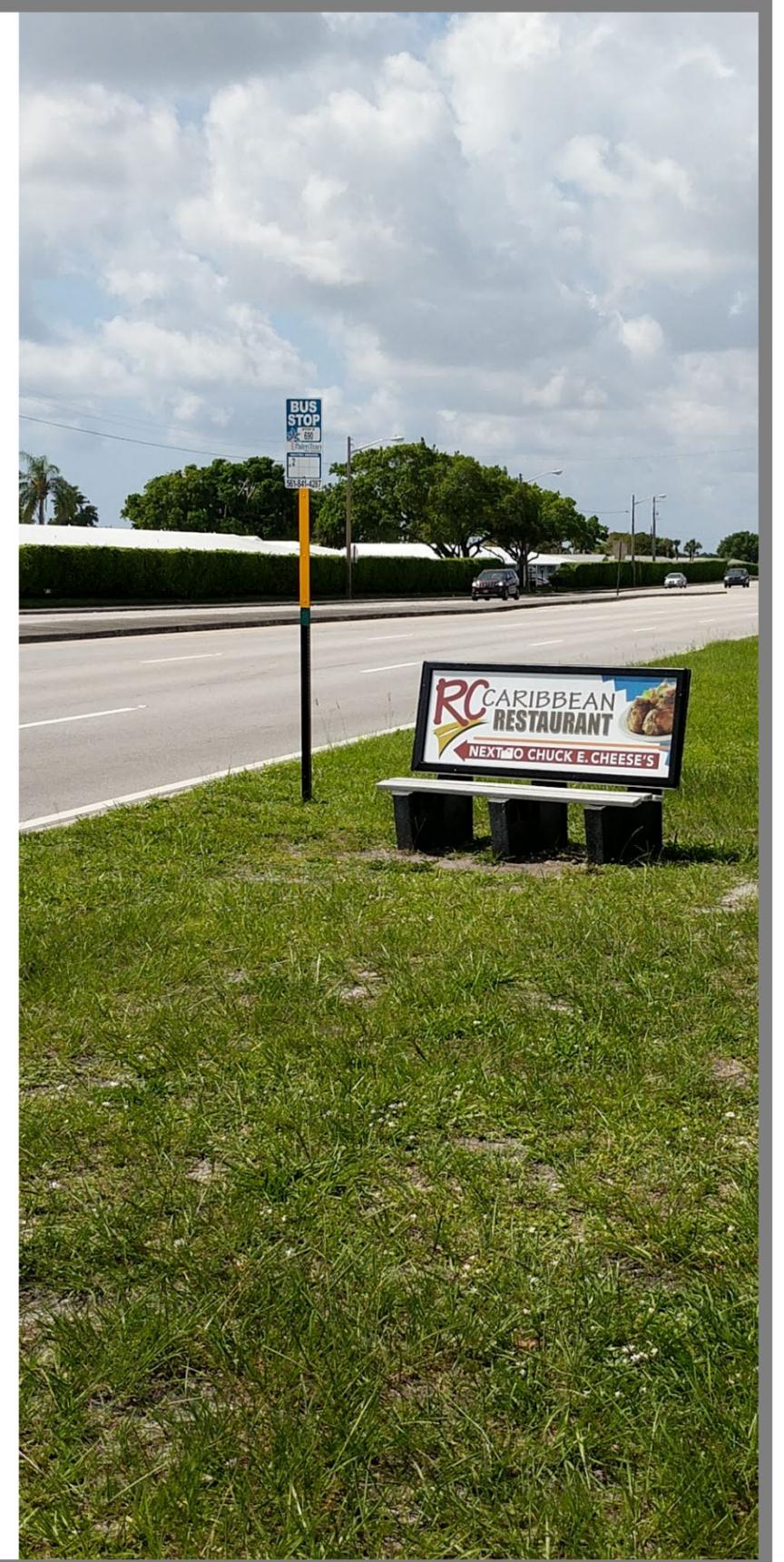




# PALM BEACH Transportation Planning Agency

## Transit Access Plan

Congress Avenue  
Boynton Beach, FL  
2019



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## Location Overview

Congress Ave. was selected by the Palm Beach Transportation Planning Agency (TPA) to conduct a transit access evaluation due to the high ridership Palm Tran bus stop at the Boynton Beach Mall, with a monthly average of 14,612 riders. The evaluation included a field visit with key stakeholders, including representatives from Palm Tran, Palm Beach County and the City of Boynton Beach that identified safety and transit accessibility concerns and potential countermeasures. In order to create a safe, efficient and connected transportation system, we must provide safe access to transit for users of all ages and abilities.

The following pages include findings with recommendations and cost estimates, including street planviews. Next steps include meeting with key stakeholders and right-of-way (ROW) owners to discuss implementation of the proposed recommendations.

### Overall Recommendations:

- ADA compliant curb ramps
- Intersections with high emphasis crosswalks on all ends and countdown signals
- Bus stop ADA compliance (level with landing pad of 5'X 8' or greater)
- Reduction of vehicle lane widths to 11 feet
- Pedestrian scale lighting
- Signage along the route to indicate bicycle lanes and routes
- Five-foot buffered bicycle lanes with green paint at conflict zones
- Widen sidewalk to 10' to 12'

### Priorities on Congress Ave. north of Boynton Beach Blvd:

- Sidewalk connections from bus stops to the residential areas north of the corridor as well as along the northern section (especially at the mall) with high emphasis crosswalks.
- Buffered bicycle lanes with green paint at conflict zones.

### Priorities on Congress Ave. south of Boynton Beach Blvd.:

- Pedestrian scale lighting and wider sidewalks with high emphasis crosswalks and ADA access.
- Bus amenities which include benches, shade (offered by bus shelters), lighting and ADA accessibility.
- Buffered bicycle lanes with green paint at conflict zones.

**Location:**  
Congress Ave. @ Old Boynton Rd.  
Boynton Beach, Florida  
Palm Tran Stop: 688

**Legend:**

- Top Ridership Stop
- Existing Bicycle Facilities
- No Bicycle Facilities
- Existing Sidewalks
- No Sidewalks
- Study Area

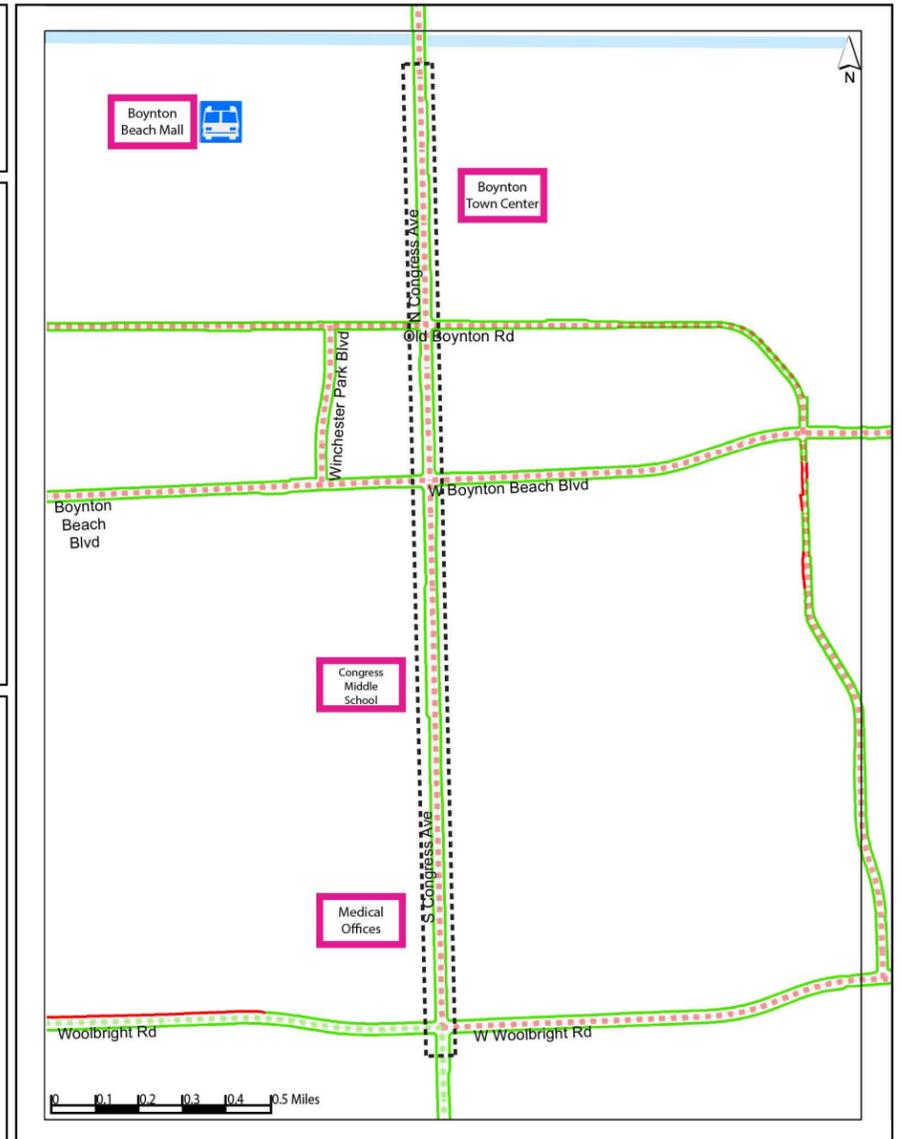
**Background:**  
Roadway Owner(s): *County*  
Municipality: *Boynton Beach*

Speed Limit:  
*S. Congress Ave. - 45 MPH*  
ROW Width: *120 ft*

TPA Design Guidelines: *Suburban*  
FDOT Context: *C4 - Urban General*

2040 Peak Traffic Volume: *52,233 vphpd*

Bus Route(s): 2



Road conditions along corridor; Photo by: CTS Engineering, Inc.

Location Aerial



Maps with focus areas and bus stops; Map Creator: CTS Engineering, Inc.

Focus Areas

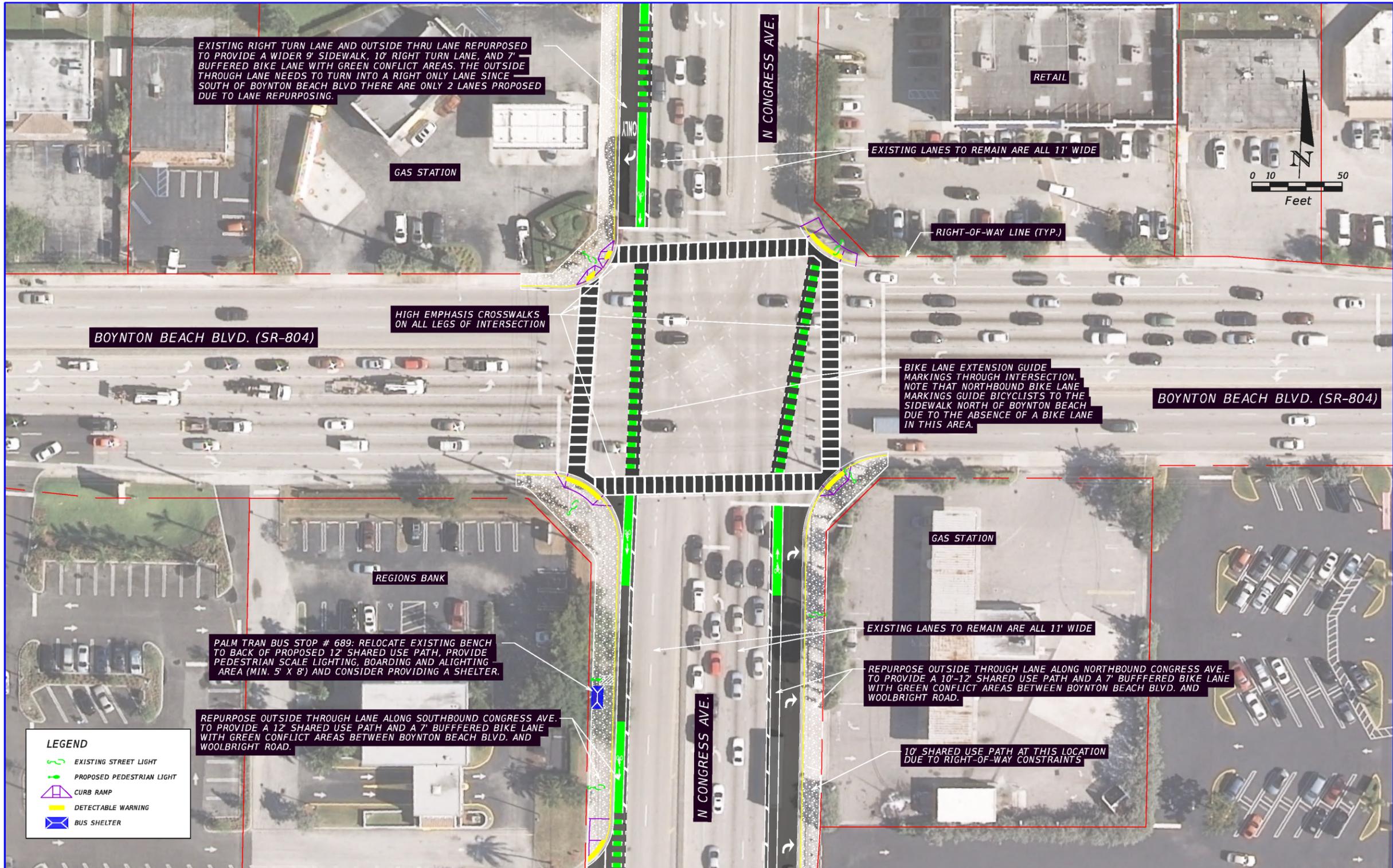


Figure 4: Locations 2, Focus Area 1; Map Creator: CTS Engineering, Inc

Boynton Beach: Focus Area 1

Crosswalk enhancements, shared use paths, buffered bike lanes with conflict zones marked in green, pedestrian lighting enhancements, bus stop improvements, lane repurposing

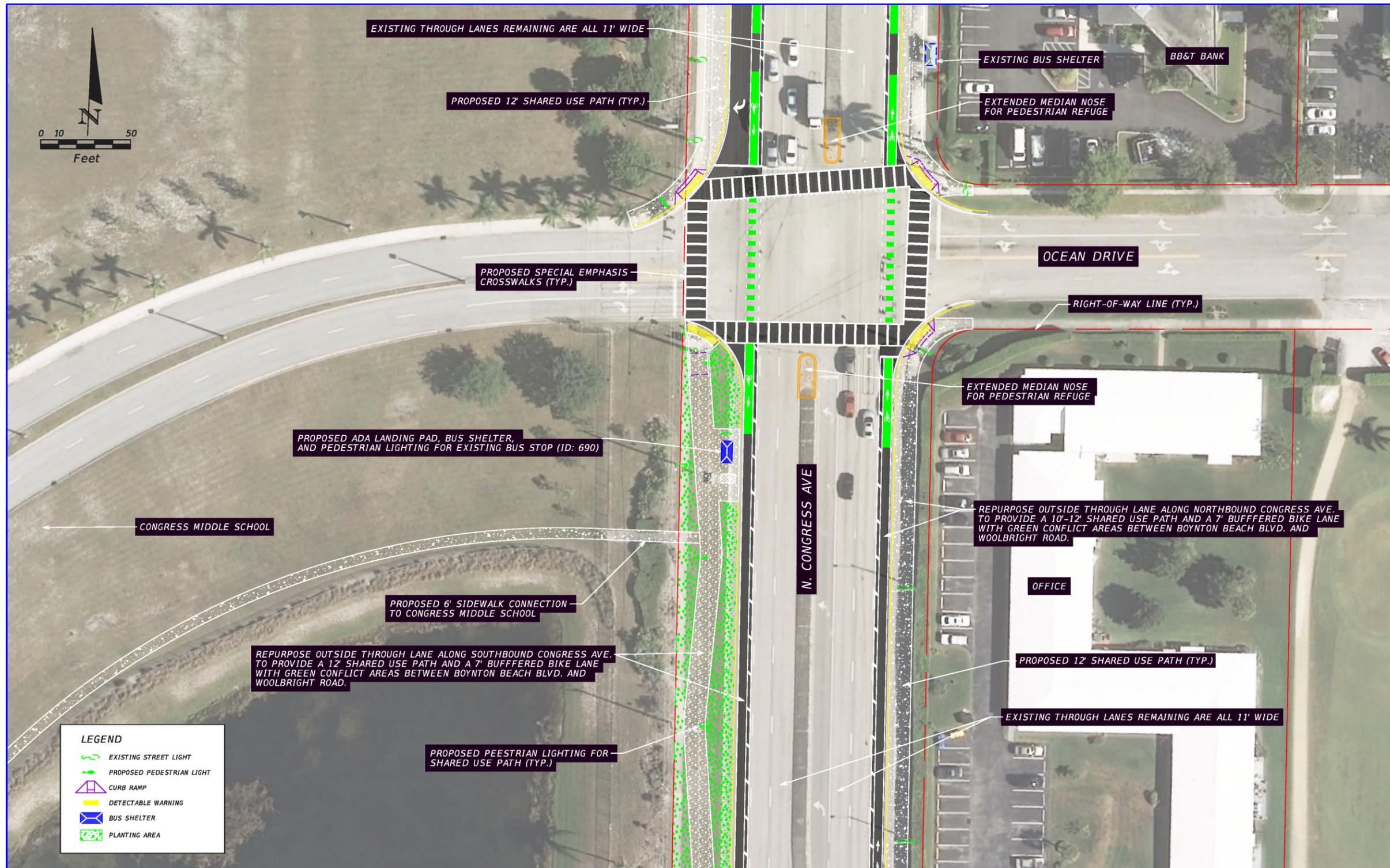


Figure 5: Locations 2, Focus Area 2; Map Creator: CTS Engineering, Inc

Boynton Beach: Focus Area 2

Crosswalk enhancements with median refuges, shared use paths, buffered bike lanes, pedestrian lighting enhancements, bus stop improvements, sidewalk access to school, lane elimination

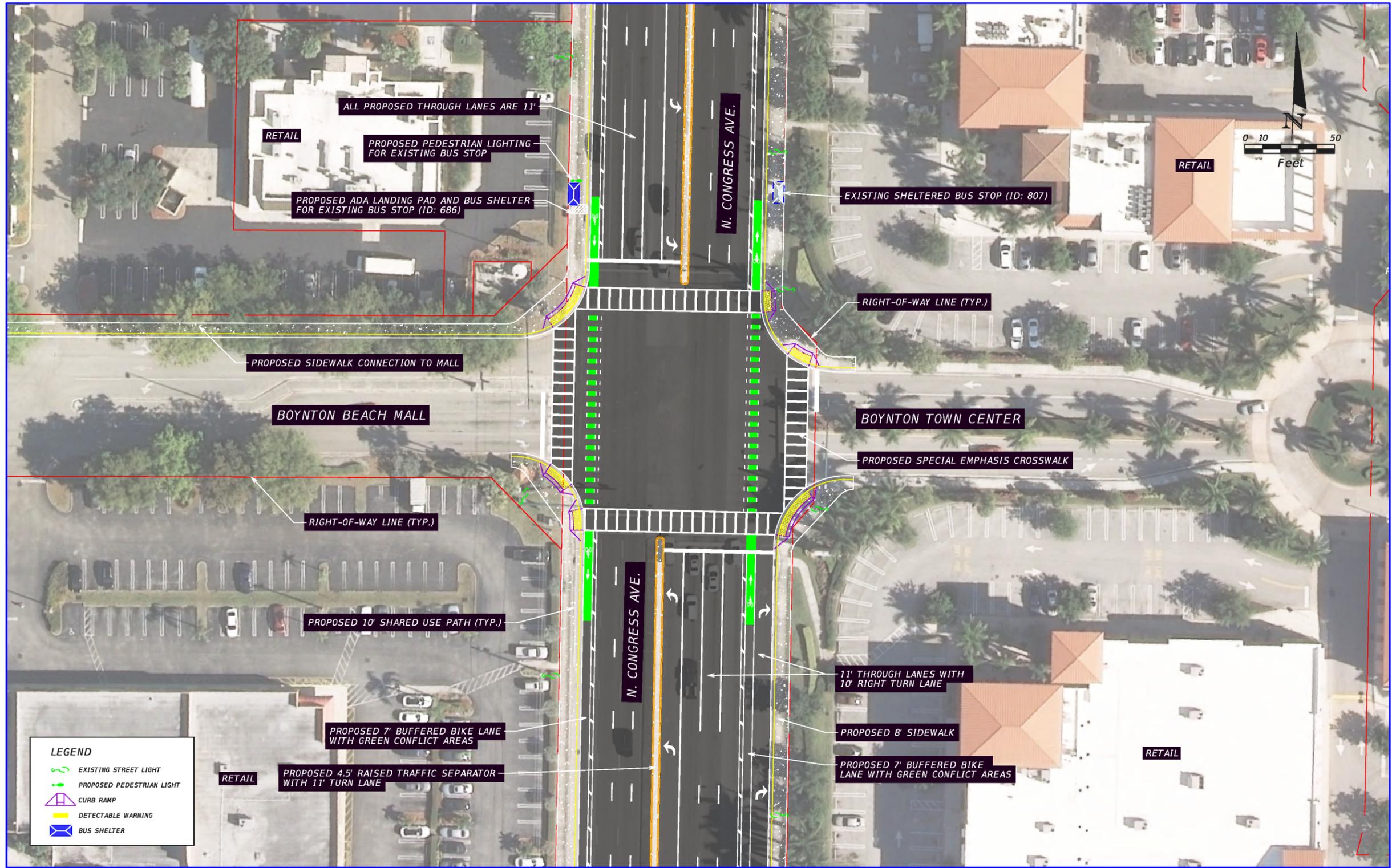
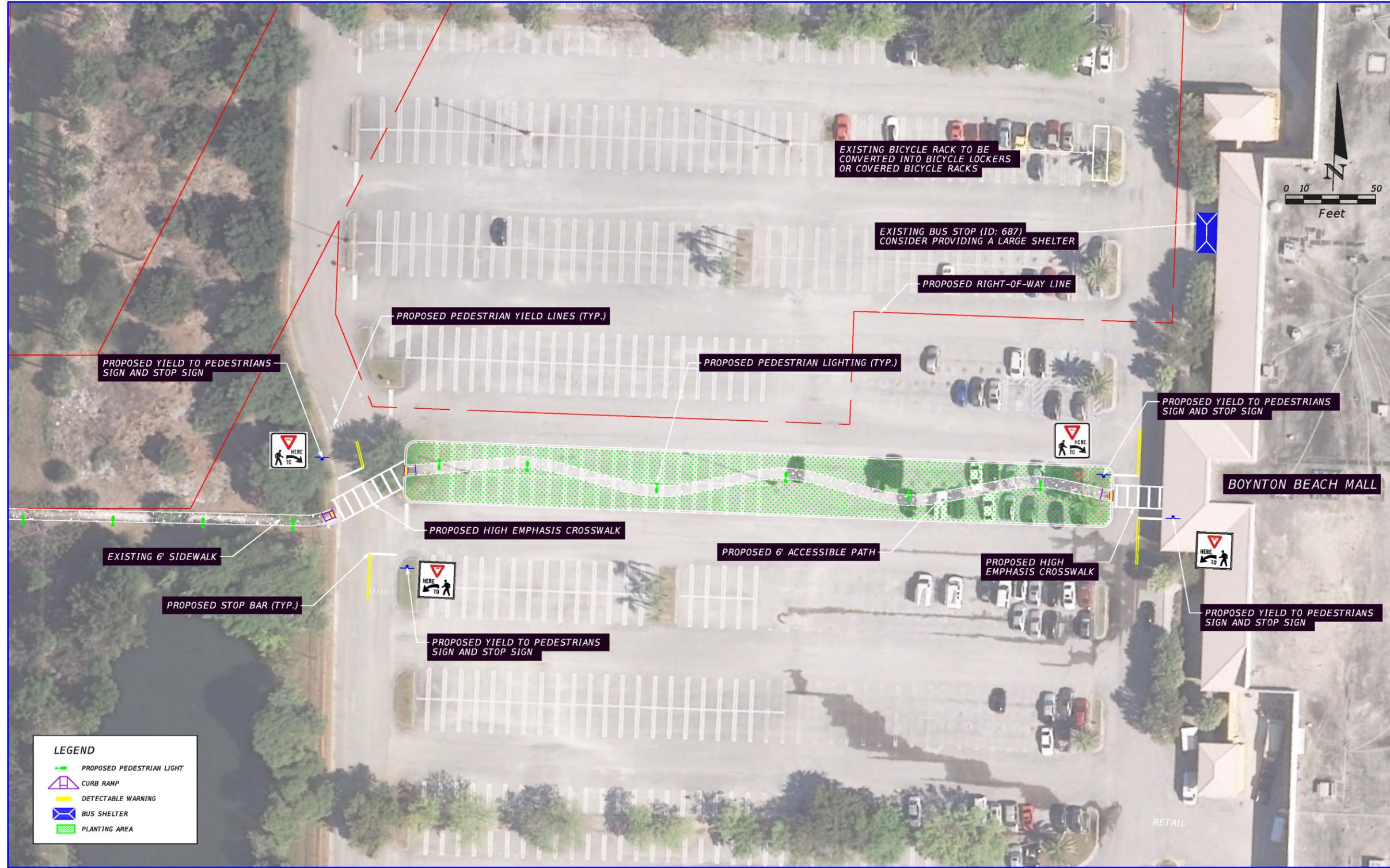


Figure 6: Locations 2, Focus Area 3; Map Creator: CTS Engineering, Inc

Boynton Beach: Focus Area 3

Crosswalk enhancements, median addition, shared use paths, buffered bike lanes with conflict zones marked in green, pedestrian lighting enhancements, bus stop improvements, sidewalk access to mall



Boynton Beach: Focus Area 4

High Emphasis crosswalk addition, accessible path with pedestrian lighting to connect nearby residents to mall

Figure 7: Locations 2, Focus Area 4; Map Creator: CTS Engineering, Inc

**Cost Estimates**

Location	Roadway Owner	ID	Description	Cost Estimate	ROW Needed?
Congress Avenue from Boynton Beach Boulevard to Woolbright Road	County	1	Recommend lane repurposing for the outside through lanes in order to fit 7' buffered bicycle lanes and 12' shared use paths in both directions.	\$1,750,000	No
Congress Avenue from Boynton Beach Boulevard to Savannah Lakes Drive		2	Recommend reducing median width from 20' to 15.5'-16' in order to fit 7' buffered bicycle lanes and 10' shared use paths for both northbound and southbound. This improvement may need access management changes at Congress Ave and the Boynton Beach south Mall Entrance.	\$1,610,000	
		3	Install special emphasis crosswalk markings at all signalized intersections.	\$195,000	
Congress Avenue from Woolbright Road to Savannah Lakes Drive		4	Install minimum required 8' x 5' boarding and alighting pad at all bus stop locations. Pads must be adjacent to curb and connected to sidewalks. Also install all missing amenities such as shelters, benches, bicycle racks, route map signage, and trash receptacles at each stop.	\$310,000	Yes – some locations may need right of way
Congress Avenue, just south of Ocean Drive to Congress Middle School Parking Lot		5	Install sidewalk connection to Congress Middle School parking lot.	\$20,000	Yes
Boynton Beach Mall entrances, from South to North Entrances of Boynton Beach Mall		6	Install sidewalks on both sides of the 3 Boynton Beach Mall Entrances. Also create an accessible path leading up the perimeter sidewalk of the mall.	\$76,000	
Sidewalk connection from Javert Street (neighborhood west of mall) to the west side of the Boynton Beach Mall		7	Install accessible route from Javert St to the west side of the Boynton Mall. Include crosswalk across Mall perimeter road and accessible route through parking lot.	\$150,000	
Bus Stop 687 (Boynton Beach Mall)		8	Consider replacing bicycle rack with more secure bicycle lockers at this high ridership stop.	\$17,000	
*Cost estimate does not include ROW acquisition or drainage				<b>Total Costs: \$ 4,128,000</b>	

## Appendices

**Appendix A: Field Observations**

Road Users Observed During Visit			
Road users varied including both young adults and older citizens. Young parents were seen pushing strollers while older citizens were seen biking down the corridor	Most of the road users were older. However, there were a couple pedestrians seen with strollers and young children walking along the sidewalks. Those seen outside of their vehicles included pedestrians and bicyclists	The bicyclists seen primarily road on the sidewalk (possibly due to the lack of a bicycle lane). However, a couple riders were seen riding with the flow of traffic	
Observations of Things that Worked			
The PED connect access from plazas to the sidewalks were featured at about every plaza within the studied corridor	Besides the property at the mall, the visited site had good sidewalks	The implementation of a median worked well; however, in some locations the median could be reduced in width to allow for the addition of a bicycle lane	Some areas within the studied corridor had undesignated bicycle lanes

Observed Deficiencies				
Sidewalks	ADA	Bicycle Facilities	Lighting	Bus Stops
	Many of the bus stops are not currently ADA compliant due either from lacking the appropriate area (8 ft by 5 ft) or by being level or both	Besides a short span of an undesignated bicycle lane, the studied corridor had no consecutive bicycle lanes	Lighting was poor along the corridor, including at bus stop locations	

Potential Pedestrian Perils	Potential Bicyclist Perils
A low-hanging sign hangs over the sidewalk on the NB corridor (between SW Congress & SW Golf)	A few Palm Tran bus stops feature benches that reside in the immediate path of bicyclists (on the sidewalk since bicycle lanes are absent)
Sidewalks in the vicinity of the mall are in poor condition (the ownership is private; however, we may make a recommendation to the owner of the property)	Part of Congress Avenue has a designated bicycle lane; however, it is not a long strip of the corridor. This lane starts and ends abruptly throwing bicyclists into the middle of traffic with no signal that the facilities are coming to an end which is very dangerous
The ADA pads at intersections need to be replaced or repaired in some locations along the corridor	
All intersections with a crosswalk currently have pedestrians crossing signals, but not all have count down signals	
Limited lighting within the corridor may pose a risk to pedestrians between dusk and dawn especially at intersections	

Top Priorities Recommended from Site Visit by PB TPA	Easy Fixes by Location	Difficult Fixes by Location
Bus shelters in many places are not ADA compliant	The sidewalk is cracked NB just after the Boynton Beach Boulevard intersection	Palm Tran benches act as an obstruction on the sidewalk
There is no lighting at bus stops	The Woolbright Road intersection needs crosswalk striping	Lane widths and median width may be reduced to add a designated bicycle lane throughout the corridor
The bicycle lanes are inconsistent along the corridor. The bicycle lane should be expanded and designated and the same size throughout the corridor	The crosswalk needs enhanced at Boynton Beach Boulevard & Congress Avenue and the southern section of Congress & Ocean intersection	The curb area in the NW quadrant of the Boynton Beach Boulevard & Congress intersection should be widened. The area is currently non-compliant per ADA requirements and has a pole in the middle of the sidewalk area
Sidewalks/crosswalks along the corridor need many ADA improvements such as replacing the mat at the ramps	The crosswalk at S Congress & SW Golf Lane needs addressed	
There is a need for pedestrian scale lighting along the corridor	The crosswalks at mall driveways need addressed	
All pedestrian signals along the corridor need to be made uniform, count down signals preferred	A concrete landing pad is needed at bus stop 690 (route 2 bus, right in front of Congress Middle School)	
	Pedestrian scale lighting is needed throughout the corridor	

Other Observations
Conflict zones along the undesignated bicycle lanes pose a risk to bicyclists
Pedestrian refuge is necessary in some intersections due to width of the crossing
There is a need for shade along the corridor. Palm Tran should add shelters to the stops along the corridor where ridership is high enough
The mall needs sidewalks at entrance points for access (however, the ownership is private)
The highest ridership stop at the mall has low visibility at the stop. It is currently difficult to identify it as a bus stop. This stop could benefit from a shelter as the benches were doused in water
Continuous bicycle lanes are needed
The sidewalks and transit stops need to meet ADA requirements
The intersections need marked, lighting at crossings, and countdown signals
Certain corners encourage quick right turns which can be dangerous for pedestrians and bicyclists. This could be addressed by changing the angle so that motorists must slowdown or stop before turning
Congress is a wide road which may call for a pedestrian refuge in the medians at crosswalks
Certain transit stops may be better utilized if located closer to intersections and may act to encourage safer crossing behavior

Site Visit: June 5, 2018



Lighting in parking lot near bus stop and above benches at mall; Photo by: CTS Engineering, Inc.



Lighting at intersection of N. Congress and Old Boynton; Photo by: CTS Engineering, Inc.



Lights off prior to sun rising along N. Congress, North of Old Boynton; Photo by: CTS Engineering, Inc.



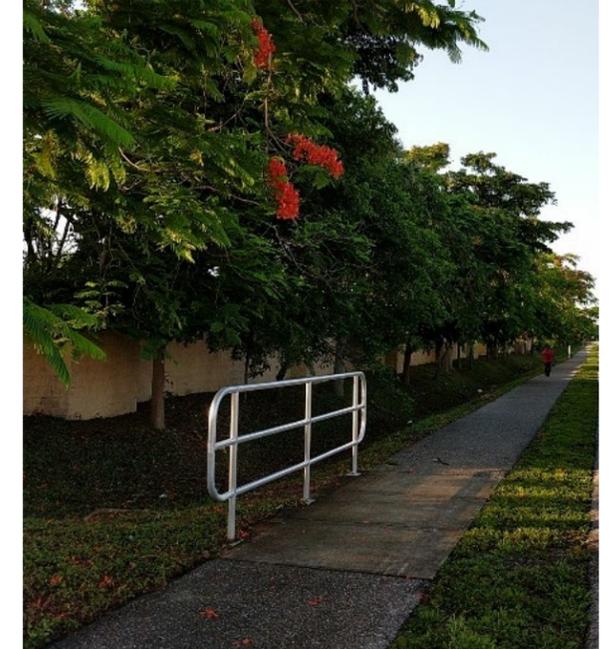
Building offering light at stop at mall; Photo by: CTS Engineering, Inc.



Broken sidewalk along corridor near Old Boynton and N. Congress; Photo by: CTS Engineering, Inc.



8 ft sidewalks near N. Congress and Boynton Beach Boulevard intersection; Photo by: CTS Engineering, Inc.



Sidewalk connecting residents to mall on Javert St (West of mall); Photo by: CTS Engineering



Proper signage heading South on N. Congress toward Old Boynton; Photo by CTS Engineering, Inc.



8 ft sidewalk North of Boynton Beach Blvd on N. Congress; Photo by: CTS Engineering, Inc.



Crosswalk at intersection of Old Boynton and Congress; Photo by: CTS Engineering, Inc.



Jaywalker seen by Boynton Beach Mall before Congress and Old Boynton Road intersection; Photo by: CTS Engineering, Inc.



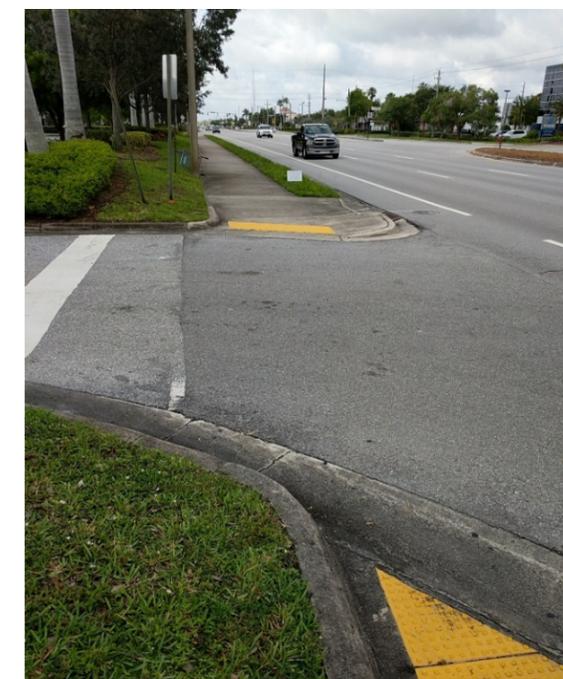
Crosswalk needed at Congress & Boynton Town Center; Photo by: CTS Engineering, Inc.



Median needs pulled back at Professional Center on S. Congress; Photo by: CTS Engineering, Inc.



Signalization not working at intersection of Old Boynton and Congress; Photo by: CTS Engineering



Crosswalk needed on Congress, North of Old Boynton; Photo by: CTS Engineering, Inc.



*Bicyclist using unmarked shoulder along N. Congress near mall; Photo by: Palm Beach TPA*



*Cyclist using the wrong lane along S. Congress near middle school; Photo by: CTS Engineering, Inc.*



*Sign on N. Congress in front of Wells Fargo indicating the sidewalk's purpose and users; Photo by: Palm Beach TPA*



*Bicycle rack at mall bus stop (687); Photo by: CTS Engineering, Inc.*



*Bicyclist attempting to cross at the crosswalk while signalization indicates otherwise; Photo by: Palm Beach TPA*

Bus Stops



On N. Congress, North of intersection with Old Boynton (688); Photo by: CTS Engineering, Inc.



Stop in front of middle school on S. Congress; Photo by: CTS Engineering, Inc.



Buses arriving and departing via bus bay at mall (687); Photo by: CTS Engineering, Inc.



Stop South of Stonehaven Dr. on S. Congress Avenue (803); Photo by: Palm Beach TPA



On N. Congress, North of intersection with Old Boynton (810); Photo by: CTS Engineering, Inc.