

Draft

78th Avenue Complete Street Concept Plan

Prepared for:
City of Pinellas Park

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FEHR  PEERS



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Executive Summary

Plan Overview

Building on the momentum of the Community Redevelopment Agency Plan (CRA Plan), Pinellas Park applied for and received a Complete Street Concept Planning Grant from Forward Pinellas to conduct a detailed study of the 78th Avenue corridor between 66th Street and US 19. The concept developed as a part of the CRA Plan identified the removal of the center left-turn lane to reallocate roadway uses within the existing right-of-way to provide a multi-use path, enhanced landscaping opportunities, and accommodate the potential to provide an 8-foot future equestrian path. The purpose of this 78th Avenue Complete Street Concept Plan was to develop and evaluate a wide range of potential alternatives that met the purpose and need identified in the Redevelopment Plan and refine a preferred concept alternative based on feedback from decision makers and the public.



How to Use this Document

This document is organized in Five Chapters, with technical appendices to provide additional details. A full concept plan of the Preferred Alternative is provided in [Appendix A](#). Since the project may be constructed in stages, it may be important to link together portions of the corridor with a retrofit alternative. A concept of this Alternative for a 4-block section is shown in [Appendix B](#).

Chapter 1 – Project Background: Describes the various planning documents and policies that support the development of the project.

Chapter 2 – Existing Conditions: Provides a summary of the existing conditions along and connecting to the corridor, and the opportunities and constraints along the corridor. A full existing conditions report is provided in [Appendix C](#).

Chapter 3 – Plan Development: Summarizes the various community engagement activities, metrics that were developed to evaluate the project alternatives, and provides a high-level overview of the Alternatives Evaluation. The full Alternatives Analysis is provided in [Appendix D](#).

Chapter 4 – Concept Plan: Presents the preferred alternative plan and describes various intersection and corridor treatments. Since this is a concept plan and detailed engineering designs would need to be prepared, considerations for the future design stage are provided to better describe the design intent. Coordination with the City Center Master Plan process is also described, along with other design elements, such as street lighting, landscaping, and street furniture. A cost estimate and other engineering considerations like drainage and utilities are also discussed.

Chapter 5 – Implementation: Potential phasing and funding opportunities are presented in the final chapter to help guide the next phases of the project.



1. Project Background

Why this Project?

The City of Pinellas Park prepared this Complete Street Concept Plan for the 78th Avenue Corridor between 66th Street and US 19 (78th Avenue Complete Street Plan), parallel with planning efforts for the City Center Master Plan. **Figure 1** displays the limits of the study corridor, which is approximately 2.5 miles long. The goals of the 78th Avenue Complete Street Plan are to:

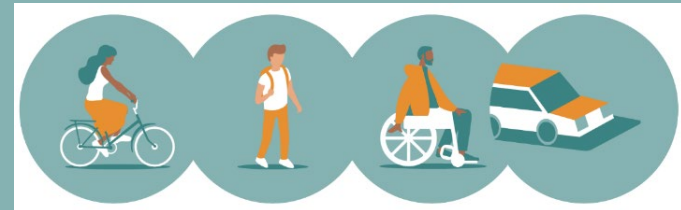
1. Identify roadway improvements that increase transportation choice for the community by improving bicycle and pedestrian connectivity along and connecting to the 78th Avenue corridor
2. Improve transportation safety outcomes for all roadway users
3. Connect the City Center and Performing Arts districts with cohesive roadway design elements that help to establish a sense of place
4. Serve as a catalyst project for other complete street improvements on connecting and parallel roadways with the ultimate goal of creating a network of complete streets in Pinellas Park, with connections to adjacent communities

This section describes relevant local and regional planning documents and processes that serve as the policy framework for the project.

What is a Complete Street?

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations. –National Complete Streets Coalition

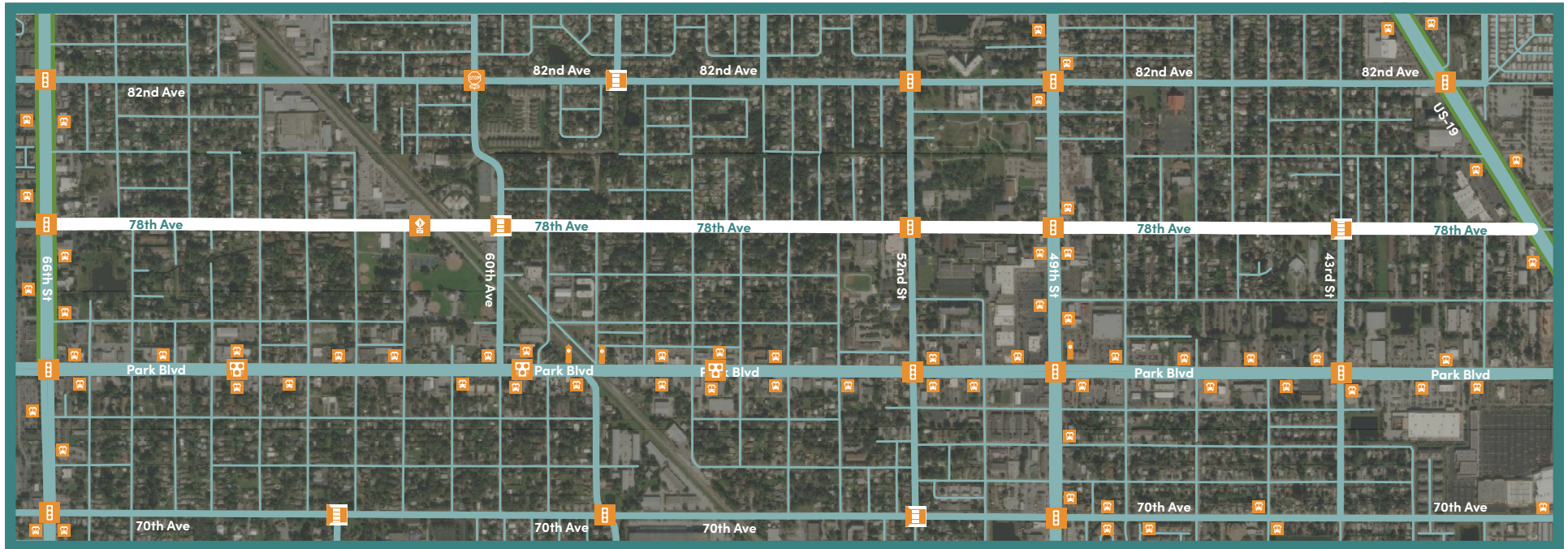
Not every Complete Street needs to accommodate all travel modes equally. Rather a network of Complete Streets can balance the needs of travel modes in a way that reflects citywide policies, transportation safety, and local priorities.



78TH Ave complete street



Figure 1
Study Corridor Map



Key

- | | | | |
|--|----------------------|--|---|
| | 78th Avenue corridor | | Pedestrian crossing at Pedestrian Hybrid Beacon (PHB) |
| | Other major streets | | Pedestrian crossing at signalized intersection |
| | Minor streets | | Pedestrian crossing at all-way stop-controlled intersection |
| | Bike lanes | | Pedestrian crossing at Rectangular Rapid Flashing Beacon (RRFB) |
| | | | Pedestrian crosswalk on uncontrolled segment |
| | | | Bus stop |
| | | | Gateway |

Policy Foundation

The 78th Avenue Complete Street Plan builds upon several local and regional planning efforts.

Local Plans

In November 2020, the City of Pinellas Park adopted a Community Redevelopment Plan that includes the entirety of the study corridor from 66th Street to US 19 within the Community Redevelopment Area (CRA). 78th Avenue forms the northern boundary of the CRA between 66th Street and 52nd Street and as such, improvements to the north side of the roadway beyond the existing centerline along this section of roadway may not be eligible for CRA funding. The Community Redevelopment Plan identified several complete street corridors, including 78th Avenue, 70th Avenue and 49th Street to provide key north-south and east-west connections, with a focus on connecting the City Center District, the Performing Arts District, and the Employment Center District. The City Center Master Plan and 78th Avenue Complete Street Plan build upon the Goals, Objectives and Policies outlined in the Redevelopment Plan.



Pinellas Park is currently updating the Comprehensive Plan, establishing a vision for the City in 2050. While the Comprehensive Plan update is still in progress, it is expected to contain refined policies aimed at improving transportation safety, specifically for people walking and people cycling, as well as increase mobility choices. The Complete Street Concept Plan aims to further these refined policies.

PINELLAS PARK 2050 *Planning for Progress*

The 78th Avenue Complete Street Plan is being developed in close consultation with the City Center Master Plan process. The City Center Master Plan area encompasses the area between 82nd Avenue, 49th Street, Park Boulevard, and 66th Street, along with the 78th Avenue corridor from 66th Street to 49th Street. The goal of the City Center Master Plan process is to develop a strategy for economic development in the Plan Area that can be implemented within a cohesive urban design palette, including streetscape elements, parking strategy, and recreational opportunities.

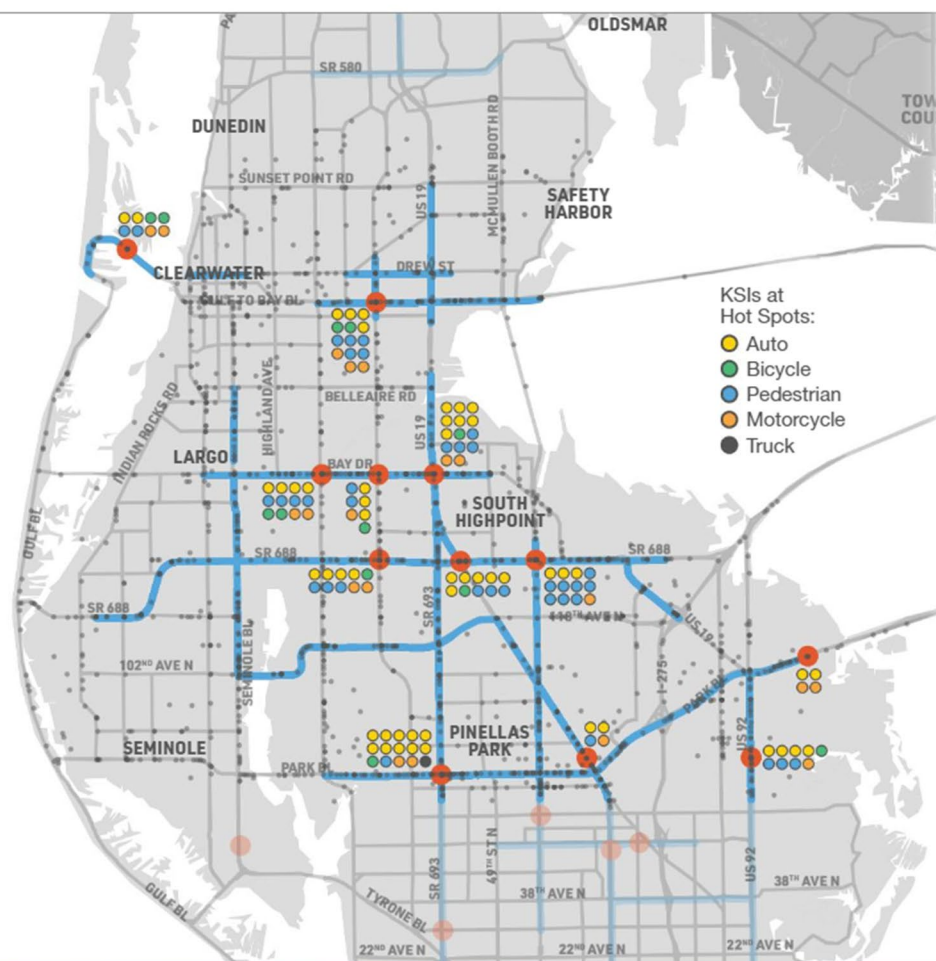
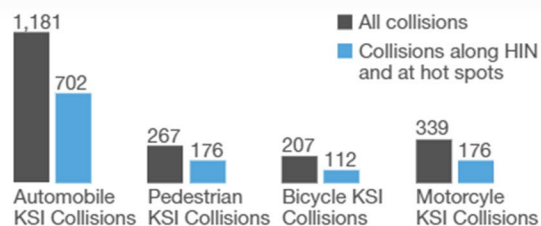
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Figure 17

High-Injury Network
and Hot Spots:
Central County

- High-Injury Network
- Hot Spots
- KSIs



Regional Plans and Support

Forward Pinellas prepared a Vision Zero Plan known as *Safe Streets Pinellas*, which was adopted in March 2021. The plan contains policies and action items aimed to reduce the number of fatal and severe injury collisions on Pinellas County roadways to zero by 2045.

Within Pinellas Park, US 19, Park Boulevard, 49th Street, 66th Street, and Bryan Dairy Road are located on the High Injury Network (HIN), meaning that those roadways experience a higher rate of traffic collisions that result in a serious injury or fatality, particularly for vulnerable roadway users (people walking, bicycling, or riding a motorcycle) than other roadways in the County.

Park Boulevard at 66th Street and US 19 just north of Park Boulevard are in the top 25 collision locations in the County. Complete Street improvements on 78th Avenue would provide an alternative roadway to Park Boulevard for local walking and bicycling travel, and ultimately connect to other complete street corridors.

The 78th Avenue Complete Street Plan preparation is largely funded through the Forward Pinellas Complete Street grant program. The grant program, started in 2016, provides direct funding for local transportation projects that demonstrate a strong link to redevelopment, economic opportunity, and better accessibility for all roadway users. The program typically awards \$100,000 for concept planning studies and up to \$1,000,000 for construction.

Pinellas Park was awarded funding for this concept plan in 2020. The key components of the complete street concept to be evaluated as part of this study include connecting the City Center District, the Performing Arts District, and the existing neighborhoods surrounding the roadway, employment centers and retail centers. The proposed improvements include removing the center left-turn lane and improving bicycle and pedestrian facilities to provide a safer east-west route for cyclist and pedestrians than Park Boulevard.



Forward Pinellas to Provide \$100K & \$1M in Complete Streets Awards

2. Existing Conditions

What is happening today?

A detailed existing conditions assessment was prepared to identify opportunities and constraints along the corridor to consider in the alternatives assessment, with the full existing conditions report provided in [Appendix C](#).

Overview

The existing conditions assessment provides a detailed description of the study area roadways, transit service, bicycle and pedestrian network, roadway operations for people driving, and a collision assessment. Key findings for each mode are presented in [Table 1](#)

10

- Roadway operations for people driving were evaluated based on level of service calculations and corridor travel time ([Figure 2](#)).
- The experience for people walking and bicycling was evaluated using a level of traffic stress assessment ([Figure 3](#)).
- Transportation safety was evaluated based on a collision assessment of the last five years ([Figure 4](#)).

Table 1: Existing Conditions Summary

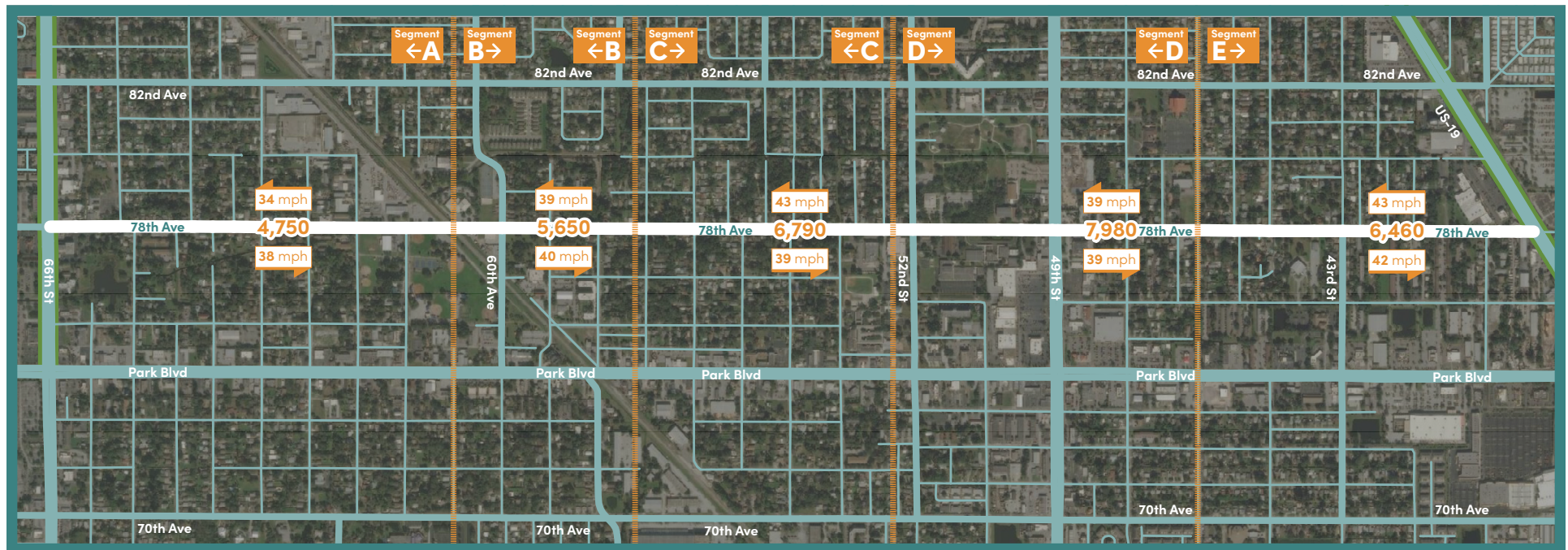
Travel Mode/ Topic	Key Findings
1. Driving	• Traffic volumes range between 5,000 and 8,000 per day • People generally drive along the corridor 5 to 10 miles per hour over the speed limit • Intersections operate within established levels of service for people driving
2. Walking and Biking	• Roadway is uncomfortable for people walking and bicycling • No designated bicycle facilities along corridor • Large crossing distances at some intersections increase pedestrian exposure to conflicts with other roadway users
3. Transport Safety	• With 5 percent of the Pinellas County population, 12 percent of traffic collisions that result in a severe injury or death occur in Pinellas Park resulting in a disproportionate burden placed on Pinellas Park residents and roadways
4. Other	• Roadway has varied right-of-way, with 60-foot minimum. • Improvements to 66th Street, 49th Street and US 19 will require coordination with FDOT and Pinellas County • Existing ADA deficiencies along corridor will require upgrade as part of the project • There is limited transit access to destinations along the corridor • Above ground utilities are generally placed at the edge of right-of-way and wide-scale relocation is expected to be avoided • Drainage conflicts will need to be carefully reviewed as part of the final design

Source: Fehr & Peers, 2021.

78TH Ave complete street



Figure 2
**Existing Daily Roadway
Volumes and Speed**



Key

39 mph

85th percentile vehicle speeds - westbound

5,650

Average Daily Traffic Volumes

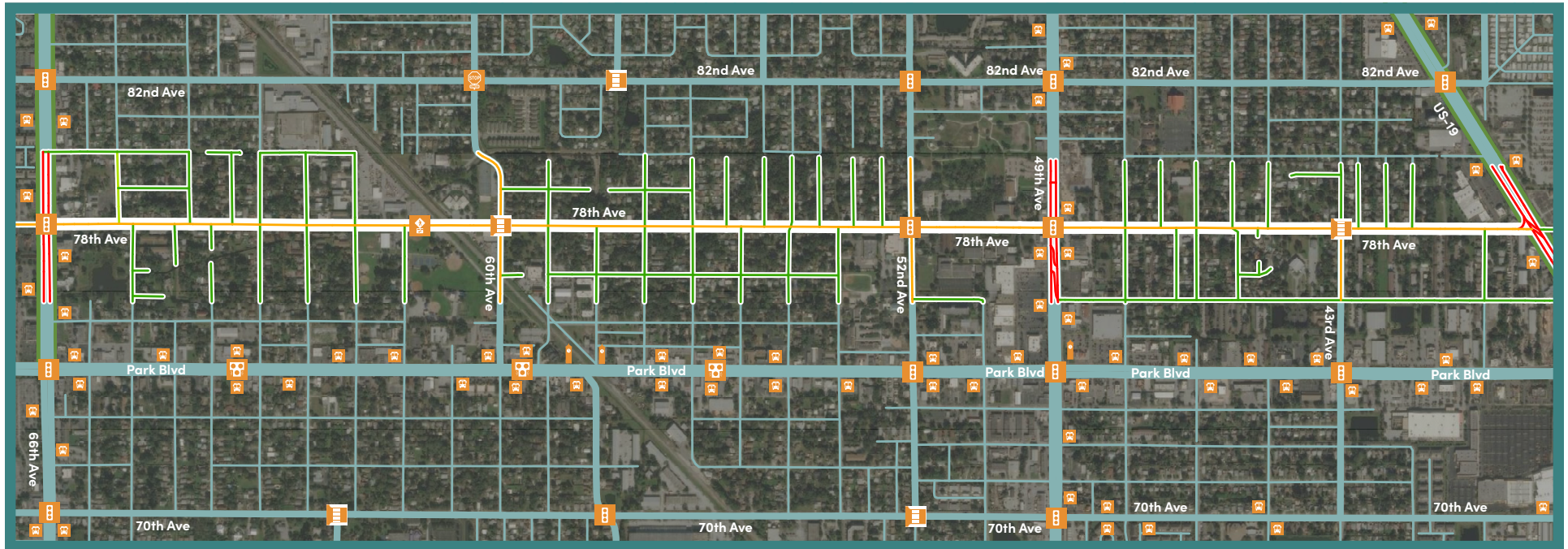
40 mph

85th percentile vehicle speeds - eastbound

78TH Ave complete street



Figure 3
Level of Traffic Stress
(LTS)



Key

LTS

- 1 (lowest stress)
- 2
- 3
- 4 (highest stress)

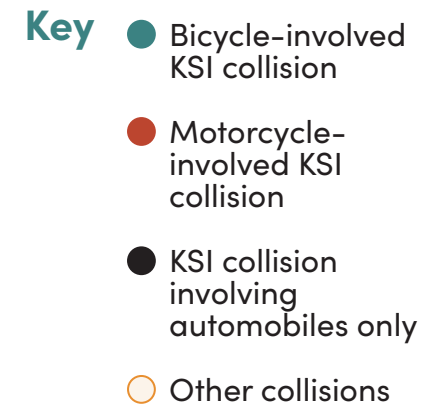
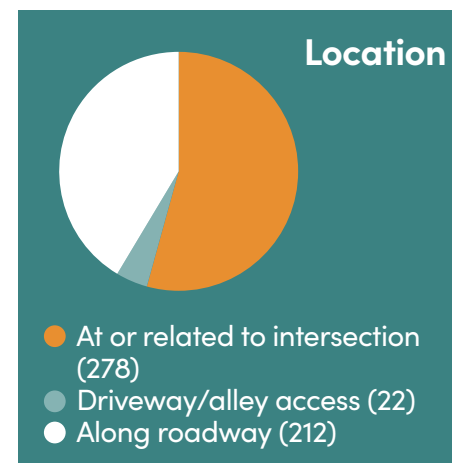
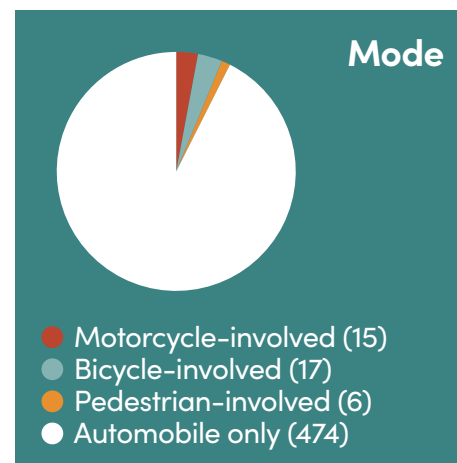
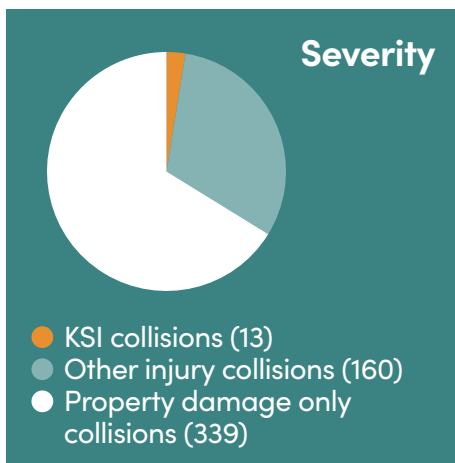
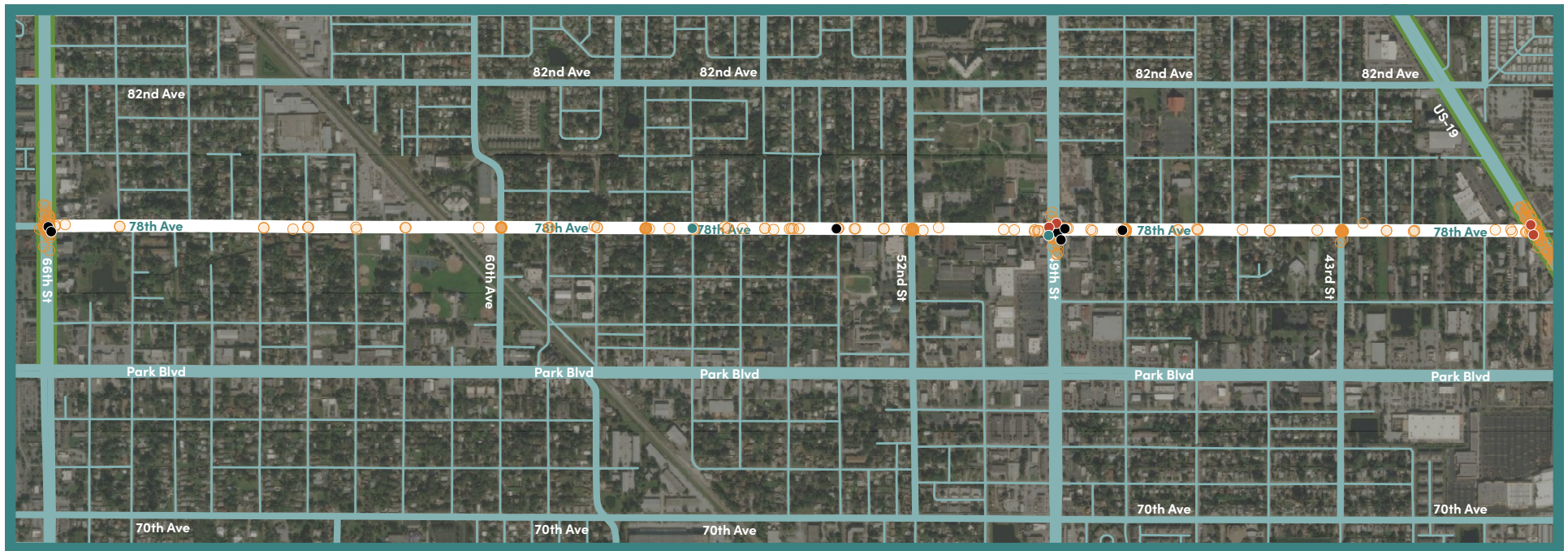
- 78th Avenue corridor
- Other major streets
- Minor streets
- Bike lanes

- Pedestrian crossing at Pedestrian Hybrid Beacon (PHB)
- Pedestrian crossing at signalized intersection
- Pedestrian crossing at all-way stop-controlled intersection
- Pedestrian crossing at Rectangular Rapid Flashing Beacon (RRFB)
- Pedestrian crosswalk on uncontrolled segment
- Bus stop
- Gateway

78TH Ave complete street



Figure 4
Collision Assessment



Based on the detailed existing conditions assessment, opportunities and constraints along the corridor were identified.

Opportunities

The following summarizes potential opportunities along the corridor that were considered in the refinement of project alternatives:

- Roadway volumes do not warrant the provision of a center-turn lane to accommodate vehicle volumes along most of the corridor length, allowing that right-of-way to be repurposed for other roadway uses to meet the overall purpose and need of the project.
- Coordination of the 78th Avenue Corridor Plan with the City Center Master Plan will allow for consideration of activity generated by the City Center for all travel modes to be accounted for in the preferred alternative for 78th Avenue.
- The intersection of 78th Avenue at 60th Street would operate well under a variety of traffic control scenarios, including elimination of left-turn pockets, roundabout control, or all way stop control.
- There is an opportunity at the intersection of 78th Avenue at 52nd Street to eliminate left-turn lanes with the installation of advanced traffic control system. Other traffic control devices are also feasible, including roundabouts.
- There is an opportunity at the intersection of 78th Avenue at 43rd Street to provide a mini-roundabout to moderate the speeds of people driving as they enter the corridor from US 19 and serve as a gateway treatment.
- There is an opportunity at the intersection with US 19 to install a partial traffic signal to protect the northbound and southbound left-turn movement without affecting overall peak period roadway operations as vehicle queues from Park Boulevard routinely extend beyond 78th Avenue. Protecting the left-turn movement, especially during periods of congestion, would reduce the frequency of severe and fatal collisions related to the northbound left-turn movement, while maintaining the level of service for through travel along the corridor. Providing a protected pedestrian crossing of US 19 at 78th Avenue in conjunction with signalization is also feasible.
- The grid network provides opportunities to increase the density of crossings of 78th Avenue. Some crossings may need enhancements, such as RRFBs and high visibility crosswalks.
- Vehicular travel speed along the corridor can be better managed through roadway design elements aimed at a design speed of 25 miles per hour.
- Improved north-south connectivity across Park Boulevard to 70th Avenue can be provided at select locations, such as at 63rd Street, 60th Street, 56th or 55th Street, 52nd Street, and 43rd Street, including the potential for an equestrian connection to the 78th Avenue corridor from the 60th Street corridor.
- There are opportunities to reduce the crossing distance at intersections along the corridor, reducing the potential exposure of vulnerable roadway users crossing the roadway with people driving vehicles.

Constraints

The following summarizes potential constraints along the corridor to consider in the refinement of project alternatives:

- Between 66th Street and 52nd Street, the boundaries of the CRA are along the center line of the roadway, so there may be funding limitations that limit the design alternatives that can be selected.
- High density of driveways along some portions of the corridor limit potential bicycle facility design options.
- Existing ADA deficiencies along the corridor could limit low-cost quick-build alternatives that could be implemented while funding is sought for the long-term project.
- Additional right-of-way may be needed through activity centers to maintain a bicycle facility, provide space for outdoor dining and other activities, and potentially on-street parking.
- Drainage and utility conflicts exist along the corridor that need to be considered in the development of project alternatives.
- Opportunities to modify intersections with 66th Street, 49th Street and US 19 will be more involved; as these intersections are owned and operated by FDOT or the County, additional agency coordination would be required. However, the increased focus on pedestrian and intersection safety, which are elements of FDOT Secretary Kevin Thibault's "Vital Few" may provide opportunities that have traditionally been difficult to get implemented.



3. Plan Development

How did we get here?

This section describes the various activities that were employed to obtain feedback from the community and stakeholders, the process to develop Concept Plan Alternatives, evaluation criteria, and the preferred alternative. A technical memorandum detailing the development of the alternatives is provided in [Appendix D](#).

Community Engagement

Feedback from the community is an important component of the project. Feedback was solicited in a number of ways, including:

- Meetings and discussion with multiple city departments
- Participation in the City Center Master Plan Charette
- Survey of community members
- Listening Session with City Council
- Stakeholder Meetings
- Project Website and Social Pinpoint On-line Feedback Tool

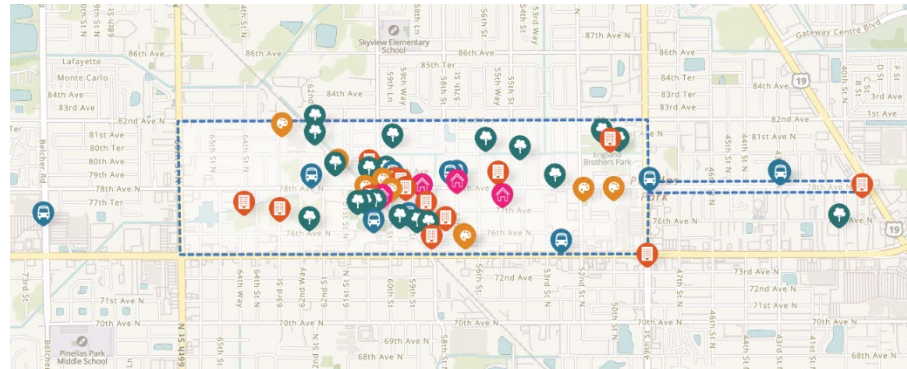


Inset 1: City Staff Identified Project Opportunities

General Feedback Summary

Initial meetings with City staff and the community yielded a wide range of feedback and identified a number of opportunities along the 78th Avenue Corridor, and connecting to the City Center area including:

- Wider sidewalks
- Multimodal opportunities
- Infrastructure upgrades
- Bicycle facilities
- Roundabouts
- Shade
- Improve Safety
- Connect destinations for people walking and biking
- Improved access to transit
- Improved signage and wayfinding
- Improved visibility at major intersections for turn movements
- Design for slower vehicle travel



Inset 2: Comment Locations from Social Pinpoint

As a part of the City Center Master Plan Project, a web map (Inset 2) and survey were used to solicit feedback from the public in combination with a weeklong charette. Transportation related comments include:

- *Add in bike lanes for 78th Street and improve access to public transportation where needed*
- *Design 78th and 82nd Avenue the same as 94th Avenue. Allows for bike, walking, etc. Eliminate turn lane which is barely used.*
- *Improve visibility of traffic for left turning vehicles (comment related to 49th Street at 78th Avenue)*
- *Bicycle Lanes!! As a cyclist (and former St. Petersburg resident) I find Pinellas Park greatly lacking in cyclist lanes..... Idea... Remove the center turn lanes from 78th, 82nd, 94th and 110th Avenues (I realize the latter are not in the "City Center"). This would not only slow traffic down, but it would also enable bicycle lanes to be installed without having to engage in any road reconstruction.*

- *This intersection needs some sort of 4-way stop or a traffic signal. Too many collisions here because people don't pay attention. Two collisions in a single day have happened multiple times along with single collision days in a row. (comment related to 57th Street at 78th Avenue)*
- *Good spot of a roundabout (comment related to 60th Street at 78th Avenue)*
- *Find a way to better join the parks together at either end using 78th as a family friendly, walkable, bike-able corridor. I know a lot of it is houses but there's still room to make it more inviting. Make sure to include the library in this connection.*
- *Traffic needs to be slowed dramatically on all roads going north and south to Park Boulevard from 78th Avenue in the entire surrounding area please place current stop signs in proper direction. This has the absolute lowest budget required out of all the ideas listed. This street alone has 10 or more children that you will never see out front due to the constant thru Traffic!!! Speed humps don't work for this solution. Stop signs only please!! (comment related to 55th Street)*
- *A multi-use paved trail along all the canals and possibly along the rail would allow cyclists the opportunity to ride within city limits instead of the Pinellas Trail. It could be accessed via the new bike lanes being established and provide a network of safe zones for pedestrians and bicyclists. Businesses along the route would see an increase in exposure and it would further prove the progressiveness of our awesome city!*



Inset 3: Billy Hattaway During the Charette Sharing Transportation Considerations for the City Center Area and 78th Street

Once project Alternatives were developed, they were presented to City Council for feedback. Based on Council feedback, the preferred alternative was refined and presented to FDOT, Pinellas County and Forward Pinellas for feedback and comment. Additional details are provided in subsequent sections of this chapter.

Evaluation Metrics

Based on the project goals and public feedback, measurable evaluation criteria were developed, as presented in **Table 2**. Alternatives that did not meet the basic transportation functions of the corridor, such as accommodating bus travel or maintaining two-way vehicular travel, were immediately eliminated from further consideration. Additionally, community support was weighed outside of the formal evaluation criteria.

Table 2: Evaluation Criteria

Project Goal	Evaluation Metric	Evaluation Scale	Maximum Score
Increase transportation choice (choice)	Level of comfort for people walking and people bicycling	- No Change - StreetScore+ improves to 2 - StreetScore+ improves to 1 (corridor is currently a 3)	20
	Change in vehicle operations	<u>Increase significantly</u> (more than 10 second increase and result in LOS F) <u>Increase moderately</u> (more than 10 seconds but LOS E or better), <u>Potentially perceptible change</u> (5 to 10 second increase/LOS E or better) no change (-5 to +5 seconds) or decrease	10
Improve transportation safety outcomes (safety)	Change in projected operating speed for people driving	- No change (existing 85th percentile vehicle speed between 35 and 40 miles per hour) - Slightly lower (projected 85th percentile vehicle speed between 30 and 35 miles per hour) - Moderately lower (projected 85th percentile vehicle speed between 25 and 30 miles per hour) - Significantly lower (projected 85th percentile vehicle speed less than 25 miles per hour)	15

Table 2: Evaluation Criteria

Project Goal	Evaluation Metric	Evaluation Scale	Maximum Score
	Change in crossing distance	• No change • Slightly lower (average crossing distance reduced by less than 10 percent) • Moderately lower (average crossing distance reduced between 10 and 20 percent) • Significantly lower (average crossing distance reduced by more than 20 percent)	10
Connect the City Center District and Performing Arts District (connections)	Are there opportunities to provide tree cover / landscaping, pedestrian scale lighting, seating, green infrastructure, and other potential community features?	• No change • Low (at least one continuous 4-6' landscape/flex areas provided) • Moderate (at least two continuous 6-8' landscape/flex area provided) • High (at least two continuous 8'+ landscape/flex area provided)	20
Serve as a catalyst for other complete street improvements (catalyst)	Project Feasibility (related to cost, utilities, and environmental issues)	Low, Medium, or High	25

Source: Fehr & Peers, 2021

Project Alternatives

Based on feedback from the public and City Staff, as well as engineering considerations associated with various improvement options along the corridor, four formal alternatives were developed to present to the City Council. A brief description is provided below, with a detailed assessment provided in [Appendix D](#), including a discussion of roadway operations for all modes and intersection traffic control options. A summary is presented in [Table 3](#).

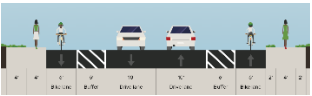
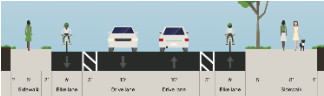
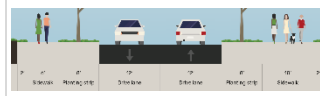
Alternative 1 – Retrofit: The retrofit alternative provides a cross-section that could be implemented within the existing pavement cross section. As roadway reconstruction projects can take years to fully design and fund, this alternative would allow the City to implement a low-cost improvement that would provide some immediate benefit to people bicycling along the corridor. This alternative would not improve the sidewalk areas or improve landscaping but would eliminate the center two-way left-turn lane and provide a bicycle lane and a striped buffer between the vehicle travel lane and the bicycle lane. It could also allow for left-turn lanes to be maintained at select intersections, like 66th Street and 49th Street.

Alternative 2 – Buffered Bike Lanes: This alternative would provide a buffered bike lane through the elimination of the center two-way left-turn lane, and would also move the southern curb line to widen the sidewalk and provide a landscape strip on the southside of the street between the bicycle lane and the sidewalk. This alternative assumes that the northern curb line would remain in its current location, but that portions of the curb would be reconstructed as needed to meet ADA requirements and improve drainage, allowing for the sidewalk to be widened and a landscape buffer to be placed between the sidewalk and the bike lane.

Alternative 3 – Modified Grant Concept: This alternative would eliminate the center two-way left-turn lane and would move both the northern and southern curb lines. This would allow for the provision of a landscape strip between the sidewalk and travel lane on both sides of the street, with a 10-foot multi-use path on the south side of the street and a 5-foot sidewalk on the north side of the street. This Alternative would accommodate a future equestrian path.

Alternative 4 – Multi-use Path: This alternative would eliminate the center two-way left-turn lane and would move both the northern and southern curb lines. This would allow for the provision of an 8-foot landscape strip between the sidewalk and travel lane on both sides of the street, with a 10-foot multi-use path on the south side of the street and a 5-foot sidewalk on the north side of the street.

Table 3: 78th Avenue Alternatives Summary

Metric	Alternative 1 (Retrofit)	Alternative 2 (Buffered Bike Lane)	Alternative 3 (Modified Grant Concept)	Alternative 4 (Multi-Use Path)
				
Increase transportation choice	Would provide buffered bike lanes but would not improve walking environment	Would provide buffered bike lanes and opportunities for wider sidewalks on both sides of the street. Sidewalk on south side would have improved landscape buffers	Would provide 10-foot multi-use path on south side of the street and wider sidewalk on north side of the street with a landscape buffer. People walking and people bicycling would share the space on the south side of the street. People bicycling could also share travel lane with people driving.	Would provide 10-foot multi-use path on south side of the street and wider sidewalk on north side of the street with a landscape buffer. People walking and people bicycling would share the space on the south side of the street. People bicycling could also share travel lane with people driving.
Improve transportation safety outcomes	Intersection traffic control along the corridor would generally remain unchanged and crossing distances for pedestrians would remain unchanged.	Provides opportunities to construct roundabouts and traffic circles along corridor in addition to raised crosswalks and other design features to slow people driving. Would allow for a modest reduction in pedestrian crossing distance at non-controlled crossings along corridor, reducing pedestrian exposure.	Provides opportunities to construct roundabouts and traffic circles along corridor in addition to raised crosswalks and other design features to slow people driving. Would allow for the highest reduction in pedestrian crossing distance at non-controlled crossings along corridor, reducing pedestrian exposure.	Provides opportunities to construct roundabouts and traffic circles along corridor in addition to raised crosswalks and other design features to slow people driving. Would allow for the highest reduction in pedestrian crossing distance at non-controlled crossings along corridor, reducing pedestrian exposure.

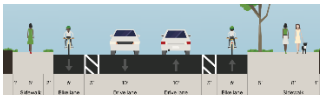
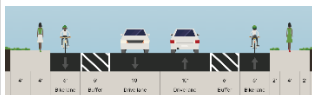


Table 3: 78th Avenue Alternatives Summary

Metric	Alternative 1 (Retrofit)	Alternative 2 (Buffered Bike Lane)	Alternative 3 (Modified Grant Concept)	Alternative 4 (Multi-Use Path)
Connect the City Center and Performing Arts District	Provides few opportunities for placemaking and cohesive roadway design elements including shade, public art, benches, light fixtures, and other public amenities	Provides modest opportunities for placemaking and cohesive roadway design elements including shade, landscaping, public art, benches, light fixtures, and other public amenities. Most amenities would be placed on the southern side of the street.	Provides greatest opportunities for placemaking and cohesive roadway design elements including shade, public art, benches, light fixtures, and other public amenities. Elements could generally be placed on both sides of the street.	Provides greatest opportunities for placemaking and cohesive roadway design elements including shade, public art, benches, light fixtures, and other public amenities. Elements could generally be placed on both sides of the street.
Serve as a catalyst project	Could be implemented for a lower cost as it would not require relocation of curb lines; could be implemented in immediate term	Would require relocation of southern curb line. Although the northern curb line would not be relocated, ADA improvements may be required along the northern curb line; could be implemented in near-term	Would require relocation of both northern and southern curb lines; as this alternative would be more expensive than Alternative 1 or 2, it may take longer to implement. Delays in constructing improvements along the corridor could decrease other investments in the area in the near-term and potentially the long-term.	Would require relocation of both northern and southern curb lines; as this alternative would be more expensive than Alternative 1 or 2, it may take longer to implement. Delays in constructing improvements along the corridor could decrease other investments in the area in the near-term and potentially the long-term.

Source: Fehr & Peers, 2021.

Preferred Alternative

The alternatives were presented to the Pinellas Park City Council at a workshop on May 11th. The primary purpose of the workshop was to solicit feedback from the Council to aid in the selection of the preferred alternative. This presentation built upon transportation focused discussions during the City Center Master Plan charette week.

Feedback from City Council showed overwhelming support for **Alternative 2 – the Buffered Bike Lane** concept. While the concept in the Grant Application, similar to Alternative 3, included a potential equestrian trail along the south side of the corridor, the land use mixture and existing and planning destinations along the corridor are not supportive of equestrian use and there was a concern that over time the additional 8-feet of public right-of-way would be seen as an extension of front yards along the corridor and future conversion to public use might be challenging. Therefore, Alternative 3 was not considered further.

There were also concerns with both Alternative 3 and 4 that the initial cost could be prohibitive, either reducing the extent of improvements along the corridor, or precluding construction of the project at all. There were also concerns related to the future maintenance of the landscape strip between the travel way and the sidewalk, and while responsibility for maintaining that area would ultimately fall upon the adjacent property owners, there were concerns that this could place an undue burden on some property owners and maintenance overtime could be inconsistent along the corridor. Therefore, Alternative 4 was not considered further.

While City Council did appreciate that Alternative 1 could be implemented within the existing curb to curb width at a relatively low cost, and saw the potential of Alternative 1 to help phase improvements along the corridor, they felt it did not meet the overall purpose and need of the project. As the phasing of improvements is considered, elements of Alternative 1 could be implemented as part of an overall phasing strategy to provide connectivity between improved sections of the corridor as discussed in the implementation section.



4. Preferred Concept

What are we going to do?

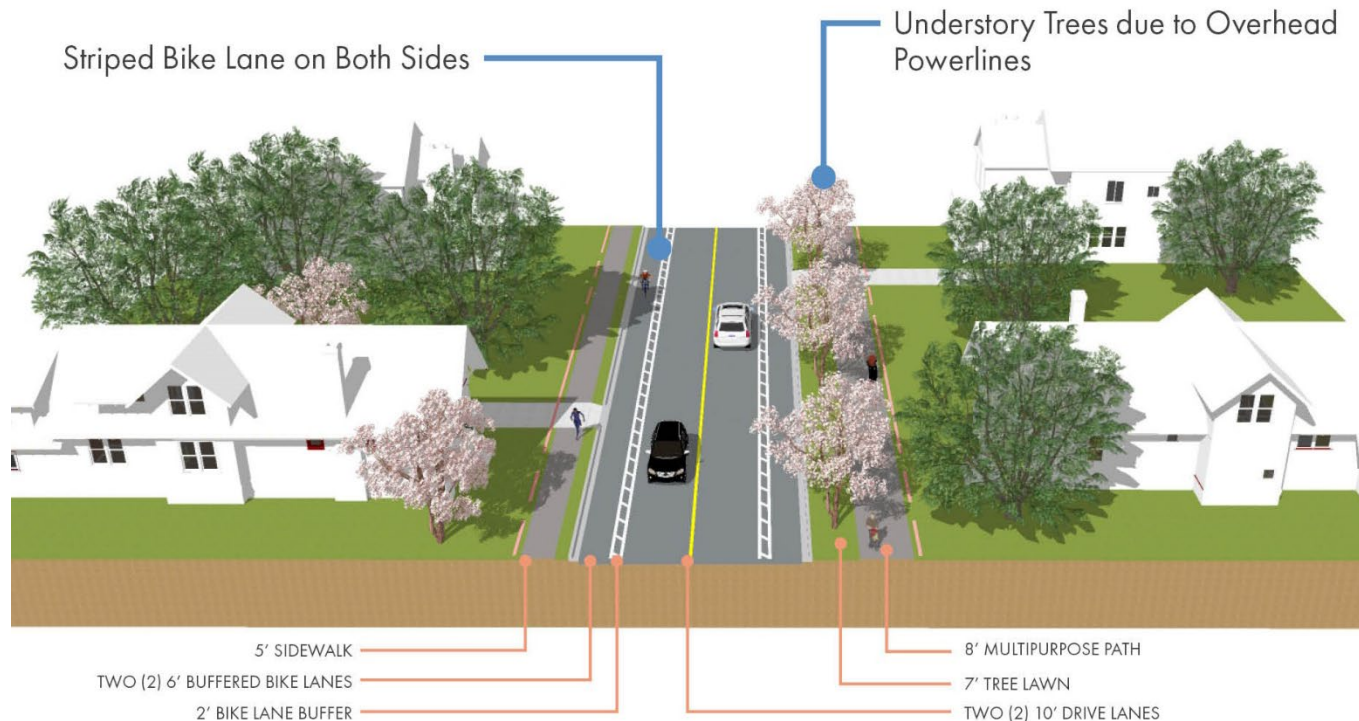
The Preferred Alternative as identified by the City Council was further refined within the alternative intent to reduce the buffer between the bicycle lane and the travel lane from 3 feet to 2 feet, for a total bike lane width from the curb of 7-feet. This change allows for the provision of a wider landscape buffer on the southside of the street. In the final project design, this would also allow the sidewalk on the south side of the street to be widened to 10-feet to provide a multi-use

path, allowing for more flexibility in the final design to balance the needs of landscaping and sidewalk width.

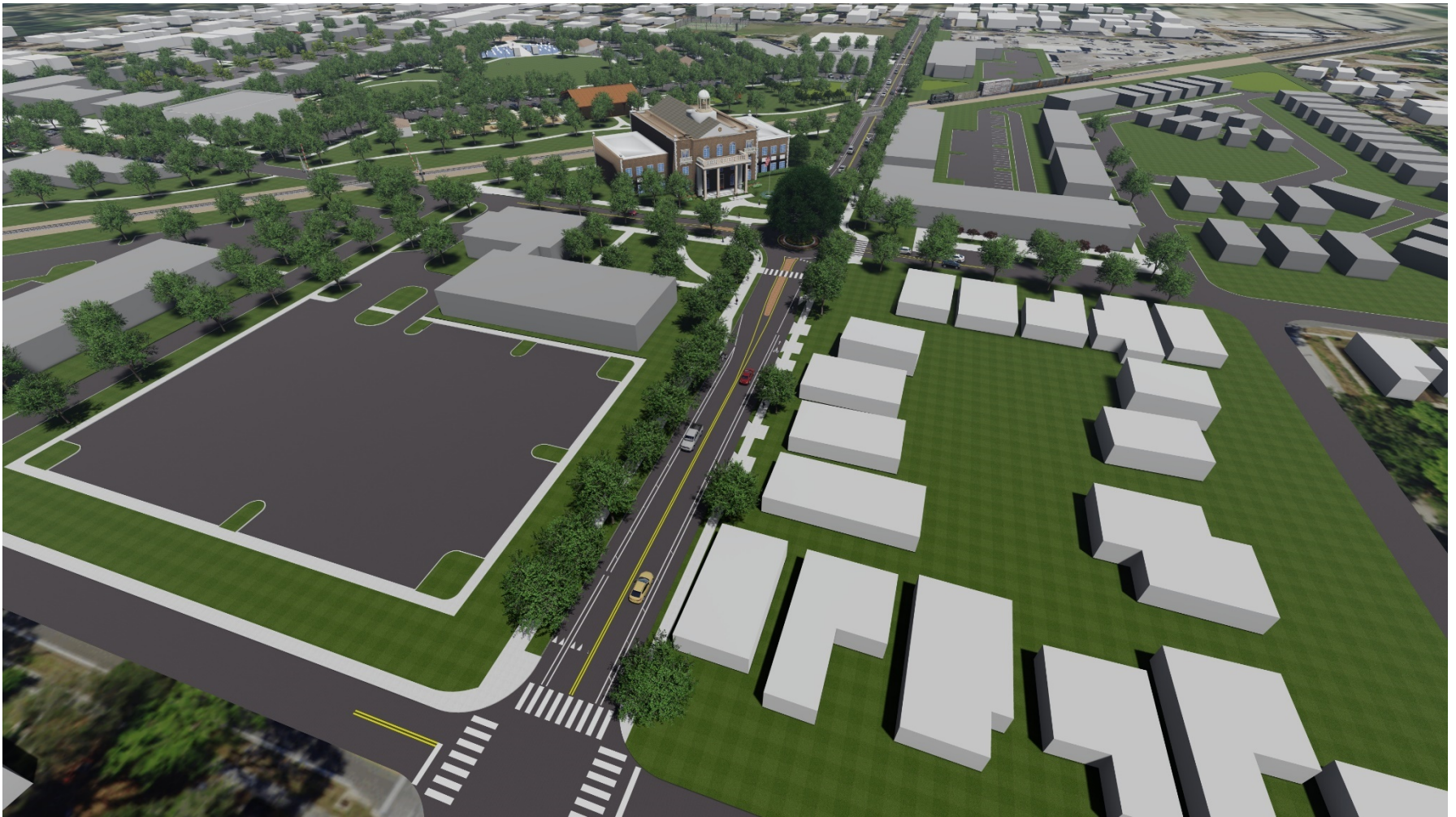
The further narrowing of the roadway would also provide visual cues for people to drive at slower speeds and would provide less space for people to stop or park their vehicle in the bicycle lane and buffer area.

Concept Plan

A concept plan was developed for the corridor, as provided in [Appendix A](#). This concept is based on the street cross section shown in [Inset 4](#) and an aerial rendering shown as [Inset 5](#).



Inset 4: Preferred Alternative Cross Section



Inset 5: Preferred Alternative Rendering Looking West at 60th Street

In the review of utility conflicts along the corridor, the drainage system to the east of 49th Street is different than the portion of the corridor to the west of 49th Street. Between 66th Street and 49th Street, drainage is provided by curb inlets spaced at regular intervals. Between 49th Street and US 19, drainage is provided by a combination of curb inlets and inlets placed close to the edge of right-of-way at the back of sidewalk.

To minimize changes to the drainage system that would need to be included as part of the project, a modified design was developed for the portion of the corridor between 49th Street and US 19. These design modifications would retain the buffered bike lane along the entire corridor but would result in a smaller landscape buffer on the south side of the street to provide an 8-foot sidewalk without the relocation of any of the existing drainage inlets at the back of sidewalk.



Inset 6: Back of Sidewalk Drainage on 78th Avenue East of 49th Street

Design Parameters

The concept plan was developed based on several key design features that should be carried through to the final design. These design features are based on current (2021) best practices. Depending on the timing of final design and construction, more recent best practice documents should be consulted to determine if modifications from the concept plan should be considered in consultation with City staff.

- Per FDOT Design Manual Section 223.2.1.2, continuous striping should be provided past low-volume and residential driveways.
- Per the 2016 Florida Greenbook Figure 9-6, skip striping should be provided 50-feet from major intersections.
- Per NACTO, at minor uncontrolled intersections, skip striping would start at the radius curb return of the intersection and continue through to the radius curb return on the other side.

There are several parcels along the corridor that currently have multiple driveway curb cuts serving the parcel. In many instances, the curb cuts do not provide access to side yard or back yard vehicle storage opportunities, nor does it provide an opportunity for people to enter from one driveway and exit from another. The concept plan assumes that these curb cuts are eliminated with the project to provide a more consistent surface for people walking. For parcels potentially affected by driveway removal, individual property owner outreach will be conducted as a part of final design.



Inset 7: Example of Driveways that may be Eliminated with Project

Intersection Treatments

The Alternatives Analysis identified numerous options for intersection treatments along the corridor. As the preferred alternative was refined, feedback from City staff and project stakeholders (FDOT, Pinellas County and Forward Pinellas) was incorporated into the Concept Plan. At intersections operated and maintained by other agencies, near-term and long-term improvements were identified for consideration of implementation by those agencies.

Intersection treatments at key locations along the corridor are presented below. The concept designs shown in **Appendix A** and further described below are conceptual in nature. While the concept plan has been drawn to scale, there may be conflicts not readily apparent from the field reviews, tax assessor's office property line data, and aerial photography. When final design occurs, the final design may change slightly to minimize potential conflicts. For example, a potential crosswalk may be relocated to avoid a drainage inlet if relocation of the inlet is not cost feasible or necessary for other aspects of the plan. Some design details, like curb ramp details for all intersections, were purposefully omitted from the concept plan as those details would be determined as a part of the final design pending the need for ADA upgrades along the corridor.

The final design should consider the intent of treatments outlined in this document to prioritize people walking and bicycling along the corridor, slower travel for people driving, and maintaining access to individual parcels.

66th Street at 78th Avenue

66th Street is the western edge of the 78th Avenue Complete Street Corridor, and the intersection of 66th Street at 78th Avenue is owned and operated by FDOT. Modifications included in the initial plan include:

- Upgrade traffic signal to mast arms¹ and provide bicycle detection
- Extend southbound left-turn lane
- Bring bike lanes to intersection
- Reduce corner radius to realign crosswalk and decrease pedestrian exposure on north crosswalk
- Modify Pedestrian push buttons for ADA compliance

There is the potential to either further extend the southbound left turn lane or add landscaping features to the median through the closure of the northbound left-turn lane at 80th Avenue. That turn lane does not serve any uses on the west side of the street but does facilitate the U-turn movement. Prior to closing that left-turn pocket, data should be collected to determine the extent of use for the U-turn movement, as shifting U-turn demand to 82nd Avenue could result in unintended consequences.

¹ Mast arm mounted signals are required for all signalized intersections within 10-miles of the coastline to better withstand winds from hurricanes and tropical storms to minimize the



Inset 8: 66th Street at 78th Street Concept

potential damage and recovery time from storms. All signalized intersections in Pinellas County will ultimately be converted from span wire to mast arms, as funding permits.

As the design is finalized, other intersection modifications to consider include:

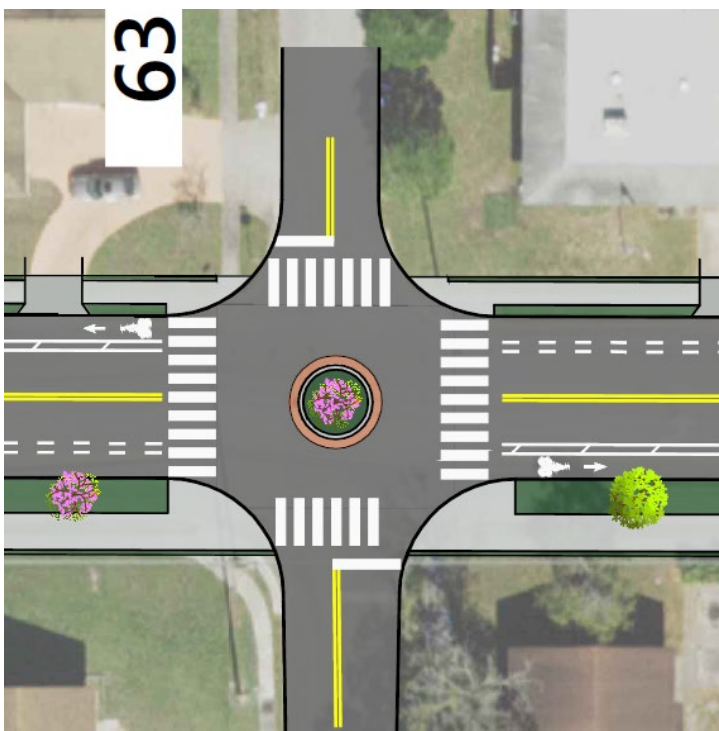
- Eliminate eastbound right-turn only lane to better align crosswalks
- Add leading pedestrian interval
- Change east-west phasing to protected
- Relocate transit stops closer to intersection

The bicycle lanes on 66th Street do not meet current FDOT standards which would require the provision of a buffered bicycle lane based on the traffic volume and speed of the roadway. When 66th Street is scheduled for resurfacing, lane widths and other design features should be evaluated to determine if it is feasible to add a buffer to the bicycle lane.



63rd Street at 78th Avenue

63rd Street connects 70th Avenue to 82nd Avenue. As part of the community engagement process, feedback was received related to the speed of people driving on 63rd Street, and conflicts at the intersection resulting in near-misses and collisions. Installation of an all-way stop control would better allocate right-of way to roadway users through the intersection. Installation of a mini roundabout would also serve to slow people driving through both corridors (Inset 8).



Inset 9: 63rd Street at 78th Avenue Concept

60th Street at 78th Avenue

Installation of a roundabout was identified at the intersection of 60th Street at 78th Avenue to replace the current traffic signal. Roundabouts along the corridor were identified by the City Council as the preferred traffic control device at City intersections along the corridor for several reasons:

- Safety benefits in terms of reducing speed of people driving along the corridor, reducing conflict points for all roadway users, and reducing pedestrian crossing distances
- More resilient during emergencies where power failures might occur as roundabout operations is unchanged under no-power conditions
- Less expensive to operate due to power and traffic signal maintenance costs

The roundabout includes bike ramps such that people bicycling can chose to cross the intersection using the pedestrian crossing, or they can take the lane and travel through the roundabout and re-enter the bike lane on the opposite side. The final design should maintain these options.



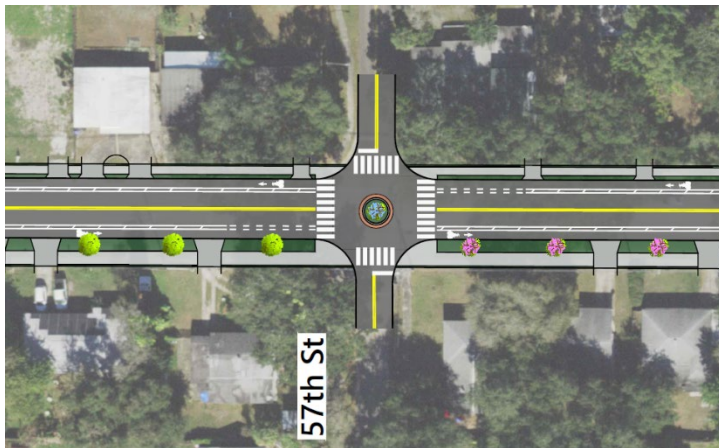
Inset 10: 60th Street at 78th Avenue Concept

The initial concept for 60th Street at 78th Avenue also reflects potential roadway improvements along 60th Street to the south of 78th Avenue that may be implemented with development in the City Center District, including a 10-foot path, 8-foot landscaping, and 12-foot travel lane in each direction.

57th Street at 78th Avenue

57th Street connects Park Boulevard to 82nd Street and was noted during community feedback session to carry high levels of through traffic with many observed near-misses. Review of collision data indicates that collisions occur at this location at a higher frequency than other intersections along the corridor. Similar to 63rd Street, the intersection of 57th Street at 78th Avenue is a candidate location for installation of all-way stop control or a mini-traffic circle, with a mini-traffic circle shown on the Concept Plans.

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Inset 11: 57th Street at 78th Avenue Concept



55th Street to 52nd Street

This portion of the roadway experiences a high level of collisions and was noted during the public feedback sessions to have numerous conflicts and concerns. Key destinations in the area include the Public Library, Post Office, Pinellas Park Elementary School and Shoecraft Park. Several opportunities were identified for exploration in combination with the redevelopment of the Public Library and with the 78th Avenue Complete Street implementation.

- Install a raised crosswalk on the west side of 53rd Street with a RRFB
- Evaluate potential to relocate post office entrance to 53rd Street (see Star on Inset 11)
- Install roundabout at 52nd Street



There is also the potential to restripe 52nd Street to provide bicycle lanes within the existing pavement cross-section from 76th Avenue to 94th Avenue until more expansive improvements, such as those shown in the City Center Master Plan for North/South Connectors can occur (see next section). Additional analysis would need to be conducted to fully determine the feasibility and identify design solutions to provide continuous facilities across Park Boulevard where the need for vehicle capacity at Park Boulevard lanes may pose challenges for the provision of bicycle lanes within the existing curb to curb dimensions.



Inset 12: 53rd Street N to 52nd Street N Concept

49th Street

49th Street is a Pinellas County intersection. To the east of 49th Street, the existing roadway design changes slightly in that there is a striped shoulder, and the sidewalk is not typically buffered by a landscape strip. Modifications included in the initial plan include:

- Upgrade traffic signal to mast arms and provide bicycle detection
- Extend northbound left-turn lane
- Bring bike lanes to intersection through elimination of eastbound right-turn lane
- Retime traffic signal to better accommodate changed travel patterns through the area and reduce the extent of the eastbound right-turn movement queue

The bike lane markings should be continued through the intersection, with a concept shown below. During final design, long-term maintenance needs of the final striping plan should be considered, and the markings should be oriented to avoid the wheel tracks of common vehicles. The most current version of the NACTO Urban Bikeway Design Guide should be consulted during final design.

As the design is finalized, other intersection modifications to consider include:

- Add leading pedestrian interval
- Change left-turn phasing to protected
- Relocate transit stops closer to intersection



Inset 13: 49th Street at 78th Avenue Concept

47th Street to 45th Street

There are currently 5 marked crossing locations of 78th Avenue along the approximately 2.5-mile study corridor, with a distance of almost a mile between some crossing locations. While most intersections have an unmarked crosswalk, the lack of pedestrian facilities may serve as a deterrent for people to walk and does not signal to people driving to expect pedestrians along the corridor. The concept plan includes options to provide additional marked crossings of the corridor between 49th Street and US 19, including the east side of 47th Street and the west side of 45th Street.



Inset 14: 47th Street N to 45th Street N Concept

43rd Street

43rd Street serves as a major connector to Park Boulevard and experiences a high level of traffic. A roundabout was identified for installation at this intersection to slow vehicles as they enter the corridor from US 19, and to better allocate right-of-way between roadway users. 43rd Street also has planned bicycle facilities that would need to be incorporated into the roundabout.

There are several design options for the future roundabout at this location that will need to be carefully considered in the final design to balance the need for vertical deflection for people driving to moderate driving speeds along the corridor, and the ramping system for people bicycling to have the option to either enter the travel lane to travel through the roundabout or use the sidewalk crossing. Left-turn access to and from 42nd Way N would also need to be maintained.



Inset 15: 43rd Street at 78th Avenue Concept



US 19

US 19 forms the eastern boundary of the study area and is a FDOT intersection. Initial modifications include:

- Install a traffic signal (continue to prohibit east/west left or through movements) – Overall LOS would be A
- Provide a pedestrian crossing
- Construct an island to protect people crossing 78th and reduce exposure

Initial Safety Performance for ICE (SPICE) evaluations are provided in [Appendix E](#) for FDOT use in programming this improvement in conjunction with other planned modifications in the area.

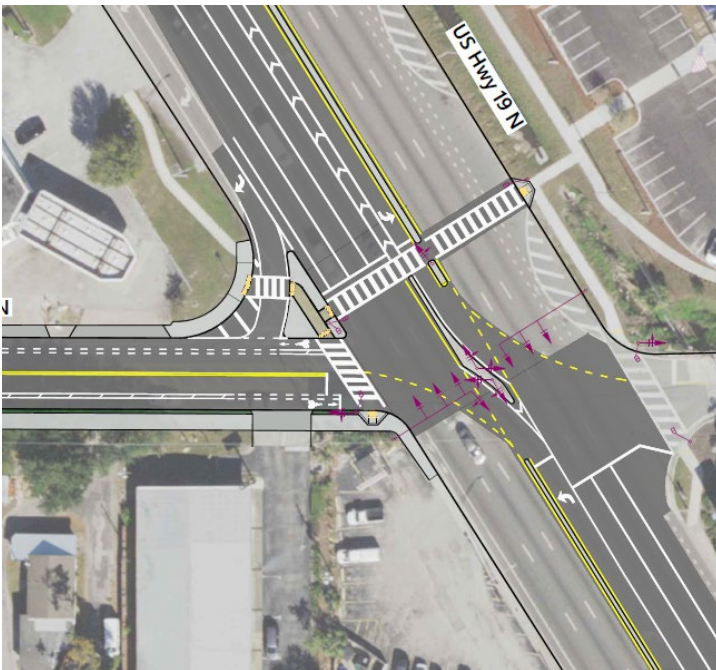
As the design is finalized, other intersection modifications to consider include:

- Eliminate pork chop island
- Relocate transit stops closer to intersection
- Continue bicycle/pedestrian connection along 78th alignment connecting to Gandy Boulevard

Other Options

Many of the individual intersection design options are best determined during final design when more details related to the City Center Master Plan and potential redevelopment in the Performing Arts District are better refined. For example, the option to provide a mid-block crossing generally along the 50th Street alignment was identified that could be considered as plans are developed for that area.

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Inset 16: US 19 at 78th Avenue Concept



Inset 17: Potential Mid-Block Crossing Along the 50th Street Alignment

After project implementation, there may also be a need to add additional elements. For example, if all-way stop-control or mini-roundabouts are not installed at 63rd Street or 57th Street with the initial project implementation, they could be installed at a later date, as implementation of the project as conceptually envisioned would not preclude the installation of those roadway design elements at a later date.

Conflict points could also emerge that were unknown or did not exist at the time of plan implementation. Additional roadway elements such as flex posts or zebra bumps (example pictures shown below) could be added in areas where conflicts are expected. These elements could also be installed at a later date if issues arise. Installation locations would need to consider proximity to driveways and intersections, and potential street sweeping needs.

Rumble strips could also be installed between the travel lane and bicycle lane within the buffer area to serve as a tactile and auditory warning for people driving. However, given the residential nature of the street, rumble strips could create noise pollution and their use should be carefully considered.



Inset 18: Zebra Bump and Flex Post Example

City Center Roadway Elements

As part of the City Center Master Plan, several roadway elements are proposed that could potentially change the flow of travel across and to 78th Avenue. While these concepts will evolve as the City Center Master Plan is implemented, key modifications that would affect the 78th Avenue Concept Plan are described below.

- Installation of a full traffic signal at the intersection of Park Boulevard at 60th Street. As 60th Street is the central roadway of the City Center Master Plan area, this improvement is critical to providing access for all roadway users. The improvement is also expected to shift some travel from the 63rd Street and 57th Street corridors. The intersection of 78th Avenue at 60th Street would operate well with added and shifted traffic with the proposed roundabout.
- Realignment of 61st Street approximately 150 feet to the east. This realignment is proposed as part of other roadway network changes within the City Center Area to create parcels that are development ready to help facilitate the first stage of private investment in the area. This general alignment is shown on the Concept plans.
- Enhancements to north/south connectors to improve facilities for people walking and bicycling. This option was considered in the roundabout concept at the 60th Street intersection (see Inset 18).

As part of the City Center Master Plan, extending 76th Avenue across the railroad tracks to 60th Street is also proposed in combination with realignment of portions of 59th Street. These changes are not expected to appreciably affect the flow of travel along 59th Street to 78th Street. The Concept does show

the potential for an enhanced crossing of 78th Avenue at 59th Street, but the need for that treatment should be considered in the final design. There are also opportunities to phase in additional crosswalk improvements at 59th Street and other locations along the corridor.

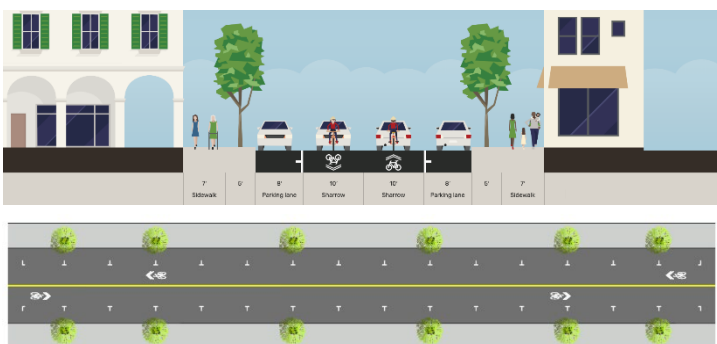


Inset 19: North-South Connector Roadway Concept

As part of the initial development of project alternatives, separate concepts were developed for the section of 78th Avenue within the City Center, including options that could be constructed within the existing right-of-way, and options that would require additional right-of-way. These options were also presented to the City Council.

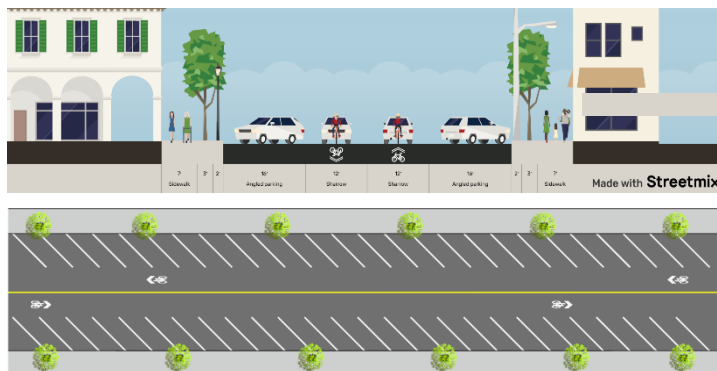
The three City Center alternatives included:

Alternative 1 – Existing Right of Way: This alternative was developed to fit within the existing right-of-way (60-feet), and included 12-feet for sidewalk and street furniture, a parallel parking lane and a shared vehicle-bicycle travel lane in each direction (Inset 19).



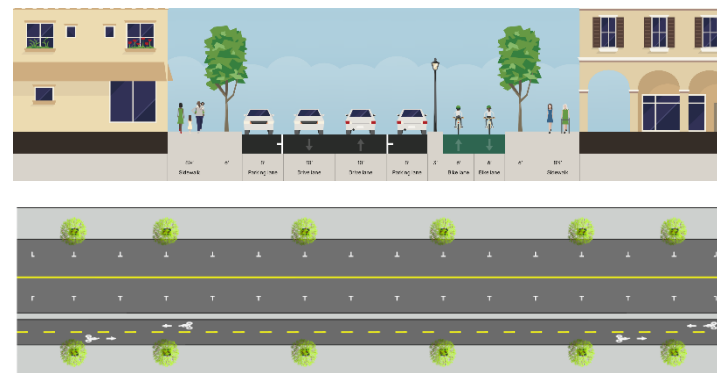
Inset 20: City Center Alternative 1

Alternative 2 – Angled Parking: This option would require 80-feet of right-of-way to provide angled parking on both sides of the street, in addition to 12-feet for sidewalk and street furniture, a shared vehicle-bicycle travel lane in each direction (Inset 20).



Inset 21: City Center Alternative 2

Alternative 3 – Cycle Track: This option also requires 80-feet of right-of-way and would provide a sidewalk and street furniture area, parallel parking lane, and a vehicle travel lane in each direction, plus a two-way cycle track (Inset 21).



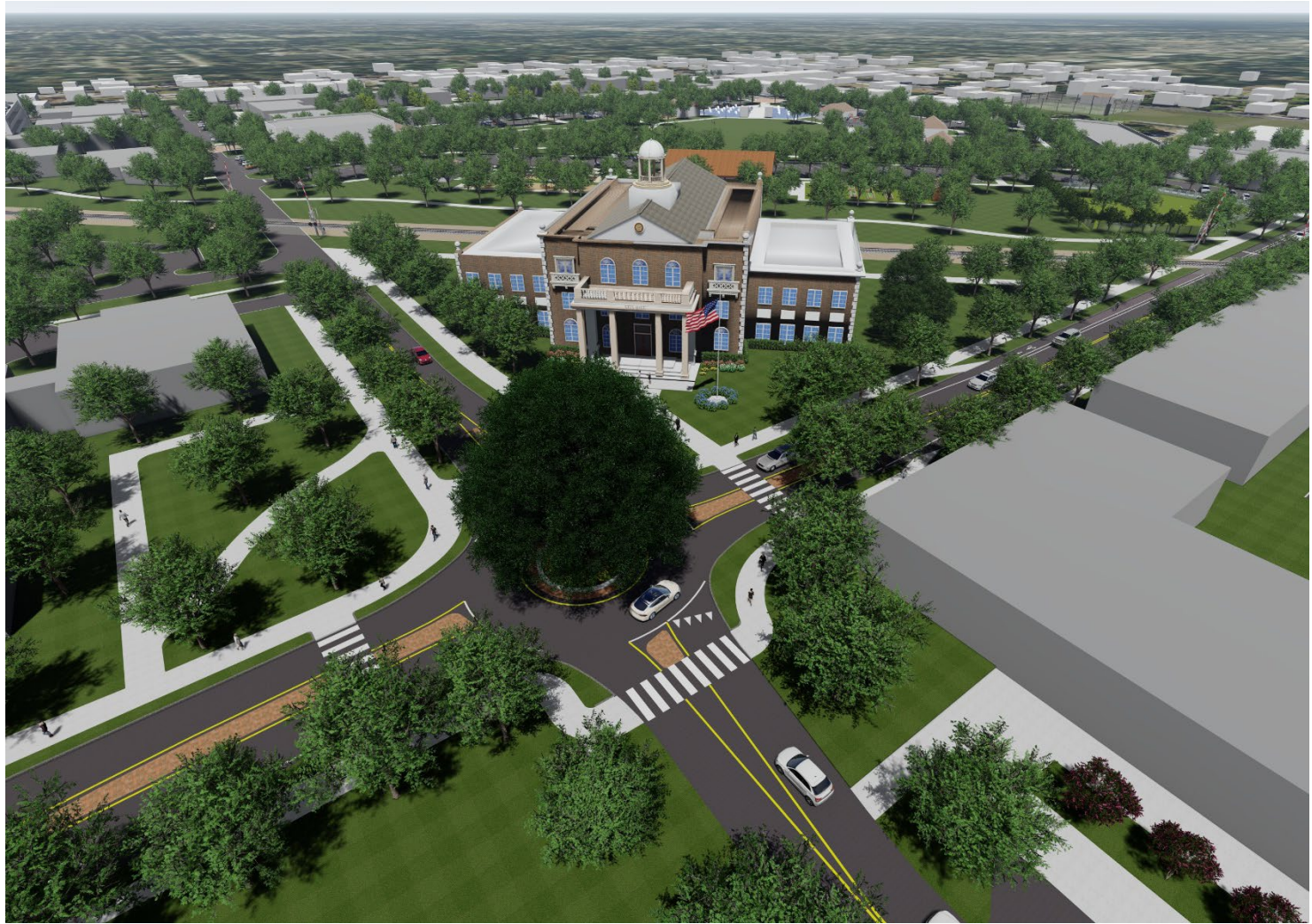
Inset 22: City Center Alternative 3

Feedback from Council was that they wanted to maintain the existing right-of-way, and that provision of a bicycle facility through the City Center portion of 78th Street was the priority over providing on street parking. Therefore, a separate City Center cross section was not developed for 78th Avenue.

The City Center Master Plan may include some slight variation of the cross section along the corridor, but the overall design intent is to maintain buffered bicycle lanes along the entire corridor. An aerial concept looking at the intersection of 78th Avenue at 60th Street in the core of the City Center area from the south is shown as **Inset 22** and from the north is shown as **Inset 23**.



Inset 23: View of 78th Avenue at 60th Street from the South



Inset 24: View of 78th Avenue at 60th Street from the North

Other Design Elements

There are a number of other design elements not shown on the Concept Plan that would need to be considered in the final design plans, including the potential for street furnishing, landscaping, street lighting, and wayfinding. Most of these elements have been identified as part of the City Center Master Plan and the 78th Avenue Complete Street corridor would help to implement consistent design treatments along the corridor. As the final design plans are being prepared, the adopted City Center Master Plan document should be consulted. In the event of conflicts between this concept plan and the City Center Master Plan, the City Center Master Plan shall dictate the elements related to street furnishing, street lighting, landscaping, and wayfinding.

Street Furnishing

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Street furniture is a term used to describe items that are installed in the public right of way for various purposes. Typical elements may include benches, bike racks, bollards, tree grates, and trash receptacles. The furniture palette developed for the City Center Master Plan and applied to the 78th Avenue corridor is classic and refined reflecting the existing architecture of Park Station. Brick, hardwoods, and subdued colors celebrate the residential quality of 78th Avenue and of Pinellas Park, and help to create a cohesive look for the entire Complete Street. Pictorial examples of the potential street furnishing are shown on **Figure 5**.

Landscaping

A cohesive landscaping plan can visually connect a corridor and activity center. It is important to select a variety of plant types that are complementary, and well suited for the environment. For the selection of street trees, irrigation, root

intrusion, leaf debris, shade canopy, and ability to thrive in a constrained planting setting are important considerations in the final selection of trees. The plant palette developed for the City Center Master Plan is mainly composed of natives and canopy trees, as well as a few trees that provide colorful flowers to add visual interest. Intersections and major points of interest can be accentuated with vibrant colors and textures, while larger swathes of road can be filled with low maintenance natives that will flourish and give more visual interest than a simple lawn. The palette helps to reflect the natural environment of the neighborhood while celebrating the 78th Avenue as a multi-modal corridor. Pictorial examples of the potential plant palette are shown on **Figure 6**.

Street Lighting

Street lighting is an important feature that can provide multiple benefits, including improved safety outcomes for all roadway users, aid navigation along the roadway, and serve as a decorative feature that can enhance the visual appeal of the area. Some studies have also shown a reduced level of crime linked to street lighting. Along the corridor, streetlights are typically provided at all intersections. The location and design of streetlights is to primarily benefit people driving along the corridor. The final design should incorporate pedestrian scale lighting at new and enhanced crossings along the corridor.

Once typical streetlights are selected along the corridor, further analysis will be required to ensure adequate spacing and minimize light pollution into adjacent homes. Coordination with the landscaping plan will be required to minimize the potential for existing or future landscaping to block light, especially pedestrian scale lighting.



Figure 5

Potential Street Furniture



Solstice Umbrella and picnic table existing at Park Station by Landscape Forms



Classic Black Trash Receptacle by Recycle Away



Plainwell Bench by Landscape Forms



Bike Rack by Dumor



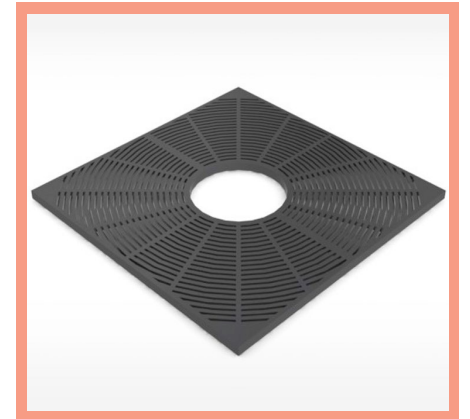
Acorn Lamp Pole by Brandon Industries



Bollards by Dumor



Brick Pavers



Tree Grate by Sitescapes

Figure 6
Potential Plant Palette

CANOPY TREES



Live Oak Cultivar



Allee/ Bosque Elm



Shumard Oak

SHRUBS



Indian Hawthorn



White Fountain Grass



Dwarf Firebush

PALM TREES



Cabbage Palm



Sylvester Date Palm



Medjool Date Palm



Foxtail Fern



Parsoni Juniper



Society Garlic

UNDERSTORY TREES



'Nanchez' Crape Myrtle



'Muskogee' Crape Myrtle



Silver Buttonwood

GROUND COVER



Beach Sunflower



Flax Lily



Brazilian Dwarf Morning Glory

Wayfinding

Wayfinding is a key element of plan implementation especially as other bicycle facilities are provided in the area. As additional facilities come on-line within the City, and multi-modal regional facilities are connected to Pinellas Park, the City should develop a Citywide Wayfinding Plan such that all signs throughout the City are consistent. Wayfinding uses consistent, clear visual cues and signage to direct users to their destinations. Effective wayfinding systems create well-structured pathways—with start, middle, and end points—that help travelers to:

1. Identify their location
2. Reinforce that they are traveling in the right direction
3. Navigate junctions and other decision-making points
4. Identify their destination upon arrival

Wayfinding communicates the trajectory of the individual path and its relationship to the transportation network of which it is a part. Wayfinding also includes key referential information, such as a traveler's intermediate position in the path, how far the traveler has progressed, and the remaining distance to the destination. Combining these two types of information—the shape of the network and the traveler's location within it—empowers travelers with the information they need to make decisions and guide themselves to their destination.

By making it easier for people to navigate to their destinations, effective wayfinding reduces confusion, cognitive load, and stress; ultimately, it produces a more enjoyable travel experience. There are also opportunities to incorporate community art into the Wayfinding experience.



Engineering Considerations

Numerous engineering assumptions went into the development of the Concept Plan, and the associated probable cost estimates. For example, based on field reviews and readily available right-of-way mapping, it appears that all above ground utility poles are located at the edge of the right-of-way line, and the concept plan was developed to maintain that utility corridor to minimize overall construction costs. As the final design is prepared, it should consider this overall design intent. Based on preliminary review of utility mapping, it does not appear that the preferred alternative would require relocation of sewer or water lines within the roadway, but some reconnections would be required based on the relocation of the southern curb line for the corridor segment between 66th Street and 49th Street.

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As mentioned previously, the location of drainage inlets on the corridor between 49th Street and US 19 may inhibit the provision of a landscape strip between the sidewalk and bicycle lane. This is intended to minimize drainage impacts along that portion of the corridor that could be cost prohibitive. However, if during final design it is determined that the drainage impacts can be cost-effectively minimized, the option does remain to provide a landscape strip between the sidewalk and bicycle lane.

Cost Estimate for Preferred Project

Estimated probable construction costs were prepared for the preferred alternative by Pennoni, a Civil Engineering firm with experience designing similar projects in Pinellas County. The probable construction costs are based on recent construction unit costs including Mobilization, Maintenance of Traffic, Erosion Control, Clearing & Grubbing, Grading, Sidewalk, Multi-use Path, Driveway, Drainage, Sodding and 20%

Contingency Allowances. A high-level summary by major category is provided in [Table 4](#), with the full cost estimate included in [Appendix F](#).

Table 4: Probable Cost Estimate Summary for Preferred Alternative

Description	Probable Cost
Preparation	\$1,661,906
Grading	\$1,600,000
Milling, Asphalt	\$1,179,300
Curb and curb ramps	\$679,400
Sidewalks	\$1,096,800
Driveways	\$264,600
Signage, Striping and RRFBs	\$398,250
Utilities	\$598,050
Roundabouts	\$296,625
Traffic Signals**	\$1,350,000
Landscaping	\$91,500
Subtotal	\$9,216,431
Contingency	\$1,927,400
Total	\$11,143,831

Note: ** it is possible that FDOT and Pinellas County would fund a portion or all costs of traffic signal upgrades.

Source: Pennoni.

The cost estimates include reconstruction of curb ramps along the corridor, including on the north side of the intersection where the curb would not be moved, to meet current ADA standards. Also included are some decorative elements within the roundabouts to allow for placemaking.

The cost estimates include over \$2,000,000 in contingency that is intended to cover the overall design of the project, as well as items that are currently unknown and whose costs are not able to be adequately estimated. For example, not included in the cost estimates are enhanced landscaping, such as street trees and irrigation system, since the cost could significantly vary depending on the tree species selected for the corridor. Street lighting is also not included since the cost would largely depend on the type of fixture selected as well as the lighting levels provided that would dictate spacing. Other community amenities are also not included, such as benches and bike racks. An estimate of the probable cost of these amenities is presented in **Table 5**. The probable cost of corridor amenities is within the overall construction cost contingency, providing for flexibility in the final design.

Table 5: Probable Cost Estimate for Corridor Amenities

Description	Probable Cost
Streetlights	\$420,000
Enhanced Landscaping (Trees and irrigation)	\$910,000
Street Furniture (benches, bike racks, trash receptacles, wayfinding, etc.)	\$100,000
Total	\$1,430,000

Source: Fehr & Peers.

The cost estimates also include the costs to upgrade traffic signals at 66th Street and 49th Street, which would need to occur regardless of this project, and it is expected that a portion or all of the costs of those signal upgrades would be borne by FDOT and the County. The cost to install a traffic signal at US 19 would provide independent utility to all

roadway users in terms of improving safety for the left-turn movement and providing an additional pedestrian crossing.

The cost for some roadway elements shown in Table 4 is also reliant on other portions of the construction process. For example, the estimate for the roundabouts does not include costs for site preparation, grading, and other elements, which are estimated elsewhere.

Potential for Utility Undergrounding

While not included as a part of the 78th Avenue Concept Plan, construction of the preferred alternative would accommodate the undergrounding of aboveground utilities along the corridor. The probable cost to bury power lines as a standalone project ranges between \$600,000 and \$1,000,000 per mile. If incorporated into the overall project, this cost per mile is likely to be significantly reduced.

Senate Bill 796, the Public Utility Storm Protection Plans, requires that local utility provider provide a plan to underground all utilities in the State to improve resiliency and minimize electricity disruptions in the event of severe weather. Early coordination with the local utility provider is recommended to determine if undergrounding of utilities can be included in the overall project construction to reduce the overall cost of constructing each separately, as well as minimize the disruptions to residents and businesses along the corridor.

Cost Estimate for Retrofit Alternative

A cost estimate was also prepared for the retrofit alternative to determine if maintaining the same curb to curb pavement width could significantly reduce costs. For the purposes of cost estimates, it was assumed that all curb ramps and

sidewalks would be reconstructed to meet current ADA standards, and that roundabouts, and other intersection modifications would occur. A high-level summary by major category is provided in **Table 6**, with the full cost estimate included in **Appendix F**.

A comparison between the cost estimate for the Preferred Alternative and the Retrofit Alternative shows some savings. Additional savings could also be realized if sidewalk reconstruction was minimized to the greatest extent feasible, and the entire roadway was not resurfaced.

Table 6: Probable Cost Estimate Summary for Retrofit Alternative

Description	Probable Cost
Preparation	\$1,332,316
Grading	\$1,207,000
Milling, Asphalt	\$1,241,900
Curb and curb ramps	\$248,400
Sidewalks	\$1,096,800
Driveways	\$264,600
Signage, Striping and RRFBs	\$398,250
Utilities	-
Roundabouts	\$296,620
Traffic Signals**	\$1,350,000
Landscaping	\$56,500
Subtotal	\$7,492,391
Contingency	\$1,515,400
Total	\$9,007,791

Note: ** it is possible that FDOT and Pinellas County would fund a portion or all costs of traffic signal upgrades.

Source: Pennoni.

5. Implementation

How are we going to get there?

This section presents opportunities and considerations for the phasing of the project, as well as funding opportunities.

Phasing

The project is expected to be developed in phases as funding permits. It is likely that the first phase of improvements would be approximately from 62nd Street to 59th Street as part of the first phase of the City Center Master Plan implementation. Subsequent stages of the project could be implemented as funding is identified and as other agency partners are able to implement improvements at their intersections.

For example, FDOT plans to eliminate the southbound bicycle lane on US 19 between 78th Avenue and its current terminus at Park Boulevard to add a second southbound left-turn lane from US 19 to Park Boulevard. While the provision of the second southbound left-turn lane would improve roadway safety and operations for people driving, it would eliminate a bicycle facility. To provide a designated bicycle connection through the area, FDOT has committed to constructing bicycle facilities on 78th Avenue to 43rd Street, connecting to 43rd Street, where there is a marked shoulder that can be used by people bicycling. Depending on the timing of this improvement, other portions of the 78th Avenue concept in the vicinity of 43rd Street could be prioritized to start creating longer roadway links with enhanced bicycle facilities.

Although the retrofit alternative was not selected as the preferred alternative, it could be used as a phasing tool to connect portions of the corridor that have been fully improved

to avoid having gaps in the bicycle network that might take years to close. A concept plan of a several block implementation of this concept is provided in [Appendix B](#).

Project Stages

The ultimate construction schedule will likely depend on the overall project cost, as well as the timing of other potential development along the corridor, such as in the City Center or Performing Arts District. To provide segments that have independent utility, improvements to the following sections are recommended to be constructed together such that each section of improvements can have independent utility:

66th Street to 62nd Street (0.55 miles) – this section of corridor connects to 66th Street, where there are existing bicycle lanes that would tie into the 78th Avenue corridor.

62nd Street to 58th Street (0.41 miles) – this section of corridor is in the core of the City Center Master Plan Area, and some area roadway improvements are expected to be constructed in anticipation of development.

58th Street to 49th Street (0.80 miles)– this section of corridor should be constructed as a single phase as it would connect the City Center and Performing Arts Districts, and only improving a part of this section of corridor would minimize the potential independent utility.

49th Street to 43rd Street (0.48 miles)– improvements to this section are recommended for implementation as soon as improvements are planned for construction on either end of this portion of corridor to provide a continuous connection.

43rd Street to US 19 (0.35 miles)– This section would provide an alternative route to US 19 when the bike lanes are removed

on US 19 to accommodate the provision of a second southbound left-turn lane from US 19 to Park Boulevard. It is recommended that improvements to the intersection of 43rd Street be constructed as a part of this stage to provide an improved connection from 78th Avenue to 43rd Street for continuous bicycle travel.

Cost by Stage

The cost estimate for the preferred alternative was further refined to isolate the costs for the segment from 66th Street to 49th Street, and from 49th Street to US 19, as presented in **Table 7**, as each segment has different design parameters that influence the cost of that specific segment. The estimates below exclude the cost of signaling US 19, and the cost of upgrading the signals at 66th Street and 49th Street.

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Table 7: Probable Cost by Stage**

Segment	Probable Cost	Length	Cost Per Mile
66 th Street to 49 th Street	\$6,423,880	1.76 miles	\$3,649,932
49 th Street to US 19	\$3,369,951	0.84 miles	\$4,011,846

Note: ** Above costs **DO NOT** include traffic signal upgrades/installation at 66th, 49th or US 19.
Source: Pennoni.

The cost estimates presented in **Table 7** reflect some of the economies of scale associated with constructing a larger segment of roadway as one project. If phases of a smaller length are considered, the cost per mile would likely increase up to 20 percent to account for some of the inefficiencies associated with a smaller project.

Funding

Given the project costs, in addition to phasing improvements along the corridor, a multitude of funding sources will likely be needed to support development of the final design plans and construction. Potential funding sources include:

- **CARES Act** – the CARES Act includes funding for State and Local Governments related to [Capital Projects](#), with a focus on low and moderate income communities. Given that about half of the corridor is located in a Pinellas County designed Community of Concern, a portion of the corridor could be eligible for funding. The window to receive this funding may close by end of summer 2021. [Other](#) funding might also be available through the CARES Act to meet other local needs.
- **Community Redevelopment Agency (CRA)** – Since a portion of the corridor is within the CRA boundaries, it may be eligible for CRA funding.
- **FDOT** offers funding through the Highway Safety Improvement Program (HSIP), Local Agency Program (LAP), 3R (Resurfacing, Restoration and Rehabilitation).
- **Forward Pinellas** offers the Complete Street grant program which provides up to \$1,000,000 per year for construction of Complete Street improvements. Incorporation of this project in the Transportation Improvement Program (TIP) and Long Range Transportation Plan (LRTP) could also make other funding sources available, as Forward Pinellas will recommend projects for funding by FDOT and other funding sources.

- **Gas Tax** – the County is proposing to increase the local portion of the gas tax from 7 cents a gallon to 12 cents a gallon to help fill the approximately \$10 million per year funding gap through 2027. If adopted, this would increase transportation funding to Pinellas Park by approximately \$400,000 per year.
- **Penny for Pinellas** – the Penny for Pinellas program collects a 1 cent sales tax that can only be used for long-term capital infrastructure projects that support the local community. Past projects funded in part by this program include installation of streetscapes and landscaping along Park Boulevard and 49th Street, renovations to the existing City Hall and Police Facilities, and the future expansion and renovation of the library. These funds can also be used for the undergrounding of utilities, which could be incorporated in the final design concept.
- **PSTA** may provide funding if bus stop enhancements are included in the final design plans.
- **Pinellas County Multi-Impact Fee** – The Pinellas County Multimodal Impact Fee is charged to all development projects in the County, with Pinellas Park receiving half of the fee for all projects within Pinellas Park. The current Multimodal Impact Fee for a new single-family home between 1,501 and 2,499 square feet is \$1,679 with lower fees for projects in designated downtown areas. This current fee structure may not be sufficient to adequately cover the cost of providing the needed infrastructure to support new development.

Coordination with FDOT and Pinellas County will also be required to implement changes at their intersections.

In addition to these programs, the City could also consider developing an impact fee program either Citywide or for development within the City Center Master Plan area to offset the cost of development. While development is required to pay a Countywide Transportation Multimodal Impact Fee, payment of that fee would not explicitly fund improvements on the 78th Avenue corridor or other roadway improvements contemplated as part of the City Center Master Plan. Additionally, the total transportation fees currently assessed to development in Pinellas Park is lower than in other portions of the state.