative 3, but operates in a dedicated lane assumed to traverse between Clearwater Beach and Downtown Clearwater. Headways are assumed to be 30 minutes throughout the day.

**Figure 1** depicts the alignment and station locations for the various alternatives.

## Figure 1: S.R. 60 Corridor Express Service Alternatives

# 3.0 Operations Plan

## 3.1 Travel Time Estimates

Travel time estimates for peak and off-peak periods were developed for each of the four alternatives. Travel time estimates assumed higher levels of traffic impacts on travel times during afternoon peak period versus morning peak period. The end-to-end travel time estimates are based on vehicle performance characteristics, distance and segment/intersection levels of service (LOS). The SR 60 run time model used collected traffic data to determine most of the Peak LOS values, but was supplemented with Google Maps traffic data to fill in any remaining gaps and provide off peak LOS estimates. The times shown here are calculated by segment and include the sum of a running time, delay time, and dwell time. This model is designed to provide conservative estimates (i.e., potentially slower than actual operations). Table 1-4 identify end-to-end travel times for each of the four alternatives.

### Table 1: End-to-End Run Times (Alternative 1)

| | Eastbound | | |
|---|---|---|---|
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| Clearwater Beach | 5:00:00 | 3:00:00 | 10:00:00 |
| Downtown | 5:06:21 | 3:07:02 | 10:06:26 |
| Clearwater Mall | 5:25:07 | 3:27:47 | 10:22:36 |
| TIA | 5:55:25 | 3:56:25 | 10:48:18 |
| **Total Time** | **0:55:25** | **0:56:25** | **0:48:17** |
| | **Westbound** | | |
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| TIA | 5:00:00 | 3:00:00 | 10:00:00 |
| Clearwater Mall | 5:26:47 | 3:33:06 | 10:25:06 |
| Downtown | 5:44:44 | 3:53:47 | 10:41:08 |
| Clearwater Beach | 5:50:40 | 3:59:48 | 10:47:05 |
| **Total Time** | **0:50:40** | **0:59:47** | **0:47:05** |

## Table 2: End-to-End Run Times (Alternative 2)

| | Eastbound | | |
|---|---|---|---|
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| Clearwater Beach | 5:00:00 | 3:00:00 | 10:00:00 |
| Downtown | 5:06:21 | 3:07:02 | 10:06:26 |
| Clearwater Mall | 5:25:07 | 3:27:47 | 10:22:36 |
| TIA | 5:55:25 | 3:56:25 | 10:48:18 |
| **Total Time** | **0:55:25** | **0:56:25** | **0:48:17** |
| | **Westbound** | | |
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| TIA | 5:00:00 | 3:00:00 | 10:00:00 |
| Clearwater Mall | 5:26:47 | 3:33:06 | 10:25:06 |
| Downtown | 5:44:44 | 3:53:47 | 10:41:08 |
| Clearwater Beach | 5:50:40 | 3:59:48 | 10:47:05 |
| **Total Time** | **0:50:40** | **0:59:47** | **0:47:05** |

## Table 3: End-to-End Run Times (Alternative 3)

| | Eastbound | | |
|---|---|---|---|
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| Clearwater Beach | 5:00:00 | 3:00:00 | 10:00:00 |
| Downtown | 5:06:21 | 3:07:02 | 10:06:26 |
| SR60/Belcher Rd | 5:19:59 | 3:21:54 | 10:17:43 |
| Clearwater Mall | 5:25:37 | 3:28:17 | 10:23:06 |
| Rocky point | 5:49:34 | 3:51:17 | 10:42:52 |
| TIA | 5:56:25 | 3:57:25 | 10:49:18 |
| **Total Time** | **0:56:25** | **0:57:25** | **0:49:18** |
| | **Westbound** | | |
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| TIA | 5:00:00 | 3:00:00 | 10:00:00 |
| Rocky point | 5:11:13 | 3:14:26 | 10:10:32 |
| Clearwater Mall | 5:27:17 | 3:33:36 | 10:25:36 |
| SR60/Belcher Rd | 5:34:58 | 3:42:43 | 10:33:30 |
| Downtown | 5:45:44 | 3:54:47 | 10:42:08 |
| Clearwater Beach | 5:51:40 | 4:00:48 | 10:48:05 |
| **Total Time** | **0:51:40** | **1:00:48** | **0:48:05** |

## Table 4: End-to-End Run Times (Alternative 4)

| | Eastbound | | |
|---|---|---|---|
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| Clearwater Beach | 5:00:00 | 3:00:00 | 10:00:00 |
| Downtown | 5:04:15 | 3:04:56 | 10:04:20 |
| SR60/Belcher Rd | 5:17:53 | 3:19:48 | 10:15:37 |
| Clearwater Mall | 5:23:31 | 3:26:11 | 10:21:00 |
| Rocky point | 5:47:28 | 3:49:11 | 10:40:46 |
| TIA | 5:54:19 | 3:55:19 | 10:47:12 |
| **Total Time** | **0:54:19** | **0:55:19** | **0:47:12** |
| | **Westbound** | | |
| **Station** | ***AM*** | ***PM*** | ***Off*** |
| TIA | 5:00:00 | 3:00:00 | 10:00:00 |
| Rocky point | 5:11:13 | 3:14:26 | 10:10:32 |
| Clearwater Mall | 5:27:17 | 3:33:36 | 10:25:36 |
| SR60/Belcher Rd | 5:34:58 | 3:42:43 | 10:33:30 |
| Downtown | 5:45:44 | 3:54:47 | 10:42:08 |
| Clearwater Beach | 5:49:34 | 3:58:42 | 10:45:59 |
| **Total Time** | **0:49:34** | **0:58:42** | **0:45:59** |

## 3.2 Operating Plan Assumptions and Requirements

For all alternatives, it was assumed the Express Bus Service operates at 30-minute frequencies from 5 a.m. until midnight. Peak period cycle times equal 150 minutes while off peak and weekend cycle times equal 120 minutes. Travel time variations between the alternatives do not vary enough during peak and off-peak periods to influence the cycle times, therefore operating requirements (i.e., vehicles, miles and hours) remain constant across all alternatives. Table 5 reflect operating plan requirements and estimated annual operating and maintenance costs.

## Table 5: Alternative Operating Assumptions

| Alternatives | Peak / Fleet Vehicles | Day | Daily / Annual Revenue Hours | Daily / Annual Revenue Miles | Annual Operating & Maintenance Costs |
|---|---|---|---|---|---|
| 1 - 4 | 5 / 6 | Weekday | 79.50 / 20,350 | 1,543 / 395,000 | $1,983,718 |
| 1 - 4 | 5 / 6 | Saturday | 74 / 3,770 | 1,543 / 78,700 | $367,500 |
| 1 – 4 | 5 / 6 | Sunday | 74 / 4290 | 1,543 / 89,500 | $418,189 |
| | | Annual | 28,410 | 563,200 | $2,769,407 |

# 4.0 Ridership Forecast Methodology

The following sections describe the ridership forecasting methodology and results prepared using the Federal Transit Administration's (FTA's) Simplified-Trips-on-Project Software (STOPS) version 2.0. Ridership estimates were prepared for the four alternatives described above.

## 4.1 STOPS Model Overview

The STOPS modeling process is comprised of a series of programs designed to estimate transit project ridership using a streamlined set of procedures that are generally less time-consuming than applying a regional travel demand forecasting model. STOPS is a limited application of the traditional "4-step" process and is similar in structure to regional models and includes many of the same computations of transit level-of-service and market share found in model sets maintained by Metropolitan Planning Organizations. The following sections provide a general overview of the underlying processes and identify key inputs used to estimate ridership with STOPS v2.0.

For this STOPS model, the modeling area mainly comprises of Clearwater, St. Petersburg, and Tampa regions. It covers all the areas covered by PSTA and Hillsborough Area Regional Transit Authority (HART) services. For modeling calibration and analysis purposes, the modeling area was divided into several districts. These districts were developed based on the TBRPM 2010 zonal structure and their location with respect to the new SR 60 Express line. The districts are smaller along the proposed express route compared to districts which are located further away. **Figure 2** shows the geographic extent of the model area and districts used in STOPS model.

For this STOPS model, the "current year" was 2016 and the horizon year was 2040. Base year 2010 and 2040 population and employment data was borrowed from the Tampa Bay Regional Planning Model (TBRPM) v8.0. The 2016 population and employment data was obtained by interpolating the 2010 and 2040 socioeconomic data (refer to Table 22). Travel demand from journey-to-work (JTW) data is estimated based on 2006-2010 American Community Survey (ACS) data.

The ACS data is directly input into STOPS, which scales it to the 2016 and 2040 population and employment levels. Some gaps were found in the ACS data, especially for north-western Clearwater Beach districts, Tampa, and North districts. Gaps in ACS data are atypical, but not uncommon. To address this issue, an additional file with trips in these areas was developed from the 2012 PSTA Survey was input to STOPS. Another gap is the representation of airport passenger trips to/from TIA. This gap is difficult to address completely without supplementary data like an airport passenger travel survey. Since an airport passenger survey was not available, the project team decided to rely on STOPS' representation of these trips.

Other inputs include:

- Automated Passenger Counter (APC) ridership data from 2016,
- The existing PSTA transit network in General Transit Feed Specification (GTFS) format,
- Zone to zone highway travel times and distances from TBRPM 8.0, and
- PSTA's 2012 Transit On-Board Survey.

The GTFS files were updated to include the new stations for the proposed route. Missing Park and Ride (PNR) locations were added to the GTFS file based on PSTA's system map.

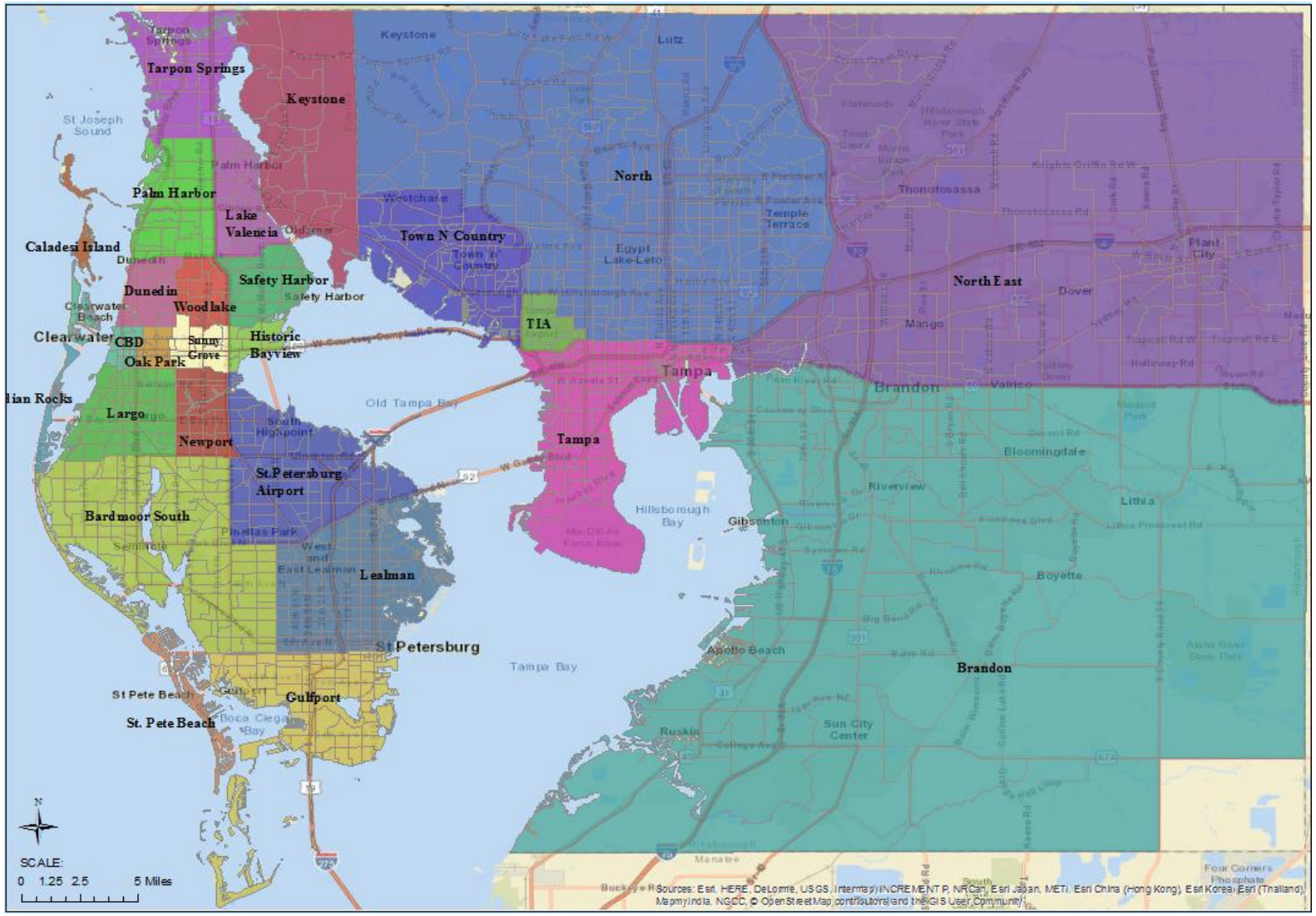
STOPS utilize the APC data to calibrate the model before forecasting. For this forecasting effort, the total number of weekday unlinked transit trips (i.e., boardings) from the APC data was 50,498. Note that this included only PSTA service and not HART service.

The 2012 On-Board Survey data was re-expanded by route to the observed ridership levels in the 2016 APC data. In this way, a table of linked transit trips by trip purpose, access mode and market segment was generated (see **Table 6**). This information is used by STOPS to calibrate the model before forecasting ridership. A comparison of the unlinked trips to the linked trips yielded an observed overall transfer rate of 70 percent for the PSTA system.

## Table 6: Linked Transit Trip Calibration Targets

| Market Segment | | Trip Purpose | | | TOTAL |
|---|---|---|---|---|---|
| HH Cars | Access mode | HBW | HBNW | NHB | |
| 0-car | Walk | 8,948 | 8,516 | 3,813 | 21,276 |
| | KNR | 108 | 62 | 130 | 299 |
| | PNR | 8 | 7 | 54 | 69 |
| | **All** | **9,063** | **8,584** | **3,997** | **21,644** |
| 1-car | Walk | 4,380 | 2,705 | 1,394 | 8,479 |
| | KNR | 277 | 86 | 50 | 414 |
| | PNR | 13 | - | 35 | 48 |
| | **All** | **4,671** | **2,791** | **1,480** | **8,941** |
| 2+-car | Walk | 2,073 | 1,576 | 795 | 4,445 |
| | KNR | 94 | 48 | 30 | 172 |
| | PNR | 58 | - | - | 58 |
| | **All** | **2,226** | **1,624** | **825** | **4,675** |
| TOTAL | Walk | 15,402 | 12,797 | 6,002 | 34,201 |
| | KNR | 479 | 195 | 210 | 885 |
| | PNR | 79 | 7 | 90 | 176 |
| | **All** | **15,960** | **12,998** | **6,302** | **35,261** |

## Figure 2: STOPS Modeling Area and Districts



## 4.2 Calibration

A precursor to developing any ridership forecast is a determination of the model's ability to replicate ridership for the existing year. Although the model is well calibrated, forecasts presented in this section have not been subjected to a rigorous process of calibration and validity testing. Nonetheless, results do fit the intended purpose and offer reasonable order-of-magnitude comparisons. The following subsections highlight results of the calibration effort.

The Census Transportation Planning Package (CTPP) Calibration Approach was set to default of "00 - (none selected)" for all alternatives. For all the alternatives, the Group calibration was also set to default "00 - (none selected)". A transfer penalty of 5 minutes was applied to all the PSTA routes. For all stops in the network, an extra Kiss and Ride (KNR) impedance of 10 minutes was applied. There was no extra penalty for walk and PNR access modes. These settings and values are consistent with other STOPS models around the country.

At a system-wide level, the model performed reasonably well in replicating existing conditions in terms of the following:

- Boardings by route,
- Transfer rates,
- Trips by trip purpose,
- Market segmentation, and
- Access mode

**Tables 7 through Table 9** summarize the calibration comparisons used for this forecasting effort. Please note that all ridership numbers presented in this document represent an average weekday estimate. Overall, Table 2 indicates that the STOPS estimated boardings were within roughly 5,200 boardings and was 10% lower than the 2016 APC data. This was mainly due to the gaps in the ACS data for certain regions. Lack of journey-to-work trips resulted in reduced weekday transit trips for some routes, including Route 60 (Downtown Clearwater/McMullen Booth Frontage Road), Route 67 (Clearwater/Oldsmar), Route 76 (Clearwater/Westfield Countryside), Route OTS (Oldsmar/Tampa connector) and Route SBT (Suncoast Beach Trolley). These routes are in the SR 60 corridor. However, the total estimated boardings for all the affected routes were almost the same as the 2016 APC boardings – essentially a zero percent difference between observed and estimated – so the calibration was considered acceptable.

Please note that there are some differences in the following tables due to minor inconsistencies in the GTFS file. Information on the Route 1, Route 30, and Route 811 (Flex East Lake) is not available in the GTFS file and hence does not have ridership estimates. Route 444 (Pinellas Park Shuttle) has one bus trip in the GTFS structure outside of the average weekday parameters that STOPS uses for calculation purposes.

## Table 7: Comparison of Calibrated Boardings by Route

| Route ID | Existing Route Name | Boardings by Route | | | |
|---|---|---|---|---|---|
| | | Expanded 2016 APC* | 2016 STOPS Estimates | Delta (Est - APC) | Percent Delta** |
| 60 | DOWNTOWN CLEARWATER/S.R.6 | 1,882 | 1,266 | (616) | -33% |
| 67 | CLEARWATER/DOWNTOWN OLDSM | 544 | 663 | 119 | 22% |
| 76 | CLEARWATER/WESTFIELD SHOP | 551 | 395 | (156) | -28% |
| OTC | OLSDMAR/TAMPA CONNECTOR | 99 | 148 | 49 | 49% |
| SBT | SUNCOAST BEACH TROLLEY | 2,096 | 2,684 | 588 | 28% |
| ***Subtotal for All Affected Routes*** | | ***5,172*** | ***5,156*** | ***(16)*** | ***0%*** |
| 100X | GATEWAY MALL/DOWNTOWN T | 270 | 330 | 60 | 22% |
| 11 | SOUTH ST PETE/PSTA 34TH S | 1,033 | 1,007 | (26) | -3% |
| 14 | ST PETERSBURG/PASADENA | 1,568 | 1,136 | (432) | -28% |
| 15 | ST PETERSBURG/GULFPORT CA | 634 | 579 | (55) | -9% |
| 18 | ST PETERSBURG/CLEARWATER | 4,862 | 4,063 | (799) | -16% |
| 19 | ST. PETERSBURG/TARPON SPR | 6,211 | 5,685 | (526) | -8% |
| 20 | SOUTH ST PETE/TYRONE SQUA | 598 | 1,139 | 541 | 91% |
| 23 | ST PETERSBURG/TYRONE SQUA | 1,053 | 948 | (105) | -10% |
| 300X | ULMERTON RD/DOWNTOWN TA | 155 | 252 | 97 | 63% |
| 32 | ST. PETERSBURG CIRCULATOR | 202 | 14 | (188) | -93% |
| 38 | DOWNTOWN ST PETE/TYRONE S | 634 | 714 | 80 | 13% |
| 4 | ST.PETERSBURG / 4TH ST / G | 4,210 | 4,145 | (65) | -2% |
| 444 | PINELLAS PARK SHUTTLE | 53 | - | (53) | -100% |
| 5 | ST PETERSBURG/TYRONE SQUAR | 867 | 720 | (147) | -17% |
| 52 | ST PETERSBURG/CLEARWATER | 5,409 | 4,752 | (657) | -12% |
| 58 | GATEWAY MALL/SEMINOLE MAL | 218 | 337 | 119 | 54% |
| 59 | ST PETE/INDIAN ROCKS BEAC | 3,088 | 3,992 | 904 | 29% |
| 61 | INDIAN ROCKS/DUNEDIN | 786 | 518 | (268) | -34% |
| 62 | TYRONE SQUARE MALL/BOOT R | 820 | 1,673 | 853 | 104% |
| 66 | INDIAN ROCKS/TARPON SPRIN | 1,135 | 1,057 | (78) | -7% |
| 68 | TYRONE MALL/JOHNS PASS VI | 364 | 543 | 179 | 49% |
| 7 | ST PETERSBURG/TYRONE SQUAR | 553 | 297 | (256) | -46% |
| 73 | TYRONE SQUARE MALL/CLEARW | 499 | 1,326 | 827 | 166% |
| 74 | ST PETERSBURG/INDIAN ROCK | 2,357 | 2,777 | 420 | 18% |
| 75 | GATEWAY MALL/TYRONE SQUAR | 612 | 535 | (77) | -13% |
| 78 | CLEARWATER/WESTFIELD SHOP | 931 | 940 | 9 | 1% |
| 79 | ST PETERSBURG/US 19 & WHI | 2,339 | 2,010 | (329) | -14% |
| 90 | GRAND CENTRAL/ST. PETE BE | 94 | 86 | (8) | -8% |
| 97 | ST PETE/CARILLON | 242 | 192 | (50) | -21% |
| 98 | PARK STREET TERMINAL/CARI | 160 | 241 | 81 | 51% |
| CAT | CENTRAL AVENUE TROLLEY | 3,102 | 2,861 | (241) | -8% |
| DPC | DUNEDIN/PALM HARBOR CONN | 59 | 143 | 84 | 141% |
| 1 | | 106 | - | (106) | |
| 30 | | 68 | - | (68) | |
| 811 | Flex-East Lake | 35 | - | (35) | |
| ***Subtotal for All Routes in APC Data*** | | ***50,498*** | ***45,012*** | ***(5,486)*** | ***-11%*** |
| 22 | 4TH ST /TYRONE SQUARE MAL | - | 332 | 332 | |
| PPS | PINELLAS PARK SHUTTLE | - | 1 | 1 | |
| ***Subtotal for Routes not in APC Data*** | | ***-*** | ***333*** | ***333*** | |
| **System Total** | | **50,498** | **45,345** | **-5153** | **-10%** |
| **Source: PSTA (Feb to Apr 2016) APC Ridership* | | | | | |
| ***Calculated relative to APC data* | | | | | |

**Table** summarizes the comparison of observed to estimated systemwide linked transit trips by market segment and trip purpose. The model estimate is almost the same as the observed data provided by the 2012 re-expanded survey. For all market segments, the estimates are within 1.5% margin of observed linked trips. Even across the trip purposes, all the estimates are within 2% of observed trips which is an acceptable margin.

## Table 8: Trips by Market Segmentation and Trip Purpose Comparison

| Market Segment | HBW | | HBO | | NHB | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | Model | Survey | Model | Survey | Model | Survey | Model | Survey | Delta |
| 0-car HH | 9,134 | 9,063 | 8,398 | 8,584 | 3,871 | 3,997 | 21,403 | 21,644 | (241) |
| 1-car HH | 4,755 | 4,671 | 2,825 | 2,791 | 1,498 | 1,480 | 9,078 | 8,941 | 137 |
| 2+ car HH | 2,227 | 2,226 | 1,631 | 1,624 | 817 | 825 | 4,675 | 4,675 | (0) |
| **Total** | **16,116** | **15,960** | **12,854** | **12,998** | **6,186** | **6,302** | **35,156** | **35,261** | **(105)** |

**Table** contains a comparison of observed to estimated data by access mode and trip purpose. Most of the observed trips (97%) access PSTA's transit system by walking. The STOPS model underestimated these trips by 1,261 or 4%. KNR and PNR trips are both overestimated by, 562 and 594 linked trips respectively.

## Table 9 Trips by Access/Egress Mode and Trip Purpose Comparison

| Access mode | HBW | | HBO | | NHB | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | Model | Survey | Model | Survey | Model | Survey | Model | Survey | Delta |
| Walk | 14,903 | 15,402 | 12,253 | 12,797 | 5,784 | 6,002 | 32,940 | 34,201 | (1,261) |
| Kiss and Ride | 640 | 479 | 473 | 195 | 334 | 210 | 1,447 | 885 | 562 |
| Park and Ride | 574 | 79 | 127 | 7 | 69 | 90 | 770 | 176 | 594 |
| **Total** | **16,116** | **15,960** | **12,854** | **12,998** | **6,186** | **6,302** | **35,156** | **35,261** | **(105)** |

Overall the calibration results are very reasonable for the purposes of this study.

## 4.3 Forecasting Methodology

The calibrated STOPS model was used to forecast ridership for the four study alternatives:

- Alternative 1: SR60 Express Bus Service with four major stop locations,
- Alternative 2: Alternative 1 with a Park and Ride Facility at Clearwater Mall,
- Alternative 3: Express Bus Service with six major stop locations and Park and Ride Facility at Clearwater Mall, and
- Alternative 4: Alternative 3 operating along a dedicated lane between Clearwater Downtown and Clearwater Beach.

The No-build scenario is assumed to be same as the existing condition (2016). The PSTA GTFS files were modified to include the requirements of these proposed alternatives. For all alternatives, it was assumed that the Express Bus Service operates at 30-minute frequencies from 5 AM till midnight.

A key setting in STOPS models is the Visibility Factor (VF). This setting approximates the differentiation of fixed-guideway alternatives and regular bus service within a corridor or study area. The range of this value is $0.0 < VF \leq 1.0$. It directly impacts forecasted ridership: higher values produce higher project ridership while lower values produce lower project ridership.

The FTA expects that the Visibility Factor relate to the project's operating and service characteristics. Rail systems, which offer the strongest differentiation from local bus service, generally receive values between 0.5 and 1.0. Bus Rapid Transit (BRT) alternatives, with offer more modest differentiation from local bus service, generally receive values between 0.0 and 0.5. "Corridor-based" BRT alternatives, which typically offer peak hour/period exclusive lanes/right-of-way, defined stations, transit signal priority and/or queue jumping for transit vehicles, and 5-15-minute frequencies, generally receive VF values between 0.0 and 0.2.

The forecasting team reviewed the alternatives and their proposed characteristics, and selected the Visibility Factors used for this study (see **Table 10**).

## Table 10: STOPS Visibility Factors by Alternative

| Transit Alternative # | STOPS Visibility Factor |
|---|---|
| Alternative #1 | 0.0 |
| Alternative #2 | 0.0 |
| Alternative #3 | 0.0 |
| Alternative #4 | 0.1 and 0.2 (both are applied in separate runs to provide range) |

# 5.0 Ridership Forecasting Results

The STOPS model was run for each of the four alternatives. The project team summarized the results, which are presented in this section.

**Table 11** summarizes the daily corridor boardings for each alternative. Overall daily ridership is expected to range between approximately 450 and 1,000 boardings. The two alternatives with two additional stops, Alternatives 3 and 4, provide higher ridership than the other alternatives. Future year ridership results are slightly higher than 2016 values.

## Table 11: 2016 and 2040 Boardings Comparisons by Alternative

| Alternative | 2016 Corridor Boardings | | | 2040 Corridor Boardings | | |
|---|---|---|---|---|---|---|
| | No Build | Build | Difference | No Build | Build | Difference |
| Alternative 1 | - | 445 | 445 | - | 483 | 483 |
| Alternative 2 | - | 518 | 518 | - | 562 | 562 |
| Alternative 3 | - | 832 | 832 | - | 899 | 899 |
| Alternative 4 | - | 966-1,018 | 966-1,018 | - | 1,043-1,100 | 1,043-1,100 |

**Table** summarize the linked trips and Vehicle Miles Traveled (VMT) savings for all the alternatives for 2016 and 2040. The STOPS model generates the reduction of Person Miles Traveled (PMT). VMT is calculated by applying a 1.2 person per vehicle auto occupancy rate to the PMT values. All alternatives are expected to produce 2,300 more transit trips systemwide between 2016 and 2040, assuming the network remains at 2016 service levels. The VMT reduction levels are consistent with the ridership results in **Table 11**.

## Table 12: 2016 and 2040 Linked Transit Trips Comparisons and VMT Savings

| Alternative | Linked Trips | | | Reduction in VMT | |
|---|---|---|---|---|---|
| | 2016 | 2040 | Increase | 2016 | 2040 |
| Alternative 1 | 35,264 | 37,591 | 2,327 | (623) | (678) |
| Alternative 2 | 35,460 | 37,807 | 2,347 | (1,210) | (1,382) |
| Alternative 3 | 35,546 | 37,903 | 2,357 | (2,073) | (2,340) |
| Alternative 4 | 35,606-35,646 | 37,968-38,011 | 2,362-2,365 | (2508)-(2818) | (2810)-(3141) |

**Table 13 and Table 14** shows the stop-level boardings for 2016 and 2040. These results include potential transit ridership by TIA airplane passengers, which was computed using a sketch-level methodology. The methodology applies a range of mode shares of 6-16% to airport passenger person trips (provided by the TBRPM). The estimated mode shares are taken from Transit Cooperative Research Program's (TCRP) Report 62, "Improving Public Transportation Access to Large Airports".

Overall most boardings are accrued at the Clearwater Mall, Downtown Clearwater and the Clearwater Beach Marina.

## Table 13: 2016 Stop-Level Boardings

| Stop Description | Build Alternatives* | | | | Potential Transit Boardings by TIA Passengers*** |
|---|---|---|---|---|---|
| | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 | |
| Tampa Int Airport Terminal | 1 | 1 | - | 0 - 0 | 25 - 68 |
| Rocky Point | - | - | 21 | 23 - 23 | 10 - 27 |
| Clearwater Mall | 159 | 196 | 189 | 262 - 282 | 3 - 7 |
| Belcher Road | - | - | 150 | 143 - 149 | 4 - 12 |
| Downtown | 148 | 173 | 264 | 314 - 334 | 7 - 19 |
| Clearwater Beach Marina | 139 | 150 | 204 | 214 - 225 | 1 - 3 |
| | **447** | **520** | **828** | **956 - 1013** | **50 - 136** |
| **** 6 %-16 % Passenger share based on TCRP Report 62* | | | | | |

## Table 14: 2040 Stop-Level Boardings

| Stop Description | Build Alternatives* | | | | Potential Transit Boardings by TIA Passengers*** |
|---|---|---|---|---|---|
| | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 | |
| Tampa Int Airport Terminal | 1 | 1 | - | 0 - 0 | 55 - 146 |
| Rocky Point | - | - | 25 | 25 - 26 | 21 - 56 |
| Clearwater Mall | 168 | 210 | 205 | 282 - 304 | 6 - 15 |
| Belcher Road | - | - | 161 | 154 - 162 | 9 - 24 |
| Downtown | 163 | 190 | 290 | 343 - 365 | 15 - 40 |
| Clearwater Beach Marina | 150 | 161 | 219 | 230 - 242 | 3 - 9 |
| | **482** | **562** | **900** | **1034 - 1099** | **109 - 290** |
| **** 6 %-16 % Passenger share based on TCRP Report 62* | | | | | |

**Appendix A** and **Appendix B** contains all electronic files related to the STOPS model.

# Appendix E – Detailed Ridership Forecasting Results

## Alternative 1

This is the original proposed alternative with four main stops: Clearwater Beach, Clearwater Downtown, Clearwater Mall, and Tampa International Airport (TIA).

The results from the STOPS forecasts are summarized in **Tables A-1** and **A-2**. Table 2 gives the 2016 and 2040 boardings by route and

Table A- shows the station to station boarding for 2016 and 2040.

## Table 2: STOPS Results by Route (Alternative 1)

| | Alternative 1 - STOPS Boardings Results | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | DRAFT | | | | | | | | 8/25/2017 |
| | Route | 2016 | | | | 2040 | | | |
| | | No Build | Alternative 1 Build | Delta | Percent Delta | No Build | Alternative 1 Build | Delta | Percent Delta |
| Routes Impacted by Corridor | TIA/Clearwater Beach | - | 445 | 445 | | - | 483 | 483 | |
| | Downtown Clearwater/SR 60 | 1,266 | 1,139 | (127) | -10% | 1,349 | 1,215 | (134) | -10% |
| | Clearwater/Downtown Oldsmar | 663 | 663 | - | 0% | 701 | 700 | (1) | 0% |
| | Clearwater/Westfield Shop | 395 | 368 | (27) | -7% | 421 | 391 | (30) | -7% |
| | Rt OTC - Oldsmar/Tampa Connector | 148 | 146 | (2) | -1% | 160 | 159 | (1) | -1% |
| | Rt SBT - Suncoast Beach Trolley | 2,684 | 2,638 | (46) | -2% | 2,817 | 2,761 | (56) | -2% |
| | Rt 52 - St. Petersburg/Clearwater | 4,752 | 4,742 | (10) | 0% | 5,092 | 5,082 | (10) | 0% |
| | Rt 59 - St. Pete/Indian Rocks Beach | 3,992 | 3,963 | (29) | -1% | 4,296 | 4,266 | (30) | -1% |
| | Rt 73 - Tyrone Sq Mall/Clearwater | 1,326 | 1,291 | (35) | -3% | 1,402 | 1,364 | (38) | -3% |
| | Rt 62 - Tyrone Sq Mall/Boot Ranch | 1,673 | 1,681 | 8 | 0% | 1,763 | 1,773 | 10 | 1% |
| | Rt 66 - Indian Rocks/Tarpon Springs | 1,057 | 1,081 | 24 | 2% | 1,148 | 1,174 | 26 | 2% |
| | Rt 98 - Park St Terminal/Carillon | 241 | 230 | (11) | -5% | 263 | 250 | (13) | -5% |
| | Rt CAT - Central Avenue Trolley | 2,861 | 2,877 | 16 | 1% | 2,996 | 3,014 | 18 | 1% |
| | Rt 4 - St. Petersburg/4th St | 4,145 | 4,145 | - | 0% | 4,423 | 4,423 | - | 0% |
| | Rt 5 - St. Petersburg/Tyrone Sq Mall | 720 | 720 | - | 0% | 761 | 761 | - | 0% |
| | Rt 7 - St. Petersburg/Tyrone Sq Mall | 297 | 297 | - | 0% | 313 | 313 | - | 0% |
| | Rt 11 - South St Pete/PSTA 34th St | 1,007 | 1,007 | - | 0% | 1,078 | 1,078 | - | 0% |
| | Rt 14 - St. Petersburg/Pasadena | 1,136 | 1,136 | - | 0% | 1,233 | 1,233 | - | 0% |
| | Rt 15 - St. Petersburg/Gulfport | 579 | 579 | - | 0% | 623 | 623 | - | 0% |
| | Rt 18 - St. Petersburg/Clearwater | 4,063 | 4,064 | 1 | 0% | 4,300 | 4,300 | - | 0% |
| | Rt 19 - St. Petersburg/Tarpon Springs | 5,685 | 5,682 | (3) | 0% | 6,096 | 6,095 | (1) | 0% |
| | Rt 20 - South St. Pete/Tyrone square | 1,139 | 1,139 | - | 0% | 1,202 | 1,202 | - | 0% |
| | Rt 22 - 4th St./Tyrone Square Mall | 332 | 332 | - | 0% | 347 | 347 | - | 0% |
| | Rt 23 - St. Petersburg/Tyrone Square Mall | 948 | 948 | - | 0% | 1,017 | 1,017 | - | 0% |
| | Rt 32 - St. Petersburg Circulator | 14 | 14 | - | 0% | 16 | 16 | - | 0% |
| | Rt 38 - Downtown St. Pete/Tyrone Sq Mall | 714 | 714 | - | 0% | 750 | 750 | - | 0% |
| | Rt 444 - Pinellas Park Shuttle | - | - | - | | - | - | - | |
| | Rt 58 - Gateway Mall/Seminole Mall | 337 | 337 | - | 0% | 362 | 362 | - | 0% |
| | Rt 61 - Indian Rocks/Dunedin | 518 | 517 | (1) | 0% | 550 | 550 | - | 0% |
| | Rt 68 - Tyrone Sq Mall/John Pass VI | 543 | 543 | - | 0% | 576 | 575 | (1) | 0% |
| | Rt 74 - St. Petersburg/Indian Rock | 2,777 | 2,779 | 2 | 0% | 2,946 | 2,947 | 1 | 0% |
| | Rt 75 - Gateway Mall/Tyrone Sq Mall | 535 | 535 | - | 0% | 561 | 561 | - | 0% |
| | Rt 78 - Clearwater/Westfield Shop | 940 | 940 | - | 0% | 1,003 | 1,003 | - | 0% |
| | Rt 79 - St. Petersburg/US 19 & Whitney Rd | 2,010 | 2,009 | (1) | 0% | 2,158 | 2,157 | (1) | 0% |
| | Rt 90 - Grand Central/St. Pete Beach | 86 | 86 | - | 0% | 93 | 93 | - | 0% |
| | Rt 97 - St. Pete/Carillon | 192 | 192 | - | 0% | 216 | 216 | - | 0% |
| | Rt DPC - Dunedin/Palm Harbor Connector | 143 | 143 | - | 0% | 159 | 159 | - | 0% |
| | Rt PPS - Pinellas Park Shuttle | 1 | 1 | - | 0% | 1 | 1 | - | 0% |
| | Rt 100X - Gateway Mall/Downtown T | 330 | 330 | - | 0% | 391 | 391 | - | 0% |
| | Rt 300X - Ulmerton Rd/Downtown Tampa | 252 | 252 | - | 0% | 281 | 281 | - | 0% |
| | **System Total** | **50,501** | **50,705** | **204** | **0%** | **53,864** | **54,086** | **222** | **0%** |

## Table A-2: Station to Station Boarding Estimates (Alternative 1)

**2016 Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 1 | 0 | 0 | **1** |
| **Clearwater Mall** | 1 | - | 82 | 74 | **157** |
| **Downtown** | 0 | 82 | - | 65 | **147** |
| **Clearwater Beach** | 0 | 74 | 65 | - | **139** |
| **Total** | **1** | **157** | **147** | **139** | **444** |

**2040 Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 1 | 0 | 0 | **1** |
| **Clearwater Mall** | 1 | - | 90 | 77 | **168** |
| **Downtown** | 0 | 90 | - | 73 | **163** |
| **Clearwater Beach** | 0 | 77 | 73 | - | **150** |
| **Total** | **1** | **168** | **163** | **150** | **482** |

**Delta Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 0 | 0 | 0 | **0** |
| **Clearwater Mall** | 0 | - | 8 | 3 | **11** |
| **Downtown** | 0 | 8 | - | 8 | **16** |
| **Clearwater Beach** | 0 | 3 | 8 | - | **11** |
| **Total** | **0** | **11** | **16** | **11** | **38** |

## Alternative 2

This alternative is the same as Alternative 1 but includes a park-ride facility at Clearwater Mall.

The results from the STOPS forecasts are summarized in **Tables A-3** and **A-4**. Table  gives the 2016 and 2040 boardings by route and

Table  shows the station to station boarding for 2016 and 2040.

## Table A-3: STOPS Results by Route (Alternative 2)

| | Alternative 2 - STOPS Boardings Results | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | DRAFT | | | | | | | | 8/25/2017 |
| | Route | 2016 | | | | 2040 | | | |
| | | No Build | Alternative 2 Build | Delta | Percent Delta | No Build | Alternative 2 Build | Delta | Percent Delta |
| Routes Impacted by Corridor | TIA/Clearwater Beach | - | 518 | 518 | | - | 562 | 562 | |
| | Downtown Clearwater/SR 60 | 1,266 | 1,193 | (73) | -6% | 1,349 | 1,273 | (76) | -6% |
| | Clearwater/Downtown Oldsmar | 663 | 661 | (2) | 0% | 701 | 698 | (3) | 0% |
| | Clearwater/Westfield Shop | 395 | 361 | (34) | -9% | 421 | 383 | (38) | -9% |
| | Rt OTC - Oldsmar/Tampa Connector | 148 | 147 | (1) | -1% | 160 | 159 | (1) | -1% |
| | Rt SBT - Suncoast Beach Trolley | 2,684 | 2,638 | (46) | -2% | 2,817 | 2,760 | (57) | -2% |
| | Rt 52 - St. Petersburg/Clearwater | 4,752 | 4,740 | (12) | 0% | 5,092 | 5,079 | (13) | 0% |
| | Rt 59 - St. Pete/Indian Rocks Beach | 3,992 | 3,940 | (52) | -1% | 4,296 | 4,241 | (55) | -1% |
| | Rt 73 - Tyrone Sq Mall/Clearwater | 1,326 | 1,280 | (46) | -3% | 1,402 | 1,352 | (50) | -4% |
| | Rt 62 - Tyrone Sq Mall/Boot Ranch | 1,673 | 1,670 | (3) | 0% | 1,763 | 1,760 | (3) | 0% |
| | Rt 66 - Indian Rocks/Tarpon Springs | 1,057 | 1,088 | 31 | 3% | 1,148 | 1,182 | 34 | 3% |
| | Rt 98 - Park St Terminal/Carillon | 241 | 231 | (10) | -4% | 263 | 251 | (12) | -5% |
| | Rt CAT - Central Avenue Trolley | 2,861 | 2,877 | 16 | 1% | 2,996 | 3,014 | 18 | 1% |
| | Rt 4 - St. Petersburg/4th St | 4,145 | 4,145 | - | 0% | 4,423 | 4,423 | - | 0% |
| | Rt 5 - St. Petersburg/Tyrone Sq Mall | 720 | 720 | - | 0% | 761 | 761 | - | 0% |
| | Rt 7 - St. Petersburg/Tyrone Sq Mall | 297 | 297 | - | 0% | 313 | 313 | - | 0% |
| | Rt 11 - South St Pete/PSTA 34th St | 1,007 | 1,007 | - | 0% | 1,078 | 1,079 | 1 | 0% |
| | Rt 14 - St. Petersburg/Pasadena | 1,136 | 1,136 | - | 0% | 1,233 | 1,233 | - | 0% |
| | Rt 15 - St. Petersburg/Gulfport | 579 | 579 | - | 0% | 623 | 623 | - | 0% |
| | Rt 18 - St. Petersburg/Clearwater | 4,063 | 4,066 | 3 | 0% | 4,300 | 4,302 | 2 | 0% |
| | Rt 19 - St. Petersburg/Tarpon Springs | 5,685 | 5,816 | 131 | 2% | 6,096 | 6,244 | 148 | 2% |
| | Rt 20 - South St. Pete/Tyrone square | 1,139 | 1,139 | - | 0% | 1,202 | 1,202 | - | 0% |
| | Rt 22 - 4th St./Tyrone Square Mall | 332 | 332 | - | 0% | 347 | 347 | - | 0% |
| | Rt 23 - St. Petersburg/Tyrone Square Mall | 948 | 948 | - | 0% | 1,017 | 1,017 | - | 0% |
| | Rt 32 - St. Petersburg Circulator | 14 | 14 | - | 0% | 16 | 16 | - | 0% |
| | Rt 38 - Downtown St. Pete/Tyrone Sq Mall | 714 | 714 | - | 0% | 750 | 750 | - | 0% |
| | Rt 444 - Pinellas Park Shuttle | - | - | - | | - | - | - | |
| | Rt 58 - Gateway Mall/Seminole Mall | 337 | 337 | - | 0% | 362 | 362 | - | 0% |
| | Rt 61 - Indian Rocks/Dunedin | 518 | 498 | (20) | -4% | 550 | 528 | (22) | -4% |
| | Rt 68 - Tyrone Sq Mall/John Pass VI | 543 | 543 | - | 0% | 576 | 575 | (1) | 0% |
| | Rt 74 - St. Petersburg/Indian Rock | 2,777 | 2,782 | 5 | 0% | 2,946 | 2,950 | 4 | 0% |
| | Rt 75 - Gateway Mall/Tyrone Sq Mall | 535 | 535 | - | 0% | 561 | 561 | - | 0% |
| | Rt 78 - Clearwater/Westfield Shop | 940 | 930 | (10) | -1% | 1,003 | 993 | (10) | -1% |
| | Rt 79 - St. Petersburg/US 19 & Whitney Rd | 2,010 | 2,009 | (1) | 0% | 2,158 | 2,158 | - | 0% |
| | Rt 90 - Grand Central/St. Pete Beach | 86 | 87 | 1 | 1% | 93 | 94 | 1 | 1% |
| | Rt 97 - St. Pete/Carillon | 192 | 192 | - | 0% | 216 | 216 | - | 0% |
| | Rt DPC - Dunedin/Palm Harbor Connector | 143 | 144 | 1 | 1% | 159 | 160 | 1 | 1% |
| | Rt PPS - Pinellas Park Shuttle | 1 | 1 | - | 0% | 1 | 1 | - | 0% |
| | Rt 100X - Gateway Mall/Downtown T | 330 | 330 | - | 0% | 391 | 391 | - | 0% |
| | Rt 300X - Ulmerton Rd/Downtown Tampa | 252 | 239 | (13) | -5% | 281 | 273 | (8) | -3% |
| | **System Total** | **50,501** | **50,884** | **383** | **1%** | **53,864** | **54,286** | **422** | **1%** |

## Table A-4: Station to Station Boarding Estimates (Alternative 2)

**2016 Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 1 | 0 | 0 | **1** |
| **Clearwater Mall** | 1 | - | 108 | 86 | **195** |
| **Downtown** | 0 | 108 | - | 64 | **172** |
| **Clearwater Beach** | 0 | 86 | 64 | - | **150** |
| **Total** | **1** | **195** | **172** | **150** | **518** |

**2040 Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 1 | 0 | 0 | **1** |
| **Clearwater Mall** | 1 | - | 119 | 90 | **210** |
| **Downtown** | 0 | 119 | - | 71 | **190** |
| **Clearwater Beach** | 0 | 90 | 71 | - | **161** |
| **Total** | **1** | **210** | **190** | **161** | **562** |

**Delta Station to Station STOPS Boardings**

| Stations | TIA | Clearwater Mall | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|
| **TIA** | - | 0 | 0 | 0 | **0** |
| **Clearwater Mall** | 0 | - | 11 | 4 | **15** |
| **Downtown** | 0 | 11 | - | 7 | **18** |
| **Clearwater Beach** | 0 | 4 | 7 | - | **11** |
| **Total** | **0** | **15** | **18** | **11** | **44** |

## Alternative 3

Alternative 3 offers six stops – Clearwater Beach, Clearwater Downtown, SR 60/Belcher Road, Clearwater Mall, SR 60/Rocky point, and Tampa International Airport (TIA) – along with a park-ride facility at Clearwater Mall.

The results from the STOPS forecasts are summarized in **Tables A-5** and **A-6**. Table  gives the 2016 and 2040 boardings by route and

Table  shows the station to station boarding for 2016 and 2040.

## Table A-5: STOPS Results by Route (Alternative 3)

| | Alternative 3 - STOPS Boardings Results | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | DRAFT | | | | | | | | 8/25/2017 |
| | Route | 2016 | | | | 2040 | | | |
| | | No Build | Alternative 3 Build | Delta | Percent Delta | No Build | Alternative 3 Build | Delta | Percent Delta |
| Routes Impacted by Corridor | TIA/Clearwater Beach | - | 832 | 832 | | - | 899 | 899 | |
| | Downtown Clearwater/SR 60 | 1,266 | 1,086 | (180) | -14% | 1,349 | 1,155 | (194) | -14% |
| | Clearwater/Downtown Oldsmar | 663 | 659 | (4) | -1% | 701 | 696 | (5) | -1% |
| | Clearwater/Westfield Shop | 395 | 380 | (15) | -4% | 421 | 405 | (16) | -4% |
| | Rt OTC - Oldsmar/Tampa Connector | 148 | 146 | (2) | -1% | 160 | 159 | (1) | -1% |
| | Rt SBT - Suncoast Beach Trolley | 2,684 | 2,612 | (72) | -3% | 2,817 | 2,733 | (84) | -3% |
| | Rt 52 - St. Petersburg/Clearwater | 4,752 | 4,715 | (37) | -1% | 5,092 | 5,053 | (39) | -1% |
| | Rt 59 - St. Pete/Indian Rocks Beach | 3,992 | 3,911 | (81) | -2% | 4,296 | 4,209 | (87) | -2% |
| | Rt 73 - Tyrone Sq Mall/Clearwater | 1,326 | 1,251 | (75) | -6% | 1,402 | 1,323 | (79) | -6% |
| | Rt 62 - Tyrone Sq Mall/Boot Ranch | 1,673 | 1,731 | 58 | 3% | 1,763 | 1,825 | 62 | 4% |
| | Rt 66 - Indian Rocks/Tarpon Springs | 1,057 | 1,157 | 100 | 9% | 1,148 | 1,257 | 109 | 9% |
| | Rt 98 - Park St Terminal/Carillon | 241 | 231 | (10) | -4% | 263 | 251 | (12) | -5% |
| | Rt CAT - Central Avenue Trolley | 2,861 | 2,877 | 16 | 1% | 2,996 | 3,014 | 18 | 1% |
| | Rt 4 - St. Petersburg/4th St | 4,145 | 4,145 | - | 0% | 4,423 | 4,423 | - | 0% |
| | Rt 5 - St. Petersburg/Tyrone Sq Mall | 720 | 720 | - | 0% | 761 | 761 | - | 0% |
| | Rt 7 - St. Petersburg/Tyrone Sq Mall | 297 | 315 | 18 | 6% | 313 | 330 | 17 | 5% |
| | Rt 11 - South St Pete/PSTA 34th St | 1,007 | 1,007 | - | 0% | 1,078 | 1,079 | 1 | 0% |
| | Rt 14 - St. Petersburg/Pasadena | 1,136 | 1,136 | - | 0% | 1,233 | 1,233 | - | 0% |
| | Rt 15 - St. Petersburg/Gulfport | 579 | 579 | - | 0% | 623 | 623 | - | 0% |
| | Rt 18 - St. Petersburg/Clearwater | 4,063 | 4,062 | (1) | 0% | 4,300 | 4,298 | (2) | 0% |
| | Rt 19 - St. Petersburg/Tarpon Springs | 5,685 | 5,833 | 148 | 3% | 6,096 | 6,263 | 167 | 3% |
| | Rt 20 - South St. Pete/Tyrone square | 1,139 | 1,141 | 2 | 0% | 1,202 | 1,204 | 2 | 0% |
| | Rt 22 - 4th St./Tyrone Square Mall | 332 | 332 | - | 0% | 347 | 347 | - | 0% |
| | Rt 23 - St. Petersburg/Tyrone Square Mall | 948 | 950 | 2 | 0% | 1,017 | 1,019 | 2 | 0% |
| | Rt 32 - St. Petersburg Circulator | 14 | 14 | - | 0% | 16 | 16 | - | 0% |
| | Rt 38 - Downtown St. Pete/Tyrone Sq Mall | 714 | 714 | - | 0% | 750 | 750 | - | 0% |
| | Rt 444 - Pinellas Park Shuttle | - | - | - | | - | - | - | |
| | Rt 58 - Gateway Mall/Seminole Mall | 337 | 337 | - | 0% | 362 | 362 | - | 0% |
| | Rt 61 - Indian Rocks/Dunedin | 518 | 477 | (41) | -8% | 550 | 505 | (45) | -8% |
| | Rt 68 - Tyrone Sq Mall/John Pass VI | 543 | 533 | (10) | -2% | 576 | 565 | (11) | -2% |
| | Rt 74 - St. Petersburg/Indian Rock | 2,777 | 2,783 | 6 | 0% | 2,946 | 2,951 | 5 | 0% |
| | Rt 75 - Gateway Mall/Tyrone Sq Mall | 535 | 535 | - | 0% | 561 | 561 | - | 0% |
| | Rt 78 - Clearwater/Westfield Shop | 940 | 932 | (8) | -1% | 1,003 | 994 | (9) | -1% |
| | Rt 79 - St. Petersburg/US 19 & Whitney Rd | 2,010 | 1,993 | (17) | -1% | 2,158 | 2,141 | (17) | -1% |
| | Rt 90 - Grand Central/St. Pete Beach | 86 | 87 | 1 | 1% | 93 | 94 | 1 | 1% |
| | Rt 97 - St. Pete/Carillon | 192 | 192 | - | 0% | 216 | 216 | - | 0% |
| | Rt DPC - Dunedin/Palm Harbor Connector | 143 | 144 | 1 | 1% | 159 | 160 | 1 | 1% |
| | Rt PPS - Pinellas Park Shuttle | 1 | 1 | - | 0% | 1 | 1 | - | 0% |
| | Rt 100X - Gateway Mall/Downtown T | 330 | 330 | - | 0% | 391 | 391 | - | 0% |
| | Rt 300X - Ulmerton Rd/Downtown Tampa | 252 | 245 | (7) | -3% | 281 | 280 | (1) | 0% |
| | **System Total** | **50,501** | **51,125** | **624** | **1%** | **53,864** | **54,546** | **682** | **1%** |

## Table A-6: Station to Station Boarding Estimates (Alternative 3)

### 2016 Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 | 0 | 0 | 0 | 0 | **0** |
| **Rocky Point** | 0 | - | 11 | 2 | 8 | 0 | **21** |
| **Clearwater Mall** | 0 | 11 | - | 0 | 106 | 72 | **189** |
| **Belcher Road** | 0 | 2 | 0 | - | 83 | 65 | **150** |
| **Downtown** | 0 | 8 | 106 | 83 | - | 67 | **264** |
| **Clearwater Beach** | 0 | 0 | 72 | 65 | 67 | - | **204** |
| **Total** | **0** | **21** | **189** | **150** | **264** | **204** | **828** |

### 2040 Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 | 0 | 0 | 0 | 0 | **0** |
| **Rocky Point** | 0 | - | 13 | 2 | 10 | 0 | **25** |
| **Clearwater Mall** | 0 | 13 | - | 0 | 117 | 75 | **205** |
| **Belcher Road** | 0 | 2 | 0 | - | 89 | 70 | **161** |
| **Downtown** | 0 | 10 | 117 | 89 | - | 74 | **290** |
| **Clearwater Beach** | 0 | 0 | 75 | 70 | 74 | - | **219** |
| **Total** | **0** | **25** | **205** | **161** | **290** | **219** | **900** |

### Delta Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 | 0 | 0 | 0 | 0 | **0** |
| **Rocky Point** | 0 | - | 2 | 0 | 2 | 0 | **4** |
| **Clearwater Mall** | 0 | 2 | - | 0 | 11 | 3 | **16** |
| **Belcher Road** | 0 | 0 | 0 | - | 6 | 5 | **11** |
| **Downtown** | 0 | 2 | 11 | 6 | - | 7 | **26** |
| **Clearwater Beach** | 0 | 0 | 3 | 5 | 7 | - | **15** |
| **Total** | **0** | | **16** | | **26** | **15** | **57** |

## Alternative 4

This alternative has the same operations as Alternative 3 but operates in a dedicated travel lane. The dedicated lane is assumed to run between Clearwater Beach and Clearwater Downtown.

The results from the STOPS forecasts are summarized in **Tables A-7** and **A-8**. Table  gives the 2016 and 2040 boardings by route and

Table  shows the station to station boarding for 2016 and 2040.

## Table A-7: STOPS Results by Route (Alternative 4)

| | Alternative 4 - STOPS Boardings Results | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | DRAFT | | | | | | | | 8/25/2017 |
| | Route | 2016 | | | | 2040 | | | |
| | | No Build | Alternative 4 Build | Delta | Percent Delta | No Build | Alternative 4 Build | Delta | Percent Delta |
| Routes Impacted by Corridor | TIA/Clearwater Beach | 0 - 0 | 966 - 1,018 | 966 - 1,018 | | 0 - 0 | 1,043 - 1,100 | 1,043 - 1,100 | |
| | Downtown Clearwater/SR 60 | 1,266 - 1,266 | 1,085 - 1,086 | (181)- (180) | (14)%- (14)% | 1,349 - 1,349 | 1,154 - 1,154 | (195)- (195) | (14)%- (14)% |
| | Clearwater/Downtown Oldsmar | 663 - 663 | 658 - 658 | (5)- (5) | (1)%- (1)% | 701 - 701 | 696 - 696 | (5)- (5) | (1)%- (1)% |
| | Clearwater/Westfield Shop | 395 - 395 | 331 - 330 | (64)- (65) | (16)%- (16)% | 421 - 421 | 352 - 351 | (69)- (70) | (16)%- (17)% |
| | Rt OTC - Oldsmar/Tampa Connector | 148 - 148 | 146 - 146 | (2)- (2) | (1)%- (1)% | 160 - 160 | 159 - 159 | (1)- (1) | (1)%- (1)% |
| | Rt SBT - Suncoast Beach Trolley | 2,684 - 2,684 | 2,650 - 2,662 | (34)- (22) | (1)%- (1)% | 2,817 - 2,817 | 2,773 - 2,785 | (44)- (32) | (2)%- (1)% |
| | Rt 52 - St. Petersburg/Clearwater | 4,752 - 4,752 | 4,703 - 4,708 | (49)- (44) | (1)%- (1)% | 5,092 - 5,092 | 5,040 - 5,045 | (52)- (47) | (1)%- (1)% |
| | Rt 59 - St. Pete/Indian Rocks Beach | 3,992 - 3,992 | 3,924 - 3,924 | (68)- (68) | (2)%- (2)% | 4,296 - 4,296 | 4,224 - 4,224 | (72)- (72) | (2)%- (2)% |
| | Rt 73 - Tyrone Sq Mall/Clearwater | 1,326 - 1,326 | 1,260 - 1,266 | (66)- (60) | (5)%- (5)% | 1,402 - 1,402 | 1,332 - 1,338 | (70)- (64) | (5)%- (5)% |
| | Rt 62 - Tyrone Sq Mall/Boot Ranch | 1,673 - 1,673 | 1,721 - 1,728 | 48 - 55 | 3 %- 3 % | 1,763 - 1,763 | 1,816 - 1,823 | 53 - 60 | 3 %- 3 % |
| | Rt 66 - Indian Rocks/Tarpon Springs | 1,057 - 1,057 | 1,159 - 1,162 | 102 - 105 | 10 %- 10 % | 1,148 - 1,148 | 1,259 - 1,262 | 111 - 114 | 10 %- 10 % |
| | Rt 98 - Park St Terminal/Carillon | 241 - 241 | 231 - 231 | (10)- (10) | (4)%- (4)% | 263 - 263 | 251 - 252 | (12)- (11) | (5)%- (4)% |
| | Rt CAT - Central Avenue Trolley | 2,861 - 2,861 | 2,878 - 2,878 | 17 - 17 | 1 %- 1 % | 2,996 - 2,996 | 3,014 - 3,015 | 18 - 19 | 1 %- 1 % |
| | Rt 4 - St. Petersburg/4th St | 4,145 - 4,145 | 4,145 - 4,145 | 0 - 0 | 0 %- 0 % | 4,423 - 4,423 | 4,423 - 4,424 | 0 - 1 | 0 %- 0 % |
| | Rt 5 - St. Petersburg/Tyrone Sq Mall | 720 - 720 | 720 - 720 | 0 - 0 | 0 %- 0 % | 761 - 761 | 761 - 761 | 0 - 0 | 0 %- 0 % |
| | Rt 7 - St. Petersburg/Tyrone Sq Mall | 297 - 297 | 310 - 309 | 13 - 12 | 4 %- 4 % | 313 - 313 | 325 - 324 | 12 - 11 | 4 %- 4 % |
| | Rt 11 - South St Pete/PSTA 34th St | 1,007 - 1,007 | 1,007 - 1,007 | 0 - 0 | 0 %- 0 % | 1,078 - 1,078 | 1,079 - 1,079 | 1 - 1 | 0 %- 0 % |
| | Rt 14 - St. Petersburg/Pasadena | 1,136 - 1,136 | 1,136 - 1,136 | 0 - 0 | 0 %- 0 % | 1,233 - 1,233 | 1,233 - 1,233 | 0 - 0 | 0 %- 0 % |
| | Rt 15 - St. Petersburg/Gulfport | 579 - 579 | 579 - 579 | 0 - 0 | 0 %- 0 % | 623 - 623 | 623 - 623 | 0 - 0 | 0 %- 0 % |
| | Rt 18 - St. Petersburg/Clearwater | 4,063 - 4,063 | 4,055 - 4,055 | (8)- (8) | (0)%- (0)% | 4,300 - 4,300 | 4,291 - 4,290 | (9)- (10) | (0)%- (0)% |
| | Rt 19 - St. Petersburg/Tarpon Springs | 5,685 - 5,685 | 5,799 - 5,812 | 114 - 127 | 2 %- 2 % | 6,096 - 6,096 | 6,229 - 6,243 | 133 - 147 | 2 %- 2 % |
| | Rt 20 - South St. Pete/Tyrone square | 1,139 - 1,139 | 1,141 - 1,142 | 2 - 3 | 0 %- 0 % | 1,202 - 1,202 | 1,204 - 1,205 | 2 - 3 | 0 %- 0 % |
| | Rt 22 - 4th St./Tyrone Square Mall | 332 - 332 | 332 - 332 | 0 - 0 | 0 %- 0 % | 347 - 347 | 347 - 347 | 0 - 0 | 0 %- 0 % |
| | Rt 23 - St. Petersburg/Tyrone Square Mall | 948 - 948 | 950 - 951 | 2 - 3 | 0 %- 0 % | 1,017 - 1,017 | 1,019 - 1,020 | 2 - 3 | 0 %- 0 % |
| | Rt 32 - St. Petersburg Circulator | 14 - 14 | 14 - 14 | 0 - 0 | 0 %- 0 % | 16 - 16 | 16 - 16 | 0 - 0 | 0 %- 0 % |
| | Rt 38 - Downtown St. Pete/Tyrone Sq Mall | 714 - 714 | 715 - 716 | 1 - 2 | 0 %- 0 % | 750 - 750 | 751 - 752 | 1 - 2 | 0 %- 0 % |
| | Rt 444 - Pinellas Park Shuttle | 0 - 0 | 0 - 0 | 0 - 0 | - | 0 - 0 | 0 - 0 | 0 - 0 | - |
| | Rt 58 - Gateway Mall/Seminole Mall | 337 - 337 | 337 - 337 | 0 - 0 | 0 %- 0 % | 362 - 362 | 362 - 362 | 0 - 0 | 0 %- 0 % |
| | Rt 61 - Indian Rocks/Dunedin | 518 - 518 | 479 - 481 | (39)- (37) | (8)%- (7)% | 550 - 550 | 508 - 510 | (42)- (40) | (8)%- (7)% |
| | Rt 68 - Tyrone Sq Mall/John Pass VI | 543 - 543 | 535 - 536 | (8)- (7) | (1)%- (1)% | 576 - 576 | 567 - 568 | (9)- (8) | (2)%- (1)% |
| | Rt 74 - St. Petersburg/Indian Rock | 2,777 - 2,777 | 2,769 - 2,766 | (8)- (11) | (0)%- (0)% | 2,946 - 2,946 | 2,936 - 2,934 | (10)- (12) | (0)%- (0)% |
| | Rt 75 - Gateway Mall/Tyrone Sq Mall | 535 - 535 | 535 - 535 | 0 - 0 | 0 %- 0 % | 561 - 561 | 561 - 561 | 0 - 0 | 0 %- 0 % |
| | Rt 78 - Clearwater/Westfield Shop | 940 - 940 | 928 - 927 | (12)- (13) | (1)%- (1)% | 1,003 - 1,003 | 990 - 990 | (13)- (13) | (1)%- (1)% |
| | Rt 79 - St. Petersburg/US 19 & Whitney Rd | 2,010 - 2,010 | 1,998 - 2,000 | (12)- (10) | (1)%- (0)% | 2,158 - 2,158 | 2,146 - 2,148 | (12)- (10) | (1)%- (0)% |
| | Rt 90 - Grand Central/St. Pete Beach | 86 - 86 | 87 - 87 | 1 - 1 | 1 %- 1 % | 93 - 93 | 94 - 94 | 1 - 1 | 1 %- 1 % |
| | Rt 97 - St. Pete/Carillon | 192 - 192 | 192 - 192 | 0 - 0 | 0 %- 0 % | 216 - 216 | 216 - 216 | 0 - 0 | 0 %- 0 % |
| | Rt DPC - Dunedin/Palm Harbor Connector | 143 - 143 | 144 - 144 | 1 - 1 | 1 %- 1 % | 159 - 159 | 160 - 160 | 1 - 1 | 1 %- 1 % |
| | Rt PPS - Pinellas Park Shuttle | 1 - 1 | 1 - 1 | 0 - 0 | 0 %- 0 % | 1 - 1 | 1 - 1 | 0 - 0 | 0 %- 0 % |
| | Rt 100X - Gateway Mall/Downtown T | 330 - 330 | 330 - 330 | 0 - 0 | 0 %- 0 % | 391 - 391 | 391 - 391 | 0 - 0 | 0 %- 0 % |
| | Rt 300X - Ulmerton Rd/Downtown Tampa | 252 - 252 | 245 - 244 | (7)- (8) | (3)%- (3)% | 281 - 281 | 279 - 278 | (2)- (3) | (1)%- (1)% |
| | **System Total** | **50,501 - 50,501** | **51,195 - 51,295** | **694 - 794** | **1 %- 2 %** | **53,864 - 53,864** | **54,625 - 54,734** | **761 - 870** | **1 %- 2 %** |

## Table A-8: Station to Station Boardings Estimates (Alternative 4)

### 2016 Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | **0 - 0** |
| **Rocky Point** | 0 - 0 | - | 12 - 12 | 2 - 2 | 9 - 9 | 0 - 0 | **23 - 23** |
| **Clearwater Mall** | 0 - 0 | 12 - 12 | - | 0 - 0 | 141 - 150 | 77 - 82 | **230 - 244** |
| **Belcher Road** | 0 - 0 | 2 - 2 | 0 - 0 | - | 82 - 87 | 55 - 55 | **139 - 144** |
| **Downtown** | 0 - 0 | 9 - 9 | 141 - 150 | 82 - 87 | - | 82 - 88 | **314 - 334** |
| **Clearwater Beach** | 0 - 0 | 0 - 0 | 77 - 82 | 55 - 55 | 82 - 88 | - | **214 - 225** |
| **Total** | **0 - 0** | **23 - 23** | **230 - 244** | **139 - 144** | **314 - 334** | **214 - 225** | **920 - 970** |

### 2040 Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | **0 - 0** |
| **Rocky Point** | 0 - 0 | - | 13 - 14 | 2 - 2 | 10 - 10 | 0 - 0 | **25 - 26** |
| **Clearwater Mall** | 0 - 0 | 13 - 14 | - | 0 - 0 | 154 - 163 | 79 - 86 | **246 - 263** |
| **Belcher Road** | 0 - 0 | 2 - 2 | 0 - 0 | - | 89 - 95 | 60 - 60 | **151 - 157** |
| **Downtown** | 0 - 0 | 10 - 10 | 154 - 163 | 89 - 95 | - | 90 - 96 | **343 - 364** |
| **Clearwater Beach** | 0 - 0 | 0 - 0 | 79 - 86 | 60 - 60 | 90 - 96 | - | **229 - 242** |
| **Total** | **0 - 0** | **25 - 26** | **246 - 263** | **151 - 157** | **343 - 364** | **229 - 242** | **994 - 1,052** |

### Delta Station to Station STOPS Boardings

| Stations | TIA | Rocky Point | Clearwater Mall | Belcher Road | Downtown | Clearwater Beach | Total |
|---|---|---|---|---|---|---|---|
| **TIA** | - | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | 0 - 0 | **0 - 0** |
| **Rocky Point** | 0 - 0 | - | 1 - 2 | 0 - 0 | 1 - 1 | 0 - 0 | **2 - 3** |
| **Clearwater Mall** | 0 - 0 | 1 - 2 | - | 0 - 0 | 13 - 13 | 2 - 4 | **16 - 19** |
| **Belcher Road** | 0 - 0 | 0 - 0 | 0 - 0 | - | 7 - 8 | 5 - 5 | **12 - 13** |
| **Downtown** | 0 - 0 | 1 - 1 | 13 - 13 | 7 - 8 | - | 8 - 8 | **29 - 30** |
| **Clearwater Beach** | 0 - 0 | 0 - 0 | 2 - 4 | 5 - 5 | 8 - 8 | - | **15 - 17** |
| **Total** | **0 - 0** | **0 - 0** | **16 - 19** | **0 - 0** | **29 - 30** | **15 - 17** | **60 - 66** |

## Population and Employment Trends **Calculated relative to 2016 stats*

| Districts | Population | | | | Employment | | | |
|---|---|---|---|---|---|---|---|---|
| | Year 2016 | Year 2040 | Delta (2040 - 2016) | Percent Delta* | Year 2016 | Year 2040 | Delta (2040 - 2016) | Percent Delta* |
| TIA | 957 | 1,389 | 432 | 45% | 17,726 | 18,878 | 1,152 | 6% |
| Historic Bayview | 11,038 | 11,888 | 850 | 8% | 9,030 | 9,203 | 173 | 2% |
| Sunny Grove | 15,364 | 16,114 | 750 | 5% | 11,407 | 12,242 | 835 | 7% |
| Oak Park | 10,679 | 10,945 | 266 | 2% | 5,584 | 5,739 | 155 | 3% |
| CBD | 12,809 | 13,756 | 947 | 7% | 23,402 | 25,880 | 2,478 | 11% |
| Dunedin | 29,696 | 30,805 | 1,109 | 4% | 8,876 | 9,698 | 822 | 9% |
| Woodlake | 21,994 | 22,445 | 451 | 2% | 12,677 | 13,029 | 352 | 3% |
| Safety Harbor | 28,136 | 29,002 | 866 | 3% | 16,182 | 16,969 | 787 | 5% |
| St. Petersburg Airport | 67,930 | 73,574 | 5,644 | 8% | 101,886 | 114,556 | 12,670 | 12% |
| Newport | 34,853 | 36,099 | 1,246 | 4% | 14,891 | 15,548 | 657 | 4% |
| Largo | 59,508 | 63,315 | 3,807 | 6% | 26,774 | 28,613 | 1,839 | 7% |
| Indian Rocks | 8,100 | 8,399 | 299 | 4% | 2,220 | 2,266 | 46 | 2% |
| Bardmoor South | 185,107 | 191,464 | 6,357 | 3% | 94,610 | 99,218 | 4,608 | 5% |
| St. Pete Beach | 19,207 | 19,650 | 443 | 2% | 9,946 | 10,124 | 178 | 2% |
| Lealman | 132,094 | 137,752 | 5,658 | 4% | 62,310 | 64,636 | 2,326 | 4% |
| Gulfport | 100,238 | 107,549 | 7,311 | 7% | 52,427 | 56,826 | 4,399 | 8% |
| Caldas Island | 441 | 441 | - | 0% | 111 | 121 | 10 | 9% |
| Palm Harbor | 49,963 | 54,715 | 4,752 | 10% | 18,132 | 19,136 | 1,004 | 6% |
| Lake Valencia | 35,790 | 36,233 | 443 | 1% | 15,161 | 15,643 | 482 | 3% |
| Tarpon Springs | 40,419 | 44,919 | 4,500 | 11% | 19,776 | 23,873 | 4,097 | 21% |
| Keystone | 46,000 | 50,303 | 4,303 | 9% | 21,392 | 23,046 | 1,654 | 8% |
| Town N Country | 98,037 | 103,789 | 5,752 | 6% | 40,825 | 45,880 | 5,055 | 12% |
| Tampa | 144,732 | 216,746 | 72,014 | 50% | 187,320 | 258,998 | 71,678 | 38% |
| North | 475,987 | 563,483 | 87,496 | 18% | 290,078 | 364,001 | 73,923 | 25% |
| North East | 243,219 | 345,026 | 101,807 | 42% | 130,865 | 204,777 | 73,912 | 56% |
| Brandon | 359,427 | 552,713 | 193,286 | 54% | 124,736 | 219,525 | 94,789 | 76% |
| Total | 2,231,723 | 2,742,514 | 510,791 | 23% | 1,318,343 | 1,678,426 | 360,083 | 27% |

# Appendix F – Detailed Cost Estimates

## SR60 from Hampton Road to McMullen Booth Road

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 8332 | $24.97 | $208,050.04 |
| INLET PROTECTION SYSTEM | EA | 42 | $87.15 | $3,660.30 |
| CLEARING & GRUBBING | LS/AC | 2.68 | $10,294.39 | $27,567.03 |
| EMBANKMENT | CY | 1133 | $8.68 | $9,837.33 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 36105 | $2.68 | $96,762.29 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 2978.69 | $88.50 | $263,614.07 |
| CONCRETE CURB AND GUTTER, TYPE E | LF | 7020 | $15.97 | $112,109.40 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 3934.00 | $35.13 | $138,201.42 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 2493.39 | $52.90 | $131,900.33 |
| PERFORMANCE TURF, SOD | SY | 28396 | $2.26 | $64,174.96 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 833 | $3.59 | $2,991.19 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 1.58 | $958.49 | $1,512.53 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 190.00 | $.56 | $106.40 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 182.00 | $.97 | $176.54 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.79 | $394.87 | $311.56 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 19.00 | $35.37 | $672.03 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 24.00 | $50.23 | $1,205.52 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 1.58 | $987.02 | $1,557.55 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 190.00 | $1.88 | $357.20 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 182.00 | $3.83 | $697.06 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 19.00 | $161.93 | $3,076.67 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 24.00 | $90.05 | $2,161.20 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 1.58 | $4,574.84 | $7,219.24 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.79 | $1,365.14 | $1,077.12 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 1.58 | $4,183.25 | $6,601.30 |
| **SUBTOTAL** | | | | **$1,085,600.26** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$162,840.04** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$187,266.05** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$379,960.09** |
| **TOTAL** | | | | **$1,865,666.44** |

### SR 60 from Hampton Road to Highland Ave

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| STAKED TURBIDITY BARRIER-NYL REINF PVC | LF | 14,573.00 | $4.96 | $72,282.08 |
| CLEARING & GRUBBING | AC | 2.34 | $11,329.10 | $26,531.06 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 11,334.56 | $35.13 | $398,182.94 |
| **SUBTOTAL** | | | | **$496,996.07** |
| **MAINTENANCE OF TRAFFIC** | | **10%** | | **$49,699.61** |
| **MOBILIZATION** | | **10%** | | **$54,669.57** |
| **PROJECT UNKNOWNS** | | **20%** | | **$120,273.05** |
| **TOTAL** | | | | **$721,638.30** |

### SR 60/Gulf to Bay Blvd from Highland Ave. to South Lake Drive

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 1,320.00 | LF | $4.96 | $6,547.20 |
| CLEARING & GRUBBING | 0.21 | AC | $11,329.10 | $2,403.14 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,026.67 | SY | $35.13 | $36,066.80 |
| **SUBTOTAL** | | | | **$45,017.14** |
| **MAINTENANCE OF TRAFFIC** | **10%** | | | **$4,501.71** |
| **MOBILIZATION** | **10%** | | | **$4,951.89** |
| **PROJECT UNKNOWNS** | **20%** | | | **$10,894.15** |
| **TOTAL** | | | | **$65,364.89** |

## SR60 from S MLK JR Avenue to Highland Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 12260 | $24.97 | $306,132.20 |
| INLET PROTECTION SYSTEM | EA | 42 | $87.15 | $3,660.30 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 5391 | $27.09 | $146,033.16 |
| CLEARING & GRUBBING | LS/AC | 1.86 | $10,294.39 | $19,109.38 |
| REGULAR EXCAVATION | CY | 9536 | $4.14 | $39,477.20 |
| EMBANKMENT | CY | 3179 | $8.68 | $27,589.54 |
| TYPE B STABILIZATION | SY | 9536 | $4.76 | $45,389.24 |
| OPTIONAL BASE, BASE GROUP 14 (TYPE B-12.5) | SY | 3406 | $35.00 | $119,194.44 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 38142.22 | $2.68 | $102,221.16 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 3146.73 | $85.68 | $269,612.11 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 485.29 | $85.68 | $41,579.79 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 3708.65 | $88.50 | $328,215.53 |
| INLETS, CURB, TYPE P-5, <10' | EA | 24 | $3,987.73 | $95,705.52 |
| INLETS, CURB, TYPE P-6, <10' | EA | 12 | $4,652.55 | $55,830.60 |
| INLETS, CURB, TYPE J-5, <10' | EA | 12 | $5,800.00 | $69,600.00 |
| MANHOLE, ADJUST | EA | 26 | $290.73 | $7,558.98 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 144 | $73.94 | $10,647.36 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 13486 | $15.98 | $215,506.28 |
| CONCRETE CURB AND GUTTER, TYPE A | LF | 4904 | $25.44 | $124,757.76 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 4555.47 | $35.13 | $160,033.78 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 3617.86 | $52.90 | $191,384.79 |
| PERFORMANCE TURF, SOD | SY | 4087 | $2.26 | $9,235.87 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 920 | $3.59 | $3,301.01 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 3.48 | $958.49 | $3,338.38 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 1122.00 | $.56 | $628.32 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 2156.00 | $.97 | $2,091.32 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.58 | $394.87 | $229.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 24.00 | $35.37 | $848.88 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 48.00 | $50.23 | $2,411.04 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 2.32 | $987.02 | $2,291.83 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 1122.00 | $1.88 | $2,109.36 |

### SR60 from S MLK JR Avenue to Highland Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 2156.00 | $3.83 | $8,257.48 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 24.00 | $161.93 | $3,886.32 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 48.00 | $90.05 | $4,322.40 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 3.48 | $4,574.84 | $15,933.96 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.58 | $1,365.14 | $792.45 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 2.32 | $4,183.25 | $9,713.38 |
| CONDUIT, F&I, DIRECTIONAL | LF | 200 | $19.79 | $3,958.00 |
| SIGNAL CABLE, FURNISH & INSTALL | PI | 1 | $5,791.08 | $5,791.08 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 6 | $647.78 | $3,886.68 |
| ELECTRICAL SERVICE WIRE, F&I | LF | 100 | $4.36 | $436.00 |
| STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40' | EA | 2 | $30,664.33 | $61,328.66 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 3 SECTION, 1 WAY, STANDARD | AS | 4 | $870.72 | $3,482.88 |
| PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION | AS | 2 | $589.82 | $1,179.64 |
| TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION | AS | 1 | $21,668.31 | $21,668.31 |
| **SUBTOTAL** | | | | **$2,550,361.58** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$382,554.24** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$439,937.37** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$892,626.55** |
| **TOTAL** | | | | **$4,315,479.74** |

### SR60 from Pierce Street to S MLK JR Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 8086 | $24.97 | $201,907.42 |
| INLET PROTECTION SYSTEM | EA | 40 | $87.15 | $3,486.00 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 5391 | $27.09 | $146,033.16 |
| CLEARING & GRUBBING | LS/AC | 1.86 | $10,294.39 | $19,109.38 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 7187.56 | $35.13 | $252,498.83 |
| PERFORMANCE TURF, SOD | SY | 3594 | $2.26 | $8,121.94 |
| **SUBTOTAL** | | | | **$631,156.72** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$31,557.84** | **$31,557.84** |
| **MOBILIZATION** | **LS** | **15%** | | **$94,673.51** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$108,874.53** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$220,904.85** |
| **TOTAL** | | | | **$1,087,167.45** |

## Drew Street from Hampton Road to McMullen Booth Rd

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| INLET PROTECTION SYSTEM | EA | 29 | $87.15 | $2,527.35 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 23689 | $2.68 | $63,486.52 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 1954.33 | $88.50 | $172,958.21 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 1205 | $3.59 | $4,325.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 2.31 | $958.49 | $2,214.69 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 530.00 | $.56 | $296.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $.97 | $649.90 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 1.55 | $394.87 | $613.25 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 7.00 | $35.37 | $247.59 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 47.00 | $50.23 | $2,360.81 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 1.55 | $987.02 | $1,532.87 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 530.00 | $1.88 | $996.40 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $3.83 | $2,566.10 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 7.00 | $161.93 | $1,133.51 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 47.00 | $90.05 | $4,232.35 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 2.31 | $4,574.84 | $10,570.65 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 1.55 | $1,365.14 | $2,120.10 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 1.55 | $4,183.25 | $6,496.71 |
| **SUBTOTAL** | | | | **$279,329.77** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$13,966.49** | **$13,966.49** |
| **MOBILIZATION** | **LS** | **15%** | | **$41,899.46** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$48,184.38** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$97,765.42** |
| **TOTAL** | | | | **$481,145.52** |

### Drew Street from Saturn Ave to Hampton Road

| Item Description | Unit Meas | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| INLET PROTECTION SYSTEM | EA | 108 | $87.15 | $9,412.20 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 93595 | $2.68 | $250,834.60 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 4446.27 | $85.68 | $380,956.41 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (2" THICKNESS) | TN | 4446.27 | $85.68 | $380,956.41 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 2475.26 | $88.50 | $219,060.51 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 2882 | $176.05 | $507,376.10 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 654 | $3.59 | $2,346.54 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 11.78 | $958.49 | $11,295.30 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 2641 | $.56 | $1,478.96 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 2641 | $.97 | $2,561.77 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $394.87 | $1,825.97 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 40 | $35.37 | $1,414.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 107 | $50.23 | $5,374.61 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 4.62 | $987.02 | $4,564.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $449.59 | $2,079.01 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" | LF | 11.78 | $1.88 | $22.15 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 2641 | $3.83 | $10,115.03 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 40 | $161.93 | $6,477.20 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 107 | $90.05 | $9,635.35 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 11.78 | $4,574.84 | $53,912.06 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $1,365.14 | $6,312.74 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 4.62 | $4,183.25 | $19,344.36 |
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $1,200.00 | $5,549.09 |
| **SUBTOTAL** | | | | **$1,892,905.41** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$283,935.81** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$326,526.18** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$662,516.89** |
| **TOTAL** | | | | **$3,215,884.29** |

## Drew Street from Myrtle Avenue to Saturn Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 4000 | $24.97 | $99,880.00 |
| FLOATING TURBIDITY BARRIER | LF | 200 | $8.88 | $1,776.00 |
| INLET PROTECTION SYSTEM | EA | 34 | $87.15 | $2,963.10 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 444.44 | $27.09 | $12,039.88 |
| CLEARING & GRUBBING | LS/AC | 2.81 | $10,294.39 | $28,927.24 |
| REGULAR EXCAVATION | CY | 7466.67 | $4.14 | $30,912.01 |
| EMBANKMENT | CY | 2488.89 | $8.68 | $21,603.57 |
| TYPE B STABILIZATION | SY | 7466.67 | $4.76 | $35,541.35 |
| OPTIONAL BASE, BASE GROUP 06 | SY | 6400 | $15.28 | $97,792.00 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 33644 | $2.68 | $90,165.92 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (2" THICKNESS) | TN | 704 | $85.68 | $60,318.72 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 3303.63 | $88.50 | $292,371.26 |
| INLETS, CURB, TYPE P-5, <10' | EA | 10 | $3,987.73 | $39,877.30 |
| INLETS, CURB, TYPE P-6, <10' | EA | 4 | $4,652.55 | $18,610.20 |
| MANHOLES, TYPE P-7, <10' | EA | 2 | $3,303.75 | $6,607.50 |
| MANHOLES, TYPE J-7, <10' | EA | 1 | $5,085.26 | $5,085.26 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 698 | $73.94 | $51,610.12 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD | LF | 62 | $85.96 | $5,329.52 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 36"S/CD | LF | 17 | $98.86 | $1,680.62 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD | LF | 17 | $126.13 | $2,144.21 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD | LF | 17 | $323.56 | $5,500.52 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 3200 | $15.98 | $51,136.00 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 1400 | $35.13 | $49,182.00 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 488.9 | $52.90 | $25,862.81 |
| PERFORMANCE TURF, SOD | SY | 3600 | $2.26 | $8,136.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 1001 | $3.59 | $3,593.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 4.32 | $958.49 | $4,142.93 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 530.00 | $.56 | $296.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $.97 | $649.90 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 3.79 | $394.87 | $1,497.36 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 2.00 | $35.37 | $70.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 11.00 | $50.23 | $552.53 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 3.79 | $987.02 | $3,742.82 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 530.00 | $1.88 | $996.40 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $3.83 | $2,566.10 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 2.00 | $161.93 | $323.86 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 11.00 | $90.05 | $990.55 |

## Drew Street from Myrtle Avenue to Saturn Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 4.32 | $4,574.84 | $19,774.05 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 3.79 | $1,365.14 | $5,176.67 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 3.79 | $4,183.25 | $15,863.07 |
| | | | $101,564.7 | |
| UTILITY WORK - JPA/UTILITY, POWER | LS | 3 | 1 | $304,694.13 |
| FIRE HYDRANT, RELOCATE | EA | 3 | $1,666.75 | $5,000.25 |
| CONDUIT, F&I, DIRECTIONAL | LF | 200 | $19.79 | $3,958.00 |
| SIGNAL CABLE, FURNISH & INSTALL | PI | 2 | $5,791.08 | $11,582.16 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 6 | $647.78 | $3,886.68 |
| ELECTRICAL SERVICE WIRE, F&I | LF | 50 | $4.36 | $218.00 |
| PRESTRESSED CONCRETE POLE, REMOVE COMPLETE | EA | 1 | $4,051.45 | $4,051.45 |
| ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST | EA | 1 | $910.13 | $910.13 |
| STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40' | EA | 2 | $30,664.33 | $61,328.66 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 3 SECTION, 1 WAY, STANDARD | AS | 3 | $870.72 | $2,612.16 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 5 SECTIONS, 1 WAY, STANDARD | AS | 1 | $1,231.57 | $1,231.57 |
| PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION | AS | 2 | $589.82 | $1,179.64 |
| TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION | AS | 1 | $21,668.31 | $21,668.31 |
| SIGN PANEL, F&I GM, UP TO 12 SF | EA | 2 | $256.15 | $512.30 |
| INTERNAL ILLUM SIGN, F&I OM, 12-18 SF | EA | 2 | $3,568.78 | $7,137.56 |
| CONDUIT, F&I, OPEN TRENCH | LF | 10032 | $9.97 | $100,019.04 |
| CONDUIT, F&I, DIRECTIONAL | LF | 1991 | $19.79 | $39,401.89 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 67 | $647.78 | $43,401.26 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | LF | 36640 | $2.00 | $73,280.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 67 | $516.66 | $34,616.22 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | EA | 67 | $3,100.00 | $207,700.00 |
| **SUBTOTAL** | | | | **$2,033,680.26** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$305,052.04** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$350,809.84** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$711,788.09** |
| **TOTAL** | | | | **$3,451,330.23** |

## Drew Street from N. Osceola Ave to Myrtle Ave

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 7556 | $2.68 | $20,250.08 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 625.17 | $88.50 | $55,327.55 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 86 | $3.59 | $308.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 1.36 | $958.49 | $1,300.68 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 260.00 | $.56 | $145.60 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 260.00 | $.97 | $252.20 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 9.00 | $35.37 | $318.33 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 3.00 | $50.23 | $150.69 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 0.65 | $987.02 | $637.45 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 0.65 | $449.59 | $290.36 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" | LF | 260.00 | $1.88 | $488.80 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 260.00 | $3.83 | $995.80 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 9.00 | $161.93 | $1,457.37 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 3.00 | $90.05 | $270.15 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 1.36 | $4,574.84 | $6,208.09 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 0.65 | $4,183.25 | $2,701.68 |
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 0.65 | $1,200.00 | $775.00 |
| **SUBTOTAL** | | | | **$91,878.57** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$4,593.93** | **$4,593.93** |
| **MOBILIZATION** | **LS** | **15%** | | **$13,781.79** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$15,849.05** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$32,157.50** |
| **TOTAL** | | | | **$158,260.83** |

## Cleveland Street from Missouri Ave to Gulf to Bay Blvd

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 4,963.20 | LF | $24.97 | $123,931.10 |
| FLOATING TURBIDITY BARRIER | 117.5 | LF | $8.88 | $1,043.40 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 11.75 | LF | $4.96 | $58.28 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 24.91 | EA | $87.15 | $2,170.91 |
| CLEARING & GRUBBING | 5.65 | AC | $11,329.10 | $63,953.76 |
| REGULAR EXCAVATION (3') | 11,475.33 | CY | $5.04 | $57,835.68 |
| EMBANKMENT (5') | 37,340.37 | CY | $8.13 | $303,577.21 |
| TYPE B STABILIZATION | 6,923.45 | SY | $3.65 | $25,270.60 |
| OPTIONAL BASE, BASE GROUP 08 | 6,557.33 | SY | $25.00 | $163,933.33 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 721.31 | TN | $110.03 | $79,365.37 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 540.98 | TN | $95.59 | $51,712.28 |
| CONC CLASS II, ENDWALLS | 17 | CY | $951.85 | $16,181.45 |
| INLETS, CURB, TYPE P-5, | 17 | EA | $3,987.73 | $67,791.41 |
| INLETS, CURB, TYPE J-5, | 5 | EA | $10,421.77 | $52,108.85 |
| MANHOLES, P-7, | 2 | EA | $3,303.75 | $6,607.50 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,094.00 | LF | $69.57 | $76,109.58 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 98 | LF | $85.96 | $8,424.08 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 2,376.00 | LF | $126.13 | $299,684.88 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 94 | LF | $323.65 | $30,423.10 |
| CONCRETE CURB & GUTTER, TYPE E | 0.00 | LF | $15.97 | $0.00 |
| CONCRETE CURB & GUTTER, TYPE F | 4,963.00 | LF | $15.98 | $79,308.74 |
| CONCRETE CURB, TYPE D | 4,963.00 | LF | $21.40 | $106,208.20 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 6,557.33 | SY | $35.13 | $230,359.12 |
| PERFORMANCE TURF, SOD | 13,661.11 | SY | $2.26 | $30,874.11 |
| CONDUIT, F& I, OPEN TRENCH | 2,482.00 | LF | $9.97 | $24,745.54 |
| CONDUIT, F& I, DIRECTIONAL BORE | 324.00 | LF | $19.79 | $6,411.96 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 10.00 | EA | $647.78 | $6,477.80 |
| SINGLE POST SIGN, F&I GM, | 9.00 | AS | $336.59 | $3,029.31 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 2.00 | AS | $1,081.99 | $2,163.98 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 2.00 | AS | $3,053.00 | $6,106.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 127.00 | EA | $3.59 | $455.93 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.00 | GM | $958.49 | $958.49 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 10.00 | EA | $35.37 | $353.70 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 20.00 | EA | $50.23 | $1,004.60 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.00 | GM | $987.02 | $987.02 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 10.00 | EA | $161.93 | $1,619.30 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 20.00 | EA | $90.05 | $1,801.00 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 17,907.00 | LF | $3.00 | $53,721.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 21.00 | EA | $516.66 | $10,849.86 |

### Cleveland Street from Missouri Ave to Gulf to Bay Blvd

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 21.00 | EA | $3,100.00 | $65,100.00 |
| **SUBTOTAL** | | | | **$2,071,227.25** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$310,684.09** |
| **MOBILIZATION** | **15%** | | | **$357,286.70** |
| **PROJECT UNKNOWNS** | **35%** | | | **$958,719.31** |
| **TOTAL** | | | | **$3,697,917.35** |

### Duke Energy Trail from Sharkey Road to Ream Wilson Trail

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PATTEREND PAVEMENT - VEHICULAR AREAS (GREEN BIKE LANES) | 277.33 | SY | $176.05 | $48,824.53 |
| SINGLE POST SIGN, F&I GM, | 36.00 | AS | $336.59 | $12,117.24 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | 478.00 | LF | $0.56 | $267.68 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 3.00 | EA | $50.23 | $150.69 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | 478.00 | LF | $1.88 | $898.64 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 3.00 | EA | $90.05 | $270.15 |
| **SUBTOTAL** | | | | **$62,528.93** |
| **MAINTENANCE OF TRAFFIC** | **5%** | | | **$3,126.45** |
| **MOBILIZATION** | **5%** | | | **$3,282.77** |
| **PROJECT UNKNOWNS** | **15%** | | | **$10,340.72** |
| **TOTAL** | | | | **$79,278.87** |

## MLK Jr Avenue from Court Street to Fairmont Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 15,945.60 | LF | $24.97 | $398,161.63 |
| FLOATING TURBIDITY BARRIER | 377.5 | LF | $8.88 | $3,352.20 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 377.5 | LF | $4.96 | $1,872.40 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 80.03 | EA | $87.15 | $6,974.61 |
| CLEARING & GRUBBING | 9.15 | AC | $11,329.10 | $103,678.43 |
| REGULAR EXCAVATION (3') | 31,005.33 | CY | $5.04 | $156,266.88 |
| EMBANKMENT (5') | 73,822.22 | CY | $8.13 | $600,174.67 |
| TYPE B STABILIZATION | 30,704.14 | SY | $3.65 | $112,070.11 |
| OPTIONAL BASE, BASE GROUP 08 | 30,119.47 | SY | $25.00 | $752,986.67 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 3,313.14 | TN | $110.03 | $364,544.94 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 2,484.86 | TN | $95.59 | $237,527.39 |
| CONC CLASS II, ENDWALLS | 54 | CY | $951.85 | $51,399.90 |
| INLETS, CURB, TYPE P-5, | 54 | EA | $3,987.73 | $215,337.42 |
| INLETS, CURB, TYPE J-5, | 15 | EA | $10,421.77 | $156,326.55 |
| MANHOLES, P-7, | 8 | EA | $3,303.75 | $26,430.00 |
| MANHOLES, J-7, | 2 | EA | $5,085.26 | $10,170.52 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 3,515.00 | LF | $69.57 | $244,538.55 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 314 | LF | $85.96 | $26,991.44 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 7,635.00 | LF | $126.13 | $963,002.55 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 302 | LF | $323.65 | $97,742.30 |
| CONCRETE CURB & GUTTER, TYPE F | 15,946.00 | LF | $15.98 | $254,817.08 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 8,858.67 | SY | $35.13 | $311,204.96 |
| PERFORMANCE TURF, SOD | 886.71 | SY | $2.26 | $2,003.95 |
| CONDUIT, F& I, OPEN TRENCH | 7,973.00 | LF | $9.97 | $79,490.81 |
| CONDUIT, F& I, DIRECTIONAL BORE | 1,040.00 | LF | $19.79 | $20,581.60 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 32.00 | EA | $647.78 | $20,728.96 |
| SINGLE POST SIGN, F&I GM, | 30.00 | AS | $336.59 | $10,097.70 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 3.00 | AS | $1,081.99 | $3,245.97 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 3.00 | AS | $3,053.00 | $9,159.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 408.00 | EA | $3.59 | $1,464.72 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 6.00 | GM | $958.49 | $5,750.94 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 7.00 | EA | $35.37 | $247.59 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 7.00 | EA | $50.23 | $351.61 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 3.00 | GM | $987.02 | $2,961.06 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 7.00 | EA | $161.93 | $1,133.51 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 7.00 | EA | $90.05 | $630.35 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 27,040.00 | LF | $3.00 | $81,120.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 32.00 | EA | $516.66 | $16,533.12 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 32.00 | EA | $3,100.00 | $99,200.00 |

### MLK Jr Avenue from Court Street to Fairmont Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| **SUBTOTAL** | | | | **$5,453,695.65** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$818,054.35** |
| **MOBILIZATION** | **15%** | | | **$940,762.50** |
| **PROJECT UNKNOWNS** | **35%** | | | **$2,524,379.37** |
| **TOTAL** | | | | **$9,736,891.87** |

### Druid Road from S Fort Harrison Ave to Jeffords Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 16.00 | EA | $35.37 | $565.92 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 32.00 | EA | $50.23 | $1,607.36 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 16.00 | EA | $161.93 | $2,590.88 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 32.00 | EA | $90.05 | $2,881.60 |
| **SUBTOTAL** | | | | **$7,645.76** |
| **MAINTENANCE OF TRAFFIC** | **10%** | | | **$764.58** |
| **MOBILIZATION** | **10%** | | | **$841.03** |
| **PROJECT UNKNOWNS** | **15%** | | | **$1,387.71** |
| **TOTAL** | | | | **$10,639.08** |

### Druid Road from Belleview Blvd to Jeffords Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 20.00 | EA | $35.37 | $707.40 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 40.00 | EA | $50.23 | $2,009.20 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 20.00 | EA | $161.93 | $3,238.60 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 40.00 | EA | $90.05 | $3,602.00 |
| **SUBTOTAL** | | | | **$9,557.20** |
| **MAINTENANCE OF TRAFFIC** | **10%** | | | **$955.72** |
| **MOBILIZATION** | **10%** | | | **$1,051.29** |
| **PROJECT UNKNOWNS** | **15%** | | | **$1,734.63** |
| **TOTAL** | | | | **$13,298.84** |

## S Prospect Avenue from Druid Road to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 6,336.00 | LF | $24.97 | $158,209.92 |
| FLOATING TURBIDITY BARRIER | 150 | LF | $8.88 | $1,332.00 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 150 | LF | $4.96 | $744.00 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 31.8 | EA | $87.15 | $2,771.37 |
| CLEARING & GRUBBING | 4.36 | AC | $11,329.10 | $49,436.07 |
| REGULAR EXCAVATION | 13,024.00 | CY | $5.04 | $65,640.96 |
| EMBANKMENT | 15,136.00 | CY | $8.13 | $123,055.68 |
| TYPE B STABILIZATION | 28,631.68 | SY | $3.65 | $104,505.63 |
| OPTIONAL BASE, BASE GROUP 08 | 12,672.00 | SY | $25.00 | $316,800.00 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 1,393.92 | TN | $110.03 | $153,373.02 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 1,045.44 | TN | $95.59 | $99,933.61 |
| CONC CLASS II, ENDWALLS | 22 | CY | $951.85 | $20,940.70 |
| INLETS, CURB, TYPE P-5, | 22 | EA | $3,987.73 | $87,730.06 |
| INLETS, CURB, TYPE J-5, | 6 | EA | $10,421.77 | $62,530.62 |
| MANHOLES, P-7, | 3 | EA | $3,303.75 | $9,911.25 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,397.00 | LF | $69.57 | $97,189.29 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 125 | LF | $85.96 | $10,745.00 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 3,034.00 | LF | $126.13 | $382,678.42 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 120 | LF | $323.65 | $38,838.00 |
| CONCRETE CURB & GUTTER, TYPE F | 6,336.00 | LF | $15.98 | $101,249.28 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 3,520.00 | SY | $35.13 | $123,657.60 |
| PERFORMANCE TURF, SOD | 352.33 | SY | $2.26 | $796.27 |
| CONDUIT, F& I, OPEN TRENCH | 3,168.00 | LF | $9.97 | $31,584.96 |
| CONDUIT, F& I, DIRECTIONAL BORE | 413.00 | LF | $19.79 | $8,173.27 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 13.00 | EA | $647.78 | $8,421.14 |
| SINGLE POST SIGN, F&I GM, | 12.00 | AS | $336.59 | $4,039.08 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1.00 | AS | $1,081.99 | $1,081.99 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1.00 | AS | $3,053.00 | $3,053.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 162.00 | EA | $3.59 | $581.58 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 2.40 | GM | $958.49 | $2,300.38 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 7.00 | EA | $35.37 | $247.59 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 7.00 | EA | $50.23 | $351.61 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.20 | GM | $987.02 | $1,184.42 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 7.00 | EA | $161.93 | $1,133.51 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 7.00 | EA | $90.05 | $630.35 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 10,744.00 | LF | $3.00 | $32,232.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 13.00 | EA | $516.66 | $6,716.58 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 13.00 | EA | $3,100.00 | $40,300.00 |
| **SUBTOTAL** | | | | **$2,162,609.04** |

### S Prospect Avenue from Druid Road to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$324,391.36** |
| **MOBILIZATION** | **15%** | | | **$373,050.06** |
| **PROJECT UNKNOWNS** | **35%** | | | **$1,001,017.66** |
| **TOTAL** | | | | **$3,861,068.11** |

### S Keene Road from Lakeview Rd to Gulf to Bay Blvd

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | 26,400.00 | SY | $2.68 | $70,752.00 |
| ASPHALTIC CONC FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (1.5" THICKNESS) | 2,178.00 | TN | $88.50 | $192,753.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 203.00 | EA | $3.59 | $728.77 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.50 | GM | $958.49 | $1,437.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | 1.50 | GM | $394.87 | $592.31 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 3.00 | EA | $35.37 | $106.11 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 3.00 | EA | $50.23 | $150.69 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.50 | GM | $987.02 | $1,480.53 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | 1.50 | GM | $449.59 | $674.39 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 3.00 | EA | $161.93 | $485.79 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 3.00 | EA | $90.05 | $270.15 |
| **SUBTOTAL** | | | | **$269,431.47** |
| **MAINTENANCE OF TRAFFIC** | **10%** | | | **$26,943.15** |
| **MOBILIZATION** | **10%** | | | **$29,637.46** |
| **PROJECT UNKNOWNS** | **10%** | | | **$32,601.21** |
| **TOTAL** | | | | **$358,613.28** |

## Bayview Avenue from Gulf to Bay Blvd to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 5,068.80 | LF | $24.97 | $126,567.94 |
| FLOATING TURBIDITY BARRIER | 120 | LF | $8.88 | $1,065.60 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 120 | LF | $4.96 | $595.20 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 25 | EA | $87.15 | $2,178.75 |
| CLEARING & GRUBBING | 3.78 | AC | $11,329.10 | $42,844.60 |
| REGULAR EXCAVATION | 6,946.13 | CY | $5.04 | $35,008.51 |
| REGULAR EXCAVATION | 4,505.60 | CY | $5.04 | $22,708.22 |
| EMBANKMENT | 9,324.09 | CY | $8.13 | $75,804.84 |
| EMBANKMENT | 3,629.51 | CY | $8.13 | $29,507.93 |
| TYPE B STABILIZATION | 15,270.23 | SY | $3.65 | $55,736.34 |
| TYPE B STABILIZATION | 9,700.18 | SY | $3.65 | $35,405.66 |
| OPTIONAL BASE, BASE GROUP 08 | 8,823.47 | SY | $25.00 | $220,586.67 |
| OPTIONAL BASE, BASE GROUP 08 | 3,379.20 | SY | $25.00 | $84,480.00 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 970.58 | TN | $110.03 | $106,793.06 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 371.71 | TN | $110.03 | $40,899.47 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 727.94 | TN | $95.59 | $69,583.40 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 278.78 | TN | $95.59 | $26,648.96 |
| CONC CLASS II, ENDWALLS | 17 | CY | $951.85 | $16,181.45 |
| INLETS, CURB, TYPE P-5, | 17 | EA | $3,987.73 | $67,791.41 |
| INLETS, CURB, TYPE J-5, | 5 | EA | $10,421.77 | $52,108.85 |
| MANHOLES, P-7, | 2 | EA | $3,303.75 | $6,607.50 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,117.00 | LF | $69.57 | $77,709.69 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 100 | LF | $85.96 | $8,596.00 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 2,427.00 | LF | $126.13 | $306,117.51 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 96 | LF | $323.65 | $31,070.40 |
| CONCRETE CURB & GUTTER, TYPE F | 5,069.00 | LF | $15.98 | $81,002.62 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 2,816.00 | SY | $35.13 | $98,926.08 |
| PERFORMANCE TURF, SOD | 281.87 | SY | $2.26 | $637.02 |
| CONDUIT, F& I, OPEN TRENCH | 2,534.00 | LF | $9.97 | $25,263.98 |
| CONDUIT, F& I, DIRECTIONAL BORE | 331.00 | LF | $19.79 | $6,550.49 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 10.00 | EA | $647.78 | $6,477.80 |
| SINGLE POST SIGN, F&I GM, | 10.00 | AS | $336.59 | $3,365.90 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1.00 | AS | $1,081.99 | $1,081.99 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1.00 | AS | $3,053.00 | $3,053.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 130.00 | EA | $3.59 | $466.70 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.92 | GM | $958.49 | $1,840.30 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 6.00 | EA | $35.37 | $212.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 6.00 | EA | $50.23 | $301.38 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 0.96 | GM | $987.02 | $947.54 |

### Bayview Avenue from Gulf to Bay Blvd to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 6.00 | EA | $161.93 | $971.58 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 6.00 | EA | $90.05 | $540.30 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 8,595.00 | LF | $3.00 | $25,785.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 10.00 | EA | $516.66 | $5,166.60 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 10.00 | EA | $3,100.00 | $31,000.00 |
| **SUBTOTAL** | | | | **$1,844,697.28** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$276,704.59** |
| **MOBILIZATION** | **15%** | | | **$318,210.28** |
| **PROJECT UNKNOWNS** | **35%** | | | **$853,864.25** |
| **TOTAL** | | | | **$3,293,476.41** |

## Bayview Avenue from Gulf to Bay Blvd to CR 32

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 1,399.00 | LF | $24.97 | $34,933.03 |
| FLOATING TURBIDITY BARRIER | 33 | LF | $8.88 | $293.04 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 33 | LF | $4.96 | $163.68 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 7 | EA | $87.15 | $610.05 |
| CLEARING & GRUBBING | 0.80 | AC | $11,329.10 | $9,097.61 |
| REGULAR EXCAVATION | 2,565.20 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 2,617.02 | CY | $8.13 | $21,276.39 |
| TYPE B STABILIZATION | 5,700.96 | SY | $3.65 | $20,808.51 |
| OPTIONAL BASE, BASE GROUP 08 | 2,487.47 | SY | $25.00 | $62,186.67 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 273.62 | TN | $110.03 | $30,106.56 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 205.22 | TN | $95.59 | $19,616.60 |
| CONC CLASS II, ENDWALLS | 5 | CY | $951.85 | $4,759.25 |
| INLETS, CURB, TYPE P-5, | 5 | EA | $3,987.73 | $19,938.65 |
| INLETS, CURB, TYPE J-5, | 1 | EA | $10,421.77 | $10,421.77 |
| MANHOLES, P-7, | 1 | EA | $3,303.75 | $3,303.75 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 308.00 | LF | $69.57 | $21,427.56 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 28 | LF | $85.96 | $2,406.88 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 670.00 | LF | $126.13 | $84,507.10 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 27 | LF | $323.65 | $8,738.55 |
| CONCRETE CURB & GUTTER, TYPE F | 1,399.00 | LF | $15.98 | $22,356.02 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 777.33 | SY | $35.13 | $27,307.72 |
| PERFORMANCE TURF, SOD | 77.81 | SY | $2.26 | $175.84 |
| CONDUIT, F& I, OPEN TRENCH | 700.00 | LF | $9.97 | $6,979.00 |
| CONDUIT, F& I, DIRECTIONAL BORE | 91.00 | LF | $19.79 | $1,800.89 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 3.00 | EA | $647.78 | $1,943.34 |
| SINGLE POST SIGN, F&I GM, | 3.00 | AS | $336.59 | $1,009.77 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1.00 | AS | $1,081.99 | $1,081.99 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1.00 | AS | $3,053.00 | $3,053.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 36.00 | EA | $3.59 | $129.24 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 0.27 | GM | $958.49 | $258.79 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 4.00 | EA | $35.37 | $141.48 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 4.00 | EA | $50.23 | $200.92 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 0.27 | GM | $987.02 | $266.50 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 4.00 | EA | $161.93 | $647.72 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 4.00 | EA | $90.05 | $360.20 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 2,373.00 | LF | $3.00 | $7,119.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 3.00 | EA | $516.66 | $1,549.98 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 3.00 | EA | $3,100.00 | $9,300.00 |
| **SUBTOTAL** | | | | **$461,714.47** |

### Bayview Avenue from Gulf to Bay Blvd to CR 32

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| MAINTENANCE OF TRAFFIC | 15% | | | $69,257.17 |
| MOBILIZATION | 15% | | | $79,645.75 |
| PROJECT UNKNOWNS | 35% | | | $213,716.09 |
| TOTAL | | | | $824,333.48 |

## Arcturas Avenue from Druid Road to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 8,163.00 | LF | $24.97 | $203,830.11 |
| FLOATING TURBIDITY BARRIER | 193 | LF | $8.88 | $1,713.84 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 193 | LF | $4.96 | $957.28 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 41 | EA | $87.15 | $3,573.15 |
| CLEARING & GRUBBING | 1.44 | AC | $11,329.10 | $16,272.71 |
| CLEARING & GRUBBING | 3.90 | AC | $11,329.10 | $44,162.89 |
| REGULAR EXCAVATION | 4,588.32 | CY | $5.04 | $23,125.13 |
| REGULAR EXCAVATION | 11,634.77 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 4,681.01 | CY | $8.13 | $38,056.64 |
| EMBANKMENT | 13,521.49 | CY | $8.13 | $109,929.74 |
| TYPE B STABILIZATION | 5,098.60 | SY | $3.65 | $18,609.88 |
| TYPE B STABILIZATION | 12,788.82 | SY | $3.65 | $46,679.18 |
| OPTIONAL BASE, BASE GROUP 08 | 4,449.28 | SY | $25.00 | $111,232.00 |
| OPTIONAL BASE, BASE GROUP 08 | 10,062.51 | SY | $25.00 | $251,562.67 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 489.42 | TN | $110.03 | $53,850.97 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 1,106.88 | TN | $110.03 | $121,789.54 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 367.07 | TN | $95.59 | $35,087.80 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 830.16 | TN | $95.59 | $79,354.69 |
| CONC CLASS II, ENDWALLS | 28 | CY | $951.85 | $26,651.80 |
| INLETS, CURB, TYPE P-5, | 28 | EA | $3,987.73 | $111,656.44 |
| INLETS, CURB, TYPE J-5, | 8 | EA | $10,421.77 | $83,374.16 |
| MANHOLES, P-7, | 4 | EA | $3,303.75 | $13,215.00 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,800.00 | LF | $69.57 | $125,226.00 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 161 | LF | $85.96 | $13,839.56 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 3,908.00 | LF | $126.13 | $492,916.04 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 155 | LF | $323.65 | $50,165.75 |
| CONCRETE CURB & GUTTER, TYPE F | 8,163.00 | LF | $15.98 | $130,444.74 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 4,534.93 | SY | $35.13 | $159,312.21 |
| PERFORMANCE TURF, SOD | 453.92 | SY | $2.26 | $1,025.87 |
| CONDUIT, F& I, OPEN TRENCH | 4,081.00 | LF | $9.97 | $40,687.57 |
| CONDUIT, F& I, DIRECTIONAL BORE | 533.00 | LF | $19.79 | $10,548.07 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 16.00 | EA | $647.78 | $10,364.48 |
| SINGLE POST SIGN, F&I GM, | 15.00 | AS | $336.59 | $5,048.85 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 2.00 | AS | $1,081.99 | $2,163.98 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 2.00 | AS | $3,053.00 | $6,106.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 209.00 | EA | $3.59 | $750.31 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 2.47 | GM | $958.49 | $2,367.47 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 8.00 | EA | $35.37 | $282.96 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 8.00 | EA | $50.23 | $401.84 |

### Arcturas Avenue from Druid Road to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.55 | GM | $987.02 | $1,529.88 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 8.00 | EA | $161.93 | $1,295.44 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 8.00 | EA | $90.05 | $720.40 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 13,842.00 | LF | $3.00 | $41,526.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 16.00 | EA | $516.66 | $8,266.56 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 16.00 | EA | $3,100.00 | $49,600.00 |
| **SUBTOTAL** | | | | **$2,570,713.02** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$385,606.95** |
| **MOBILIZATION** | **15%** | | | **$443,448.00** |
| **PROJECT UNKNOWNS** | **35%** | | | **$1,189,918.79** |
| **TOTAL** | | | | **$4,589,686.75** |

## N Lake Avenue from Druid Road to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 8,236.80 | LF | $24.97 | $205,672.90 |
| FLOATING TURBIDITY BARRIER | 195 | LF | $8.88 | $1,731.60 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 195 | LF | $4.96 | $967.20 |
| CLEARING & GRUBBING | 0.92 | AC | $11,329.10 | $10,458.48 |
| CLEARING & GRUBBING | 1.72 | AC | $11,329.10 | $19,444.86 |
| REGULAR EXCAVATION | 2,127.64 | CY | $5.04 | $10,723.33 |
| REGULAR EXCAVATION | 5,122.77 | CY | $5.04 | $25,818.78 |
| EMBANKMENT | 1,914.88 | CY | $8.13 | $15,567.97 |
| EMBANKMENT | 10,014.79 | CY | $8.13 | $81,420.25 |
| TYPE B STABILIZATION (6") | 3,191.47 | SY | $3.65 | $11,648.85 |
| TYPE B STABILIZATION (12") | 5,630.90 | SY | $3.65 | $20,552.77 |
| OPTIONAL BASE, BASE GROUP 04 (RECYLCED CONCRETE AGGRAGETE) | 2,553.17 | SY | $10.76 | $27,472.15 |
| OPTIONAL BASE,BASE GROUP 08 | 4,984.32 | SY | $18.00 | $89,717.76 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC A | 140.42 | TN | $98.14 | $13,781.26 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 274.14 | TN | $110.03 | $30,163.36 |
| ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-12.5, PG 76-22 | 274.14 | TN | $102.00 | $27,962.04 |
| PLAIN CEMENT CONCRETE PAVMENT (8" THICKNESS) | 101.73 | CY | $88.00 | $8,952.23 |
| REINFORCING STEEL (MISC) | 5502 | LB | $3.10 | $17,056.20 |
| CONC CLASS II, ENDWALLS | 8 | CY | $951.85 | $7,614.80 |
| INLETS, CURB, TYPE P-5, | 8 | EA | $3,987.73 | $31,901.84 |
| INLETS, CURB, TYPE J-5, | 2 | EA | $10,421.77 | $20,843.54 |
| MANHOLES, P-7, | 1 | EA | $3,303.75 | $3,303.75 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 549.00 | LF | $69.57 | $38,193.93 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 49 | LF | $85.96 | $4,212.04 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 1,193.00 | LF | $126.13 | $150,473.09 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 47 | LF | $323.65 | $15,211.55 |
| CONCRETE CURB & GUTTER, TYPE F | 2,492.00 | LF | $15.98 | $39,822.16 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,384.53 | SY | $35.13 | $48,638.66 |
| PERFORMANCE TURF, SOD | 915.37 | SY | $2.26 | $2,068.74 |
| CONDUIT, F& I, OPEN TRENCH | 1,246.00 | LF | $9.97 | $12,422.62 |
| CONDUIT, F& I, DIRECTIONAL BORE | 163.00 | LF | $19.79 | $3,225.77 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 5.00 | EA | $647.78 | $3,238.90 |
| SINGLE POST SIGN, F&I GM, | 5.00 | AS | $336.59 | $1,682.95 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 64.00 | EA | $3.59 | $229.76 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 0.94 | GM | $958.49 | $900.98 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 4.00 | EA | $35.37 | $141.48 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 4.00 | EA | $50.23 | $200.92 |

## N Lake Avenue from Druid Road to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 0.47 | GM | $987.02 | $463.90 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 4.00 | EA | $161.93 | $647.72 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 4.00 | EA | $90.05 | $360.20 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 4,226.00 | LF | $3.00 | $12,678.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 5.00 | EA | $516.66 | $2,583.30 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 5.00 | EA | $3,100.00 | $15,500.00 |
| **SUBTOTAL** | | | | **$1,035,672.58** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$155,350.89** |
| **MOBILIZATION** | **15%** | | | **$178,653.52** |
| **PROJECT UNKNOWNS** | **35%** | | | **$479,386.94** |
| **TOTAL** | | | | **$1,849,063.93** |

## N Hampton Road from SR 60 to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 5,174.40 | LF | $24.97 | $129,204.77 |
| FLOATING TURBIDITY BARRIER | 123 | LF | $8.88 | $1,092.24 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 123 | LF | $4.96 | $610.08 |
| CLEARING & GRUBBING | 1.11 | AC | $11,329.10 | $12,523.81 |
| CLEARING & GRUBBING | 0.78 | AC | $11,329.10 | $8,818.85 |
| REGULAR EXCAVATION | 3,299.41 | CY | $5.04 | $16,629.04 |
| REGULAR EXCAVATION | 1,189.76 | CY | $5.04 | $5,996.39 |
| EMBANKMENT | 3,834.45 | CY | $8.13 | $31,174.11 |
| EMBANKMENT | 2,974.40 | CY | $8.13 | $24,181.87 |
| TYPE B STABILIZATION (12") | 3,626.68 | SY | $3.65 | $13,237.38 |
| TYPE B STABILIZATION (12") | 1,124.32 | SY | $3.65 | $4,103.78 |
| OPTIONAL BASE,BASE GROUP 08 | 5,579.20 | SY | $18.00 | $100,425.60 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 613.71 | TN | $110.03 | $67,526.73 |
| ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-12.5, PG 76-22 | 460.28 | TN | $102.00 | $46,948.97 |
| CONC CLASS II, ENDWALLS | 11 | CY | $951.85 | $10,470.35 |
| INLETS, CURB, TYPE P-5, | 14 | EA | $3,987.73 | $55,828.22 |
| INLETS, CURB, TYPE J-5, | 4 | EA | $10,421.77 | $41,687.08 |
| MANHOLES, P-7, | 2 | EA | $3,303.75 | $6,607.50 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 747.00 | LF | $69.57 | $51,968.79 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 67 | LF | $85.96 | $5,759.32 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 1,623.00 | LF | $126.13 | $204,708.99 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 64 | LF | $323.65 | $20,713.60 |
| CONCRETE CURB & GUTTER, TYPE F | 3,390.00 | LF | $15.98 | $54,172.20 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,865.60 | SY | $35.13 | $65,538.53 |
| PERFORMANCE TURF, SOD | 2,934.54 | SY | $2.26 | $6,632.06 |
| CONDUIT, F& I, OPEN TRENCH | 2,587.00 | LF | $9.97 | $25,792.39 |
| CONDUIT, F& I, DIRECTIONAL BORE | 338.00 | LF | $19.79 | $6,689.02 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 10.00 | EA | $647.78 | $6,477.80 |
| SINGLE POST SIGN, F&I GM, | 10.00 | AS | $336.59 | $3,365.90 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1.00 | AS | $1,081.99 | $1,081.99 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1.00 | AS | $3,053.00 | $3,053.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 132.00 | EA | $3.59 | $473.88 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.96 | GM | $958.49 | $1,878.64 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 4.00 | EA | $35.37 | $141.48 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 4.00 | EA | $50.23 | $200.92 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 0.98 | GM | $987.02 | $967.28 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | 1.50 | GM | $449.59 | $674.39 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 4.00 | EA | $161.93 | $647.72 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 4.00 | EA | $90.05 | $360.20 |

### N Hampton Road from SR 60 to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | 1.50 | GM | $1,200.00 | $1,800.00 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 8,774.00 | LF | $3.00 | $26,322.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 10.00 | EA | $516.66 | $5,166.60 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 10.00 | EA | $3,100.00 | $31,000.00 |
| **SUBTOTAL** | | | | **$1,102,653.45** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$165,398.02** |
| **MOBILIZATION** | **15%** | | | **$190,207.72** |
| **PROJECT UNKNOWNS** | **35%** | | | **$510,390.72** |
| **TOTAL** | | | | **$1,968,649.91** |

## MLK, Jr Avenue from Lakeview Road to Court Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 7,920.00 | LF | $24.97 | $197,762.40 |
| FLOATING TURBIDITY BARRIER | 188 | LF | $8.88 | $1,669.44 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 188 | LF | $4.96 | $932.48 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 40 | EA | $87.15 | $3,486.00 |
| CLEARING & GRUBBING | 4.55 | AC | $11,329.10 | $51,495.91 |
| REGULAR EXCAVATION | 14,520.00 | CY | $5.04 | $73,180.80 |
| EMBANKMENT | 14,813.33 | CY | $8.13 | $120,432.40 |
| TYPE B STABILIZATION | 32,269.60 | SY | $3.65 | $117,784.04 |
| OPTIONAL BASE, BASE GROUP 08 | 14,080.00 | SY | $25.00 | $352,000.00 |
| OPTIONAL BASE,BASE GROUP 09 | 0.00 | SY | $18.00 | $0.00 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 1,548.80 | TN | $110.03 | $170,414.46 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | 0.00 | TN | $95.60 | $0.00 |
| ASPH CONC FC,TRAFFIC B,FC-9.5,PG 76-22 | 1,161.60 | TN | $95.59 | $111,037.34 |
| CONC CLASS II, ENDWALLS | 27 | CY | $951.85 | $25,699.95 |
| INLETS, CURB, TYPE P-5, | 27 | EA | $3,987.73 | $107,668.71 |
| INLETS, CURB, TYPE J-5, | 8 | EA | $10,421.77 | $83,374.16 |
| MANHOLES, P-7, | 4 | EA | $3,303.75 | $13,215.00 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,746.00 | LF | $69.57 | $121,469.22 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 156 | LF | $85.96 | $13,409.76 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 3,792.00 | LF | $126.13 | $478,284.96 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 150 | LF | $323.65 | $48,547.50 |
| CONCRETE CURB & GUTTER, TYPE F | 7,920.00 | LF | $15.98 | $126,561.60 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 4,400.00 | SY | $35.13 | $154,572.00 |
| PERFORMANCE TURF, SOD | 440.42 | SY | $2.26 | $995.34 |
| CONDUIT, F& I, OPEN TRENCH | 3,960.00 | LF | $9.97 | $39,481.20 |
| CONDUIT, F& I, DIRECTIONAL BORE | 517.00 | LF | $19.79 | $10,231.43 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 16.00 | EA | $647.78 | $10,364.48 |
| SINGLE POST SIGN, F&I GM, | 15.00 | AS | $336.59 | $5,048.85 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 2.00 | AS | $1,081.99 | $2,163.98 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 2.00 | AS | $3,053.00 | $6,106.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 203.00 | EA | $3.59 | $728.77 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.50 | GM | $958.49 | $1,437.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 6.00 | EA | $35.37 | $212.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 6.00 | EA | $50.23 | $301.38 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.50 | GM | $987.02 | $1,480.53 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 6.00 | EA | $161.93 | $971.58 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 6.00 | EA | $90.05 | $540.30 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 13,430.00 | LF | $3.00 | $40,290.00 |

### MLK, Jr Avenue from Lakeview Road to Court Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| POLE CABLE DIST SYSY, CONVENTIONAL | 16.00 | EA | $516.66 | $8,266.56 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 16.00 | EA | $3,100.00 | $49,600.00 |
| **SUBTOTAL** | | | | **$2,559,727.31** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$383,959.10** |
| **MOBILIZATION** | **15%** | | | **$441,552.96** |
| **PROJECT UNKNOWNS** | **35%** | | | **$1,184,833.78** |
| **TOTAL** | | | | **$4,570,073.15** |

## Missouri Avenue from Belleair Road to Court Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| | 16,051.0 | | | |
| SEDIMENT BARRIER | 0 | LF | $1.54 | $24,718.54 |
| FLOATING TURBIDITY BARRIER | 380 | LF | $9.29 | $3,530.20 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 380 | LF | $5.96 | $2,264.80 |
| SOIL TRACKING PREVENTION DEVICE | 2 | EA | $2,911.75 | $5,823.50 |
| INLET PROTECTION SYSTEM | 81 | EA | $116.67 | $9,450.27 |
| LITTER REMOVAL | 2.89 | AC | $29.77 | $86.04 |
| MOWING | 2.89 | AC | $45.51 | $131.52 |
| CLEARING & GRUBBING | 6.63 | AC | $11,329.10 | $75,142.83 |
| | 32,102.4 | | | |
| REGULAR EXCAVATION (3') | 0 | CY | $5.04 | $161,796.10 |
| | 27,643.7 | | | |
| EMBANKMENT (Avg 2.5') | 3 | CY | $8.13 | $224,743.55 |
| | 26,154.5 | | | |
| TYPE B STABILIZATION | 4 | SY | $3.65 | $95,464.07 |
| | 12,484.2 | | | |
| OPTIONAL BASE,BASE GROUP 09 | 7 | SY | $18.00 | $224,716.80 |
| | 74,905.6 | | | |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 0 | SY | $2.85 | $213,480.96 |
| | 10,299.5 | | | |
| SUPERPAVE ASPH CONC, TRAF D, PG76-22,PMA (3") | 2 | TN | $89.48 | $921,601.05 |
| ASPH CONC FC,TRAFFIC B,FC-12.5,PG 76-22 (1.5") | 7,209.66 | TN | $96.09 | $692,776.61 |
| CONC CLASS II, ENDWALLS | 82 | CY | $951.85 | $78,051.70 |
| INLETS, CURB, TYPE P-5, | 55 | EA | $5,016.02 | $275,881.10 |
| INLETS, CURB, TYPE J-5, | 15 | EA | $9,119.07 | $136,786.05 |
| INLETS, DT BOT, TYPE C, | 8 | EA | $3,256.56 | $26,052.48 |
| INLETS, DT BOT, TYPE D, | 3 | EA | $3,275.49 | $9,826.47 |
| MANHOLES, P-7, | 8 | EA | $4,448.40 | $35,587.20 |
| MANHOLES, J-7, | 3 | EA | $9,021.02 | $27,063.06 |
| PIPE CULV, OPT MATL, ROUND, 24"S/CD | 4,022.00 | LF | $72.66 | $292,238.52 |
| PIPE CULV, OPT MATL, ROUND, 36"S/CD | 359 | LF | $105.55 | $37,892.45 |
| PIPE CULV, OPT MATL, ROUND, 48"S/CD | 7,770.00 | LF | $167.26 | $1,299,610.20 |
| PIPE CULV, OPT MATL, ROUND, 54"S/CD | 608 | LF | $214.93 | $130,677.44 |
| | 16,051.0 | | | |
| CONCRETE CURB & GUTTER, TYPE E | 0 | LF | $17.76 | $285,065.76 |
| | 16,051.0 | | | |
| CONCRETE CURB & GUTTER, TYPE F | 0 | LF | $19.80 | $317,809.80 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 8,917.33 | SY | $38.61 | $344,298.24 |
| PERFORMANCE TURF, SOD | 7,133.89 | SY | $2.54 | $18,120.08 |
| CONDUIT, F& I, OPEN TRENCH | 8,026.00 | LF | $9.58 | $76,889.08 |
| CONDUIT, F& I, DIRECTIONAL BORE | 1,593.00 | LF | $15.38 | $24,500.34 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 53 | EA | $624.74 | $33,111.22 |
| SINGLE POST SIGN, F&I GM, | 36 | AS | $325.66 | $11,723.76 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 3 | AS | $966.28 | $2,898.84 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 3 | AS | $4,548.76 | $13,646.28 |
| MULTI-POST SIGN, F&I GM, 51-100 SF | 3 | AS | $6,012.41 | $18,037.23 |

## Missouri Avenue from Belleair Road to Court Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| RETRO-REFLECTIVE PAVEMENT MARKERS | 1026 | EA | $3.39 | $3,478.14 |
| PAINTED PAVT MARK, STD, WHITE, SOLID, 6" | 6.08 | GM | $958.49 | $5,827.62 |
| PAINTED PAVT MARK, STD, WHITE, SOLID, 24" | 2200 | LF | $0.97 | $2,134.00 |
| PAINTED PAVT MARK, STD, WHITE, SKIP, 6" | 1.52 | GM | $394.87 | $600.20 |
| PAINTED PAVT MARK, STANDARD, WHITE, MESSAGE | 7.00 | EA | $35.37 | $247.59 |
| PAINTED PAVT MARK, STANDARD, WHITE, ARROW | 7.00 | EA | $50.23 | $351.61 |
| PAINTED PAVT MAR, STD, YELLOW, SOLID, 6" | 3.04 | GM | $987.02 | $3,000.54 |
| THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" | 6.08 | GM | $4,574.84 | $27,815.03 |
| THERMOPLASTIC, STD, WHITE, SOLID, 24" | 2200 | LF | $3.83 | $8,426.00 |
| THERMOPLASTIC, STD-OP, WHITE, SKIP, 6" | 1.52 | GM | $1,365.14 | $2,075.01 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 7.00 | EA | $161.93 | $1,133.51 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 7.00 | EA | $90.05 | $630.35 |
| THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6" | 3.04 | GM | $4,183.25 | $12,717.08 |
| | 29,312.0 | | | |
| LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2 | 0 | LF | $2.25 | $65,952.00 |
| POLE CABLE DIST SYS, CONVENTIONAL | 53 | EA | $732.90 | $38,843.70 |
| LIGHT POLE COMP,F&I,SGL ARM SM, AL,40' | 53 | EA | $6,305.72 | $334,203.16 |
| Signalization (New due to widening)(# of Intersections w/Mast Arms). Approx Cost from FDOT LRE | 4 | EA | $256,251.93 | $1,025,007.72 |
| Signalization (New due to widening)(# of Intersections w/Span Wire). Approx Cost from FDOT LRE | 1 | EA | $188,061.20 | $188,061.20 |
| **SUBTOTAL** | | | | **$7,871,998.60** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$1,180,799.79** |
| **MOBILIZATION** | **15%** | | | **$1,357,919.76** |
| **PROJECT UNKNOWNS** | **35%** | | | **$3,643,751.35** |
| | | | | **$14,054,469.5** |
| **TOTAL** | | | | **0** |

## Missouri Avenue from Court Street (SR 60) to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 3,590.00 | LF | $1.54 | $5,528.60 |
| FLOATING TURBIDITY BARRIER | 85 | LF | $9.29 | $789.65 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 85 | LF | $5.96 | $506.60 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $2,911.75 | $2,911.75 |
| INLET PROTECTION SYSTEM | 18 | EA | $116.67 | $2,100.06 |
| LITTER REMOVAL | 0.65 | AC | $29.77 | $19.35 |
| MOWING | 0.65 | AC | $45.51 | $29.58 |
| CLEARING & GRUBBING | 1.48 | AC | $11,329.10 | $16,808.26 |
| REGULAR EXCAVATION (3') | 7,180.80 | CY | $5.04 | $36,191.23 |
| EMBANKMENT (Avg 2.5') | 6,183.47 | CY | $8.13 | $50,271.58 |
| TYPE B STABILIZATION | 5,850.36 | SY | $3.65 | $21,353.80 |
| OPTIONAL BASE,BASE GROUP 09 | 2,792.53 | SY | $18.00 | $50,265.60 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 11,968.00 | SY | $2.85 | $34,108.80 |
| SUPERPAVE ASPH CONC, TRAF D, PG76-22,PMA (3") | 1,777.25 | TN | $89.48 | $159,028.15 |
| ASPH CONC FC,TRAFFIC B,FC-12.5,PG 76-22 (1.5") | 1,217.74 | TN | $96.09 | $117,013.02 |
| CONC CLASS II, ENDWALLS | 18 | CY | $951.85 | $17,133.30 |
| INLETS, CURB, TYPE P-5, | 12 | EA | $5,016.02 | $60,192.24 |
| INLETS, CURB, TYPE J-5, | 3 | EA | $9,119.07 | $27,357.21 |
| INLETS, DT BOT, TYPE C, | 2 | EA | $3,256.56 | $6,513.12 |
| INLETS, DT BOT, TYPE D, | 1 | EA | $3,275.49 | $3,275.49 |
| MANHOLES, P-7, | 2 | EA | $4,448.40 | $8,896.80 |
| MANHOLES, J-7, | 1 | EA | $9,021.02 | $9,021.02 |
| PIPE CULV, OPT MATL, ROUND, 24"S/CD | 900.00 | LF | $72.66 | $65,394.00 |
| PIPE CULV, OPT MATL, ROUND, 36"S/CD | 80 | LF | $105.55 | $8,444.00 |
| PIPE CULV, OPT MATL, ROUND, 48"S/CD | 1,738.00 | LF | $167.26 | $290,697.88 |
| PIPE CULV, OPT MATL, ROUND, 54"S/CD | 136 | LF | $214.93 | $29,230.48 |
| CONCRETE CURB & GUTTER, TYPE E | 0.00 | LF | $17.76 | $0.00 |
| CONCRETE CURB & GUTTER, TYPE F | 3,590.00 | LF | $19.80 | $71,082.00 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,994.67 | SY | $38.61 | $77,014.08 |
| PERFORMANCE TURF, SOD | 1,595.78 | SY | $2.54 | $4,053.28 |
| CONDUIT, F& I, OPEN TRENCH | 1,795.00 | LF | $9.58 | $17,196.10 |
| CONDUIT, F& I, DIRECTIONAL BORE | 356.00 | LF | $15.38 | $5,475.28 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 12 | EA | $624.74 | $7,496.88 |
| SINGLE POST SIGN, F&I GM, | 8 | AS | $325.66 | $2,605.28 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1 | AS | $966.28 | $966.28 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1 | AS | $4,548.76 | $4,548.76 |
| MULTI-POST SIGN, F&I GM, 51-100 SF | 1 | AS | $6,012.41 | $6,012.41 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 230 | EA | $3.39 | $779.70 |
| PAINTED PAVT MARK, STD, WHITE, SOLID, 6" | 1.36 | GM | $958.49 | $1,303.55 |

## Missouri Avenue from Court Street (SR 60) to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVT MARK, STD, WHITE, SOLID, 24" | 124 | LF | $0.97 | $120.28 |
| PAINTED PAVT MARK, STD, WHITE, SKIP, 6" | 0.17 | GM | $394.87 | $67.13 |
| PAINTED PAVT MARK, STANDARD, WHITE, MESSAGE | 2.00 | EA | $35.37 | $70.74 |
| PAINTED PAVT MARK, STANDARD, WHITE, ARROW | 2.00 | EA | $50.23 | $100.46 |
| PAINTED PAVT MAR, STD, YELLOW, SOLID, 6" | 1.36 | GM | $987.02 | $1,342.35 |
| THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" | 1.36 | GM | $4,574.84 | $6,221.78 |
| THERMOPLASTIC, STD, WHITE, SOLID, 24" | 124 | LF | $3.83 | $474.92 |
| THERMOPLASTIC, STD-OP, WHITE, SKIP, 6" | 0.17 | GM | $1,365.14 | $232.07 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 2.00 | EA | $161.93 | $323.86 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 2.00 | EA | $90.05 | $180.10 |
| THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6" | 1.36 | GM | $4,183.25 | $5,689.22 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2 | 6,557.00 | LF | $2.25 | $14,753.25 |
| POLE CABLE DIST SYS, CONVENTIONAL | 12 | EA | $732.90 | $8,794.80 |
| LIGHT POLE COMP,F&I,SGL ARM SM, AL,40' | 12 | EA | $6,305.72 | $75,668.64 |
| Signalization (New due to widening)(# of Intersections w/Mast Arms). Approx Cost from FDOT LRE | 1 | EA | $256,251.93 | $256,251.93 |
| **SUBTOTAL** | | | | **$1,591,906.71** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$238,786.01** |
| **MOBILIZATION** | **15%** | | | **$274,603.91** |
| **PROJECT UNKNOWNS** | **35%** | | | **$736,853.82** |
| **TOTAL** | | | | **$2,842,150.45** |

## Missouri Avenue from Cleveland Street to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 1,901.00 | LF | $24.97 | $47,467.97 |
| FLOATING TURBIDITY BARRIER | 45 | LF | $8.88 | $399.60 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 45 | LF | $4.96 | $223.20 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 10 | EA | $87.15 | $871.50 |
| CLEARING & GRUBBING | 1.31 | AC | $11,329.10 | $14,830.82 |
| REGULAR EXCAVATION | 4,435.20 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 6,936.75 | CY | $8.13 | $56,395.75 |
| TYPE B STABILIZATION | 4,294.75 | SY | $3.65 | $15,675.84 |
| OPTIONAL BASE,BASE GROUP 09 | 3,801.60 | SY | $18.00 | $68,428.80 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | 418.18 | TN | $95.60 | $39,977.63 |
| ASPHALTIC CONC FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (1.5" THICKNESS) | 418.18 | TN | $88.50 | $37,008.58 |
| CONC CLASS II, ENDWALLS | 6 | CY | $951.85 | $5,711.10 |
| INLETS, CURB, TYPE P-5, | 6 | EA | $3,987.73 | $23,926.38 |
| INLETS, CURB, TYPE J-5, | 2 | EA | $10,421.77 | $20,843.54 |
| MANHOLES, P-7, | 1 | EA | $3,303.75 | $3,303.75 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 419.00 | LF | $69.57 | $29,149.83 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 37 | LF | $85.96 | $3,180.52 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 910.00 | LF | $126.13 | $114,778.30 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 36 | LF | $323.65 | $11,651.40 |
| CONCRETE CURB & GUTTER, TYPE F | 1,901.00 | LF | $15.98 | $30,377.98 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,056.00 | SY | $35.13 | $37,097.28 |
| PERFORMANCE TURF, SOD | 105.70 | SY | $2.26 | $238.88 |
| CONDUIT, F& I, OPEN TRENCH | 950.00 | LF | $9.97 | $9,471.50 |
| CONDUIT, F& I, DIRECTIONAL BORE | 124.00 | LF | $19.79 | $2,453.96 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 4.00 | EA | $647.78 | $2,591.12 |
| SINGLE POST SIGN, F&I GM, | 4.00 | AS | $336.59 | $1,346.36 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 49.00 | EA | $3.59 | $175.91 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 1.00 | GM | $958.49 | $958.49 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | 55.00 | LF | $0.97 | $53.35 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 2.00 | EA | $35.37 | $70.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 2.00 | EA | $50.23 | $100.46 |

### Missouri Avenue from Cleveland Street to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 0.36 | GM | $987.02 | $355.33 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | 55.00 | LF | $3.83 | $210.65 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 2.00 | EA | $161.93 | $323.86 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 2.00 | EA | $90.05 | $180.10 |
| PAINTED PAVEMENT MARKINGS, STD-OP, YELLOW, SOLID, 6" | 0.36 | GM | $4,183.25 | $1,505.97 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 3,223.00 | LF | $3.00 | $9,669.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 4.00 | EA | $516.66 | $2,066.64 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 4.00 | EA | $3,100.00 | $12,400.00 |
| **SUBTOTAL** | | | | **$626,909.52** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$94,036.43** |
| **MOBILIZATION** | **15%** | | | **$108,141.89** |
| **PROJECT UNKNOWNS** | **35%** | | | **$290,180.74** |
| **TOTAL** | | | | **$1,119,268.58** |

### Gulf to Bay Blvd from Court Street (SR 60) to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 4,752.00 | LF | $1.54 | $7,318.08 |
| FLOATING TURBIDITY BARRIER | 112.5 | LF | $9.29 | $1,045.13 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 112.5 | LF | $5.96 | $670.50 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $2,911.75 | $2,911.75 |
| INLET PROTECTION SYSTEM | 24 | EA | $116.67 | $2,800.08 |
| LITTER REMOVAL | 0.86 | AC | $29.77 | $25.60 |
| MOWING | 0.86 | AC | $45.51 | $39.14 |
| CLEARING & GRUBBING | 1.96 | AC | $11,329.10 | $22,246.23 |
| REGULAR EXCAVATION (3') | 4,752.00 | CY | $5.04 | $23,950.08 |
| EMBANKMENT (Avg 2.5') | 8,184.00 | CY | $8.13 | $66,535.92 |
| TYPE B STABILIZATION | 4,926.24 | SY | $3.65 | $17,980.78 |
| OPTIONAL BASE,BASE GROUP 09 | 3,696.00 | SY | $18.00 | $66,528.00 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 12,672.00 | SY | $2.85 | $36,115.20 |
| SUPERPAVE ASPH CONC, TRAF D, PG76-22,PMA (3") | 2,003.76 | TN | $89.48 | $179,296.44 |
| ASPH CONC FC,TRAFFIC B,FC-12.5,PG 76-22 (1.5") | 1,350.36 | TN | $96.09 | $129,756.09 |
| CONC CLASS II, ENDWALLS | 24 | CY | $951.85 | $22,844.40 |
| INLETS, CURB, TYPE P-5, | 16 | EA | $5,016.02 | $80,256.32 |
| INLETS, CURB, TYPE J-5, | 5 | EA | $9,119.07 | $45,595.35 |
| INLETS, DT BOT, TYPE C, | 2 | EA | $3,256.56 | $6,513.12 |
| INLETS, DT BOT, TYPE D, | 1 | EA | $3,275.49 | $3,275.49 |
| MANHOLES, P-7, | 2 | EA | $4,448.40 | $8,896.80 |
| MANHOLES, J-7, | 1 | EA | $9,021.02 | $9,021.02 |

## Gulf to Bay Blvd from Court Street (SR 60) to Cleveland Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PIPE CULV, OPT MATL, ROUND, 24"S/CD | 1,191.00 | LF | $72.66 | $86,538.06 |
| PIPE CULV, OPT MATL, ROUND, 36"S/CD | 106 | LF | $105.55 | $11,188.30 |
| PIPE CULV, OPT MATL, ROUND, 48"S/CD | 1,738.00 | LF | $167.26 | $290,697.88 |
| PIPE CULV, OPT MATL, ROUND, 54"S/CD | 180 | LF | $214.93 | $38,687.40 |
| CONCRETE CURB & GUTTER, TYPE F | 4,752.00 | LF | $19.80 | $94,089.60 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 2,640.00 | SY | $38.61 | $101,930.40 |
| PERFORMANCE TURF, SOD | 2,112.00 | SY | $2.54 | $5,364.48 |
| CONDUIT, F& I, OPEN TRENCH | 2,376.00 | LF | $9.58 | $22,762.08 |
| CONDUIT, F& I, DIRECTIONAL BORE | 472.00 | LF | $15.38 | $7,259.36 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 16 | EA | $624.74 | $9,995.84 |
| SINGLE POST SIGN, F&I GM, | 11 | AS | $325.66 | $3,582.26 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1 | AS | $966.28 | $966.28 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1 | AS | $4,548.76 | $4,548.76 |
| MULTI-POST SIGN, F&I GM, 51-100 SF | 1 | AS | $6,012.41 | $6,012.41 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 306 | EA | $3.39 | $1,037.34 |
| PAINTED PAVT MARK, STD, WHITE, SOLID, 6" | 1.8 | GM | $958.49 | $1,725.28 |
| PAINTED PAVT MARK, STD, WHITE, SOLID, 24" | 36 | LF | $0.97 | $34.92 |
| PAINTED PAVT MARK, STD, WHITE, SKIP, 6" | 0.225 | GM | $394.87 | $88.85 |
| PAINTED PAVT MARK, STANDARD, WHITE, MESSAGE | 3.00 | EA | $35.37 | $106.11 |
| PAINTED PAVT MARK, STANDARD, WHITE, ARROW | 3.00 | EA | $50.23 | $150.69 |
| PAINTED PAVT MAR, STD, YELLOW, SOLID, 6" | 0.9 | GM | $987.02 | $888.32 |
| THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" | 1.8 | GM | $4,574.84 | $8,234.71 |
| THERMOPLASTIC, STD, WHITE, SOLID, 24" | 36 | LF | $3.83 | $137.88 |
| THERMOPLASTIC, STD-OP, WHITE, SKIP, 6" | 0.225 | GM | $1,365.14 | $307.16 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 3.00 | EA | $161.93 | $485.79 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 3.00 | EA | $90.05 | $270.15 |
| THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6" | 0.9 | GM | $4,183.25 | $3,764.93 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2 | 8,678.00 | LF | $2.25 | $19,525.50 |
| POLE CABLE DIST SYS, CONVENTIONAL | 16 | EA | $732.90 | $11,726.40 |
| LIGHT POLE COMP,F&I,SGL ARM SM, AL,40' | 16 | EA | $6,305.72 | $100,891.52 |
| **SUBTOTAL** | | | | **$1,566,620.17** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$234,993.03** |
| **MOBILIZATION** | **15%** | | | **$270,241.98** |
| **PROJECT UNKNOWNS** | **35%** | | | **$725,149.31** |
| **TOTAL** | | | | **$2,797,004.49** |

**Lakeview Road from South Keene Road to W of Dr. MLK, Jr Ave.**

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 19,747.00 | LF | $24.97 | $493,082.59 |
| FLOATING TURBIDITY BARRIER | 468 | LF | $8.88 | $4,155.84 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 468 | LF | $4.96 | $2,321.28 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 99 | EA | $87.15 | $8,627.85 |
| CLEARING & GRUBBING | 6.80 | AC | $11,329.10 | $77,037.88 |
| REGULAR EXCAVATION | 21,941.33 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 16,090.31 | CY | $8.13 | $130,814.23 |
| TYPE B STABILIZATION | 16,093.97 | SY | $3.65 | $58,742.98 |
| OPTIONAL BASE, BASE GROUP 08 | 15,358.93 | SY | $25.00 | $383,973.33 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 21,941.33 | SY | $2.85 | $62,532.80 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 3,033.39 | TN | $110.03 | $333,763.83 |
| ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-12.5, PG 76-22 | 2,051.51 | TN | $102.00 | $209,254.50 |
| CONC CLASS II, ENDWALLS | 67 | CY | $951.85 | $63,773.95 |
| INLETS, CURB, TYPE P-5, | 67 | EA | $3,987.73 | $267,177.91 |
| INLETS, CURB, TYPE J-5, | 19 | EA | $10,421.77 | $198,013.63 |
| MANHOLES, P-7, | 9 | EA | $3,303.75 | $29,733.75 |
| MANHOLES, J-7, | 2 | EA | $5,085.26 | $10,170.52 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 4,353.00 | LF | $69.57 | $302,838.21 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 389 | LF | $85.96 | $33,438.44 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 9,455.00 | LF | $126.13 | $1,192,559.15 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 374 | LF | $323.65 | $121,045.10 |
| CONCRETE CURB & GUTTER, TYPE F | 19,747.00 | LF | $15.98 | $315,557.06 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 5,485.33 | SY | $35.13 | $192,699.76 |
| PERFORMANCE TURF, SOD | 1,097.48 | SY | $2.26 | $2,480.31 |
| CONDUIT, F& I, OPEN TRENCH | 9,874.00 | LF | $9.97 | $98,443.78 |
| CONDUIT, F& I, DIRECTIONAL BORE | 1,279.00 | LF | $19.79 | $25,311.41 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 39.00 | EA | $647.78 | $25,263.42 |
| SINGLE POST SIGN, F&I GM, | 37.00 | AS | $336.59 | $12,453.83 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 4.00 | AS | $1,081.99 | $4,327.96 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 4.00 | AS | $3,053.00 | $12,212.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 505.00 | EA | $3.59 | $1,812.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 7.00 | GM | $958.49 | $6,709.43 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | 788.00 | LF | $0.97 | $764.36 |

**Lakeview Road from South Keene Road to W of Dr. MLK, Jr Ave.**

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 24.00 | EA | $35.37 | $848.88 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 24.00 | EA | $50.23 | $1,205.52 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 3.74 | GM | $987.02 | $3,691.45 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | 788.00 | LF | $3.83 | $3,018.04 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 24.00 | EA | $161.93 | $3,886.32 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 24.00 | EA | $90.05 | $2,161.20 |
| PAINTED PAVEMENT MARKINGS, STD-OP, YELLOW, SOLID, 6" | 0.36 | GM | $4,183.25 | $1,505.97 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 33,486.00 | LF | $3.00 | $100,458.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 39.00 | EA | $516.66 | $20,149.74 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 39.00 | EA | $3,100.00 | $120,900.00 |
| **SUBTOTAL** | | | | **$4,955,271.33** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$743,290.70** |
| **MOBILIZATION** | **15%** | | | **$854,784.30** |
| **PROJECT UNKNOWNS** | **35%** | | | **$2,293,671.22** |
| **TOTAL** | | | | **$8,847,017.56** |

## Lakeview Road from South Hercules Avenue to South Keene Road

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 5,597.00 | LF | $24.97 | $139,757.09 |
| FLOATING TURBIDITY BARRIER | 133 | LF | $8.88 | $1,181.04 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 133 | LF | $4.96 | $659.68 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 28 | EA | $87.15 | $2,440.20 |
| CLEARING & GRUBBING | 0.96 | AC | $11,329.10 | $10,917.13 |
| REGULAR EXCAVATION | 6,218.67 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 4,560.36 | CY | $8.13 | $37,075.69 |
| TYPE B STABILIZATION | 4,561.39 | SY | $3.65 | $16,649.08 |
| OPTIONAL BASE, BASE GROUP 08 | 4,353.07 | SY | $25.00 | $108,826.67 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 6,218.67 | SY | $2.85 | $17,723.20 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | 859.73 | TN | $110.03 | $94,596.17 |
| ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-12.5, PG 76-22 | 581.45 | TN | $102.00 | $59,307.42 |
| CONC CLASS II, ENDWALLS | 19 | CY | $951.85 | $18,085.15 |
| INLETS, CURB, TYPE P-5, | 19 | EA | $3,987.73 | $75,766.87 |
| INLETS, CURB, TYPE J-5, | 5 | EA | $10,421.77 | $52,108.85 |
| MANHOLES, P-7, | 3 | EA | $3,303.75 | $9,911.25 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,234.00 | LF | $69.57 | $85,849.38 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 110 | LF | $85.96 | $9,455.60 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 2,680.00 | LF | $126.13 | $338,028.40 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 106 | LF | $323.65 | $34,306.90 |
| CONCRETE CURB & GUTTER, TYPE F | 5,597.00 | LF | $15.98 | $89,440.06 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 1,554.67 | SY | $35.13 | $54,615.44 |
| PERFORMANCE TURF, SOD | 311.05 | SY | $2.26 | $702.98 |
| CONDUIT, F& I, OPEN TRENCH | 2,798.00 | LF | $9.97 | $27,896.06 |
| CONDUIT, F& I, DIRECTIONAL BORE | 365.00 | LF | $19.79 | $7,223.35 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 11.00 | EA | $647.78 | $7,125.58 |
| SINGLE POST SIGN, F&I GM, | 11.00 | AS | $336.59 | $3,702.49 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 1.00 | AS | $1,081.99 | $1,081.99 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 1.00 | AS | $3,053.00 | $3,053.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 143.00 | EA | $3.59 | $513.37 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 2.00 | GM | $958.49 | $1,916.98 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | 418.00 | LF | $0.97 | $405.46 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 13.00 | EA | $35.37 | $459.81 |

## Lakeview Road from South Hercules Avenue to South Keene Road

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 13.00 | EA | $50.23 | $652.99 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.06 | GM | $987.02 | $1,046.24 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | 418.00 | LF | $3.83 | $1,600.94 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 13.00 | EA | $161.93 | $2,105.09 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 13.00 | EA | $90.05 | $1,170.65 |
| PAINTED PAVEMENT MARKINGS, STD-OP, YELLOW, SOLID, 6" | 0.36 | GM | $4,183.25 | $1,505.97 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 9,491.00 | LF | $3.00 | $28,473.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 11.00 | EA | $516.66 | $5,683.26 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 11.00 | EA | $3,100.00 | $34,100.00 |
| **SUBTOTAL** | | | | **$1,408,557.90** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$211,283.69** |
| **MOBILIZATION** | **15%** | | | **$242,976.24** |
| **PROJECT UNKNOWNS** | **35%** | | | **$651,986.24** |
| **TOTAL** | | | | **$2,514,804.07** |

## Highland Avenue from Druid Road to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 7,920.00 | LF | $24.97 | $197,762.40 |
| FLOATING TURBIDITY BARRIER | 188 | LF | $8.88 | $1,669.44 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 188 | LF | $4.96 | $932.48 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 40 | EA | $87.15 | $3,486.00 |
| CLEARING & GRUBBING | 2.73 | AC | $11,329.10 | $30,897.55 |
| REGULAR EXCAVATION | 8,800.00 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 6,453.33 | CY | $8.13 | $52,465.60 |
| TYPE B STABILIZATION | 6,454.80 | SY | $3.65 | $23,560.02 |
| OPTIONAL BASE, BASE GROUP 08 | 6,160.00 | SY | $25.00 | $154,000.00 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 19,360.00 | SY | $2.85 | $55,176.00 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | 1,942.60 | TN | $95.60 | $185,712.56 |
| ASPHALTIC CONC FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (1.5" THICKNESS) | 1,403.60 | TN | $88.50 | $124,218.60 |
| CONC CLASS II, ENDWALLS | 27 | CY | $951.85 | $25,699.95 |
| INLETS, CURB, TYPE P-5, | 27 | EA | $3,987.73 | $107,668.71 |
| INLETS, CURB, TYPE J-5, | 8 | EA | $10,421.77 | $83,374.16 |
| MANHOLES, P-7, | 4 | EA | $3,303.75 | $13,215.00 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,746.00 | LF | $69.57 | $121,469.22 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 156 | LF | $85.96 | $13,409.76 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 3,792.00 | LF | $126.13 | $478,284.96 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 150 | LF | $323.65 | $48,547.50 |
| CONCRETE CURB & GUTTER, TYPE F | 7,920.00 | LF | $15.98 | $126,561.60 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 4,400.00 | SY | $35.13 | $154,572.00 |
| PERFORMANCE TURF, SOD | 440.42 | SY | $2.26 | $995.34 |
| CONDUIT, F& I, OPEN TRENCH | 3,960.00 | LF | $9.97 | $39,481.20 |
| CONDUIT, F& I, DIRECTIONAL BORE | 517.00 | LF | $19.79 | $10,231.43 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 16.00 | EA | $647.78 | $10,364.48 |
| SINGLE POST SIGN, F&I GM, | 15.00 | AS | $336.59 | $5,048.85 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 2.00 | AS | $1,081.99 | $2,163.98 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 2.00 | AS | $3,053.00 | $6,106.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 405.00 | EA | $3.59 | $1,453.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 3.00 | GM | $958.49 | $2,875.47 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | 533.00 | LF | $0.97 | $517.01 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | 0.375 | GM | $394.87 | $148.08 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 16.00 | EA | $35.37 | $565.92 |

### Highland Avenue from Druid Road to Drew Street

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 16.00 | EA | $50.23 | $803.68 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.50 | GM | $987.02 | $1,480.53 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | 533.00 | LF | $3.83 | $2,041.39 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 16.00 | EA | $161.93 | $2,590.88 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 16.00 | EA | $90.05 | $1,440.80 |
| PAINTED PAVEMENT MARKINGS, STD-OP, YELLOW, SOLID, 6" | 0.36 | GM | $4,183.25 | $1,505.97 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | 0.38 | GM | $1,200.00 | $450.00 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 13,430.00 | LF | $3.00 | $40,290.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 16.00 | EA | $516.66 | $8,266.56 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 16.00 | EA | $3,100.00 | $49,600.00 |
| **SUBTOTAL** | | | | **$2,212,542.45** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$331,881.37** |
| **MOBILIZATION** | **15%** | | | **$381,663.57** |
| **PROJECT UNKNOWNS** | **35%** | | | **$1,024,130.59** |
| **TOTAL** | | | | **$3,950,217.98** |

## Hercules Avenue from Druid Road to Drew Street., 3960 LF

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| SEDIMENT BARRIER | 7,920.00 | LF | $24.97 | $197,762.40 |
| FLOATING TURBIDITY BARRIER | 188 | LF | $8.88 | $1,669.44 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | 188 | LF | $4.96 | $932.48 |
| SOIL TRACKING PREVENTION DEVICE | 1 | EA | $3,423.56 | $3,423.56 |
| INLET PROTECTION SYSTEM | 40 | EA | $87.15 | $3,486.00 |
| CLEARING & GRUBBING | 2.73 | AC | $11,329.10 | $30,897.55 |
| REGULAR EXCAVATION | 8,800.00 | CY | $5.04 | $12,928.61 |
| EMBANKMENT | 6,453.33 | CY | $8.13 | $52,465.60 |
| TYPE B STABILIZATION | 6,454.80 | SY | $3.65 | $23,560.02 |
| OPTIONAL BASE, BASE GROUP 08 | 6,160.00 | SY | $25.00 | $154,000.00 |
| MILLING EXIST ASPH PAVT, 2" AVG DEPTH | 70,752.00 | SY | $2.85 | $201,643.20 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | 4,907.76 | TN | $95.60 | $469,181.86 |
| ASPHALTIC CONC FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (1.5" THICKNESS) | 4,230.16 | TN | $88.50 | $374,369.16 |
| CONC CLASS II, ENDWALLS | 27 | CY | $951.85 | $25,699.95 |
| INLETS, CURB, TYPE P-5, | 27 | EA | $3,987.73 | $107,668.71 |
| INLETS, CURB, TYPE J-5, | 8 | EA | $10,421.77 | $83,374.16 |
| MANHOLES, P-7, | 4 | EA | $3,303.75 | $13,215.00 |
| MANHOLES, J-7, | 1 | EA | $5,085.26 | $5,085.26 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | 1,746.00 | LF | $69.57 | $121,469.22 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | 156 | LF | $85.96 | $13,409.76 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | 3,792.00 | LF | $126.13 | $478,284.96 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | 150 | LF | $323.65 | $48,547.50 |
| CONCRETE CURB & GUTTER, TYPE F | 7,920.00 | LF | $15.98 | $126,561.60 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | 4,400.00 | SY | $35.13 | $154,572.00 |
| PERFORMANCE TURF, SOD | 440.42 | SY | $2.26 | $995.34 |
| CONDUIT, F& I, OPEN TRENCH | 3,960.00 | LF | $9.97 | $39,481.20 |
| CONDUIT, F& I, DIRECTIONAL BORE | 517.00 | LF | $19.79 | $10,231.43 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 16.00 | EA | $647.78 | $10,364.48 |
| SINGLE POST SIGN, F&I GM, | 15.00 | AS | $336.59 | $5,048.85 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | 2.00 | AS | $1,081.99 | $2,163.98 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | 2.00 | AS | $3,053.00 | $6,106.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 405.00 | EA | $3.59 | $1,453.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 3.00 | GM | $958.49 | $2,875.47 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | 533.00 | LF | $0.97 | $517.01 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | 0.375 | GM | $394.87 | $148.08 |

### Hercules Avenue from Druid Road to Drew Street., 3960 LF

| Description | Total Quantity | Unit | Unit Price | Total Amount |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 16.00 | EA | $35.37 | $565.92 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 16.00 | EA | $50.23 | $803.68 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 1.50 | GM | $987.02 | $1,480.53 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | 533.00 | LF | $3.83 | $2,041.39 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 16.00 | EA | $161.93 | $2,590.88 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 16.00 | EA | $90.05 | $1,440.80 |
| PAINTED PAVEMENT MARKINGS, STD-OP, YELLOW, SOLID, 6" | 0.36 | GM | $4,183.25 | $1,505.97 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | 0.38 | GM | $1,200.00 | $450.00 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 13,430.00 | LF | $3.00 | $40,290.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 16.00 | EA | $516.66 | $8,266.56 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 16.00 | EA | $3,100.00 | $49,600.00 |
| **SUBTOTAL** | | | | **$2,892,629.51** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$433,894.43** |
| **MOBILIZATION** | **15%** | | | **$498,978.59** |
| **PROJECT UNKNOWNS** | **35%** | | | **$1,338,925.88** |
| **TOTAL** | | | | **$5,164,428.41** |

# Appendix F – Long-Term Cost Estimates

**SR60 from Hampton Road to McMullen Booth Road**

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 8332 | $24.97 | $208,050.04 |
| FLOATING TURBIDITY BARRIER | LF | 197.5 | $8.88 | $1,753.80 |
| INLET PROTECTION SYSTEM | EA | 42 | $87.15 | $3,648.97 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 8274 | $27.09 | $224,142.66 |
| CLEARING & GRUBBING | LS/AC | 2.87 | $10,294.39 | $29,536.11 |
| REGULAR EXCAVATION | CY | 7647 | $4.14 | $31,659.41 |
| EMBANKMENT | CY | 4302 | $8.68 | $37,343.29 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 30551 | $2.68 | $81,875.79 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 2520.43 | $88.50 | $223,058.06 |
| CONC CLASS II, ENDWALLS | CY | 14.22 | $951.85 | $13,535.31 |
| INLETS, CURB, TYPE P-5, <10' | EA | 28 | $3,987.73 | $111,656.44 |
| INLETS, CURB, TYPE J-5, <10' | EA | 8 | $5,800.00 | $46,400.00 |
| MANHOLES, TYPE P-7, <10' | EA | 4 | $3,303.75 | $13,215.00 |
| MANHOLES, TYPE J-7, <10' | EA | 2 | $5,085.26 | $10,170.52 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 3950 | $73.94 | $292,063.00 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD | LF | 158 | $85.96 | $13,581.68 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 36"S/CD | LF | 186 | $98.86 | $18,387.96 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD | LF | 4 | $126.13 | $504.52 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 48"S/CD | LF | 404 | $167.26 | $67,573.04 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD | LF | 316 | $323.56 | $102,244.96 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 16685 | $15.98 | $266,626.30 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 3702.00 | $35.13 | $130,051.26 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 2493.39 | $52.90 | $131,900.33 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) (14'x10' AVG SIZE/9=15.56 SY EA) | SY | 8 | $97.85 | $782.80 |
| PERFORMANCE TURF, SOD | SY | 28396 | $2.26 | $64,174.96 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 833 | $3.59 | $2,991.19 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 1.58 | $958.49 | $1,512.53 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 190.00 | $.56 | $106.40 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 182.00 | $.97 | $176.54 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.79 | $394.87 | $311.56 |

## SR60 from Hampton Road to McMullen Booth Road

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 19.00 | $35.37 | $672.03 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 24.00 | $50.23 | $1,205.52 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 1.58 | $987.02 | $1,557.55 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 190.00 | $1.88 | $357.20 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 182.00 | $3.83 | $697.06 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 19.00 | $161.93 | $3,076.67 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 24.00 | $90.05 | $2,161.20 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 1.58 | $4,574.84 | $7,219.24 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.79 | $1,365.14 | $1,077.12 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 1.58 | $4,183.25 | $6,601.30 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 8 | $26,700.00 | $213,600.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 8 | $1,022.50 | $8,180.00 |
| TRASH RECEPTACLE | EA | 8 | $1,060.00 | $8,480.00 |
| CONDUIT, F&I, OPEN TRENCH | LF | 345 | $9.97 | $3,439.65 |
| CONDUIT, F&I, DIRECTIONAL | LF | 1991 | $19.79 | $39,401.89 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 28 | $647.78 | $18,137.84 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | LF | 15234 | $2.00 | $30,468.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 28 | $516.66 | $14,466.48 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | EA | 28 | $3,100.00 | $86,800.00 |
| Mid-Block Crossing using High-intensity Activated crossWalK (HAWK) (from FDOT Long Range Estimate System, MIDXWK-O-05-BB) | LS | 1 | $120,051.93 | $120,051.93 |
| **SUBTOTAL** | | | | **$2,696,685.07** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$404,502.76** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$465,178.18** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$901,821.60** |
| **TOTAL COST** | | | | **$4,518,187.61** |

### SR 60 from US 19 to Highland Ave

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| STAKED TURBIDITY BARRIER-NYL REINF PVC | LF | 14,573.00 | $4.96 | $72,282.08 |
| CLEARING & GRUBBING | AC | 2.34 | $11,329.10 | $26,531.06 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 11,334.56 | $35.13 | $398,182.94 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 3,724.00 | $176.05 | $655,610.20 |
| **SUBTOTAL** | | | | **$1,152,606.27** |
| **MAINTENANCE OF TRAFFIC** | | **10%** | | **$49,699.61** |
| **MOBILIZATION** | | **10%** | | **$54,669.57** |
| **PROJECT UNKNOWNS** | | **20%** | | **$120,273.05** |
| **TOTAL** | | | | **$1,377,248.50** |

### SR60 from Lake Drive to MLK Jr. Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 12260 | $24.97 | $306,132.20 |
| INLET PROTECTION SYSTEM | EA | 42 | $87.15 | $3,660.30 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 5391 | $27.09 | $146,033.16 |
| CLEARING & GRUBBING | LS/AC | 1.86 | $10,294.39 | $19,109.38 |
| REGULAR EXCAVATION | CY | 9536 | $4.14 | $39,477.20 |
| EMBANKMENT | CY | 3179 | $8.68 | $27,589.54 |
| TYPE B STABILIZATION | SY | 9536 | $4.76 | $45,389.24 |
| OPTIONAL BASE, BASE GROUP 14 (TYPE B-12.5) | SY | 3406 | $35.00 | $119,194.44 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 38142.22 | $2.68 | $102,221.16 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 3146.73 | $85.68 | $269,612.11 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 485.29 | $85.68 | $41,579.79 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 3708.65 | $88.50 | $328,215.53 |
| INLETS, CURB, TYPE P-5, <10' | EA | 24 | $3,987.73 | $95,705.52 |
| INLETS, CURB, TYPE P-6, <10' | EA | 12 | $4,652.55 | $55,830.60 |
| INLETS, CURB, TYPE J-5, <10' | EA | 12 | $5,800.00 | $69,600.00 |
| MANHOLE, ADJUST | EA | 26 | $290.73 | $7,558.98 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 144 | $73.94 | $10,647.36 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 13486 | $15.98 | $215,506.28 |
| CONCRETE CURB AND GUTTER, TYPE A | LF | 4904 | $25.44 | $124,757.76 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 4555.47 | $35.13 | $160,033.78 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 3617.86 | $52.90 | $191,384.79 |
| PERFORMANCE TURF, SOD | SY | 4087 | $2.26 | $9,235.87 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 920 | $3.59 | $3,301.01 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 3.48 | $958.49 | $3,338.38 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 1122.00 | $.56 | $628.32 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 2156.00 | $.97 | $2,091.32 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.58 | $394.87 | $229.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 24.00 | $35.37 | $848.88 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 48.00 | $50.23 | $2,411.04 |

## SR60 from Lake Drive to MLK Jr. Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 2.32 | $987.02 | $2,291.83 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 1122.00 | $1.88 | $2,109.36 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 2156.00 | $3.83 | $8,257.48 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 24.00 | $161.93 | $3,886.32 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 48.00 | $90.05 | $4,322.40 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 3.48 | $4,574.84 | $15,933.96 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 0.58 | $1,365.14 | $792.45 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 2.32 | $4,183.25 | $9,713.38 |
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 0.00 | $1,200.00 | $0.00 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | | $26,700.00 | $0.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | | $1,022.50 | $0.00 |
| TRASH RECEPTACLE | EA | | $1,060.00 | $0.00 |
| BENCH, F & I, STEEL | EA | | $1,566.67 | $0.00 |
| UTILITY WORK - JPA/UTILITY, POWER | LS | | $101,564.71 | $0.00 |
| FIRE HYDRANT, RELOCATE | EA | | $1,666.75 | $0.00 |
| CONDUIT, F&I, DIRECTIONAL | LF | 200 | $19.79 | $3,958.00 |
| SIGNAL CABLE, FURNISH & INSTALL | PI | 1 | $5,791.08 | $5,791.08 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 6 | $647.78 | $3,886.68 |
| ELECTRICAL SERVICE WIRE, F&I | LF | 100 | $4.36 | $436.00 |
| PRESTRESSED CONCRETE POLE, REMOVE COMPLETE | EA | | $4,051.45 | $0.00 |
| ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST | EA | | $910.13 | $0.00 |
| STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40' | EA | 2 | $30,664.33 | $61,328.66 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 3 SECTION, 1 WAY, STANDARD | AS | 4 | $870.72 | $3,482.88 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 5 SECTIONS, 1 WAY, STANDARD | AS | | $1,231.57 | $0.00 |
| PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION | AS | 2 | $589.82 | $1,179.64 |
| TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION | AS | 1 | $21,668.31 | $21,668.31 |
| **SUBTOTAL** | | | | **$2,550,361.58** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$382,554.24** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$439,937.37** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$892,626.55** |
| **TOTAL** | | | | **$4,315,479.74** |

### SR60 from MLK Jr. Avenue to Pierce Street

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 8086 | $24.97 | $201,907.42 |
| INLET PROTECTION SYSTEM | EA | 40 | $87.15 | $3,486.00 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 5391 | $27.09 | $146,033.16 |
| CLEARING & GRUBBING | LS/AC | 1.86 | $10,294.39 | $19,109.38 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 7187.56 | $35.13 | $252,498.83 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) (14'x10' AVG SIZE/9=15.56 SY EA) | SY | 93.36 | $97.85 | $9,135.28 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 1004 | $176.05 | $176,754.20 |
| PERFORMANCE TURF, SOD | SY | 3594 | $2.26 | $8,121.94 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 6 | $26,700.00 | $160,200.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 6 | $1,022.50 | $6,135.00 |
| TRASH RECEPTACLE | EA | 6 | $1,060.00 | $6,360.00 |
| BENCH, F & I, STEEL | EA | 27 | $1,566.67 | $42,300.09 |
| **SUBTOTAL** | | | | **$1,032,041.29** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$51,602.06** | **$51,602.06** |
| **MOBILIZATION** | **LS** | **15%** | | **$154,806.19** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$178,027.12** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$361,214.45** |
| **TOTAL** | | | | **$1,777,691.11** |

## Drew Street from McMullen Booth Rd to Hampton Road

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| INLET PROTECTION SYSTEM | EA | 29 | $87.15 | $2,527.35 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 23689 | $2.68 | $63,486.52 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 1954.33 | $88.50 | $172,958.21 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) | SY | 7 | $97.85 | $684.95 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 1205 | $3.59 | $4,325.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 2.31 | $958.49 | $2,214.69 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 530.00 | $.56 | $296.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $.97 | $649.90 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 1.55 | $394.87 | $613.25 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 7.00 | $35.37 | $247.59 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 47.00 | $50.23 | $2,360.81 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 1.55 | $987.02 | $1,532.87 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 530.00 | $1.88 | $996.40 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $3.83 | $2,566.10 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 7.00 | $161.93 | $1,133.51 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 47.00 | $90.05 | $4,232.35 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 2.31 | $4,574.84 | $10,570.65 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 1.55 | $1,365.14 | $2,120.10 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 1.55 | $4,183.25 | $6,496.71 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 7 | $26,700.00 | $186,900.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 7 | $1,022.50 | $7,157.50 |
| TRASH RECEPTACLE | EA | 7 | $1,060.00 | $7,420.00 |
| **SUBTOTAL** | | | | **$481,492.22** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$24,074.61** | **$24,074.61** |
| **MOBILIZATION** | **LS** | **15%** | | **$72,223.83** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$83,057.41** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$168,522.28** |
| **TOTAL** | | | | **$829,370.34** |

## Drew Street from Hampton Road to Saturn Avenue

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| INLET PROTECTION SYSTEM | EA | 108 | $87.15 | $9,412.20 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 93595 | $2.68 | $250,834.60 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 4446.27 | $85.68 | $380,956.41 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (2" THICKNESS) | TN | 4446.27 | $85.68 | $380,956.41 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 2475.26 | $88.50 | $219,060.51 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) (14'x10' AVG SIZE/9=15.56 SY EA) | SY | 373.44 | $97.85 | $36,541.10 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 2882 | $176.05 | $507,376.10 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 654 | $3.59 | $2,346.54 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 11.78 | $958.49 | $11,295.30 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 2641 | $.56 | $1,478.96 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 2641 | $.97 | $2,561.77 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $394.87 | $1,825.97 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 40 | $35.37 | $1,414.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 107 | $50.23 | $5,374.61 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 4.62 | $987.02 | $4,564.22 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $449.59 | $2,079.01 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" | LF | 11.78 | $1.88 | $22.15 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 2641 | $3.83 | $10,115.03 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 40 | $161.93 | $6,477.20 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 107 | $90.05 | $9,635.35 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 11.78 | $4,574.84 | $53,912.06 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $1,365.14 | $6,312.74 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 4.62 | $4,183.25 | $19,344.36 |
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 4.62 | $1,200.00 | $5,549.09 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 24 | $26,700.00 | $640,800.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 24 | $1,022.50 | $24,540.00 |
| TRASH RECEPTACLE | EA | 24 | $1,060.00 | $25,440.00 |
| **SUBTOTAL** | | | | **$2,620,226.51** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$393,033.98** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$451,989.07** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$917,079.28** |
| **TOTAL** | | | | **$4,432,328.84** |

## Drew Street from Myrtle Avenue to Saturn Avenue - Option A (Road Diet)

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 20064 | $24.97 | $500,998.08 |
| FLOATING TURBIDITY BARRIER | LF | 475 | $8.88 | $4,218.00 |
| INLET PROTECTION SYSTEM | EA | 34 | $87.15 | $2,963.10 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 11124 | $27.09 | $301,349.16 |
| CLEARING & GRUBBING | LS/AC | 5.75 | $10,294.39 | $59,192.74 |
| EMBANKMENT | CY | 1543.3 | $8.68 | $13,395.84 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 33370 | $2.68 | $89,431.60 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 2753.03 | $88.50 | $243,643.16 |
| INLETS, CURB, TYPE P-5, <10' | EA | 68 | $3,987.73 | $271,165.64 |
| INLETS, CURB, TYPE J-5, <10' | EA | 19 | $5,800.00 | $110,200.00 |
| MANHOLES, TYPE P-7, <10' | EA | 10 | $3,303.75 | $33,037.50 |
| MANHOLES, TYPE J-7, <10' | EA | 3 | $5,085.26 | $15,255.78 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 4423 | $73.94 | $327,036.62 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD | LF | 396 | $85.96 | $34,040.16 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD | LF | 106 | $126.13 | $13,369.78 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD | LF | 380 | $323.56 | $122,952.80 |
| CONCRETE CURB AND GUTTER, TYPE E | LF | 1808 | $15.97 | $28,873.76 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 13931 | $15.98 | $222,617.38 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 14528 | $35.13 | $510,368.64 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 6306 | $52.90 | $333,598.51 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) (14'x10' AVG SIZE/9=15.56 SY EA) | SY | 24 | $97.85 | $2,348.40 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 8470 | $176.05 | $1,491,143.50 |
| DETECTABLE WARNINGS | SF | 84 | $28.96 | $2,432.64 |
| PERFORMANCE TURF, SOD | SY | 11574 | $2.26 | $26,157.24 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 501 | $3.59 | $1,796.97 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 5.28 | $958.49 | $5,057.85 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 2583.00 | $.56 | $1,446.48 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 3582.00 | $.97 | $3,474.54 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 27.00 | $50.23 | $1,356.21 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 3.79 | $987.02 | $3,742.82 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 2583.00 | $1.88 | $4,856.04 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 3582.00 | $3.83 | $13,719.06 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 27.00 | $90.05 | $2,431.35 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 5.28 | $4,574.84 | $24,140.95 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 3.79 | $4,183.25 | $15,863.07 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 24 | $26,700.00 | $640,800.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 24 | $1,022.50 | $24,540.00 |

## Drew Street from Myrtle Avenue to Saturn Avenue - Option A (Road Diet)

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| TRASH RECEPTACLE | EA | 24 | $1,060.00 | $25,440.00 |
| UTILITY WORK - JPA/UTILITY, POWER | LS | 3 | $101,564.71 | $304,694.13 |
| FIRE HYDRANT, RELOCATE | EA | 3 | $1,666.75 | $5,000.25 |
| CONDUIT, F&I, DIRECTIONAL | LF | 200 | $19.79 | $3,958.00 |
| SIGNAL CABLE, FURNISH & INSTALL | PI | 2 | $5,791.08 | $11,582.16 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 6 | $647.78 | $3,886.68 |
| ELECTRICAL SERVICE WIRE, F&I | LF | 50 | $4.36 | $218.00 |
| ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST | EA | 1 | $4,051.45 | $4,051.45 |
| PRESTRESSED CONCRETE POLE, REMOVE COMPLETE | EA | 1 | $910.13 | $910.13 |
| STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40' | EA | 2 | $30,664.33 | $61,328.66 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 3 SECTION, 1 WAY, STANDARD | AS | 3 | $870.72 | $2,612.16 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 5 SECTIONS, 1 WAY, STANDARD | AS | 1 | $1,231.57 | $1,231.57 |
| PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION | AS | 2 | $589.82 | $1,179.64 |
| TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION | AS | 1 | $21,668.31 | $21,668.31 |
| SIGN PANEL, F&I GM, UP TO 12 SF | EA | 2 | $256.15 | $512.30 |
| INTERNAL ILLUM SIGN, F&I OM, 12-18 SF | EA | 2 | $3,568.78 | $7,137.56 |
| CONDUIT, F&I, OPEN TRENCH | LF | 10032 | $9.97 | $100,019.04 |
| CONDUIT, F&I, DIRECTIONAL | LF | 1991 | $19.79 | $39,401.89 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 67 | $647.78 | $43,401.26 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | LF | 36640 | $2.00 | $73,280.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 67 | $516.66 | $34,616.22 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | EA | 67 | $3,100.00 | $207,700.00 |
| **SUBTOTAL** | | | | **$6,456,844.79** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$58,381.50** | **$58,381.50** |
| **MOBILIZATION** | **LS** | **15%** | | **$893,763.96** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$1,027,828.55** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$2,085,449.23** |
| **TOTAL** | | | | **$10,522,268.03** |

## Drew Street from Saturn Avenue to Myrtle Avenue - Option B

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 4000 | $24.97 | $99,880.00 |
| FLOATING TURBIDITY BARRIER | LF | 200 | $8.88 | $1,776.00 |
| INLET PROTECTION SYSTEM | EA | 34 | $87.15 | $2,963.10 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 444.44 | $27.09 | $12,039.88 |
| CLEARING & GRUBBING | LS/AC | 2.81 | $10,294.39 | $28,927.24 |
| REGULAR EXCAVATION | CY | 7466.67 | $4.14 | $30,912.01 |
| EMBANKMENT | CY | 2488.89 | $8.68 | $21,603.57 |
| TYPE B STABILIZATION | SY | 7466.67 | $4.76 | $35,541.35 |
| OPTIONAL BASE, BASE GROUP 06 | SY | 6400 | $15.28 | $97,792.00 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 33644 | $2.68 | $90,165.92 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (2" THICKNESS) | TN | 704 | $85.68 | $60,318.72 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 3303.63 | $88.50 | $292,371.26 |
| INLETS, CURB, TYPE P-5, <10' | EA | 10 | $3,987.73 | $39,877.30 |
| INLETS, CURB, TYPE P-6, <10' | EA | 4 | $4,652.55 | $18,610.20 |
| MANHOLES, TYPE P-7, <10' | EA | 2 | $3,303.75 | $6,607.50 |
| MANHOLES, TYPE J-7, <10' | EA | 1 | $5,085.26 | $5,085.26 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 698 | $73.94 | $51,610.12 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD | LF | 62 | $85.96 | $5,329.52 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 36"S/CD | LF | 17 | $98.86 | $1,680.62 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD | LF | 17 | $126.13 | $2,144.21 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD | LF | 17 | $323.56 | $5,500.52 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 3200 | $15.98 | $51,136.00 |
| CONCRETE CURB, TYPE A | LF | 3200 | $25.44 | $81,408.00 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 1400 | $35.13 | $49,182.00 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 6" | SY | 488.9 | $52.90 | $25,862.81 |
| BUS SHELTER PAD - CONCRETE (6" THICKNESS) | SY | 24 | $97.85 | $2,348.40 |
| PATTEREND PAVEMENT - VEHICULAR AREAS | SY | 496.67 | $176.05 | $87,438.17 |
| PERFORMANCE TURF, SOD | SY | 3600 | $2.26 | $8,136.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 1001 | $3.59 | $3,593.95 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 4.32 | $958.49 | $4,142.93 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 530.00 | $.56 | $296.80 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $.97 | $649.90 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 3.79 | $394.87 | $1,497.36 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 2.00 | $35.37 | $70.74 |

## Drew Street from Saturn Avenue to Myrtle Avenue - Option B

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 11.00 | $50.23 | $552.53 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 3.79 | $987.02 | $3,742.82 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID,12" | LF | 530.00 | $1.88 | $996.40 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 670.00 | $3.83 | $2,566.10 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 2.00 | $161.93 | $323.86 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 11.00 | $90.05 | $990.55 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 4.32 | $4,574.84 | $19,774.05 |
| THERMOPLASTIC, STD-OPT, WHITE, SKIP, 6" (10'-30' SKIP) | GM | 3.79 | $1,365.14 | $5,176.67 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 3.79 | $4,183.25 | $15,863.07 |
| BUS SHELTER, F&I, UP TO 50 SF | SY | 24 | $26,700.00 | $640,800.00 |
| BICYCLE RACK (2-6 BICYCLES) | SY | 24 | $1,022.50 | $24,540.00 |
| TRASH RECEPTACLE | EA | 24 | $1,060.00 | $25,440.00 |
| UTILITY WORK - JPA/UTILITY, POWER | LS | 3 | $101,564.71 | $304,694.13 |
| FIRE HYDRANT, RELOCATE | EA | 3 | $1,666.75 | $5,000.25 |
| CONDUIT, F&I, DIRECTIONAL | LF | 200 | $19.79 | $3,958.00 |
| SIGNAL CABLE, FURNISH & INSTALL | PI | 2 | $5,791.08 | $11,582.16 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 6 | $647.78 | $3,886.68 |
| ELECTRICAL SERVICE WIRE, F&I | LF | 50 | $4.36 | $218.00 |
| PRESTRESSED CONCRETE POLE, REMOVE COMPLETE | EA | 1 | $4,051.45 | $4,051.45 |
| ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST | EA | 1 | $910.13 | $910.13 |
| STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40' | EA | 2 | $30,664.33 | $61,328.66 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 3 SECTION, 1 WAY, STANDARD | AS | 3 | $870.72 | $2,612.16 |
| TRAFFIC SIGNAL, F&I ALUMINUM, 5 SECTIONS, 1 WAY, STANDARD | AS | 1 | $1,231.57 | $1,231.57 |
| PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION | AS | 2 | $589.82 | $1,179.64 |
| TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION | AS | 1 | $21,668.31 | $21,668.31 |
| SIGN PANEL, F&I GM, UP TO 12 SF | EA | 2 | $256.15 | $512.30 |
| INTERNAL ILLUM SIGN, F&I OM, 12-18 SF | EA | 2 | $3,568.78 | $7,137.56 |
| CONDUIT, F&I, OPEN TRENCH | LF | 10032 | $9.97 | $100,019.04 |
| CONDUIT, F&I, DIRECTIONAL | LF | 1991 | $19.79 | $39,401.89 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 67 | $647.78 | $43,401.26 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | LF | 36640 | $2.00 | $73,280.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 67 | $516.66 | $34,616.22 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | EA | 67 | $3,100.00 | $207,700.00 |

### Drew Street from Saturn Avenue to Myrtle Avenue - Option B

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SUBTOTAL | | | | $2,895,654.82 |
| INITIAL CONTINGENCY AMOUNT, DO NOT BID | LS | 1 | $50,000.00 | $50,000.00 |
| MOBILIZATION | LS | 15% | | $434,348.22 |
| MAINTENANCE OF TRAFFIC | LS | 15% | | $499,500.46 |
| PROJECT UNKNOPWNS | LS | 35% | | $1,013,479.19 |
| TOTAL | | | | $4,892,982.69 |

## Drew Street from N. Osceola Ave to Myrtle Ave

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 7556 | $2.68 | $20,250.08 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 625.17 | $88.50 | $55,327.55 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 86 | $3.59 | $308.74 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 1.36 | $958.49 | $1,300.68 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12" | LF | 260.00 | $.56 | $145.60 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 260.00 | $.97 | $252.20 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6" (10'-30' SKIP) | GM | | $394.87 | $0.00 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 9.00 | $35.37 | $318.33 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 3.00 | $50.23 | $150.69 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 0.65 | $987.02 | $637.45 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 0.65 | $449.59 | $290.36 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" | LF | 260.00 | $1.88 | $488.80 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 260.00 | $3.83 | $995.80 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 9.00 | $161.93 | $1,457.37 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 3.00 | $90.05 | $270.15 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 1.36 | $4,574.84 | $6,208.09 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 0.65 | $4,183.25 | $2,701.68 |
| THERMOPLASTIC, STD-OPT, YELLOW, SKIP, 6" (10'-30' SKIP) | GM | 0.65 | $1,200.00 | $775.00 |
| **SUBTOTAL** | | | | **$91,878.57** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$4,593.93** | **$4,593.93** |
| **MOBILIZATION** | **LS** | **15%** | | **$13,781.79** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$15,849.05** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$32,157.50** |
| **TOTAL** | | | | **$158,260.83** |

## Druid Road from Orange Avenue to US19

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 46992 | 24.97 | $ 1,173,390.24 |
| FLOATING TURBIDITY BARRIER | LF | 1113 | 8.88 | $ 9,883.44 |
| STAKED TURBIDITY BARRIER-NYL REINF PVC | LF | 1113 | 4.96 | $ 5,520.48 |
| SOIL TRACKING PREVENTION DEVICE | EA | 1 | 3423.56 | $ 3,423.56 |
| INLET PROTECTION SYSTEM | EA | 236 | 87.15 | $ 20,567.40 |
| CLEARING & GRUBBING | AC | 26.9697 | 11329.1 | $ 305,542.39 |
| REGULAR EXCAVATION | CY | 52213.33 | 5.04 | $ 263,155.20 |
| EMBANKMENT | CY | 27847.11 | 8.13 | $ 226,397.01 |
| TYPE B STABILIZATION | SY | 45268.96 | 3.65 | $ 165,231.70 |
| OPTIONAL BASE, BASE GROUP 08 | SY | 31328 | 25 | $ 783,200.00 |
| MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH | SY | 59840 | 2.68 | $ 160,371.20 |
| SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B, PG76-22, PMA | TN | 8382.88 | 110.03 | $ 922,368.29 |
| ASPHALT CONCRETE FRICTION COURSE,TRAFFIC B, FC-12.5, PG 76-22 | TN | 5014.24 | 102 | $ 511,452.48 |
| CONC CLASS II, ENDWALLS | CY | 160 | 951.85 | $ 152,296.00 |
| INLETS, CURB, TYPE P-5, | EA | 160 | 3987.73 | $ 638,036.80 |
| INLETS, CURB, TYPE J-5, | EA | 45 | 10421.77 | $ 468,979.65 |
| MANHOLES, P-7, | EA | 22 | 3303.75 | $ 72,682.50 |
| MANHOLES, J-7, | EA | 4 | 5085.26 | $ 20,341.04 |
| PIPE CULV, OPT MATL, ROUND, 18" S/CD | LF | 10360 | 69.57 | $ 720,745.20 |
| PIPE CULV, OPT MATL, ROUND, 30" S/CD | LF | 926 | 85.96 | $ 79,598.96 |
| PIPE CULV, OPT MATL, ROUND, 42" S/CD | LF | 22499 | 126.13 | $ 2,837,798.87 |
| PIPE CULV, OPT MATL, ROUND, 54" S/CD | LF | 890 | 323.65 | $ 288,048.50 |
| CONCRETE CURB & GUTTER, TYPE F | LF | 46992 | 15.98 | $ 750,932.16 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 26106.67 | 35.13 | $ 917,127.20 |
| PERFORMANCE TURF, SOD | SY | 2613.139 | 2.26 | $ 5,905.69 |
| CONDUIT, F& I, OPEN TRENCH | LF | 23496 | 9.97 | $ 234,255.12 |
| CONDUIT, F& I, DIRECTIONAL BORE | LF | 3066 | 19.79 | $ 60,676.14 |
| PULL & SPLICE BOX, F&I, 13" X 24" | EA | 93 | 647.78 | $ 60,243.54 |
| SINGLE POST SIGN, F&I GM, | AS | 89 | 336.59 | $ 29,956.51 |
| SINGLE POST SIGN, F&I GM, 12-20 SF | AS | 9 | 1081.99 | $ 9,737.91 |
| MULTI-POST SIGN, F&I GM, 31-50 SF | AS | 9 | 3053 | $ 27,477.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 1202 | 3.59 | $ 4,315.18 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 8.9 | 958.49 | $ 8,530.56 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 1127 | 0.97 | $ 1,093.19 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 50 | 35.37 | $ 1,768.50 |

## Druid Road from Orange Avenue to US19

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 36 | 50.23 | $ 1,808.28 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 8.9 | 987.02 | $ 8,784.48 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 1127 | 3.83 | $ 4,316.41 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 50 | 161.93 | $ 8,096.50 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 36 | 90.05 | $ 3,241.80 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 8.9 | 4183.25 | $ 37,230.93 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | LF | 79686 | 3 | $ 239,058.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 93 | 516.66 | $ 48,049.38 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | EA | 93 | 3100 | $ 288,300.00 |
| Extension of 2-8 ft x 8 ft, 1-10.5' x 10.5' Box Culverts (Stevenson Creek) | LS | 1 | 349263.3 | $ 349,263.30 |
| Extension of 2-12 ft x 8 ft Box Culverts (Allen Creek) | LS | 1 | 170440.9 | $ 170,440.88 |
| **SUBTOTAL** | | | | **$ 13,099,639.58** |
| **MAINTENANCE OF TRAFFIC** | | **15%** | | **$ 1,964,945.94** |
| **MOBILIZATION** | | **15%** | | **$ 2,259,687.83** |
| **PROJECT UNKNOWNS** | | **35%** | | **$ 6,063,495.67** |
| **TOTAL** | | | | **$ 23,387,769.01** |

### Cleveland Street from Belcher Road to Hillcrest Avenue

| Description | Total Quantity | Unit | Weighted Avg. Unit Price | Total Amount |
|---|---|---|---|---|
| CLEARING & GRUBBING | 2.67 | AC | $11,329.10 | $30,210.93 |
| EMBANKMENT (1') | 2,151.11 | CY | $8.13 | $17,488.53 |
| PATTEREND PAVEMENT - VEHICULAR AREAS (MEDIAN) | 12730.67 | SY | $176.05 | $2,241,233.87 |
| CONDUIT, F& I, OPEN TRENCH | 10,560.00 | LF | $9.97 | $105,283.20 |
| CONDUIT, F& I, DIRECTIONAL BORE | 1,378.00 | LF | $19.79 | $27,270.62 |
| PULL & SPLICE BOX, F&I, 13" X 24" | 42.00 | EA | $647.78 | $27,206.76 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | 540.00 | EA | $3.59 | $1,938.60 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | 4.00 | GM | $958.49 | $3,833.96 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | 122.00 | EA | $35.37 | $4,315.14 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | 244.00 | EA | $50.23 | $12,256.12 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | 4.00 | GM | $987.02 | $3,948.08 |
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | 122.00 | EA | $161.93 | $19,755.46 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | 244.00 | EA | $90.05 | $21,972.20 |
| THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" | 4.00 | NM | $4,300.00 | $17,200.00 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | 4.00 | GM | $4,183.25 | $16,733.00 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO. | 35,814.00 | LF | $3.00 | $107,442.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | 42.00 | EA | $516.66 | $21,699.72 |
| LIGHT POLE COMP. F&I, SGL ARM SM, AL, 40' | 42.00 | EA | $3,100.00 | $130,200.00 |
| **SUBTOTAL** | | | | **$2,809,988.19** |
| **MAINTENANCE OF TRAFFIC** | **15%** | | | **$421,498.23** |
| **MOBILIZATION** | **15%** | | | **$484,722.96** |
| **PROJECT UNKNOWNS** | **25%** | | | **$929,052.35** |
| **TOTAL** | | | | **$4,645,261.73** |

**Park Blvd from SR60 from Drew Street**

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| SEDIMENT BARRIER | LF | 5850 | $24.97 | $146,074.50 |
| INLET PROTECTION SYSTEM | EA | 18 | $87.15 | $1,568.70 |
| REMOVAL OF EXISTING CONCRETE PAVEMENT | SY | 3250 | $27.09 | $88,042.50 |
| CLEARING & GRUBBING | LS/AC | 7.02 | $10,294.39 | $72,315.96 |
| REGULAR EXCAVATION | CY | 15015.56 | $4.14 | $62,164.40 |
| EMBANKMENT | CY | 5005.19 | $8.68 | $43,445.01 |
| TYPE B STABILIZATION | SY | 13224 | $4.76 | $62,948.36 |
| OPTIONAL BASE, BASE GROUP 01 | SY | 3927 | $18.75 | $73,625.00 |
| OPTIONAL BASE, BASE GROUP 06 | SY | 9436 | $15.28 | $144,175.29 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC A, (1" THICKNESS) | TN | 215.97 | $98.14 | $21,194.97 |
| SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (1.5" THICKNESS) | TN | 778 | $85.68 | $66,696.17 |
| ASPHALTIC CONC FRICTION COURSE, FC-12.5, PG 76-22 (1.5" THICKNESS) | TN | 778 | $88.50 | $68,891.35 |
| INLETS, CURB, TYPE P-5, <10' | EA | 20 | $3,987.73 | $79,754.60 |
| INLETS, CURB, TYPE J-5, <10' | EA | 6 | $5,800.00 | $34,800.00 |
| MANHOLES, TYPE P-7, <10' | EA | 3 | $3,303.75 | $9,911.25 |
| MANHOLES, TYPE J-7, <10' | EA | 1 | $5,085.26 | $5,085.26 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 24"S/CD | LF | 1280 | $73.94 | $94,643.20 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD | LF | 114 | $85.96 | $9,799.44 |
| PIPE CULVERT, OPT MATERIAL, ROUND, 36"S/CD | LF | 2780 | $98.86 | $274,830.80 |
| CONCRETE CURB AND GUTTER, TYPE F | LF | 6309 | $15.98 | $100,817.82 |
| CONCRETE CURB AND GUTTER, TYPE A | LF | 5265 | $25.44 | $133,941.60 |
| CONCRETE TRAFFIC SEPARATOR, SPECIAL-VARIABLE WIDTH | SY | 147.78 | $78.83 | $11,649.32 |
| CONCRETE SIDEWALK AND DRIVEWAYS, 4" | SY | 1963.33 | $35.13 | $68,971.90 |
| PATTERNED PAVEMENT - VEHICULAR AREAS | SY | 242 | $176.05 | $42,604.10 |
| DETECTABLE WARNINGS | SF | 22 | $28.96 | $637.12 |
| PERFORMANCE TURF, SOD | SY | 1300 | $2.26 | $2,938.00 |
| RETRO-REFLECTIVE PAVEMENT MARKERS | EA | 146 | $3.59 | $525.04 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6" | GM | 1.11 | $958.49 | $1,061.96 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24" | LF | 60.00 | $.97 | $58.20 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE | EA | 16.00 | $35.37 | $565.92 |
| PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 49.00 | $50.23 | $2,461.27 |
| PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6" | GM | 1.11 | $987.02 | $1,093.57 |
| THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" | LF | 60.00 | $3.83 | $229.80 |

**Park Blvd from SR60 from Drew Street**

| Item Description | Unit | Quantity | Unit Price | Total Cost |
|---|---|---|---|---|
| THERMOPLASTIC, STANDARD, WHITE, MESSAGE | EA | 16.00 | $161.93 | $2,590.88 |
| THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 49.00 | $90.05 | $4,412.45 |
| THERMOPLASTIC, STD-OPT, WHITE, SOLID, 6" | GM | 1.11 | $4,574.84 | $5,068.71 |
| THERMOPLASTIC, STD-OPT,YELLOW, SOLID, 6" | GM | 1.11 | $4,183.25 | $4,634.85 |
| CONDUIT, F&I, OPEN TRENCH | LF | 2925 | $9.97 | $29,162.25 |
| CONDUIT, F&I, DIRECTIONAL | LF | 38 | $19.79 | $752.02 |
| PULL & JUNCTION BOX, F&I, PULL BOX | EA | 12 | $647.78 | $7,773.36 |
| LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2 | EA | 9850 | $2.00 | $19,700.00 |
| POLE CABLE DIST SYSY, CONVENTIONAL | EA | 12 | $516.66 | $6,199.92 |
| LIGHT POLE COMP, F&I, SGL ARM SM,AL, 40 | EA | 12 | $3,100.00 | $37,200.00 |
| **SUBTOTAL** | | | | **$1,845,016.82** |
| **INITIAL CONTINGENCY AMOUNT, DO NOT BID** | **LS** | **1** | **$50,000.00** | **$50,000.00** |
| **MOBILIZATION** | **LS** | **15%** | | **$276,752.52** |
| **MAINTENANCE OF TRAFFIC** | **LS** | **15%** | | **$318,265.40** |
| **PROJECT UNKNOWNS** | **LS** | **35%** | | **$645,755.89** |
| **TOTAL** | | | | **$3,135,790.64** |