



# Complete Drew Street Concept Plan

FINAL REPORT  
September 2018



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# 1 INTRODUCTION



# Introduction

## Introduction

Drew Street is an important east-west corridor in Clearwater that has changed significantly from the early 20th century when it was a local two-lane roadway that included a dairy farm, a winery, orange groves, and rolling hills. Over time, it grew to include established neighborhoods and local commercial shops. It also served as a direct route to connect to the old Memorial Causeway Bridge and onto Clearwater Beach and as the city grew, Drew Street was widened to four lanes.

Downtown Clearwater vehicular traffic patterns were changed with the completion of the Clearwater Memorial Causeway in 2005, and Drew Street no longer has a direct connection to the beach. The change placed more of an impetus on creating a vibrant waterfront north of the bridge which has continued today with Imagine Clearwater, a community vision for the Downtown Waterfront.

Over time, the local community has asked the City and the Florida Department of Transportation (FDOT) to look at ways to improve Drew Street. The desire for change has been based on safety concerns with a large number of crashes, as well as economic development goals. In writing the next chapter of Drew Street's future, the challenge is how to best balance competing mobility desires while also addressing the surrounding land use context.



A view of Drew Street  
looking west

## Why are we doing this?

The Complete Drew Street Concept Plan began as a request by community and neighborhood groups who asked the City of Clearwater to apply for a planning grant as part of Forward Pinellas's new Complete Streets incentive program. This group had identified a segment of Drew Street that they believed was dangerous and appropriate for further study. In the grant application, the City expanded the study area to include approximately four miles of Drew Street from North Osceola Avenue and US 19, connecting the two important activity centers of Downtown and the US 19 Activity Center. The application was selected in May 2017 as part of a competitive process.

The grant application listed the following goals:

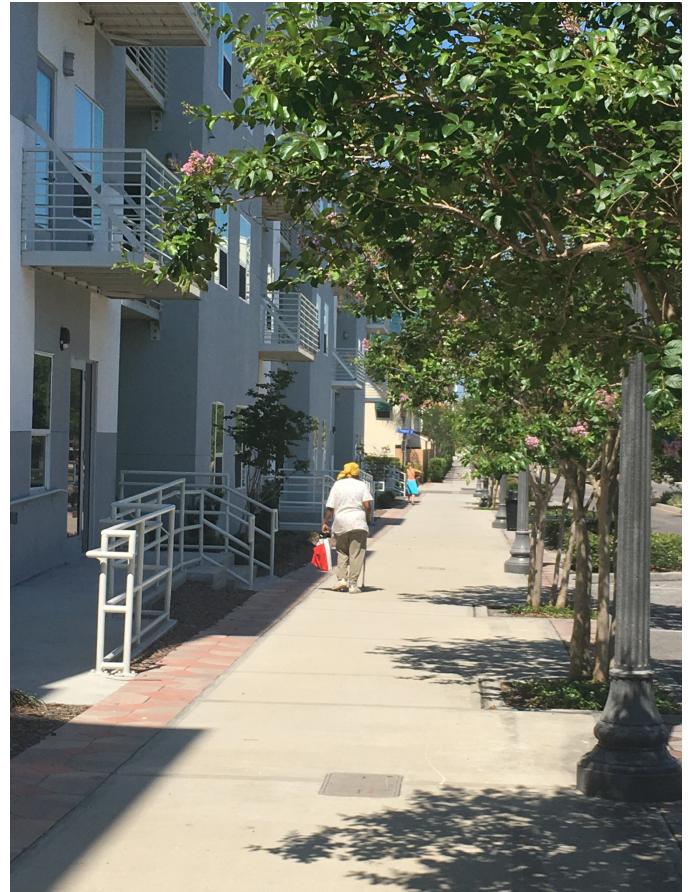
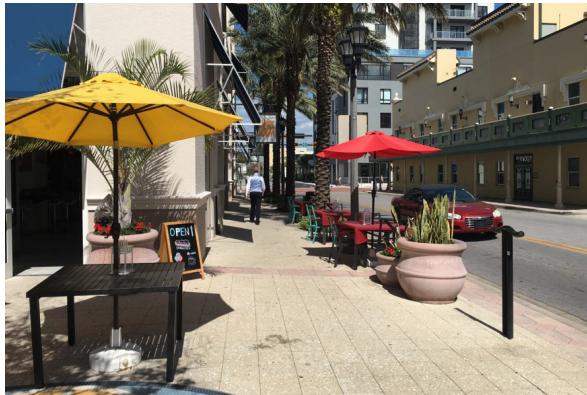
1. **Safer Drew Street (Vision Zero):** An expected outcome of Complete Streets improvements along Drew Street is the reduction of crashes and related injuries.
2. **Better Mobility & Accessibility:** A focus on all transportation modes is a goal for improving Drew Street, including more convenient means of crossing Drew Street and enhancing the trail connections along both ends of the corridor.
3. **Stronger Local Economy:** Complete Streets improvements would complement the land use planning efforts in this area including a focus on the redevelopment of the activity centers located on the east side of the corridor.

# Introduction

## What are Complete Streets?

The grant application sought to achieve a plan that responds to the public's request for a safer corridor with balanced mobility. As part of the application, existing needs were identified along Drew Street and Complete Streets improvements were then identified as part of this project to improve mobility and safety.

“Complete Streets” are defined as streets that are designed to accommodate all users, including pedestrians, bicyclists, motorists, and transit users of all ages and abilities. They are designed, operated, and maintained to enable safe and comfortable travel for all users.



# Introduction

## What is the Complete Drew Street Concept Plan?

After being awarded the grant, the City created the Complete Drew Street Concept Plan process. The objective is to identify preferred complete streets improvements and concepts between North Osceola Avenue and US 19.

The intention of the concepts is to evaluate how Drew Street could be reconfigured to balance accessibility for all modes of transportation, enhance safety, comfort and function for all users and encourage economic revitalization and reinvestment along Drew Street and within surrounding neighborhoods.

Ultimately the key goals of the concepts and improvements of this project are the following:

- Aid the transformation of Drew Street/SR-590 into a vibrant, sustainable, and multi-modal spine
- Develop a concept plan to improve safety and reduce the number of crashes
- Increase accessibility and connectivity with surrounding land uses
- Support existing businesses and future growth
- Promote active living by improving access to trails

Prior to developing concepts, the existing conditions including the corridor context and safety concerns along the corridor were reviewed in greater detail. Significant stakeholder involvement throughout the process helped better clarify the existing conditions and issues on Drew Street as described in the next section.



Pinellas Trail near Drew Street. Part of the process was to promote better access to trails.

# EXISTING CONDITIONS



# Existing Conditions

## Existing Conditions

Through this project, stakeholder meetings, public input, and technical analyses were used to analyze the existing conditions along Drew Street to identify areas of need and provide recommendations to improve the corridor for all users.

The study area identified in the grant application is between North Osceola Avenue and US 19. Throughout the corridor, the character of the roadway changes. The corridor currently includes a mix of urban, residential, and commercial uses with anticipated increases in density and intensity in certain areas as identified in the Future Land Use Plan.

Drew Street serves a wide variety of users. Both local and regional traffic use Drew Street and several transit routes run along the corridor. Bicyclists and pedestrians use Drew Street on a daily basis, and there are four school zones located within the project corridor. The purpose of this section is to better understand the relationship between the corridor context and the needs of the various users.

## Corridor Context

- The Drew Street corridor provides an east-west connection across Clearwater from Downtown to North Bayshore Boulevard.
- The roadway is primarily four lanes and serves both regional and local traffic.
- Drew Street is maintained by three different jurisdictions: City of Clearwater, Florida Department of Transportation (FDOT), and Pinellas County.
- Drew Street traverses Downtown, neighborhoods, and commercial land uses.
- Residential homes, businesses, community centers, and several schools are located within the corridor study area.

## Key Agency Stakeholders

- City of Clearwater
- FDOT
- Forward Pinellas
- Pinellas County
- Pinellas Suncoast Transit Authority (PSTA)



# Existing Conditions

The public expressed a variety of challenges and concerns with the existing conditions along Drew Street throughout the project.



Safety



Narrow Sidewalks



Trail Connectivity



Lack of Left-Turn Lanes



Lack of Mid-Block Crossings



Lack of Landscaping



Dangerous Intersections



Narrow Lanes

# Existing Conditions

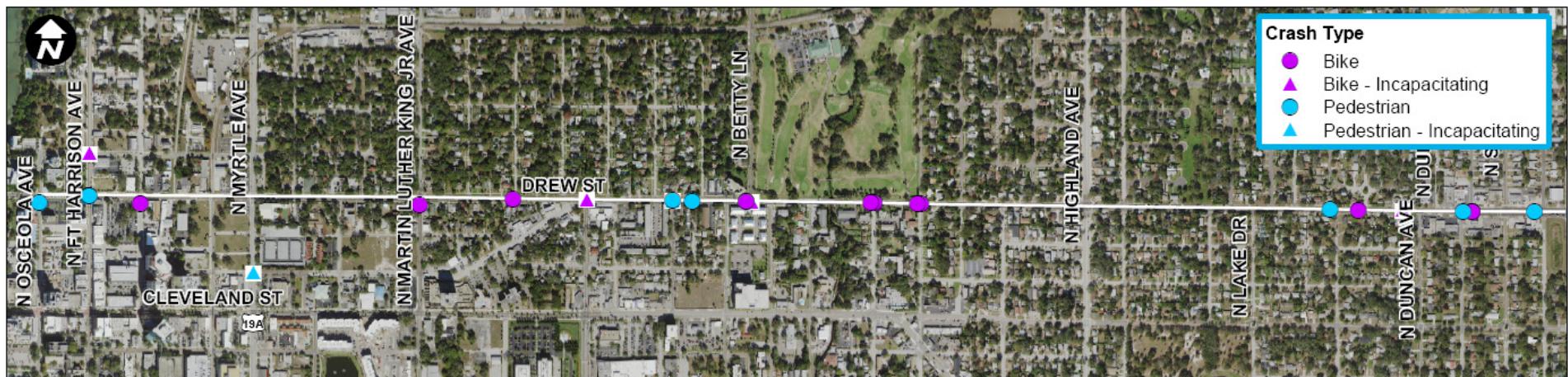
## Safety & Speed Considerations

One of the main objectives of the Complete Drew Street Concept Plan is to improve safety. To better understand safety concerns, pedestrian, bicyclist, and vehicle crashes were analyzed over a period of five years from 2012 to 2017. During this time period, there were 1,600 crashes including 2 fatalities and 50 serious injuries in the study area.

Speeding was seen during several field visits. To better understand speeding complaints, a speed study was performed during July 2018. The 85th percentile speed near Hillcrest Avenue was determined to be 55 miles per hour, 15 miles per hour over the speed limit. Over 40% of vehicles were observed to be speeding (traveling at a speed greater than 45 miles per hour).

### Five Years (2012 to 2017)

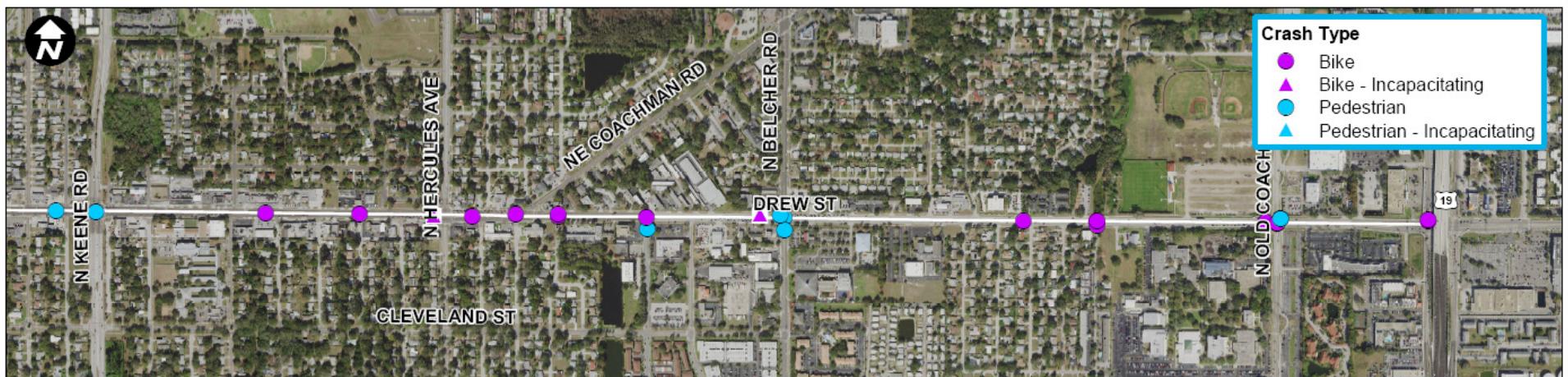
- 1,600 crashes (all modes)
- 2 fatalities
- 50 serious injuries
- 25 pedestrian crashes (3 serious injuries)
- 44 bicycle crashes (5 serious injuries)



# Existing Conditions



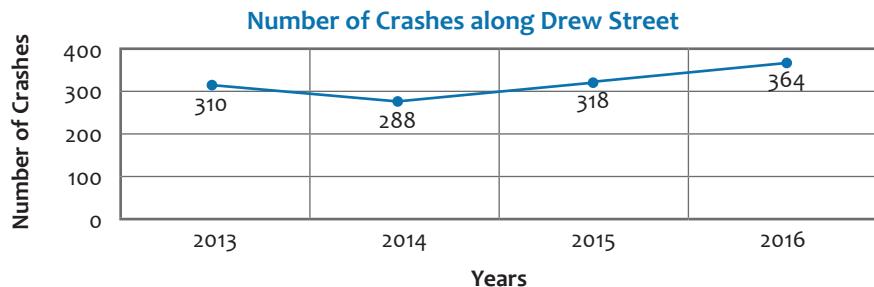
A number of serious crashes have occurred along Drew Street. Several were uncommon crashes such as one involving a school bus, as well as at the playground at Delphi Academy.



Bicycle and pedestrian crash locations from east of Duncan Avenue to US 19

# Existing Conditions

The number of crashes has increased along Drew Street by approximately 20% over three years. Serious injury crashes also increased during the study period. The number of these crashes tripled over a period of four years, from 4 crashes in 2013 to 13 crashes in 2016.



	2013	2014	2015	2016
Number of Total Crashes	310	288	318	364
Pedestrian Crashes	5	4	3	4
Bicycle Crashes	4	11	9	7
Serious Injury Crashes	4	5	11	13

\*2012 and 2017 are not included as only partial data was available



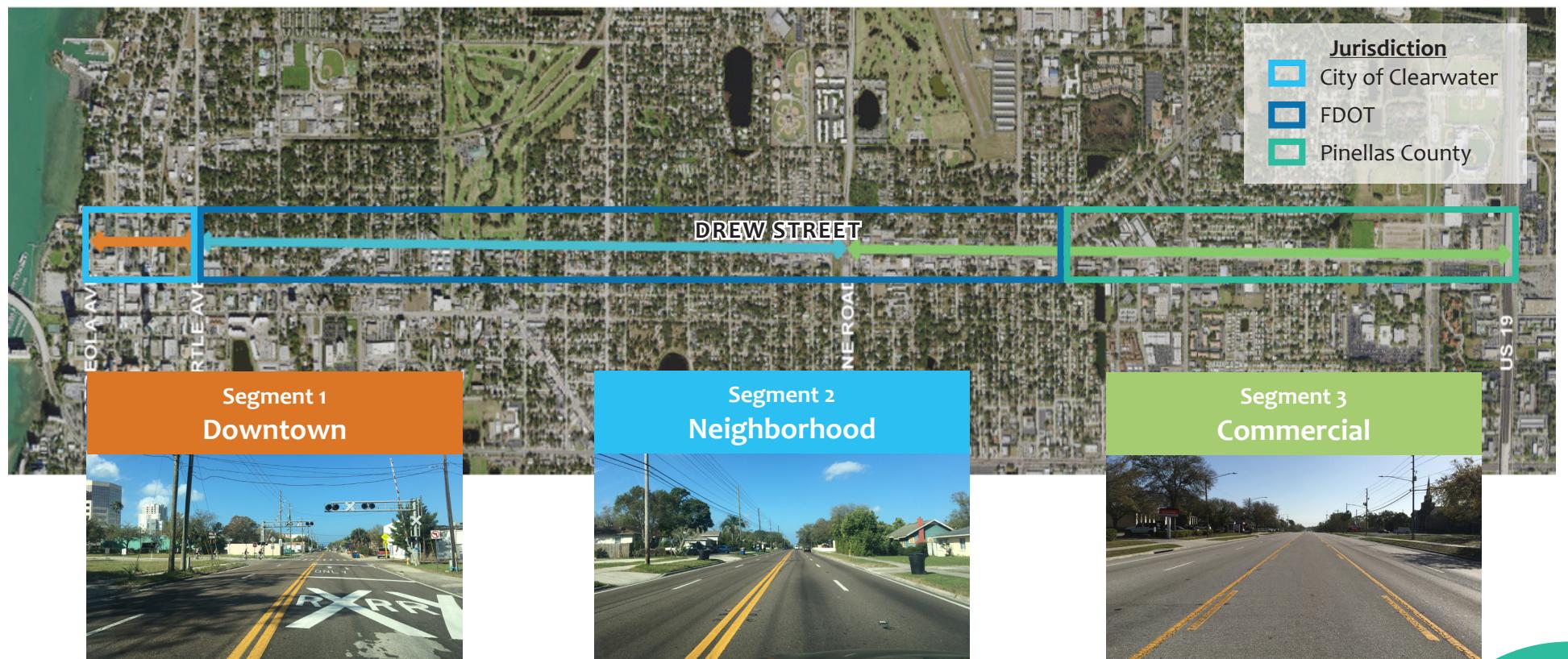
Above are pictures of recent crashes including one that damaged the Delphi Academy playground

# Existing Conditions

## Corridor Segments

For planning purposes and to better understand the existing conditions along Drew Street, the corridor has been divided into three segments. The west end of Drew Street includes direct access to Downtown Clearwater. The middle segment is residential and includes numerous residential driveways connecting directly onto Drew Street. The east segment is primarily commercial and is a major activity center. The western part of the corridor intersects the Pinellas Trail and the eastern part intersects the Duke Energy Trail. The following pages provide more detail for each segment. These details were provided to the public and participants as part of the public outreach campaign, as described in the next section, Stakeholder Involvement.

Drew Street is primarily a four-lane roadway and is classified as an urban minor arterial collector. The corridor characteristics and adjacent land uses change along the roadway. The corridor is maintained by three different jurisdictions: the City of Clearwater, FDOT, and Pinellas County.



# Existing Conditions

## Downtown: Segment 1

### Location and Context

<b>Location</b>	From North Osceola Avenue to North Myrtle Avenue
<b>Segment Length</b>	1,706 feet (0.32 miles)
<b>Road Type</b>	Four-lane undivided
<b>Median/Turn Lanes</b>	No
<b>On-Street Parking</b>	No
<b>Bike Lanes/Paved Shoulder</b>	None
<b>Sidewalk</b>	Yes
<b>Transit Stops</b>	Yes
<b>Lighting</b>	Yes
<b>Drainage</b>	Closed drainage
<b>Residential Land Use</b>	Yes
<b>Non-Residential Land Use</b>	Yes
<b>Major Attractions</b>	City of Clearwater Public Library, Church of Scientology, hotels, Coachman Park, Pinellas Trail
<b>Railroad Crossing</b>	Yes
<b>FDOT Functional Class</b>	Urban Minor Arterial
<b>AADT*</b>	13,100
<b>Jurisdiction</b>	City of Clearwater
<b>Posted Speed</b>	30 mph
<b>Total Pavement Width</b>	Approximately 40 feet
<b>Approximate Right-of-way</b>	Approximately 60 feet

\*Annual Average Daily Traffic



This section is the gateway to Downtown and crosses the Pinellas Trail

# Existing Conditions

## Neighborhood: Segment 2

### Location and Context

<b>Location</b>	From North Myrtle Avenue to Keene Road
<b>Segment Length</b>	10,560 feet (2 miles)
<b>Road Type</b>	Four-lane undivided
<b>Median/Turn Lanes</b>	No Exception: Left-turn lane at the intersection of Drew Street & North Highland Avenue
<b>On-Street Parking</b>	No
<b>Bike Lanes/Paved Shoulder</b>	No Exception: Bike lane from Jupiter Avenue to Keene Road
<b>Sidewalk</b>	Yes for north side Exception: Incomplete along south side (from apartments near N Betty Lane)
<b>Transit Stops</b>	Yes
<b>Lighting</b>	Yes
<b>Drainage</b>	Closed drainage Exception: Some open drainage along golf course)
<b>Residential Land Use</b>	Yes
<b>Non-residential Land Use</b>	Yes
<b>Major Attractions</b>	Clearwater Academy International, Clearwater Country Club
<b>Railroad Crossing</b>	No
<b>FDOT Functional Class</b>	Urban Minor Arterial
<b>AADT</b>	13,100 - 26,000
<b>Jurisdiction</b>	FDOT
<b>Posted Speed</b>	35-40 mph
<b>Total Pavement Width</b>	Approximately 38 feet (fluctuates)
<b>Approximate Right-of-way</b>	Approximately 70 feet (fluctuates)



Pictures above show the narrow lanes near the Clearwater Country Club with primarily residential uses

# Existing Conditions

## Commercial: Segment 3

### Location and Context

<b>Location</b>	Keene Road to US 19
<b>Segment Length</b>	10,760 feet (2 miles)
<b>Road Type</b>	Four-lane undivided
<b>Median/Turn Lanes</b>	Yes
<b>On-Street Parking</b>	No
<b>Bike Lanes/Paved Shoulder</b>	Yes (substandard)
<b>Sidewalk</b>	Yes
<b>Transit Stops</b>	Yes
<b>Lighting</b>	Yes
<b>Drainage</b>	Closed drainage
<b>Residential Land Use</b>	Yes
<b>Non-Residential Land Use</b>	Yes
<b>Major Attractions</b>	Delphi Academy, Skycrest Elementary School, Florida Spine Institute, Clearwater East Community Library, Skycrest Christian School, St. Petersburg College, Spectrum Stadium
<b>Railroad Crossing</b>	No
<b>FDOT Functional Class</b>	Major Collector
<b>AADT</b>	26,000 – 29,500
<b>Jurisdiction</b>	FDOT, Pinellas County
<b>Posted Speed</b>	40-45 mph
<b>Total Pavement Width</b>	Approximately 66 feet
<b>Approximate Right-of-way</b>	Approximately 94 feet



Drew Street includes a wider cross section east of Keene Road with a mix of uses as well as the Duke Energy Trail

# STAKEHOLDER INVOLVEMENT



# Stakeholder Involvement

There was significant stakeholder involvement and input using a variety of public outreach methods to not only understand the existing conditions, but to develop concepts for the different study area segments. These methods created significant stakeholder involvement and input throughout the process. Staff also produced materials in both English and Spanish to publicize events and surveys. This section describes the details of how each of the following approaches successfully brought stakeholders into the process. Additional information is provided in the Appendix.

- Agency Coordination Meeting
- Focus Group Interviews
- Online Surveys
- Community Workshops
- Project Website
- City Communications
- Complete Streets Advisory Committee Meetings
- City Council Work Session
- FDOT Meeting
- Interdepartmental City Staff Meetings

## Agency Coordination Meeting

On February 28, 2018, a meeting was held with the following agencies to review previous studies of the area, as well as to discuss the direction of this study:

- City of Clearwater
- Pinellas County
- Forward Pinellas
- FDOT

## Focus Group



### Quotes from Focus Groups

- “Left turns bottleneck traffic”
- “Drew Street has unique and local businesses”
- “Drew Street is not being used to its full economic potential right now”
- “Drivers drift in the narrow lanes”
- “Right turns are dangerous into residential driveways”

## Interviews

On March 22, 2018, five focus group interviews were held to gain community insight into the challenges and experiences along Drew Street. Community members discussed potential improvements and enhancements they would like to see as well as their long-term vision for the corridor. Additional information for each focus group interview is provided in the Appendix.

### Session 1: Local Businesses

Members of local businesses including the Florida Spine Institute, Bison Storage, Kimberly Home Pregnancy Center, and Hassell Florist attended the session. Attendees voiced concerns regarding the safety of vehicles and pedestrians visiting their sites and noted the lack of mid-block crossings and left-turn conflicts for vehicles.

# Stakeholder Involvement

## Session 2: Economic Development

As part of the economic development session, local developers and real-estate investors discussed their vision of the future of the Drew Street corridor and surrounding area. Interviewees highlighted the different contexts, from a residential to commercial corridor, and the need for a blended focus on both the community and the commercial development. Suggested improvements included a center two-way left-turn lane and a blend of zoning along the corridor with a focus of encouraging vertical mixed use development, particularly in the middle and eastern portions of the study area.

## Session 3: Bicyclists

Bicycle riders, bicycle shop owners/employees, and members of local bicycle groups shared their personal experiences riding along Drew Street. The attendees mentioned that the existing trail connections have visibility conflicts for drivers and highlighted the different needs for both commuter and recreational riders. Attendees noted that Cleveland Street provides a bicycle route to Downtown that parallels Drew Street.

## Session 4: Public Institutions

Representatives for a variety of public institutions attended this session, including Skycrest Christian School, Skycrest Elementary School, Hispanic Outreach Center, Delphi Academy, Clearwater Academy International, and St. Petersburg College. As four school zones are located on Drew Street, a Police Department School Crossing Guard attended and discussed the safety concerns of crossing children, especially in the areas with a higher speed limit (by Keene Road). Representatives suggested improvements such as improving the safety at bus stops and the addition of another signalized mid-block crossing.

## Session 5: Neighborhood Associations

Neighborhood association representatives and residents living along Drew Street provided their concerns regarding the safety along the corridor and suggested potential improvements. Residents expressed their concerns regarding speeding, property damage, the difficulty turning into their driveways, and the lack of buffers between vehicles and pedestrians. Residents suggested a two-way left-turn lane, a reduction in the speed limit, and signage emphasizing the transition to a residential area.

## Online Surveys

### Survey # 1

The first survey opened on May 3, 2018 and closed on May 25, 2018. Taken by 1,472 participants, the first survey gained input on participants' preferences and their prioritization of Complete Streets elements and tools for Drew Street. Participants also identified areas of concern along the corridor. The results were used to develop concepts to improve the corridor and specific intersections.

### Survey # 2

The second survey requested participants rate three concepts developed for each segment. Over 700 participants took the survey. The survey also requested participants identify their preference for specific corridor or intersection improvements. Additional information regarding the concepts and the results of the survey ratings are provided in Concept Development, the next section of this report.

# Stakeholder Involvement

## Community Workshop #1

The first Complete Drew Street Community workshop was a success with approximately 50 members of the public participating.

The workshop was held on May 22, 2018, at the Clearwater East Community Library at 2465 Drew Street in the commercial segment of the corridor next to St. Petersburg College. Participants were asked to complete four different exercises to express their concerns about Drew Street and improvements they wanted to see.

Participants completed four different exercises, and a common theme between all exercises was the desire to improve pedestrian facilities. Participants voiced a request for the short-term improvement of repairing sidewalks and improved walkability. Participants also mentioned a need for traffic calming and intersection improvements, including adding roundabouts and mid-block crossings.

Participants identified their concerns on a map including the types of improvements they would like to see. Most of the improvements were along the western portion of Drew Street between North Osceola Avenue and Keene Road.

### Top Five Answers to “What are your concerns with Drew Street?”

Safety  
Speeding  
Lane Width  
Sidewalks  
Street Lighting



Participants placed icons depicting different types of street improvements

# Stakeholder Involvement



Workshop attendees provided input during several interactive exercises

# Stakeholder Involvement

## Complete Streets Advisory Committee Meetings

The Complete Streets Advisory Committee was formed to provide input and guidance in the development and implementation of Complete Streets and improved mobility throughout the City. The Committee was consulted twice during the Complete Drew Street project and provided input on identifying complete streets elements along Drew Street as well as a review and rating of the concepts.

The first Advisory Committee meeting was held on May 1, 2018, and committee members were asked to select the top five improvements they would like to see along the Drew Street corridor. The top three answers were path/wide-walk (wider sidewalks), speed reduction, and bike lanes.

The second Advisory Committee meeting was held on June 10, 2018, and the committee attendees voted on the concepts. The results are summarized in the Appendix.

## City Council

The consultants first met individually with the City of Clearwater Council members at the beginning of the project to discuss their concerns along the corridor and the overall project. At the July 2018 City Council Work Session, the City Council provided direction on selecting the preferred concept for each segment.

## City of Clearwater Staff Meeting

The project team met with various departments in the City of Clearwater including fire and rescue, police , and engineering. The concepts were presented to City staff to gain their feedback and comments. Additionally, City staff met with PSTA to discuss the existing and future transit use along the Drew Street corridor.

## FDOT Meeting

The project team met with FDOT and members of their lane elimination review committee to discuss initial concepts for Drew Street, as well as FDOT's lane elimination process. FDOT provided preliminary feedback and guidance regarding what steps would be required should the City chose a concept that included a lane reduction for the segment of Drew Street that is owned by FDOT.



Interactive exercises were held with the Complete Streets Advisory Committee

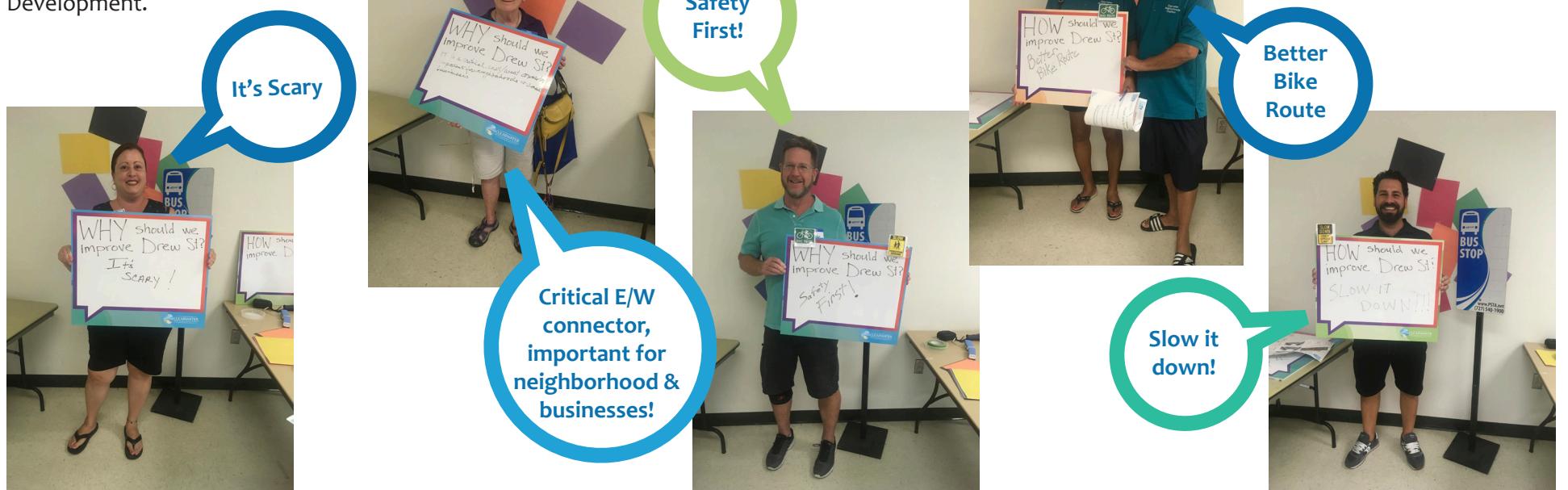
# Stakeholder Involvement

## Community Workshop #2

The second Complete Drew Street Community Workshop was held on June 28, 2018, at the North Greenwood Recreation Center. More than 70 members of the community attended, exceeding the attendance at the first Complete Drew Street workshop.

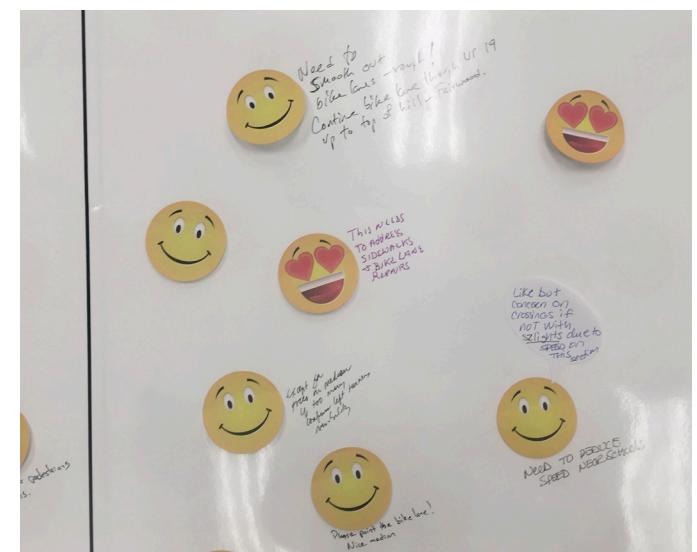
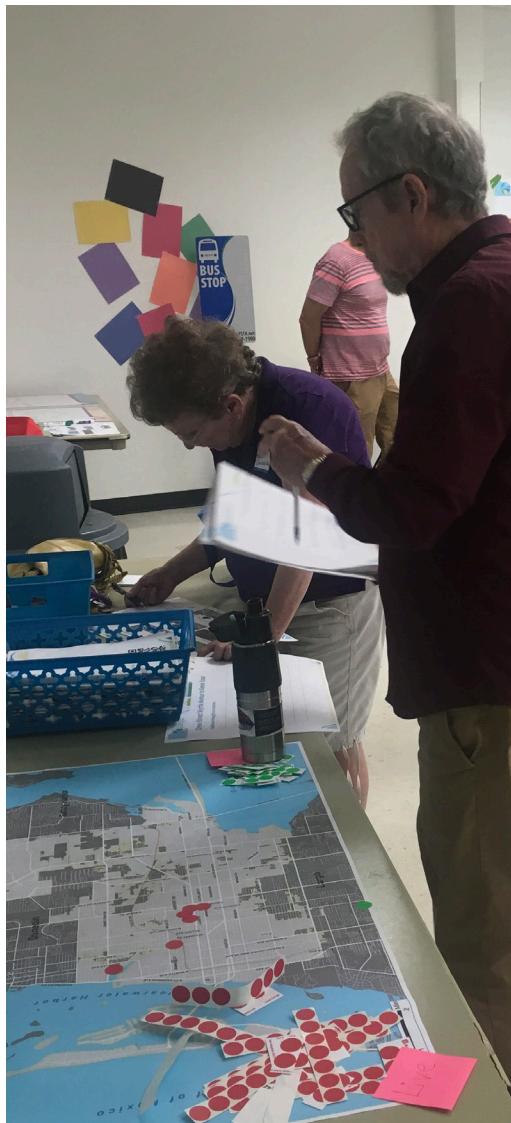
Workshop participants were given the opportunity to express their opinions about the concepts using emojis and written comments. Participants were also given handouts showing the concepts with pros and cons as well as other corridor and intersection improvements.

Participants' preferences for each segment are summarized in the next section, Concept Development.



Community Workshop #2 Photo Booth: Workshop participants share opinions about Drew Street

# Stakeholder Involvement



Workshop attendees provided input on concepts through several interactive exercises

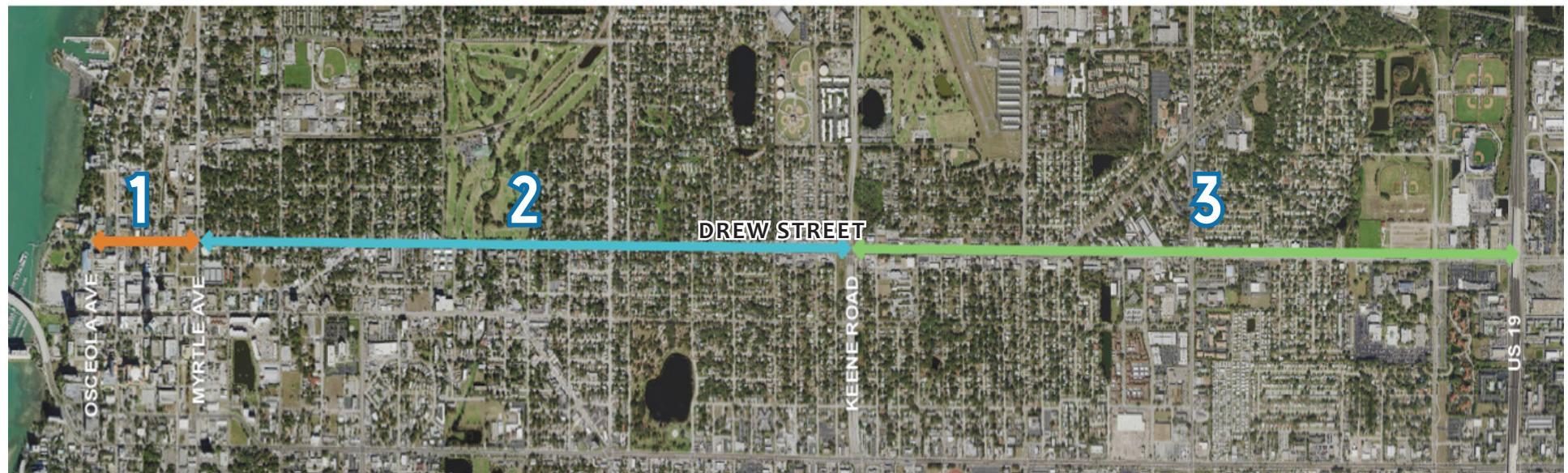
# CONCEPT DEVELOPMENT



# Concept Development

This section identifies the concepts that were developed through the stakeholder involvement process. For each of the three Drew Street segments, three concepts were developed, refined, and then presented to the public, review agencies, City staff, and City Council. Preferred concepts, chosen after extensive public outreach, balance mobility for pedestrians, bicyclists, and vehicles.

In addition to preferred concept plans for each segment, short-term intersection improvements are recommended and illustrated in this section. Additional short-term corridor improvements could be constructed independent of the design and construction of the selected concept plans.



# Downtown: Segment 1

## (North Osceola Avenue to Myrtle Avenue)

For Segment 1, the existing roadway is comprised of four narrow travel lanes. The preferred scenario includes reapportioning these narrow roadway lanes to include a bi-directional bike lane and on-street parking. The on-street parking is anticipated to be intermittent between intersections to allow for dedicated turn lanes at the intersections of Myrtle, Fort Harrison, and North Osceola Avenues.

The bi-directional bike lane will provide an enhanced connection from the Pinellas Trail to the waterfront as envisioned in the Imagine Clearwater Plan. A bi-directional bike lane provides connectivity to the trail, a reduced number of conflict points, and crossings. This segment is intended to enhance the walkability of Downtown Clearwater and create a gateway entrance to the Downtown.

The Imagine Clearwater Plan will require a special event access management plan in the future. Meetings were held with City staff to discuss the emergency access along the corridor. The bi-directional bike lane could provide access for emergency vehicles when necessary.



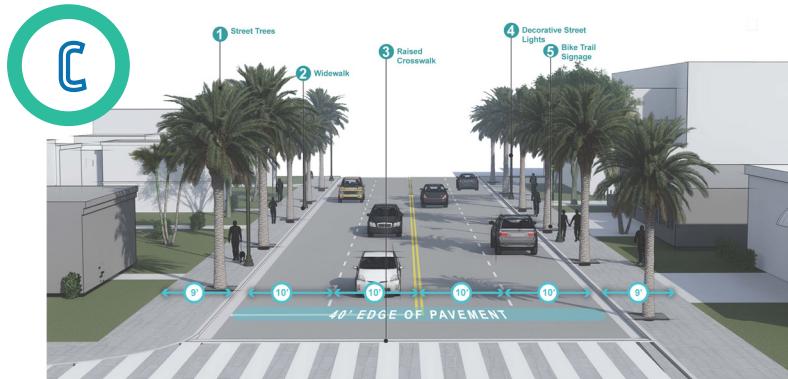
# Concept Development



Concept A:  
Existing



Concept B:  
Bi-Directional Bike Lanes



Concept C:  
Wider Sidewalks/Shared Use Path

# Concept Development

## Preferred Concept for Downtown Section

**B**

**1 Wider Sidewalks**

**2 Parallel Parking**

**3 Two Lane Road**

**4 Flex Posts**

**5 Bi-Directional Bike Lane**

**6 Bike Trail Signage**

**40' EDGE OF PAVEMENT**

**SCENARIO B:**  
**PARALLEL PARKING & BI-DIRECTIONAL BIKE LANE**

**1 Enhanced Planting**  
Improve vehicular-pedestrian separation and enhance landscaping along the corridor with the inclusions of native plantings.

**2 Parallel Parking**  
Provides on-street parking near downtown and improves vehicle - pedestrian seperation

**3 Lane Elimination**  
Reapportion the lanes to create a two lane roadway.

**4 Flex Posts**  
Provides vehicular - bicycle separation and improves bicycle safety

**5 Bi-Directional Bike Lane**  
Provides a protected space for bicyclists and improves vehicle-bicycle separation

**6 Bike Trail Signage**  
Improves Pinellas Trail connection for pedestrians and bicycling by providing wayfinding

# Concept Development

Characteristics	Concept A Existing Conditions	Concept B Bi-Directional Bike Lanes	Concept C Wider Sidewalks/Shared Use Path
Cross Section Width (Approximate Right-of-Way)	50 feet	50 feet	50 feet
Number of Lanes	4	2	4
Lane Width	10 feet	11 feet	11 feet
Median	None	None	None
Pedestrian	5-foot sidewalks	5-foot sidewalks	9-foot sidewalks
Bicycle	None	Bi-Directional Bike Lane	9-foot sidewalks
Parking	None	On-Street Parking	None
Aesthetics	None	Enhanced lighting and landscaping	Enhanced lighting and street trees
Connectivity	Trail connection to Pinellas Trail	Enhanced trail connection to Pinellas Trail  Lighting Enhanced walkability and biking On-Street Parking Landscaping	Raised crosswalk  Enhanced pedestrian facilities Landscaping
Pros	Existing sidewalks		
Cons	No bike facilities Narrow sidewalks	Potential increase in auto congestion Medium Cost (\$\$)	Not a dramatic change Medium Cost (\$\$)

# Concept Development

## Downtown Corridor Improvements: Segment 1

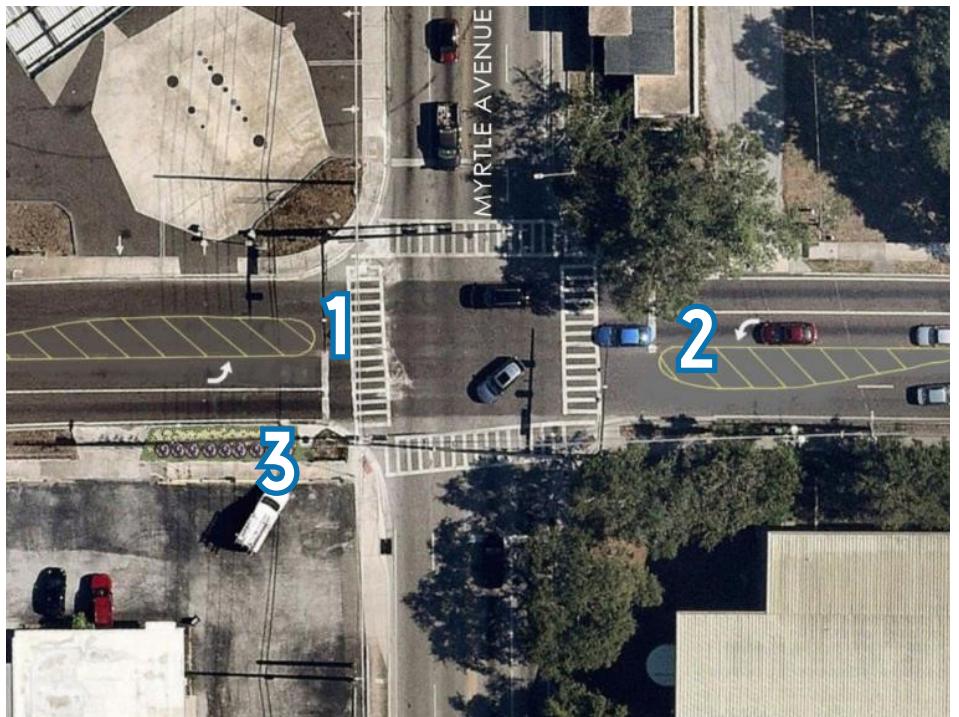
Additionally, it is recommended to consider complete streets corridor improvements along this section including:

- Lighting improvements
- Sidewalk improvements
- Gateway signage in conjunction with Imagine Clearwater implementation
- Improved signal operations/lane assignments at Fort Harrison and Myrtle Avenues

## Recommended Spot Improvements at Myrtle Avenue

Spot improvements were identified for the intersection of Drew Street and Myrtle Avenue. These improvements could be implemented even if one of the concepts shown previously are not completed.

1. Signal head modifications to allow for exclusive turn lanes
2. Eastbound & westbound left-turn lanes
3. Enhanced planting to create a landscaped buffer to improve the pedestrian experience and pedestrian safety



# Concept Development

## Project Implementation

Planning level costs were developed for the concepts presented previously. Costs were estimated based upon available data and include a contingency and construction inspection cost in the design cost.

North Osceola Avenue to Myrtle Avenue	Concept B	Concept C
Streets & Sidewalks	\$342,000	\$406,000
Landscaping	\$22,000	\$34,000
Lighting	\$15,000	\$15,000
Design	\$130,000	\$155,000
<b>Total</b>	<b>\$509,000</b>	<b>\$610,000</b>

## Public Feedback

Public feedback was received on the concepts through the Community Workshops, the second survey, and the second Citywide Complete Streets Advisory Committee meeting. Public participants at the Community Workshop, the Complete Streets Advisory Committee, and the City Council all preferred Concept B.

Downtown: North Osceola Ave. to Myrtle Ave.	Community Workshop June 28, 18	Online Survey June 18 –July 9	Citywide Complete Streets Advisory Committee
Public Preference A:	11% voted for A	Rated 2.56	0% voted for A
Public Preference B:	61% voted for B	Rated 2.96	78% voted for B
Public Preference C:	28% voted for C	Rated 3.31	22% voted for C

\* In the survey participants rated the concepts from 1 to 5 stars, a higher number is a stronger preference

## Residential: Segment 2 (Myrtle Avenue to Keene Road)

Segment 2, Drew Street from Myrtle Avenue to Keene Road, is primarily residential. The existing roadway is comprised of four narrow travel lanes with residential driveways directly along Drew Street. The recommended scenario includes reapportioning the roadway to include two wider roadway lanes (one lane in each direction) and creating a two-way left-turn center lane with intermittent landscaped medians that could include mid-block pedestrian crossings.

Public feedback regarding this segment focused primarily on the difficulty turning left as well as vehicles speeding which was confirmed by a speed study. During site visits, it was observed the existing inner lanes acted as de facto turn lanes. The reapportioned roadway will allow for wider travel lanes and for a center lane to improve turning movements, including allowing for left turns out of the neighborhoods. An intermittent landscape median is shown in the concept to provide a safer area for mid-block crossings along the corridor. Landscape medians also provide a narrowed view corridor for drivers, which should help to reduce speeds. The landscape median locations will need to be further analyzed in a design phase. Further coordination regarding bus bays is suggested due to the high ridership along Drew Street.



# Concept Development

Concept A:  
Existing

A



Concept B:  
Reapportion the Lanes  
With Center Turn Lane &  
Landscaped Medians

B



Concept C:  
Roadway Widening

C



# Concept Development

**B**

## Preferred Concept for Residential Section

The diagram illustrates the Preferred Concept for the Residential Section, labeled 'B'. The street has a total width of 38' EDGE OF PAVEMENT, divided into 8' sidewalks, a 16' landscape median with trees and flowers, and 11' lanes. Key features include:

- 1 Wider Sidewalks**: Improve walkability by enhancing and widening sidewalks to eight feet.
- 2 Lane Elimination**: Reapportion the lanes to create a two lane roadway.
- 3 Median**: Construct center lane medians with landscaping to improve corridor aesthetics and safety.
- 4 Mid-Block Crossing**: Improve walkability by providing mid-block crossings for pedestrians.
- 5 Enhanced Planting**: Improve vehicular-pedestrian separation and enhance landscaping along the corridor with the inclusions of native plantings.

**SCENARIO B:**  
**REAPPORTION THE LANES WITH CENTER TURN LANE & LANDSCAPED MEDIAN**

# Concept Development

Characteristics	Concept A Existing Conditions	Concept B Lane Elimination Reapportion the Lanes with Center Turn Lane & Landscaped Median	Concept C Roadway Widening
Cross Section Width (Approximate Right-of-Way)	70-feet	70-feet	70-feet
Number of Lanes	4	3	4
Lane Width	9.5-feet	11 feet	11 feet
Median	None	Approximately 16-foot two-way left-turn lane with intermittent landscaped median	11-foot with intermittent landscaped median
Pedestrian	Two 5-foot sidewalks	Two 8-foot sidewalks	Two 6-foot sidewalks
Bicycle	None	None	None
Aesthetics	None	Landscaping	Landscaping
Connectivity	None	Improve walkability	Improve walkability
Pros	Existing sidewalks & street lighting	Wider sidewalks Mid-block crossings Enhanced landscaping	Wider Sidewalks Mid-block crossings Maintain vehicle lanes
Cons	Uncomfortable travel lanes Narrow sidewalks No bike lanes No landscaping Lack of crossings	No bike lanes Greater upkeep (landscaping) Increase travel time Medium cost (\$\$)	Very high cost (\$\$\$) Requires purchase of right-of-way Challenging to implement/long-term Expand curb Greater upkeep (landscaping)

# Concept Development

## Roadway Analysis

	Existing PM Peak-Hour	Concept B Lane Elimination PM Peak-Hour	Approximate Difference in Travel Time
Eastbound Travel Time	6.5 min	8.8 min	2.3 min
Westbound Travel Time	5.6 min	5.9 min	0.3 min

\*Concept B is defined as Lane Elimination from North Osceola Avenue to Highland Avenue

The lane elimination for Concept B was modeled from North Osceola Avenue to Highland Avenue. Due to the close proximity of traffic signals at Drew Street & Keene Road and Drew Street & Saturn Avenue, Highland Avenue provided a transition area for vehicles to merge into one lane. Further analysis will be required as part of any future design studies.

A vehicular traffic analysis was performed using Synchro (version 10) to model the travel time impacts of reducing the existing number of travel lanes. The traffic volumes and signal timing were used from data provided in the FDOT Preliminary Screening Corridor Study. The analysis indicates approximately a 2 minute increase in peak direction travel time along the corridor during the evening peak-hour (between 4:00 p.m. to 6:00 p.m.). Further design improvements are recommended particularly at the intersections of Drew Street & NE Cleveland Street/Missouri Avenue and Drew Street & Betty Lane.

Traffic diversion was analyzed for the parallel roadway facilities of SR 60, Cleveland Street, and Sunset Point Road using the transportation model provided by FDOT with 2040 volumes. The model was updated to incorporate the roadway changes from the Cleveland Street improvement project, Phase 3, and extended to Missouri Avenue. Traffic diversion is anticipated to be minimal on the parallel facilities. Additionally, before and after federal studies have indicated roadway diversion to vary and in many cases have been shown to have little or no impact on existing volumes:

“According to studies by FHWA, under most daily traffic conditions, lane elimination (of one through lane per direction) seems to have minimal effects on vehicle capacity because left-turning vehicles are moved into a common two-way left-turn lane (TWLTL). Four-lane roadways with average daily traffic (ADT) of up to 20,000 (or up to 1,750 vehicles per peak hour) have been shown to be good candidates for lane elimination. Four-lane roads with ADTs higher than 20,000 should be evaluated for lane elimination feasibility on a case-by-case basis.”

Source: Statewide Lane Elimination Guidance (FDOT, December 2014)

Currently, over 20,000 vehicles per day use the residential segment of Drew Street. Therefore, a lane elimination of this segment would need to be evaluated further by FDOT.

# Concept Development

## Segment 2 Corridor Improvements

The report recommends considering complete streets corridor improvements along this section including:

- Filling in the sidewalk gap near Betty Lane
- Providing mid-block pedestrian crossings
- Enhanced Lighting
- Sidewalk improvements along the golf course

## Spot Improvements at Betty Lane

Spot improvements were identified for the intersection of Betty Lane. These improvements could be implemented in the short-term, even if one of the concepts shown previously are not completed. These improvements would also help to provide a small diversion to help slow speeds.

1. Eastbound left-turn lane
2. Modified sidewalk to provide a landscaped buffer between the roadway
3. Addition of new curb along the roadway
4. Landscaping medians



# Concept Development

## Project Implementation

Planning level costs were calculated for both concepts. Scenario C does not include the property acquisition costs associated with purchasing the necessary rights-of-way to expand the curb. The cost of acquisition is anticipated to be significant.

Myrtle Avenue to Keene Road	Concept B	Concept C*
Streets & Sidewalks	\$2,703,000	\$9,170,000
Landscaping	\$341,000	\$339,000
Lighting	\$91,000	\$91,000
Property Acquisition	--	Not included
Design	\$1,044,000	\$3,160,000
<b>Total</b>	<b>\$4,179,000</b>	<b>\$12,760,000</b>

\*Concept C does not include right-of-way acquisition

## Public Feedback

Public feedback was received on the concepts through the Community Workshops, the second survey, and the second Citywide Complete Streets Advisory Committee. As shown in the table below, Scenario B was the preferred scenario.

Neighborhood: Myrtle Avenue to Keene Road	Community Workshop June 28, 18	Online Survey June 18 – July 9*	Citywide Complete Streets Advisory Committee
Public Preference A:	8% voted for A	Rated 2.37	0% voted for A
Public Preference B:	77% voted for B	Rated 2.94	78% voted for B
Public Preference C:	15% voted for C	Rated 2.75	22% voted for C

\* In the survey participants rated the concepts from 1 to 5 stars, a higher number is a stronger preference

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# Commercial: Segment 3

## (Keene Road to US 19)

Segment 3, Drew Street from Keene Road to US 19, is primarily commercial with businesses abutting both the north and south side of the street. The existing roadway is comprised of four travel lanes with a 14-foot two-way left-turn center lane and four-foot bike lanes.

Improvements for this segment focus primarily on beautification and the encouragement of future re-development. Medians currently exist along this segment and could be improved to include appropriate landscaping which not only can beautify the corridor but provide friction to slow speeds down. There are existing four-foot bike lanes along the roadway which could be enhanced with more signage and pavement markings.

Additionally, a hybrid option could be created from Scenario B and Scenario C. The existing four-foot bike lanes could be widened to five feet and the existing 14 two-way left-turn lane could be reduced to 12 feet. The existing seven-foot buffer could then include enhanced landscaping.



# Concept Development

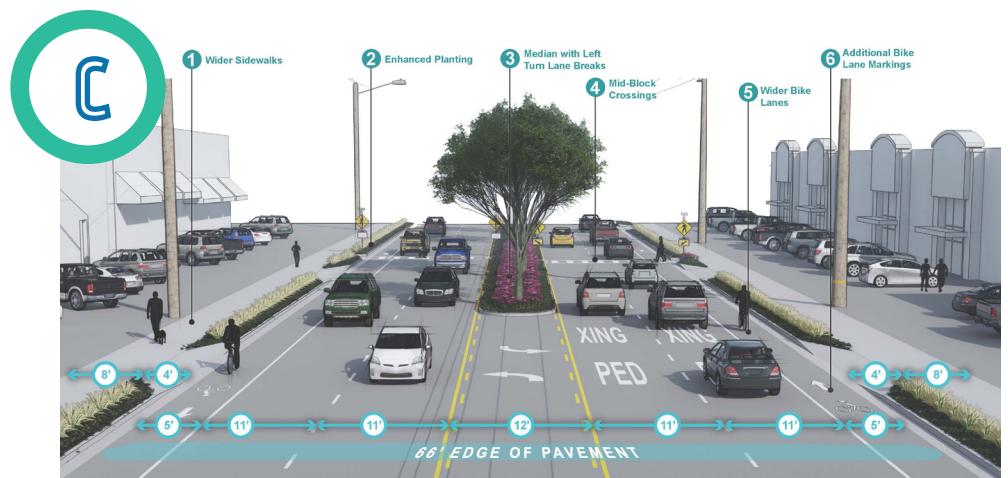
Concept A:  
Existing



Concept B:  
Landscaped Medians & Midblock Crossings



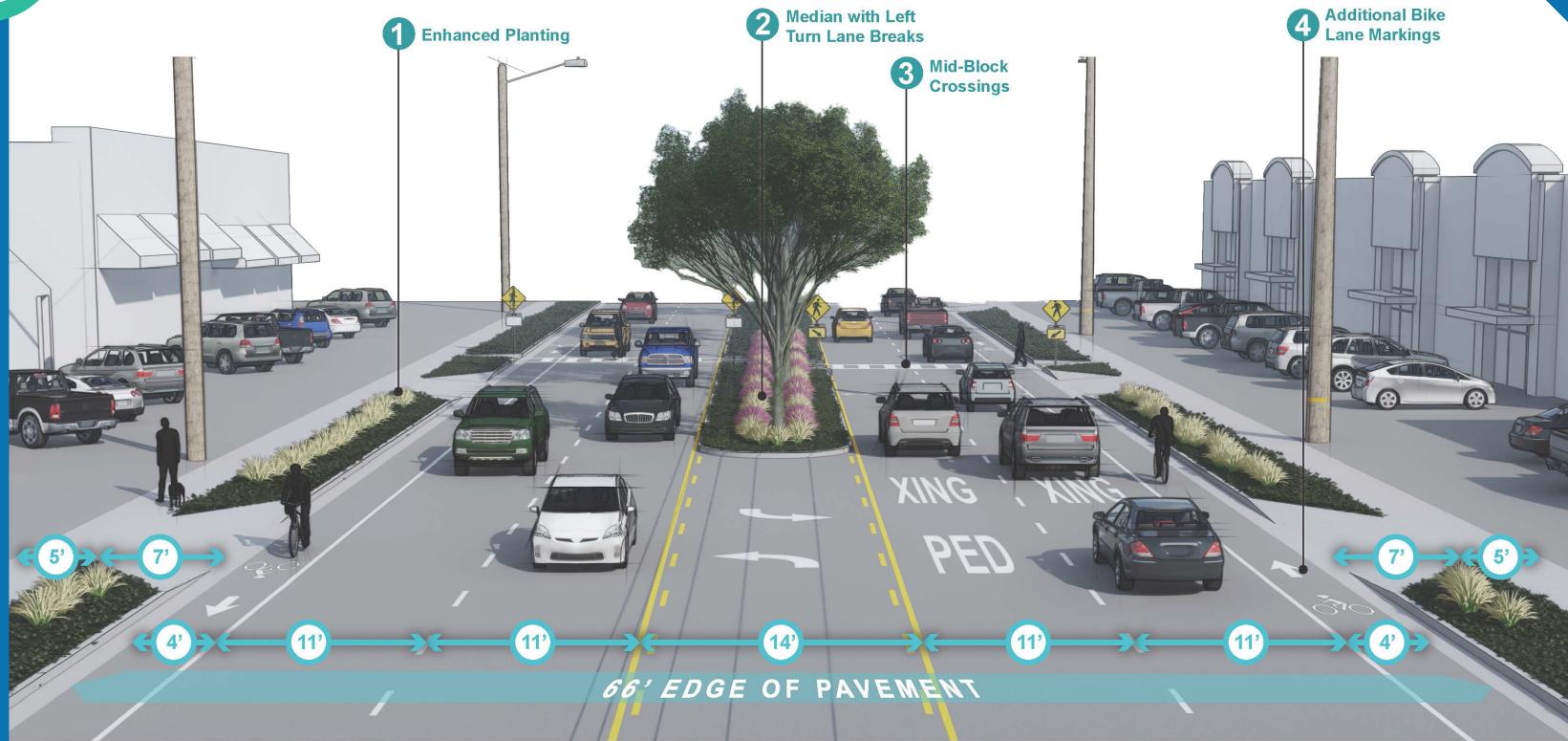
Concept C:  
Landscaped Medians & Wider Bike Lanes  
& Wider Sidewalks



# Concept Development

B

## Preferred Concept for Commercial Section



**1 Enhanced Planting**  
Improve vehicular-pedestrian separation and enhance landscaping along the corridor with the inclusions of native plantings.

**2 Median**  
Construct center medians with landscaping to improve corridor aesthetics and safety.

**3 Mid-Block Crossing**  
Improve walkability by providing mid-block crossings for pedestrians.

**4 Bike Lane Markings**  
Enhance existing bike lanes by providing additional bike lane markings.

**SCENARIO B:  
LANDSCAPED MEDIAN & MIDBLOCK CROSSINGS**

# Concept Development

Characteristics	Concept A Existing Conditions	Concept B Landscaped Medians & Midblock Crossings	Concept C Wider Bike Lanes & Sidewalks
Cross Section Width (Approximate Right-of-Way)	94-feet	94-feet	94-feet
Number of Lanes	5	5	5
Lane Width	11-feet	11-feet	11-feet
Median	14-foot two-way left-turn lane with intermittent medians	14-foot two-way left-turn lane with intermittent landscaped medians	12- foot two-way left-turn lane with intermittent landscaped median
Pedestrian	Two 5-foot sidewalks	Two 5-foot sidewalks	Two 8-foot sidewalks
Bicycle	4-foot bike lanes	4-foot bike lanes	5-foot bike lanes
Aesthetics	None	Landscaping	Landscaping
Connectivity	None	Improve pedestrian crossings	Improve pedestrian crossings & Improve bike lanes
Pros	Existing sidewalks & street lighting	Mid-block crossings Enhanced landscaping	Wider bike lanes Mid-block crossings Enhanced landscaping
Cons	Landscaping Lack of crossings	Greater upkeep (landscaping) Medium cost (\$\$)	Greater upkeep (landscaping) High cost (\$\$\$)

\*One recommendation is to consider a hybrid concept that includes Concept B with the addition of wider bike lanes that are shown in Concept C.

# Concept Development

## Segment 3 Recommended Corridor Improvements

- Landscaped roadway medians
- Mid-block crossings
- Enhanced crossings at intersections
- Consistent lighting
- Enhanced crossings including at Old Coachman for Duke Energy Trail

## Spot Improvements at Corona Avenue

These should be implemented in the short-term, even if the concepts presented earlier are not implemented.

1. Landscaped Medians
2. Crosswalk barrier medians



## Benefits of Landscaping Medians

Landscaping would be intermittent along the corridor. Landscaping in the medians is intended to slow drivers down by reducing the cone of vision and creating a sense of enclosure.

Landscaping, as a key part of corridor beautification, is intended to promote economic vitality. Sight-distance lines, jurisdictional maintenance, land use codes, and access will need to be considered and coordinated with businesses during the design phase when selecting the appropriate type of landscaping.



# Concept Development

## Spot Improvements at Old Coachman Road

Improvements were also developed to improve the crossings at the intersection of Drew Street & Old Coachman Road. The Duke Energy Trail crosses the east leg of the intersection. These should be implemented in the short-term, even if the concepts presented earlier are not implemented.

1. Restrict right turn on red (self-activated by trail user)
2. Trail signage improvements
3. Widened and highly visible crosswalk for the Duke Energy Trail
4. Decrease turn radii and ADA ramp improvements



# Concept Development

## Project Implementation

Planning level costs were calculated for both concepts. Impacts to potential driveways were included in the costs.

Keene Road to US 19	Concept B	Concept C
Streets & Sidewalks	\$2,065,000	\$3,637,000
Landscaping	\$427,000	\$409,000
Lighting	\$107,000	\$90,000
Design	\$869,000	\$1,372,000
<b>Total</b>	<b>\$3,468,000</b>	<b>\$5,508,000</b>



## Public Feedback

Public feedback was received on the concepts through the Community Workshops, the second survey, and the second Citywide Complete Streets Advisory Committee. As shown in the table below, Scenario B was the preferred scenario.

Commercial: Keene Road to US 19	Community Workshop June 28, 18	Online Survey June 18 – July 9*	Citywide Complete Streets Advisory Committee
Public Preference A:	18% voted for A	Rated 2.76	0% voted for A
Public Preference B:	58% voted for B	Rated 3.49	80% voted for B
Public Preference C:	24% voted for C	Rated 2.55	20% voted for C

\* In the survey participants rated the concepts from 1 to 5 stars, a higher number is a stronger preference

# Concept Development

## Other Corridor Improvements

Additional corridor improvements along Drew Street are recommended and could be implemented prior to any roadway infrastructure projects. These include improving the existing signal timing along the corridor and filling in sidewalk gaps. Greenspace opportunities should be explored, particularly on the City-owned parcels along Drew Street.

Throughout the public outreach process, maintenance of existing facilities was mentioned. In particular, the drainage structures along Drew Street should be evaluated and repaired as needed.

These corridor improvement recommendations can be incorporated as separate projects as described in the next and final section, Next Steps.

### Corridor Improvements

- Improve lighting
- Reduce speed
- Improved signal timing
- Add left turn lanes
- Fill sidewalk gap
- Add landscaping in medians
- Midblock crossings
- Widen roadway lanes
- Enhance trail crossings
- Create a Downtown gateway



#### Legend

- ★ Gateway to Downtown
- ▲ Potential Roundabout
- ||||| Recommended intersection improvements
- Intersection improvements
- 📍 Crossing improvements

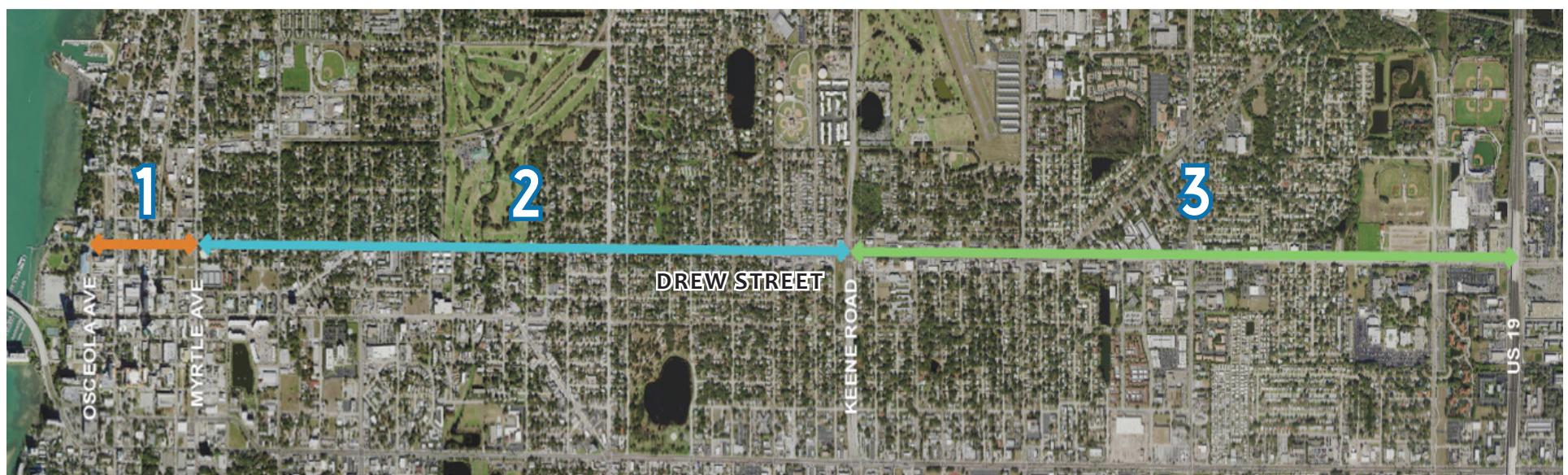
# NEXT STEPS



# Next Steps

The purpose of this plan was to identify Complete Streets concepts for improving Drew Street, which would be reviewed further in the next phase. These concepts were developed through a review of the existing conditions, technical analysis, and robust stakeholder involvement. The concept plans summarized in this report were developed at a planning level and are just the start. Next, the concepts need to enter a preliminary engineering design phase, including additional public involvement and agency coordination. A preliminary engineering report (PER) will document engineering and environmental analyses and support future decision-making related to the alternatives shown in this report. The PER should include detailed plans at the property level, as well as costs. For Neighborhood Segment 2, further evaluation is needed to identify the transition location for the lane redistribution provided in Concept B. With any PER, additional stakeholder input would occur to review designs.

Coordination will be needed with both FDOT and Pinellas County, as different maintaining agencies, to gain approval to enter to a design phase. FDOT published the *Lane Elimination Guide* in December 2014 outlining the process required for a lane elimination. The first stage is scheduling a meeting with the FDOT District Seven office. The lane elimination process includes a district review and Central Office review prior to approval. Also, Drew Street was resurfaced nearly ten years ago and FDOT would need to prioritize the project for improvement.



# Next Steps

Short term improvements should be prioritized for the corridor whenever possible such as the spot improvements identified in this report. A joint funding opportunity for improving Drew Street should be pursued. FDOT has previously identified recommended intersection improvements as part of the *Final Recommendations Report SR 60 Preliminary Screening Corridor Study* (June 2017). These include additional turn lanes at the intersections of Drew Street & Missouri Avenue and Drew Street & Keene Road.

Additionally, using temporary striping and signage, a pilot project may be feasible to determine the actual road diet impacts along the City-owned part of the Drew Street corridor for Concept B. This would allow the City to further investigate the impacts of the roadway lane elimination and the impact to vehicles. A pilot project could allow for additional public outreach and opportunities to be heard as part of achieving the final design, which would then be funded for construction.

Finally, improvements would need to be prioritized and funded in the different FDOT, County, and City work programs to address the planning costs shown below. Drew Street was resurfaced less than ten years ago and FDOT would need to discuss prioritization of the project based on the Complete Drew Street process. Funding would need to be included in FDOT's work program, and the County and City's five year Capital Improvement Program (CIP). Additional funding could also be pursued for inclusion in the Forward Pinellas Transportation Improvement Program (TIP). The Complete Drew Street Concept Plan included a robust process that involved significant stakeholder input to develop concepts. This process moved the City closer to accomplishing the goals set in the grant application of a Safer Drew Street, Better Mobility and Accessibility, and a Stronger Local Economy and provided direction to move towards future implementation phases.

	Downtown Segment 1	Neighborhood Segment 2	Commercial Segment 3
Preferred Concept	Concept B	Concept B	Concept B
Approximate Cost	\$509,000	\$4,179,000	\$3,468,000

## Complete Drew Street Concept Plan

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