

HALLANDALE BEACH CRA TRAFIC CALMING ASSESSMENT HALLANDALE BEACH, FL

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Executive Summary

The purpose of this project is to conduct a traffic calming assessment for the City of Hallandale Beach CRA. A summary of findings is provided below, with more detailed information about the analysis and recommendations provided in subsequent sections.

Traffic Calming Analysis Findings and Recommendations

Kimley-Horn and Associates, Inc. has been retained to perform an assessment of potential traffic calming methods to be used in the Hallandale Beach CRA. The community has expressed concern about vehicles speeding through the neighborhood as well as cut-through traffic as people try to find alternative routes to major roads like Hallandale Beach Boulevard and Dixie Highway.

Traffic calming measures address one or more of the following: reducing vehicle speeds, reducing vehicle volumes, and creating comfortable and dedicated space for people walking and biking. FHWA defines traffic calming as reducing automobile speeds or volumes, mainly using physical measures, to improve the quality of life in both residential and commercial areas and increase the safety and comfort of walking and bicycling. There is no "one-strategy cures all" treatment for traffic calming, and often it is applying several strategies to create the desired outcomes in a community.

For the Hallandale Beach CRA, several traffic calming strategies have been identified. They are identified using mapping analysis of where crashes occur and where vehicle volumes are highest in the neighborhood, field observations, and professional guidance from organizations like the National Association of City Transportation Officials (NACTO), the Federal Highway Administration (FHWA), and the Florida Department of Transportation (FDOT).

The traffic calming strategies have been reconciled with recently completed project and projects that are in various stages of design. The strategies identified are in addition to what is already programmed for design and construction within the CRA.

The traffic calming strategies are:

- Neighborhood Gateway Features
- New Sidewalks
- Green Bike Lanes
- Streetscapes
- Sidewalk Enhancements
- Intersection Enhancements
- Expanding Sidewalks

Implementing these strategies can address the safety needs identified during the assessment by reducing vehicle speeds, reducing vehicle volumes, and improving safety for all street users, particularly those walking and biking.



Study Area

The study area for this project consists of the Hallandale Beach CRA. It generally follows Interstate 95 to the west, Pembroke Road to the north, Northeast 14th Avenue to the east, and Southwest 11th Street to the south (*Figure 1*).

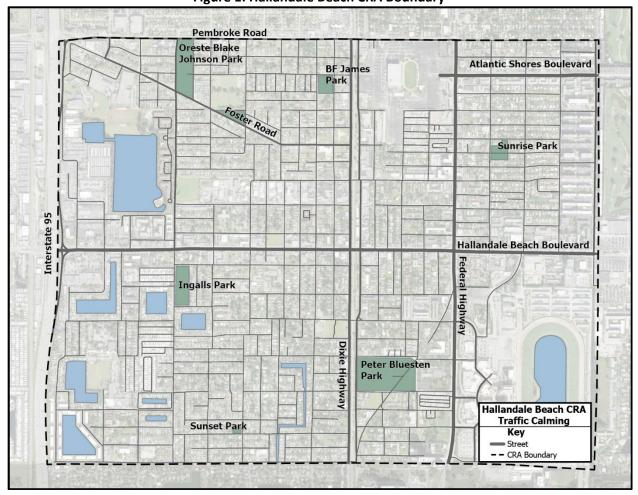


Figure 1: Hallandale Beach CRA Boundary



Data Collection and Methodology

Traffic Calming Data Collection and Analysis

Data for the assessment was collected from the following sources:

- Hallandale Beach CRA Project Data. Data for projects in design and construction phases were mapped and overlayed on the existing street network.
- Florida Department of Transportation State Safety Office GIS. Statewide database of crashes over multiple years. Crash locations for the past five years were analyzed for this project.
- Network Vehicular Volume Data from Replica. Replica is a third-party data platform that provides
 a variety of transportation, land use, and economic data sets. The Network Vehicular Volume data
 set uses anonymized cell phone data to estimate vehicle volumes across the roadway network for
 the United States. The network data for the area covered by the Hallandale CRA is used for this
 project.
- **Field Visit.** On Friday February 24, Kimley-Horn conducted an all-day field visit. Kimley-Horn employees rode bikes throughout the CRA. The purpose of the visit was to observe how people drive through the neighborhood, how easy and comfortable walking and biking is in the CRA and observe the physical conditions of the streets and traffic signals.

The data was mapped and overlayed on the existing street network to identify trends and the relationships between existing conditions, programmed projects, and identification of where needs still exist related to crash hotspots and where vehicle volumes are highest within the Hallandale Beach CRA.

The assessment excluded data from the major roads and focused on roadways classified as collectors and local streets. The data for major roads was reviewed to understand its relationship to the neighborhood street network, but they were not a primary focus for this assessment.



Traffic Calming Assessment Findings

The assessment consists of two phases. Phase 1 identified existing conditions where traffic calming can be most impactful. Phase 2 identified specific traffic calming strategies. When applied, the strategies can improve safety and reduce vehicle volumes and speeds in the Hallandale Beach CRA neighborhoods.

Phase 1: Existing Condition Findings

An analysis of the existing conditions found several roadway segments with higher vehicle volumes and several high crash intersections within the CRA boundary (*Figure 2*). The neighborhood routes with the highest vehicle volumes are also where most of the crashes occur. Additionally, most of the crash clusters are associated with intersections. Some but not all of the high crash intersections are signalized. The routes through the neighborhood with the highest vehicle volumes primarily provide direct connections between major roads. These routes are the most convenient and direct routes for people driving through the neighborhood. The recommendations associated with Phase 2 are based on these findings.

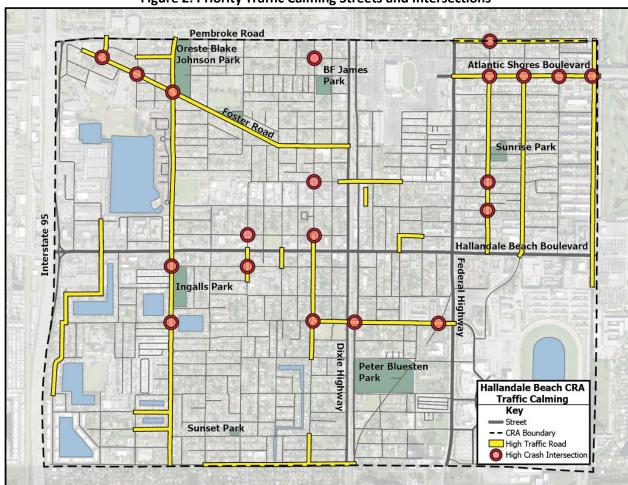


Figure 2: Priority Traffic Calming Streets and Intersections



Phase 2 Traffic Calming Strategies

Based on the Phase 1 findings, several traffic calming strategies are identified in Phase 2. The *Figure 3* map summarizes the type of traffic calming strategies identified and where they are recommended within the CRA. A summary of each type of strategy and why it is selected is provided below. Additionally, more detailed information about each strategy is provided as part of *Appendix A*.

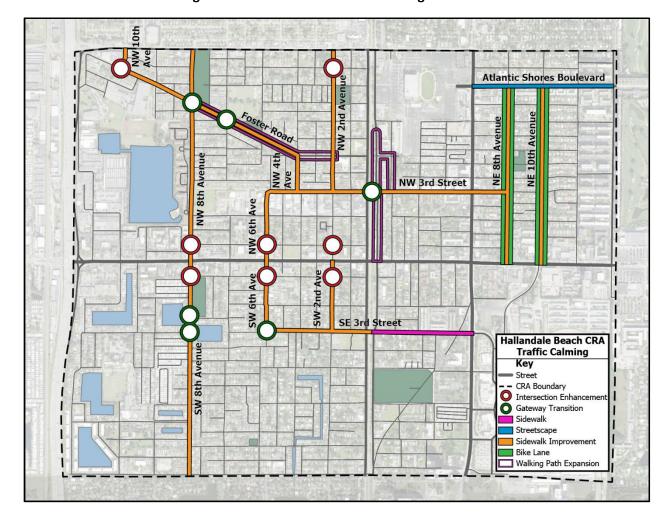


Figure 3: Recommended Traffic Calming Measures

Neighborhood Gateways

Neighborhood gateways are effective measures at defining transitions into primarily lower traffic residential areas. Neighborhood gates encourage reduced speeds in these neighborhoods and increase the visual appeal of neighborhoods and their streets. Neighborhood gateways come in a variety of forms. They can be implemented with pavement markings, medians, roundabouts, landscaping, and decorative signs. Examples and concepts for these treatments are provided in Appendix A.



Intersection Enhancements

Intersection enhancements improve mobility and safety for all users, including people walking, biking, and driving. Intersection enhancements come in variety of forms, including improved roadway markings, improved crosswalk markings, signal changes to make it easier for people walking to cross the intersection and for drivers to navigate through the intersection more safely, improved intersection sightlines, as well as features that enhance traffic flow.

Sidewalk Installation and Improvements

Sidewalks are a critical component of neighborhood streets. They make is safer and more comfortable for people walking to access destination. The priority sidewalk gap where no sidewalk exists today is along SE 3rd Street between Dixie Highway and US-1. This route provides an important connection between neighborhoods west of Dixie and commercial and civic destinations along US-1. The other sidewalk improve areas are streets where sidewalks can be widened or additional shade trees and separation from the roadway would make walking more comfortable and convenient.

Streetscaping

Streetscape improvements visually enhance a street with additional landscaping, widen sidewalks to create or expand dedicated space for people walking. Streetscape projects can also include roadway elements like bike lanes and on-street parking. When implemented, these streetscape elements give drivers visual ques to slow down. The location for streetscape changes is along Atlantic Shores Boulevard between US-1 and NE 14th Avenue. The street is auto-oriented with a wide roadway, significant on-street parking, limited shade, and narrow sidewalks. Narrowing the roadway and creating wider spaces for people walking and biking will slow vehicles down, improve safety, and encourage more people to walk and bike.

Green Bike Lanes

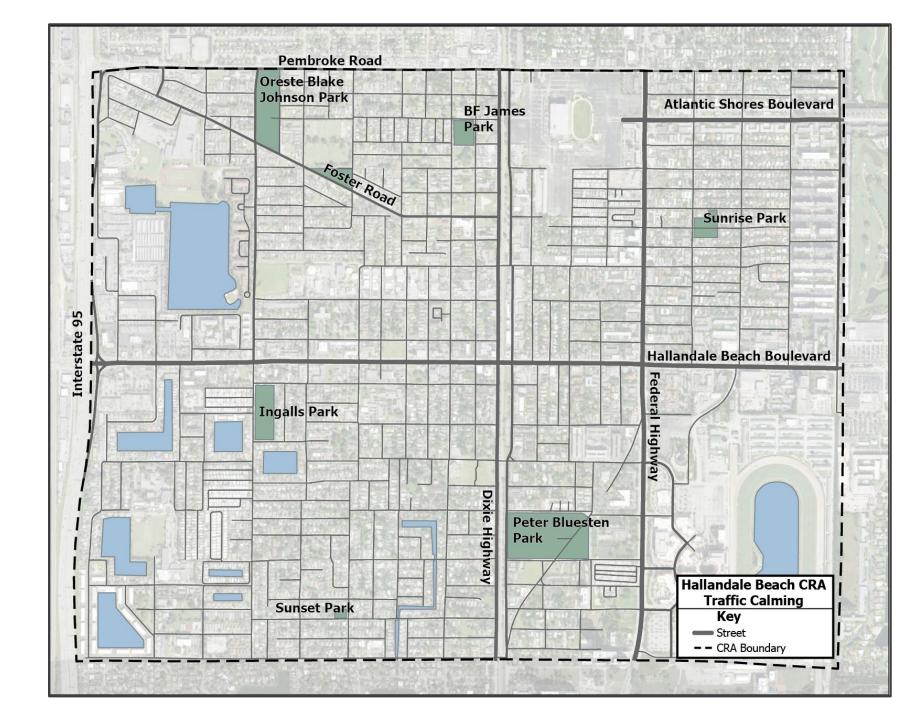
The painting of bike lanes with green paint can be a low-cost strategy to improve safety and calm traffic through a neighborhood. The one-way pair of NE 8th Avenue and NE 10th Avenue has bike lanes. People driving often drive in the bike lane, presumably thinking it is another travel lane. Green paint will help delineate that the bike lane is not a travel lane, discourage people from driving in the bike lane, and narrow how wide the roadway feels. The feeling of a narrower roadway will encourage people driving to go slower.



Appendix A: Traffic Calming Assessment Presentation

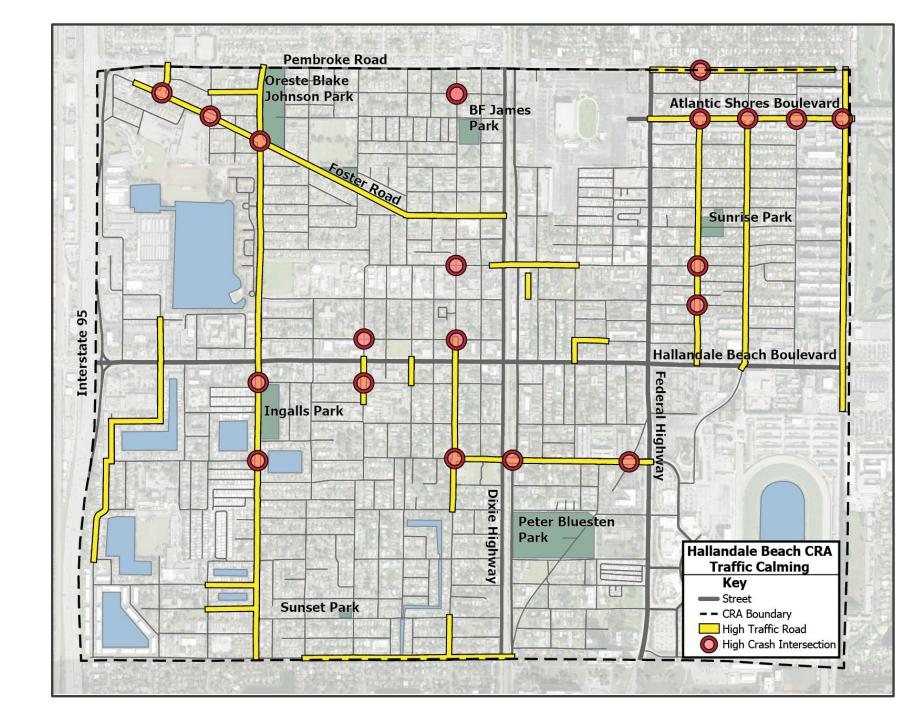
Study Area

The study area for the traffic calming assessment encompasses the entire Hallandale Beach CRA area.



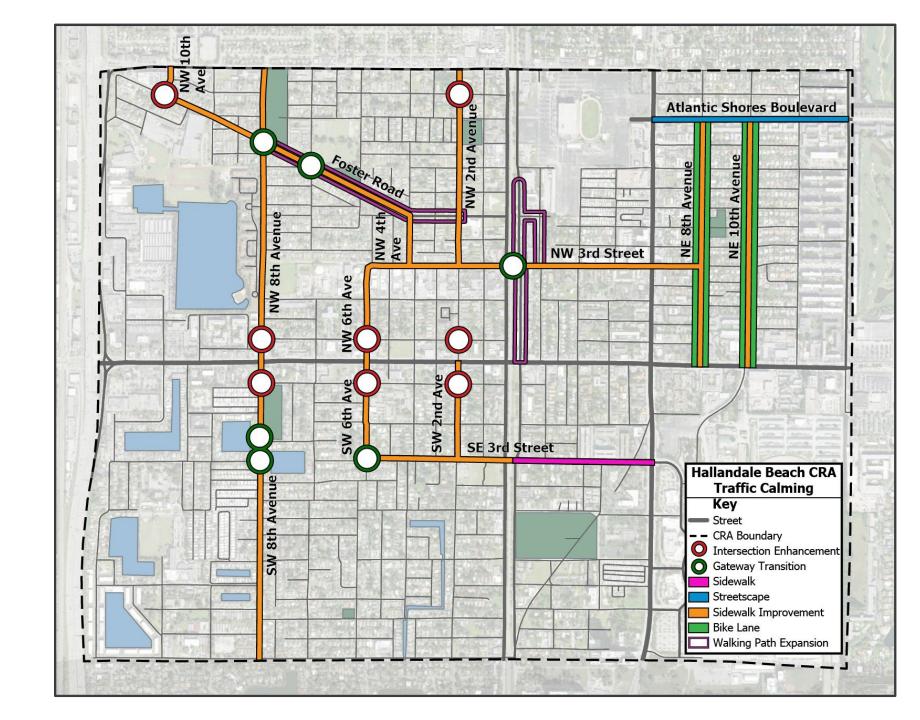
Traffic Calming Priority Areas

This map streets with the highest vehicle volumes in the CRA and intersections with the greatest frequency of crashes.



Traffic Calming Measures

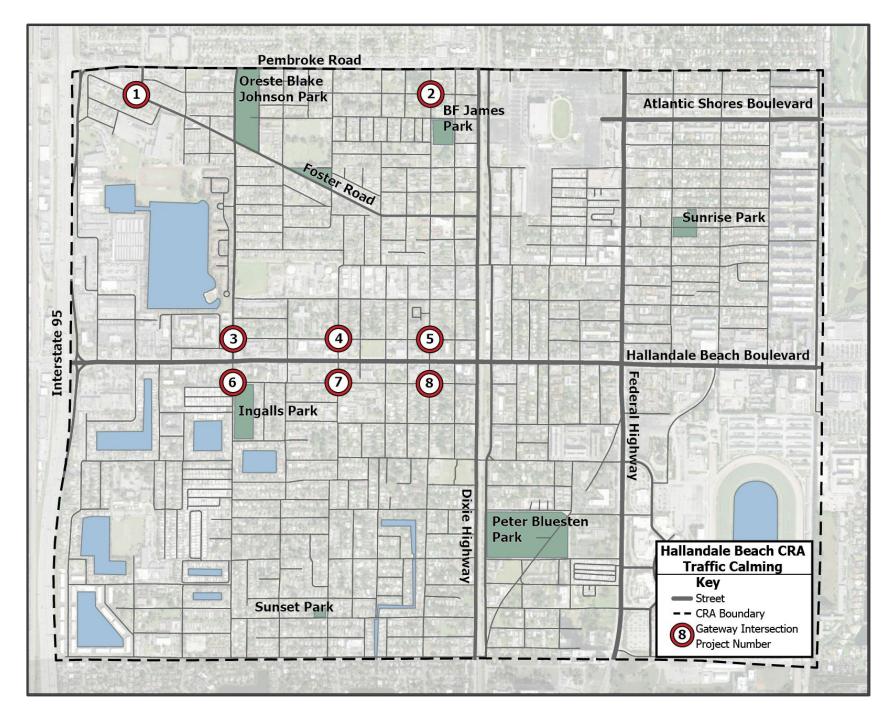
This map highlights the location of recommended traffic calming measures within the CRA.



Neighborhood Gateways

Neighborhood gateway intersections encourage reduced speeds and increase the visual appeal of neighborhoods and their streets.

Installation of neighborhood gateways typically require no right of way acquisition.



Examples of Neighborhood Gateways

Example from
Jupiter, Florida –
utilization of
stamped asphalt
and planted
medians to create
a gateway and
traffic calming
zone.





Examples of Neighborhood Gateways

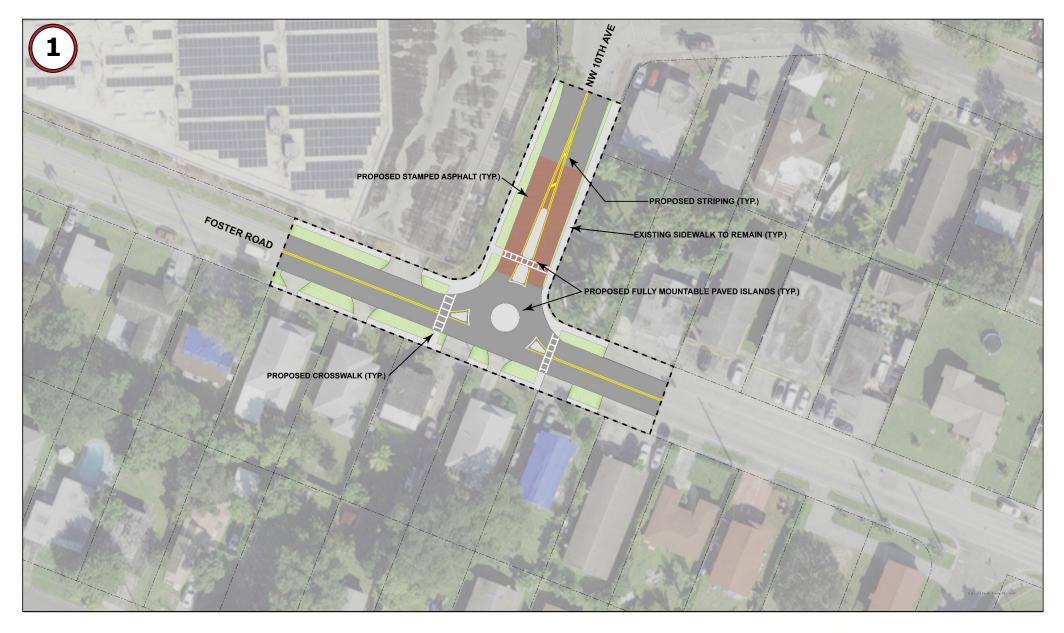
Example from
West Palm
Beach, Florida—
utilization of a
mini roundabout
with a planted
center island and
partially
mountable curb.



Examples of Neighborhood Gateways

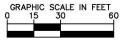
Example from Delray Beach, Florida— utilization of a mini roundabout with a planted center island and partially mountable curb, a partially mountable splitter island, additional curb plantings and clearly marked crosswalks.





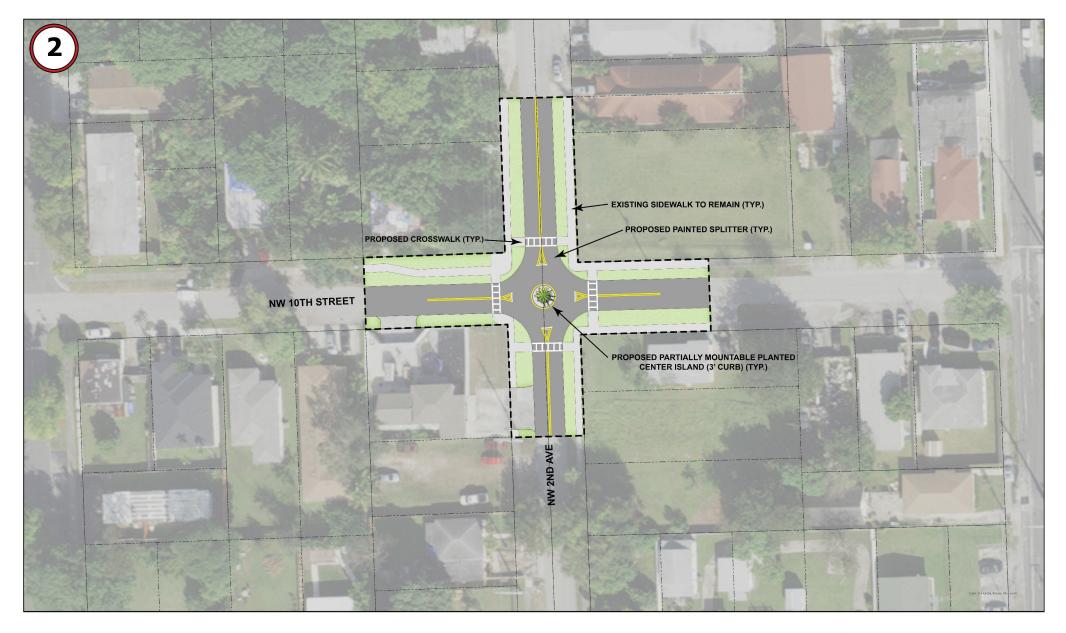






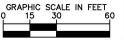








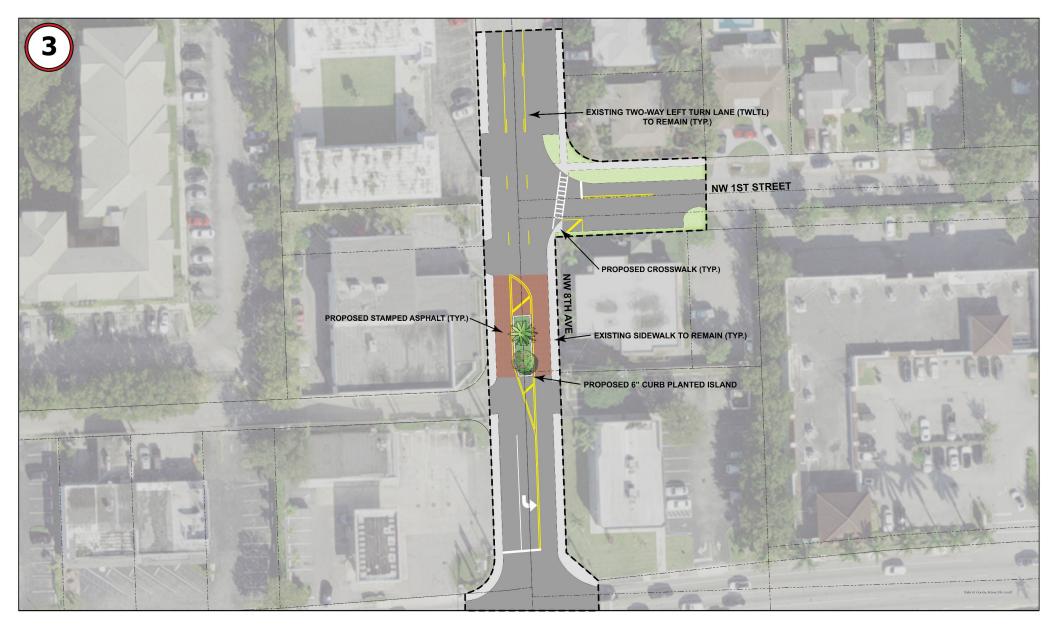






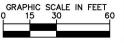








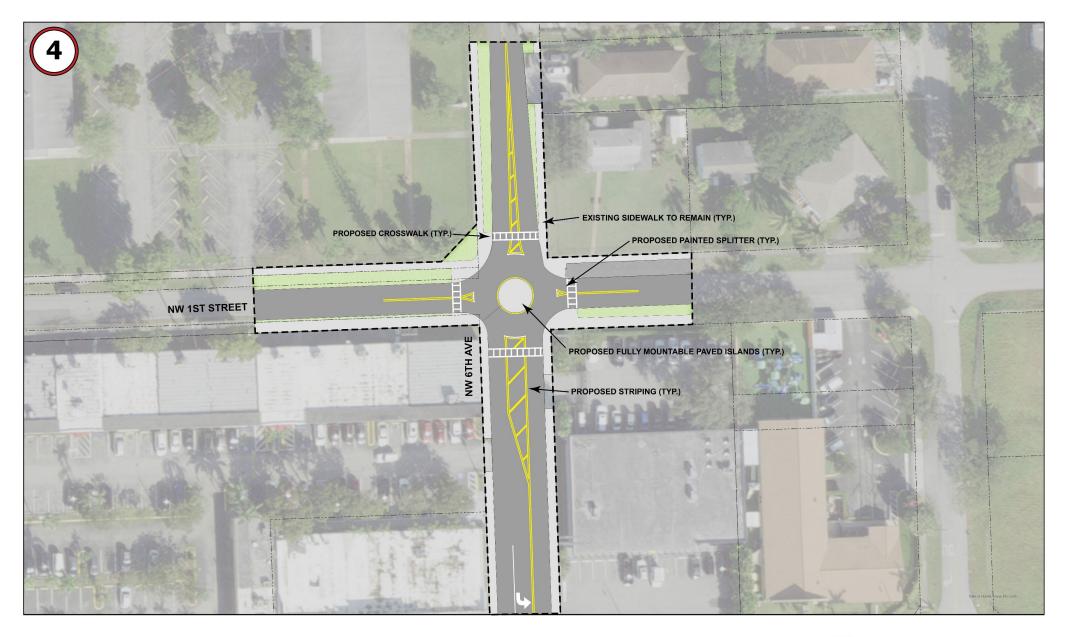






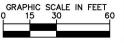








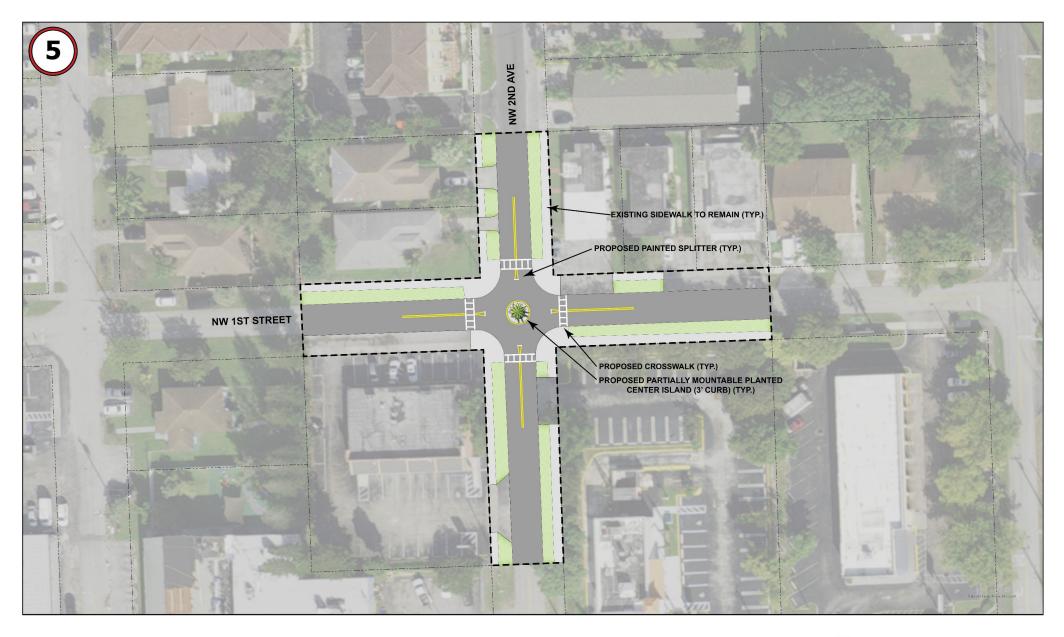






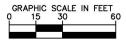








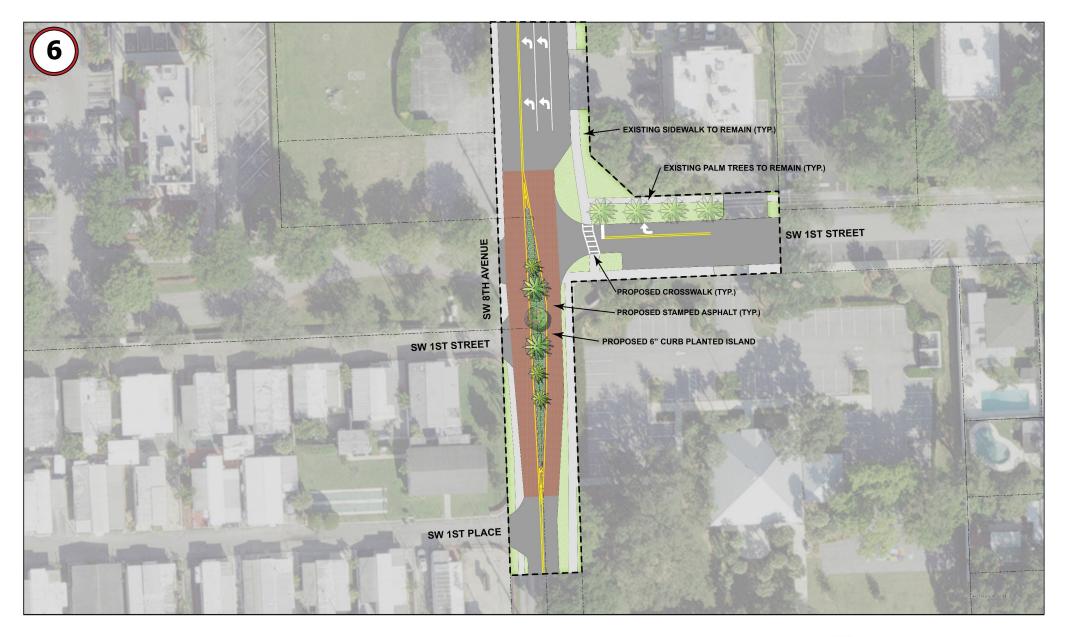






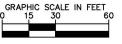






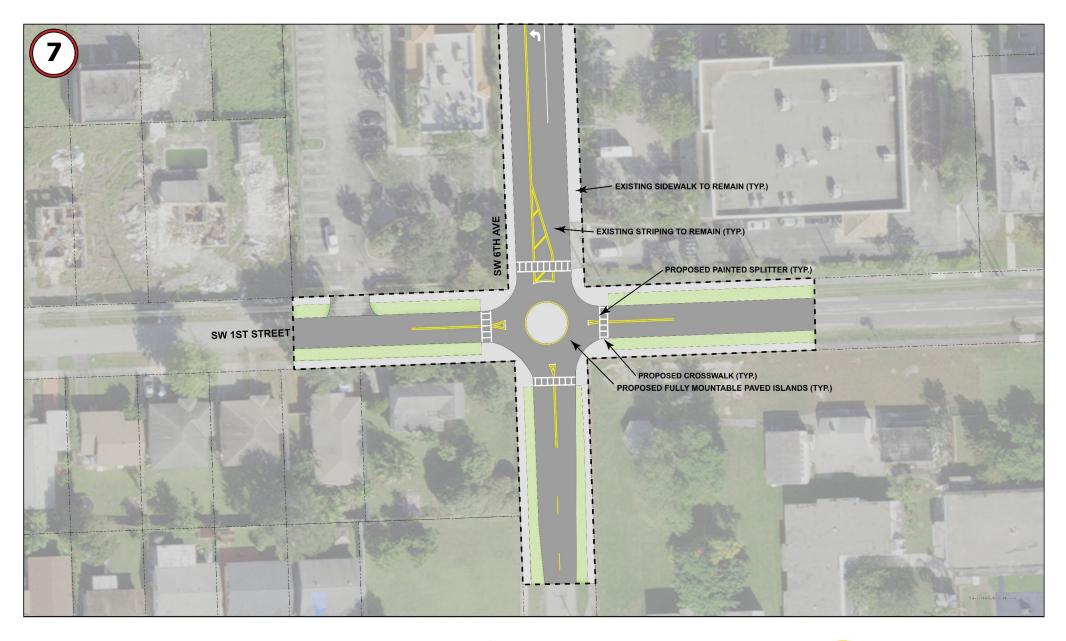






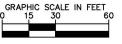














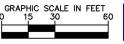












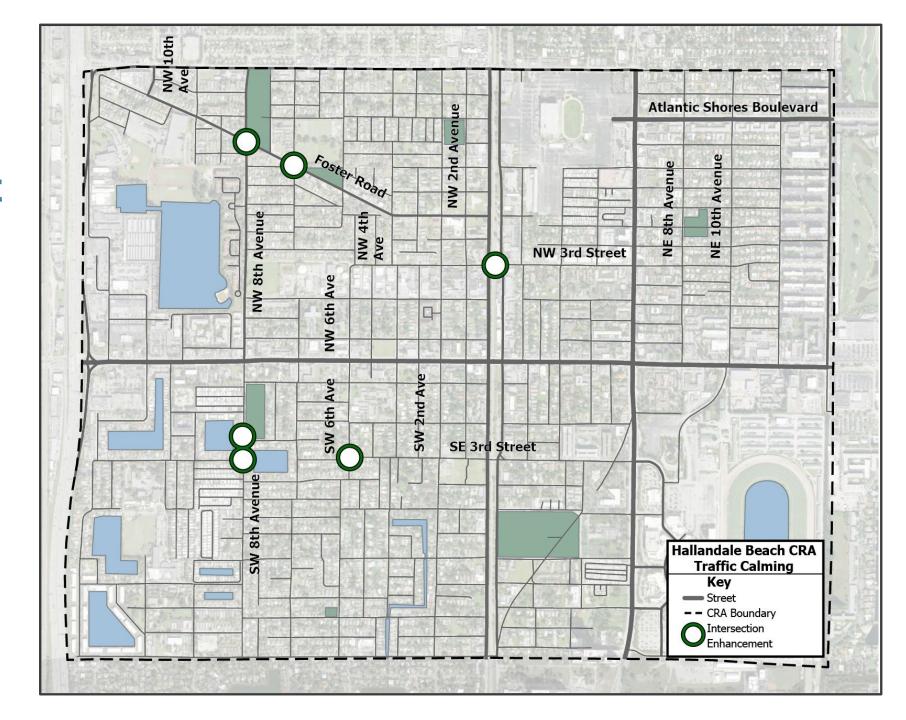






Intersection Enhancement

Intersection enhancements come in a variety of forms, including improving roadway markings, crosswalk markings, pedestrian warning signage, roadway sightlines, and traffic flow enhancements.



Examples of Intersection Enhancements





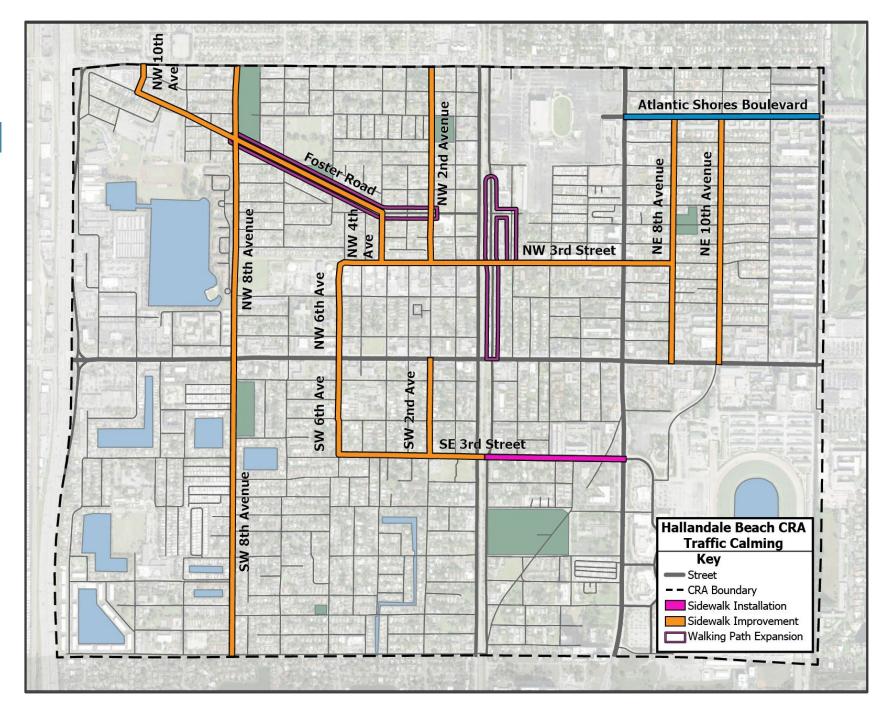




Sidewalk Installation and Improvement

Sidewalks enhance urban fabric and provide easy ways to expand pedestrian infrastructure without right of way acquisition.

Improved sidewalks, such as those on portions NW 3rd Street, better define urban spaces and improve pedestrian safety



Examples of Sidewalk Improvements



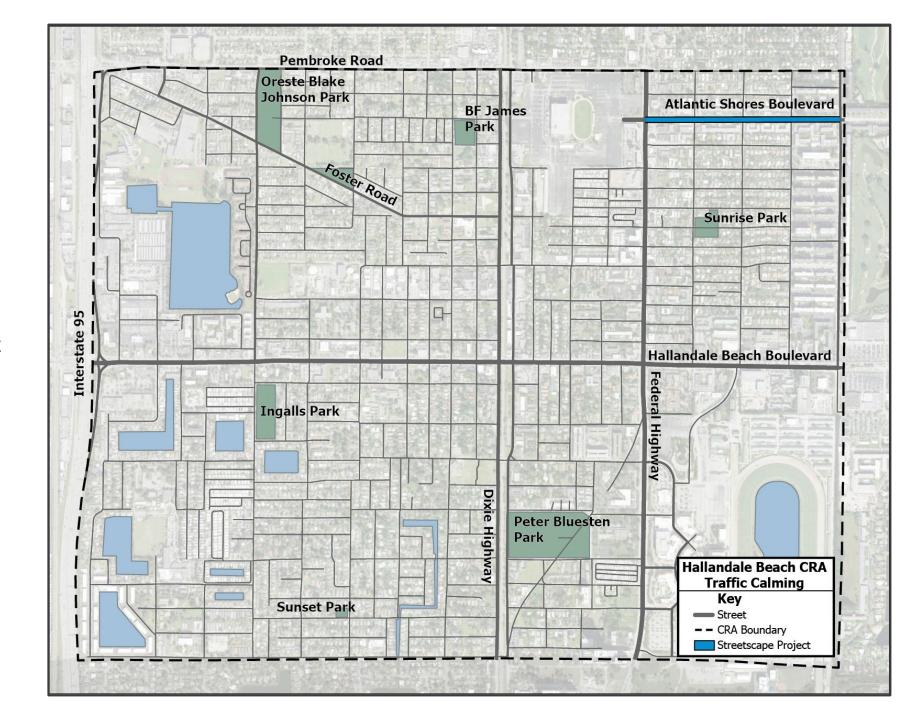






Streetscape: Atlantic Shores Boulevard

Atlantic Shores Boulevard has ample right of way to implement a complete street treatment, improving safety and mobility for all users.



Examples of Streetscape Projects



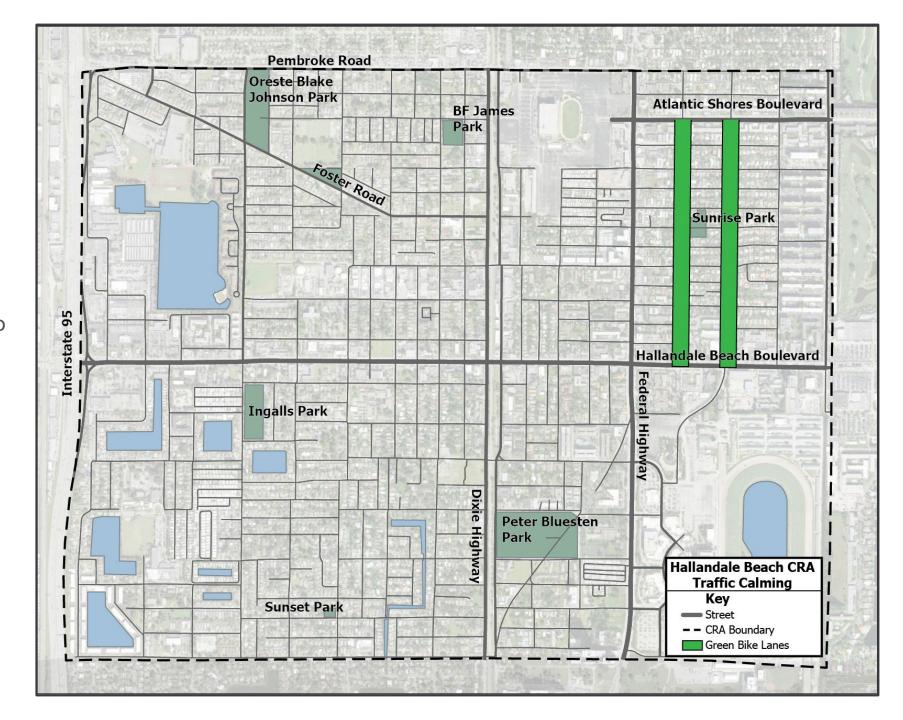






Green BikeLanes

Green bike lanes refer to painting bike lanes in roadways bright green in order to increase visibility of bike lanes for motorists and to better mark where bikes are supposed to travel for bicyclists.



Examples of Green Bike Lanes





