Polk TPO
Priority Transportation Project Application

Project Title: US 17/92 Corridor Improvements in Downtown Lake Alfred Phase 1

Applicant Agency: City of Lake Alfred

Contact Name and Title: Amee Bailey, Community Development Director

Phone: 863-291-5748

E-Mail: abailey@mylakealfred.com

Project Type

____ TAP ___X___Complete Street ____Local MUT
____ Regional MUT/SUN Trail ____TRIP

Project Description (must include location map)

From: To: E. Echo St to Pomelo Street along US 17/92 in Lake Alfred

Length: 0.62 miles Width: varies Surface Type: asphalt

Project Cost

Funding Requested: 1,467,000 Local Match: $163,000

Planning/Design Cost: $370,000 Total Project Cost: $1,630,000

Introduction

The proposed project is located within the city-limits of Lake Alfred along the US 17/92 corridor. A decade ago, the corridor was created as one-way pairs and bisected the downtown core of Lake Alfred. While the corridor served the purpose of removing truck traffic off North Buena Vista it created new issues. The corridor experiences excessive vehicular speeds, an excessive number of travel lanes with a wide roadway deterring a small town feel to the City, difficulties for pedestrians and bicyclists attempting to cross US 17-92, lack of continuous bike lanes to provide improved connectivity, lack of parking, wrong-way movements on the one-way pair section, and perceived impacts to businesses as a result of the one-way pair configuration.

In 2013 the City developed the Downtown Master Plan. The Plan stated that "the roadway (US 17-92) presents challenges for pedestrians and bicyclists as well as motorists to cross in these areas as well as in the full one-way sections." In 2016 the FDOT Traffic Operations Corridor

Study identified the need for lane repurposing to provide better, safer access for pedestrians and bicyclist utilizing the corridor. In 2017, the City requested additional studies from the FDOT and for the TPO to prioritize complete street projects along the corridor. The FDOT completed at Corridor Planning Study in 2019. The purpose of that study was to define a vision and system of investments for U.S. 17/92 from U.S. 17 to Rochelle Avenue that support the City of Lake Alfred's economic development plan and the Florida Department of Transportation's (FDOT) Complete Streets Policy. FDOT has worked alongside local partners to identify the project goals, develop alternatives, and outline recommendations that will ensure U.S. 17/92 through Lake Alfred supports the growth of a pedestrian friendly, sustainable, and prosperous urban downtown while providing for safe local and regional travel.

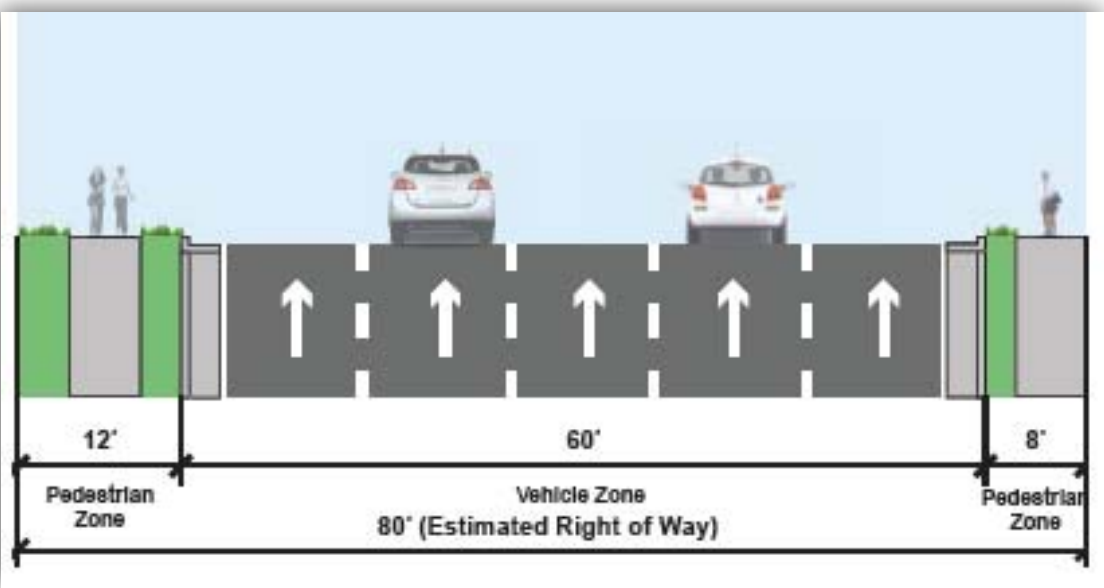
This application serves as the first effort to implement recommendations from that study.

Project Description

US 17/92 within the study areas includes a one-way pair system with three through lanes in each travel direction and additional turn lanes. The cross-section for Lake Shore Way from E. Echo Street to W. Cummings Street includes three through lanes and two turn lanes. This section is located just south of the school crossing. A portion of the section is located within the school zone. The posted speed limit ranges from 35 to 45 miles per hour (mph) throughout the corridor. U.S. 17/92 plays a significant role in regional freight movement through Central Florida. It is identified as part of the evacuation network in the Polk County 2030 Comprehensive Plan. The corridor is not part of the Strategic Intermodal System (SIS) but is identified by the Polk TPO Momentum 2040 Plan as part of the regional freight network.

The proposed project includes two areas of improvement: Intersection improvements and lane reduction along Lakeshore Way.

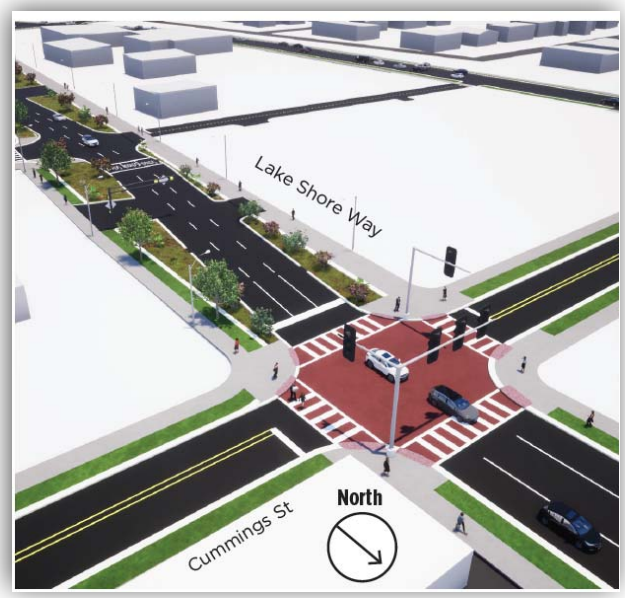
As mentioned above the US 17/92 cross-section for Lake Shore Way from E. Echo Street to W. Cummings Street includes three through lanes and two turn lanes. This wide expanse of pavement creates safety hazards for pedestrians and sends a mixed signal to drivers regarding the speed limits in Downton Lake Alfred.



The requested project funding is concentrated in this northbound stretch of US 17/92. The additional turn lanes in this are serve little use, other than to promote unsafe conditions along the roadway. The turn lanes in this section are proposed to be removed which will not significantly impact capacity on Lake Shore Way. The repurposed space could be used to introduce horizontal curves in the roadway to manage speeds and also introduce a bioswale with landscaping. The elimination of pavement is proposed without moving the curb and guttering system along the segment. The illustration below shows the Lakeshore Way pavement repurposing of the continuous turn lanes on Lake Shore Way creating chicanes in place of the

straight away.

Horizontal deflection, such as a chicane, serve as deceleration areas transition drivers from a high-speed to low-speed cross section. The noticeable change in roadway characteristics alerts the driver that they are expected to decelerate to an operating speed that matches the context of the community, in this case the school zone and downtown area. Repurposing the turn lanes will help to reduce travel speeds approaching the school crossing at Cummings Street. In addition to the proposed chicanes, improvements are proposed at each of the intersections between US 17/92 and Cummings Street. These improvements include full intersection signalization, striping, signage, curb ramps, and pavement improvements.

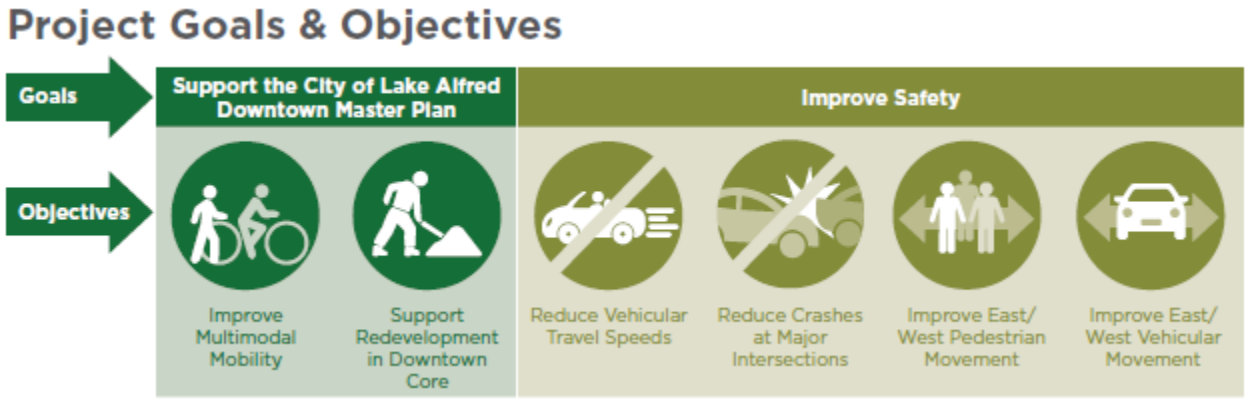


Priority Evaluation Criteria.

1. Project Linkage – 30 Points

Please explain how this project demonstrates a benefit to the intermodal transportation system identified in the TPO's LRTP, Complete Street Action Plan, Transit Development Plan or Neighborhood Mobility Audits.

The City of Lake Alfred is working with the FDOT to redesign the arterial corridor within the City and specifically the downtown area. The goals of the City as established in the Downtown Master Plan are to create a pedestrian friendly destination for residents and visitors. The vision includes a pedestrian focus, traditional development style, engaged street fronts, and enhanced aesthetic appeal. However, US 17/92 bisects the City and one-way pairs were installed 10 years ago. The FDOT Traffic Operations conducted a Corridor Study in 2016 and identified the need for lane repurposing to provide better, safer access for pedestrians and bicyclist utilizing the corridor. Following this report was the completion of a Corridor Planning Study in 2020, which identified the goals below. These goals are in line with the TPO's LRTP which also currently includes a project for this corridor in Lake Alfred as a PD&E/EMO for US 17/92 @CR 557. This project is the first phase in implementing a complete street objective for the corridor.



a.) Strategic Multi-Use Trails

Regional Multi-Use Trails

a. Is this proposed trail a regional trail? No

i. If a Regional Trail, is the proposed project included in the Office of Greenways and Trails statewide system of trails?

_____

_____

ii. If a Regional Trail, is the proposed project currently designated as a regional trail by the Polk TPO?

_____

_____

Local Multi-Use Trails

b. Is the proposed trail a local multi-use trail? Yes

i. If a local multi-use trail, will this project address or improve safety conditions for bicyclists and pedestrians along the corridor in which it is proposed?

Phase 1 of the US 17/92 Corridor Improvements in Downtown Lake Alfred includes intersection improvements at US 17/92 and Cummings Street. The Lake Alfred Veterans Trail runs north and south parallel to Shinn Blvd. The southern end of the Veterans Trail terminates at a pedestrian bridge over US 17-92 connecting the trail to the existing Chain of Lakes Trail which extends south to Winter Haven. The two intersection improvements at Cummings will provide the only complete direct crossing on the 6-lane facility with signalization for pedestrians to cross US 17/92. This connection will then allow trail users to continue to the Veterans Park on the east side of US 17/92. These intersections are also the current crossing area for children on the west side of US 17/92 to cross the arterial road to attended Lake Alfred Elementary

ii. Will this project cross or intersect with any major roadways?

The entire project is along US 17/92. While the project leads up to CR 557, the project does not cross any other major roads.

iii. Is the proposed trail project part of a multi-use trail network identified in the Momentum 2040 or Trails Master Plan? If yes, explain how the proposed project will help meet the performance targets set forth in Momentum 2040.

2045 Multi-Use Trails Needs

The existing Veterans Trail is part of the Trails Master Plan (green (N-S). The proposed improvements will aide in future connections of the Old Dixie Trail (black dashed line (E to W) heading towards Haines City. The Veterans Trail currently dead-ends three (3) blocks north of this intersection and there is a gap between the Veterans Trail and the future improvements along CR 557 (yellow). The trail connection to Haines City will need to cross US 17/92 since there are several impediments to continuing the trail north of the current terminus.

b.) Strategic Bicycle/Pedestrian Needs

a. Does the proposed project address bicycle/pedestrian needs identified in Momentum 2040, recent bicycle/pedestrian safety plans, or neighborhood mobility audits? No

i. If yes, explain how the project will help meet the performance targets set forth in Momentum 2040.

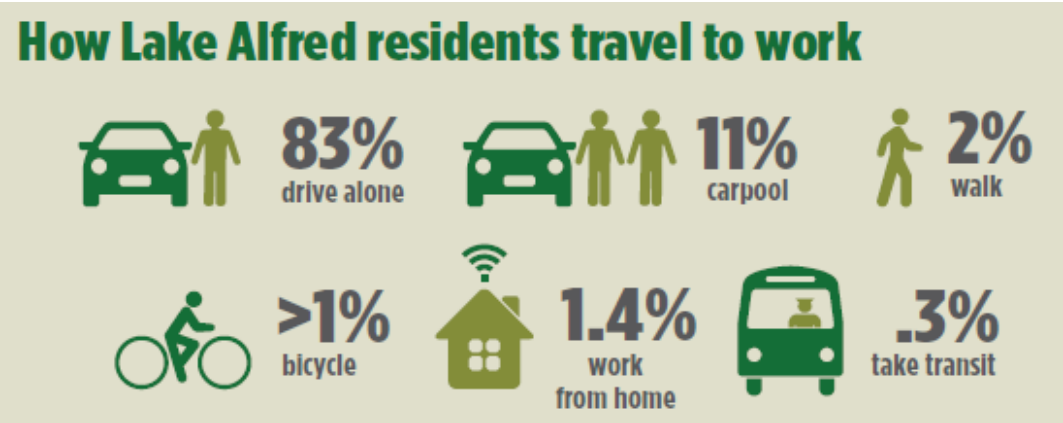
Polk TPO classifies US 17-92 from Echo Street (south end of the one-way pair section) to Pomelo Street/County Road 557 as an "Other Bicycle/Pedestrian Priority Corridor". This generally means that the corridor is on their "radar" for potential bicycle and pedestrian safety improvements, but no projects in the project development process at this time.

c.) Proposed Transit Service Improvements

a. Does the proposed project enhance access and use of a transit service? Yes

i. If yes, explain how the project will help meet the performance targets set forth in Momentum 2040.

Citrus Connection, the local transit provider, serves the study area with Route 15, which extends from Winter Haven to Hanes City. The route provides 1.5-hour headways weekdays from 5:45 a.m. to 7:00 p.m. The project will create a safe path for transit users to access the existing transit rout stops. Since the US 17/92 is a divided one-way pairs 6 lane facility, it is very difficult for transit users to access the transit stops if they are not on the same side of the highway as the stop. Location. The enhanced pedestrian path along Cumming Street with signalized intersections will greatly improve pedestrian safety.

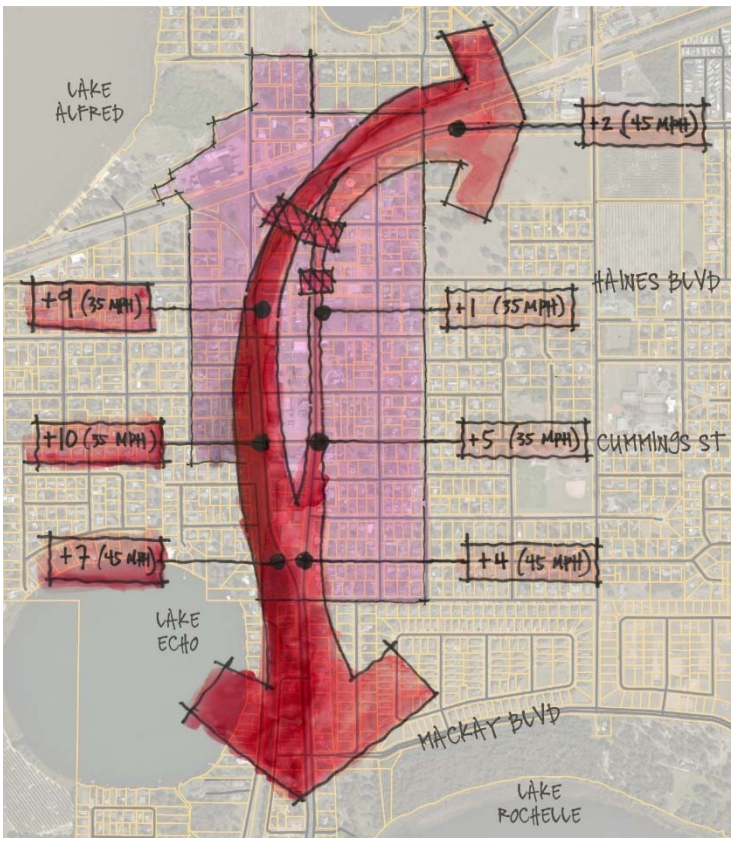


d.) High Crash Corridors

a. Is the proposed project identified as a corridor which exhibits a high number of bicycle and pedestrian crashes? No

Although the corridor is not identified on the LRTP as a high crash corridor, the numbers are still higher than desired. A total of 115 crashes were reported within the study corridor limits, resulting in two fatalities and 102 injuries over the three-year study period.

- 18 sideswipe crashes occurred when a vehicle traveling in the middle lane on U.S. 17/92 between Thelma and Pomelo Streets attempted to turn onto a side street and struck a vehicle traveling in an adjacent lane.
- Southbound motorists disregarding the red signal indication caused angle crashes at the southbound U.S. 17/92 and Pomelo Street intersection.
- Southbound vehicles were observed speeding in the active school zone.
- Southbound vehicles traveled at an 85th percentile speed of 49.8 mph.



The proposed improvements will assist in decreasing speeds in the corridor and provide safe pedestrian intersections. These improvements will aid the TPO's movement "Toward Zero Facilities."


Crash vehicles at final rest at southbound US 17-92 and Haines Boulevard (looking south)

2. System Continuity – 15 Points

a. Does the project complete, extend or enhance the existing transportation system? YES

The proposed project will enhance the existing transportation network by introducing Complete Street components in the corridor. Since the one-way pairs were installed prior to the Complete Street program adoption by FDOT, it has limited elements for users other than vehicle and freight users.

b. Does the project enhance access to essential services, e.g., shopping, medical, financial, employment or school facilities, in a traditionally underserved (environmental justice) area? YES

US 17/92 is a barrier for residents in the City of Lake Alfred. This barrier impacts all types of users. Lake Alfred Elementary, Central Park, the Mackay Lakeside Preserve, Veterans Park, and government services are on the east. The Veterans Trail (pedestrian bridge access to Chain of Lakes Trail), Lions Park are on the west. In the middle is are the commercial and retail businesses. Residents walking, biking, and driving have to cross US 17/92 to access daily needs, shopping, government services, and recreational areas. As a small City, although the City has several parks, each park has different amenities. Therefore, resident often have to cross US 17/92 to find the recreation that fits their needs. The core residential areas are on the east and west, therefore, everyone has to enter the downtown core to access shopping.

Most importantly, our elementary aged children on the west side of US 17/92 have to cross the 6+ lane facility to access Lake Alfred Elementary.

Children crossing the southbound lanes of US 17-92 at Cummings Street (looking west)

Children and adult waiting to cross the southbound lanes of US 17-92 at Cummings Street (looking southwest)

Children crossing the northbound lanes of US 17-92 at Cummings Street (looking east)

3. System Continuity – 25 Points

Will the project provide benefits to a "large segment" of the community, or will the project serve a "traditionally underserved" (environmental justice) area?

The project serves to benefit all users utilizing the corridor and address the objectives of the project and TPO's goals. The project will benefit pedestrians by providing signalized intersection crossing across both Lakeshore Way and Shinn Blvd. These intersections will also create breaks in the traffic flow N-S along US 17/92, which in effect will created timed periods for vehicular crossings E-W across US 17/92. The chicanes will also serve to notify drivers to slow dawn since the design speed will more closely resemble the posted speed. Slower traffic in downtown will lead to less vehicle accidents and speeding tickets. 😊 Lastly, the project will incorporate stormwater elements, which will also improve drainage. The intersection at Cummings Street and Lakeshore Way has historically experience flash flooding during storm events.

4. Cost to Benefit Comparison – 10 Points

Is the project cost-effective in relation to the benefits derived? YES

The project will benefit both residents and visitor to Lake Alfred. The segment of US 17/92 within Lake Alfred experiences 17,000 AADT in each direction and the numbers will continue to grow. Therefore, the improvements to safety in this corridor, the number of trips, and the increase to the citizens of lake Alfred's quality of life is well worth the cost.

5. Public/Private Support – 10 Points

Is there demonstrated public and/or private support for this project? This could include public support gathered from the individual municipalities/jurisdictions, including public input gathered from meetings related to the proposed project. Additionally, the TPO's planning efforts such as Momentum 2040, Neighborhood Mobility Audits and Complete Street Action Plans qualifies for public support for projects documented in these plans.

The City of Lake Alfred is dedicated to citizen involvement. City staff and FDOT consultant have performed walking audits within the corridor. The City Commission held both a public workshop and a public meeting on the project. The City also advertised the workshop in the paper, on the City website, and on social media. Therefor, the City Commission of the City of Lake Alfred adopted a resolution of support for this project.

6. Commitment – 10 Points

Does the community have financial commitment in the project? If the municipality or jurisdiction is unable to provide a financial commitment, please explain other forms of commitment such as in-kind services that may apply.

The City has included street resurfacing in the biannual CIP budget. In addition, if awarded the City also has CRA funds that could contribute to streetscaping in the corridor. The City has proposed a 10% match.

Additional project information:

The City of Lake Alfred looks forward to the continued partnership with the Polk TPO and the FDOT regarding improvements to the US 17/92 corridor in Alake Alfred.

City of Lake Alfred
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AGENDA
CITY COMMISSION WORKSHOP
MONDAY DECEMBER 9, 2019
6:00 PM
CITY HALL

CALL TO ORDER: MAYOR NANCY DALEY

ROLL CALL: DEPUTY CITY CLERK MAMIE DRANE

AGENDA

1.) **FLORIDA DEPARTMENT OF TRANSPORTATION: LANE REPURPOSING STUDY PRESENTATION AND DISCUSSION**

ADJOURN

MINUTES
CITY OF LAKE ALFRED
CITY COMMISSION WORKSHOP
MONDAY, DECEMBER 9, 2019
CITY HALL

Call to Order: Mayor Nancy Daley

Pledge of Allegiance: Mayor Nancy Daley

Those in attendance were Mayor Nancy Daley, Vice Mayor Jack Dearmin, Commissioner Charles Lake, Commissioner Brent Eden, and Commissioner Albertus Maultsby.

Staff in attendance: City Manager Ryan Leavengood, Assistant City Attorney Seth Claytor, Community Development Director Ameé Bailey, and other staff.

AGENDA:

Florida Department Of Transportation: Lane Repurposing Study Presentation And Discussion

City Manager Ryan Leavengood deferred to Deborah Chesna from the Florida Department of Transportation (FDOT) to introduce the item.

Deborah Chesna, District Pedestrian-Bicycle Coordinator, FDOT introduced the project the Lake Shore Way/Shinn Blvd. (US 17/92) Corridor Planning Study and the project consultant team from Kittelson.

Patty Hurd, Senior Planner Kittelson and Associates, Inc. stated Kittelson and Associates has been coordinating with the Florida Department of Transportation (FDOT), the City and County staff, and the Polk TPO staff to find different ideas for the17/92 corridor to facilitate growth in the City. The goals and opportunities that were identified by the group took into account how things are functioning today and how they may function in the future traffic-wise. She said the first goal would be to support the Lake Alfred Downtown Master Plan and the redevelopment in the Downtown core. There are some alternatives to road-way design to improve multimodal mobility and improve safety on the Corridor.

Vice Mayor Dearmin stated the residents' main concern is the bottleneck between the two intersections, at Shinn and Lake Shore, heading to CR 557, which has been a problem from the beginning.

Commissioner Lake stated if a large truck gets stuck at the light between the two intersections traffic becomes backed up.

Patty Hurd stated the study found that the major traffic delays are at the intersections the delays are one (1) to two (2) minutes during peak congested periods and diverting traffic for the regional network is a major concern. This will be covered later in the presentation but two (2) left turn lanes from Lake Shore on to CR557 would help.

Continuing with the presentation she stated that long term opportunities for the corridor include lane repurposing to reuse one of the outside lanes the other was to return the one-way-pair to a two-way pattern. There are opportunities that will serve the traffic and support both the one way and two-way conversion. The long term alternatives she presented consisted of six-lanes to four-lane the repurposing of Lake Shore Way with improvements to the intersection at US 17/92 and Lake Shore Way, and a two-lane one-way pair and converting Shinn Boulevard and Lake Shore Way to two directions of travel.

The lane repurposing alternatives presented were;

1.) Alternative 1 leaves both curbs in place and adds a protected bike lane, trails, wider median, and western sidewalks.
2.) Alternative 1A maintained the existing curbs and added a rain garden.
3.) Alternative 1B moved the east curbs and added a rain garden.
4.) Alternative 2A kept both curbs with parking on the west side.
5.) Alternative 2B moved the east curbs and added parking on the west side.

Ms. Hurd spoke of changes and improvements starting at the south side of Hwy 17/92 and working her way north. The changes included a displaced left turn at 17/92, a split and roundabout at Thelma St., Shinn Blvd and Lake Shore Way.

Addressing the intersection at CR557, Shinn Blvd and Lake Shore Way she stated that this intersection at Lake Shore would have a left turn lane, a left through lane and a through lane, two lanes would turn on to CR557 and two lanes would be through lanes. In the eastbound direction of CR557 coming into town, there would be a right turn lane and a through lane.

Commissioner Eden asked if this would be on the north side or the south side lanes.

Ms. Hurd stated this would be on the north side. It is the north/south movement that is growing, the Hwy 17/92, east/west movement is not growing. The capacity the City should address is through the turning movement. She suggested the two-way one-way pair with two through lanes can work with the modified turning movement.

Ms. Hurd continued with the presentation defining the outcome of the Hwy 17/92 corridor should there be a two-way conversion. This reiteration included a cycle track, that features two-way bike travel and is physically separated from the road with either landscape or a raised island.

Mayor Daley asked about motorized vehicles on the cycle track.

Discussion continued regarding the two-way pair.

Ms. Hurd stated for this to work Lake Shore Way will have to carry most of the traffic, if Shinn Blvd. tries to carry all the traffic, Shinn Blvd. will break down. The models predict two-thirds of the traffic would be on Shinn and one third would be on Lake Shore. As far as FDOT traffic is concerned both scenarios can work with the intersection configurations that have been suggested. They are preliminary options for right now. The intersection configuration that has been shown as a system which is important.

Mayor Daley stated this fits into the City's Master Plan, the pictures in the Downtown Master Plan look a lot like the pictures being used by Ms. Hurd.

City Manager Leavengood, addressing Debra Chesna, stated staff has talked about signalization for years. He asked how does the City pull all ideas together to make everything work.

Ms. Chesna stated a systemic analysis is one option. The signals at the intersections do not meet warrant and there is more analysis' to be done that are also systemic. The new approach gives more options.

Mayor Daley asked about the other intersections that do not have signalization such as Mackay Blvd. at Shinn and Lake Shore Way. She stated these intersections are in serious trouble.

Ms. Chesna stated when the Project Development and Environment (PD&E) begins their study there will be extensive public involvement. Staff should make sure residents are aware and come out to voice their opinions.

City Manager Leavengood stated his concern is making the plan become the reality. What the City is planning should interface with the FDOT. If the City can get the plan online now some of the elements may still be 10 to 15 years from now. If the downtown property is sold to an end-user that could be the opportunity to bring online that portion of the needed signalization.

Director Bailey stated the light at Haines will be moving to Pierce to space out the lights at different intervals that make more sense.

Ms. Chesna stated things can be moved around FDOT's approach is different as they are now looking at the land use, where are the people coming from and what are their needs.

Mayor Daley asked what is the worst and best time frame for this project.

Ms. Hurd asked if that question could be tabled until the end of the presentation. She had more information to present. Moving the signal from Haines St. to Pierce St. does two things, it facilitates proper spacing of the lights. It also, in both alternatives, it provides time for the traffic to clear without impacting the CR 557 intersection. The intersection configurations shown will

reduce crashes and improve safety while improving capacity at those intersections. Parking would be helpful for redevelopment along the corridor. There are more opportunities for parking on the west side, there are fewer driveways. When suggesting locations for parking, consider utilization.

For short term improvements, the criteria she used was; buying right-of-way was not necessary, the existing drainage is not impacted and the capacity of the roadway would not be diminished. This is a short term solution for less than five (5) years. Commissioner Lake suggested, for CR557 and Pomelo St., re-striping the road to make a third lane, and relocating signal heads. This would work short term, less than ten (10) years. Another suggestion was to remove the turning lane from Lake Shore Way and replace it with landscaping. This does not impact capacity, it is twenty feet, this will maintain the existing curbs and would introduce the new curb.

Ms. Hurd had several drafts showing what the different improvements would look like upon completion.

Discussion ensued on the pictured alternatives.

Ms. Hurd asked the Commissioners to discuss the alternatives with each other and their constituents to help turn the alternatives into recommendations. Whichever alternative the City decides will be presented to the Polk TPO board.

Vice Mayor Dearmin stated we know Lake Alfred is growing and we need improvements. He asked, how soon can the short term improvements happen.

Ms. **Chesna** stated that a resolution shows that the Commission is in favor of what has been purposed, but the City does not have to choose between the two alternatives at this time. The alternatives will need to be annalized during the PD&E process.

Ms. Hurd stated the implementation of the short term alternatives will depend on how much support the City can gather and how much money the City can get. If funding can be set aside she does not see a reason that the short term alternatives can not be achieved.

Director Bailey asked about changing the striping on Pomelo St. since it is a City Street.

Ms. **Hurd** stated the issue would be if a new signal head is needed. If you do that becomes a structural question.

City Manager Leavengood thanked his staff, the FDOT staff and both Ms. Hurd and Ms. Chesna for the presentation.

The Commissioners reached a consensus to go forward with the project.

With no other business, the meeting was adjourned at 8:36 pm.

Respectfully submitted,

Mamie Drane
Deputy City Clerk

Reviewed by

Ameé Bailey
City Clerk

CITY OF LAKE ALFRED

CAPITAL IMPROVEMENTS PROGRAM (CIP)

FY 2020/2021 - FY 2024/2025

	2020/2021 1st Year Budget	2021/2022 2nd Year Budget	2022/2023	2023/2024	2024/2025	Funding
General Gov. / Finance / Community Development						
Replacement Vehicles			$30,000	$30,000	$30,000	
Accounting/Permit Software			$150,000			50k Gen Imp?
City Hall Conference Room					$400,000	Impact / Permit
Technical Standards	$25,000					
City Website Replacement		$40,000				
Total:	$25,000	$40,000	$180,000	$30,000	$430,000	
Police Department						
Replacement Patrol Vehicle	$45,000	$50,000	$50,000	$50,000	$100,000	
Evidence Building					$300,000	Public Safety Imp
Total:	$45,000	$50,000	$50,000	$50,000	$400,000	
Fire Department						
Replacement Fire Engine	*$50,000*	$450,000	*$50,000*	*$50,000*	*$50,000*	350k GF Asg.
Replace Tanker Truck		$50,000	$100,000			
Replacement Rescue Truck			$50,000			
Total:	$50,000	$500,000	$200,000	$50,000	$50,000	
Community Redevelopment Agency						
Downtown Streetscaping					*$50,000*	
P&R Master (Lions & Central)	$220,000	$120,000	$240,000	*$160,000*	$320,000	110k CRA Asg.
Retail Development Consultant	$40,000	$40,000	$40,000			
Façade Grant	$50,000	$50,000	$50,000	$50,000	$50,000	
Total:	$310,000	$210,000	$330,000	$210,000	$420,000	
Parks and Recreation						
P&R Master Plan	$100,000	*$50,000*	$100,000	*$50,000*	$100,000	50k GF Asg.
Gardner House Restoration		*$25,000*	$150,000	*$75,000*	$350,000	Hist. Pres. Grant
Vehicle Replacement				$30,000		
Total:	$100,000	$75,000	$250,000	$155,000	$450,000	
Facility Ops. & Maint.						
Misc Projects	$20,000	$60,000	$60,000	$60,000	$60,000	
Total:	$20,000	$60,000	$60,000	$60,000	$60,000	
Public Works						
Replacement Service Vehicles		$30,000		$30,000		
Lightning Loader Replacement				$160,000		Sanitation R.
Garbage Truck Replacement		$250,000			$250,000	Sanitation R.
Sidewalk Projects	$10,000	$20,000	$50,000	$50,000	$50,000	
Street Resurfacing	$150,000		$200,000		$200,000	Local Gas Tax
Total:	$160,000	$300,000	$250,000	$240,000	$500,000	

CITY OF LAKE ALFRED

CAPITAL IMPROVEMENTS PROGRAM (CIP)

FY 2020/2021 - FY 2024/2025

	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Funding
	1st Year	2nd Year				
Public Utilities						
Replacement Service Vehicles		$30,000		$30,000		
CR 557 Sewer Extension		$1,500,000				Sewer Impact
Sewer Infill Project				$2,000,000		Partial Grant Offset
557 Widening: Main Relocate		$1,000,000				Water Impact
New Water Plant	$800,000		$4,000,000			Partial Grant Offset
Polk Cooperative Rate Study						Water Impact
Buena Vista Master Lift Station			$600,000			1/2 Impact
Stormwater Master Plan	$40,000					Stormwater R.
Stormwater/Trail Project				$100,000		
Vac Trailer	$90,000					40k EF Asg.
Total:	$930,000	$2,530,000	$4,600,000	$2,130,000	$0	

Funding Reserves External Funding Restricted Funding

City of Lake Alfred
120 E. Pomelo Street
Lake Alfred, FL 33850

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CITY OF LAKE ALFRED
CITY COMMISSION MEETING
TUESDAY JANUARY 21, 2020
7:30 PM
CITY HALL

Call To Order: Mayor Nancy Daley

Invocation and Pledge Of Allegiance: TBD

Roll Call: Deputy City Clerk Mamie Drane

Announcements: City Manager & City Attorney

Recognition of Citizens: (Items That Are Not On the Agenda)

Proclamation - APLI

Consent Agenda
1.) City Commission Meeting Minutes
2.) City Commission Announcements
3.) Board Appointments

Agenda
1.) Ordinance 1431-20: Police and Fire Retirement Update – Cancer Presumption
2.) Resolution 02-20: US Highway 17/92 Project Support
3.) Bids: US 92 Water & Sewer Main Extension
4.) Bids: Repaving Approaches to Railroad Crossings

Recognition Of Citizens: (Please Limit Your Comments To 5 Minutes.)

Commissioner Questions and Comments:

Commissioner Lake
Vice Mayor Dearmin
Mayor Daley
Commissioner Eden
Commissioner Maultsby
Adjourn

CITY OF LAKE ALFRED
CITY COMMISSION MEETING
JANUARY 21, 2020

2.) RESOLUTION 02-20: SUPPORT FOR DOWNTOWN LANE REPURPOSING

ISSUE: The City Commission will consider Resolution 02-20 that supports the corridor study recommendations and requests Priority Transportation Projects to be included in FDOT's Five-Year Work Program.

ATTACHMENTS:

- Resolution 02-20

ANALYSIS: The Polk Transportation Planning Organization (TPO) is responsible for developing a list of Priority Transportation Projects. The list is submitted to the Florida Department of Transportation (FDOT) for consideration during the development of their Five-Year Work Program for Polk County. The projects are based on the goals and objectives of the TPO's adopted Momentum 2040 plan and are intended to promote safety, enhance mobility and reduce congestion for all users of the transportation system.

The resolution requests prioritization funding from FDOT to conduct short and long term projects within the corridor including a roadway reconfiguration project development and environmental analysis (PD&E) on US Highway 17/92 through Lake Alfred's downtown core. The study would analyze the alternatives associated with reducing the number of travel lanes and enhance pedestrian and bicyclist connectivity as well as transit access in the corridor. The project is requested to be fully funded by the FDOT District One in its upcoming Five-Year Work Program review cycle. The first TPO funding application opportunity is due February 1st. The TPO Board will consider its final list of Priority Projects in June to submit to FDOT.

STAFF RECOMMENDATION: Approve Resolution 02-20.

RESOLUTION NO. 02-20

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF LAKE ALFRED, FLORIDA; MAKING FINDINGS, SUPPORTING THE LAKE SHORE WAY/SHINN BOULEVARD (US 17/92) CORRIDOR PLANNING STUDY ("THE STUDY"), AND ESTABLISHING PROJECT PRIORITIES FOR FUNDING BY THE FLORIDA DEPARTMENT OF TRANSPORTATION AND THE POLK TRANSPORTATION PLANNING ORGANIZATION; SUPPORTING THE SUBMISSION OF AN APPLICATION BY THE CITY OF LAKE ALFRED, FLORIDA; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Florida Department of Transportation hereafter FDOT completed the one-way pair reconfiguration of US Highway 17/92 through Lake Alfred in 2010; and

WHEREAS, the project was designed for increased capacity, providing a total of 6 travel lanes for traffic traveling north and south through the center of Lake Alfred downtown to provide high-capacity connection to Interstate-4 for distance travel and freight movement; and

WHEREAS, based on Polk Transportation Planning Organization data published November 2017, the US Highway 17/92 is a Principal Arterial corridor in downtown Lake Alfred, has an annual average daily traffic count exceeding 30,000 vehicles, with a level of service rating of B/C; and

WHEREAS, the Lake Alfred Downtown Master Plan adopted in 2013 assembled the community's vision to see a revitalized, vibrant and connected downtown after the US Highway 17/92 corridor reconfiguration; and

WHEREAS, the residents and business community of Lake Alfred have expressed concerns for pedestrian connectivity along and across the US Highway 17/92; and

WHEREAS, the City of Lake Alfred recognizes the importance of providing a balanced and holistic transportation network, which provides adequate capacity and improves safety for all types of travel, including vehicles, pedestrians, transit and bicyclists; and

WHEREAS, the City of Lake Alfred adopted Resolution 11-12, adopting the Polk County Local Government Complete Streets Policy that was formalized through the Polk Transportation Organization Resolution 2012-15; and

WHEREAS, in 2017, the Florida Department of Transportation completed a Corridor Study which recommended a "road diet" and other associated improvements for the US Highway 17/92 corridor through the City of Lake Alfred; and

WHEREAS, in 2019, the Florida Department of Transposition conducted a Corridor Planning Study for the US Highway 17/92 corridor through the City of Lake Alfred recommending short, mid-term, and long-term alternatives for improvements along the corridor; and

WHEREAS, the Polk Transportation Planning Organization's Priority Transportation Projects include intersection improvements for US Highway 17/92 and County Road 557 in downtown Lake Alfred: and

WHEREAS, the Federal Highway Administration and Florida Department of Transportation recognize that road diets and complete street projects are a proven safety countermeasure to reduce highway fatalities and serious injuries.

NOW THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LAKE ALFRED, FLORIDA, THAT:

SECTION 1. RECITALS INCORPORATED. The provisions set forth in the recitals (whereas clauses) are hereby adopted by the Commission as the legislative findings and intent pertaining to this Resolution.

SECTION 2. TRANSPORTATION NEEDS. The transportation needs along the US Highway 17/92 corridor within the City of Lake Alfred require a multi-modal solution to ensure a safe and functional system that serves all users, improves the quality of life, and allows for a more efficient urban form.

SECTION 3. CORRIDOR ALTERNATIVES. The Lake Shore Way/Shinn Boulevard (US 17/92) Corridor Planning Study ("The Study") contains alternatives that could respond to the area's transportation need, recommending short, mid-term, and long-term alternatives for improvements along the corridor.

Short term – Pavement repurposing of continuous turn-lanes, intersection improvements, and intersection warnings.
Mid-Term – Public and private improvements through land development of properties in the corridor.
Long-Term – Lane repurposing with intersection improvements, or conversion of one-way traffic to two directions of travel.

SECTION 4. PROJECT SUPPORT. The City Commission of the City of Lake Alfred, Florida does hereby support the conclusions of The Study and agrees that improvements are needed along the US Highway 17/92 Corridor and that the recommended alternatives need to be evaluated to determine the most beneficial solution.

SECTION 5. AUTHORIZATIONS. The City Commission of the City of Lake Alfred, Florida does hereby support and authorizes the City Manager to submit an application to the Polk Transportation Organization and/or the Florida Department of Transportation to support transportation improvements within the US Highway 17/92 corridor. Additionally, the City Commission directs the City Manager to coordinate the City's efforts in order to submit the applications and to meet the application requirements and bring about the earliest possible completion of any eligible projects as may be identified in the application.

SECTION 6. REQUEST. The City of Lake Alfred requests that the Florida Department of Transportation coordinate with the Polk TPO to prepare a comprehensive funding strategy for the project alternatives for inclusion in the FDOT's next available Work Program update.

SECTION 7. EFFECTIVE DATE. This Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Commission of the City of Lake Alfred in session duly and regularly assembled, this 21st day of January 2020.

CITY OF LAKE ALFRED
CITY COMMISSION

By: _____
Nancy Z. Daley, Mayor

ATTEST:

By: _____
Ameé Bailey-Speck, City Clerk

APPROVED AS TO FORM:

By: _____
Frederick J. Murphy Jr., City Attorney

FLORIDA DEPARTMENT OF TRANSPORTATION

[YEAR] TRANSPORTATION ALTERNATIVES PROGRAM

FUNDING APPLICATION FOR FISCAL YEAR [dates]

APPLICANT INFORMATION

Agency/Organization Name: City of Lake Alfred			
Agency Contact Name: Amee Bailey	**Title:** Community Development Director		
Mailing Address: 120 E. Pomelo Street	**City:** Lake ALfred	**State:** FL	**Zip Code:** 33850
County: Polk	**MPO/TPO (if applicable):** Polk TPO		
Telephone: 863-291-5748	**Email Address:** abailey@mylakealfred.com		

CERTIFICATION OF PROJECT SPONSOR/IMPLEMENTING AGENCY SUPPORT:

Certification of project sponsor/implementing agency support is attached. ☒ Yes *(Required)*

PROJECT TYPE: ☒ **Infrastructure** ☐ **Non-infrastructure**

FDOT requires locally administered infrastructure projects be implemented by a LAP certified agency; Non-infrastructure projects do not require LAP certification. If the project applicant intends to administer the project but is not LAP certified at the time of application submittal, they may seek project-specific certification prior to project authorization if their application is selected, or they may partner with a LAP certified agency or with FDOT to serve as the project sponsor and implementing agency. Non-profit organizations are not eligible for LAP certification.

FOR INFRASTRUCTURE PROJECTS ONLY - APPLICANT'S LOCAL AGENCY PROGRAM (LAP) CERTIFICATION STATUS

☐ Currently fully LAP Certified / Year of Certification:
☐ Not LAP Certified but will seek project-specific certification
☒ Not LAP Certified but project will be administered by the FDOT District
☐ Not LAP Certified but have secured a LAP Sponsor/Implementing Agency as identified below:

LAP Sponsor/Implementing Agency Name:			
LAP Sponsor/Implementing Agency Contact Name:	**Title:**		
Mailing Address:	**City:**	**State:** FL	**Zip Code:**
Telephone:	**Email Address:**		

PROJECT INFORMATION

PROJECT NAME/TITLE: US 17/92 Corridor Improvements in Downtown Lake Alfred Phase 1

ELIGIBLE TRANSPORTATION ALTERNATIVES PROJECT CATEGORY:

Please check the one Transportation Alternatives eligible project category that the proposed project will address. Checking more than one category does not ensure or increase eligibility. Additional guidance on eligible project activities is included in Appendix B of the FDOT TA Program Guidance.

1. ☐ Construction, planning and design of on and off-road facilities for bicyclists, pedestrians, and other forms of nonmotorized transportation (pedestrian and bicycle facilities)
2. ☒ Construction, planning and design of infrastructure-related projects/systems to provide safe routes for non-drivers including children, older adults, individuals with disabilities (safe routes for non-drivers)
3. ☐ Conversion and use of abandoned railroad corridors for non-motorized use
4. ☐ Construction of turnouts, overlooks, and viewing areas
5. ☐ Inventory, control or removal of outdoor advertising
6. ☐ Historic preservation and rehabilitation of historic transportation facilities
7. ☐ Vegetation management practices in transportation rights of way
8. ☐ Archaeological activities related to impacts from transportation projects
9. ☐ Environmental mitigation activities
10. ☐ Safe Routes to School

***NOTE:** *Safe Routes to School (SRTS) funding under Transportation Alternatives is separate from the FDOT SRTS Program; however, if FDOT SRTS Program funds are to be used on any phase of the project then the project will need to comply with the Florida SRTS program requirements. For more information, visit https://www.fdot.gov/safety/2A-Programs/Safe-Routes.shtm.*

PROJECT LOCATION:

Roadway name:* US 17/92 Lakeshore Way N and Shinn Blvd S		
☒ **On-State System Road** (State Roadway)	☐ **Off-State System Road** (Local Roadway)	**Roadway number:** SR 600 (i.e. US, SR, CR, etc., if applicable)

***NOTE:** *For off-road/trail projects please indicate adjacent roadway*

PROJECT LIMITS:

If project has various locations (e.g. city-wide), include attachments specifying each termini and project length.

South or West Termini: E. Echo Street Street Name/Mile Post/Other	**North or East Termini:** E. Pomelo Street Street Name/Mile Post/Other
Project Length (in miles): 0.62 miles	
Attachment included? ☒ Yes ☐ No	
A location map with aerial view is attached to this application. ☒ Yes *(Required)* *Label important features, roadways, etc. to clearly locate and show the boundaries of the project.*	

PROJECT DESCRIPTION:

Brief Description: The project includes the following element. 1. The pavement re-purposing along Lake Shore Way (chicanes and bioswales with vegetation), 2. intersection improvements at Cummings and Pomelo (striping, re-striping, rumble strips, pavement treatments, and curb ramps, and two new traffic signals at Cummings Street)

Detailed Scope of Work:

A detailed scope of work is attached.	☒ Yes *(Required)*
Clearly describe the existing conditions and the proposed project in detail, including specifics on the major items of work (e.g. width of sidewalks or trails, materials to be used, etc.), the purpose and need for this project, and the desired improvements.	
Conceptual or design plans are attached.	☒ Yes ☐ No
Typical Section drawings are attached.	☐ Yes ☒ No
Other attachment (e.g. studies, documentation to support the project).	☒ Yes ☐ No
If yes, please describe:	

PUBLIC INVOLVEMENT:

Has the applicant received input from stakeholders?	☒ Yes ☐ No
Briefly explain: Field visits, discussions with school crossing gaurds and students, public workshop, and public hearing	
Have public information or community meetings been held?	☒ Yes ☐ No
If yes, please provide a brief description and attach supporting documentation:	
Describe public and private support for the project *(e.g. petitions, endorsements, resolutions, letters of support):* A Resolution of support from the City of Lake Alfred	
Is the project within limits of wetlands, contamination/hazardous waste areas or endangered/threatened species? If Yes, specify and provide documentation:	☐ Yes ☒ No
Is environmental permitting required?	☐ Yes ☒ No
If Yes, specify and provide documentation:	
Provide any additional project specific information that should be considered:	

PROJECT IMPLEMENTATION

Please indicate the project phases included in this funding request:

- ☐ Planning activities
- ☐ Project Development and Environment Study (PD&E)
- ☒ Preliminary Engineering/Final Design
- ☐ Right-of-Way (ROW)
- ☒ Construction
- ☒ Construction Engineering and Inspection activities (CEI)

Please indicate who will execute the project phases identified for this project:*

Planning	PD&E	Preliminary Engineering/ Final Design	ROW	Construction	CEI
☐ Implementing agency staff	N/A	☐ Implementing agency staff	N/A	☐ Implementing agency staff	☐ Implementing agency staff

☐ Consultant	☐ Consultant	☐ Consultant	☐ Consultant	☐ Consultant	☐ Consultant
☐ FDOT	☐ FDOT	☒ FDOT	☐ FDOT	☒ FDOT	☒ FDOT
☒ Not applicable	☒ Not applicable	☐ Not applicable	☒ Not applicable	☐ Not applicable	☐ Not applicable

***NOTE:** Local agencies are not eligible to be certified in PD&E and/or ROW (Refer to FDOT LAP Manual Chapters 11 and 12).*

Is this project related to other FDOT funded phases that are complete, underway, or in FDOT's 5-year Work Program?
☒ Yes ☐ No

If Yes, please describe. *If previous phases of this project were constructed as LAP projects, please provide the associated FDOT Project Number (i.e. FPID/FMN numbers)*:

The project was identified in the planning stage of the US 17/92 Corridor Study and is in association with an expanding project in the work plan and TPO priority planning.
FDOT Item 442404-1 PD&E/EMO for SR 600 (US 17/92) @ CR 557 (E. Pomelo St)

Is there a proposed maintenance plan for when the project is complete? ☐ Yes ☒ No
If yes, please provide a brief description and attach supporting documentation as appropriate:

PROJECT RIGHT-OF-WAY / EASEMENT REQUIREMENTS

Is right-of-way acquisition proposed? ☐ Yes ☒ No
If yes, describe existing right-of-way (ROW) ownerships along the project, including when the ROW was obtained and how ownership is documented (i.e., plats, deeds, prescriptions, easements). Attach ROW documentation as appropriate.

Also describe proposed acquisition including timeline, expected fund source, limitations on fund use or availability, and who will acquire and retain ownership of proposed right-of-way:

Will temporary construction easements be required? ☒ Yes ☐ No
If Yes, please describe:

Easements may be needed from the City of Lake Alfred at the intersections on Cummings and along Pomelo St.

PROJECT COST ESTIMATE AND FUNDING REQUEST

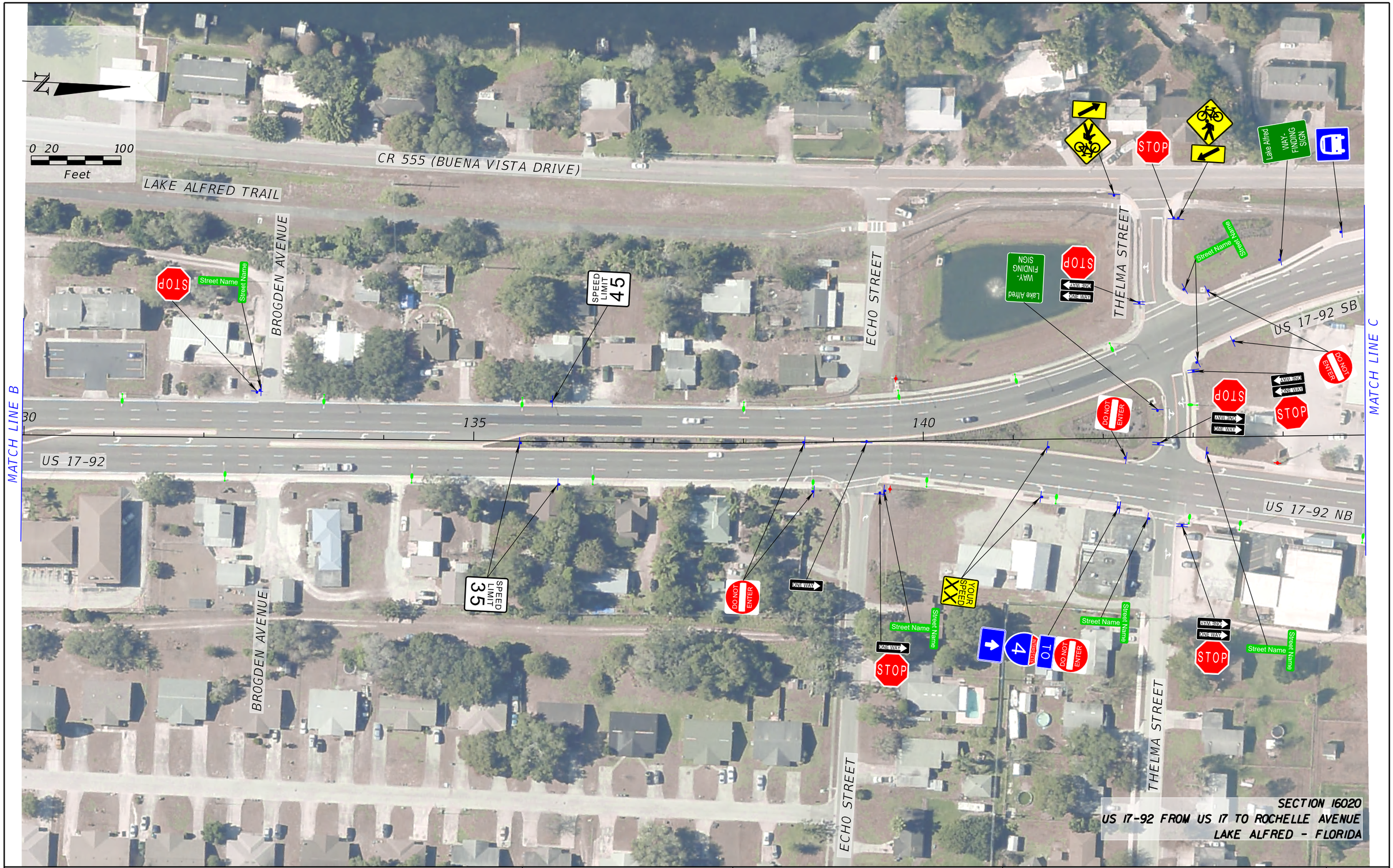
ESTIMATED PROJECT COST:

A detailed project cost estimate is attached. ☒ Yes *(Required)*

Provide a summary of the estimated cost for the work being proposed, indicating local fund allocation as appropriate.

Project Phase	TA funds	Local funds	Total Cost
Planning Activities	$0	$0	$0
Project Development & Environmental Study (PD&E)	$0	$0	$0
Design Costs/Plan Preparation	$	$	$0
Environmental Assessment (s) associated with the design phase	$0	$0	$0
Permits associated with the design phase (including application fees, mitigation and permit acquisition work)	$0	$0	$0
Right-of-Way	$0	$0	$0
Construction	$	$163,000	$1,330,000

Construction Engineering and Inspection Activities (CEI)	$	$ 0	$ 170,000
Other costs* (please describe) **FDOT does not allow programming for contingency costs. Any contingency costs should be accounted for using local funds.*	$	$	$
TOTAL ESTIMATED PROJECT COST	**$** 1,467,000	**$** 163,000	**$** 1,630,000
PERCENT OF TOTAL PROJECT COST	**%** 90	**%** 10	**100%**



Utility Pole
Traffic Sign
Luminaire

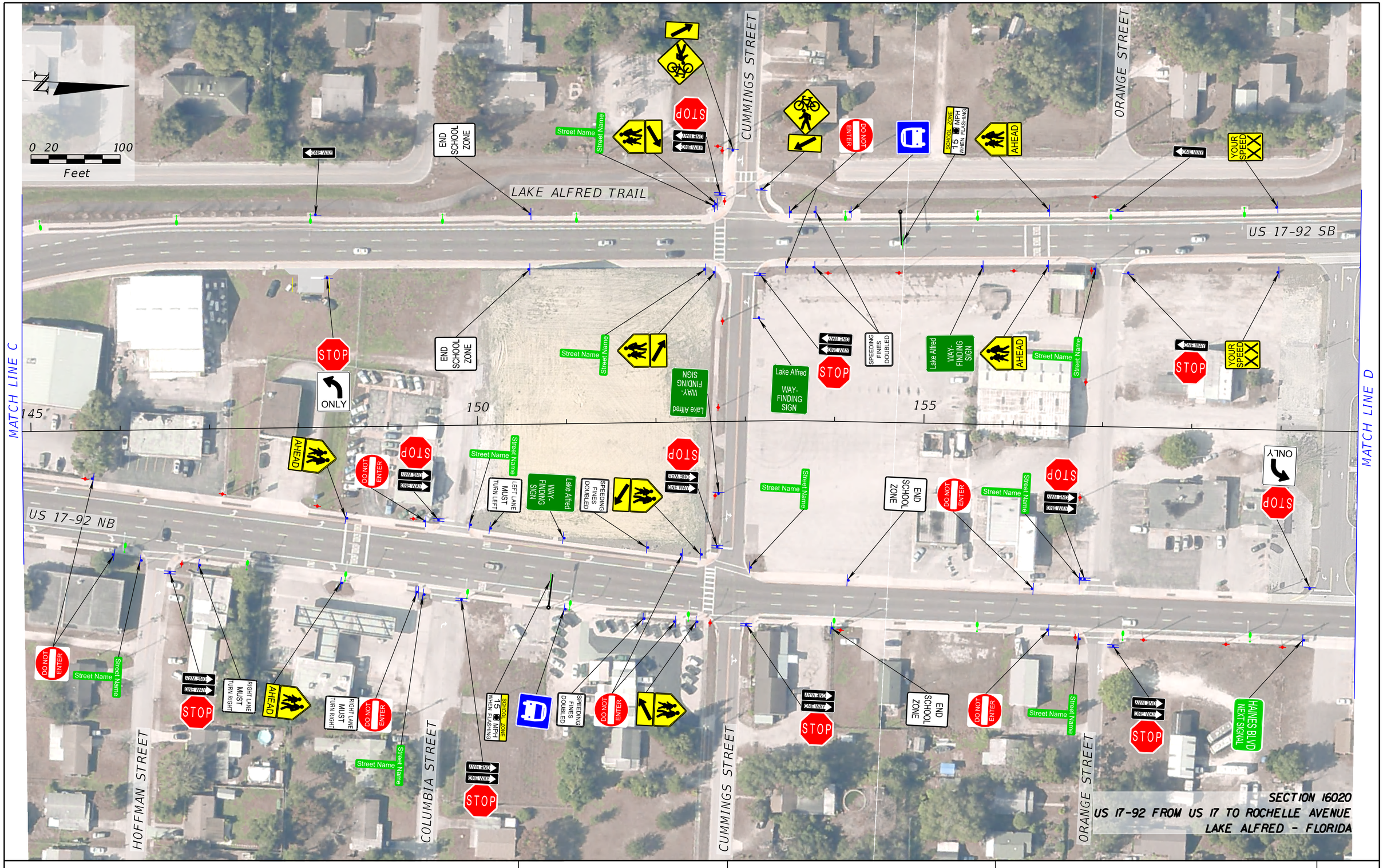
Symbols:

Traffic Controller Cabinet
Ditch Bottom Inlet
Signal Pole
Pedestrian Signal Pole
Mitered End Section

Traffic Engineering Data Solutions, Inc.
80 Spring Vista Drive Phone: 386.753.0558
DeBary, FL 32713 Fax: 386.753.0778
CERTIFICATION OF AUTHORIZATION # 27392

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FIGURE 2
EXISTING CONDITION DIAGRAM



SECTION 16020
US 17-92 FROM US 17 TO ROCHELLE AVENUE
LAKE ALFRED - FLORIDA

Symbols:
- Utility Pole
- Traffic Sign
- Luminaire
- Traffic Controller Cabinet
- Ditch Bottom Inlet
- Signal Pole
- Pedestrian Signal Pole
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FIGURE 2
EXISTING CONDITION DIAGRAM

PIERCE STREET
LAKE ALFRED TRAIL
HAINES BOULEVARD
BUENA VISTA DRIVE
POMELO STREET
US 17-92 NB
US 17-92 SB
MATCH LINE D
MATCH LINE E
160
165
170
0 20 100
Feet

SECTION 16020
US 17-92 FROM US 17 TO ROCHELLE AVENUE
LAKE ALFRED - FLORIDA

Symbols:
- Utility Pole
- Traffic Sign
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FIGURE 2
EXISTING CONDITION DIAGRAM

PAGE NO. 11

Project: Lake Alfred Corridor Planning Study

Remove Continuous Turn Lanes and Add Landscaping and Chicane

Component	Total Cost
Striping & Signage	$1,213.42
Landscaping	$81,345.10
Drainage	$139,138.09
Total Construction Cost	$221,696.61

Implementation Cost

Construction	$220,000
Design/CEI	$70,000
Roadway ROW	$0
Total	***$290,000***

Two New Traffic Signals

Component	Total Cost
Striping & Signage	$49,083.06
Special Pavement	$207,441.34
Signal Equipment	$751,397.69
Curb Ramps	$32,838.82
Total Construction Cost	$1,040,760.90

Implementation Cost

Construction	$1,040,000
Design/CEI	$300,000
Roadway ROW	$0
Total	***$1,340,000***

Short Term Improvements Grand Total

Construction	$1,260,000
Design/CEI	$370,000
Roadway ROW	$0
Total	***$1,630,000***
City (10%)	$163,000.0
FDOT (90%)	$1,467,000.00

CITY OF LAKE ALFRED

LAKE SHORE WAY/ SHINN BOULEVARD (U.S. 17/92) CORRIDOR PLANNING STUDY

Final Report | February 2020

LAKE SHORE WAY/ SHINN BOULEVARD (U.S. 17/92) CORRIDOR PLANNING STUDY

FEBRUARY 2020

Table of Contents

Appendix

PREPARED FOR:
Florida Department of Transportation
Intermodal Systems Development,
District One
801 North Broadway Avenue
Bartow, Florida 33830

PREPARED BY:
Kittelson & Associates, Inc.
225 East Robinson Street, Suite 355
Orlando, FL 32801

Purpose of the Study

The purpose of this study is to define a vision and system of investments for U.S. 17/92 from U.S. 17 to Rochelle Avenue that support the City of Lake Alfred's economic development plan and the Florida Department of Transportation's (FDOT) Complete Streets Policy. FDOT has worked alongside local partners to identify the project goals, develop alternatives, and outline recommendations that will ensure U.S. 17/92 through Lake Alfred supports the growth of a pedestrian friendly, sustainable, and prosperous urban downtown while providing for safe local and regional travel.

The City of Lake Alfred Downtown Master Plan

Lake Alfred is a dynamic small-town community with 100+ years of history. The character of the town is reflected and preserved in its many community events, exceptional schools, parks, lakes, and neighborhoods. To preserve and grow this unique community, the City invested in an economic development plan focused on creating a pedestrian-friendly destination, centered on a sustainable and prosperous urban Downtown Core. The City defined the vision for the Downtown Core in its Downtown Master Plan and is implementing the vision through the comprehensive plan and land development regulations.

U.S. 17/92

The U.S. 17/92 Corridor Planning Study examines 1.5 miles along U.S. 17/92 beginning at U.S. 17 and terminating at Rochelle Avenue. U.S. 17/92 is a primary east/west route through Polk County, connecting travelers to Lakeland to the west and Haines City to the east. Through Lake Alfred, the roadway runs north/south, connecting commuters to Interstate 4 along C.R. 557. The City of Lake Alfred's Downtown Master Plan identifies the current design of U.S. 17/92, which separates city residents on the west from downtown civic services on the east, as one of the City's challenges. The roadway design presents crossing challenges for pedestrians, bicyclists, and motorists.

FDOT Complete Streets

In 2014, FDOT adopted the Statewide Complete Streets Policy. Complete streets serve the transportation needs of system users of all ages and abilities, including pedestrians, bicyclists, transit riders, motorists, and freight handlers. The Complete Streets Policy is part of a proactive, context-sensitive transportation planning process that considers local land development patterns and promotes safety, quality of life, and economic development.

Project Study Partners

- City of Lake Alfred
- Polk County
- Polk TPO
- Central Florida Regional Planning Council

The Study Process

FDOT has worked alongside project partners to develop roadway design alternatives that support the City's vision for the Downtown Core.

The study team presented its recommendations to the City of Lake Alfred City Council on December 9, 2019. The City Council adopted Resolution 02-20 on January 21, 2020 (see Appendix F) supporting the goals and objectives of the study as well as the short-term and long-term recommendations identified on page 32 of this report.

Project Goals & Objectives

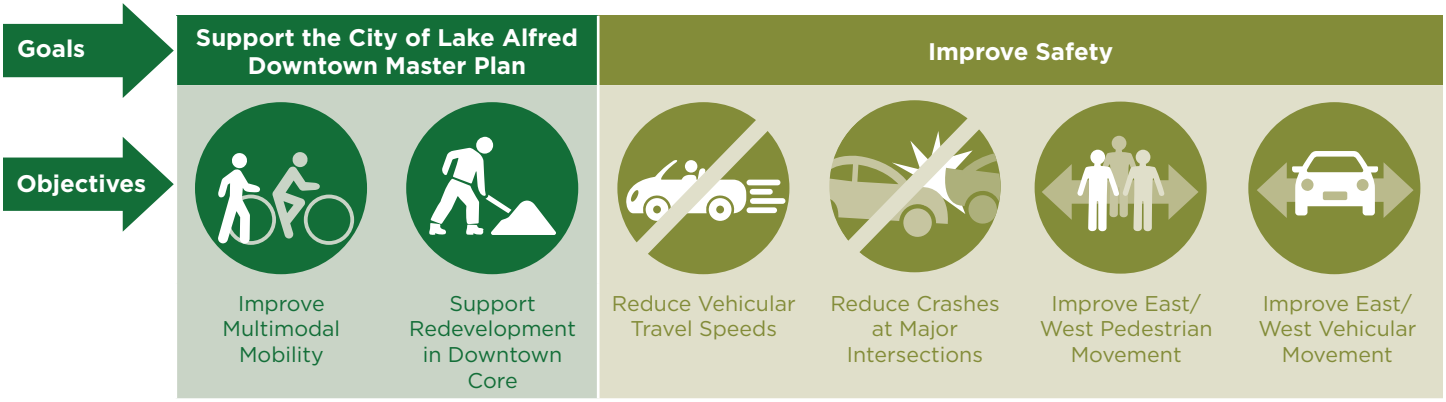
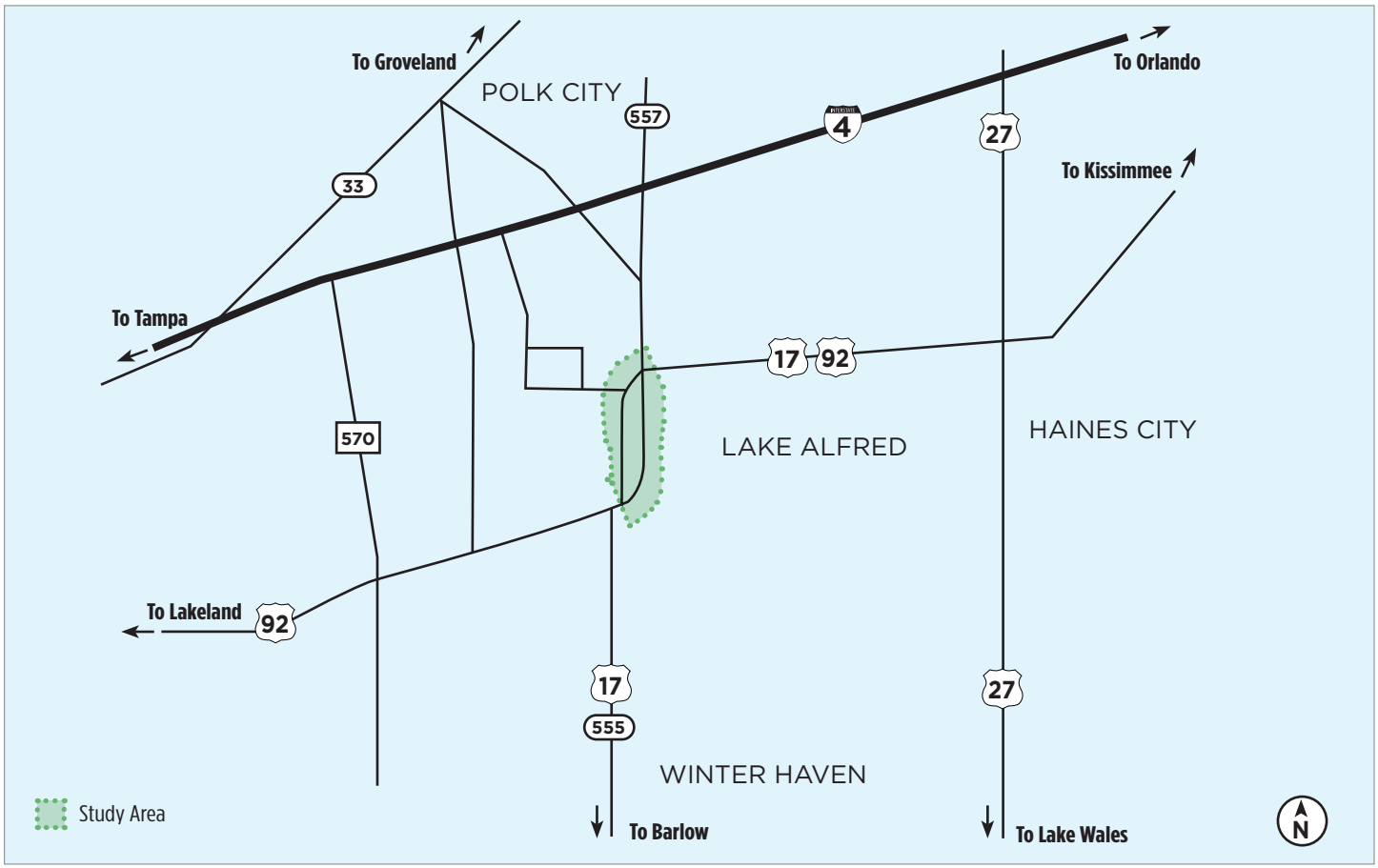


Figure 1. Regional Context



Urban Form Today & in the Future

To support the Complete Streets Policy, FDOT adopted a context classification system that describes the general characteristics of the land use and development patterns and connectivity along a roadway. The context classification provides cues to the types of uses and user groups on a roadway and informs the design criteria and standards for any proposed roadway improvements.

Along U.S. 17/92, from U.S. 17 to Mackay Boulevard, are commercial uses, multi-family housing, and a park. The context classification for this section of U.S. 17/92 is C3C – Suburban Commercial (see Appendix A: Context Classification Memorandum).

Along U.S. 17/92, the Downtown District begins at Echo Street and extends north to N. Rochelle Avenue. On Lake Shore Way, there are commercial properties and public buildings (City Hall, the Lake Alfred Water Plant, and the fire station). Along Shinn Boulevard between Echo Street and N. Lake Shore Way, there are single- and multi-family homes on the west side and commercial uses and the post office on the east side. The context classification for Lake Shore Way between MacKay Boulevard and E. Pomelo Street and Shinn Boulevard between E. Echo Street and E. Pomelo Street is C2T – Rural Town.

The elementary school, parks and civic uses in the City are located along or to the east of U.S. 17/92, meaning that residents on the west side of the roadway must cross U.S. 17/92 to reach these destinations.

Figure 2. Context Classification Map

Plan for Future Growth along U.S. 17/92

To understand how the City will grow over time based on the Downtown Master Plan and associated land development regulations, the study examined a potential redevelopment site within the Downtown Core Zone. The site is bounded by Cummings Street to the north, Lake Shore Way to the east, Columbia Street to the south, and Shinn Boulevard to the west. Currently, Columbia Street does not connect through to Shinn Boulevard, but the conceptual plan assumes it would be connected.

Figure 3: Case Study Concept shows a conceptual plan that meets the criteria of the Land Development Code and increases multimodal connectivity. The conceptual plan includes multi-level, mixed-use buildings fronting Cummings Street, Shinn Boulevard, and Lake Shore Way with shared parking located internal to the proposed block. A retention pond, which can also act as a community park space, is located in the southeast corner based on existing topography. In order to satisfy some of the low impact development requirements of the code, a centralized open space was created that could be used to satisfy the surrounding area's additional stormwater requirements. The open space is intended to be used as a gathering location for events as such a farmer's market, with access and circulation through the shared parking and access points from Lake Shore Way, Shinn Boulevard, and Columbia Street. At Cummings Street, the pedestrian plaza crossing would be raised to safely connect users across the street to recent development and green space. Finally, on-street parking would be proposed on Cummings Street and Columbia Street to serve as part of the overall parking strategy for the development block. This scenario contains more parking than required by code to support the farmer's market and the larger goal of shared parking throughout downtown. **Table 1** breaks down how the case study development pattern aligns with the requirements of the Downtown Code.

The case study also examined longer term options. As development grows in the Downtown Core, the shared parking areas are organized to be flexible for future infill developments. This concept benefits from future on-street parking on both Shinn Boulevard and Lake Shore Way.

Table 1. Case Study Site Breakdown

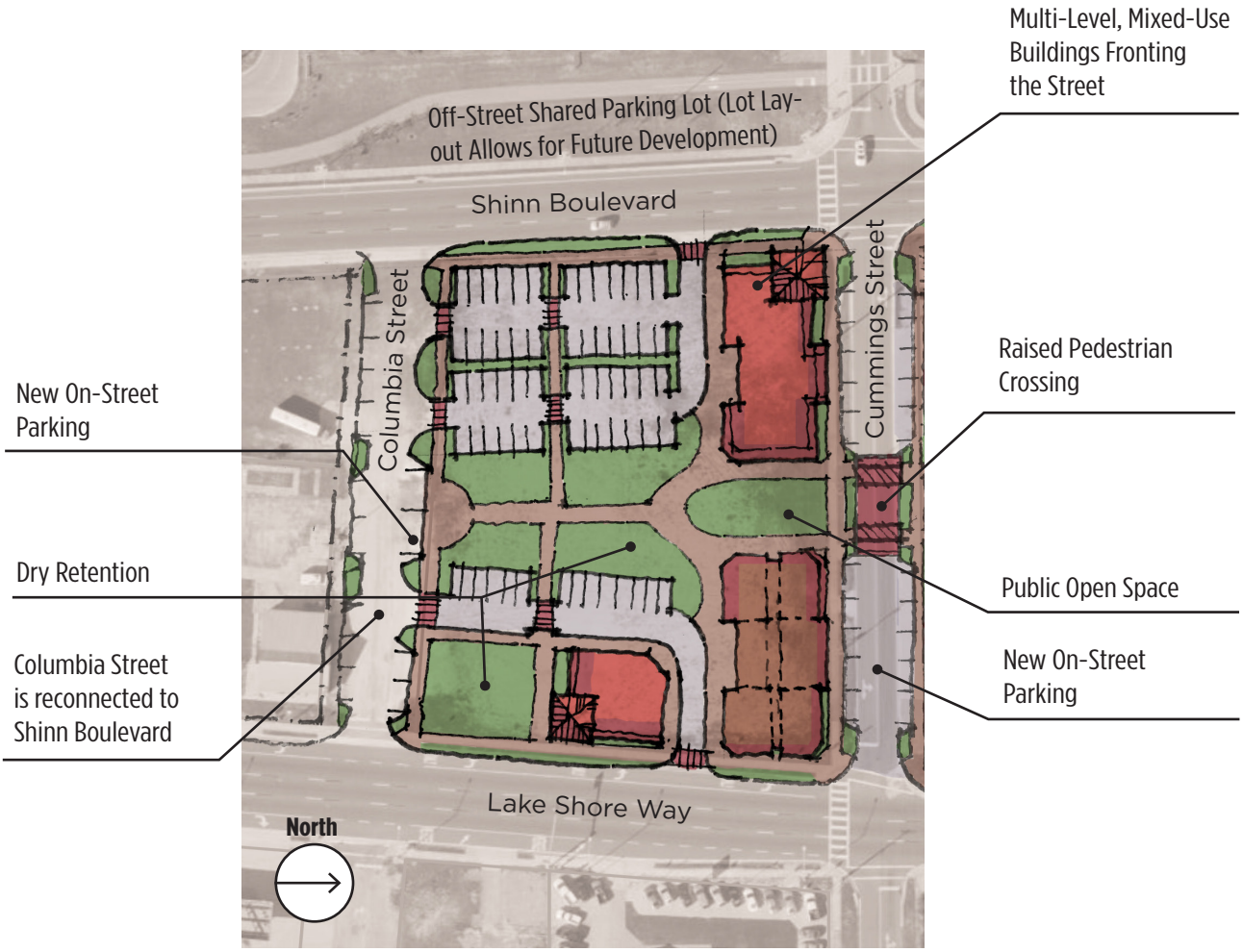
Elements	Included in Case Study Concept	Comparison to What is Required by Code
Commercial/Retail Use	15,000 SF / 0.2 Floor Area Ratio	2.0 FAR Allowed
Residential	10 Units (assumes 1,200 gross SF) / 5.7 Dwelling Units Per Acre	12 DU/AC Max
Parking	15 Residential 52 Commercial / Retail 14 On-Street Spaces	Spaces Required by Code: 55 Surplus: +26
Impervious Surface	51,000 SF / 67% of Site	Approval Based on DOD Development Review
Open Space/Stormwater	25,000 SF / 33% of Site	20%-23% Req.

Lessons Learned

In order to achieve the densities, vibrancies, and mix of uses allowed in the Downtown Overlay District, the City may want to consider investments to promote site development flexibility and multimodal travel within the downtown area:

- **"Park-Once" Locations** — Examine locations for specific shared parking areas within walking distances of destinations (i.e., public parking lots).
- **On-Street Parking** — Increase the amount of on-street parking to help offset the required off-street parking.
- **Stormwater Master Plan** — Develop a comprehensive stormwater master plan for Downtown Lake Alfred to help the higher density land uses accommodate stormwater demands. This would include not just on-site drainage, but a shared system with off-site ponds and open spaces that can function both as dry retention areas and placemaking opportunities for community gathering space.
- **Low Impact Development (LID)** — Continue implementing LID treatments, such as rain gardens or bioswales, as part of overall streetscape improvements, building towards an overall stormwater master system.
- **Complete Sidewalks and Streetscape** — Construct sidewalks on both sides of all dowtown streets with street trees and other landscape.
- **Bicycle Facilities** — Continue developing bicycle facilities on major roadways, as well as off-street facilities like the Veterans Memorial Trail.

Figure 3. Case Study Concept



Existing Roadway Conditions

The existing roadway is a six-lane divided urban principal arterial with curb and gutter from Lake Alfred Road until E. Echo Street. There, the roadway splits into a one-way pair with three through lanes in each travel direction and additional turn lanes. The roadway merges to a four-lane divided urban principal arterial with curb and gutter at S. Seminole Avenue. The posted speed limit ranges from 35 to 45 miles per hour (mph) throughout the corridor.

U.S. 17/92 plays a significant role in regional freight movement through Central Florida. It is identified as part of the evacuation network in the Polk County 2030 Comprehensive Plan. The corridor is not part of the Strategic Intermodal System (SIS) but is identified by the Polk TPO Momentum 2040 Plan as part of the regional freight network.

Citrus Connection, the local transit provider, serves the study area with Route 15, which extends from Winter Haven to Hanes City. The route provides 1.5-hour headways weekdays from 5:45 a.m. to 7:00 p.m.

Crash Analysis

Florida Department of Transportation District One Traffic Operations conducted a corridor study for U.S. 17/92 from U.S. 17 to Rochelle Avenue in 2016. The study evaluated crash data for the 36-month period between January 1, 2013 and December 31, 2015 obtained from FDOT's Crash Analysis Reporting System (CARS) database and University of Florida's Signal Four Analytics. A total of 115 crashes were reported within the study corridor limits, resulting in two fatalities and 102 injuries. The study identified four notable crash trends throughout the corridor:

- The two fatalities and 28 of the injuries (27% of all injury crashes) occurred at the intersection of U.S. 17 and U.S. 92.
- Motorists drove too fast for conditions or failed to navigate the curves south of Mackay Boulevard and at Thelma Street.
- 18 sideswipe crashes occurred when a vehicle traveling in the middle lane on U.S. 17/92 between Thelma and Pomelo Streets attempted to turn onto a side street and struck a vehicle traveling in an adjacent lane.
- Southbound motorists disregarding the red signal indication caused angle crashes at the southbound U.S. 17/92 and Pomelo Street intersection. The study indicated that southbound vehicles traveled at an 85th percentile speed of 49.8 mph. This and the horizontal curve prior to the signal led to inadequate sight distance prior to the signal.

Vehicular Volumes and Existing and No-Build Level of Service (LOS)

The 2018 Annual Average Daily Traffic (AADT) on Lake Shore Way and Shinn Boulevard between Pierce Street and Haines Boulevard was 17,000 vehicles per day on each roadway, according to FDOT Traffic Online. Trucks make up approximately 8.8% of total traffic through the one-way pair in Lake Alfred.[1]

Vehicular Level of Service (LOS) is a system of six designated ranges from A (best) to F (worst) to evaluate roadway facility vehicular performance. The U.S. 17/92 study corridor is classified as an urban principal arterial and has an FDOT vehicular LOS target of D.

A traffic operations analysis for the existing year (2018) and future year (2040) was completed using *Highway Capacity Manual (HCM)* methodologies to evaluate existing and future operational conditions at the intersections. The full analysis is presented in Appendix E: Operations Memorandum. Existing and future year intersection LOS are shown in Figure 4.

For the future no-build year (2040), the District One Regional Planning Model (D1RPM) Version 1.0.3 was used to develop design traffic forecasts for the U.S. 17/92 study corridor. A weighted average growth rate of 2.0% was estimated from base year 2010 to horizon year 2040 in the study area. This is in line with the Bureau of Economic and Business Research (BEBR) medium-to-high anticipated growth rate for Polk County. A future year traffic operations analysis was completed for 2030 and 2040 no-build conditions using HCM methodology. The analysis is presented in Appendix D: Traffic Forecasting Memorandum.

2018 Annual Average Daily Traffic: 17,000 (Lake Shore Way and Shinn Boulevard Combined). 8.8% truck traffic.

1 Source: FDOT Traffic Online, Portable Traffic Monitoring Site: 165264 and 165263

Figure 4. The Transportation System

Travel Patterns for Lake Alfred Residents

Most **Lake Alfred** residents **work** in **Polk County.**

Average Commute Times

LAKE ALFRED RESIDENT

POLK COUNTY RESIDENT

FLORIDA RESIDENT

How Lake Alfred residents travel to work

83% drive alone

11% carpool

2% walk

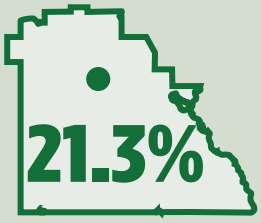
>1% bicycle

1.4% work from home

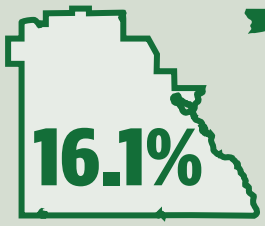
.3% take transit

7.2% do not own a vehicle

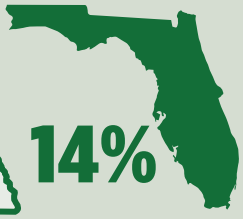
Households Living in Poverty



LAKE ALFRED



POLK COUNTY



FLORIDA

There may be an unmet demand for alternative modes of transportation, **especially transit**.

Source: U.S. Census Quick Facts, 2017

Origin-Destination Study

An origin-destination analysis was conducted based on 2018 data collected by StreetLight Data. StreetLight Data collects data from smart phones and navigation devices. The origin-destination data were complemented by travel time estimates collected from Google Maps API trips on U.S. 17/92 through Lake Alfred, as well as competing routes on parallel and intersecting facilities. The Origin-Destination Study is documented in Appendix C: Origin-Destination Memorandum.

Origin-Destination Statistics

Characteristics of Vehicular Trips through Lake Alfred on U.S. 17/92

90% **are greater than 10 miles.**

1/3 **of trips** are **southbound/northbound** from Winter Haven to I-4 along C.R. 557.

20:1 There are **20 trips** to I-4 toward **Orlando for each trip** to I-4 toward **Tampa.**

In the peak season, **midday** and **weekend** demand is sometimes higher than PM peak period demand.

AM demand **does not increase** in peak season when compared to off-peak season.

Travel Time Comparison: Winter Haven to I-4

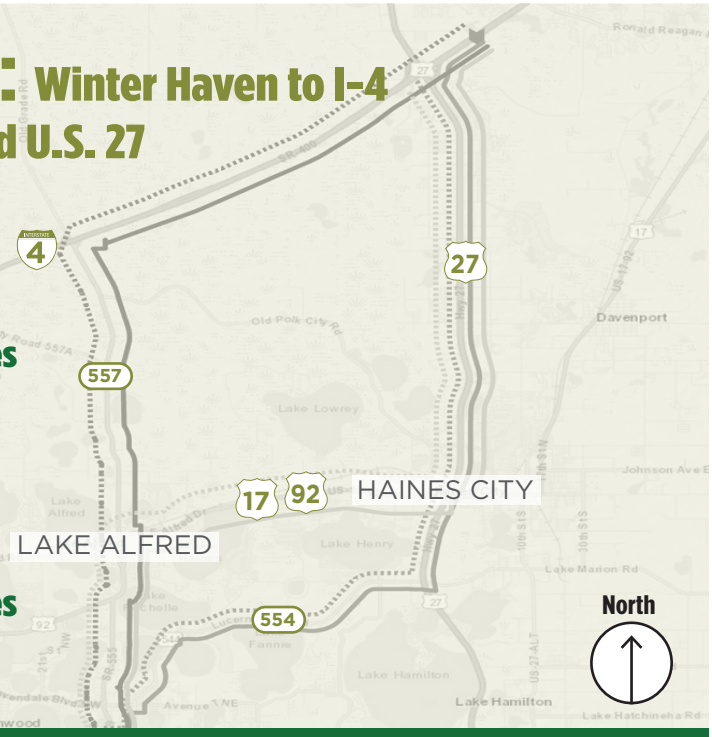
U.S. 17/92 and C.R. 557 vs. C.R. 544 and U.S. 27

Off-Peak along U.S. 17/92 and C.R. 557 is:

- Northbound ~7 minutes faster
- Southbound ~7 minutes faster

AM Peak along U.S. 17/92 and C.R. 557 is:

- Northbound ~2 minutes faster
- Southbound ~7 minutes faster



Trip diversion would only occur with **major increases in delays.**

Short-term Roadway Alternatives

Alternatives were divided into short- and long-term options. It was assumed that an alternative could be implemented in the short-term if one or more of the following was true:

- No right of way was required
- It could be constructed without rebuilding drainage structures
- It did not significantly impact throughput capacity

The study recommends three short-term projects.

Pavement Repurposing of Continuous Turn Lanes on Lake Shore Way from E. Echo Street to W. Cummings Street

The current cross-section for Lake Shore Way from E. Echo Street to W. Cummings Street includes three through lanes and two turn lanes. This section is located just south of the school crossing. A portion of the section is located within the school zone. The turn lanes in this section could be removed without significantly impacting capacity on Lake Shore Way. Repurposing the turn lanes could help reduce travel speeds approaching the school crossing. The repurposed space could be used to introduce horizontal curves in the roadway to manage speeds and also introduce a bioswale with landscaping. Figure 6 illustrates the Lake Shore Way short-term pavement repurposing of the continuous turn lanes on Lake Shore Way.

Lake Shore Way and C.R. 557 and Shinn Boulevard and C.R. 557/ E. Pomelo Street Intersections

The travel pattern from U.S. 17/92 toward I-4 introduces significant turning movements at Lake Shore Way and C.R. 557 and Shinn Boulevard and C.R. 557/E. Pomelo Street. These intersections experience queuing from vehicles traveling northbound on Lake Shore Way, turning left onto C.R. 557, and traveling through the intersection at Shinn Boulevard.

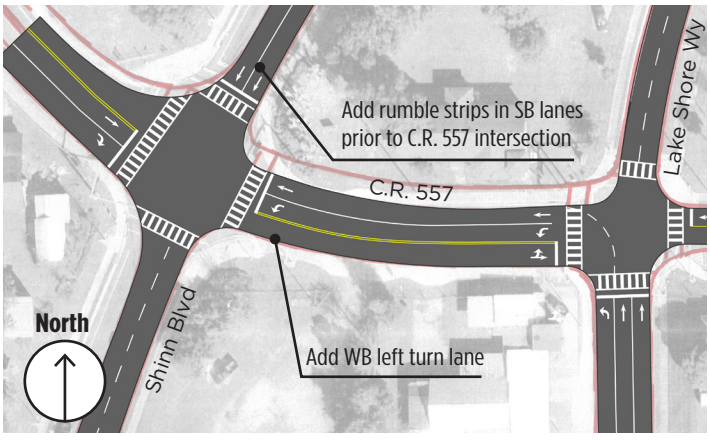
Polk County and the Polk Transportation Planning Organization (TPO) are conducting a Project Development and Environment (PD&E) Study on the potential widening of C.R. 557 from two lanes to four lanes from north of the CXS tracks near the U.S. 17/92 intersection to south of the I-4 interchange. As improvements are evaluated to support future traffic demand at these intersections, they should be designed to support the broader vision for U.S. 17/92 and the City of Lake Alfred Downtown Master Plan.

The study team evaluated interim intersection configurations (Figure 5) that could be constructed within existing right of way. One alternative interim configuration would add an exclusive westbound left turn lane to the intersection of Shinn Boulevard and C.R. 557 and update the signal timings. This improvement can be completed without moving existing curbs.

Table 2. C.R. 557 Intersections Short-Term Improvements Vehicular Level of Service Analysis

	2020 LOS	2030 LOS
Shinn Boulevard	D/D	E/F
Lake Shore Way	A/A	A/A

Figure 5. County Road 557 / Pomelo Street / Shinn Boulevard Intersection



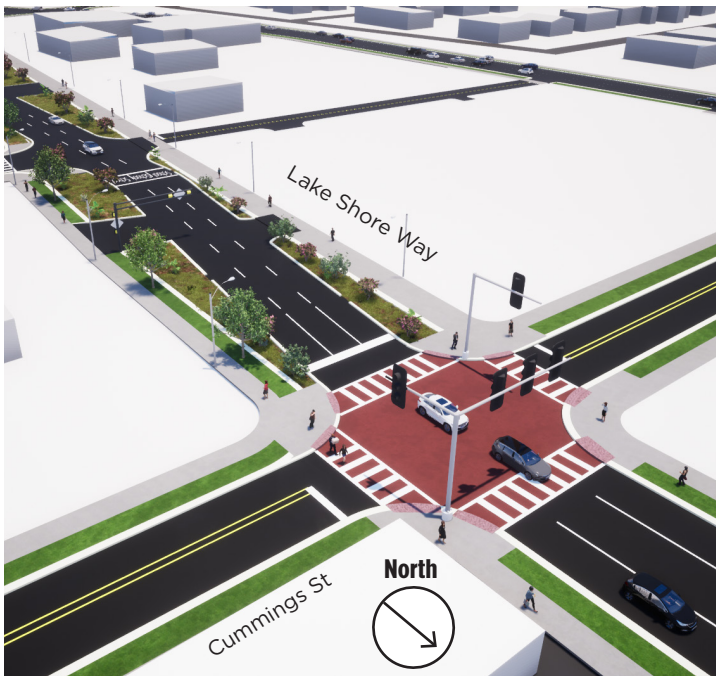
Approach to C.R. 557 and Shinn Boulevard

To reduce travel speeds and alert southbound drivers to the upcoming signal at C.R. 557, consider introducing rumble strips along U.S. 17/92 prior to the intersection as well a preemptive warning signs prior to the signal.

Figure 6. Pavement Repurposing of Continuous Turn Lanes on Lake Shore Way (from E. Echo Street to W Cummings Street)

Birds Eye View

View South, Lake Shore Way at Cummings St



Lake Shore Way and W. Cummings St

Mid-term Redevelopment Potential

The City defined the vision for the Downtown Core in its Downtown Master Plan and is implementing the vision through comprehensive plan and land development regulations. In the mid term, the City will enforce their land development regulations to implement pedestrian supportive private development in the Downtown Core.

In order to achieve the densities, vibrancies, and mix of uses allowed in the Downtown Overlay District, the City could make investments to promote densities and multimodal travel within the downtown area.

- Consider reducing parking requirements or implementing maximum parking requirements instead of minimum parking requirements. To support this, the City may look to invest in "Park-Once" locations, on-street parking, and sidewalks on both sides of downtown streets with street trees and other landscape.
- Stormwater Master Plan — Develop a comprehensive stormwater master plan for Downtown Lake Alfred to help the higher-density land uses accommodate stormwater demands. This would include not just on-site drainage, but a shared system with off-site ponds and open spaces that can function both as dry retention areas and placemaking opportunities for community gathering space.
- Low Impact Development (LID) — Continue implementing LID treatments, such as rain gardens or bioswales, as part of overall streetscape improvements, building towards an overall stormwater master system.
- Bicycle Facilities — Continue developing bicycle facilities on major roadways, as well as off-street facilities like the Veterans Memorial Trail.

Public investments along Lake Shore Way and Cummings Street can promote private development on the city owned property located south of Cummings Street between Lake Shore Way and Shinn Boulevard. Figure 7 presents conceptual land improvement potentials along Lake Shore Way and Shinn Boulevard on the currently vacant parcel south of Cummings Street.

Figure 7. Mid-Term Private Development along Lake Shore Way, Cummings Street, and Shinn Boulevard

Birds Eye View

View South, Lake Shore Way at Cummings St

Lake Shore Way and W. Cummings St

Long-term Roadway Alternatives

The long-term alternatives considered for evaluation included:

- No-build
- Six- to four-lane lane repurposing of U.S. 17/92 (Lake Shore Way) from the U.S. 17 intersection to E. Echo Street, with improvements to the intersection at U.S. 17 and U.S. 92
- U.S. 17/92 E. Echo Street to C.R. 557/Pomelo Street: maintain the one-way pair with a lane repurposing on both Shinn Boulevard and Lake Shore Way
- U.S. 17/92 E. Echo Street to C.R. 557/Pomelo Street: convert Shinn Boulevard and Lake Shore Way to two directions of travel

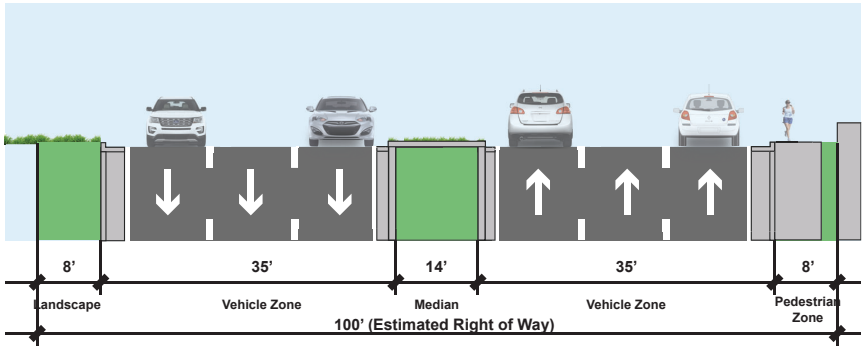
This report presents intersection configurations that support the goals of the project and meet FDOT LOS targets for the build year. It is important that the design of the intersections through Lake Alfred work as a system. The system of intersection controls should:

- Provide well-spaced east-west pedestrian crossings, such as signalized intersections, HAWKs (pedestrian hybrid beacons), rectangular rapid flashing beacons, raised intersections, or roundabouts
- Provide well-spaced gaps for east-west vehicular travel through Lake Alfred
- Reinforce the desired vehicle travel speed (also know as vehicular target speed) through signal timing and/or geometric design
- Manage delays along the corridor

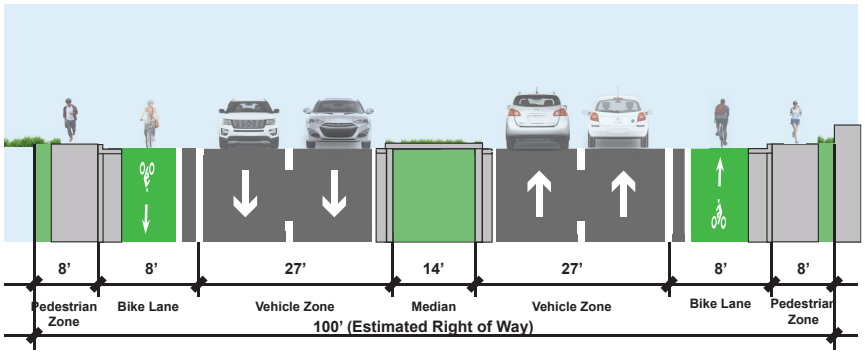
All intersection configurations evaluated as part of this study are presented in Appendix E: Operations Memorandum. The intersection configurations presented are preliminary. Additional analysis will be conducted during the PD&E stage to determine the optimal intersection configurations. The PD&E may develop different alternatives for each intersection.

Six- to Four-Lane Repurposing Alternative of U.S. 17/92 (S. Lake Shore Way) from the U.S. 17 Intersection to E. Echo Street

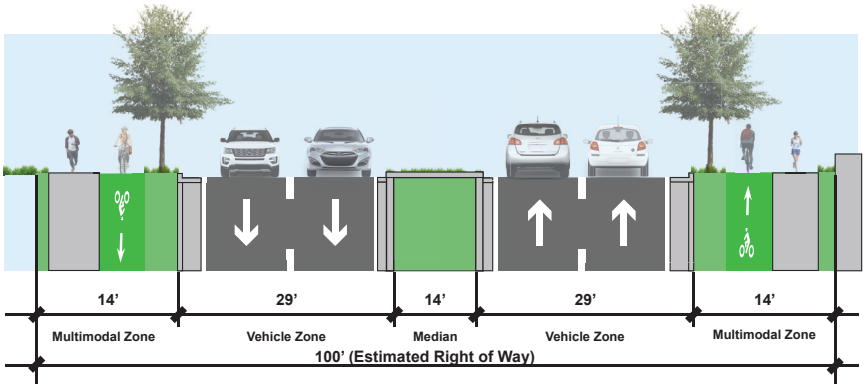
Existing



Alternative 1: Hold Both Curbs in Place and Add Buffered Bike Lanes and Western Sidewalk



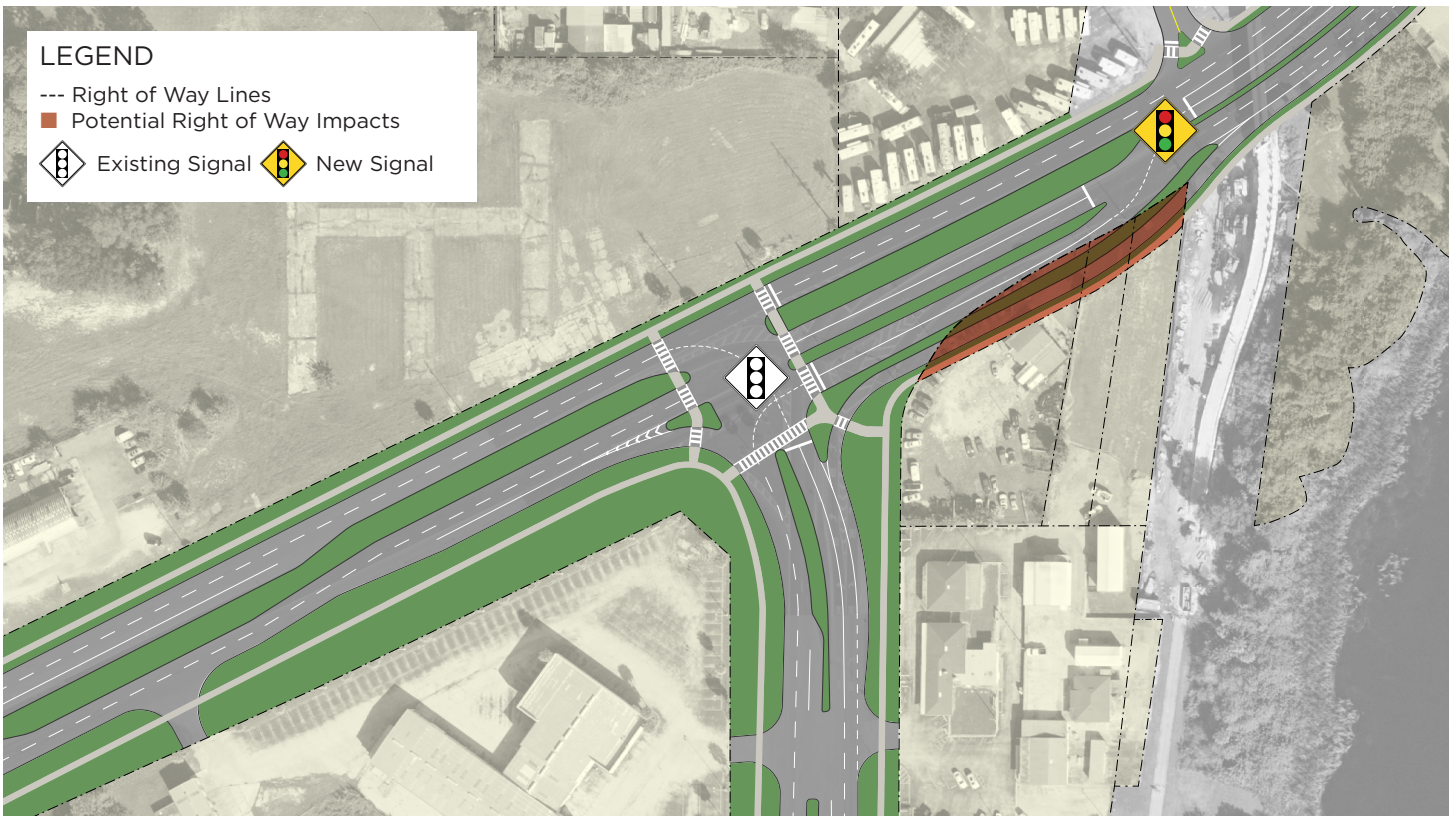
Alternative 2: Move Both Curbs and Add Separated Bike Lanes/ Trail and Western Sidewalk



U.S. 17 and U.S. 92 Intersection

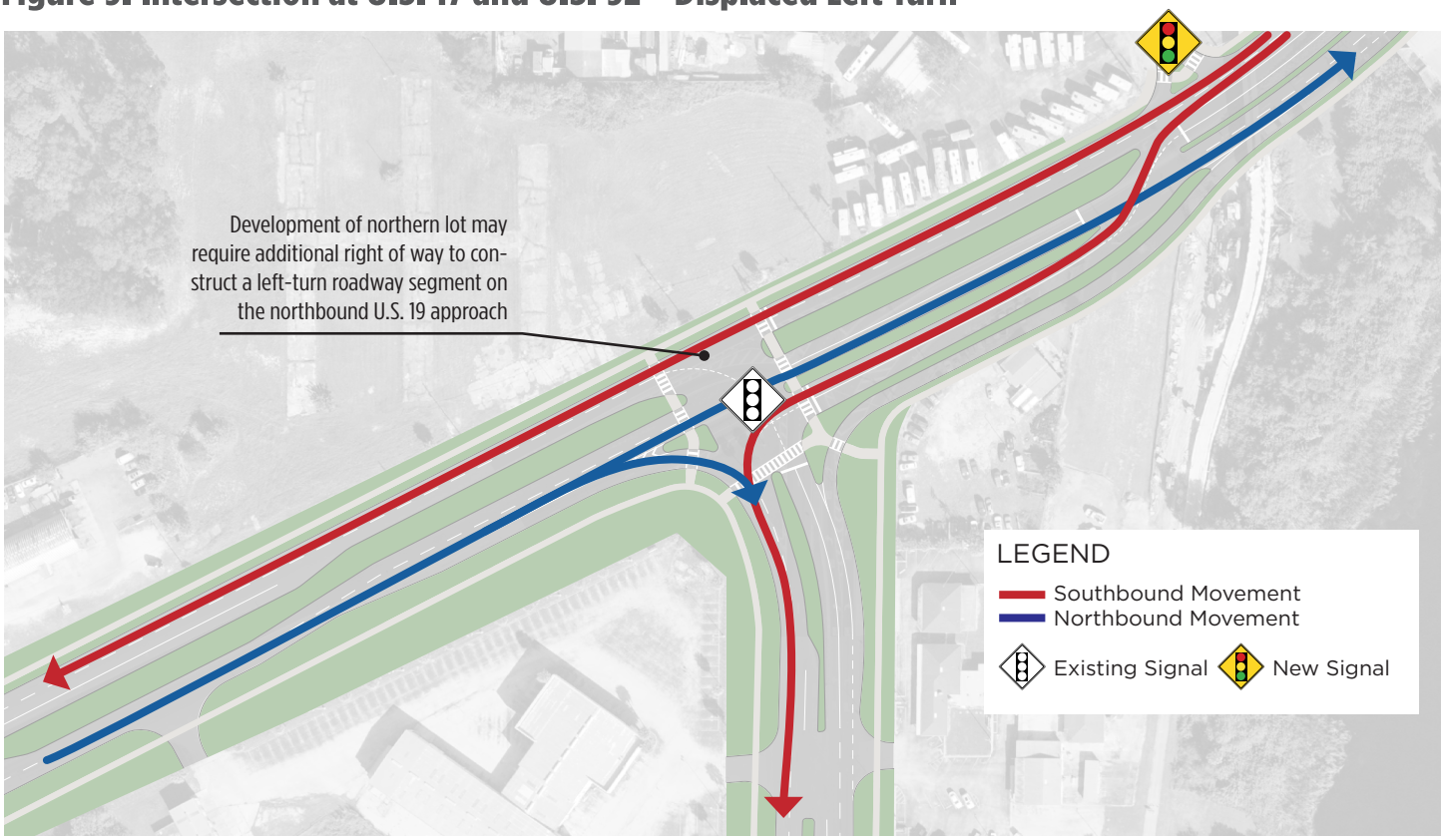
The intersection of U.S. 17 and U.S. 92 is projected to function at LOS F in the PM peak hour in 2040. One alternative evaluated to reduce delays at this intersection is to construct a displaced left-turn lane (DLT).

Figure 8. Intersection at U.S. 17 and U.S. 92—Displaced Left Turn



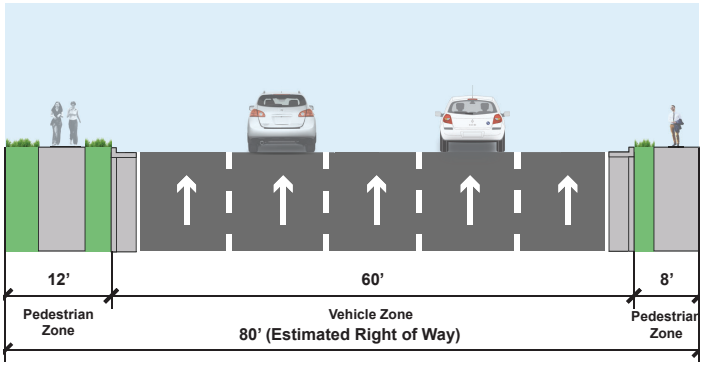
In a DLT intersection, vehicles that would like to turn left at the main intersection cross opposing through lanes at a new signal-controlled intersection several hundred feet ahead of the turn location and then travel parallel to opposing lanes to the original signal. The left turn then occurs simultaneously with the through traffic at the main intersection. Traffic signals at the left-turn crossovers and the main intersection are coordinated so vehicles do not stop multiple times in the intersection area. A DLT intersection removes signal phases and conflict points from the main intersection, improving operations and safety.

Figure 9. Intersection at U.S. 17 and U.S. 92—Displaced Left Turn



S. Lake Shore Way: Thelma Street to Cummings Street Alternatives

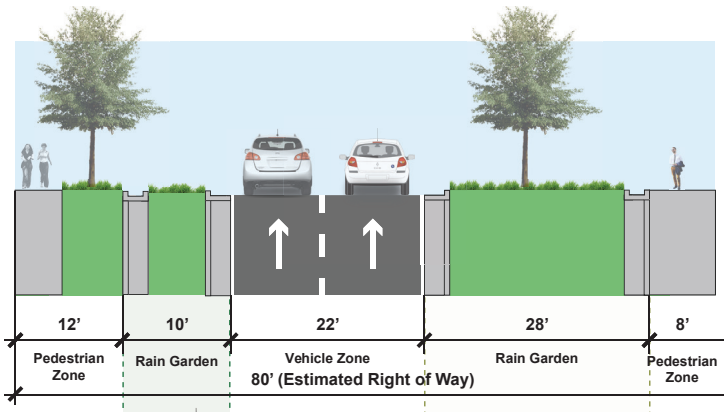
Existing



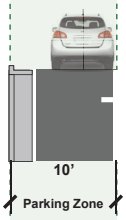
Alternative 1: One-Way Lane Repurposing

Alternative 1A: Maintain Existing Curbs

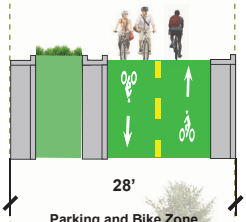
Alternative 1A.i: Rain Garden



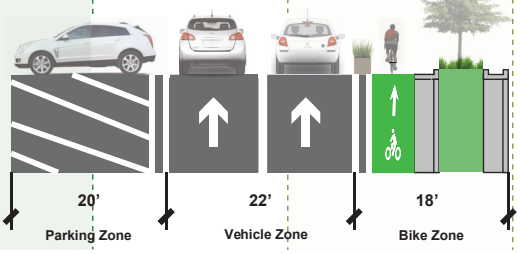
Alternative 1A.ii: Parking on West Side



Alternative 1A.iii: Rain Garden and Cycle Track

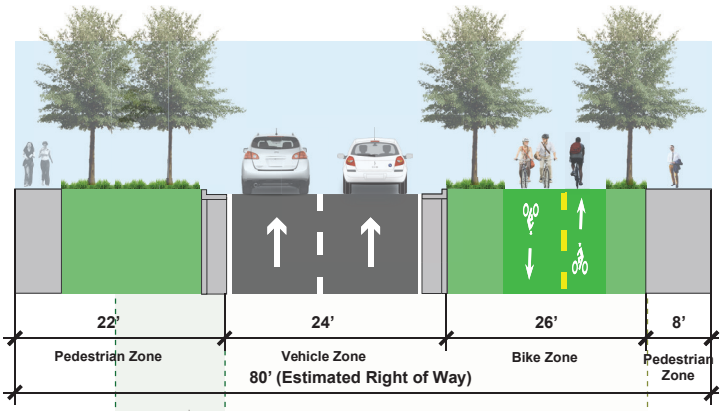


Alternative 1A.iv: Buffered Bicycle Lane with Angled Parking on Western Side

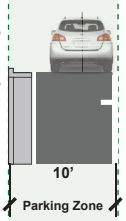


Alternative 1B: Move Both Curbs

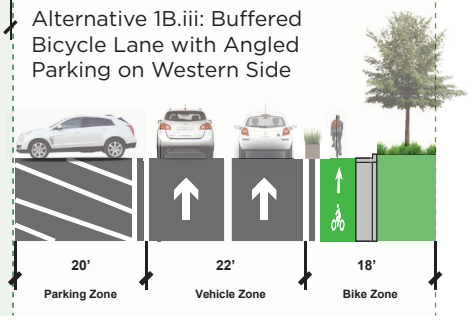
Alternative 1B.i: Rain Garden



Alternative 1B.ii: Parking on West Side

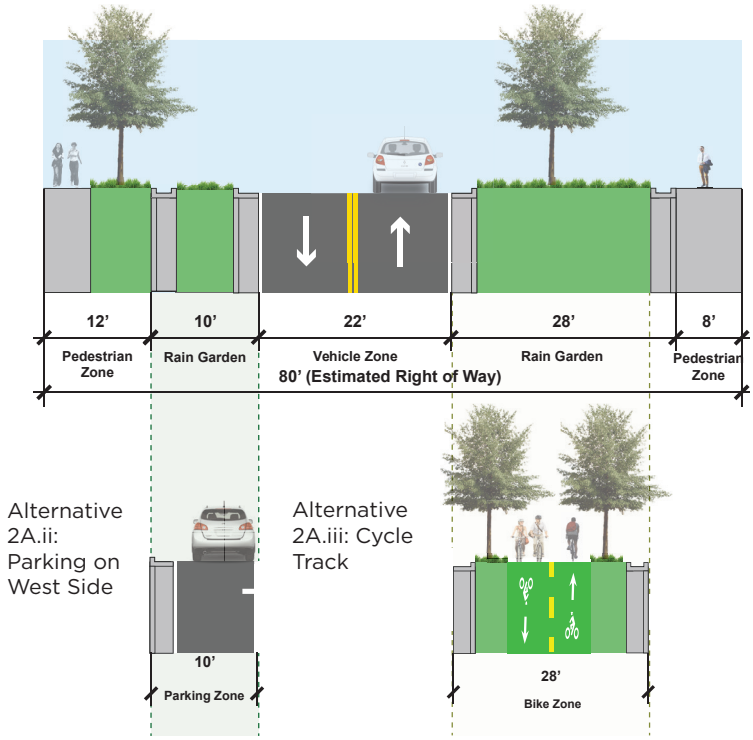


Alternative 1B.iii: Buffered Bicycle Lane with Angled Parking on Western Side



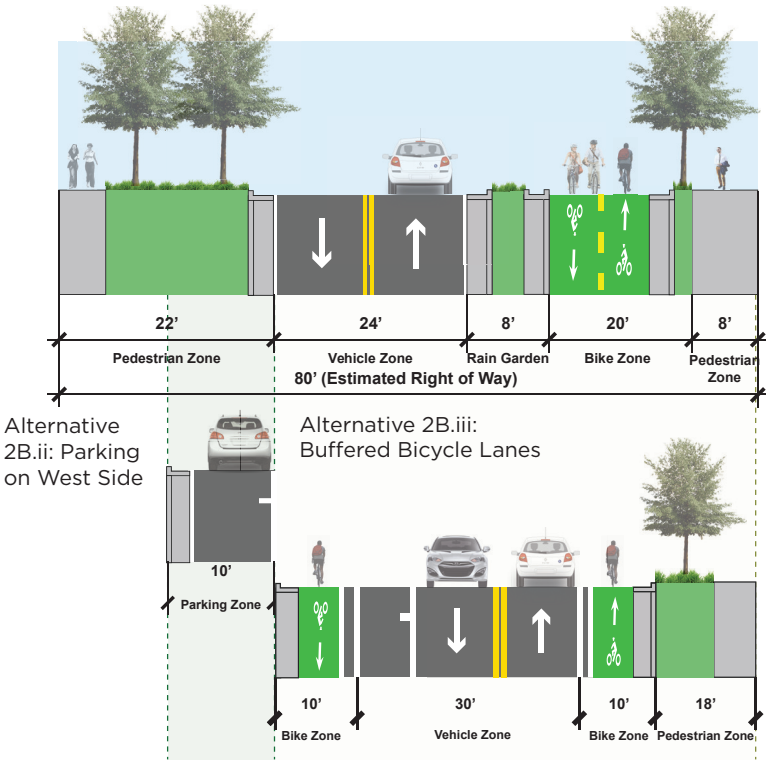
Alternative 2A: Hold Both Curbs

Alternative 2A.i: Rain Garden



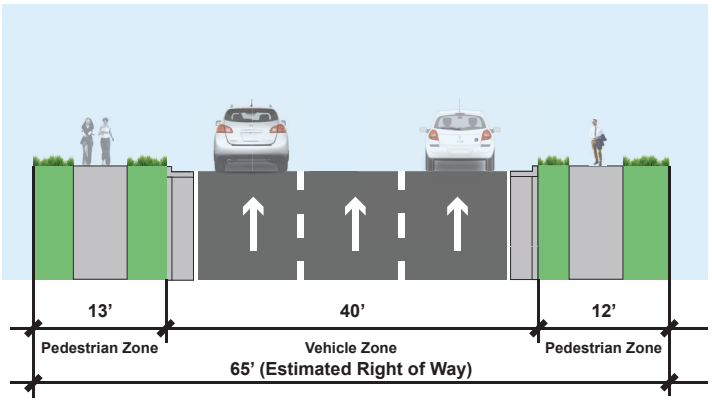
Alternative 2B: Move West Curb

Alternative 2B.i: Rain Garden and Cycle Track



S. Lake Shore Way: Cummings Street to Haines Boulevard Alternatives

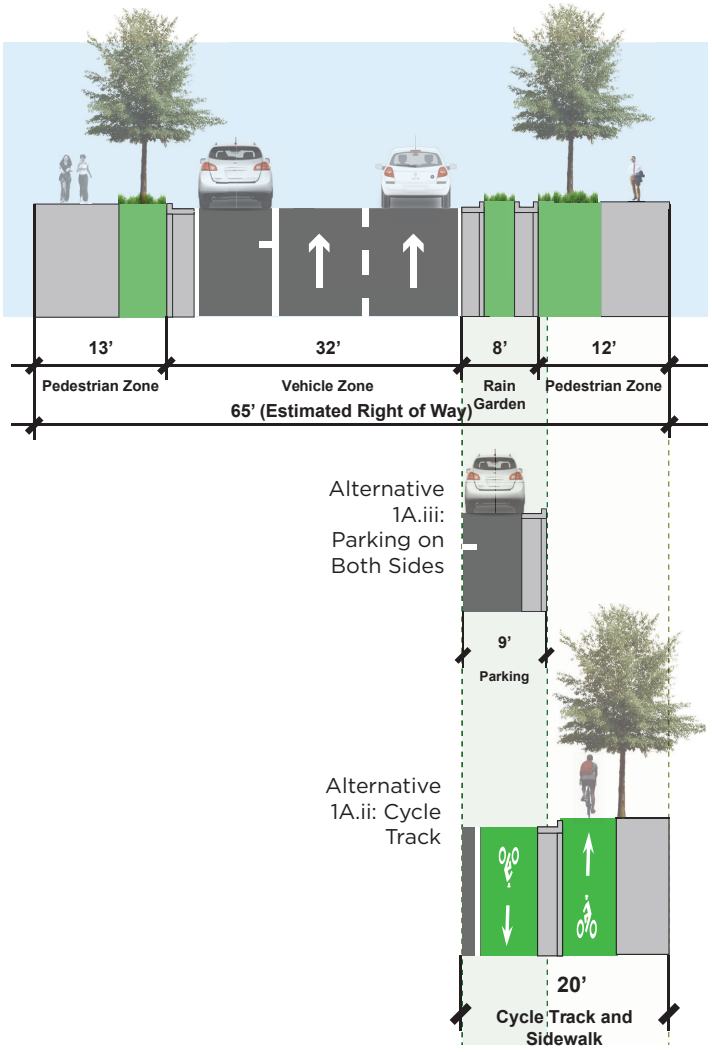
Existing



Alternative 1: One-Way Lane Repurposing

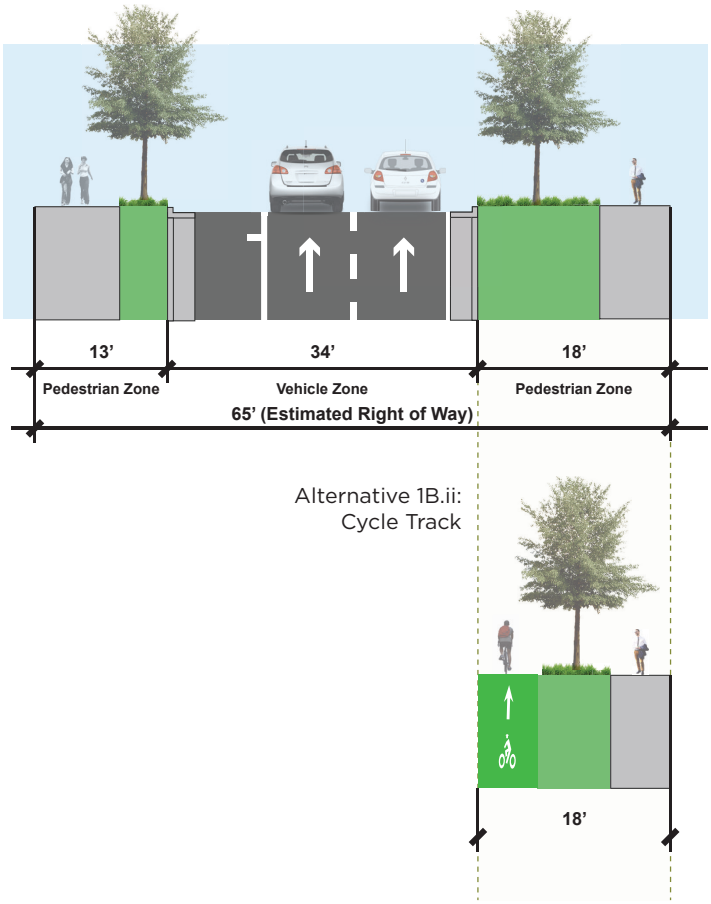
Alternative 1A: Hold Both Curbs with Parking on the West Side

Alternative 1Ai: Rain Garden



Alternative 1B: Move East Curb with Parking on the West Side

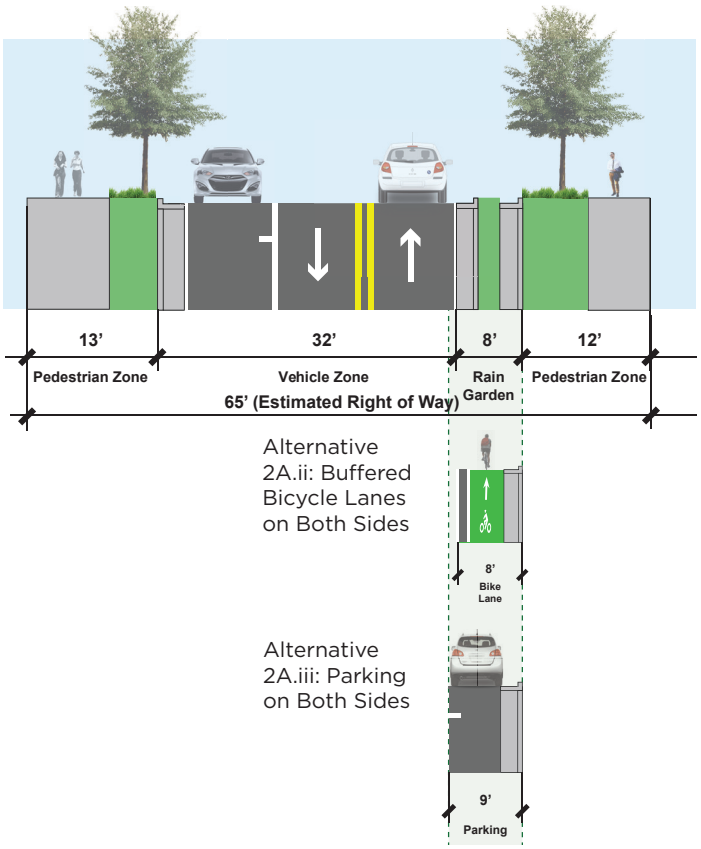
Alternative 1Bi: Rain Garden



Alternative 2: Two-Way Conversion

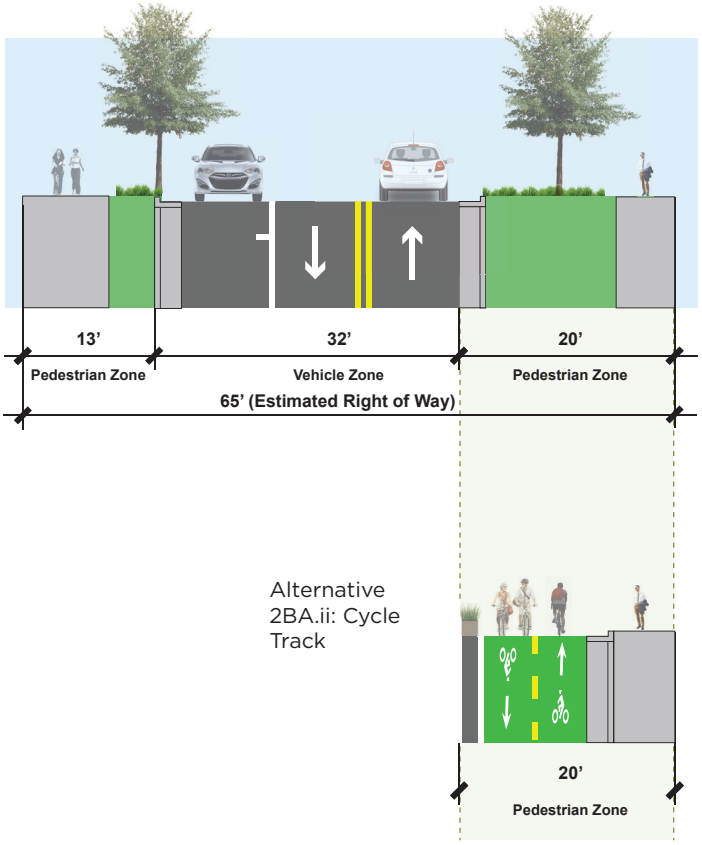
Alternative 2A: Maintain Existing Curbs with Parking on the West Side

Alternative 2A.i. Rain Garden



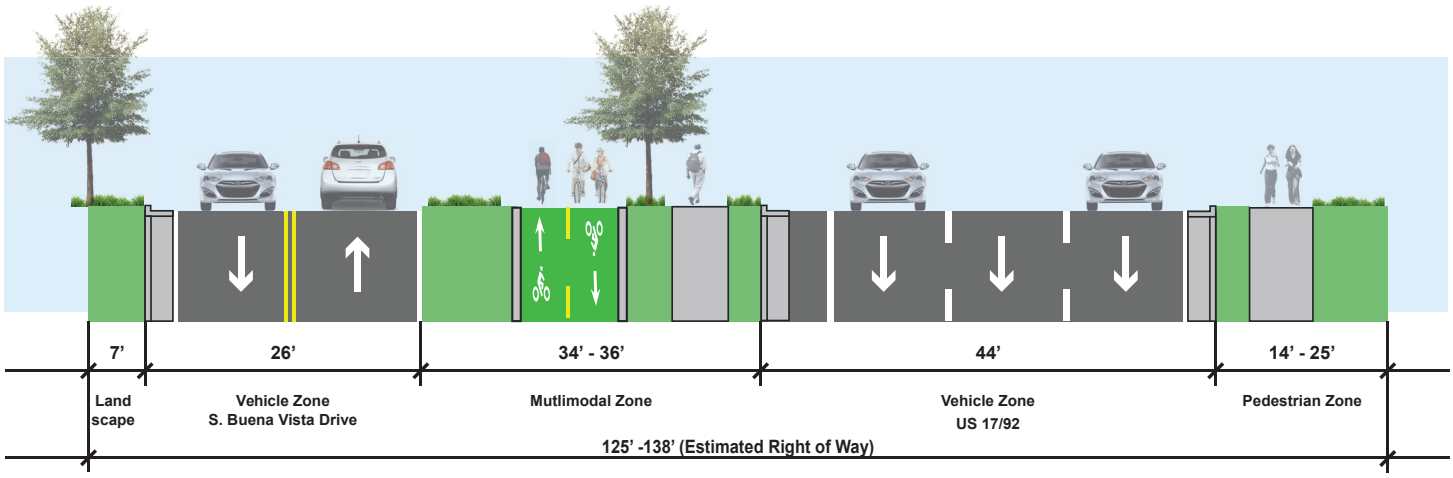
Alternative 2B: Move East Curb

Alternative 2B.i. Rain Garden and Sidewalk with Parking on the West Side



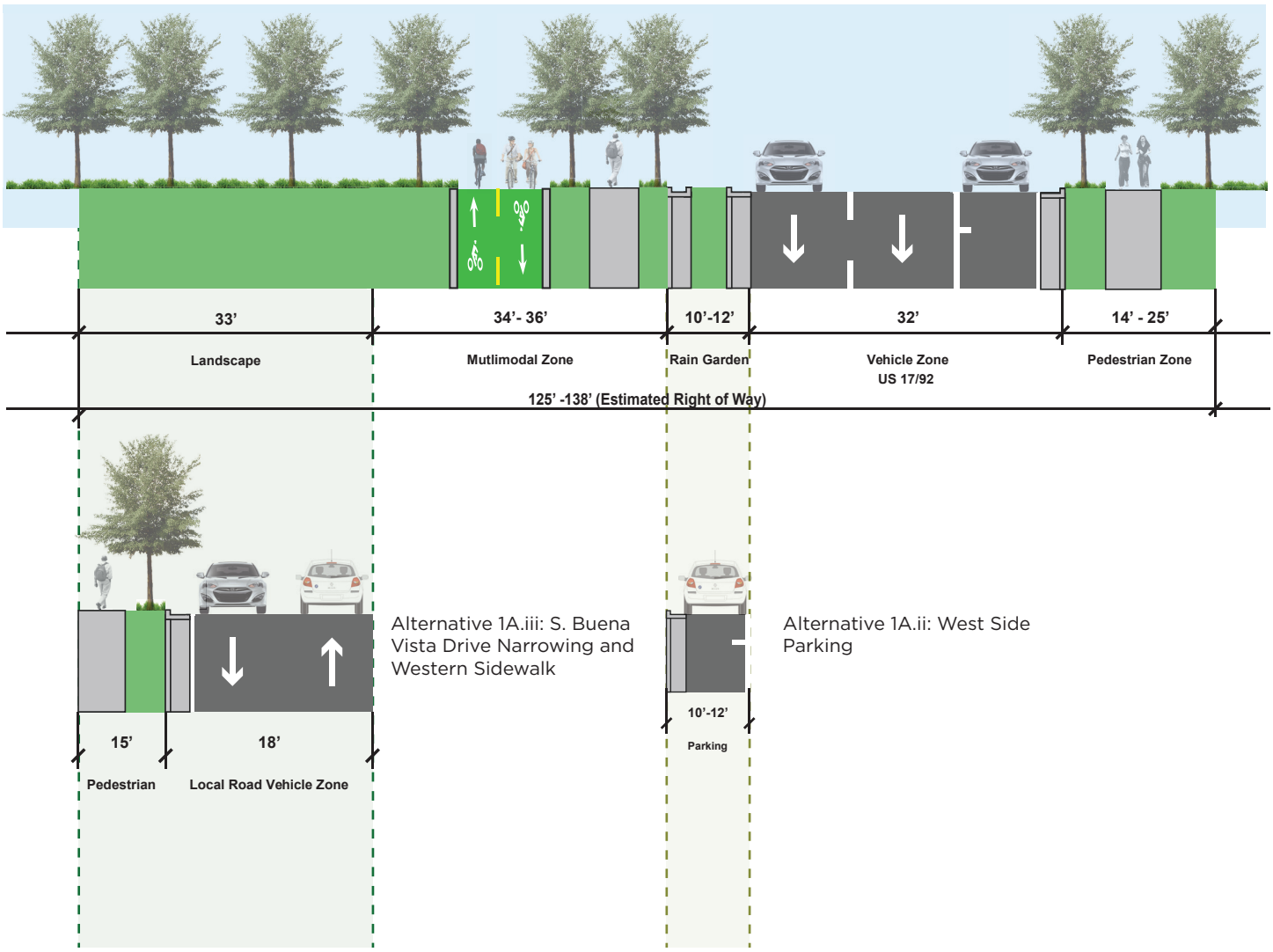
Shinn Boulevard Alternatives

Existing



Alternative 1: One-Way Lane Repurposing

Alternative 1A: Rain Garden and S. Buena Vista Drive Repurposing



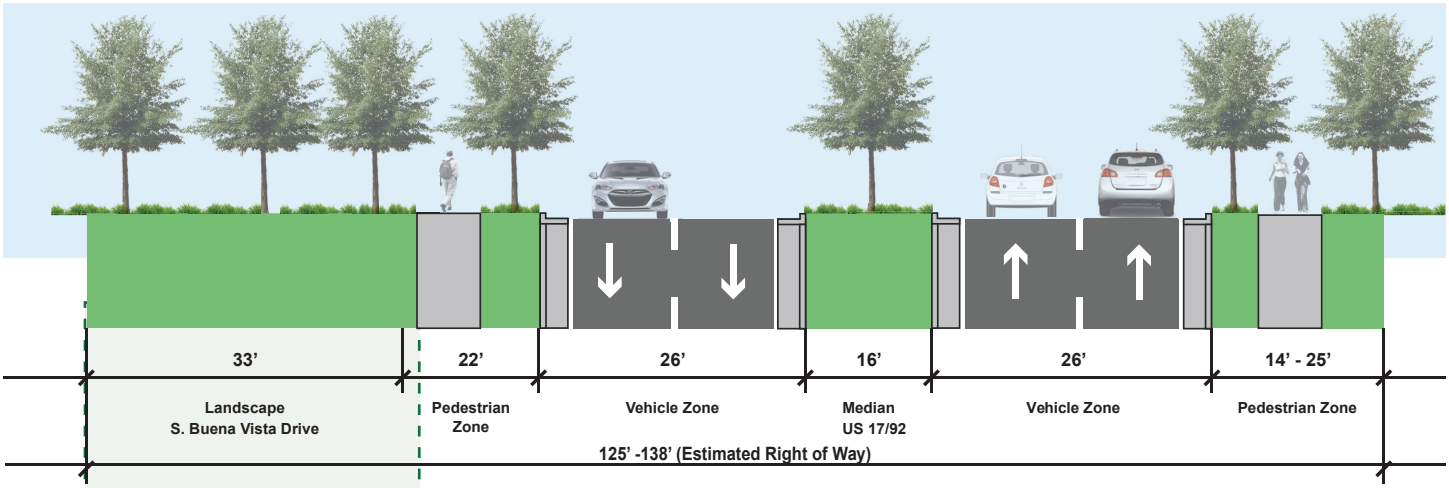
Alternative 1A.iii: S. Buena Vista Drive Narrowing and Western Sidewalk

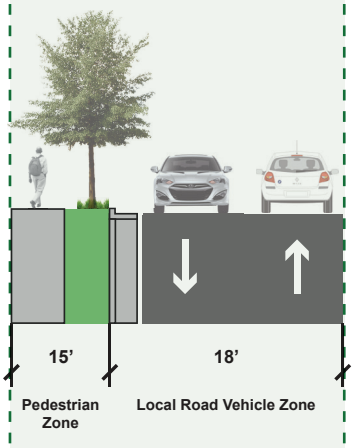
Alternative 1A.ii: West Side Parking

Zone

Alternative 2: Two-Way Conversion

Alternative 2A: Eastern Landscaping and Multiuse Trail and S. Buena Vista Drive Repurposing





Alternative 2A.ii: S. Buena Vista Drive Narrowing and Western Sidewalk

U.S. 17/92 from E. Echo Street to Haines Boulevard System of Intersection Controls

From E. Echo Street to Haines Boulevard, two build alternatives were considered: one-way lane repurposing and two-way conversion. The preliminary system of intersection controls recommended for each alternative are presented in Figure 10. The system of intersections controls were developed to:

- Manage delays along the corridor
- Provide well-spaced gaps for east-west vehicular travel through Lake Alfred
- Provide well-spaced east-west pedestrian crossings, such as signalized intersections, HAWKs (pedestrian hybrid beacons), rectangular rapid flashing beacons, raised intersections, or roundabouts
- Reinforce vehicular target speeds through signal timing and/or geometric design

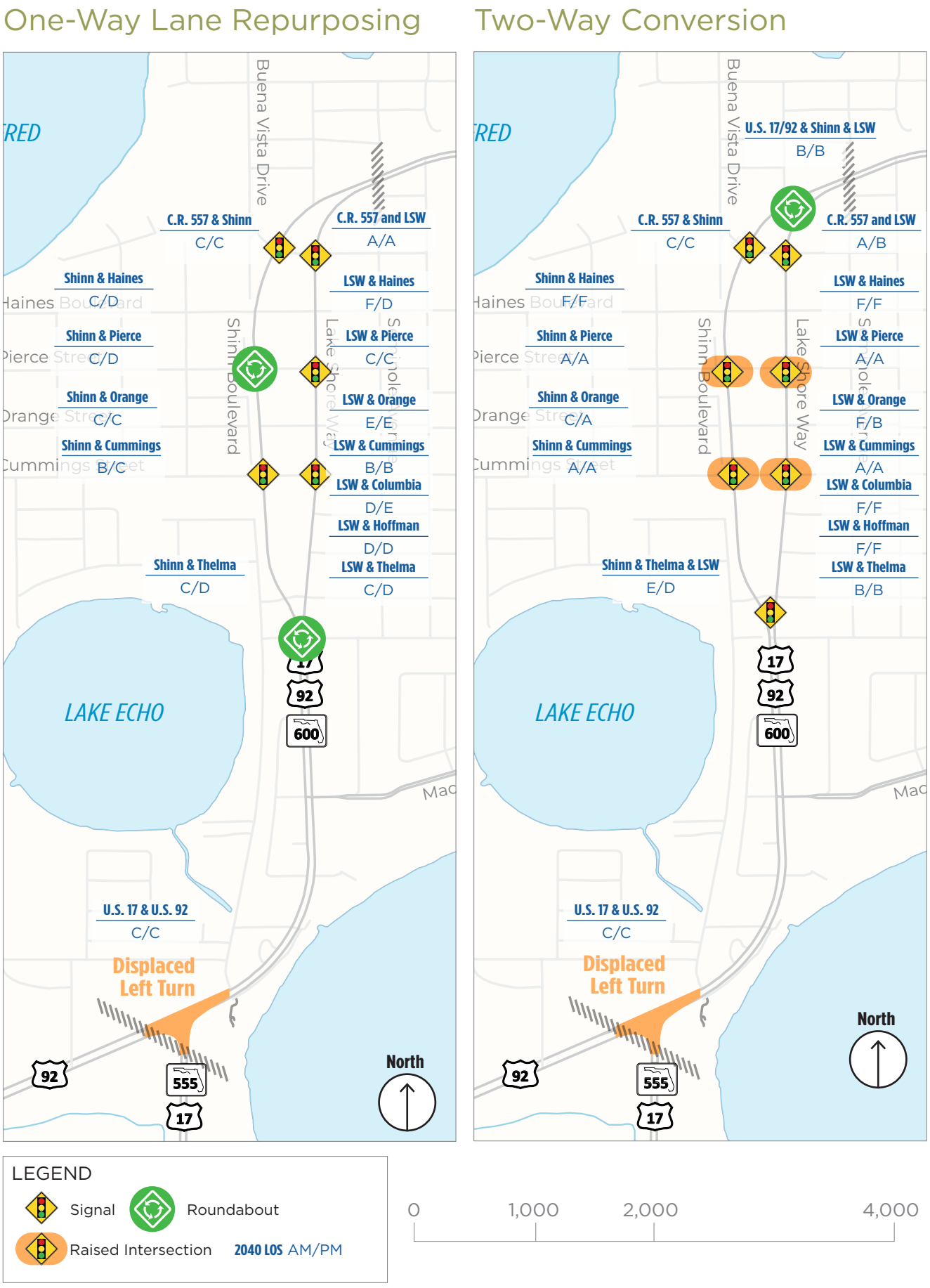
A 2040 alternatives traffic operations analysis was completed to evaluate future operational conditions at intersections for the various intersection controls recommended for each alternative. The District One Regional Planning Model (D1RPM), Version 1.0.3 was used to develop design traffic forecasts for the U.S. 17/92 study corridor. Different weighted average growth rates were used for each alternative from base year 2010 to horizon year 2040 within the study area. A full description of the methodology used to develop 2040 volumes is provided in Appendix D: Traffic Forecasting Memorandum.

Table 3. Long-Term Alternatives: Growth Rate and Annual Average Daily Traffic (AADT)

Alternative	Growth Rate	Annual Average Daily Traffic	
		Lake Shore Way	Shinn Boulevard
No-Build	2.0%	23,900	24,200
One-Way Lane Repurposing	1.9%	22,700	23,400
Two-Way Conversion: Four Lanes on Shinn Boulevard and Two Lanes on Lake Shore Way	2.6%	17,200	36,900

The future vehicular LOS analysis suggests that improvements to the major intersections **can reduce delays** at U.S. 17 and Lake Shore Way and U.S. 17/92 and E. Pomelo Street (C.R. 557). Furthermore, the preliminary system of intersection controls recommended for each alternative presented in Figure 10 can meet FDOT vehicular LOS targets.

Figure 10. System of Intersection Controls



One-Way Lane Repurposing Intersection Modifications

Figure 11. One-Way Lane Repurposing Roundabout at Thelma Street

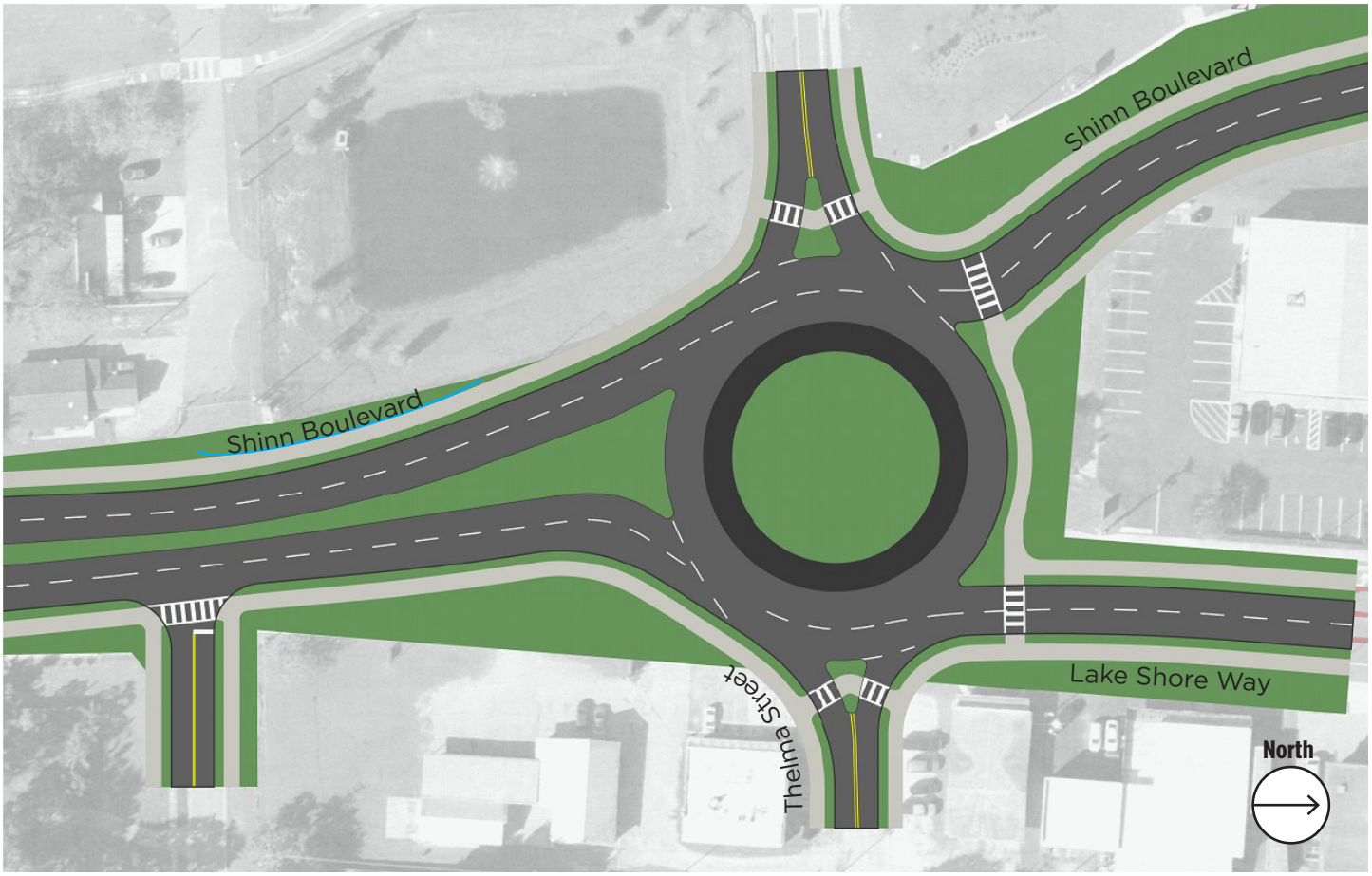


Figure 12. One-Way Lane Repurposing Roundabout at Pierce Street

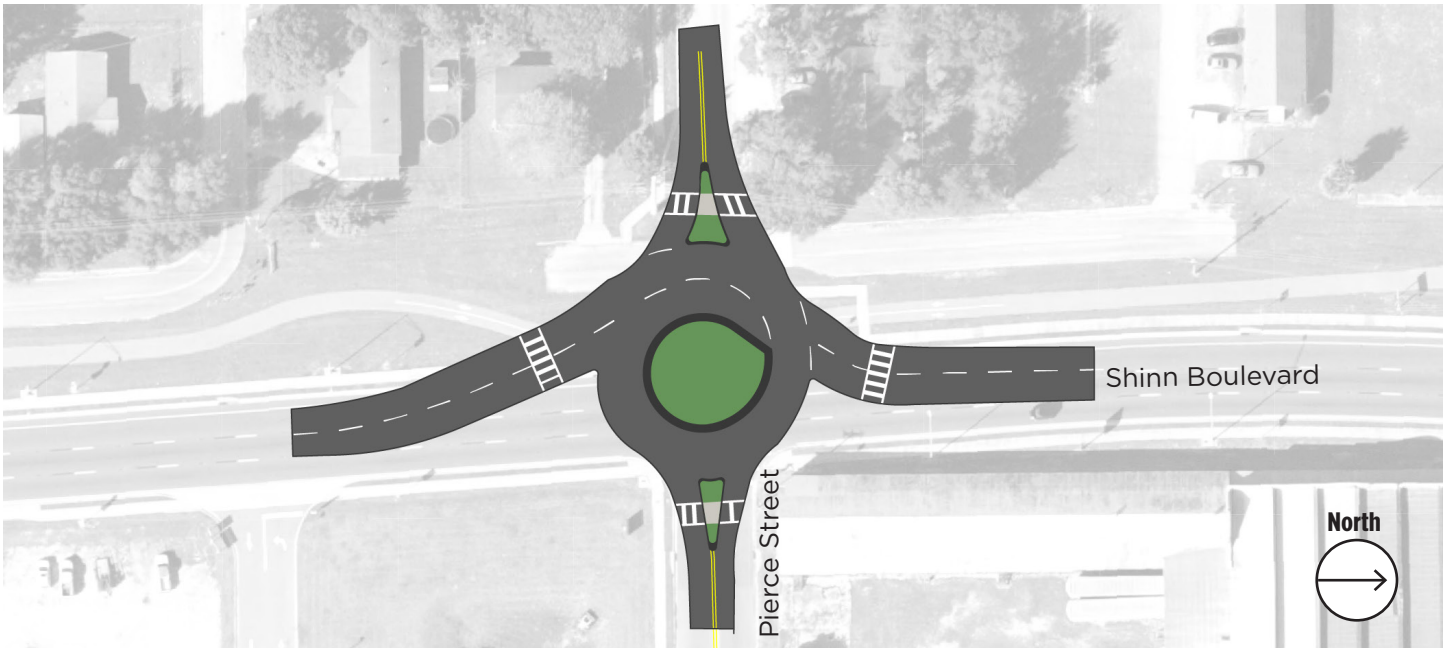
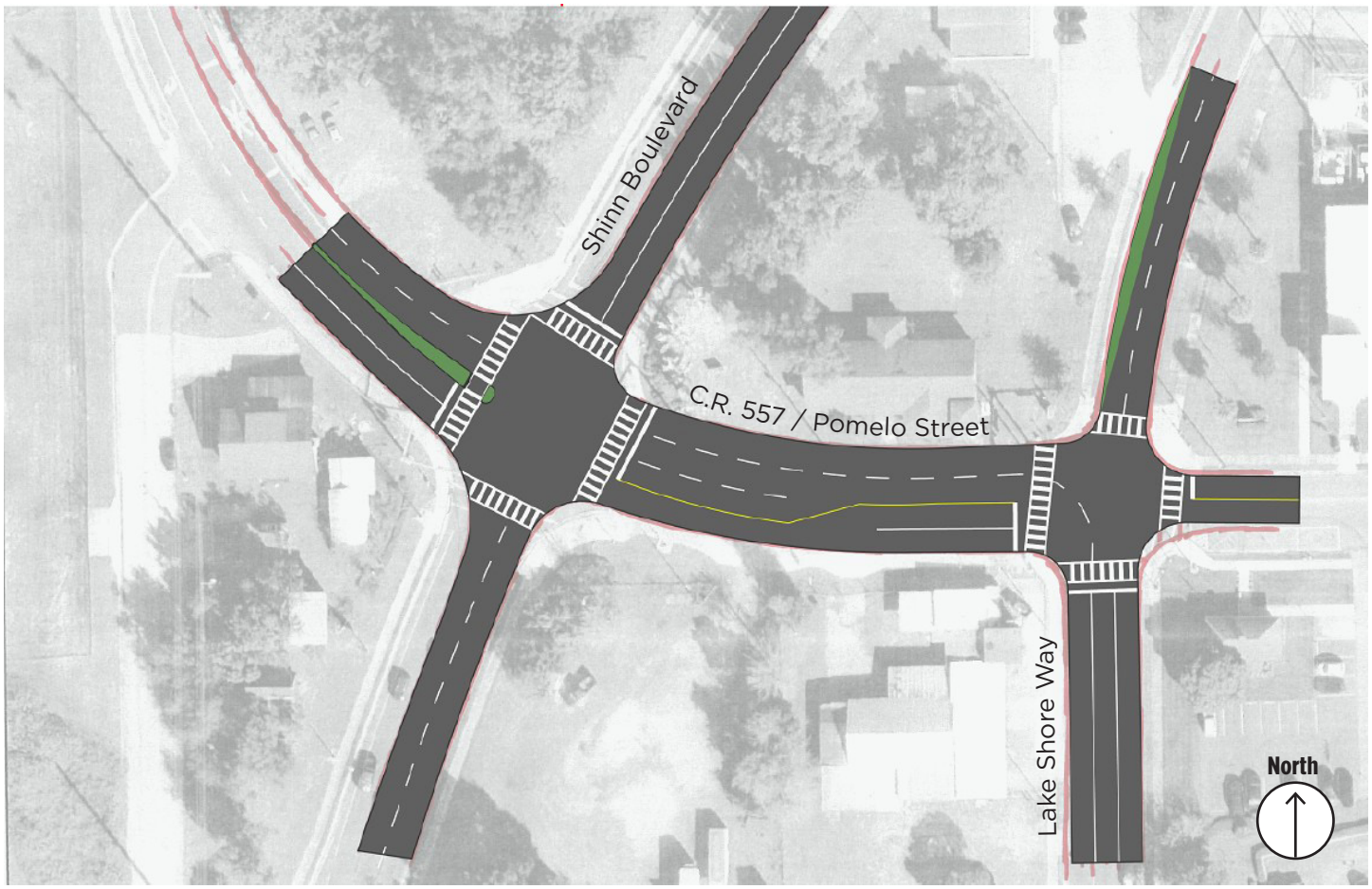


Figure 13. One-Way Lane Repurposing C.R. 557 / Pomelo Street / Shinn Boulevard



Two-Way Conversion Intersection Modifications

Figure 14. Two-Way Conversion Signalized Intersection at Thelma Street

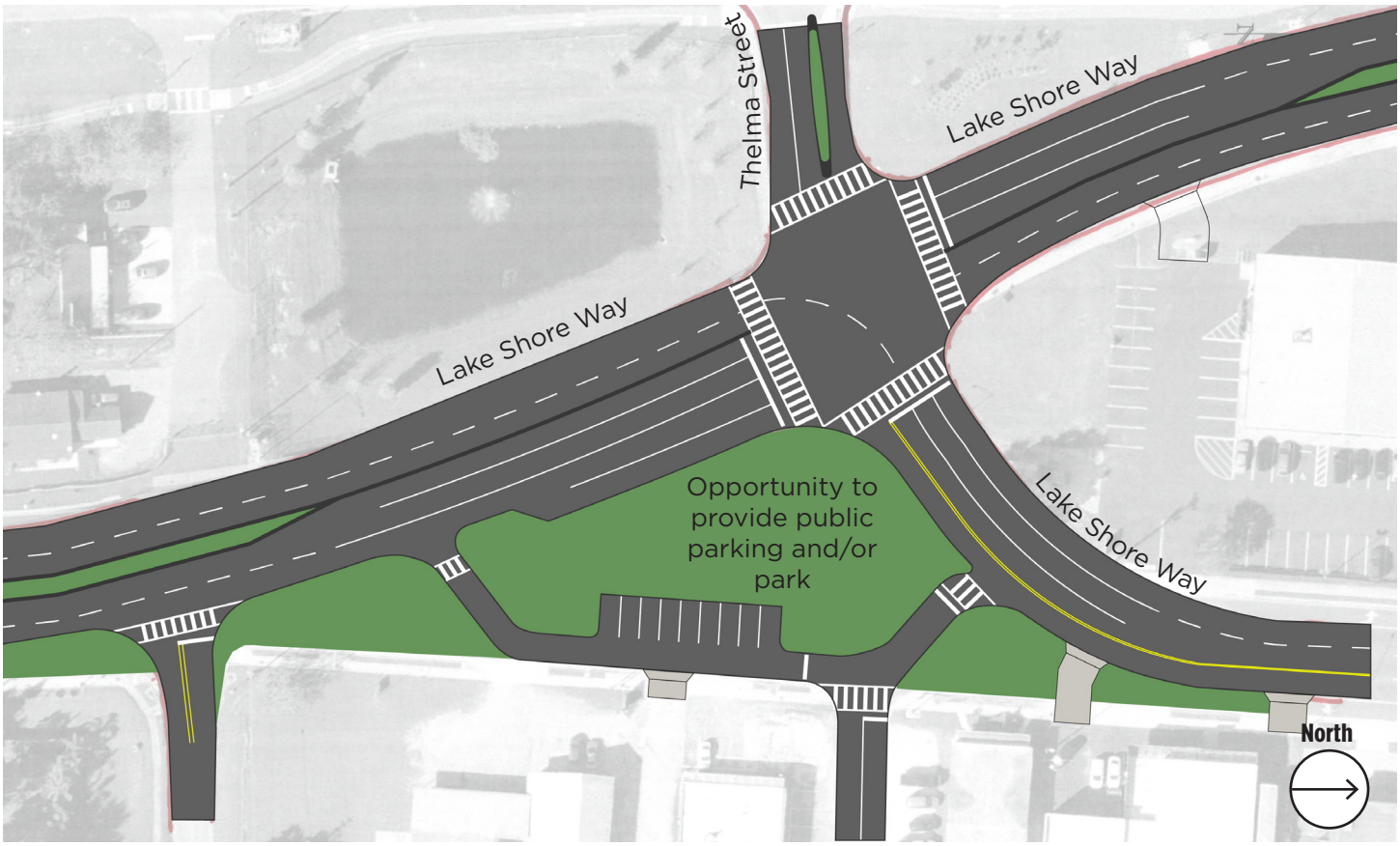


Figure 15. Two-Way Conversion C.R. 557 / Pomelo Street / Shinn Boulevard

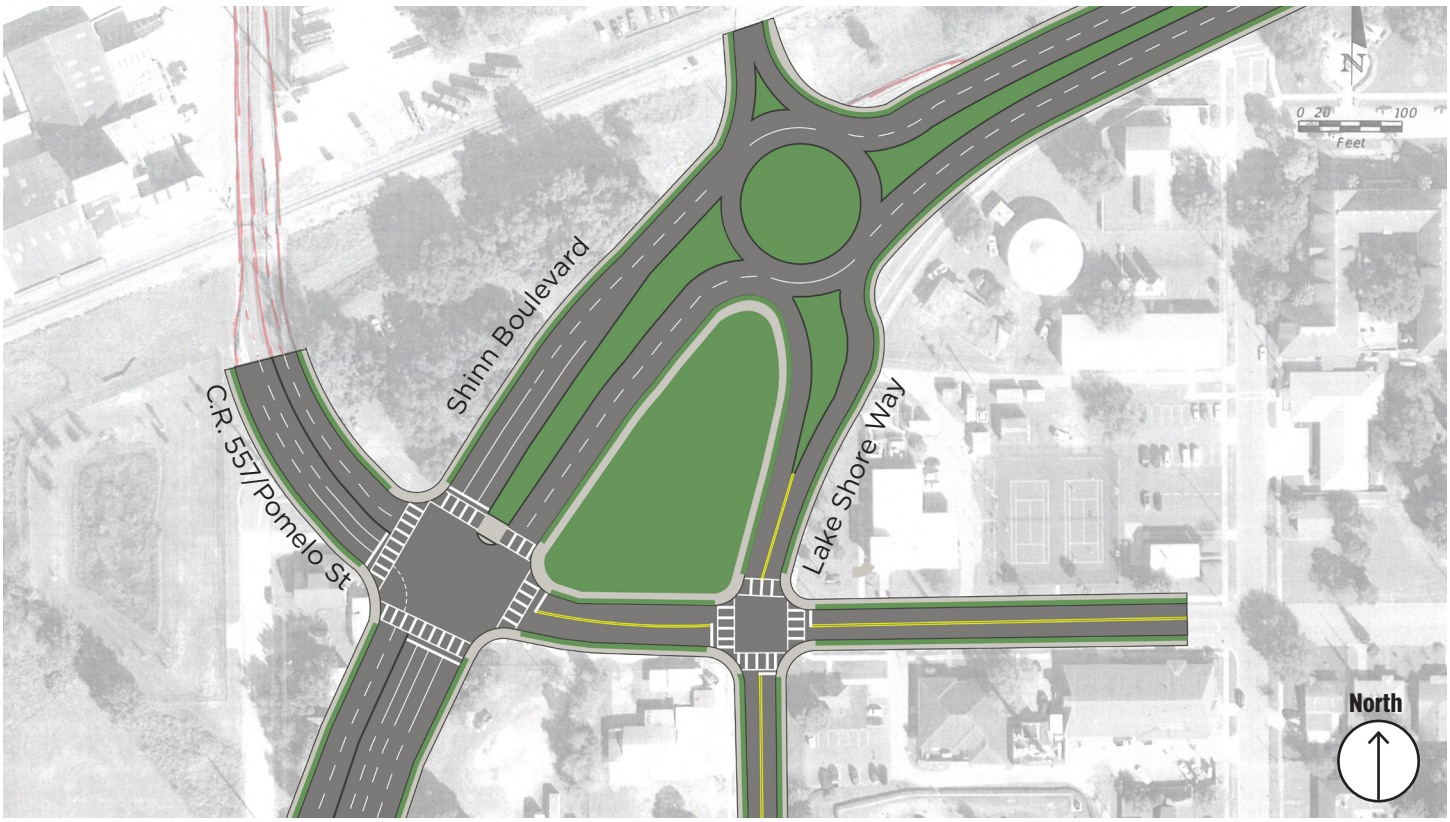


Figure 16. Two-Way Conversion Rendering of Lake Shore Way and Shinn Boulevard (from E. Echo Street to W. Cummings Street)

Birds Eye View

View South, Lake Shore Way at Cummings St

Lake Shore Way and W. Cummings St

Figure 16. Two-Way Conversion Rendering of Lake Shore Way and Shinn Boulevard (from E. Echo Street to W. Cummings Street), continued

View South on Shinn Blvd at Cummings St

Shinn Blvd and W. Cummings Intersection

Measures of Effectiveness

While U.S. 17/92 must accommodate regional travel, the goal of this project was to develop alternatives that improve safety and support the City of Lake Alfred's Downtown Master Plan. This section measures the alternatives against these goals.

Table 4. Goals, Objectives, and Measures of Effectiveness

Goal: Support the City of Lake Alfred Downtown Master Plan

Objectives:		Improved Multimodal Mobility				Support Redevelopment in Downtown Core		
Measures of Effectiveness:		Number of Controlled Pedestrian Crossings Across U.S. 17/92 / Avg Spacing	Continuous Sidewalk	Continuous Bicycle Facilities	Accessible Bus Stops	On-Street Parking	Stormwater Treatment (Rain Garden)	Streetscape Improvements
Lake Shore Way U.S. 17 to E. Thelma St	No Build*	3/3,400 ft	No	No	0	No	No	No
	All Build Conditions	1/3,900 ft	Yes	Yes	3	No	No	Yes
Lake Shore Way Thelma St to Cummings St	No Build*	3/3,400 ft	Yes	No	1	No	No	No
	All Build Conditions	2/1,000 ft	Yes	Optional	2	7-15	Optional	Yes
Lake Shore Way Cummings St to Haines Blvd	No Build*	3/3,400 ft	Yes	No	1	No	No	No
	All Build Conditions	2/675 ft	Yes	Optional	2	13-17	Optional	Yes
Shinn Blvd	No Build*	2/6,800 ft	Yes	Yes	3	No	No	No
	All Build Conditions	4/1,000 ft	Yes	Yes	3	82-165	Yes	Yes

*From U.S. 17 to Pomelo Street

Goal: Improve Safety

Objectives:		Reduce Vehicular Travel Speeds/Crashes at Major Intersections		Improve East/West Mobility
Measures of Effectiveness:		Provide Enclosure (Street Trees Near Travel Lanes)	Provide Deflection (Roundabouts/Vertical Shifts)	Number of Improved Local Roadway Connections
Lake Shore Way - U.S. 17 to E. Thelma Street	No Build	No	No	-
	Alternatives	Alternative 2	No	-
Lake Shore Way - Thelma Street to Cummings Street	No Build	No	No	-
	One-Way Lane Repurposing	All but Angled Parking	Yes (Roundabout)	2
	Two-Way Conversion	All but Angled Parking	Yes (Raised Intersections; intersection at Thelma Street)	2
Lake Shore Way Cummings Street to Haines Boulevard	No Build	No	No	-
	One-Way Lane Repurposing	All but Cycle Track Option	No	-
	Two-Way Conversion	All but Cycle Track Option	Yes (Raised Intersections)	-
Shinn Boulevard	No Build	No	No	0
	One-Way Lane Repurposing	Yes	Yes (Roundabout at Pierce Street and Thelma Street)	3
	Two-Way Conversion	Yes	Yes (Roundabout at N. Lake Shore Way)	3

Recommendations

The City of Lake Alfred supports the following recommendations:

Short Term:

- Pavement repurposing of continuous turn lanes on Lake Shore Way from E. Echo Street to W. Cummings Street.
- Addition of a westbound left-turn lane at Shinn Boulevard and C.R. 557/ E. Pomelo Street intersection.
- Evaluation of safety measures to reduce travel speeds entering the intersection at C.R. 557 and Shinn Boulevard in the southbound direction.
- Program a PD&E study to further evaluate the one-way lane repurposing and the two-way conversion of the one-way pair.
- Program a PD&E study for the U.S. 17 and U.S. 92 intersection and lane repurpsing from U.S. 17 and U.S. 92 to Thelma Street.

Mid Term:

- The City will enforce its land development regulations to implement pedestrian supportive private development in the Downtown Core.
- The City will invest in infrastructure that supports higher density development and multimodal travel.
- The City will evaluate current land development codes and overlays to consider modifications to parking requirements, additional inclusion of LID (low impact design) treatments, and bicycle infrastructure and facilities.
- The City will evaluate the potential of a Master Stormwater Master Plan that incorporates the Downtown Overlay District to help the higher density land uses to accommodate stormwater demands and works together the street network and LID treatments.

Long Term:

- Rebuild U.S. 17/92 through the City of Lake Alfred to support the future vision for the City as a pedestrian-friendly destination centered on a sustainable and prosperous urban Downtown Core. This will be achieved by constructing the preferred lane repurposing alternative determined through the PD&E studies recommended in the short term.

KITTELSON & ASSOCIATES

FDOT

CITY OF LAKE ALFRED FLORIDA