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## **OVERVIEW**

The City of Tampa was awarded a Safe Streets for All (SS4A) grant to improve roadways in the high-injury network and implement safety improvement to essential corridors. Habana Avenue is a north-south corridor with connections to important destinations and services like St. Joseph's hospital and other medical services. This is also a corridor that provides connections to bus routes on Dr. MLK Jr Boulevard and Hillsborough Avenue, making it an important corridor for bicyclists and pedestrians. The purpose of this study is to provide design concepts and improvements to the corridor to improve safety for all users.

The purpose of this document is to provide a summary of existing conditions, initial input received during the design charrette and stakeholder meetings on preliminary concepts, and development of recommendations and concept alternatives..

## **CORRIDOR SNAPSHOT**





7,400

Daily number of trips









Fatalities in a 5-year period



Injury crashes in a 5-year period

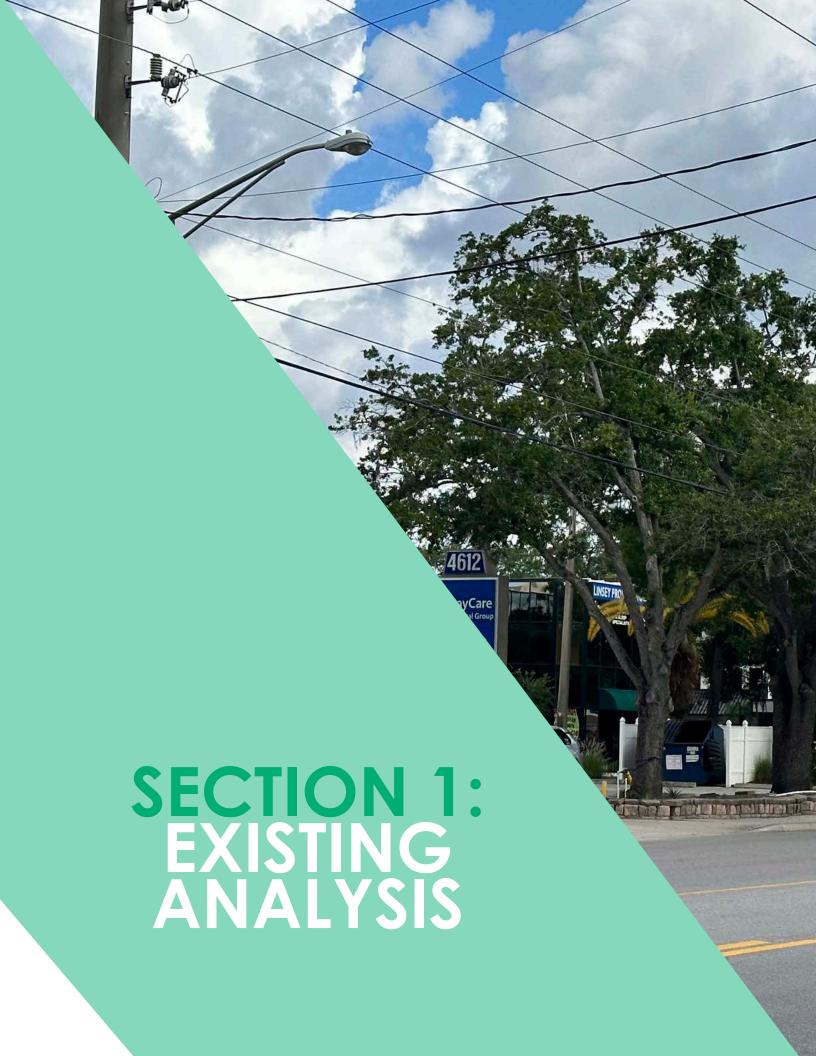


Bike crashes in a 5-year period



Pedestrian crashes in a 5-year period







## ROADWAY CONTEXT

Habana Avenue is approximately 1.05 miles between MLK Jr. Boulevard and Hillsborough Avenue. The corridor is a 5-lane roadway section with four 11-foot travel lanes and one 12-foot center turn lane. There is a small, 4-foot buffer, that is sometimes used as a bicycle lane, on each side of the roadway. There are 5-foot sidewalks on each side of the roadway throughout the corridor. The posted speed limit in the study area is 40 mph. The approximate right-of-way width along Habana Avenue is 80 to 90 feet and the approximate average curb-to-curb width is 64 feet.

#### **Functional Classification and Context Classification**

Habana Avenue's functional classification is a major collector. The adjacent context classification along Habana Avenue includes the following. A map of the context classifications and details on the categories is provided on page 13.

- · Suburban Commercial
- Suburban Residential
- · Urban General Residential
- Urban General Mixed Used

#### **Evaluation Of Speed Data**

Vehicle spot speed data was collected for 24-hours at one location along the study corridor between 12:00 a.m. and 11:59 p.m. on Thursday, May 4, 2023. The spot speed data was separately collected for the northbound and southbound volumes. The existing posted speed along the corridor is 40 miles per hour. The vehicle spot speed data is included in the Appendix.

The results of the spot speed data collection are as follows:

#### Northbound:

Volume: 9,236 daily vehicles

• 85th Percentile: 40.3 MPH

• 50th Percentile: 32.8 MPH

10 MPH Pace: 30-39

#### Southbound:

Volume: 6,956 daily vehicles

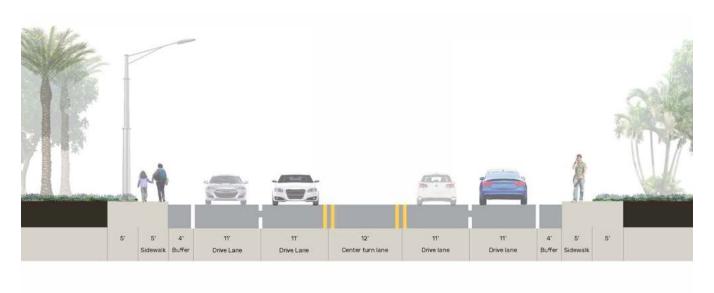
• 85th Percentile: 35.9 MPH

50th Percentile: 29.7 MPH

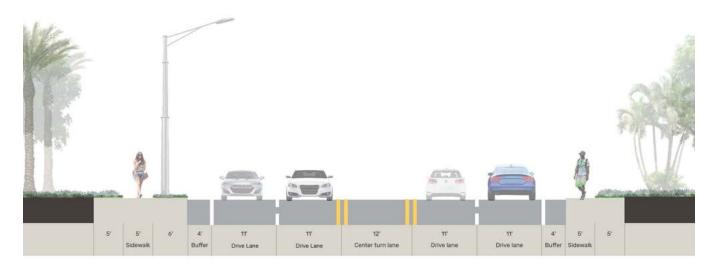
10 MPH Pace: 25-34

## **EXISTING TYPICAL SECTIONS**

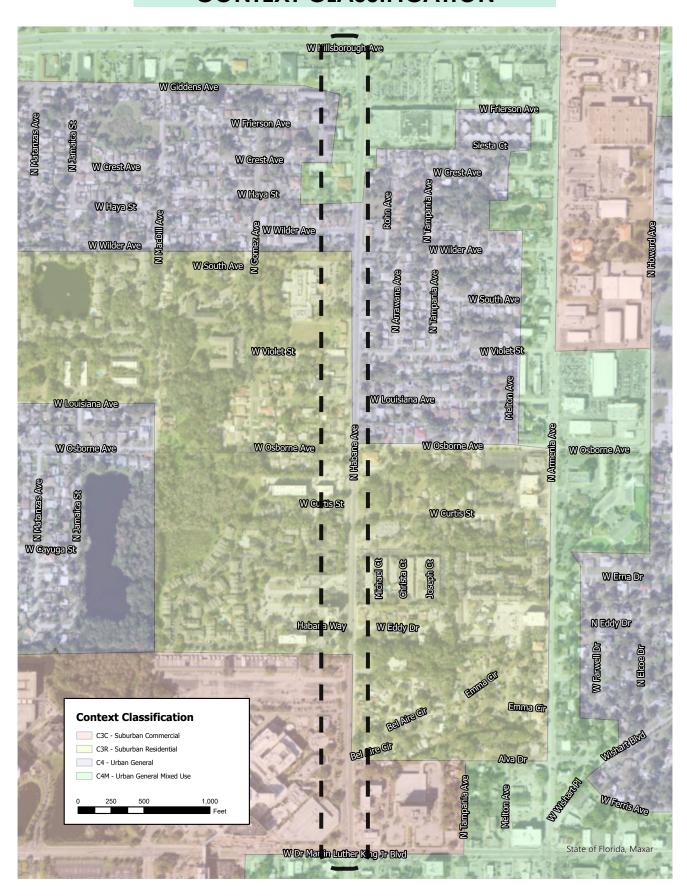
RIGHT-OF-WAY WIDTH (APPROX.) = 84 FT.



## RIGHT-OF-WAY WIDTH (APPROX.) = 90 FT.



## **CONTEXT CLASSIFICATION**



#### **Traffic Volume**

The Average Annual Daily Traffic (AADT) for the study area is 7,400 vehicles. The City of Tampa conducted Turning Movement Counts (TMC) in May 2023 for the Peak AM and PM existing for Dr. MLK Jr. Boulevard and Hillsborough Avenue. The full TMC reports can be found the in Appendix.

A preliminary traffic analysis was conducted using the intersection configuration and signal timings that are present today with a potential lane reallocation (1 northbound lane and 1 southbound lane with a two-way left turn lane). The preliminary analysis shows that the travel time will not be negatively impacted (see Appendix). Below is a summary table:

Habana Ave	MLK to Hillsborough	Northbound	Southbound
	Running Time	102.9	104
	Signal Delay	128.2	206.3
AM Existing	Travel Time (s)	231.1	310.3
	Arterial Speed	17.4	13.1
	Arterial LOS	D	E
	Running Time	102.9	107.4
	Signal Delay	128.2	206.3
AM Proposed	Travel Time (s)	231.1	313.7
	Arterial Speed	17.4	13.2
	Arterial LOS	D	E
	Running Time	0	3.4
	Signal Delay	0	0
Difference (Proposed - Existing)	Travel Time (s)	0	3.4
	Arterial Speed	0	0.1

Habana Ave	MLK to Hillsborough	Northbound	Southbound
	Running Time	102.9	109.3
	Signal Delay	156.3	148.8
PM Existing	Travel Time (s)	259.2	258.1
	Arterial Speed	15.5	16
	Arterial LOS	E	E
	Running Time	102.9	107.4
	Signal Delay	160	179.6
PM Proposed	Travel Time (s)	262.9	287
	Arterial Speed	15.3	14.4
	Arterial LOS	E	E
	Running Time	0	-1.9
5:55	Signal Delay	3.7	30.8
Difference (Proposed - Existing)	Travel Time (s)	3.7	28.9
	Arterial Speed	-0.2	-1.6

#### **Multimodal Connections**

There are no bus routes that run on Habana Avenue but the corridor provides connections to bus services on adjacent streets. There are several routes (routes 7, 32, and 45) that service MLK Jr. Boulevard and one route (route 34) on Hillsborough Avenue.

#### **Zoning and Future Land Use**

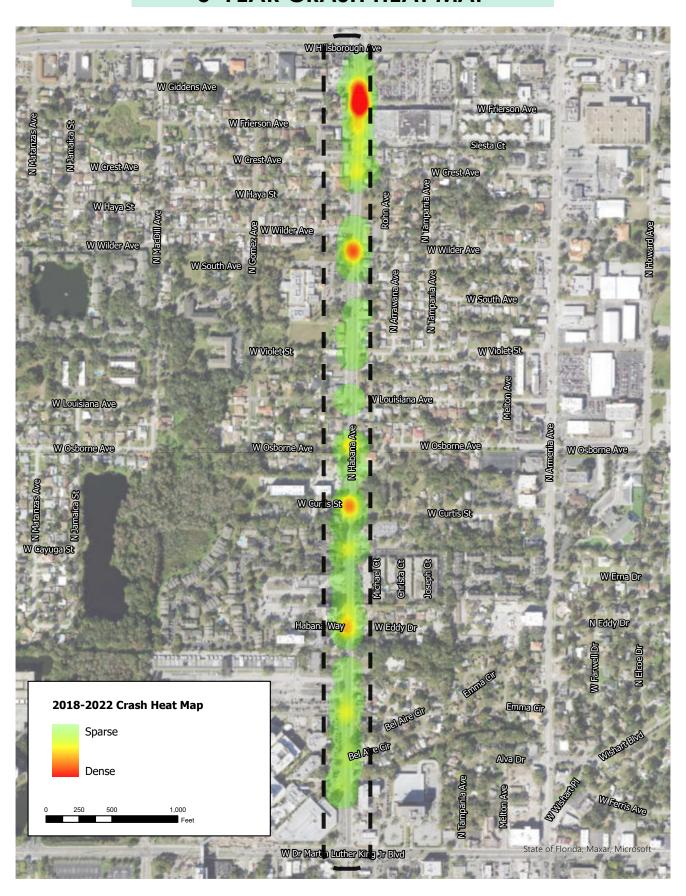
The current zoning within the study area is primarily Office Professional (OP-1) with a mixture of Residential Single-Family (RS-50) and Planned Development (PD). Other zoning categories adjacent to Habana Avenue within the study area are:

- Commercial General (CG)
- Commercial Neighborhood (CN)
- Residential Multifamily (RM-16)
- Residential Multifamily (RM-24)
- Residential Office (RO)
- Residential Office (RO-1)

The future land use in this study area is primarily Residential-35 (R-35). There are areas of Public/ Semi-Public (P/QP) uses including St. Joseph's Hospital and other healthcare uses. Other uses along the corridor are:

- Residential-20 (R-20)
- Urban Mixed Use (UMU-60)
- Community Mixed Use (CMU-35)

## **5-YEAR CRASH HEAT MAP**



## **CRASHES BY TYPE**



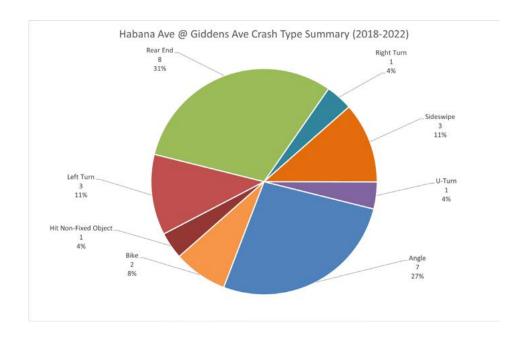
## SAFETY CHALLENGES

The following is summary of the high crash locations and crashes by type at the high crash intersections along the corridor. This summary does not include the crashes that occurred at the signalized intersections at MLK Jr. Boulevard and Hillsborough Avenue.

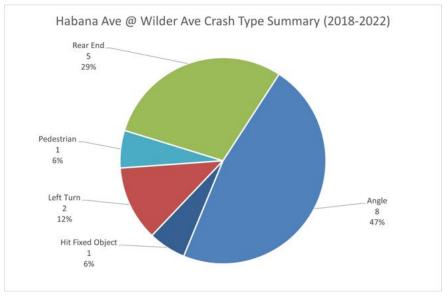
### **High Crash Intersections**

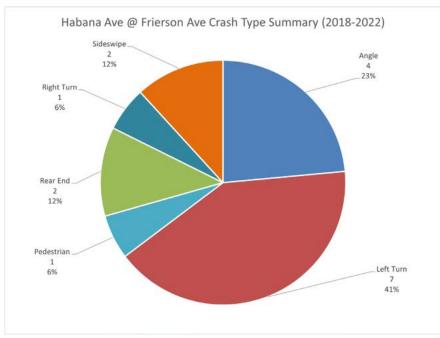
- Giddens Avenue 26 Total Crashes
- Wilder Avenue 17 Total Crashes
- Frierson Avenue 17 Total Crashes
- Bel Aire Circle 15 Total Crashes
- Eddy Drive/Habana Way 14 Total Crashes

#### **Crash Types by High Crash Intersections**

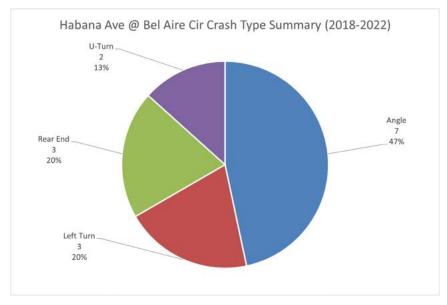


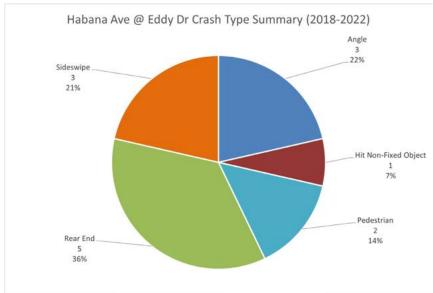
## **Crash Types by High Crash Intersections (cont...)**





## **Crash Types by High Crash Intersections(cont...)**





### **Corridor Bike and Pedestrian Crashes**

Locations of Bike and Pedestrian Crashes (2018-2022)							
Location	Number of Bike Crashes	Number of Pedestrian Crashes	Total				
Giddens Avenue	2	0	2				
Frierson Avenue	0	1	1				
Crest Avenue	1	1	2				
Wilder Avenue	0	1	1				
Joseph Court	0	1	1				
Eddy Drive	0	2	2				
Total:	3	6	9				

## **Corridor Crashes by Types**

Crashes by Types (2018-2022) - Excluding Crashes at MLK Jr. Blvd and Hillsborough Ave							
Crash Type			Year	5-Year Total	Annual		
Orasii Type	2018	2019	2020	2021	2022	3-1eai Totai	Average
Angle	14	11	10	11	11	57	12
Bike	0	1	0	0	2	3	<1
Head On	0	2	0	1	0	3	<1
Hit Fixed Object	2	0	0	0	1	3	<1
Hit Non-Fixed Object	1	0	1	0	0	2	<1
Left Turn	5	7	3	3	1	19	4
Pedestrian	0	2	2	1	2	7	2
Rear End	4	8	6	6	6	30	6
Right Turn	0	0	0	2	0	2	<1
Sideswipe	3	3	1	2	2	11	3
Single Vehicle	0	0	0	0	0	0	0
U-Turn	0	1	1	0	1	3	<1
Total:	29	35	24	26	26	140	28

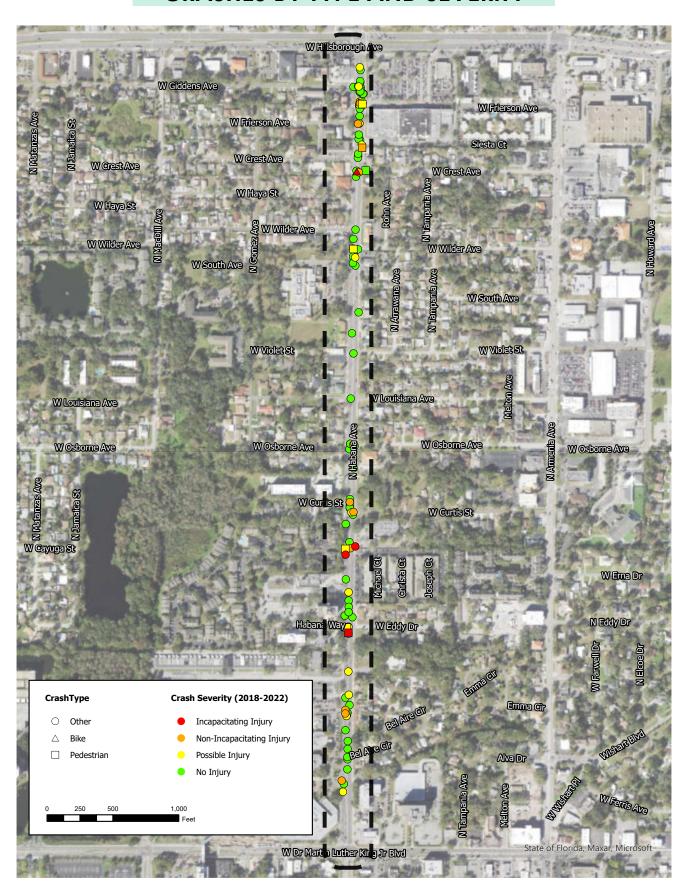
Crashes by Types (2018-2022) - <i>All Crashes</i>							
Crash Type	Year					5-Year Total	Annual
	2018	2019	2020	2021	2022	5-Teal Total	Average
Angle	30	19	17	20	24	110	22
Bike	2	1	1	1	2	7	2
Head On	0	5	0	2	0	7	4
Hit Fixed Object	6	0	1	0	2	9	3
Hit Non-Fixed Object	1	0	1	0	0	2	<1
Left Turn	14	10	6	8	8	46	9
Pedestrian	0	2	4	3	3	12	3
Rear End	39	34	18	26	22	139	28
Right Turn	3	1	0	2	1	7	2
Sideswipe	14	6	6	7	6	39	8
Single Vehicle	2	0	0	0	0	2	<1
U-Turn	1	1	4	1	4	11	2
Total:	29	79	58	70	72	391	78

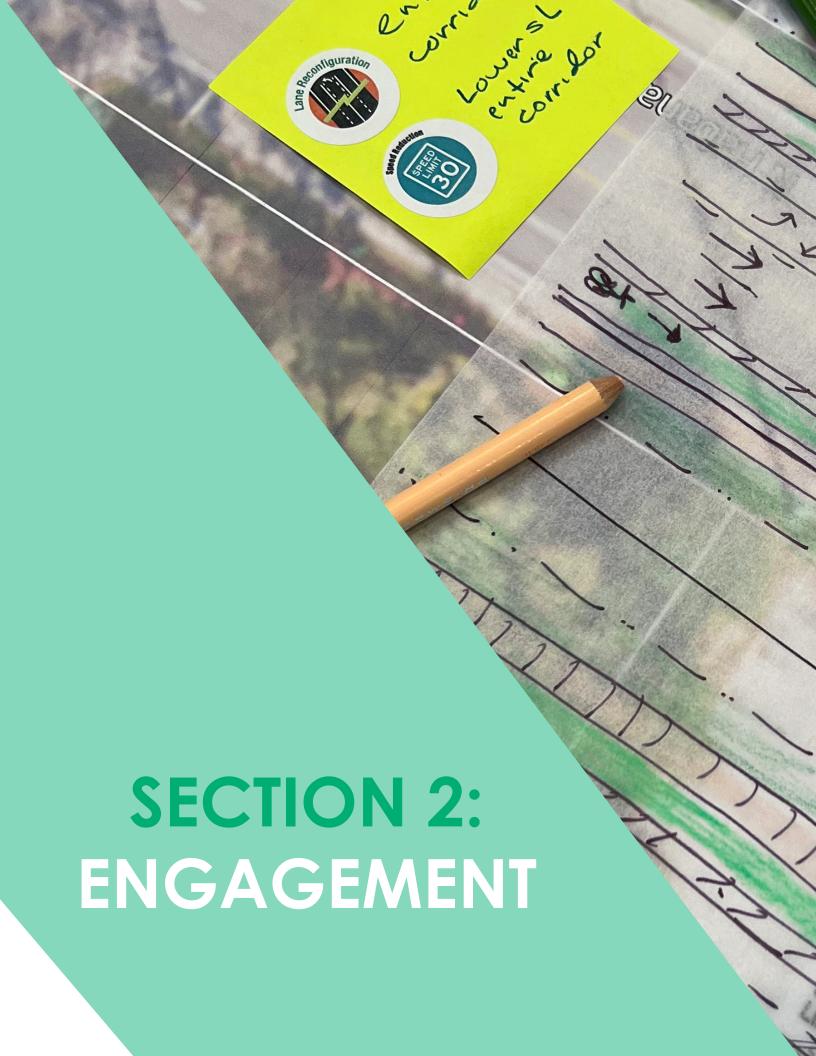
### **Corridor Crash Severity**

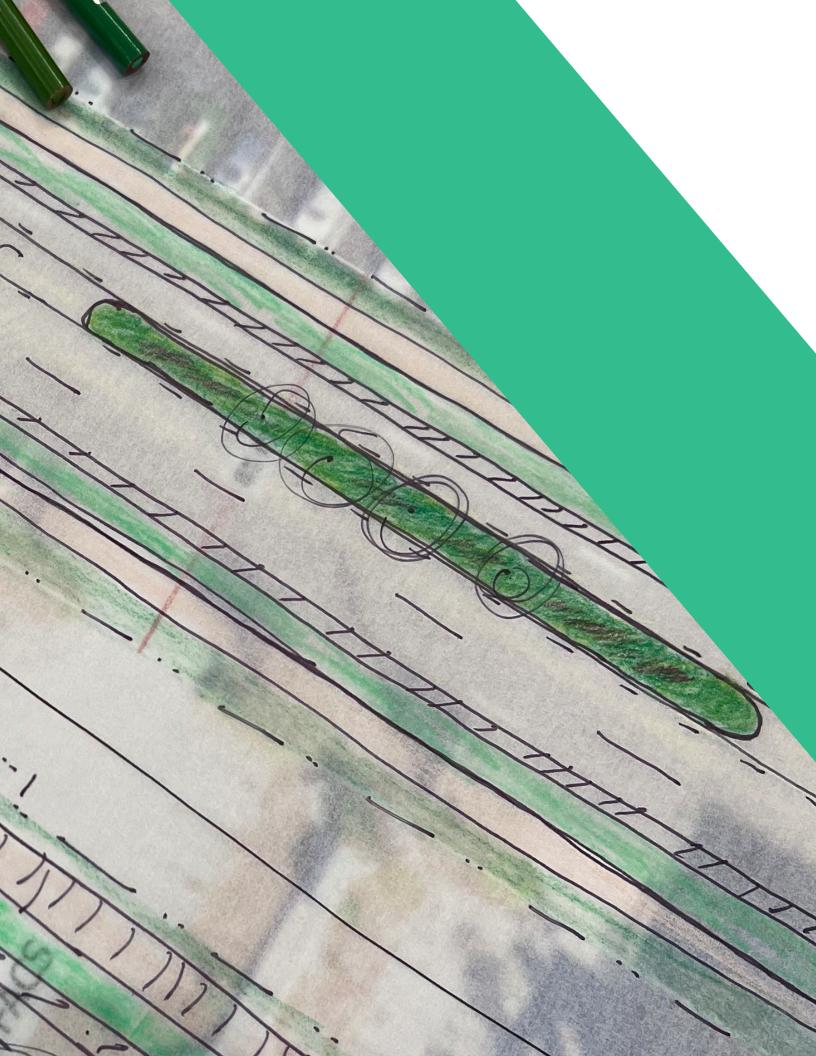
#### Crash Severity Summary (2018-2022) - Excluding Crashes at MLK Jr. Blvd and Hillsborough Ave Year Annual Severity **5-Year Total** Average Fatal Incapacitating <1 Non-Incapacitating Possible Injury

Crash Severity Summary (2018-2022) - All Crashes							
Coverity			Year			5-Year Total	Annual
Severity	2018	2019	2020	2021	2022	5-Year Total	Average
Fatal	0	0	0	0	0	0	0
Incapacitating	2	1	0	3	1	7	2
Non-Incapacitating	5	12	5	8	3	33	91
Possible Injury	37	8	14	19	13	91	19

## **CRASHES BY TYPE AND SEVERITY**







## **ENGAGEMENT SUMMARY**

### **Walking Audits and Site Visit**

One walking audit with renowned walkability expert, Dan Burden, was conducted along with a site visit at a later date with project team staff. The purpose of these site visits were to observe existing behavior and issues along the corridor. The observations are summarized below:

#### **Observations**

- · High volume of people riding a bike on the sidewalk and in the street
- Narrow sidewalks
- · Lack of dedicated bike facilities
- Pedestrians and cyclists crossing mid-block
- · Worn pavement and pavement markings

#### **Design Charrette and Stakeholder Outreach**

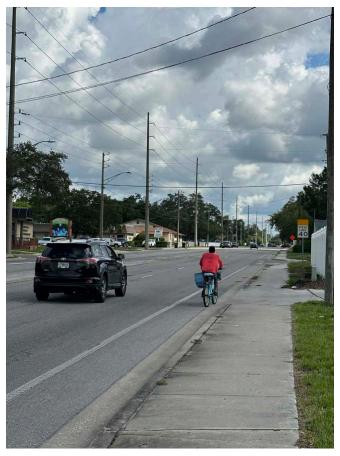
A design charrette was held on June 12th and 13th, 2023 at South University Tampa. Additional stakeholder outreach was conducted with St. Joseph's Hospital, Publix, and other businesses along the corridor.

During the outreach, multiple issues were identified by community members. First is the frequent speeding on Habana Avenue. Community members stated that the wide roadway and lack of traffic encourages speeding and racing on the corridor. Another commonly mentioned topic was lack of comfortable and safe bike facilities on the corridor. Stakeholders and community members mentioned there is a large population of people who rely on bicycling as their primary mode of transportation. With two major destinations at the each end of the corridor, Publix and St. Joseph's Hospital, it is important to have dedicated facilities for bicyclists. St. Joseph's Hospital was supportive of reducing the number of travel lanes to improve safety. The Hospital also mentioned many of their staff get to work by bicycle or transit and expressed the need for dedicate bike facilities, additional crossings, and other safety improvements to the corridor.

Below are some of the major themes and comments received through the engagement process:

- Slow down vehicle traffic
- Create a dedicated space for bicyclists
- Improve landscaping and shade
- Add more crossings
- Improve sight lines/visibility along the corridor
- Improve pavement surface/resurface the roadway
- Increase public safety and incorporate Crime Prevention Through Environmental Design (CPTED) elements









#### Meeting with St. Joseph's Hospital

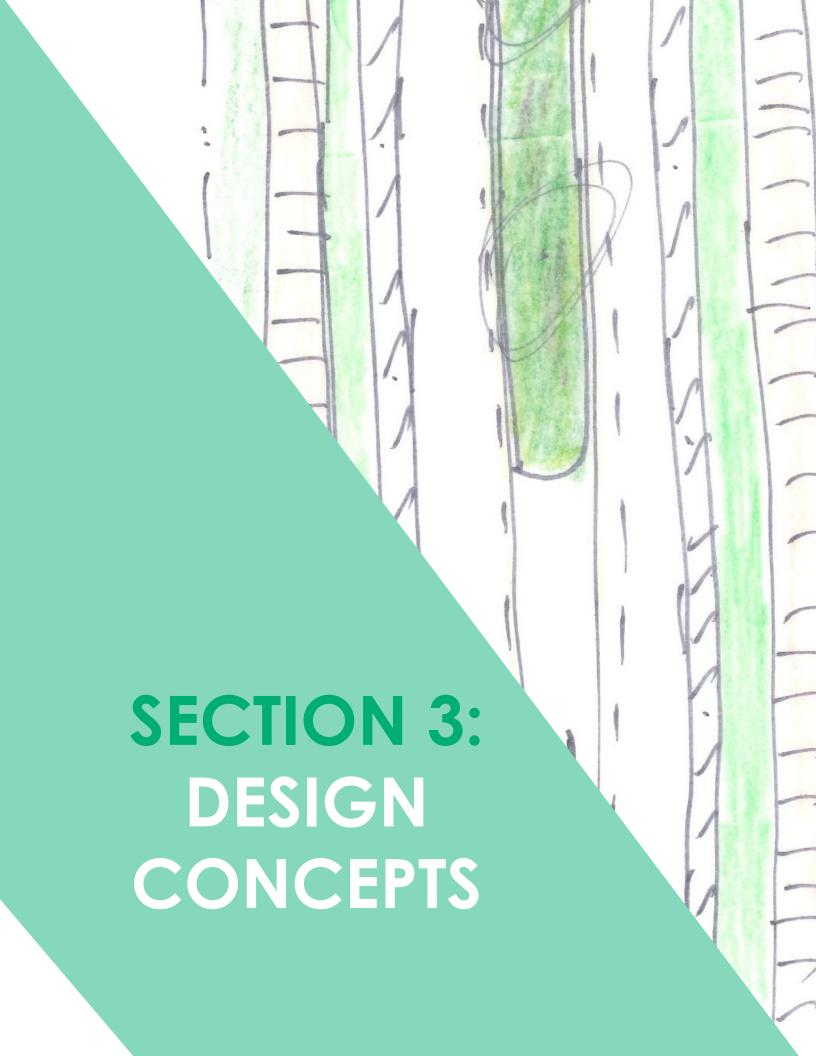
A meeting with conducted on July 27, 2023 with St. Joseph Hospital staff to discuss existing concerns and potential design concepts for the corridor. The following items were discussed during the meeting:

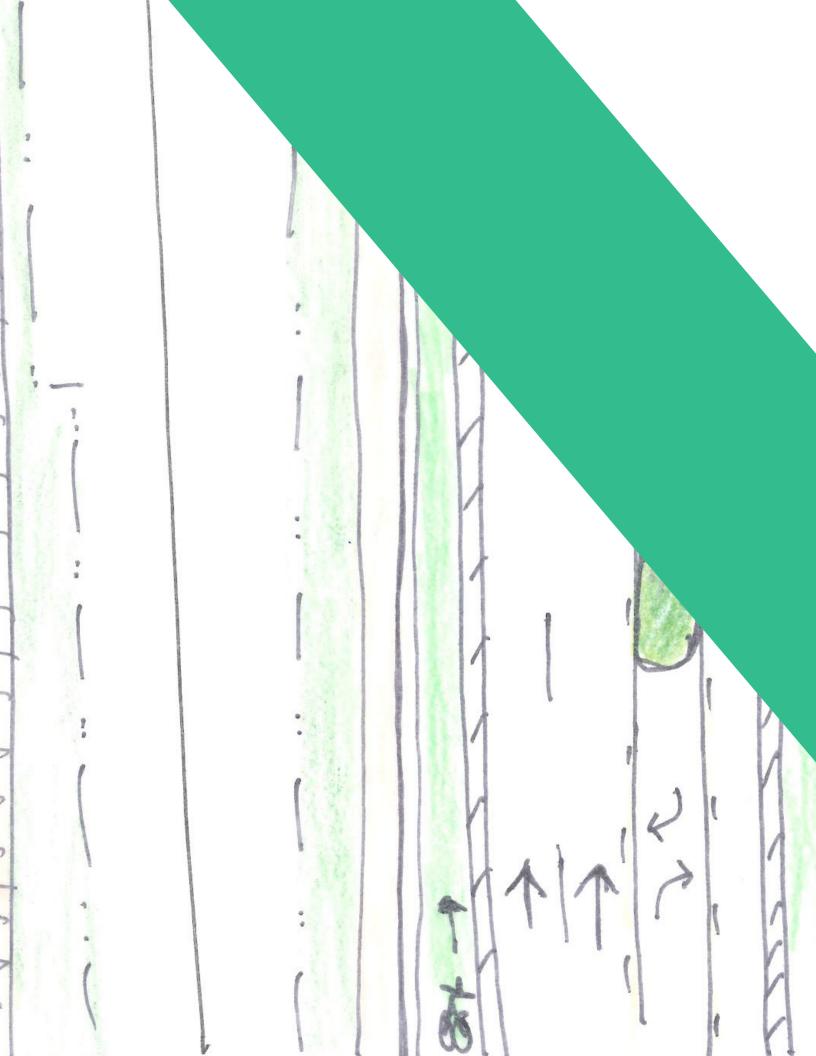
- The corridor is a healthcare hub:
  - There are many people who have never been to the area before which causes visitors to drive up and down Habana Avenue looking for their appointment location
  - Signage is not adequate which also contributes to lost and confused drivers
- Frequent driveway openings
- · Large amount of foot traffic and people on bicycles
- Many hospital staff and visitors use the bus
  - Hospital is concerned about bus users crossing the streets
- There is a large population of people without a vehicle in this area
- Objects like trees and power/utility poles block views and create unsafe conditions for all roadway users
  - The driveway to the hospital ER is a dangerous location because of blocked sight-lines
- Would like to see limited left turns onto Habana Avenue
  - · Force vehicles to make U-turns
- Consider dedicated turns lanes into the hospital
- Implementing green bike paint would draw attention to bicyclists
- Consider "rush" periods where hospital staff shifts change and there are a large number of people leaving and entering the hospital (6:30 AM/PM). This impacts the traffic signals at Dr. MLK Jr. Boulevard and Hillsborough Avenue.

#### Meeting with City Staff

A meeting with City staff and the Vision Zero team to discuss existing issues and potential improvements along the corridor. The following items were discussed during these meetings:

- · Hillsboro Plaza is a major attraction on the corridor and a crash hot spot
  - Recent improvements have not had much impact on safety
  - Force right turns only
  - · Allow left turns into shopping plaza
  - Add "Do Not Block" pavement markings
- Implement pedestrian crossings every 1/4 mile
- Create a traffic separator
- Narrow travel lanes
- Potential to drop the speed limit by 5 MPH
- · Construct medians similar to Dale Mabry Highway or Columbus Drive
- A lane reconfiguration/repurposing is favorable to provide more space for bicyclists
- Incorporate "Z-Crossings" into proposed mid-block crossings
- Consider right turn signal improvements at Dr. MLK Boulevard
- Consider adding "Do Not Block" pavement markings to hospital emergency driveway





## CORRIDOR RECOMMENDATIONS

Utilizing the corridor data and conditions in combination with the charrette process, stakeholder meetings, and City staff meetings, corridor recommendations and improvements were identified for implementation. Preliminary concepts and improvements were generated based on the existing conditions, the site visits, and stakeholder engagement. The preliminary concepts were discussed with stakeholders and city staff.

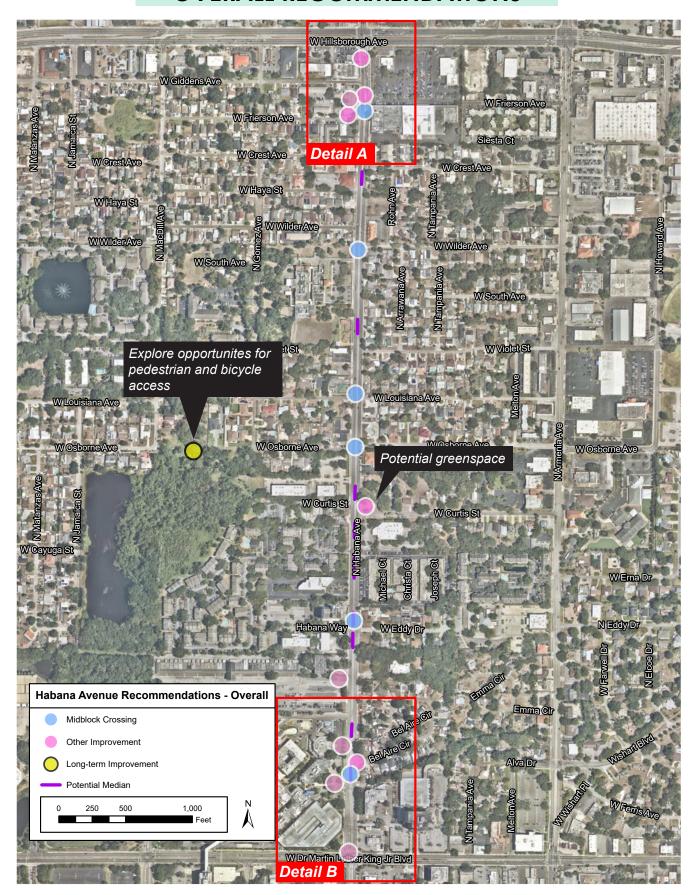
#### **Corridor Improvements**

- · Americans with Disabilities Act (ADA) improvements to sidewalks, curb ramps, and crossings
- · Pressure wash sidewalks
- · Construct medians and consider improving the two-way left turn lane to directional median openings
- Examine access management and seek opportunities for driveway consolidation or closure where possible
- Construct protected/buffered bike lanes
- Implement high-emphasis crosswalks on side streets
- Reduce curb radii on side streets and construct bulb-outs
- Implement speed feedback signs at the northern and southern locations to lower speeds
- Reconfigure and re-purpose travel lanes
- · And landscaping where possible

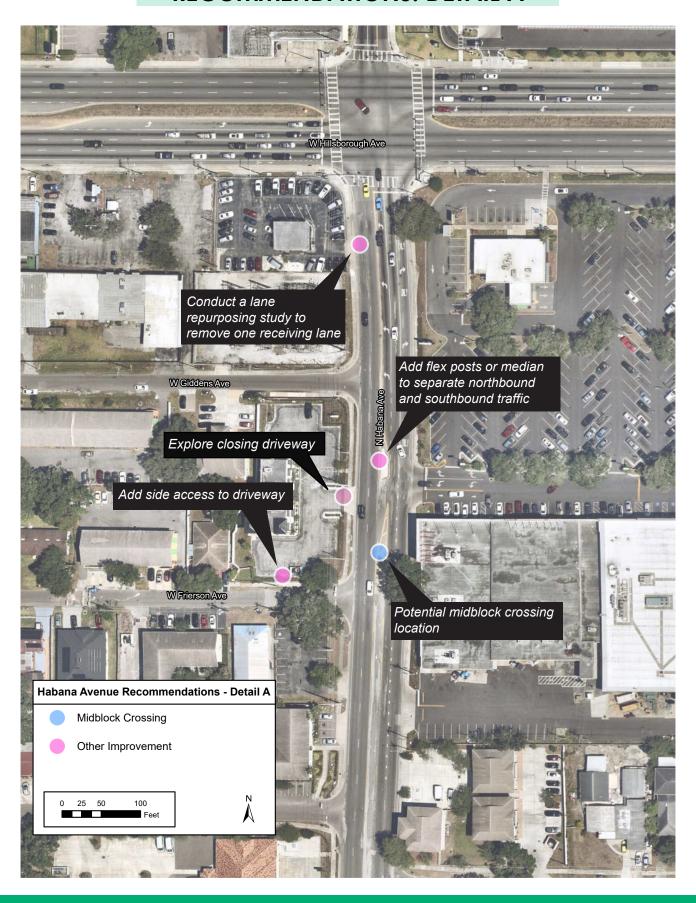
#### **Location Improvements**

- Add a sidewalk or trail to connect to Al Lopez Park on Osborne Avenue
- Potential green space opportunity at Curtis Street
- Construct new mid-block crossings
  - · Bel Aire Circle
  - Eddy Drive
  - Osborne Avenue
  - Wilder Avenue
  - Frierson Avenue

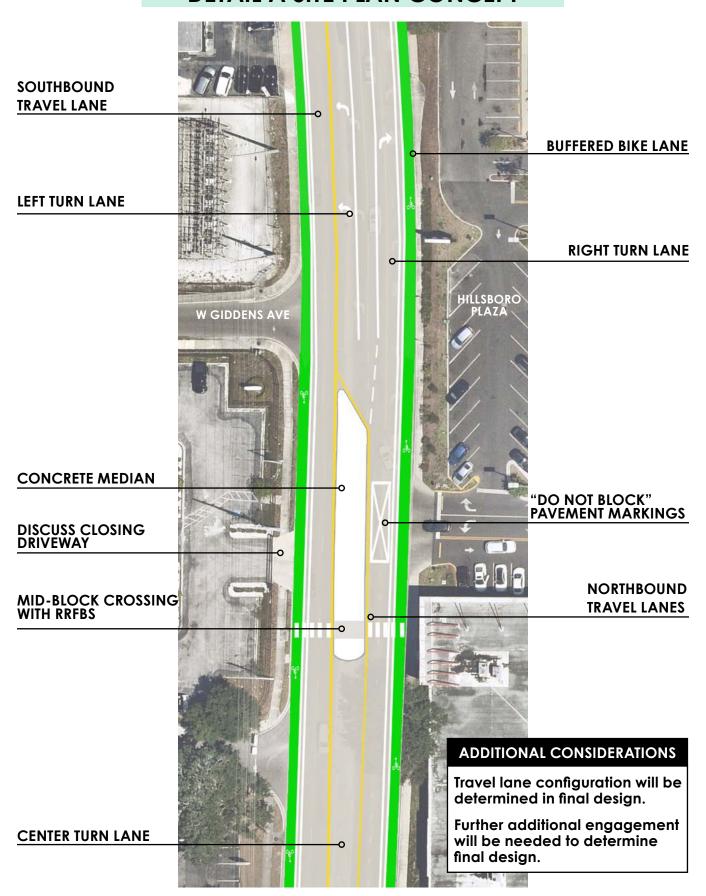
## **OVERALL RECOMMENDATIONS**



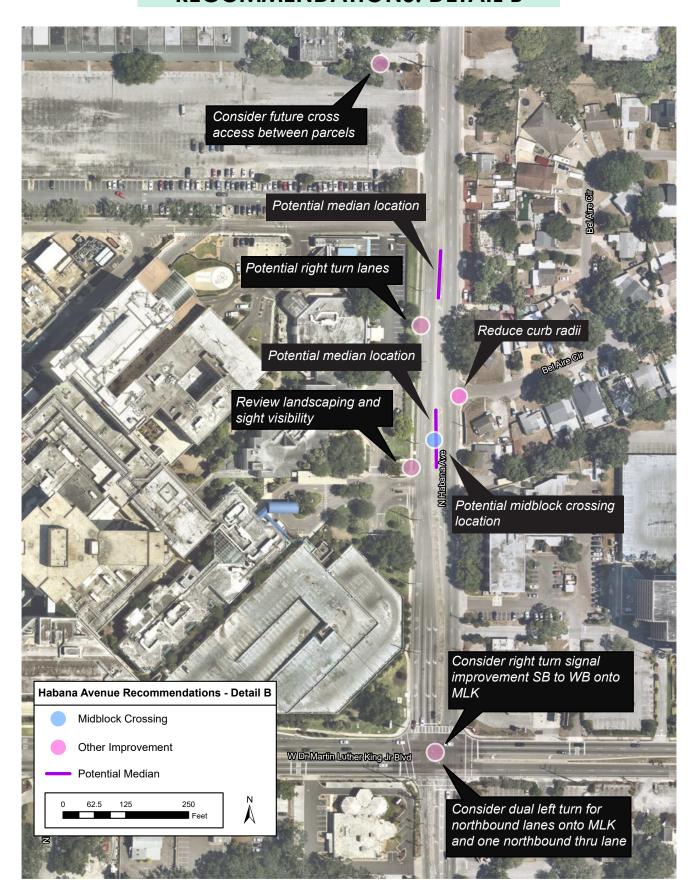
## **RECOMMENDATIONS: DETAIL A**



### **DETAIL A SITE PLAN CONCEPT**



### **RECOMMENDATIONS: DETAIL B**



## PROPOSED CONCEPTS

Utilizing the corridor data and conditions in combination with the charrette process, stakeholder meetings, and City staff meetings, two corridor concepts, an unbalanced approach and a multiple lane elimination concept, was developed for implementation. These concepts are initial options for the corridor and will need to be studied further for implementation.

#### **Multiple Lane Elimination**

#### **Elements**

- Large buffered and protected bike lane
- Two travel lanes: One southbound; One northbound
- · Center turn lane
- Space for potential bioswale and green infrastructure

#### **Benefits**

- · Dedicated, protected space for bicyclists
- Better walking environment with bike lane/buffer adjacent to the sidewalk
- · Narrows the roadway for vehicles to deter speeding
- Reconfigures the existing roadway footprint and does not require moving curb

Provides space for potential right turn lanes at key locations

#### **Unbalanced Approach**

#### **Elements**

- · Buffered and protected bike lane
- Three travel lanes: One southbound; Two northbound
- · Center turn lane

#### **Benefits**

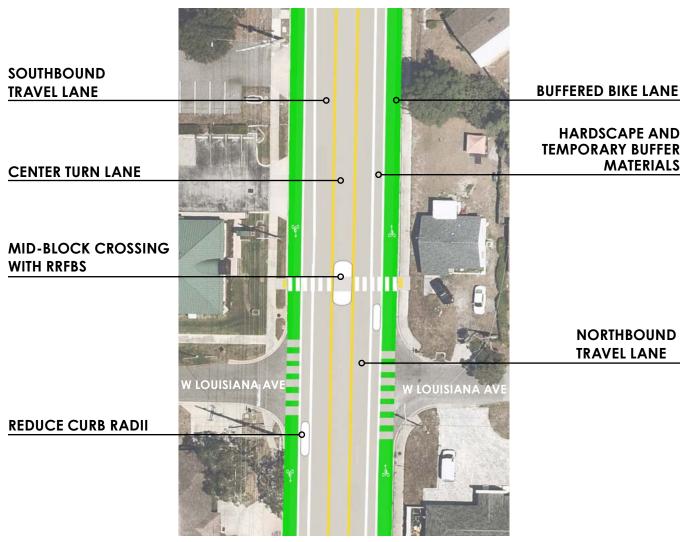
- · Dedicated, protected space for bicyclists
- · Better walking environment with bike lane/buffer adjacent to the sidewalk
- · Narrows the roadway for vehicles to deter speeding
- Reconfigures the existing roadway footprint and does not require moving curb
- · Can accommodate more emergency vehicles

# PROPOSED TYPICAL SECTION: MULTIPLE LANE ELIMINATION

CURB TO CURB WIDTH (APPROX.) = 64 FT.



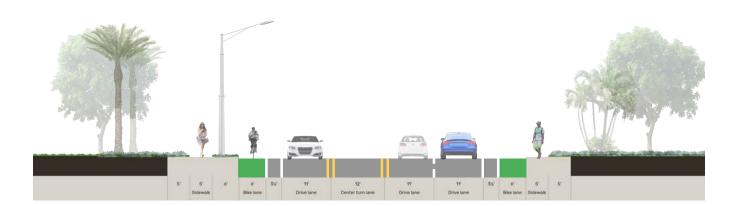
## PROPOSED CONCEPT SITE PLAN



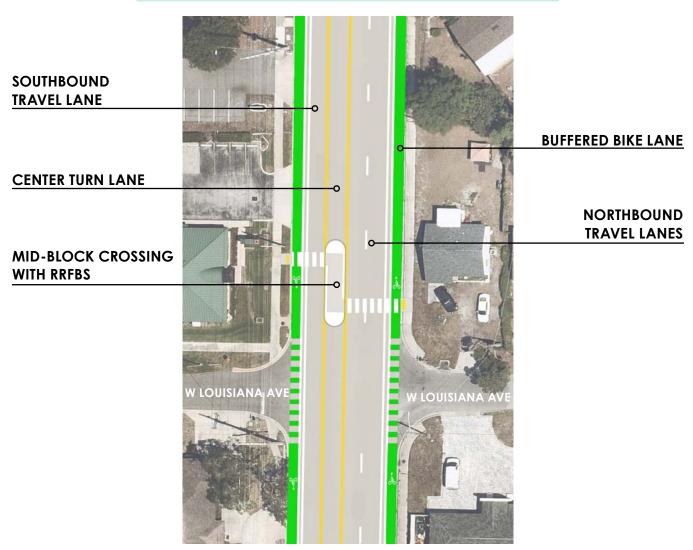
NOTE: CONCEPT ARE SUBJECT TO CHANGE DURING FINAL DESIGN

## PROPOSED TYPICAL SECTION: **UNBALANCED APPROACH**

CURB TO CURB WIDTH (APPROX.) = 64 FT.



## PROPOSED CONCEPT SITE PLAN



NOTE: CONCEPT ARE SUBJECT TO CHANGE DURING FINAL DESIGN



