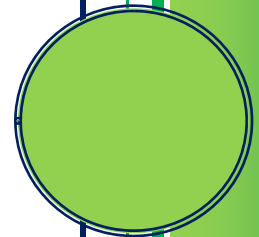




MIAMI-BEACH PEDESTRIAN PRIORITY ZONE STUDY – PHASE I

Technical Memorandums for Tasks 4-6

January 29, 2018



Miami-Beach Pedestrian Priority Zone Study (Tasks 4-6) – Phase I

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Attachments

Attachment 1:	Kick-off Meeting Minutes
Attachment 2:	Data Collection Summary Forms
Attachment 3:	List of Pictures Showing Short-Term Improvements
Attachment 4:	Crash Summaries – Maps of Parking, Hotel, transit, Places of Worship and pedestrian generators
Attachment 5:	Concept Plans and Preliminary Cost Estimates for 6 th Street
Attachment 6:	Concept Plans and Preliminary Cost Estimates for Meridian Avenue and Pennsylvania Avenue
Attachment 7:	Concept Plans and Preliminary Cost Estimates for Improved Pedestrian Pathway

MEMORANDUM

TO: Lynda Kompelien Westin, AICP
Transportation Manager
City of Miami Beach

COPIES TO: Levi K. Stewart, MSURP, Planning Analyst
City of Miami Beach
Heidi Siegel, AICP, Keith & Schnars
John P. Krane, P. E., Keith & Schnars
José Luis Rodríguez, P.E., Keith & Schnars

FROM: Fadi Emil Nassar, PhD., P.E., P.T.O.E, Keith & Schnars

DATE: January 29, 2018 (revised)

SUBJECT: Task 4 Documenting Existing Conditions
Task 5 Identifying Deficiencies
Task 6 Recommended Improvements
Task 8 Conceptual Designs
Miami Beach Pedestrian Priority Zone Feasibility Study
Keith & Schnars Project No. 18237.03

I. INTRODUCTION

This Technical Memorandum presents a summary of Task 4 Documenting Existing Conditions, Task 5 Identifying Deficiencies, Task 6 Recommended Improvements and Task 8 Conceptual Designs for the *Miami Beach Pedestrian Priority Zone Feasibility Study (PPZ)*.

II. STUDY OBJECTIVES

The two objectives of this pedestrian priority zone feasibility study are first to evaluate the feasibility of applying the Pedestrian Priority Zone (PPZ) as defined in the City Design Guidelines to the study area in South Miami Beach, and second to develop conceptual designs which implement PPZ concepts. The study area is depicted in **Figure 1** and is bordered by 16th Street to the north, S. Pointe Drive to the south, Alton Road to the west and Ocean Drive to the east. PPZs are areas where pedestrian focused design guidelines and standards apply on all streets. When implemented, PPZs create an integrated network of streets, pathways and transit hubs that support pedestrians. PPZs can also improve the quality of life and livability of an area by promoting affordable, healthy and environmentally sustainable transportation system. The PPZ in this study is defined broadly and not limited to the minimum requirement thresholds. All feasible improvements that will enhance the safety, comfort, and connectivity of pedestrians are addressed in this document including short term improvements that can be quickly implemented. The kick-off meeting minutes for this project are included in **Attachment 1**.

Figure 1
Miami Beach PPZ Study Area



III. DATA COLLECTION

The work effort included collecting data and information from various sources including:

1. Available (As Built) roadway plans / surveys / right-of-way plans / cross sections / utility plans;
2. Existing signal timings;
3. Available traffic and pedestrian counts;
4. Crash data;
5. Existing and future land use maps;
6. Documented public input;
7. City, County and FDOT guidelines, policies and regulations;
8. City transportation and bicycle master plans;
9. Transit services and bus stops;
10. Bike network;
11. Previous transportation studies; and
12. Location of parking facilities, places of public interest, worship centers and commercial activity.

A separate memorandum has been prepared providing additional information on collected data and reviewed documents.

IV. EXISTING CONDITIONS

Collected data and documents in addition to extensive field reviews and measurements were used to document existing conditions as related to pedestrians. The general and specific observations related to existing pedestrian conditions throughout the study area are presented next. Detailed information for each road segment is provided in the data collection sheets provided in **Attachment 2**. Additional figures illustrating existing conditions are included in the Deficiency section of the report as they also illustrate variations from PPZ standards.

General Observations:

A. Sidewalks

1. All road segments have sidewalks.
2. Sidewalks generally aligned with crosswalks.
3. Most sidewalks are textured concrete, paver blocks used at some locations south of 5th Street.
4. Most sidewalks are 5-foot wide, except for Alton Road, 5th Street, Washington Avenue, Collins Avenue, Ocean Drive and the area south of 5th Street which have sidewalks 6 to 10 feet wide.

B. Crosswalks

1. Crosswalks are generally provided at all intersections.
2. Crosswalks with texture (paver blocks or stamped concrete) are constructed along Collins Avenue, Alton Road South of 4th Street, Washington Avenue and Ocean Boulevard south of 5th Street, and the east-west approaches of 5th Street intersections.

3. High emphasis crosswalks are provided along Alton Road, Espanola Way, Washington Avenue and Ocean Drive north of 5th Street, and the north-south approaches of 5th Street intersections.

C. Bike Lanes

1. Green bike lanes are provided on 16th Street, Alton Road south of 4th Street, S. Pointe Drive and Ocean Drive south of 5th Street.
2. Bike lanes marked with a diamond sign are provided on 5th Avenue and Euclid Avenue.
3. Sharrow lanes (shared) are provided on Alton Road, Washington Avenue and Collins Avenue. It should be noted that sharrow lanes have not been proven to enhance cyclist safety.

D. Posted Speed

The desirable posted speed for a PPZ is 25 mph. The only road within the study area with a posted speed of 25 mph, excluding school zones, is 3rd Street. The remaining streets have a posted speed of 30 mph except for Alton Road and Washington Drive where the speed is 35 mph north of 5th Street. It should be noted that Washington Avenue had a posted speed of 25 mph south of 5th Street, however, the posted speed was recently changed to 30 mph. Posted speeds in the study area are summarized below.

1. Alton Road & Washington Avenue north of 5th Street: 35 MPH.
2. Other roads: assumed 30 MPH (except for school zones).
3. Posted speed sign missing from most road sections.
4. No posted speed signs on all east-west roads except 3rd Street and 5th Street.
5. No posted speed on Jefferson Avenue, Meridian Avenue, Euclid Avenue and Drexel Avenue.
6. School zone speed (15 MPH) on 2nd Street, 4th Street, 14th Street, Euclid and Drexel Avenues.

E. Traffic Control

Most intersections operate with a 2-way or 4-way stop sign control except for Alton Road, Washington Avenue, Collins Avenue, 16th Street, 15th Street, 11th Street and 5th Street that are signalized. Meridian Avenue and Ocean Drive are partially signalized. Unsignalized intersections are predominately 4-way stops except for the one-way northbound Collins Court and Ocean Court alleyways which have stop signs in the northbound direction.

F. Signal Timing and Pedestrian Phases

Traffic signals within the study area operate at various cycles. Alton Road north of 5th Street operates at 150 sec cycles in both the AM and PM peak periods. 5th Street operates at a 180 sec cycle in the AM and 140 sec cycle in the PM peak period. Washington Avenue signal cycle lengths are mostly 100 sec during the AM and 110 sec during PM peak periods. Collins Avenue signals operate mostly at 100 sec during both the AM and PM peak periods. Most of the remaining signals are fully actuated with variable cycle length.

All intersections have a pedestrian phase with an adequate Walk/Don't Walk phase based on a walking speed of 3 feet per second. Most locations have a push button to activate the pedestrian phase and at some locations an audible signal to assist visually impaired individuals. The pedestrian phase at signals along 5th Street has no minimum recall mode and the pedestrian phase is skipped if the push button is not activated.

G. Street Lighting

All road segments are lighted. Light poles generally provide adequate illumination for the road segments. On the west side of Ocean Drive, lights are attached to the trees instead of light posts. The majority of light posts consist of 3 types:

1. Typical bent mast arm.
2. I-type post.
3. Modern curved style post used on Collins Avenue.

The commercial roads from Washington Avenue to Ocean Drive generally have excellent lighting conditions generated by both street lights and commercial businesses. The lighting conditions along Collins Avenue where unique light posts are installed is good but not as great as the lighting conditions along Washington Avenue, Ocean Drive and S. Pointe Drive.

The area located south of 5th Street generally has the new type of light post with very good lighting conditions. 2nd and 3rd Streets have trees that slightly diminish mid-block lighting but is still good. Other streets have mainly palm trees that do not obstruct light.

The area north of 5th Street and west of Washington Avenue has mostly a traditional lighting system that is good but less effective than the new style light post found south of 5th Street. Furthermore, the lighting on the roads parallel to the park (Michigan Avenue and Meridian Avenue) are partially obstructed by large trees. It was observed that the new light posts are installed on improved roads such as 11th Street next to the Flamingo Park. Illustrative pictures taken at night and grading of lighting conditions are provided in the Deficiency section of this memorandum.

H. Shading

Field visits were conducted and Google maps were reviewed to estimate the percent of shade for each section of roads within the study area. The primary source of shade is trees. Other sources include awnings and building shades. Palm trees are the predominant landscaping tree and the main source of shade. Large trees are primarily located along Meridian Avenue and Michigan Avenue adjacent to the Flamingo Park. Quite a few large trees were recently damaged or toppled by Hurricane Irma. Field notes were adjusted assuming most of the toppled trees will be replaced to maintain the tree canopy. The field sheets provided in **Attachment 2** include the percent shade and type of shade for each roadway segment and per direction of travel.

I. Pedestrian Crashes

Vehicle and pedestrian crashes were obtained for the study area for the years 2012-2016. **Attachment 4** includes a graphical summary of crash data. Pedestrian crashes were spread out throughout the study area with no major cluster of accidents. The highest concentration of pedestrian crashes was along Washington Avenue, Collins Avenue, and Alton Road between 11th Street and 16th Street.

Individual Roadways:

The roadway network in the South Beach study area is a NS/EW grid-pattern system. There are 11 north-south streets/avenues extending from South Pointe Drive north to 16th Street, a distance of approximately 1.5 miles.

Likewise, there are 18 streets extending from Alton Road in the west to Collins Avenue in the east, with lengths varying from 0.3 Mile to 0.75 mile.

In general, all of the study area streets have sidewalks along both sides of the roadways, with ADA-like treatments at the intersections and crosswalks. Lighting is provided along all of the streets although some lighting units may be obscured due to large trees and other landscaping features.

While the bulk of the study area is comprised of low-rise residential buildings located within the core areas of the Flamingo and South Pointe neighborhoods, the commercial, office, entertainment, and services are located primarily along the periphery limits of the neighborhoods along Alton Road, Washington Avenue, Collins Avenue, Ocean Drive, and 5th Street.

An interesting feature of the area is that, with few exceptions, the residential and other developments front the north-south streets, and thus provide the main pedestrian accesses for the local developments and services.

Almost all of the streets within both neighborhoods are characterized by continuous curb parking which is regulated as resident parking zones (primarily between Alton Road and Washington Avenue.

Within the Flamingo Neighborhood between 5th Street and 16th Street (south-north) and Ocean Drive and Alton Road (east to west) and west of Washington Avenue, the streets traverse mostly low-rise residential apartment buildings. A few single family homes are located at the western sector near Flamingo Park. East of Washington Avenue, besides some low-rise apartment buildings, the streets serve multi-use facilities, hotels, public service facilities, the beach corridor, and entertainment centers.

Likewise, within the South Pointe Neighborhood between South Pointe Drive and 5th Street (south-north) and west of Washington Avenue, the streets traverse mostly residential areas. The streets west of Washington Avenue, and within the Flamingo Neighborhood, between South Pointe Drive and 5th Street, serve mostly low-rise residential apartment buildings. The high-rise apartments and condos are located either west of Alton Road or south of South Pointe Drive.

East of Washington Avenue, besides some middle to high-rise apartment buildings and hotels, the streets serve multi-use facilities, public service facilities, and entertainment centers.

The east-west streets west of Washington Avenue tend to have narrower sidewalks (5 feet or less), higher instances of obstructions, about the same degree of shading than those east of Washington Avenue.

Shading along the east-west streets is more prominent along the south sides of the streets than on the north side since the buildings add to shade due to the position of the sun.

South Pointe Drive

South Pointe Drive provides some of the widest and most spacious sidewalks (6 to 10 feet) and most enhanced pedestrian crossings in South Beach, as well as green bike lanes. Since the street is four lanes wide (11 foot lanes plus parking) with a median, pedestrian crossings are longer. Although it is a multi-lane road which intersects major north-south streets like Washington Avenue and Collins Drive, it has no signalized intersections.

The street serves a mixture of high-rise residential and commercial uses and provides direct access to the beach. Sporadic shading is provided by trees and buildings along the north side of the street and by tall palms and large buildings along the south side of the street. Very few sidewalk obstructions are found along either side of the street.

1st Street

The street serves a mixture of high-rise residential and commercial uses, including hotels, and, like many of the east-west streets, provides direct access to the beach. The street has no bike lanes.

West of Washington Avenue, 1st Street has one travel lane in each direction and a median. The latter is unique in that it features parking provided along both sides of the median in addition to regular curb parking. This creates longer pedestrian crossings. The sidewalks are wide (>6 feet) and have few obstructions along either side of the street. Shading along this segment is provided mostly by trees and awnings and it tends to be effective.

East of Washington Avenue, the street narrows to the typical two-way, two-lane with parking configuration found in South Beach. However, sidewalks are wide (> 6 feet) but have a greater number of obstructions. Shading along this segment is provided by trees and it tends to be less effective.

2nd Street

West of Washington Avenue, 2nd Street serves mostly low-rise residential buildings, some more recent than others. The street has no bike lanes. The sidewalk widths are typical at 6 to 7 feet. Although there are few obstructions along the south side of the street, the north side has a number of light posts and other features that significantly reduce walkability. Shading along this segment is provided mostly by trees.

East of Washington Avenue, 2nd Street serves a mix of residential, commercial, and public service facilities. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are narrower at 5 to 5.5 feet. There are fewer obstructions than those found west of Washington Avenue. Shading along this segment is provided mostly by trees.

3rd Street

West of Washington Avenue, 3rd Street serves low-rise residential buildings. The street has no bike lanes. The sidewalk widths are wide at 7 feet but have a greater degree of obstructions which reduces the effective sidewalk widths to less than 5 feet in many points. Shading along this segment is provided mostly by trees with good coverage along the south side but poor coverage along the north side.

East of Washington Avenue, 3rd Street serves a mostly low-rise residential facilities and the Jewish Museum of Florida. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wide at 7 feet but have a greater degree of obstructions, in particular the north side of the street, which reduces the effective sidewalk widths to less than 5 feet in many points. Shading along this segment is provided mostly by palm trees (shading less than 50%).

4th Street

West of Washington Avenue, 4th Street serves a mix of uses including low-rise residential buildings, offices, commercial, and the South Pointe Elementary School. The street has no bike lanes. The sidewalk widths are about 6 feet but have a high degree of obstruction along both sides of the street which reduces the effective sidewalk widths to less than 4 feet in many points. Shading along this segment is provided mostly by palm trees with poor coverage (< 35% along the south side and < 50% along the north side).

East of Washington Avenue, 4th Street serves a mostly low-rise residential area and a parking facility. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wide at 7 feet but have a greater degree of obstructions along both sides of the street, which reduces the effective sidewalk widths to less than 5 feet in many points. Shading along this segment is sporadic provided mostly by palm trees and it tends to be ineffective (overall shade coverage about 10% to 20%).

5th Street (SR A1A)

West of Washington Avenue, 6th Street serves exclusively commercial uses. The street has bike lanes. The sidewalk widths are some of South Beach's most spacious sidewalks with widths ranging from 11 feet to 28 feet with minimal obstructions. Shading along this segment is provided mostly by trees with moderate coverage (40% to 60%) along both sides of the street.

East of Washington Avenue, 5th Street serves exclusively commercial uses. The street has diamond bike lanes up to Collins Avenue. The sidewalk widths are some of South Beach's most spacious sidewalks with widths ranging from 10 feet to 32 feet with minimal obstructions. Shading along this segment is provided by trees with moderate coverage (40% to 70%).

6th Street (Flamingo)

West of Washington Avenue, 6th Street serves a mix of uses including low-rise residential buildings and commercial. The street has no bike lanes. The sidewalk widths are about 5 feet but have a high degree of

obstructions along both sides of the street which reduces the effective sidewalk widths to less than 4 feet in many points. Shading along this segment is provided mostly by trees with poor coverage (<20% along both sides of the street).

East of Washington Avenue, 6th Street serves mostly low-rise residential building and some commercial. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are about 5 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to about 3 feet in many points. Shading along this segment is provided by a combination of trees, awnings, and adjacent buildings resulting in an ineffective coverage ranging from 10% to 40%.

7th Street (Flamingo)

West of Washington Avenue, 7th Street serves primarily low-rise residential uses with mixed uses nearest Alton Road. The street has no bike lanes. The sidewalk widths are about 5 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to 4 feet or less at many points. Shading along this segment is provided mostly by palm trees and some medium sized shade trees with poor coverage (<20%) along both sides of the street.

East of Washington Avenue, 7th Street serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to less than 5 feet at various locations. Shading along this segment is provided by a combination of palm trees and adjacent buildings resulting in an uneven and ineffective coverage ranging from 10% to 50%.

8th Street (Flamingo)

West of Washington Avenue, 8th Street serves primarily low-rise residential uses with mixed uses nearest to Alton Road. The street has no bike lanes. The sidewalk widths are about 5 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to 4 feet or less at many points. Shading along this segment is provided mostly by trees with poor coverage (<30%) along both sides of the street.

East of Washington Avenue, 8th Street serves mostly commercial uses. It operates one-way westbound from Ocean Drive to Washington Avenue. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 to 8 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to less than 5 feet at various locations. Shading along this segment is provided by a combination of trees and adjacent buildings resulting in an uneven and ineffective coverage ranging from 10% to 60% along the north side and from 10% to 50% along the south side.

9th Street (Flamingo)

West of Washington Avenue, 9th Street serves primarily low-rise residential uses with mixed uses near Alton Road. The street has no bike lanes. The sidewalk widths are about 5 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to less than 4 feet at many points. Shading along this segment is provided mostly by trees with poor coverage (from 5% to less than 30%) along both sides of the street.

East of Washington Avenue, 9th Street serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 to 8 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to about 5 feet at various locations. Shading along this segment is provided by a combination of trees and adjacent buildings resulting in an uneven and ineffective coverage ranging from practically 0% to 15%.

10th Street (Flamingo)

West of Washington Avenue, 10th Street serves primarily low-rise residential uses with mixed uses near Alton Road. The street has no bike lanes. The sidewalk widths are about 5 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to less than 4 feet at several points. Shading along this segment is provided mostly by trees with poor coverage (<20%) along both sides of the street.

East of Washington Avenue, 10th Street serves mostly mixed residential and commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 to 8 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to about 5 feet at various locations. Shading along this segment is provided by a combination of trees and adjacent buildings resulting in an uneven and ineffective coverage of about 10%.

11th Street (Flamingo)

Between Alton Road and Meridian Avenue, 11th Street borders the southern limit of Flamingo Park. The south side of the street is primarily low-rise residential. East of Meridian Avenue to Washington Avenue, the adjacent land uses are primarily low-rise residential. The street has no bike lanes.

The sidewalk widths are about 5 feet except for the recently constructed segment between Jefferson and Meridian Avenues which has a 10 foot sidewalk. The rest of the sidewalks have a number of obstructions along both sides of the street which reduces the effective sidewalk widths from 3 feet to 4 feet at several points. Shading along this segment is provided mostly by palm and shade trees with poor coverage (<25%) along both sides of the street.

East of Washington Avenue, 11th Street serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths

are wider averaging about 7 to 8 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to about 4 feet at various locations. Shading along this segment is provided by a combination of trees, awnings, and adjacent buildings resulting in extreme and uneven shading from 10% to 85% along the north side and from 5% to 25% along the south side. .

12th Street (Flamingo)

The two block segment of 12th Street between Alton Road and Michigan Avenue borders the northern limit of Flamingo Park. The north side of the street is occupied by single family homes. The street has no bike lanes. At Michigan Avenue, the sidewalks connect with the Flamingo Park walkways. The sidewalk widths are about 5 feet with a number of obstructions along both sides of the street which reduces the effective sidewalk widths to about 4 feet at several points. Shading along this segment is limited to trees which provide uneven shade coverage (less than 60%).

Between Meridian Avenue and Washington Avenue, the prevailing land use is low-rise residential. The street has no bike lanes. The sidewalk widths are about 5 feet with a number of obstructions along both sides of the street which reduces the effective sidewalk widths to about 3.5 to 4 feet at several points. Shading along this segment is provided mostly by trees and buildings with moderate but uneven coverage (20% to 70%) along both sides of the street.

East of Washington Avenue, 12th Street serves mostly mixed residential and commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to about 4 feet at various locations. Shading along this segment is provided by a combination of trees, awnings, and adjacent buildings resulting in poor shading along both sides of the street (coverage of 15% to 30%).

13th Street (Flamingo)

The two block segment of 13th Street between Alton Road and Michigan Avenue is occupied by single family homes. The street has no bike lanes. At Michigan Avenue, the sidewalks connect with the main Flamingo Park walkway which traverse the park exiting at Meridian Avenue. The sidewalk widths are about 4 feet with little or no major obstructions along both sides of the street. Shading along this segment is limited to trees which provide uneven shade coverage (between 10% and 50%).

Between Meridian Avenue and Washington Avenue, the prevailing adjacent land use is low-rise residential. The street has no bike lanes. The sidewalk widths are about 5 feet with a number of obstructions along both sides of the street which reduces the effective sidewalk widths to about 4 feet at several points. Shading along this segment is provided mostly by trees and buildings with moderate but uneven coverage (5% to 50%) along both sides of the street.

East of Washington Avenue, 13th Street serves mostly mixed residential and commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 7 feet with few obstructions along both sides of the street.

Shading along this segment is provided by a combination of trees, awnings, and adjacent buildings resulting in poor shading along both sides of the street (coverage of 10% to 50%).

14th Street (Flamingo)

The two block segment of 14th Street between Alton Road and Michigan Avenue is occupied by single family homes. The street has no bike lanes. The sidewalk widths are about 4 feet with some obstructions along both sides of the street which tend to reduce the effective widths to 3.5 feet. Shading along this segment is limited to trees which provide uneven shade coverage (between 10% and 30%).

Between Meridian Avenue and Washington Avenue, the prevailing adjacent land use is low-rise residential with a school between Drexel Avenue and Washington Avenue. . The street has no bike lanes. The sidewalk widths are about 5 feet with a number of obstructions along both sides of the street which reduces the effective sidewalk widths to about 3 to 3.5 feet at several points. Shading along this segment is provided mostly by trees and buildings with poor and uneven coverage (10% to 40%) along both sides of the street.

East of Washington Avenue, 14th Street serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider than average up to 9 feet with few major obstructions. Shading along this segment is provided by a combination of trees, awnings, and adjacent buildings resulting in poor shading along both sides of the street (coverage of 0% to 20%).

Española Way (Flamingo)

Between Jefferson Avenue and Meridian Avenue, Española Way is a local residential street serving single family homes. The sidewalks are very narrow at 4 feet. Shading is provided by trees and is moderate (20%-40% coverage). There are no bike lanes.

Between Meridian Avenue and Pennsylvania Avenue, Española Way serves low-rise residences. Traffic flow is one-way westbound. The sidewalks are very narrow at 4 feet. Shading is provided by trees and is moderate (20%-40% coverage)

Between Pennsylvania Avenue and Drexel Avenue, Española Way serves commercial and school uses. Traffic flow is one-way westbound. The sidewalk widths vary from 4 to 12 feet and have some obstacles that narrow the sidewalks to 3 feet at a few points. Shading is provided by trees, awnings, and buildings and is moderate to good (60%-80% coverage). The segment between Drexel Avenue and Washington Avenue is a pedestrian zone with shops and restaurants. Shading is excellent as a result of effective landscaping.

East of Washington Avenue, Española Way operates as a two-way street and serves commercial uses. The street has no bike lanes. The sidewalk widths are very wide (10 feet) and have little or no obstructions. Shading along this segment is provided by a combination of trees and adjacent buildings resulting in moderate shading (50%).

15th Street (Flamingo)

West of Washington Avenue, 15th Street serves primarily mixed low-rise residential commercial uses with mixed uses nearest Alton Road. The street has no bike lanes. The sidewalk widths are about 5 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to 4 feet or less at many points. Shading along this segment is provided mostly by trees with low to moderate coverage (5% to 40%) along both sides of the street.

East of Washington Avenue, 15th Street is one block long and serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk widths are wider averaging about 8 feet but have a high degree of obstructions along both sides of the street which reduces the effective sidewalk widths to about 5 feet at various locations. Shading along this segment is provided by trees with coverage of 60% to 70%.

16th Street (Flamingo)

West of Washington Avenue, 16th Street serves primarily mixed low-rise residential commercial uses with commercial uses nearest Alton Road and Washington Avenue. The street has green bike lanes between Alton Road and Washington Avenue. The sidewalk widths are about 5 feet but have a number of obstructions along both sides of the street which reduces the effective sidewalk widths to 4 feet or less at many points. The widest sidewalk sections are found nearest Alton Road and Washington Avenue (9 to 10 feet). Shading along this segment is provided mostly by trees and some awnings with low to moderate coverage (5% to 40%) along both sides of the street.

East of Washington Avenue, 16th Street is one block long and serves mostly commercial uses. The street serves as a direct pedestrian access to the beach east of Ocean Drive. The street has no bike lanes. The sidewalk width along the north side is 5 feet but with some obstacles, the effective width is reduced to about 4 feet. The sidewalk width along the south side is 10 feet with a small number of obstacles that do not affecting walkability. Shading along this segment is provided by trees, awnings, and buildings with a high degree of coverage (50% to 70%).

Alton Road (SR 907)

South of 5th Street, Alton Road serves a number of mixed high-rise residential, commercial and public school facilities. The street has green bike lanes. The sidewalk widths range from 6 to 15 feet with little or no major obstructions. Shading along this segment is provided by a combination of trees and buildings with low to moderate coverage (20% to 70%) along both sides of the street.

North of 5th Street, Alton Road serves exclusively commercial uses. The street has narrow lanes. The sidewalk widths range from 6 feet to 15 feet with little or no major obstructions. Shading along this segment is provided mostly by trees, awnings, and buildings with low to moderate coverage (0% to 40%) along both sides of the street.

Lenox Avenue

South of 15th Street, Lenox Avenue extends for only one block to 4th Street serving commercial uses. The sidewalk widths are 6 feet with little obstruction. Between 5th and 11th Streets, Lenox Avenue serves a mix of low-rise residential and commercial uses. The largest commercial use is the 5th and Alton retail center which includes a Publix Supermarket and a Best Buy, among others. The street has no bike lanes.

Between 5th and 6th Streets the sidewalks are 7 feet on the west side and 5 feet along the east side, both sides with minor obstacles. North of 6th Street, the sidewalks are 5 feet with minor obstacles that do not detract from its effectiveness. Shading along this segment is provided mostly by large trees with low to moderate coverage (from 5% to 80%) along both sides of the street.

Michigan Avenue

South of 5th Street, Michigan Avenue serves commercial and school uses. The street has no bike lanes. The sidewalk widths range from 5 feet to 7.5 feet with several obstructions to reduce the effective width to about 5 feet. Shading along this segment is provided mostly by large trees with moderate to high coverage (20% to 70%) along both sides of the street.

North of 5th Street, Michigan Avenue serves primarily low-rise residential and mixed uses near 5th Street. The street has no bike lanes. The sidewalk widths average around 5 feet with 7 foot widths found between 12th and 14th Streets. Sidewalk obstructions along both sides of the street are minimal. Shading along this segment is provided mostly by large trees with low to moderate coverage (20% to 40%) along both sides of the street.

Jefferson Avenue

South of 5th Street, Jefferson Avenue serves primarily low-rise residential uses. The street has no bike lanes. The sidewalk widths range from 5 feet to 8 feet with several obstructions that contribute to reduce effectiveness to about 4 to 7 feet respectively. Shading along this segment is provided mostly by large trees with moderate coverage (20% to 80%) along both sides of the street.

North of 5th Street, Jefferson Avenue serves primarily low-rise residential and mixed uses near 5th Street. The street has no bike lanes. The sidewalk widths average around 5 feet with sidewalk obstructions along both sides of the street which reduce width effectiveness to 4 feet. Shading along this segment is provided mostly by large trees with low to moderate coverage (20% to 50%) along both sides of the street.

Meridian Avenue

South of 5th Street, Meridian Avenue serves primarily low-rise residential uses. The street has no bike lanes. The sidewalk widths range from 5 feet to 7 feet with minimal obstructions. Shading along this segment is provided mostly by trees with moderate to high coverage (20% to 85%) along both sides of the street.

North of 5th Street, Meridian Avenue serves primarily low-rise residential and mixed uses near 5th Street. The street has no bike lanes. The sidewalk widths average around 5 feet with minimal sidewalk obstructions along both sides of the street which reduce width effectiveness to about 4 feet at various points. Shading along this segment is provided mostly by large trees with low to moderate coverage (10% to 80%) along both sides of the street.

Euclid Avenue

South of 5th Street (to 3rd Street), Euclid Avenue serves primarily mixed commercial and low-rise residential uses. The street has no bike lanes along this segment. The sidewalk widths average 8 feet with several obstructions that reduce the effective width to around 5 to 6 feet. Shading along this segment is provided mostly by trees with low to moderate coverage (20% to 40%) along both sides of the street.

North of 5th Street, Euclid Avenue serves primarily low-rise residential and mixed uses near 5th Street. The street has bike lanes through the entire length of this segment. The sidewalk widths average around 5 feet with numerous obstructions along both sides of the street which reduce width effectiveness to as low as 3 to 4 feet at various points. Shading along this segment is provided mostly by large trees with low coverage (10% to 40%) along both sides of the street.

Pennsylvania Avenue

North of 7th Street, Pennsylvania Avenue serves a mixture of uses including low-rise residential, commercial and a school. The street has no bike lanes along this segment. The sidewalk widths are 5 feet except for the segment between Española Avenue vary from 5 feet to 6 feet (between 7th and 9th Streets), to 8 feet between 11th and 12th Streets, and to 9 feet between 14th and 15th Street. Numerous obstacles tend to reduce the sidewalk widths 1 to 2 feet at various points along the avenue. Shading along this segment is provided mostly by trees with low to moderate coverage (10% to 50%) along both sides of the street.

Drexel Avenue

North of 12th Street, Drexel Avenue serves a mixture of uses including low-rise residential, commercial and a school. The street has no bike lanes along this segment. The sidewalk widths vary from 5 feet between 12th and 14th Streets and between 15th and 16th Streets to 9 feet between Española Way and 15th Street. Numerous obstacles tend to reduce the sidewalk effective widths by about one foot. Shading along this segment is provided mostly by trees with low to moderate coverage (10% to 50%) along both sides of the street.

Washington Avenue

South of 5th Street, Washington Avenue serves a number of mixed residential, commercial and public facility uses. The street has narrow bike lanes. The sidewalks are very spacious with widths ranging from 11 feet to 20 feet. There are several obstructions that do not adversely impact the sidewalk effectiveness.

Shading along this segment is provided mostly by large trees with moderate coverage (50% to 70%) along both sides of the street.

North of 5th Street, Washington Avenue serves exclusively commercial uses, as well as the Police department. The street has narrow bike lanes. The sidewalks are very spacious with widths ranging from 7 feet to 18 feet. There are several obstructions that do not adversely impact the sidewalk effectiveness. Shading along this segment is provided mostly by trees and awnings with moderate coverage (50% to 75%) along both sides of the street.

Collins Avenue (SR A1A)

South of 5th Street, Collins Avenue serves a number of mixed residential, and commercial uses. The street has no bike lanes. The sidewalk widths range from 7.5 to 9.5 feet; however, due to a number of obstructions, the sidewalk widths are reduced by about 50%. Shading along this segment is provided mostly by palm trees with low to moderate coverage (15% to 70%) along both sides of the street.

North of 5th Street, Collins Avenue serves almost exclusively commercial uses. The street has narrow bike lanes. The sidewalks widths range from 6 feet to 16 feet. There are several obstructions that adversely impact the sidewalk effectiveness reducing some sections by at least 2 feet. Shading along this segment is provided mostly by shade and palm trees with low coverage (0% to 20%) along both sides of the street.

Ocean Drive

South of 5th Street, Ocean Drive serves a number of mixed residential, hotel, and entertainment facilities including beach access. The street has no bike lanes. The sidewalk widths range from 10 to 11 feet; however, due to a number of obstructions, the sidewalk widths are reduced by about 50%. Shading along this segment is provided mostly by palm and shade trees with low to moderate coverage (15% to 60%) along both sides of the street.

North of 5th Street, Ocean Drive serves a number of mixed residential, hotel, and entertainment facilities including beach access. The street has no bike lanes. The sidewalks widths range from 10 feet to 15 feet. There are several obstructions that adversely impact the sidewalk effectiveness reducing some sections by at least 4 feet. Shading along this segment is provided mostly by shade and palm trees with low to moderate coverage (10% to 50%) along both sides of the street.

V. DEFICIENCIES

Deficiencies were established by comparing existing conditions to the 10 criteria defining a pedestrian priority zone. These criteria are:

1. Minimum six-foot unobstructed clear pedestrian path
2. Crosswalks on all Intersection approaches
3. Curb ramps aligned with sidewalks
4. Posted speed of 25 MPH
5. Reduced lane width
6. Bulb-outs at Intersections
7. Automated countdown timers
8. Shaded sidewalks
9. Mid-block lighting
10. No right turn on red

For most of these criteria, deficiencies are illustrated using graphical representation of each roadway segment and a color code indicating the level of compliance. Typically a dark green indicates full compliance, whereas red indicates worst compliance. Shaded colors indicates partial or percent compliance as described in the legend of each figure. All figures are provided at the end of this section.

1. Minimum Six-Foot Unobstructed Clear Pedestrian Path

Sidewalk widths are illustrated in **Figure 2**. A compounded score from 1 to 10 was calculated for each roadway segment taking into account the sidewalk width, number of obstructions and the clear distance. Sidewalk scores are depicted in **Figure 3** with color gradation ranging from best (score =10, dark green) to worst (score = 0, dark red). Sidewalks with numerous obstructions (trees, signs, etc.) within the 6 feet clearance distance ranked lowest even if some of these obstructions such as signs can be easily relocated.

2. Crosswalks on all Intersection Approaches

Crosswalks are generally provided at all intersection approaches. The study area has three types of crosswalks consisting of (1) standard double lines, (2) emphasis crosswalks (Zebra lines), and (3) crosswalks with pavement treatment using either paver block or stamped concrete. The type and location of crosswalks are depicted on **Figure 4**. **Figure 4** also identifies crosswalk that are faded and not clearly visible that requires a fresh coat of paint.

3. Curb Ramps Aligned with Sidewalks

A field review of the study area intersections indicated that sidewalks, crosswalks and curb ramps are generally aligned and can be accessible by wheelchairs. **Figure 5** depicts the level of alignment of sidewalks, ramps, and crosswalks throughout the study area. A more detailed review of alignment, ADA compliance and accessibility will be performed for the selected corridors that will be selected to develop new designed concepts implementing PPZ guidelines.

4. Posted Speed of 25 MPH Maximum

In order to promote a safe pedestrian priority zone, roadways within that zone should operate at a speed not exceeding 25 mph. The City of Miami Beach Transportation Master Plan and the Bicycle and Pedestrian Master Plan recommend a posted speed of 25 mph for pedestrian priority zones. The Miami Beach Street Design Guidelines goes even further and recommends in addition to the 25 mph maximum speed for PPZ, extending 20 mph zones to improve pedestrian safety. Within the study area and except for school zones, only 3rd Street has a posted speed of 25 mph or less. The remaining roadways have a posted or implied speed of 30 mph except for 5th Avenue and Alton Road and Washington Avenue north of 5th Street which have a posted speed of 35 mph. **Figure 6** depicts the posted speed on roadway segments. Hashed cells indicate no posted speed is present on that roadway segment and a 30 mph posted speed was assumed.

5. Reduced Lane Width

A 10-foot lane is generally desirable for a pedestrian priority zone because it helps reduce vehicle speed, pedestrian crossing distance, and crashes; unless transit, service and emergency vehicles require a wider lane. **Figure 7** depicts the lane width throughout the study area. Most lanes are 11 feet wide. Lenox, Michigan, Jefferson and Meridian Avenues have sections with 16 to 17 foot lanes which can provide space for bike lanes or wider sidewalks.

6. Bulb-outs at Intersections

Bulb-outs are desirable at intersections because they change the character of the road, help reduce speed and crosswalk distance, and provide opportunities of additional landscaping. Existing bulb-outs are depicted on **Figure 8**. Bulb-outs are recommended at all intersections of identified priority PPZ corridors.

7. Automated Countdown Timers

Field reviews indicated that installed traffic signals are equipped with automated countdown timers, though this feature has not been activated at all crossings. The locations and types of traffic controls within the study area are shown in **Figure 9**. **Figure 10** provides details regarding the signal timing, cycle length, and pedestrian Walk and Don't Walk phases.

A general c

8. Shaded Sidewalks

The level of shading on each roadway segment was estimated using data collected during field visits and by reviewing Google aerials. Hurricane Irma damaged quite a few large trees and impacted shading. Some field visits were performed after Irma. In the final analysis, adjustments were made to account for downed trees as it can reasonable be assumed they will be replaced within a reasonable time. **Figure 11** shows the level of shading for each side of every roadway segment. The color gradient scheme easily highlights areas with adequate shading and deficient areas and their deficiency levels.

9. Mid-block Lighting

Field review were conducted in evening hours to assess lighting conditions and identify obscured locations. As stated in existing conditions, the commercial roads from Washington Avenue to Ocean Drive generally have excellent lighting conditions generated by both street lights and commercial businesses. The lighting conditions along Collins Avenue is good but less bright than Washington Avenue and Ocean Drive.

The area located south of 5th Street generally has the new type of light post with very good lighting conditions. 2nd and 3rd Streets have trees that slightly diminish mid-block lighting but is still good. Other streets have mainly palm trees that do not obstruct light. The area north of 5th Street and west of Washington Avenue has mostly the traditional lighting system that is good but less effective than the new style light post found south of 5th Street. Furthermore, the lighting on the roads parallel to the park (Michigan Avenue and Meridian Avenue) are partially obstructed by large trees. It was observed that the new light posts are installed on improved roads such as 11th Street next to the Flamingo Park. Illustrative pictures taken at night and grading of lighting conditions are provided in the Deficiency section of this memorandum.

The lighting conditions are summarized in **Figure 12**. Night pictures of various locations are shown in **Figures 13, 14 and 15**.

10. No Right Turn on Red

Most roadways within the study area do not have right turn lanes. The only exceptions are Alton Road (see **Figure 4**) and the cross streets along 5th Street. Lenox, Michigan and Meridian Avenues have a no right turn on red (RTOR) in the southbound direction. Michigan and Meridian Avenues have a no RTOR in the northbound direction. Considering Alton Road is a major north-south arterial, prohibiting right turn on red (RTOR) benefits need to be balanced with efficient movement of traffic along the corridor. Typically a pedestrian count is needed to establish the need to prohibit RTOR throughout the corridor, including shared through-right turn lanes, especially near major pedestrian generators such as Flamingo Park.

11. Field Pictures of Damages of Immediate Improvements

Thousands of pictures were taken during the field work performed for this project to document sidewalk conditions, obstructions and damages areas. As an illustration, **Figure 16** shows sample pictures of damaged Sidewalks, **Figure 17** shows pictures of mail storage units blocking sidewalks, and **Figure 18** shows pictures of various obstructions.

Figure 2
Miami Beach Pedestrian Priority Zone Feasibility Study
Sidewalk Typical Width

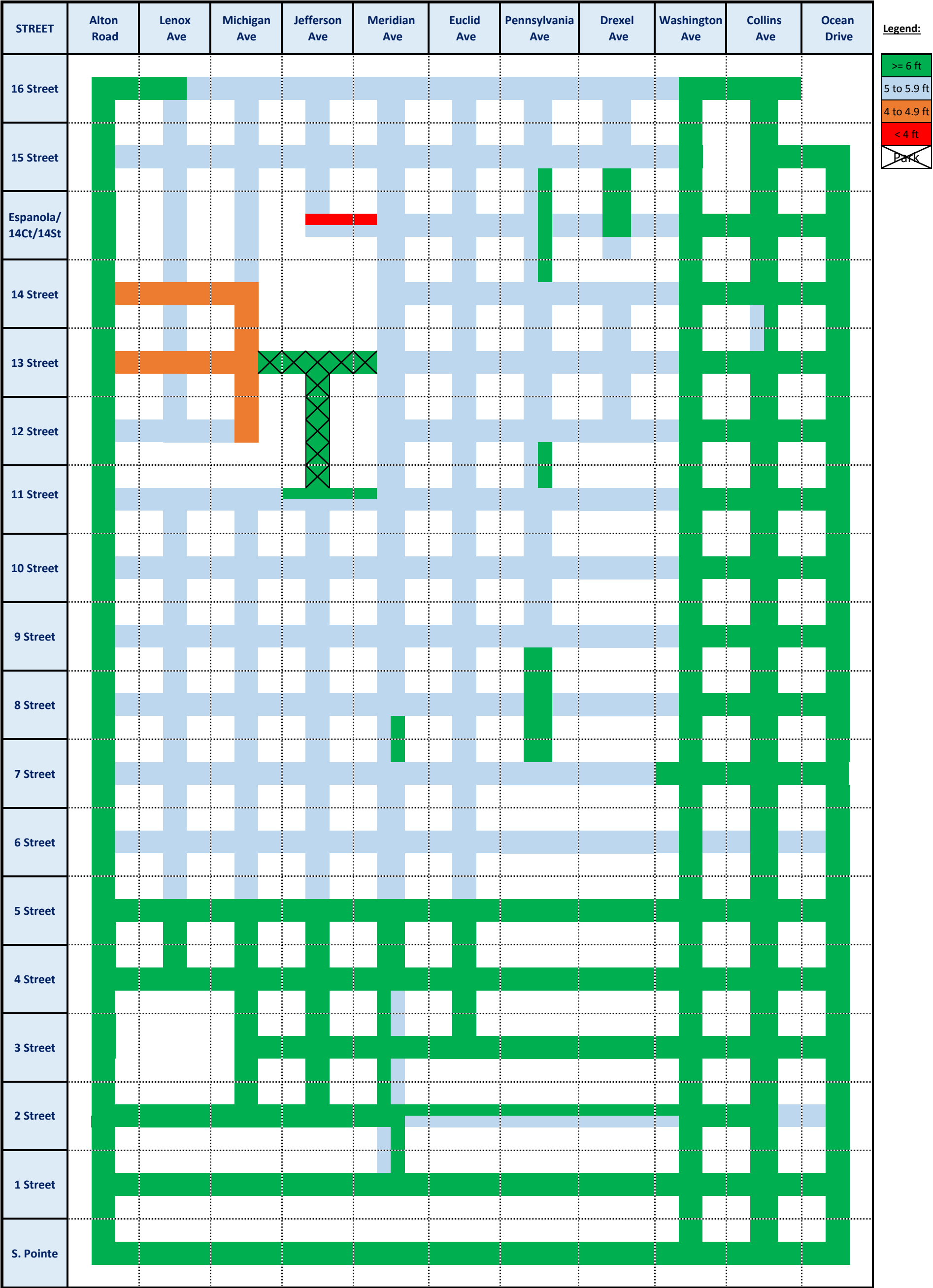


Figure 3
Miami Beach Pedestrian Priority Zone Feasibility Study
Sidewalk and Obstruction Composite Score

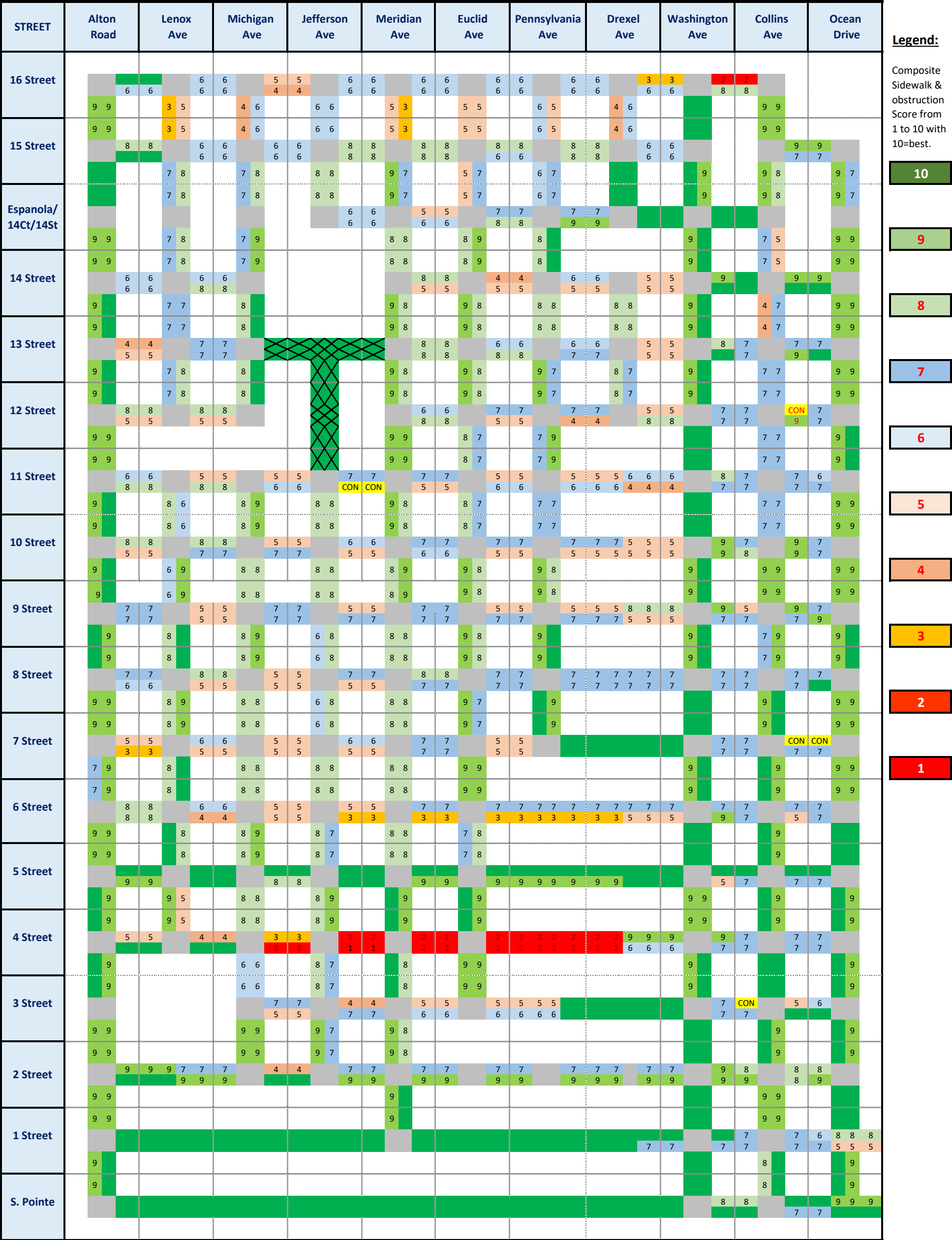
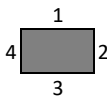


Figure 4
Miami Beach Pedestrian Priority Zone Feasibility Study
Existing Crosswalks and Right-Turn Lanes

STREET	TYPE	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsylvania Ave	Drexel Avenue	Washington Ave	Collins Avenue	Ocean Drive
16 Street	X-Walk	E1234	D13	D1234	D1234	D1234	D1234	D1234	D1234	E1234	E134, T2	
	RT											
	Notes					Faded XWalk						
15 Terrace	X-Walk	E4										
	RT	R4										
	Notes	*T Intersection										
15 Street	X-Walk	E1234	D1234	D1234	D1234	D1234	D1234	D1234	D1234	E134	B123	E234
	RT											
	Notes					Faded XWalk			Faded XWalk	*T Intersection		*T Intersection
Espanola	X-Walk					D24	E4	E1234	0	E1234	B134	
	RT											
	Notes					Faded XWalk			*Pedestrian Way			
14 Ct/14 Pl	X-Walk	E4				E23	E1234	E4				E234
	RT	R4										
	Notes	*T Intersection										
14 Street	X-Walk	E24	D1234	D4		D2	D1234	D1234	E234	E1234	B1234	E34
	RT	R24										
	Notes			*T Intersection		*T Intersection			*T Intersection			*T Intersection
13 Street	X-Walk	E234	D1234	D134		D123	D1234	D1234	D24	E1234	B1234	E134
	RT	R24										
	Notes			*T Intersection		*T Intersection						*T Intersection
12 Street	X-Walk	E1234	D1	D4		D123	D24	D24	No Crosswalk	E1234	B1234	E134
	RT											
	Notes		*T Intersection	*L Intersection		*T Intersection		Faded XWalk	*T Intersection			*T Intersection
11 Street	X-Walk	E1234	D3	E23	0	0	0	D1234		E1234	B1234	E134
	RT											
	Notes		*T Intersection	*T Intersection	*Construction	*Construction	*Construction					*T Intersection
10 Street	X-Walk	E1234	D1234	D1234	D1234	D24	D1234	D1234		E1234	B1234	E134
	RT											
	Notes											*T Intersection
9 Street	X-Walk	E24	D24	D3	D1234	D1234	E1234	D1234		E1234	B1234	E134
	RT	R24										
	Notes				Faded XWalk							*T Intersection
8 Street	X-Walk	E1234	D1234	D1234	D1234	E1234	E1234	D1234		E1234	B1234	E134
	RT											
	Notes											*T Intersection
7 Street	X-Walk	E2	D1234	D1234	D1234	D1234	E1234	D1		E1234	B1234	E134
	RT	R2										
	Notes							*T Intersection				*T Intersection
6 Street	X-Walk	E23, D4	D1234	D1234	D1234	D1234	D1234			E134	B124	E14
	RT	R24										
	Notes									*T Intersection		*T Intersection
5 Street	X-Walk	D23	E13, B24	E13, B24	E13, B24	E13, B24	E13			B1234	B1234	E1234
	RT	R124	R1	R1,3	R1	R1,3	R1,3			R1	R1,3	R1,3
	Notes						*Divided from 5th St					*T Intersection
4 Street	X-Walk	E2, T3	E12	E1234	D1234	D1234	D1234			B1234	B1234	B1234
	RT											
	Notes	*T Intersection	*T Intersection									
3 Street	X-Walk			E12	D1234	D1234	E14			B2	B1234	B134
	RT											
	Notes			*T Intersection			*T Intersection					
2 Street	X-Walk	B23		E1, D2	D124	D1234				B1234	B1234	B134
	RT											
	Notes	*T Intersection		*T Intersection								
1 Street	X-Walk	B1, D2			D12	D124				B123, D4	B1234	B1234
	RT											
	Notes	*T Intersection				*T Intersection						
S. Pointe	X-Walk	B13								B1234	B1234	B1234
	RT											
	Notes	*Road Curves										

Direction/Approach



Crosswalk Type:

- B Brick
- P Pavement Text
- X Raised
- E Emphasis (Zebra)
- D Double lines

Other:

- R Right-Turn Lane

Note: Emphasis crosswalk (E4) on the east approach and southbound right-turn lane (R4) at the T-Intersection of Alton Road & 15 Place

Figure 5
Miami Beach Pedestrian Priority Zone Feasibility Study
Curb Alignments with Sidewalks

STREET	TYPE	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsylvania Ave	Drexel Avenue	Washington Ave	Collins Avenue	Ocean Drive
16 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y13 TA	Y1234 SA	Y1234 SA	Y1234 SA	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 SA	Y1234 TA	
15 Terrace	Aligned? Type of Ramp Notes											
15 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 SA	Y1234 SA	Y1234 STA	Y1234 SA	Y1234 SA	Y134 SA T - Intersection	Y123 TA T - Intersection	Y234 TA T - Intersection
Espanola	Aligned? Type of Ramp Notes					Y24 SA	Y4 TA	Y1234 TA	 Pedestrian Way	Y1234 SA	Y134 TA T - Intersection	
14 Ct/14 Pl	Aligned? Type of Ramp Notes	Y4 TA T-intersection				Y23 SA	Y1234 SA	Y4 SA				Y234 TA T - Intersection
14 Street	Aligned? Type of Ramp Notes	Y24 TA	Y1234 TA	Y4 SA T-intersection		Y2 SA T-intersection	Y1234 SA	Y1234 SA	Y23, N4 SA T - Intersection	Y1234 TA	Y1234 TA	Y134 TA T - Intersection
13 Street	Aligned? Type of Ramp Notes	Y234 TA	Y1234 TA	Y134 N T-intersection		Y123 SA T-intersection	Y1234 SA	Y1234 SA	Y24 SA	Y1234 TA	Y1234 TA	Y134 TA T - Intersection
12 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y1 STA T-intersection	Y4 SA L intersection		Y123 SA T-intersection	Y24 SA	Y1234 SA	 T - Intersection	Y1234 TA	Y1234 TA	Y134 TA T - Intersection
11 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y3 TA T-intersection	Y23 SA	 Construction	 Construction	 Construction	Y1234 SA		Y1234 TA	Y1234 TA	Y134 TA T - Intersection
10 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 SA	Y24 SA	Y1234 SA	Y1234 STA		Y1234 TA	Y1234 TA	Y134 TA T - Intersection
9 Street	Aligned? Type of Ramp Notes	Y24 TA	Y24 SA	Y1234 SA	Y1234 STA	Y1234 TA	Y1234 TA	Y1234 TA		Y1234 TA	Y1234 TA	Y134 TA T - Intersection
8 Street	Aligned? Type of Ramp Notes	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 SA	Y1234 TA	Y1234 TA	Y1234 TA		Y1234 SA	Y1234 TA	Y134 TA T - Intersection
7 Street	Aligned? Type of Ramp Notes	Y2 TA T-intersection	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 TA	Y1234 TA	Y1 TA		Y1234 TA	Y1234 TA	Y134 TA T - Intersection
6 Street	Aligned? Type of Ramp Notes	Y234 TA	Y1234 TA	Y1234 SA	Y1234 SA	Y1234 TA	Y1234 SA			Y134 TA Split intersection	Y124 TA	Y14 TA T - Intersection
5 Street	Aligned? Type of Ramp Notes	Y23 TA	Y1234 TA	Y1234 TA	Y1234 TA	Y1234 TA	Y13 TA Divided from 5th St			Y1234 TA	Y1234 TA	Y1234? TA
4 Street	Aligned? Type of Ramp Notes	Y23 TA T-intersection?	Y12 TA T-intersection	Y1234 TA	Y1234 TA	Y1234 TA	Y1234 TA			Y1234 TA	Y1234 TA	Y1234 TA
3 Street	Aligned? Type of Ramp Notes	Y3 T-intersection?		Y123 TA T-intersection	Y1234 TA	Y1234 TA	0 0 Midblock Crosswalk			Y2 SA	Y1234 TA	Y134 TA
2 Street	Aligned? Type of Ramp Notes	Y23 TA T-intersection		Y12 TA T-intersection	Y1234 SA	Y1234 TA				Y1234 TA	Y1234 TA	Y134 TA
1 Street	Aligned? Type of Ramp Notes	Y12 TA T-intersection			Y123 TA	Y124 TA T-intersection				Y1234 SA	Y1234 TA	Y1234 TA
S. Pointe	Aligned? Type of Ramp Notes	Y13 TA Curve								Y1234 TA	Y1234 TA	Y1234 TA

Approach

1
2
3

Alignment

Y	Yes
N	No

Ramp Type:

N	None
S	Slope
T	Texture
A	ADA

Note: Curb cut not totally aligned on the southwest corner of Drexel Avenue and 14 Street

Figure 6
Miami Beach Pedestrian Priority Zone Feasibility Study
Posted Speed Limit

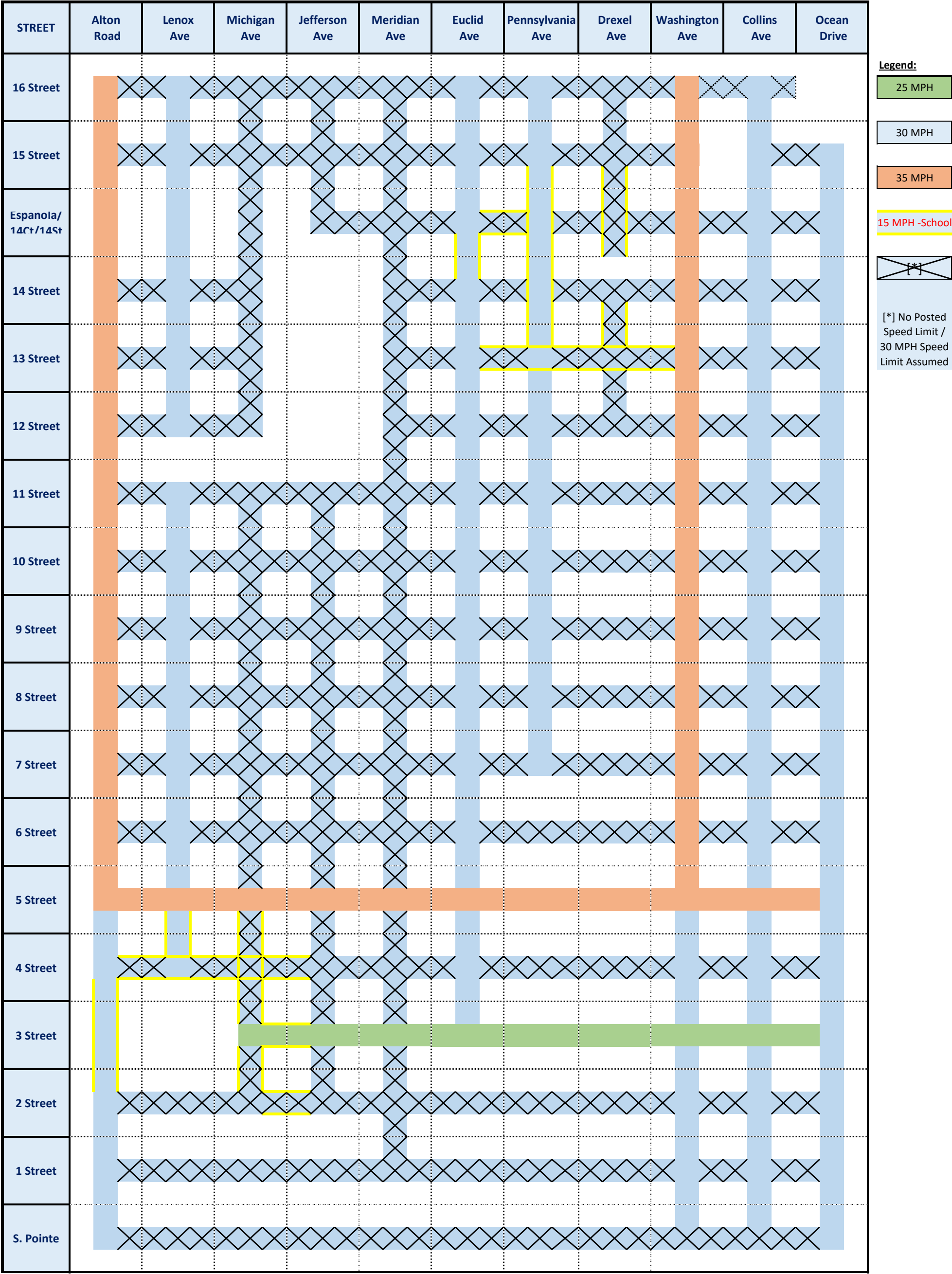


Figure 7
Miami Beach Pedestrian Priority Zone Feasibility Study
Lane Width

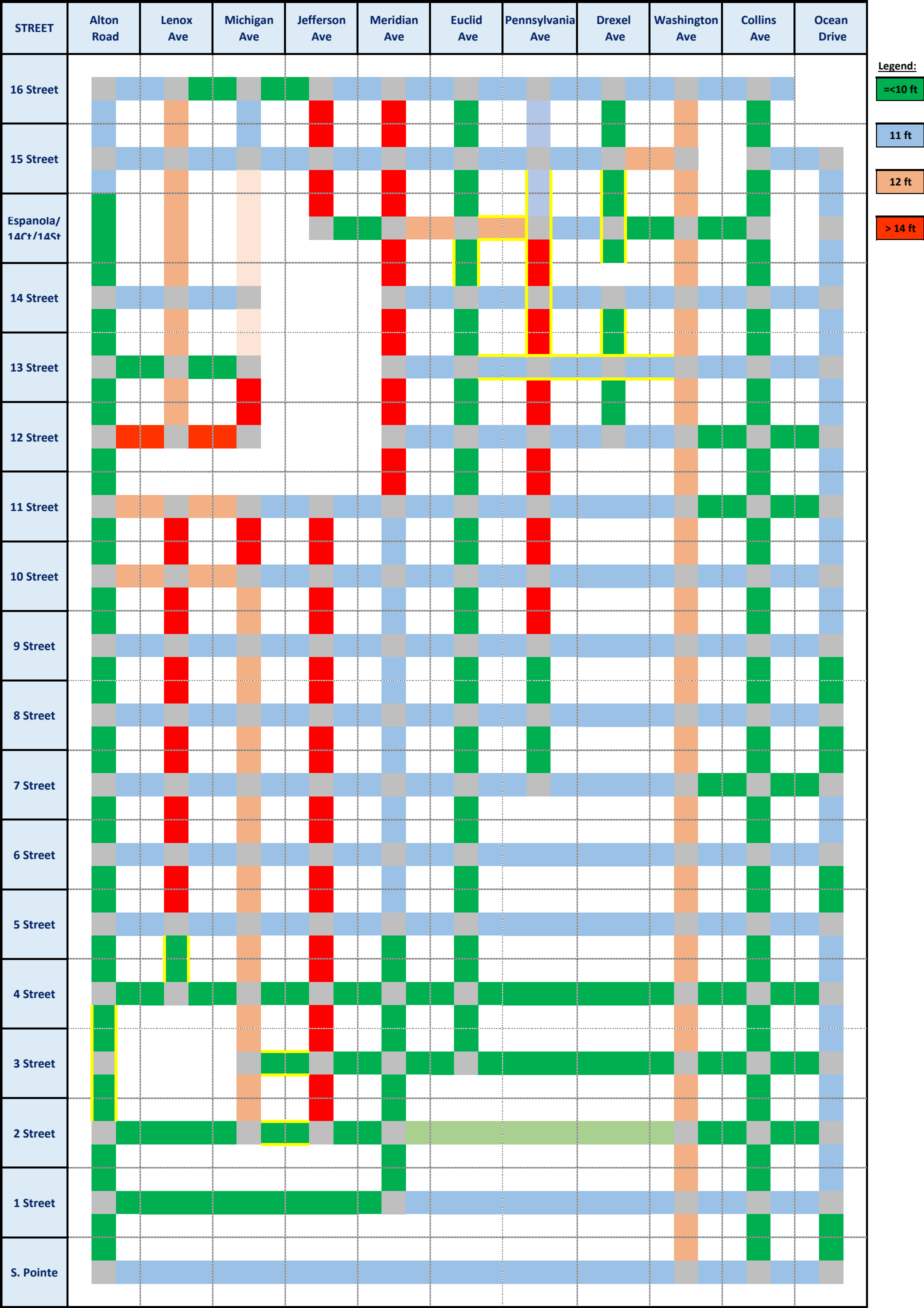





















































































Figure 8
Miami Beach Pedestrian Priority Zone Feasibility Study
Bulbout Locations

STREET	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsylvania Avenue	Drexel Avenue	Washington Avenue	Collins Avenue	Ocean Drive
16 Street											
15 Street											
Espanola Way											
14 Pl/14 Ct											
14 Street											
13 Street											
12 Street											
11 Street											
10 Street											
9 Street											
8 Street											
7 Street											
6 Street											
5 Street											
4 Street											
3 Street											
2 Street											
1 Street											
S Pointe Dr											

Note: Green color indicates the presence of an intersection bulbout for the particular approach highlighted in green.

Figure 9
Miami Beach Pedestrian Priority Zone Feasibility Study
Existing Intersection Control Types and Signal Asset Number

STREET	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsyl- vania Ave	Drexel Avenue	Washing- ton Ave	Collins Court-NB	Collins Avenue	Ocean Court-NB	Ocean Drive	Total Sig.	Total 4-Stp	Total 2-Stp	Legend:
16 Street	2645	4-Stop	2753	2731	2746	4-Stop	4-Stop	2707	2806					7	3	0	9999 Traffic Signal Asset Number
15 Street	2644	4-Stop	6907	4-Stop?	2745	2710	4-Stop	2706	2805		3888		4-Stop	7	4	0	4-Stop 4-Way Stop Control
Espanola Way					WB Stop (1-Way)	WB Stop (1-Way)	7157 School	1-Way WB	2804 / 5082Sch	NB-Stop	2663			3	0	3	N/S Stop 2-way Stop Control in North/South Direction
14 Pl/14 Ct	EB Stop				2744	4-Stop	5546			NB-Stop		NB-Stop	EB-Stop	2	1	4	E/W Stop 2-Way Stop Control in East/West Dir.
14 Street	3911 Btw Ct&St	4-Stop	E/W Stop		E/W Stop	4-Stop	2768	2704	2803	NB-Stop	2662	NB-Stop	EB-Stop	5	2	5	1-Way One-way street - No traffic control signs
13 Street	7361	4-Stop	4-Stop		4-Stop	4-Stop	7158 School	E/W Stop	2802	NB-Stop	6024	NB-Stop	EB-Stop	4	4	4	(5612 Old) Removed Signal
12 Street	4631 (5613 Old)	N/S Stop	SB Stop		WB Stop	E/W Stop	E/W Stop	1-Way NB	2801	NB-Stop	6915	NB-Stop	EB-Stop	3	0	8	6907 Future Signal
11 Street	2643	N/S Stop	NB Stop	6706	2743	2709	2767		2800	NB-Stop	2661	NB-Stop	6344	8	0	4	(999 Ped-F) Pedestrian flashing beacon signal
10 Street	3372	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		2799	NB-Stop	2660	NB-Stop	4424	4	6	2	7157 School School Flasher
9 Street	E/W Stop (5612 Old)	E/W Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		2798	NB-Stop	6579	NB-Stop	EB-Stop	2	5	5	Road Closed or no Cross St. Connection
8 Street	2642	4-Stop	4-Stop	4-Stop	2742	4-Stop	4-Stop		2797	NB-Stop	2659	NB-Stop	1-Way WB	4	5	2	7290 Flashing Signal
7 Street	WB Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	SB Stop		2796	NB-Stop	6006	NB-Stop	6345	3	5	4	
6 Street	2641	4-Stop	4-Stop	2729	2741	4-Stop			2795	NB-Stop	7005	NB-Stop	1-Way WB	5	3	2	
5 Street	2640	2734	2752	2728	2740	N/S Stop			2794	NB-Stop	2658	NB-Stop	4649	8	0	3	
4 Street	5614Sch/ 7290 Stop	N/S Stop	4-Stop	4-Stop	4-Stop	N/S Stop			4-Stop (2793-Old)	NB-Stop	4-Stop (2657-Old)	NB-Stop	4-Stop	0	6	4	
3 Street			WB-Stop	N/S Stop	4-Stop	N/S Stop			E/W Stop	NB-Stop	E/W Stop	NB-Stop	EB-Stop	0	1	8	
2 Street	6919 (4172 Old)		N/S Stop	4-Stop	4-Stop				4-Stop	NB-Stop	4-Stop	NB-Stop	4-Stop	1	5	3	
1 Street	5615Sch/ 6857 Stop			N/S Stop	N/S Stop				4-Stop (2791-Old)	NB-Stop	4-Stop (2656-Old)	NB-Stop	E/W Stop	1	2	5	
S Pointe Dr	6132 Ped-F 4-Stop								4-Stop		4-Stop		4-Stop	0	4	0	
Total Signals	12	1	3	4	7	2	4	3	14	0	13	0	4	67	56	66	
Total 4-Stop	1	8	7	7	7	9	5	0	4	0	4	0	4	56			
Total 2-Stop	3	4	5	2	4	5	2	1	1	16	1	15	7	66		67	

Figure 10
Miami Beach Pedestrian Priority Zone Feasibility Study
Existing Intersection Control Types - Signal Asset Number - Walk/Don't Walk (NS/EW) - Cycle Length (AM/PM)

STREET	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsyl-vania Ave	Drexel Avenue	Washing-ton Ave	Collins Court-NB	Collins Avenue	Ocean Court-NB	Ocean Drive
16 Street	#2645 W/DW: 5/14 & 5/24 sec 150 sec/150 sec	4-Stop	#2753 W/DW: 7/19 & 7/20 sec 95 sec / FREE	#2731 W/DW: 7/18 & 7/19 sec 95 sec / 95 sec	#2746 W/DW: 7/19 & 7/14 sec 95 sec / 95 sec	4-Stop	4-Stop	#2707 W/DW: 5/21 & 5/21 sec FREE / FREE	#2806 W/DW: 7/14 & 5/28 sec 100 sec / 110 sec				
15 Street	#2644 W/DW: 7/12 & 7/20 sec 150 sec/150 sec	4-Stop	<u>6907 (NEW)</u>	4-Stop?	#2745 W/DW: 7/19 & 7/10 sec FREE / FREE	#2710 W/DW: 7/17 & 7/14 sec FREE / FREE	4-Stop	#2706 W/DW: 7/14 & 7/16 sec FREE / FREE	#2805 W/DW: 7/16 & 5/24 sec 100 sec / 110 sec		#3888 W/DW: 7/10 & 7/22 sec 100 sec / 100 sec		4-Stop
Espanola Way					WB Stop(1-Way)	WB Stop(1-Way)	<u>7157 School</u>	95 sec / 95 sec	#2804 W/DW: 7/12 & 5/23 sec 100 sec / 110 sec	NB-Stop	#2663 W/DW: 7/12 & 7/17 sec 100 sec / 100 sec		
14 Pl/14 Ct	EB Stop				#2744 W/DW: 7/11 & 7/12 sec FREE / FREE	4-Stop	#5546 PED: 15/16 sec FREE / FREE			NB-Stop		NB-Stop	EB-Stop
14 Street	#3911 (BTW Ct-St) Ped: 7/24 sec 150 sec / 150 sec	4-Stop	E/W Stop		E/W Stop	4-Stop	#2768 W/DW: 7/10 & 7/15 sec FREE / FREE	#2704 W/DW: 7/12 & 7/11 sec FREE / FREE	#2803 W/DW: 7/12 & 5/22 sec 100 sec / 110 sec	NB-Stop	#2662 W/DW: 7/12 & 7/12 sec 100 sec / 100 sec	NB-Stop	EB-Stop
13 Street	<u>7361</u>	4-Stop	4-Stop		4-Stop	4-Stop	<u>7158 School</u>	E/W Stop	#2802 W/DW: 7/12 & 4/26 sec 100 sec / 110 sec	NB-Stop	#6024 W/DW: 10/7 & 10/8 sec 100 sec / 100 sec	NB-Stop	EB-Stop
12 Street	#4631 W/DW: 7/14 & 7/21 sec 150 sec / 150 sec	N/S Stop	SB Stop		WB Stop	E/W Stop	E/W Stop	1-Way NB	#2801 W/DW: 4/11 & 4/27 sec 100 sec / 110 sec	NB-Stop	#6915 W/DW: 10/10 & 10/10 sec 100 sec / 100 sec	NB-Stop	EB-Stop
11 Street	#2643 W/DW: 7/10 & 5/22 sec 150 sec / 150 sec	N/S Stop	NB Stop	<u>6706 (NEW)</u>	#2743 W/DW: 7/12 & 7/12 sec FREE / FREE	#2709 W/DW: 7/10 & 7/15 sec FREE / FREE	#2767 W/DW: 7/14 & 7/16 sec FREE / FREE		#2800 W/DW: 7/11 & 7/23 sec 100 sec / 110 sec	NB-Stop	#2661 W/DW: 7/9 & 10/9 sec 150 sec / 150 sec	NB-Stop	#6344 W/DW: 7/14 & 7/9 sec FREE / FREE
10 Street	#3372 W/DW: 7/9 & 5/21 sec 150 sec / 150 sec	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		#2799 W/DW: 7/16 & 7/17 sec 100 sec / 110 sec	NB-Stop	#2660 W/DW: 7/10 & 10/14 sec 150 sec / 150 sec	NB-Stop	#4424 W/DW: 0/0 & 0/0 sec FREE / FREE
9 Street	E/W Stop(5612 Old)	E/W Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		#2798 W/DW: 7/12 & 7/21 sec 100 sec / 110 sec	NB-Stop	#6579 W/DW: 7/9 & 10/14 sec 65 sec / 65 sec	NB-Stop	EB-Stop
8 Street	#2642 W/DW: 7/10 & 4/24 sec 150 sec / 150 sec	4-Stop	4-Stop	4-Stop	#2742 W/DW: 7/12 & 7/14 sec FREE / FREE	4-Stop	4-Stop		#2797 W/DW: 7/16 & 7/17 sec 100 sec / 110 sec	NB-Stop	#2659 W/DW: 7/10 & 10/10 sec 65 sec / 65 sec	NB-Stop	1-Way WB
7 Street	WB Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	SB Stop		#2796 W/DW: 7/16 & 7/17 sec 100 sec / 110 sec	NB-Stop	#6006 W/DW: 7/8 & 10/10 sec 65 sec / 65 sec	NB-Stop	#6345 W/DW: 7/12 & 7/10 sec FREE / FREE
6 Street	#2641 W/DW: 7/14 sec 150 sec / 150 sec	4-Stop	4-Stop	<u>2729 (NEW)</u>	#2741 W/DW: 7/14 & 7/14 sec FREE / FREE	4-Stop			#2795 W/DW: 7/11 & 7/19 sec 100 sec / 110 sec	NB-Stop	<u>7005 (NEW)</u>	NB-Stop	1-Way WB
5 Street	#2640 W/DW: 5/18 & 5/22 sec 180 sec / 140 sec	#2734 W/DW: 4/28 & 5/12 sec 180 sec / 140 sec	#2752 W/DW: 4/29 & 5/12 sec 180 sec / 140 sec	#2728 W/DW: 5/31 & 5/12 sec 180 sec / 140 sec	#2740 W/DW: 7/33 & 5/13 sec 180 sec / 140 sec	N/S Stop			#2794 W/DW: 4/29 & 4/26 sec 180 sec / 140 sec	NB-Stop	#2658 W/DW: 0/0 & 0/0 sec 180 sec / 140 sec	NB-Stop	#6345 W/DW: 7/12 & 7/10 sec FREE / FREE
4 Street	<u>5614Sch/</u> <u>7290 (NEW)</u>	N/S Stop	4-Stop	4-Stop	4-Stop	N/S Stop			4-Stop(2793-Old)	NB-Stop	4-Stop(2657-Old)	NB-Stop	4-Stop
3 Street			WB-Stop	N/S Stop	4-Stop	N/S Stop			E/W Stop	NB-Stop	E/W Stop	NB-Stop	EB-Stop
2 Street	#6919 W/DW: 7/8 & 7/25 sec FREE / FREE		N/S Stop	4-Stop	4-Stop				4-Stop	NB-Stop	4-Stop	NB-Stop	4-Stop
1 Street	<u>5615Sch/</u> <u>6857 Stop</u>			N/S Stop	N/S Stop				4-Stop(2791-Old)	NB-Stop	4-Stop(2656-Old)	NB-Stop	E/W Stop
S Pointe Dr	6132 Ped-F4-Stop								4-Stop		4-Stop		4-Stop

Figure 11
Miami Beach Pedestrian Priority Zone Feasibility Study
Shade Coverage Percentage

STREET	Alton Road	Lenox Ave	Michigan Ave	Jefferson Ave	Meridian Ave	Euclid Ave	Pennsylvania Ave	Drexel Ave	Washington Ave	Collins Ave	Ocean Drive												
16 Street		25% 25% 5% 5%		40% 40% 30% 30%		20% 20% 30% 30%		40% 40% 30% 30%		30% 30% 5% 5%		20% 20% 20% 20%		20% 20% 50% 50%		15% 15% 25% 25%		50% 50% 70% 70%					
	15% 40%		35% 50%		35% 30%		35% 50%		40% 60%		20% 30%		25% 25%		40% 35%		85% 65%		20% 35%				
	15% 40%		35% 50%		35% 30%		35% 50%		40% 60%		20% 30%		25% 25%		40% 35%		85% 65%		20% 35%				
15 Street		5% 5% 10% 10%		20% 20% 40% 40%		20% 20% 30% 30%		25% 25% 30% 30%		30% 30% 25% 25%		40% 40% 50% 50%		25% 25% 40% 40%		40% 40% 30% 30%			70% 70% 60% 60%				
	15% 30%		20% 30%		60% 40%		50% 25%		25% 40%		20% 30%		15% 15%		50% 30%		85% 70%		20% 10%	45% 50%			
	15% 30%		20% 30%		60% 40%		50% 25%		25% 40%		20% 30%		15% 15%		50% 30%		85% 70%		20% 10%	45% 50%			
Espanola/ 14Ct/14St						30% 30% 40% 40%		25% 25% 30% 30%		40% 40% 35% 35%			80% 80% 75% 75%		70% 70% 80% 80%		60% 60% 50% 50%						
	15% 30%		20% 30%		40% 60%			70%		10% 10%		20% 50%				70% 70%		20% 15%		30% 20%			
	15% 30%		20% 30%		40% 60%			70%		10% 10%		20% 50%				70% 70%		20% 15%		30% 20%			
14 Street		10% 10% 25% 25%		30% 30% 25% 25%			25% 25% 20% 20%		20% 20% 20% 20%			40% 40% 20% 20%		20% 20% 10% 10%		25% 10% 20% 10%			20% 10% 20% 10%				
	20% 30%		35% 50%		40% 60%				15% 15%		45% 40%		40% 25%		70% 75%		10% 20%		30% 20%				
	20% 30%		35% 50%		40% 60%				15% 15%		45% 40%		40% 25%		70% 75%		10% 20%		30% 20%				
13 Street		50% 50% 30% 30%		35% 35% 10% 10%		20% 20% 20% 20%		20% 20% 20% 20%		25% 25% 5% 5%		50% 50% 50% 50%		30% 30% 15% 15%		20% 20% 5% 5%		20% 20% 50% 10%		20% 20% 20% 20%			
	20% 30%		30% 40%		40% 85%			25% 15%		40% 50%		30% 30%		70% 70%		15% 20%		30% 20%					
	20% 30%		30% 40%		40% 85%			25% 15%		40% 50%		30% 30%		70% 70%		15% 20%		30% 20%					
12 Street		20% 20% 70% 70%		20% 20% 60% 60%			20% 20% 30% 30%		20% 20% 25% 25%			30% 30% 70% 70%		5% 5% 20% 20%		10% 10% 15% 15%		30% 20% 30% 20%					
	50% 60%						25% 40%		20% 55%			50% 60%				15% 15%		30% 20%					
	50% 60%						25% 40%		20% 55%			50% 60%				15% 15%		30% 20%					
11 Street		35% 35% 15% 15%		25% 25% 15% 15%		20% 20% 15% 15%		20% 20% 15% 15%		20% 20% 1% 1%			20% 20% 1% 1%	1% 1%	1% 1%	15% 15%	15% 15%		15% 80% 25% 10%		10% 80% 10% 15%		
	15% 20%		75% 25%		35% 70%		55% 35%		85% 65%		25% 30%		25% 25%			60% 55%		10% 15%		25% 25%			
	15% 20%		75% 25%		35% 70%		55% 35%		85% 65%		25% 30%		25% 25%			60% 55%		10% 15%		25% 25%			
10 Street		20% 20% 10% 10%		35% 35% 80% 80%		25% 25% 25% 25%		25% 25% 25% 25%		20% 20% 20% 20%		10% 10% 20% 20%		10% 10% 20% 20%	10% 20%	20% 20% 15% 15%	15% 15%		10% 10% 10% 10%		35% 35% 10% 10%		
	15% 30%		30% 45%		40% 60%		60% 45%		80% 65%		30% 50%		65% 30%			60% 75%		25% 20%		40% 30%			
	15% 30%		30% 45%		40% 60%		60% 45%		80% 65%		30% 50%		65% 30%			60% 75%		25% 20%		40% 30%			
9 Street		30% 30% 20% 20%		25% 25% 25% 25%		10% 10% 5% 5%		25% 25% 20% 20%		20% 20% 20% 20%		10% 10% 25% 25%		10% 10% 25% 25%	10% 40%	40% 40% 5% 5%	40% 40%		15% 35% 10% 35%		10% 15% 10% 10%		
	15% 5%		20% 35%		65% 60%		70% 60%		70% 70%		35% 45%		55% 35%			65% 70%		15% 10%		30% 20%			
	15% 5%		20% 35%		65% 60%		70% 60%		70% 70%		35% 45%		55% 35%			65% 70%		15% 10%		30% 20%			
8 Street		10% 10% 15% 15%		35% 35% 35% 35%		15% 15% 35% 35%		15% 15% 20% 20%		10% 10% 15% 15%		40% 40% 30% 30%		40% 40% 30% 30%	40% 25%	25% 25% 10% 10%	25% 25%		50% 60% 25% 50%				
	10% 5%		50% 75%		45% 75%		70% 70%		85%		35% 20%		50% 20%			80% 50%		20% 5%		35% 20%			
	10% 5%		50% 75%		45% 75%		70% 70%		85%		35% 20%		50% 20%			80% 50%		20% 5%		35% 20%			
7 Street		10% 10% 15% 15%		20% 20% 20% 20%		50% 50% 40% 40%		30% 30% 15% 15%		15% 15% 20% 20%		15% 15% 15% 15%		15% 15% 25% 25%	15% 15%	15% 15% 25% 25%	15% 15%		60% 50% 10% 15%		10% 30% 10% 10%		
	5% 5%		50% 25%		75% 65%		75% 70%		80% 80%		25% 20%				45% 60%			40% 5%		20% 20%			
	5% 5%		50% 25%		75% 65%		75% 70%		80% 80%		25% 20%				45% 60%			40% 5%		20% 20%			
6 Street		60% 60% 60% 60%		20% 20% 10% 10%		15% 15% 10% 10%		15% 15% 10% 10%		20% 20% 35% 35%		20% 20% 35% 35%	20% 20% 35% 35%	20% 20% 35% 35%	20% 5% 5% 5%	5% 5% 5% 5%	5% 5%		15% 15% 10% 40%		40% 15% 20% 15%		
	5% 5%		60% 65%		70% 40%		30% 40%		45% 25%		10% 15%				70% 40%			15% 5%		20% 20%			
	5% 5%		60% 65%		70% 40%		30% 40%		45% 25%		10% 15%				70% 40%			15% 5%		20% 20%			
5 Street		45% 45% 50% 50%		50% 50% 40% 40%		40% 40% 45% 45%		40% 40% 60% 60%		60% 60% 60% 60%		60% 60% 60% 60%	60% 60% 60% 60%	60% 60% 60% 60%	60% 70% 70% 70%	70% 70%		40% 30% 60% 60%		70% 70% 70% 70%			
	45% 20%		60% 50%		70% 20%		50% 20%		70% 80%		30% 20%				50% 50%			40% 20%		50% 30%			
	45% 20%		60% 50%		70% 20%		50% 20%		70% 80%		30% 20%				50% 50%			40% 20%		50% 30%			
4 Street		35% 35% 35% 35%		50% 50% 55% 55%		40% 40% 45% 45%		50% 50% 30% 30%		40% 40% 40% 40%		40% 40% 40% 40%	40% 40% 40% 40%	40% 40% 40% 40%	40% 15% 15% 15%	15% 15%		20% 70% 15% 40%		15% 70% 15% 35%			
	50% 60%				70% 70%		75% 30%		85% 85%		40% 20%				65% 50%			30% 30%		60% 15%			
	50% 60%				70% 70%		75% 30%		85% 85%		40% 20%				65% 50%			30% 30%		60% 15%			
3 Street					70% 70% 70% 70%		35% 35% 60% 60%		60% 60% 80% 80%		60% 60% 80% 80%	60% 60% 80% 80%	60% 60% 80% 80%	60% 60% 80% 80%	5% 5% 5% 5%	5% 5%		40% 50% 40% 40%		50% 45% 60% 60%			
	50% 60%				70% 55%		60% 30%		70% 70%						80% 70%			70% 60%		60% 25%			
	50% 60%				70% 55%		60% 30%		70% 70%						80% 70%			70% 60%		60% 25%			
2 Street		5% 5% 30% 30%	5% 5% 30% 30%	50% 50% 80% 80%	50% 50% 80% 80%		70% 70% 80% 80%		70% 70% 80% 80%		60% 60% 80% 80%		60% 60% 80% 80%	60% 60% 80% 80%	60% 60% 80% 80%	60% 60% 80% 80%		85% 25% 30% 50%		25% 25% 25% 20%			
	30% 30%						70% 30%										65% 60%		60% 60%		60% 40%		
	30% 30%						70% 30%										65% 60%		60% 60%		60% 40%		
1 Street		15% 15% 40% 40%	15% 15% 40% 40%	15% 15% 40% 40%	15% 15% 40% 40%	85% 85% 80% 80%	85% 85% 80% 80%	85% 85% 80% 80%	85% 85% 80% 80%	85% 85% 80% 80%		80% 80% 80% 80%	80% 80% 80% 80%	80% 80% 80% 80%	80% 80% 80% 80%	20% 20% 40% 40%	20% 20% 40% 40%		20% 30% 40% 30%		15% 15% 50% 25%	50% 50% 50% 50%	###
	70% 50%																	65% 60%		60% 60%		50% 50%	
	70% 50%																	65% 60%		60% 60%		50% 50%	
S. Pointe		30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%	30% 30% 70% 70%		60% 30% 30% 30%		50% 50% 40% 40%		25% 25% 80% 80%	###

Legend:

Composite Sidewalk & obstruction Score from 1 to 10 with 10=best.

90-100%

80-89%

70-79%

60-69%

50-59%

40-49%

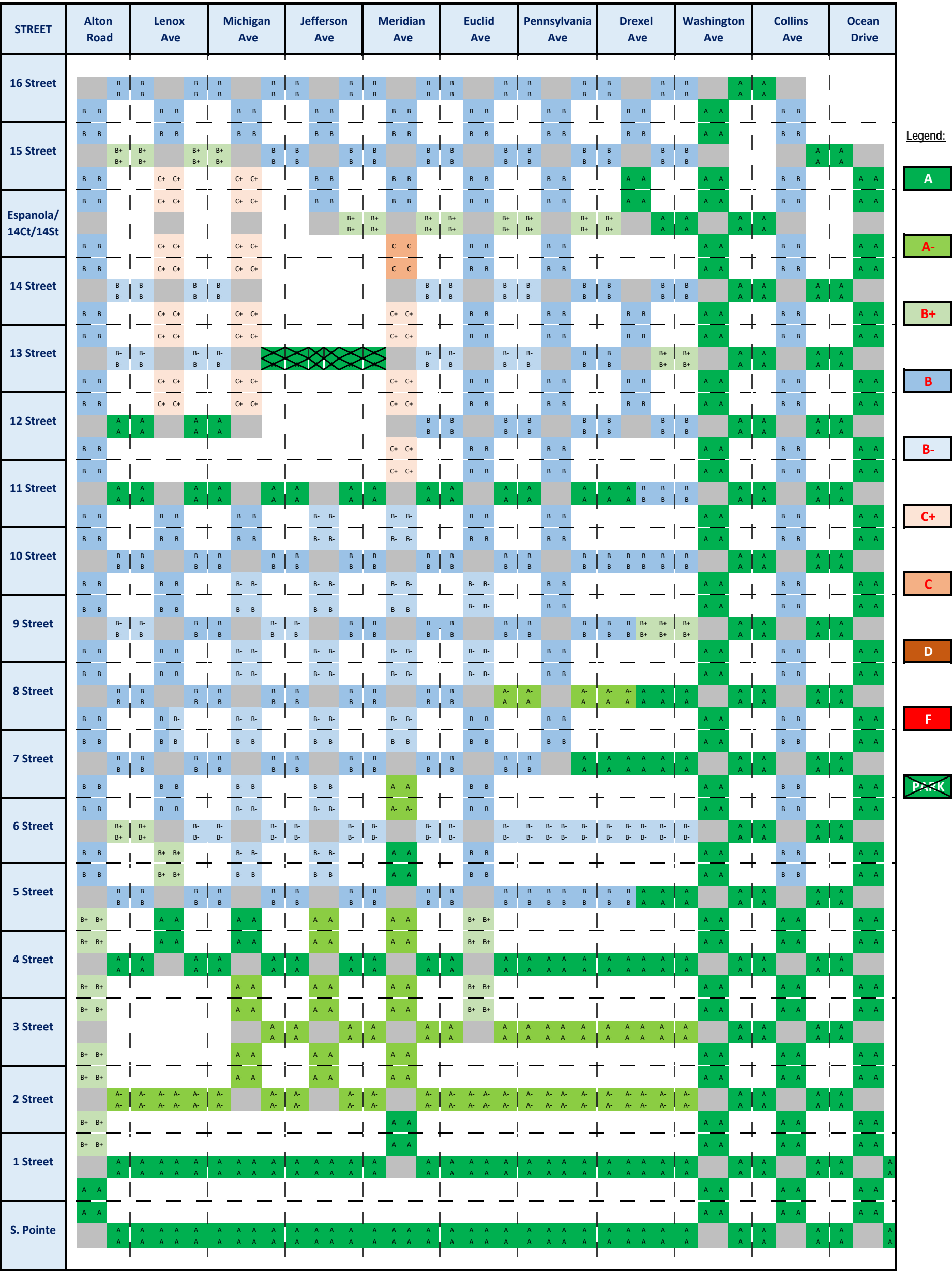
30-39%

10-30%

<0-9%

Note: Best shading conditions is where large trees are present or continuous awning in commercial areas. Palm trees, even when densely spaced, only provide partial shading.

Figure 12
Miami Beach Pedestrian Priority Zone Feasibility Study
Lighting Condition



Note: Best lighting conditions is represented with Grade A and the worst with Grade F.



a. Alton Road – Southbound – south of 5th Street



b. South Pointe Drive – Eastbound (median lights)



c. Ocean Drive – Northbound – South of 1st Street



d. Collins Avenue – Northbound (New Light Posts)

Figure 13 – Lighting conditions on Alton Road, S. Pointe Drive, Ocean Drive and Collins Avenue



a. 5th Street and Lenox Avenue



b. Washington Avenue – Northbound – South of 8th Street



c. Collins Avenue – Northbound – South of 5th Street



d. Collins Avenue – Northbound – South of 2nd Street

Figure 14 – Lighting conditions along Ocean Drive, Washington Avenue and Collins Avenue



a. Michigan Avenue near Flamingo Park



b. 2nd Street east of Meridian Avenue - Westbound



c. Meridian Avenue near Flamingo Park



d. Flamingo Park – Eastbound From Michigan Avenue & 13 Street

Figure 15 – Lighting conditions on 2nd Street and near Flamingo Park



Figure 16 – Pictures of Damaged Sidewalk



Figure 17 – Picture of Mail Storage Blocking the Sidewalk



Figure 18 – Pictures of signs and other obstructions reducing sidewalk clearance

VI. RECOMMENDED IMPROVEMENTS

Improvement prioritization can be grouped into short-term improvements consisting of removing/relocating obstacles and fixing sidewalk damages; mid-term improvements such as crosswalks, bike lane and sidewalk improvements; and long-term improvements such as developing new design concepts for an entire corridor that may require relocating curbs and gutters, widening sidewalks, narrowing lanes, reducing posted speed, adjusting signal timing and enhancing lighting and shading conditions.

For short-term improvements, a list of 188 potential improvements is provided in **Attachment 3**. The difficulty of removing obstructions is also indicated for each location. The pictures illustrating obstructions or the sidewalk damages are provided on a USB flash memory. Each picture filename indicates the location and direction of the item shown in the picture for easy identification in the field. The USB flash memory also includes over 3,000 coded pictures covering all sidewalk sections within the study area. These pictures are coded for easy identification (street, section, direction, picture sequence).

In general, improvements can be grouped into 4 categories:

Short-term standard improvements such as:

1. Insuring visible crosswalk at each intersection's approach (see **Figure 4**).
2. Removing/relocating minor obstructions.
3. Trimming hedges and low branches, insuring adequate sight distance (visible triangles at corners.)
4. Fixing sidewalk damage and improving vertical alignment.
5. Providing bike lanes if lane width in excess of 15 feet.
6. Increasing shade where easily implemented.

Short-term PPZ improvements such as:

1. Lower posted speed to 25 mph and installing posted speed signs by MUTCD guidance.
2. Implementing a pedestrian friendly signal timing, cycle length and Walk/Don't Walk phases.
3. Removing/relocating small obstructions (signs, mail storage, newsstand, etc.)
4. Fixing major sidewalk damage or alignment issues.
5. Insuring all signalized intersections have countdown pedestrian signal heads.
6. Implementing no right turn on red where warranted.
7. Eleven foot lanes can be reduced to 10 foot lane by widening the width of parallel parking.
8. Increasing shade with small trees.

Mid-term improvements such as:

1. Providing textured crosswalks at priority pedestrian corridors and imbedded lights where justified (see **Figure 4**).
2. Widening sidewalks to a minimum of 6 feet where space is available.
3. Remove/relocate bigger obstructions (parking stand, small trees, small light posts, etc.)
4. Constructing bulb-outs at all feasible locations.
5. Increasing shade (trees & awnings).
6. Improving walkability (landscaping, street furniture, leveled/textured sidewalk, way finder signs).
7. Providing green bike lanes.

8. Improving lighting (LED/photocell).

Long-term improvements such as:

1. Reduce lane width by moving the curb and gutter.
2. Increasing sidewalk width by moving curb and gutter.
3. Rebuilding sidewalk if significant damage and/or concrete sections not aligned from tree roots.
4. Remove/relocate larger obstructions (poles, trees, light poles, fire hydrant, mast arms, etc.)
5. More extensive landscaping and planting larger shade trees.

Except for the major arterials (Alton Road, Washington Avenue north of 5th Street, Collins Avenue north of 5th Street and 5th Street), it is recommended to lower the posted speed to a maximum of 25 mph. This is in agreement with the City of Miami Beach Transportation Master Plan and the Bicycle/Pedestrian Master Plan, as well as satisfying one of the main criteria defining a PPZ. The City Street Design Guidelines goes even further and recommends in addition to the 25 mph posted speed for PPZ, extending the 20 MPH zone to improve pedestrian safety. For 25 mph posted speed, no additional studies are required as this speed is consistent with the City's master plans and PPZ criteria. However, for designating corridors for a posted speed of 20 mph, additional speed studies may be required to provide the technical and legal justifications on a corridor by corridor basis.

In addition, the pedestrian phases of the traffic signals can be enhanced by increasing the Walk/Don't Walk time, adding pedestrian sensors to supplement the push button, and creating a minimum phase recall at important intersections such as along 5th Street. While the minimum phase recall can be based on a crossing speed of 2.8 feet per second, longer pedestrian phases can be triggered if the push button is activated to better accommodate slower pedestrians. A minimum pedestrian phase recall will prevent the phase from skipping when there is no pedestrian or vehicular demand for that movement. This may cause driver frustration if it happens too frequently. Therefore, the benefits of this policy should be evaluated for each intersection using its controller skipped phase logged history as a guide. **Figure 9** indicates traffic signals operating at various cycle lengths or uncoordinated. A more uniform signal timing operation can be implemented and adjusted for pedestrian priority operation, and for designing signal progression to accommodate slower speeds.

In summary, the prioritization of major improvements takes into account a number of factors including deficiencies, scoring/grading technique, right-of-way width, City's master plans, pedestrian crashes, and other factors such as pedestrian generators (parks, shopping, museum, convention center, places of worship, entertainment, etc.), transit routes and stops, parking and hotel locations. **Attachment 4** provides information on crashes, location of parking garages and hotels, places of worship and major pedestrian generators that should be considered in corridor selection for PPZ. A summary of the characteristics of each roadway with the various scores is shown in **Table 1**. This table has been prepared to assist in prioritizing and selecting projects for new design concepts.

Per project scope and kick-off meeting, three corridors will be selected for developing PPZ design concepts. A priority list was developed based on reviewing **Table 1** and the deficiency figures.

Improvement concepts and costs for selected corridors are discussed in Section VIII of this report.

TABLE 1
MIAMI BEACH PPZ FIELD DATA SUMMARY

E/W Streets	Posted Speed (MPH)	Lane Width (FT)	Street Parking	Bike Lane	Bike Share	Cross-Walks	Curb Align?	West of Washington Ave						East of Washington Ave					
								Sidewalk Width	Sidewalk Grade	Obstruction Score (1-10)	Walkability Grade	Light Grade	Shade Grade	Sidewalk Width	Sidewalk Grade	Obstruction Score (1-10)	Walkability Grade	Light Grade	Shade Grade
16 Street	30*	11'-10'-11'	Yes-P	Yes-Green	NO	~All-D	YES	~ 5'	B	5	B-	B	D	~ 5'	B+	6	B+	A	C
15 Street	30*	11'-12'-10'	Yes-P	NO	YES	~All-D	YES	~ 5'	B-	7	B-	B	C	8'	A-	9	A-	A	B
Espanola Way	30* (15 Sch)	9'-12'	Yes-P	NO	NO	~All-E	YES	4' TO 10'	A-	7	B	B+	C	>10'	B+	10	A-	A	C
14 Street	30* (15 Sch)	11'	~Yes-P	NO	YES	~All-D	YES	4' & 5'	C+	7	B-	B	D	> 7'	A-	10	A-	A	D
13 Street	30*	10'-11'	~Yes-P	NO	YES	~All-D	YES	4' & 5'	B-	7	B	B	D	> 7'	B+	9	B+	A	D
12 Street	30*	17'-11'-9'	Yes-P	NO	YES	~All-D	YES	5'	C+	6	B-	B	D	7'	A-	7	B+	A	D
11 Street	30	12'-11'-9.5'	Yes-P	NO	YES	~All-D	YES	5' & 10'	C+	7	B-	A	C	> 7'	B+	7	B+	A	D
10 Street	30*	12'-11'	Yes-P	NO	NO	~All-D	YES	5'	C	7	C+	B	D	> 7'	B+	8	B	A	D
9 Street	30*	11'	Yes-P	NO	YES	~All-D	YES	5'	B-	6	B-	B	D	> 7'	A-	8	A-	A	D
8 Street	30*	11'	Yes-P	NO	NO	~All-D	YES	5'	B-	7	B-	B/A-	D	> 7'	B+	8	B+	A	C
7 Street	30*	11'-10'	Yes-P	NO	YES	~All-D	YES	5'	B-	5	C+	B	D	> 7'	B	7	B	A	D
6 Street	30*	11'	~Yes-P	NO	NO	~All-D	YES	~ 5'	B-	6	B-	B-	D	~ 5'	B+	7	B+	A	C
5 Street	35	11'	NO	Diamond	NO	~All-E	YES	> 10'	A-	9	B+	B	B	> 10'	A-	8	A-	A	B
4 Street	30* (15 Sch)	10'	Yes-P	NO	YES	~All-D	YES	> 6'	B+	5	B+	A	C	> 6'	A-	8	A-	A	D
3 Street	25 (15 Sch)	9'	Yes-P	NO	NO	~All-D	YES	> 7'	A-	7	A-	A-	B	> 7'	B+	8	A-	A	C
2 Street	30*	10'-11'	~Yes-P	NO	NO	~All-D	YES	5' TO 7'	B+	8	B+	A-	B	5' TO 6'	A-	9	A-	A	C
1 Street	30*	10'-11'	Yes-P&M	NO	NO	~All-D	YES	6' TO 10'	A-	10	A-	A	B	6' TO 10'	A-	8	A-	A	C
South Pointe Dr	30*	11'	~Yes-P	Yes-Green	NO	~All-D	YES	8' TO 10'	A	10	A	A	C	6' TO 10'	A-	9	A-	A	C
N/S Streets								North of 5 Street						South of 5 Street					
Alton Road	35 (15 Sch)	10'-11'	~NO	Gr/Sharrow	YES	All-E&B	YES	6' TO 15'	A	9	A	B/B+	C	6' TO 15'	A-	9	A	B+	C
Lenox Ave	30 (15 Sch)	10'-16'-12'	~Yes-P	NO	YES	All-D&E	YES	4' TO 6'	B+	8	A-	B/C+	C						
Michigan Ave	30* (15 Sch)	12'-16'-12'	~Yes-P&A	NO	YES	~All-D	YES	4' TO 7'	B+	8	A-	B/C+	C	5' TO 7'	A-	8	A-	A-	B
Jefferson Ave	30*	~ 16'	Yes-P&A	NO	YES	~All-D	YES	5'	B+	7	B+	B/B+	C	5' TO 8'	A-	8	A-	A-	C
Meridian Ave	30*	~10- 16'	Yes-P	NO	YES	~All-D	YES	5'	B+	9	A-	B/B+	B	5' TO 7'	A-	9	A-	A-	A
Euclid Ave	30 (15 Sch)	10'	Yes-P&A	Diamond	NO	All-D&E	YES	5'	B+	8	B+	B	D	8' & 5'	A-	9	B+	B+	C
Pennsylvania Ave	30 (15 Sch)	10'-17'	Yes-P	NO	NO	~All-D	YES	5' TO 9'	B+	9	B+	B	C						
Drexel Ave	30*	9'-10'	Yes-P&A	NO	NO	~All-D	YES	5' TO 9'	B+	8	B+	B	C						
Washington Ave	30/35	11'-12'	Yes-P	Sharrow	NO	All-E&B	YES	6' TO 12'	A	10	A	A	B	8' TO 10'	A-	10	A	A	B
Collins Avenue	30	9.5'-10'	Yes-P	~Sharrow	NO	All-B	YES	6' TO 12'	B+	8	B+	A/B	D	8' TO 10'	A-	9	A	A	B
Ocean Drive	30	~11'	Yes-P-V	Green/NO	YES	ALL-E&B	YES	10' TO 15'	B+	9	A	A	C	> 10'	A-	10	A	A	B

Notes:

Obstruction score: Best = 10 (No Obstructions within 6') - Worst = 0 (Sidewalk <4' & Obstructions > 20)

Crosswalk Type: D= Dual Lines, E=Emphasis, B=Brick or Textured

Street Parking: P=Parallel; A=Angle; M=Median; V=Valet

Sch= School Speed Limit (15 mph)

(*) No posted speed sign, posted speed assumed

(~) Description applies to most of the corridor but not all

VII. Short-Term Improvement Costs

Average improvement costs are presented in **Table 2**. This table is used for general reference. The short-term standard improvement costs and PPZ specific improvement costs are provided in **Table 3**. **Table 4** shows a cost estimate of immediate action related to replacing faded crosswalks with emphasis crosswalks. More detailed cost estimations were developed for the selected corridors and desired improvements and are provided in **Attachments 5, 6 & 7**.

Based on the Gap Analysis, a series of areawide low-cost improvements were identified that would help bring the study area into compliance with the criteria for a Pedestrian Zone. These improvements range in scope from simple adjustments to pedestrian signal timings to the placement or relocation of signage or street furniture. These types of improvements can be done through regularly schedule maintenance. Other typical improvements that were identified include the construction of bulb-outs and/or wider sidewalks to help shorten crossing distances at intersections and to provide a wider clear walking path. These types of improvement would require the expenditure of capital improvement funds. In order to assist the City with planning and programming of these types of improvements, a literature search was conducted to help develop a quick reference guide to estimating project costs. The most useful resources that were located include:

1. **Safe Routes to School Online Guide** (<http://guide.saferoutesinfo.org/index.cfm/>), a web resource, was developed through a collaborative effort by experts in the field to assist in providing information related to supporting the development of Safe Routes to School programs with links to publications and training resources. Under the Engineering tab, there are links to various strategies, and within those strategies a discussion of treatments and their potential costs.
2. **Costs for Pedestrian and Bicyclist Infrastructure Improvements**, published in October 2013, was produced by UNC Highway Safety Research Center for the Federal Highway Administration. It is subtitled, *A Resource for Researchers, Engineers, Planners, and the General Public*, and this effort was specifically targeted at developing a database of unit costs for estimating various bicycle and pedestrian infrastructure costs.

The following summarizes the most relevant unit cost information applicable to this project.

TABLE 2
 Unit Cost of Typical Improvements

Infrastructure	Description	Median	Average	Minimum	Maximum	Cost Unit	Sources	Observations
Bikeway	Bicycle Lane (5')	\$89,470	\$133,170	n/a	\$536,680	Mile	6	6
Bikeway	Signed Bicycle Route	\$27,240	\$25,070	\$5,360	\$64,330	Mile	3	6
Bikeway	Signed Bicycle Route with improvements	\$241,230	\$239,440	\$42,890	\$536,070	Mile	1	6
Curb Extension	Curb Extension/ Choker/ Bulb Outs	\$10,150	\$13,000	\$1,070	\$41,170	Each	19	28
Raised Crossing	Raised Crosswalk	\$7,110	\$8,170	\$1,290	\$30,880	Each	14	14
Raised Crossing	Raised Intersection	\$59,160	\$50,540	\$12,500	\$114,150	Each	5	5
Crosswalk	High Visibility	\$3,070	\$2,540	\$600	\$5,710	Each	4	4
Crosswalk	Striped Crosswalk	\$340	\$770	\$110	\$2,090	Each	8	8
Crosswalk	Striped Crosswalk	\$6	\$9	\$1	\$26	Linear foot	12	48
Crosswalk	Striped Crosswalk	\$6	\$7	\$1	\$31	Sq. Ft.	5	15
Sidewalk	Brick Sidewalk	\$60	\$60	\$12	\$160	Linear Ft.	9	9
Sidewalk	Concrete Paved Shoulder	\$6	\$7	\$3	\$58	Sq. Ft.	1	11
Sidewalk	Concrete Sidwalk	\$27	\$32	\$2	\$410	Linear Ft.	46	164
Sidewalk	Concrete Sidewalk Patterned	\$38	\$36	\$11	\$170	Linear Ft.	4	5
Sidewalk	Concrete Sidewalk Stamped	\$45	\$45	\$5	\$160	Linear Ft.	12	17
Sidewalk	Concrete Sidwalk + Curb	\$170	\$150	\$23	\$230	Linear Ft.	4	7
Sidewalk	Sidewalk Unspecified	\$34	\$45	\$14	\$150	Linear Ft.	17	24
Sidewalk	Sidewalk Pavers	\$70	\$80	\$54	\$200	Linear Ft.	3	4
Ped Detection	Furnish and Install	\$180	\$390	\$68	\$1,330	Each	7	14
Ped Detection	Push Button (Retrofit)	\$230	\$350	\$61	\$2,510	Each	22	34
Ped Detection	Push Button Removal		\$45	\$21	\$92	Each		
Speed Control	Speed Bump	\$1,670	\$1,550	\$540	\$2,300	Each	4	4
Speed Control	Speed Hump	\$2,130	\$2,640	\$690	\$6,860	Each	14	14
Speed Control	Speed Table	\$2,090	\$2,400	\$2,000	\$4,180	Each	5	5
Curb Ramps	Truncated Dome	\$37	\$42	\$6	\$260	Sq. Ft.	9	15
Curb Ramps	Wheelchair Ramp	\$740	\$810	\$89	\$3,600	Each	16	31
Curb Ramps	Wheelchair Ramp	\$12	\$12	\$3	\$76	Sq. Ft.	10	43
Curb/Gutter	Curb and Gutter	\$20	\$21	\$1	\$120	Linear Ft.	\$16	\$108
Lighting	In Pavement Lighting	\$18,250	\$17,260	\$6,480	\$40,000	Total	4	4
Lighting	Streetlight	\$3,600	\$4,880	\$310	\$13,900	Each	12	17
Street Furniture	Street Trees	\$460	\$430	\$54	\$940	Each	7	7
Street Furniture	Bench	\$1,660	\$1,550	\$220	\$5,750	Each	15	17
Street Furniture	Bench Removal		\$910	\$80	\$3,140	Each		
Street Furniture	Bus Shelter	\$11,490	\$11,560	\$5,230	\$41,850	Each	4	4
Street Furniture	Bus Shelter Removal		\$3,690	\$720	\$10,460	Each		
Street Furniture	Trash Receptacle	\$1,330	\$1,420	\$310	\$3,220	Each	12	13
Street Furniture	Trash Receptacle Removal		\$320	\$130	\$520	Each		

TABLE 3
 General Preliminary Cost Estimated for PPZ Improvements

Short-term standard improvements		Number of Locations or Units or Trees	Number of Intersections	Number of Crosswalks	Estimated Cost	Notes:
1	Immediate replacement of faded crosswalks with emphasis crossings.		7	23	\$60,718.50	See Table 4
2	Insuring visible crosswalk at each intersection's approach. Convert 70% of double line crosswalks to emphasis crosswalks		48	192	\$487,680.00	Based on a unit cost of \$2,540 each. (1) (2)
3	Removing/relocating small obstructions where feasible (signs, mail storage, newsstand, etc.)				\$51,946.67	Assumed 15% of Item 4 cost (Fixing sidewalk, etc.)
4	Trimming hedges and low branches, insuring adequate site distance (visible triangles at corners.)					To be performed by City.
5	Fixing sidewalk damage and improving vertical alignment.				\$346,311.11	Assumed 10% of sidewalks need repair. (3)
6	Increasing shade with medium trees where easily implemented.	473			\$283,800.00	Assumed 10% of all streets minus state roads and Meridian Avenue. Assumed \$600 per tree. (4)
TOTAL SHORT-TERM STANDARD IMPROVEMENTS					\$1,230,456.28	
Short-term PPZ improvements						
1.	Lower posted speed to 25 mph maximum and installing posted MPH speed limit signs by MUTCD guidance. R2-1 (24x30) (700-1-11)	109			\$41,965.00	All entry points and key interior points. (3)
2.	Insuring all signalized intersections have countdown pedestrian signal heads.		7		\$31,319.40	Assumed 4 2-way ped signal Item 0653-1-12. (3)
3.	Implementing a pedestrian friendly signal timing, cycle length and Walk/Don't Walk phases.				See Item 4	
4.	Implementing no right turn on red where warranted.				\$24,000.00	Engineering fees for Short-Term PPZ improvements Items 3 and 4. Assumed 160 hours.
5.	Eleven feet lanes can be reduced to 10 feet lane by widening the width of parallel parking- edge stripe.				\$76,689.28	Striping 6" white line. Includes 10% contingency. (3)
6.	Providing bike lanes if lane width in excess of 15 feet.				\$461,373.52	5 Foot bike lanes. (1) (2)
TOTAL SHORT-TERM PPZ IMPROVEMENTS					\$635,347.20	

Prepared December 1, 2017

Cost sources:

- (1) *Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the General Public* ", Max A. Bushell, Bryan W. Poole, Charles V. Zegeer, Daniel A.
- (2) *Advisory Inflation Factors For Previous Years (1987-2016)* , FDOT Office of Policy Planning – Transportation Costs Reports
- (3) *FDOT Item Average Unit Cost from 2016/11/01 to 2017/10/31*
- (4) *Bentrock's Plant Finder*, November 2017.

TABLE 4
Short-Term Actions - Replacement of Faded Crosswalks with Emphasis Crosswalks.

Intersections	Number of Crosswalks	Average Unit Cost	Estimated Cost	Notes
1. Meridian Avenue and 16th Street	4	\$2,540	\$10,160	NB/SB Crosswalks only on the east and west approaches.
2. Merian Avenue and 15th Street	4	\$2,540	\$10,160	
3. Meridian Avenue and Española Way	2	\$2,540	\$5,080	
4. Jefferson Avenue and 9th Street	4	\$2,540	\$10,160	
5. Pennsylvania Avenue and 12th Street	4	\$2,540	\$10,160	
6. Drexel Avenue and 15th Street	4	\$2,540	\$10,160	
7. Drexel Avenue and 12th Street (T-Intersection)	1	\$3,070	\$3,070	Crosswalk only across north approach (Drexel Avenue). Assumed median unit cost.
TOTAL ESTIMATED COST			\$58,950	
Adjusted for Inflation - 1.03 Factor (2)			\$60,720	

Sources:

- (1) *Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the General Public* ", Max A. Bushell, Bryan W. Poole, Charles V. Zegeer, Daniel A. Rodriguez, UNC Highway Safety Research Center. Prepared for the Federal Highway Administration, October 2013,
 (2) *Advisory Inflation Factors For Previous Years (1987-2016)* , FDOT Office of Policy Planning – Transportation Costs Reports

VIII. Improvement Concepts and Costs

The preliminary recommended east-west streets are **13th Street** because it provides an important link to the Flamingo Park and is located central to the Flamingo Area, **11th Street** because it is undergoing improvements and therefore to insure PPZ concepts are evaluated, and **4th Street** to identify ways to improve clearance and reduce the number of obstructions in the South Pointe neighborhood. Another good candidate is **6th Street** as it provides a link to the shopping center/supermarket, the South Shore Community Center and the beach. Following discussions with City staff, the highest ranked east-west corridor is 6th Street. Concept improvement plans and preliminary cost estimations were developed for 6th Street and are provided in **Attachment 5**.

The preliminary recommended north-south streets are the three roads connecting to Flamingo Park (**Michigan Avenue, Jefferson Avenue and Meridian Avenue**) because they have wide lanes allowing new design concepts and are also central to the Flamingo area. Sections of these streets have large trees that typically cause damage to the sidewalk. Additional damage was created by Hurricane Irma by uprooting or tilting trees causing additional damage to the sidewalk requiring immediate City attention. Other candidate is **Pennsylvania Avenue** because it is near Washington Avenue and close to the commercial area. Following discussions with City staff, the two highest ranked north-south avenues are **Meridian Avenue** and **Pennsylvania Avenue**. Concept improvement plans and preliminary cost estimations were developed for both Avenue and are provided in **Attachment 6**.

In addition to the three corridors identified above, concept plans were developed for an improved pathway extending between Washington Avenue and the beach via 14th Place. Concept improvement plans are provided in **Attachment 7**.

ATTACHMENT 1

Kick-Off Meeting Minutes



June 14, 2017

MEETING MINUTES

South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis

City of Miami Beach

Task 1: Kick-Off Meeting - Friday, May 26, 2017

K&S Project No. 18237.03

Attendance:

- Winsome Bowen, AICP, CPCC, Deputy Director Transportation, City of Miami Beach
- Lynda Westin, Transportation Manager, City of Miami Beach
- Josiel Ferrer-Diaz, E.I., Transportation Manager, City of Miami Beach
- John Krane, P.E., Director of Transportation Planning, Keith & Schnars (K&S)
- José Luis Rodríguez, P.E., Senior Traffic Engineer, K&S
- Mark Kline, P.E., Director of Roadway Design, K&S
- Debbie Love, AICP, Director of Planning, K&S
- Marisol Ortega, ISA, Landscape Architecture Designer, K&S
- Fadi Emil Nassar, P.E., PTOE, Assistant Director of Traffic Engineering, K&S

Time and Date: Friday, May 26, 2017, 11:00 AM

Location: Conference Room, Transportation Department
1688 Meridian Ave., Suite 801, Miami Beach, FL 33139

Attachments

The purpose of the meeting was to confirm the City's expectations for the project, identify data needs from the City of Miami Beach, and to discuss the timeline and deliverables. The following minutes summarize the meeting discussions and Keith & Schnars' (K&S) understanding of how to proceed with the study. A copy of the Meeting Agenda is presented in **Attachment 1**.

Study Objective: The study objective is to prepare a Conceptual Plan including both infrastructure and policy solutions for the study area to enhance pedestrian safety and

comfort, with the goal of implementing the City's Pedestrian Priority Zone (PPZ) criteria as defined in the City Design Guidelines. Representative conceptual designs will be prepared in coordination with City staff and applied to groupings of area roadways based on their existing characteristics, constraints and opportunities for improvement.

Study Area: S. Pointe Drive to the south, Alton Road to the west, Ocean Drive to the east, and 16th Street to the north.

The study area includes the mostly residential Flamingo Neighborhood with low-rise and single-family homes, the Entertainment District between Ocean Drive and Washington Avenue, and the area between S. Pointe Drive and 5th Street with medium to high-rise buildings. The study area includes **20 East-West roads** (1st Street to 16th Street, Commerce Street, S. Pointe Drive, 14th Place/Court, and Española Way), and **13 North-South roads** (Alton Road, Lenox Avenue, Michigan Avenue, Jefferson Avenue, Meridian Avenue, Euclid Avenue, Pennsylvania Avenue, Drexel Avenue, Washington Avenue, Collins Court, Collins Avenue, Ocean Court, and Ocean Drive).

Data Collection: The PPZ feasibility study will build on existing studies including the **Miami Beach (MB) Street Design Guidelines (April 2016)**, the **MB Bicycle-Pedestrian Master Plan (2015)**, and the **MB Transportation Master Plan (April 2016)** documents (these have been downloaded from the City's website).

In general, As-Built road construction plans are available through MB for the newer areas such as south of 5th Street. Little information is available for the historical section of the Flamingo Neighborhood. Most internal east-west roadways have 50-ft right-of-way; whereas, north-south roadways have 70-ft right-of-way. Collins Avenue and a section of Alton Road are State Roads and As-Built plans can be obtained from FDOT. Plans for Washington Avenue and Ocean Drive will be more challenging to obtain. There may also be private development plans available that would include some of this information.

Lynda Westin will be the City point of contact and will collect the existing City data and information needed to assist with the Study. She will set up an internal meeting with Public Works, Office of Capital Improvement Projects, Planning (Land Use), GIS, Parking and other departments to identify existing documents related to roadway plans, surveys, right-of-way, typical cross-sections, utility plans, crash data, traffic and pedestrian counts, transit and GIS layers.

Some traffic data may be obtained from recent studies to be provided by City. Parking policies can be obtained from Monica Beltran or Saul Francis, Director, Parking Department. The Police Department can provide identification of crime zones, or areas of higher crime activity. Past public input regarding pedestrian issues may be obtained

through Public Works. Lynn Bernstein (now retired) may be able to contribute background information regarding Miami Beach pedestrian issues.

According to the Miami-Dade County GIS database, the study area includes 67 traffic signals (excluding school and pedestrian flashers). The latest signal timing plans for these signals will be obtained from Miami-Dade County Traffic Engineering to identify timings, pedestrian phasing, actuations, and recalls. Field review will identify the types of pedestrian signal heads, and where countdown pedestrian signals have already been installed.

The study scope does not include collection of new traffic or pedestrian counts. The analysis will be based on existing and available data.

Guiding Policies: The PPZ Concept Plan should be consistent with the City's transportation mobility hierarchy of prioritizing pedestrians first, then bicycles and transit, and finally vehicles; while maintaining freight movement mobility needs. Within the study area, there is generally an east-west pedestrian/bike travel movement between the residential areas and the Entertainment District where many residents work.

In general, the City would consider the removal/replacement of traffic signals or All-Way stop signs if the study demonstrates this would result in improved operations/safety/walkability conditions. The City would also consider physical improvements such as roundabouts/small traffic circles or street diets/reduced lane widths (where appropriate and feasible). Concepts favoring walkability such as passive street calming measures are preferable compared to speed tables or speed humps. Raised or textured crosswalks and/or intersections may be considered. Similarly, green bike lanes consistent with the MUTCD are desirable where appropriate as this concept has recently been implemented in Miami Beach. The study recommendations should not reduce the overall number of parallel parking space within the study area. It was noted that audible pedestrian signals are not necessarily liked by the residents, due to the associated volume of noise created upon activation.

Existing Conditions and Deficiencies: Evaluating existing conditions and identifying deficiencies will be performed using field review, recent aerials, and collected data. The main focus will be to evaluate each roadway segment's conditions compared to the ten criteria that defines a PPZ.

The data will be summarized using tabular and graphical formats. Separate summaries will be provided for roadway segments (sidewalk widths and continuity, obstructions, lighting, shading, speed limit, travel lane width, right-of-way, parallel parking, bike lanes, street furniture, land use, walkability, etc.) and for intersections (crosswalk type, traffic

control, pedestrian signal head, countdown timers, curb ramp/sidewalk alignment, bulb-outs, etc.). Considering the large number of streets to be evaluated, evaluation criteria ranges will be grouped into categories to streamline the evaluation process and prioritization (e.g. the presence of shading along a segment may be assigned a level of 1 to 5 ranging from minimal to full coverage). Likewise, an average unit price per category improvement will be developed for initial feasibility assessment and improvement ranking. In addition to tables and graphics, maps will be used to identify the location of major pedestrian generators (to be provided by City staff), and sidewalk width and continuity. Color will be used to enhance the readability of tables and graphics by quickly identifying the locations and clusters of problem areas.

Attached are two completed samples of intersection information (**Attachment 2: Existing Intersection Control Types and Asset Number** and **Attachment 3: Existing Crosswalks and Right-Turn Lanes**) and one typical blank form for segment information of one street (**Attachment 4: PPZ Data Collection Form**).

Improvement prioritization: The data collection effort will identify deficiencies for each corridor and develop a scoring system for critical items such as sidewalk, obstructions, lighting, shading and walkability. This information combined with generalized improvement cost, right-of-way availability and constructability will result in the development of a preliminary priority list that will be reviewed with City staff before presenting it to the public. The final priority list will be evaluated with a higher level of details and will serve as the basis of the concept plans.

Concept plans: It is anticipated that 3 or 4 typical section concepts will be developed that can be applied to groups of roadways. A listing of the necessary improvements and associated costs for each roadway will then be generated based on the applied concept.

Policy recommendations: Comprehensive Plan policy recommendations will be coordinated with the mobility plan policy recommendations and those identified within other plans, such as the Transportation Master Plan.

Anticipated Meetings: Three formal meetings are anticipated, including one internal meeting to review preliminary results, one public meeting and one project priority meeting with City staff. In addition, monthly progress meetings will be scheduled, preferably starting at 10:30 AM. The City may choose to include others in these meetings to maximize the utility of these meetings.

Next Progress Meeting: To be scheduled for the third week of June (19th – 23rd). A standing monthly meeting will be established by the City for progress meetings.

MEETING MINUTES
South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis
City of Miami Beach
Task 1: Kick-Off Meeting - Friday, May 26, 2017
K&S Project No. 18237.03

ATTACHMENT 1

KICK-OFF MEETING AGENDA

City of Miami Beach
South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis
Kick-Off Meeting Agenda - Friday, May 26, 2017

PURPOSE

The purpose of this meeting is to confirm project expectations, identify data needs from the City and finalize timeline and deliverables

INTRODUCTIONS

- City Staff
- Keith and Schnars (K&S)

DISCUSSION ITEMS

- Study goals and objectives
- Data collection
- Existing conditions and deficiencies
- Recommended improvements and prioritization
- Conceptual plans
- Anticipated meetings with staff and public
- Deliverables and timeline

DOCUMENT REQUEST

- Available roadway plans/surveys/right-of-way/cross-sections/utility plans
- Available traffic and pedestrian counts
- Available crash data
- GIS layers maintained by the City of Miami Beach
- Documented public input
- Final transportation and bike/pedestrian master plans
- Committed developments
- Previous transportation studies
- Pedestrian generators

OPEN DISCUSSION

NOTES:

MEETING MINUTES
South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis
City of Miami Beach
Task 1: Kick-Off Meeting - Friday, May 26, 2017
K&S Project No. 18237.03

ATTACHMENT 2

**EXISTING INTERSECTION CONTROL TYPES
AND SIGNAL ASSET NUMBER**

Table X1

Miami Beach Pedestrian Priority Zone Feasibility Study

Existing Intersection Control Types and Signal Asset Number

STREET	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsylvania Ave	Drexel Avenue	Washington Ave	Collins Court-NB	Collins Avenue	Ocean Court-NB	Ocean Drive	Total Sig.	Total 4-Stp	Total 2-Stp
16 Street	2645	4-Stop	2753	2731	2746	4-Stop	4-Stop	2707	2806		2769			7	3	0
15 Street	2644	4-Stop	6907	4-Stop?	2745	2710	4-Stop	2706	2805		3888		4-Stop	7	4	0
Espanola Way					WB Stop (1-Way)	WB Stop (1-Way)	7157 School	1-Way WB	2804 / 5082Sch	NB-Stop	2663			3	0	3
14 Pl/14 Ct	EB Stop				2744	4-Stop	5546			NB-Stop		NB-Stop	EB-Stop	2	1	4
14 Street	3911 Btw Ct&St	4-Stop	E/W Stop		E/W Stop	4-Stop	2768	2704	2803	NB-Stop	2662	NB-Stop	EB-Stop	5	2	5
13 Street	7361	4-Stop	4-Stop		4-Stop	4-Stop	7158 School	E/W Stop	2802	NB-Stop	6024	NB-Stop	EB-Stop	4	4	4
12 Street	4631 (5613 Old)	N/S Stop	SB Stop		WB Stop	E/W Stop	E/W Stop	1-Way NB	2801	NB-Stop	6915	NB-Stop	EB-Stop	3	0	8
11 Street	2643	N/S Stop	NB Stop	6706	2743	2709	2767		2800	NB-Stop	2661	NB-Stop	6344	8	0	4
10 Street	3372	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		2799	NB-Stop	2660	NB-Stop	4424	4	6	2
9 Street	E/W Stop (5612 Old)	E/W Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop		2798	NB-Stop	6579	NB-Stop	EB-Stop	2	5	5
8 Street	2642	4-Stop	4-Stop	4-Stop	2742	4-Stop	4-Stop		2797	NB-Stop	2659	NB-Stop	1-Way WB	4	5	2
7 Street	WB Stop	4-Stop	4-Stop	4-Stop	4-Stop	4-Stop	SB Stop		2796	NB-Stop	6006	NB-Stop	6345	3	5	4
6 Street	2641	4-Stop	4-Stop	2729	2741	4-Stop	4-Stop		2795	NB-Stop	7005	NB-Stop	1-Way WB	5	3	2
5 Street	2640	2734	2752	2728	2740	N/S Stop			2794	NB-Stop	2658	NB-Stop	4649	8	0	3
4 Street	5614Sch/ 7290 Stop	N/S Stop	4-Stop	4-Stop	4-Stop	N/S Stop			4-Stop (2793-Old)	NB-Stop	4-Stop (2657-Old)	NB-Stop	4-Stop	0	6	4
3 Street			WB-Stop	N/S Stop	4-Stop	N/S Stop			E/W Stop	NB-Stop	E/W Stop	NB-Stop	EB-Stop	0	1	8
2 Street	6919 (4172 Old)		N/S Stop	4-Stop	4-Stop				4-Stop	NB-Stop	4-Stop	NB-Stop	4-Stop	1	5	3
1 Street	5615Sch/ 6857 Stop			N/S Stop	N/S Stop				4-Stop (2791-Old)	NB-Stop	4-Stop (2656-Old)	NB-Stop	E/W Stop	1	2	5
S Pointe Dr	6132 Ped-F 4-Stop								4-Stop		4-Stop		4-Stop	0	4	0
Total Signals	12	1	3	4	7	2	4	3	14	0	13	0	4	67	56	66

Legend:

- 9999 Traffic Signal Asset Number
- 4-Stop 4-Way Stop Control
- N/S Stop 2-Way Stop Control in North/South Direction
- E/W Stop 2-Way Stop Control in East/West Direction
- 1-Way Access to one-way street - No traffic control signs
- (5612 Old) Removed Signal
- 6907 Future Signal
- (999 Ped-F) Pedestrian flashing beacon signal
- 7157 School School Flascher
- Road Closed or no Cross Street Connection Road Closed or no Cross Street Connection
- 7290 Flashing Signal

MEETING MINUTES
South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis
City of Miami Beach
Task 1: Kick-Off Meeting - Friday, May 26, 2017
K&S Project No. 18237.03

ATTACHMENT 3

EXISTING CROSSWALKS AND RIGHT-TURN LANES

Table X3

Miami Beach Pedestrian Priority Zone Feasibility Study
Existing Crosswalks and Right-Turn Lanes

STREET	TYPE	Alton Road	Lenox Avenue	Michigan Avenue	Jefferson Avenue	Meridian Avenue	Euclid Avenue	Pennsylvania Ave	Drexel Avenue	Washington Ave	Collins Court-NB	Collins Avenue	Ocean Court-NB	Ocean Drive
16 Street	X-Walk RT	E1234 0	D13 0	D1234 0	D1234 0	D1234 0	D1234 0	D1234 0	D1234 0	E1234 0		E134, T2 0		
	Notes													
15 Street	X-Walk RT	E1234 0	D1234 0	D1234 0	D1234 0	D1234 0	D1234 0	D1234 0	D1234 0	E134 0		B123 0		E234 0
	Notes									*T Intersection				*T Intersection
Espanola	X-Walk RT					???	E4 0	E1234 0	0 0	E1234 0	0 0	B134 0		
	Notes								*Pedestrian Way		*T Intersection			
14 Cx/14 Pl	X-Walk RT	E4 R4				E23 0	E1234 0	E4 0					0 0	E234 0
	Notes	*T Intersection											*Alley way	
14 Street	X-Walk RT	E24 R24	D1234 0	D4		D2 0	D1234 0	D1234 0	E234 0	E1234 0	0 0	B1234 0	0 0	E34 0
	Notes			*T Intersection		*T Intersection			*T Intersection		*Alley way		*Alley way	*T Intersection
13 Street	X-Walk RT	E234 R24	D1234 0	D134	0	D123 0	D1234 0	D1234 0	D24 0	E1234 0	0 0	B1234 0	0 0	E134 0
	Notes			*T Intersection	*construction	*T Intersection					*Alley way		*Alley way	*T Intersection
12 Street	X-Walk RT	E1234 0	D1 0	D4		D123 0	D24 0	???	0 0	E1234 0	0 0	B1234 0	0 0	E134 0
	Notes		*T Intersection			*T Intersection			*T Intersection		*Alley way		*Alley way	*T Intersection
11 Street	X-Walk RT	E1234 0	D3 0	E23	0	0 0	0 0	D1234 0		E1234 0	0 0	B1234 0	0 0	E134 0
	Notes		*T Intersection		*construction		*construction				*Alley way		*Alley way	*T Intersection
10 Street	X-Walk RT	E1234 0	D1234 0	D1234	D1234 0	D24 0	D1234 0	D1234 0		E1234 0	0 0	B1234 0	0 0	E34 0
	Notes									Corner Bulb outs	*Alley way		*Alley way	*T Intersection
9 Street	X-Walk RT	E24 R24	D24 0	D3	D1234 0	D1234 0	E1234 0	D1234 0		E1234 0	0 0	B1234 0	0 0	E134 0
	Notes									Corner Bulb outs	*Alley way		*Alley way	*T Intersection
8 Street	X-Walk RT	E1234 0	D1234 0	D1234	D1234 0	E1234 0	E1234 0	D1234 0		E1234 0	0 0	B1234 0	0 0	E134 0
	Notes										Corner Bulb outs		*Alley way	*T Intersection
7 Street	X-Walk RT	E2 R2	D1234 0	D1234	D1234 0	D1234 0	E1234 0	D1 0		E1234 0	0 0	B1234 0	0 0	E134 0
	Notes							*T Intersection		Corner Bulb outs	*Alley way		*Alley way	*T Intersection
6 Street	X-Walk RT	E23, D4 R24	D1234 0	D1234	D1234 0	D1234 0	D1234 0			E134 0	0 0	B124 0	0 0	E14 0
	Notes									*T Intersection	*Alley way		*Alley way	*T Intersection
5 Street	X-Walk RT	D23 R124	E13, B24 0	E13, B24	E13, B24 0	E13, B24 0	E13 0			B1234 0	0 0	B1234 0	0 0	E1234?
	Notes						*Divided from 5 St				*Alley way		*Alley way	?May be Brick?
4 Street	X-Walk RT	E2, T3 0	E12 0	E1234 0	D1234 0	D1234 0	D1234 0			B1234 0	0 0	B1234 0	0 0	B1234 0
	Notes	*T Intersection	*T Intersection								*Alley way		*Alley way	
3 Street	X-Walk RT	B3		E12 0	D1234 0	D1234 0	0 0			B2 0	0 0	B1234 0	0 0	B134 0
	Notes	*T Intersection?		*T Intersection			???				*Alley way		*Alley way	
2 Street	X-Walk RT	B23 0		E1, D2 0	D124 0	D1234 0				B1234 0	0 0	B1234 0	0 0	B134 0
	Notes	*T Intersection		*T Intersection							*Alley way		*Alley way	
1 Street	X-Walk RT	B1, D2 0			D12 0	D124 0				B123, D4 0	0 0	B1234 0	0 0	B1234 0
	Notes	*T Intersection				*T Intersection					*Alley way		*Alley way	
S. Pointe	X-Walk RT	B13 0								B1234 0		B1234 0		B1234 0
	Notes	*Road Curves												

Direction/Approach

1
2
3
4

Crosswalk Type:

B Brick
P Pavement Treatment
X Raised
E Emphasis (Zebra)
D Double lines

Other:

R Right-Turn Lane
C Corner Bulb Outs

Note: Emphasis crosswalk (E4) on the east approach and southbound right-turn lane (R4) at the T-Intersection of Alton Road & 15 Place

MEETING MINUTES
South Beach Pedestrian Priority Zone Study - Phase I: Feasibility Analysis
City of Miami Beach
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K&S Project No. 18237.03

ATTACHMENT 4

SAMPLE
PPZ DATA COLLECTION

ATTACHMENT 2

Data Collection Forms

Figure Z-1
PPZ Data Collection - 1st Street

PPZ Criteria	Alton Rd>	Jefferson Ave>	Meridian Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
9. Parking Lane/Type		YES-P (SIDE & MEDIAN)	YES-P (SIDE & MEDIAN)	YES-P (SIDE & MEDIAN)	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO
7b. Shade Coverage		15%	85%	80%	20%	30%	15%	15%	50%
7a. Shade type / Grade		TREES	TREES	TREES	PALM/AWNING	PALM/AWNING	PALM	PALM	PALM
6b. Lighting Coverage		Y	Y	Y	Y	Y	Y	Y	Y
6a. Lighting Type / Grade		I	I	I	I	I	I	I	I
5c. Obstruction Grade		10	10	10	10	7	7	6	8
5b. Obstruction Type		--	SHRUB (NEEDS TRIMMING)	FH	L/S/T/FH	L/S/T/Pr	L/S/FH	L/T/Pr/BR	Tr/L
5a. Obstruction density		0	0	0	0	6	8	8	0
4d. Sidewalk Grade		A	A	A	B+	B+	B+	B+	A-
4c. Sidewalk Continuity		Y	Y	Y	Y	Y	Y	Y	Y
4b. Sidewalk width		6' (6')	8' (7')	8' (7')	8' (8')	7' (4.5')	7' (4.5')	7' (3.8')	10' (6')
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	PAVER
3b. Walkability Grade		A-	A-	A-	A-	A-	A-	A-	A-
3a. Land Use		RESIDENTIAL	RESIDENTIAL	MIXED	COMMERCIAL	COMMERCIAL	MIXED	COMMERCIAL	HOTEL
2. Lane Width		10'	10'	10'	11'	11'	11'	11'	11'
1. Speed		--	--	--	--	--	--	--	--
NOTES		Parallel parking in median	Parallel parking in median				BULB-OUT	BULB-OUT	
PPZ Criteria	Alton Rd>	Jefferson Ave>	Meridian Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes



PPZ Criteria	Alton Rd>	Jefferson Ave>	Meridian Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
NOTES		Parallel parking in median	Parallel parking in median			BULB-OUT	BULB-OUT	BULB-OUT	
1. Speed		--	--	--	--	--	--	--	--
2. Lane Width		10'	10'	10'	11'	11'	11'	11'	11'
3a. Land Use		OPEN SPACE	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	PARKING LOT
3b. Walkability Grade		A-	A-	A-	A-	A-	A-	A-	B
4a. Sidewalk Type		CONCRETE	CONCRETE (NO TEXTURE)	CONCRETE (NO TEXTURE)	CONCRETE	CONCRETE	CONCRETE	PAVER	PAVER
4b. Sidewalk width		8.3' (6.5')	8' (7')	7.7' (6.7')	7' (4.5')	7' (4.5')	7' (4.9')	7' (4.7')	6' (5')
4c. Sidewalk Continuity		Y	Y	Y	Y	Y	Y	Y	Y
4d. Sidewalk Grade		A-	A-	A-	A-	A-	A-	A-	B
5a. Obstruction density		0	0	0	6	6	7	6	13
5b. Obstruction Type		L/G	L/Pr	FH/Pr	L/BR/Pr	L/S	CP/L/BR/Pr	L/T/G	Tr/L/Hedge
5c. Obstruction Grade		10	10	10	7	7	7	7	5
6a. Lighting Type / Grade		I	I	I	I	I	I	I	I
6b. Lighting Coverage		Y	Y	Y	Y	Y	Y	Y	Y
7a. Shade type / Grade		TREES	TREES / AWNING	TREES / AWNING	TREES	TREES	TREES	TREES	TREES
7b. Shade Coverage		40%	80%	80%	40%	30%	50%	25%	50%
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO
9. Parking Lane/Type		YES-P (SIDE & Median)	YES-P (SIDE & Median)	YES-P (SIDE & Median)	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO

Figure Z-6
PPZ Data Collection - 6th Street


PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
9. Parking Lane/Type		NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO	NO	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
7b. Shade Coverage		60%	20%	15%	15%	20%	5%	15%	15%	40%	15%	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	AWNING/TREES	AWNING/TREES	AWNING	BLDG	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		7	7	7	7	7	7	7 & I	7	7	7 & I	
5c. Obstruction Grade		8	6	5	5	7	7	7	7	7	7	
5b. Obstruction Type		L/S	L/S/G	L/S	L/S/Pr/G	L	L/S/CONSTRUCTION	L/S	Pr/S/L	S	L	
5a. Obstruction density		3	6	7	9	2	4	4	3	1	2	
4d. Sidewalk Grade		B+	B	B	B-	B	C+	B-	B+	B+	A-	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		6.2' (3.8')	5' (4.2')	5' (3.4')	5' (3.4')	5' (3.2')	5' (3.8')	5' (3.4')	5' (3')	5' (3.5')	5' (3.7')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade		B+	B	B	B-	B	B	B	B+	B+	B+	
3a. Land Use		CHURCH	RESIDENTIAL	RESIDENTIAL	MIXED	RESIDENTIAL	MIXED	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	
2. Lane Width		11'	11'	11'	11'	11'	11'	11' (one way)	11' (one way)	11' (one way)	11' (one way)	
1. Speed		--	--	--	--	--	--	--	--	--	--	
NOTES								ONE-WAY EB	ONE-WAY EB	ONE-WAY WB	ONE-WAY WB	
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
6th Street												
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
NOTES								< BO - ONE-WAY EB	ONE-WAY EB / BO>	<BO/ONE-WAY WB	ONE-WAY WB/BO>	
1. Speed		--	--	--	--	--	--	--	--	--	--	
2. Lane Width		11'	11'	11'	11'	11'	11'	11' (one way)	11' (one way)	11' (one way)	11' (one way)	
3a. Land Use		RETAIL/PUBLIX	RESIDENTIAL	RESIDENTIAL	MIXED	MIXED	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	
3b. Walkability Grade		A-	C	C+	C+	C+	C+	B	B	B	A-	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4b. Sidewalk width		12' (8')	6' (2.5')	5' (3.5')	5' (3')	5' (3.6')	5' (3.7')	5' (5')	5' (3.2')	5' (3)	5' (3')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade		A-	C-	C+	C+	C+	C-	B	B+	B+	A-	
5a. Obstruction density		0	13	10	15	15	9	0	3	6	3	
5b. Obstruction Type		--	S/L/G/Pr/CP	NP/CP/S/L	Pr/CP/S/L	CP/Pr/S/L/G	CP/S/L/Pr	--	FH/L/S	FH/L/S/Pr/u	S/L	
5c. Obstruction Grade		8	4	5	3	3	5	9	7	5	7	
6a. Lighting Type / Grade		7	7	7	7	7	7	I	I & 7	I & 7	I & 7	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade		TREES/AWNING/BLDG	TREES	TREES	TREES	TREES	TREES	BLDG	AWNING	TREES / BLDG	BLDG	
7b. Shade Coverage		60%	10%	10%	10%	10%	5%	10%	40%	20%	15%	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
9. Parking Lane/Type		NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO / ONE-WAY	NO / ONE-WAY	YES-PARALLEL	YES-PARALLEL	

Figure Z-13
PPZ Data Collection - 13th Street

PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
9. Parking Lane/Type		NO	NO			YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	Y-P	Y-P	Y-P	Y-P	
8. Bike Lane Type / Grade		NO	NO			NO	NO	NO	NO / BIKE SHARE	NO	NO	NO/BIKE SHARE	NO	
7b. Shade Coverage		50%	35%	20%	20%	25%	50%	30%	20%	20%	20%	20%	20%	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	PALM / BLDG	TREES	TREES/BLDG	TREES	AWNING	TREES	PALM/BLDG	PALM/BLDG	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I	I	I	7	7	7	7	I	I	I	I	
5c. Obstruction Grade		4	7	10	10	8	6	6	5	8	7	7	7	
5b. Obstruction Type		L/T/S	L/T	G	--	S/L	S/L	S/L	S/L/G/P	L/S/P	L/S	L/S/BR	L/S/P	
5a. Obstruction density		9	3	1	0	5	6	7	7	4	6	6	7	
4d. Sidewalk Grade		C	C	A	A	B-	B	B-	C	B	B	B+	B+	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		4' (3.5')	4' (4')	10'	8' + 8'	5' (4')	5' (4')	5' (4')	5' (3.5')	7.5' (3')	7.5' (5')	7.5' (6')	7' (5')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade		B	B	A	A	B-	B	B-	C	B	B	A-	A-	
3a. Land Use		RESIDENTIAL/MIX	RESIDENTIAL	PARK	PARK	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED	MIXED	MIXED	MIXED	MIXED	
2. Lane Width		10'	10'			11'	11'	11'	11'	11'	11'	11'	11'	
1. Speed		--	--			--	--	--	--	--	--	--	--	
NOTES														
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes



PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
NOTES														
1. Speed		--	--			--	--	--	--	--	--	--	--	
2. Lane Width		10'	10'			11'	11'	11'	11'	11'	11'	11'	11'	
3a. Land Use		RESIDENTIAL	RESIDENTIAL	PARK	PARK	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED	MIXED	MIXED	MIXED	MIXED	
3b. Walkability Grade		B	B	A	A	B-	B-	C+	B	B+	B+	B+	A-	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4b. Sidewalk width		4' (4')	4' (4')	10'	8' + 8'	5' (4')	5' (4')	5' (3')	5' TO 7' (3')	7.5' (6')	7.5' (5')	7.5' (5')	7.5' (6')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade		C+	C	A	A	B-	B-	C	B	B+	B+	B+	A-	
5a. Obstruction density		8	5	1	0	5	5	4	6	0	7	4	0	
5b. Obstruction Type		WP/T	L/WP/S/HEDGE	G	--	S/L	S/L	S/L	S/L/P	S/P/L	S/L/U	L/S	L/S/P	
5c. Obstruction Grade		5	7	10	10	8	8	7	5	10	7	9	10	
6a. Lighting Type / Grade		I	I	I	I	7	7	7	7	I	I	I	I	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade		PALM	PALM	TREES	TREES	PALM/BLDG	TREES	TREES/BLDG	PALM	AWNING	TREES	PALM/BLDG	PALM/BLDG	
7b. Shade Coverage		30%	10%	20%	20%	5%	50%	15%	5%	50%	10%	20%	20%	
8. Bike Lane Type / Grade		NO	NO			NO	NO	NO	NO	NO	NO	NO	NO	
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL			YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO	Y-P	Y-P	Y-P	Y-P	

Figure Z-14
PPZ Data Collection - 14th Street

PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
9. Parking Lane/Type		NO	NO			YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	Y-PARALLEL	Y-PARALLEL	Y-PARALLEL	
8. Bike Lane Type / Grade		NO	NO			NO	NO	NO	NO	NO	NO-BIKE SH.	NO	NO	
7b. Shade Coverage		10%	30%			25%	20%	40%	20%	25%	10%	20%	10%	
7a. Shade type / Grade		TREES	TREES			TREES / BLDG	TREES/BLDG	TREES	TREES	AWNINGS	PALM/BLDG	PALM/BLDG	PALM/BLDG	
6b. Lighting Coverage		YES	YES			YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I			I	I	I	I	I	I	I	I	
5c. Obstruction Grade		6	6			8	4	6	5	9	10	9	9	
5b. Obstruction Type		HEDGE	HEDGE			S/L/HEDGE	S/L	S/L	S/L/Pr	S/L/Pr	--	L/SIGN	SIGN/Pr/V	
5a. Obstruction density		1	1			4	6	7	8	3	0	4	3	
4d. Sidewalk Grade		C+	C+			C	C	B	C+	B+	A	A-	A-	
4c. Sidewalk Continuity		YES	YES			YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		4' (3.5')	4' (3.5')			5' (4')	4' TO 5' (2.5')	5' (4')	5' (3.5')	8' (5')	9'(7)	7' (6')	7' (6')	
4a. Sidewalk Type		CONCRETE	CONCRETE			CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade		B-	B-			C	C	B	C+	B+	A	A-	A-	
3a. Land Use		RESIDENTIAL	RESIDENTIAL			RESIDENTIAL	RESIDENTIAL	SCHOOL	SCHOOL	COMMERCIAL	COMM.	COMM.	COMM.	
2. Lane Width		11'	11'			11'	11'	11'	11'	11'	11'	11'	11'	
1. Speed		--	--			--	15 SCHOOL	15 SCHOOL	15 SCHOOL	--	--	--	--	
NOTES														
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes



PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Ct>	Ocean Dr>	Notes
NOTES						DS								
1. Speed		--	--			--	15 SCHOOL	15 SCHOOL	15 SCHOOL	--	--	--	--	
2. Lane Width		11'	11'			11'	11'	11'	11'	11'	11'	11'	11'	
3a. Land Use		RESIDENTIAL	RESIDENTIAL			RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED	COMM.	COMM.	COMM.	COMM.	
3b. Walkability Grade		B-	B-			C	C+	C+	B-	B+	B+	A-	A-	
4a. Sidewalk Type		CONCRETE	CONCRETE			CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4b. Sidewalk width		4' & 5' (3.5')	4' (3')			5' (3')	5' (3.8')	5' (3.8')	5' (3.8')	7+' (6')	7' (6')	7' (6')	7' (6')	
4c. Sidewalk Continuity		YES	YES			YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade		B-	C+			C	C+	C+	B-	B+	B+	A-	A-	
5a. Obstruction density		1	0			8	10	9	9	0	0	0	0	
5b. Obstruction Type		HEDGE	--			S/L/P/M/CP	S/L/CP	CP/L/S	CP/L/S/W	L/S	L/S/Pr	L/S	L/S/Pr	
5c. Obstruction Grade		6	8			5	5	5	5	10	10	10	10	
6a. Lighting Type / Grade		I	I			7	7	7	7	7	7	7	7	
6b. Lighting Coverage		YES	YES			YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade		PALM	TREES			TREES / BLDG	TREES / BLDG	TREES	TREES / BLDG	AWNINGS	PALM/BLDG	PALM/BLDG	PALM/BLDG	
7b. Shade Coverage		25%	25%			20%	20%	20%	10%	20%	10%	20%	10%	
8. Bike Lane Type / Grade		NO	NO			NO	NO	NO	NO	NO	NO	NO	NO	
9. Parking Lane/Type		NO	NO			YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	Y-PARALLEL	Y-PARALLEL	Y-PARALLEL	Y-PARALLEL	

Figure Z-Es
PPZ Data Collection - Espanola Way

PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ave>	Ocean Dr>	Notes
9. Parking Lane/Type					YES-PARALLEL	YES-PARALLEL	~ YES-PARALLEL	YES-P / PARTIAL	NO / PED ONLY	YES-PARALLEL		
8. Bike Lane Type / Grade					NO	NO	NO	NO	NO	NO		
7b. Shade Coverage					30%	25%	40%	80%	70%	60%		
7a. Shade type / Grade					TREES	TREES	TREES	TREES / AWNING	TREES / AWNINGS	PALM / BLDG		
6b. Lighting Coverage					YES	YES	YES	YES	YES	YES		
6a. Lighting Type / Grade					I	I	I	I	I	I		
5c. Obstruction Grade					6	5	7	7	10	10		
5b. Obstruction Type					S	L/M/S	L/T/S	REST TC	CLEAR MIDDLE PATH	T/L/S/Pr		
5a. Obstruction density					1	6	5	5	0	12		
4d. Sidewalk Grade					D+	B-	B-	A-	A+	B+		
4c. Sidewalk Continuity					YES	YES	YES	YES	YES	YES		
4b. Sidewalk width					3.5' (2')	5' (3')	5' (3')	5' TO 12' (3')	> 10'	> 10'		
4a. Sidewalk Type					CONCRETE / NARROW	CONCRETE	CONCRETE	CONCRETE	ASPHALT	CONCRETE		
3b. Walkability Grade					C	B-	B-	A	A+	A-		
3a. Land Use					RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL		
2. Lane Width					8'	12' one way	12' one way	Ped Way	9'	9'		
1. Speed					--	--	15 MPH SCH	--	--	--		
NOTES						ONE-WAY WB	ONE-WAY WB	ONE-WAY WB	PEDESTRIAN ONLY	< BULB OUT >		
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ave>		Notes



PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Enclid Ave>	Pennsylvania Ave	Drexel Ave>	Washington Ave>	Collins Ave>		Notes
NOTES						ONE-WAY WB	ONE-WAY WB	ONE-WAY WB	PEDESTRIAN ONLY	< BULB OUT >		
1. Speed					--	--	--	--	--	--		
2. Lane Width					8'	12' one way	12' one way	Ped Way	9'	9'		
3a. Land Use					RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL		
3b. Walkability Grade					C	C	C	A	A+	A-		
4a. Sidewalk Type					CONCRETE	CONCRETE	CONCRETE	CONCRETE	ASPHALT	CONCRETE		
4b. Sidewalk width					4' (2')	4' (2')	4' & 5' (3')	VARIES*	>10'	>10'		
4c. Sidewalk Continuity					YES	YES	YES	YES	YES	YES		
4d. Sidewalk Grade					D+	D+	B	A	A+	A-		
5a. Obstruction density					3	5	8	*	0	12		
5b. Obstruction Type					S/L	S/L	S/L	T/S/REST TC	CLEAR MIDDLE PATH	T/S/Pr		
5c. Obstruction Grade					6	6	8	9	10	10		
6a. Lighting Type / Grade					I	I	I	I	I	I		
6b. Lighting Coverage					YES	YES	YES	YES	YES	YES		
7a. Shade type / Grade					TREES	TREES	TREES	TREES	TREES/AWNINGS	PALM / BLDG		
7b. Shade Coverage					40%	30%	35%	75%	80%	50%		
8. Bike Lane Type / Grade					NO	NO	NO	NO	NO	NO		
9. Parking Lane/Type					YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-P / PARTIAL	NO / PED ONLY	YES-PARALLEL		

Figure Z-15
PPZ Data Collection - 15th Street

PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ave>	Ocean Drive	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		YES-PARALLEL	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO / BIKE SHARE		NO	
7b. Shade Coverage		5%	20%	20%	25%	30%	40%	25%	40%		70%	
7a. Shade type / Grade		TREES	PALM	PALM	TREES	TREES	TREES	PALM	PALM / Awning		PALM	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES		YES	
6a. Lighting Type / Grade		7	7	7	7	7	7	7	7		I	
5c. Obstruction Grade		8	6	6	8	8	8	8	6		9	
5b. Obstruction Type		S	S	S/G/HEDGE	S	S	S	S/HEDGE	S/L/Pr/TC		TREES / Pr	
5a. Obstruction density		4	6	6	5	3	4	5	6		3	
4d. Sidewalk Grade		B-	B-	B-	B-	B-	B-	C+	B-		A-	
4c. Sidewalk Continuity		YES	YES	Y	YES	YES	YES	YES	YES		YES	
4b. Sidewalk width		5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')		8' (5') ?	
4a. Sidewalk Type		CONCRETE / FT	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE		CONCRETE	
3b. Walkability Grade		B-	B-	B-	B-	B-	B-	C+	A-		A-	
3a. Land Use		COMMERCIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED		COMMERCIAL	
2. Lane Width		11'	11'	11'	11'	11'	11'	11'	12'		10'	
1. Speed		--	--	--	--	--	--	--	--		--	
NOTES		< BULB OUT						HEDGE TRIM				
PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Euclid Ave>	Pennsylvania Ave>	Drexel Ave>	Washington Ave>	Collins Ave>		Notes



PPZ Criteria	Alton Rd>	Lenox Ave>	Michigan Ave>	Jefferson Ave>	Meridian Ave>	Enclid Ave>	Pennsylvania Ave	Drexel Ave>	Washington Ave>	Collins Ave>		Notes
NOTES		< BULB OUT	CONSTRUCTION									
1. Speed		--	--	--	--	--	--	--	--		--	
2. Lane Width		11'	11'	11'	11'	11'	11'	11'	12'		10'	
3a. Land Use		COMMERCIAL	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED		COMMERCIAL	
3b. Walkability Grade		A-	B-	B-	B-	B-	B-	B-	B-		A-	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE		CONCRETE	
4b. Sidewalk width		8' (7')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')		8' (5')?	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES		YES	
4d. Sidewalk Grade		A	B-	B-	B-	B-	B-	B-	B-		A-	
5a. Obstruction density		0	6	9	3	3	7	5	7		6	
5b. Obstruction Type		--	S	S	S	S	S	S	S/L		TREES	
5c. Obstruction Grade		10	6	6	8	8	6	8	6		7	
6a. Lighting Type / Grade		7	7	7	7	7	7	7	7		I	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES		YES	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES		PALM	
7b. Shade Coverage		10%	40%	30%	30%	25%	50%	40%	30%		60%	
8. Bike Lane Type / Grade		NO / SHARED BIKE	NO	NO	NO	NO	NO	NO	NO		NO / BIKE SHARE	
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		YES-PARALLEL	

Figure Z-S
PPZ Data Collection - South Pointe Drive

PPZ Criteria	Alton Rd>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Dr>	Notes
9. Parking Lane/Type		YES-PARALLEL	No	No	YES-PARALLEL	Y-Angle
8. Bike Lane Type / Grade		Y-GREEN	Y-GREEN	Y-GREEN	Y-GREEN	No
7b. Shade Coverage		30%	60%	30%	50%	25%
7a. Shade type / Grade		Trees/Bldg	Trees	Trees	Trees / Bldg	Trees
6b. Lighting Coverage		Y	Y	Y	Y	Y
6a. Lighting Type / Grade		I	I	I	I	I
5c. Obstruction Grade		10	8	8	10	9
5b. Obstruction Type		L	--	G	G	L/G
5a. Obstruction density		0	1	1	0	3
4d. Sidewalk Grade		A	A	A-	A	A-
4c. Sidewalk Continuity		Y	Y	Y	Y	Y
4b. Sidewalk width		8' (6')	9' (3.9')	9' (3.9')	10' (7')	6.5' (5')
4a. Sidewalk Type		PAVER	CONC	CONC	PAVER	CONC
3b. Walkability Grade		A	A	A-	A	A-
3a. Land Use		COMM	COMM	PARKING	COMM	OPEN/PARKING
2. Lane Width		11'	11'	11'	11'	11'
1. Speed		--	--	--	--	--
NOTES						
PPZ Criteria	Alton Rd>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Dr>	Notes



PPZ Criteria	Alton Rd>	Washington Ave>	Collins Ct>	Collins Ave>	Ocean Dr>	Notes
NOTES					< BULB-OUT >	
1. Speed		--	--	--	--	--
2. Lane Width		11'	11'	11'	11'	11'
3a. Land Use		MIX	MIX	MIX	RESIDENTIAL	MIX
3b. Walkability Grade		A	A	A-	B+	A
4a. Sidewalk Type		PAVER	CONC	CONC	CONC	PAVER
4b. Sidewalk width		10' (7.3')	7' (6')	7' (6')	6' (4')	6+'(6+')
4c. Sidewalk Continuity		Y	Y	Y	Y	Y
4d. Sidewalk Grade		A	A-	A-	B+	A
5a. Obstruction density		0	0	0	8	0
5b. Obstruction Type		--	L	L	L/S/Pr	--
5c. Obstruction Grade		10	10	10	7	10
6a. Lighting Type / Grade		I	I	I	I	I
6b. Lighting Coverage		Y	Y	Y	Y	Y
7a. Shade type / Grade		PALM / BLDG	PALM / BLDG	PALM / BLDG	PALM/BLDG	PALM/BLDG
7b. Shade Coverage		70%	30%	30%	40%	80%
8. Bike Lane Type / Grade		Y-GREEN	SHARROW	SHARROW	Y-GREEN	NO
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL

Figure Z-AI
PPZ Data Collection - Alton Road

PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type		NO	NO	NO	NO	NO	NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	
8. Bike Lane Type / Grade		Y-GREEN	Y-GREEN	Y-GREEN	Y-GREEN	NO	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	
7b. Shade Coverage		70%	30%	50%	50%	45%	5%	5%	10%	15%	15%	15%	50%	20%	20%	15%	15%	15%	
7a. Shade type / Grade		TR/BLDG	TR/BLDG	TR/BLDG	TR/BLDG	TR/BLDG	--	--	TREES	TREES/AWNING	TREES/AWNING	TREES/AWNING	TREES	TREES	TREES	TREES	TREES	TREES / BLDG EDGE	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I	I	I	I	7	7	7	7	7	7	7	7	7	7	7	7	
5c. Obstruction Grade		9	9	9	10	10	9	7	9	10	9	9	9	9	9	9	10	9	
5b. Obstruction Type		S/G/L	SIGN/FH	S	--	--	S/L/G/SIGN	S/L	SIGN	--	SIGN/PS	G/NS	PS	L/SIGNAL	L/Pr/FH	SIGN	--	FH	
5a. Obstruction density		4	3	1	0	0	4	8	1	0	2	2	1	3	3	1	0	1	
4d. Sidewalk Grade		A-	A-	A-	A	A	B	B	A-	A-	A-	A-	A-	A-	B+	A-	A-	A-	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		12' (6+')	8'(7')	9' (6+')	15' (6+')	6' (6')	6' (5')	8' (5')	15' (5.5')	9' (6+')	9' (5.5')	15' (5.5')	15' (5.5')	15' (5.5')	15' (6+')	9' (6+')	8' (6+')	9' (6+')	
4a. Sidewalk Type		CONCR.	CONCR.	CONCR.	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	CONCRETE/ASPHALT	
3b. Walkability Grade		A	A	A-	A	A	B-	B	A-	A-	A-	A-	A-	A-	B=	A-	A-	A-	
3a. Land Use		MIX	RES.	MIX	COMM.	RES.	RES.	MIX	MIX	COMMERCIAL	COMMERCIAL	COMMERCIAL	MIX	MIX	MIX	COMMERCIAL	COMMERCIAL	COMMERCIAL	
2. Lane Width		2x10'	2x10'	2x10'	2x10'	2x10'	2x10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	2x11'	2x11'	
1. Speed		--	--	15 SCH	15 SCH	30	--	--	35	--	--	--	35	--	--	--	--	35	
NOTES																			
PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes



PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
NOTES		< B.O.	< B.O.	< B.O.	< B.O.	< B.O. >			CONSTRUCTION	BULB OUT >	< BULB OUT >	< BULB OUT >	< BULB OUT >	< BULB OUT >		< BULB OUT >	< BULB OUT >	< BULB OUT >	
1. Speed		--	30	15 SCH	15 SCH	--	--	--	--	35	--	--	--	35	--	--	--	--	35
2. Lane Width		2x10'	2x10'	2x10'	2x10'	2x10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	2x11'	2x11'	
3a. Land Use		COMM.	RESID.	PARKING	SCHOOL	MIX	MIX	COMMERCIAL	COMMERCIAL	MIX	COMMERCIAL	COMMERCIAL	PARK	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	
3b. Walkability Grade		A-	A-	A	A	B	B	B	A-	A-	A-	A-	A	A	A	A-	A	A-	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4b. Sidewalk width		12' (6+')	8'(7')	9' (6+')	15' (6+')	6' (6')	6' (6')	8' (6+')	15' (6+')	9' (6+')	9' (6+')	15' (6+')	15' (5.5')	15' (6+')	15' (6+')	9' (5')	8' (6+')	9' (5')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade		A-	A-	A	A	B	B	B	A-	A-	A-	A	A-	A	A	A	A	A-	
5a. Obstruction density		0	3	1	1	3	3	2	1	1	0	0	4	0	0	2	0	3	
5b. Obstruction Type		--	S/SIGN	U	G	S/L	S/G	L/SIGN	S	PS	--	--	U/G/PS/SIGN	--		L/PS	--	BUS STOP / S	
5c. Obstruction Grade		10	9	9	9	9	9	9	9	9	10	10	9	10	10	9	10	9	
6a. Lighting Type / Grade		I	I	I	I	I	7	7	7	7	7	7	7	7	7	7	7	7	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	
7b. Shade Coverage		50%	30%	60%	60%	20%	5%	5%	5%	30%	30%	20%	60%	30%	30%	30%	30%	40%	
8. Bike Lane Type / Grade		Y-GREEN	Y-GREEN	Y-GREEN	Y-GREEN	NO	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW/BIKE S	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	
9. Parking Lane/Type		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	~ YES-PARALLEL	YES PARALLEL	

Figure Z-Le
PPZ Data Collection - Lenox Ave

PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	15 Street	16 Street	Notes
9. Parking Lane/Type						YES-P	NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		NO	NO	~ YES-90 DEGREE	YES-PARALLEL	
8. Bike Lane Type / Grade						NO	NO	NO / BIKE SHARE	NO	NO	NO	NO		NO	NO	NO	NO	
7b. Shade Coverage						60%	60%	50%	80%	20%	30%	75%		30%	35%	20%	35%	
7a. Shade type / Grade						TREES	TREES/AWNINGS	TREES	TREES	TREES	TREES	TREES		PALM	TREES	TREES	TREES	
6b. Lighting Coverage						YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	
6a. Lighting Type / Grade						I	I	7	7	7	7	7		I	I	I	7	
5c. Obstruction Grade						9	10	8	8	8	6	8		7	7	7	3	
5b. Obstruction Type						WP/Pr	--	TREE STUMPS	TS	TS/S	HEDGE/L/S	T		FH/T	L	CARS/L/S/HEDGE	NP/S/L/M	
5a. Obstruction density						4	0	1	4	3	9	5		4	2	3	11	
4d. Sidewalk Grade						A-	A	A-	B	B	B+	B		B	B	B-	B+	
4c. Sidewalk Continuity						YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	
4b. Sidewalk width						6' (5')	7.5' (7.5')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')		4' (4')	4' (4')	4' (4')	5' (3.1')	
4a. Sidewalk Type						CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE/RNL	CONCRETE	CONCRETE/NL/DS		CONCRETE/DS	CONCRETE / NL	CONCRETE/DS/NL	CONCRETE	
3b. Walkability Grade						A-	A	A-	B+	B	B+	B		B	B+	B	B+	
3a. Land Use					SCHOOL	COMM	COMMERCIAL	MIX	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL		RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED	
2. Lane Width						10'	12.6'	16'	16'	16'	16'	16'		12'	12'	12'	12'	
1. Speed						15 SCH	--	--	--	--	30	NL/DS		--	--	--	--	
NOTES							GARAGE / NTOR		IRMA	DRIVEWAYS				DS	NARROW SIDEWALK	TRIM HEDGE	RELOCATE M/NS	
PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	15 Street	16 Street	Notes

Lenox Ave



PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	15 Street	16 Street	Notes
NOTES									IRMA	DRIVEWAYS		DRIVEWAYS		DRIVEWAYS	TRIM HEDGE	NARROW SIDEWALK		
1. Speed						15 SCH	--	--	30	--	30	--		---	---	--	---	
2. Lane Width						10'	12.6'	16'	16'	16'	16'	16'		12'	12'	12'	12'	
3a. Land Use					SCHOOL	COMM.	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL		RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	
3b. Walkability Grade						A-	A-	B+	B+	B+	B+	B-		B+	B+	B	B-	
4a. Sidewalk Type						CONCRETE	CONCRETE	CONCRETE/DS	CONCRETE/DS	CONCRETE/DS/NL	CONCRETE	CONCRETE/DS/NL		CONCRETE	CONCRETE	CONCRETE	CONCRETE/BT	
4b. Sidewalk width					6' (4')	10' (5')	5' (5')	6' (6')	6' (5')	6' (6')	6' (5')	5' (4')		4' (4')	4' (4')	5' (5')	5' (3.1')	
4c. Sidewalk Continuity						YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	
4d. Sidewalk Grade						A-	A-	B+	B+	B+	B	B		B+	B+	B	B	
5a. Obstruction density						7	2	0	1	0	2	10		0	1	4	10	
5b. Obstruction Type						S/L/T	G/FH	--	G	TS	HEDGE/M/T	S/L		--	L/HEDGE	L/Tr/HEDGE/FENCE	S/L/HEDGE	
5c. Obstruction Grade						5	8	10	9	10	9	6		8	7	8	5	
6a. Lighting Type / Grade						I	I	7	7	7	7	7		I	I	I	7	
6b. Lighting Coverage						YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	
7a. Shade type / Grade						TREES	TREES	TREES	TREES	TREES	TREES	TREES		TREES	TREES	TREES	TREES	
7b. Shade Coverage						50%	65%	25%	75%	35%	45%	25%		40%	50%	30%	50%	
8. Bike Lane Type / Grade						NO	NO	NO	NO	NO	NO	NO		NO	NO	NO	NO	
9. Parking Lane/Type						YES-P	NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		NO	NO	NO	YES-PARALLEL	

Figure Z-Mi
PPZ Data Collection - Michigan Ave

PPZ Criteria	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		NO	NO	NO	Y-P	Y-PARALLEL	
8. Bike Lane Type / Grade		NO / BIKE SHARE	NO	NO	NO / BIKE SHARE	NO	NO	NO	NO	NO		NO	NO	NO	NO	NO	
7b. Shade Coverage		70%	70%	70%	50%	75%	45%	65%	40%	35%		40%	40%	40%	60%	35%	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES*	TREES	TREES	TREES	TREES*		TREES*	TREES	TREES	TREES	TREES	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I	I	I	7	7	7	7	7		I	I	I	I	7	
5c. Obstruction Grade		9	6	8	8	8	8	8	8	8		8	8	7	7	4	
5b. Obstruction Type		L	L	Pr	Pr	Tr/Hedge	Tr/Hedge	Tr/Hedge	Tr/Hedge	Trees		--	--	--	M/G/S	S/L	
5a. Obstruction density		5	6	1	1	1	1	1	1	1		0	0	1	3	13	
4d. Sidewalk Grade		A-	A-	B+	B+	B+	B+	B+	B+	B+		A-	A-	B+	B-	B	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
4b. Sidewalk width		7.5' (5.5')	6' (3.6')	5' (4')	5' (4')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')		4' (4')	4' (4')	5' (3')	5' (3')	5' (4')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE		CONCRETE	CONCRETE	CONCRETE	CONC.	CONCRETE	
3b. Walkability Grade		A-	A-	B+	B+	B+	B+	B+	B+	B+		A-	A-	B+	B	B+	
3a. Land Use		SCHOOL	SCHOOL	COMM	RESIDENTIAL/MIX	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL		RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RES.	RESIDENTIAL	
2. Lane Width		12'	12'	12'	12'	12'	12'	12'	12'	15'		15'	12'	12'	12'	12'	
1. Speed		15 MPH SCH	15 MPH SCH	15 MPH SCH	--	--	--	--	--	--		--	--	--	--	--	
NOTES				RELOCATE Pr	NO RTOR SCH / N.L.	TRIM/TREE DOWN	TRIM HEDGE	TRIM HEDGE / N.L.	TRIM HEDGE	TRIM/TREE DOWN/DS		TREE DOWN					
PPZ Criteria	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes



PPZ Criteria	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
NOTES									* DOWNED TREES								
1. Speed		15 MPH SCH	15 MPH SCH	15 MPH SCH	--	--	--	--	30	--		--	--	--	--	--	
2. Lane Width		12'	12'	12'	12'	12'	12'	12'	12'	15'		15'	12'	12'	12'	12'	
3a. Land Use		RESIDENTIAL	RESIDENTIAL	COMMERCIAL	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL		PARK	PARK	PARK	MIXED	RESIDENTIAL	
3b. Walkability Grade		A-	A-	A-	A-	B+	B+	B+	B+	B+		A-	A	A	B+	B+	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE		CONCRETE/PAVER	CONCRETE/PAVER	CONCRETE/PAVER	CONC.	CONCRETE	
4b. Sidewalk width		7.5' (5.5')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')	5' (5')		7' (7')	7' (7')	5' (4')	5' (4')	5' (4')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
4d. Sidewalk Grade		A-	A-	A-	B+	B+	B+	B+	B	B+		A-	A	A	B	B+	
5a. Obstruction density		5	6	2	0	1	1	0	1	0		0	0	0	5	10	
5b. Obstruction Type		L	L/NS	L	--	L/Tr/HEDGE	NS	--	DOWNED TREE	--		--	--	--	S/L/WP	S/L	
5c. Obstruction Grade		9	6	8	9	8	8	9	8	9		10	10	9	8	6	
6a. Lighting Type / Grade		I	I	I	I	7	7	7	7	7		I	I	I	I	7	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES*	TREES		TREES	TREES	TREES	TREES	TREES	
7b. Shade Coverage		55%	70%	20%	40%	65%	75%	60%	60%	70%		85%	60%	60%	40%	30%	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO	NO		NO	NO	NO - BIKE SHARE	NO	NO	
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		YES-ANGLE	YES-ANGLE	YES-ANGLE	Y-ANGLE	YES-PARALLEL	

Figure Z-Je
PPZ Data Collection - Jefferson Ave

PPZ Criteria	2 St	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-ANGLE	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL					YES-P	YES-PARALLEL	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO	NO					NO	NO	
7b. Shade Coverage		60%	75%	50%	30%	75%	70%	70%	60%	55%	60%	20%			50%	35%	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	PALM	PALM			TREES	TREES	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES			YES	YES	
6a. Lighting Type / Grade		I	I	I & 7	I & 7	I & 7	I & 7	I & 7	I & 7	I & 7	I	I			7	7	
5c. Obstruction Grade		9	8	8	8	8	6	6	8	8	10	10			8	6	
5b. Obstruction Type		--	T	L/Pr	T/Pr	T	T	T	T/S	T/S					S	S/L/HEDGE	
5a. Obstruction density		0	1	5	2	5	7	6	5	4					2	8	
4d. Sidewalk Grade		A	A	A-	B+/A-	B	B	B+	B+	B+	A	A			B	B	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES					YES	YES	
4b. Sidewalk width		5' (5')	7' (3.9')	6' (3.9')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	5' (4')	10	10			5' (4')	5' (4')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE					CONC.	CONCRETE	
3b. Walkability Grade		A-	A	A-	A-	B	B	B+	B+	B+	A	A			B+	B	
3a. Land Use		RESIDENTIAL	RESIDENTIAL	MIXED	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	PARK	PARK			RES.	RESIDENTIAL	
2. Lane Width		16'	16'	14'	16'	17'	17'	17'	17'	17'					17'	17'	
1. Speed		--	--	--	--	--	--	--	--	--					--	--	
NOTES					TNL	TNL/IRMA	TREE STUMPS	TREE STUMPS	TN/ DS							HEDGE TRIM/DRIVEWAYS	
PPZ Criteria	2 St	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes



PPZ Criteria	2 St	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
NOTES		TRIM HEDGE	TRIM HEDGE		DS	DS	DS	DS / NL	IRMA / DS	DS / NL / BO>							
1. Speed		--	--	--	--	--	--	--	--	--					--	--	
2. Lane Width		16'	16'	14'	16'	17'	17'	17'	17'	17'					17'	17'	
3a. Land Use		RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	MIXED	COMMERCAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL/FIRE ST.	PARK	PARK			RES.	RESIDENTIAL	
3b. Walkability Grade		A-	A-	A	B	B	B+	B+	B+	B+	A	A			B	B+	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE / DS	CONCRETE / DS	CONCRETE / DS	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE			CONC.	CONCRETE / D.S.	
4b. Sidewalk width		7' (5')	7' (5')	8' (7')	7' (6')	5' (4.5')	5' (4.5')	5' (4.5')	5' (4.5')	5' (4.5')	10	10			5' (4')	5' (4')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES			YES	YES	
4d. Sidewalk Grade		A-	A-	A	B	B-	B+	B+	B+	B	A	A			B	B	
5a. Obstruction density		7	9	3	6	2	2	5	3	3					2	8	
5b. Obstruction Type		L/G/NP/HEDGE	L/S	L	T/S/Pr	T/SG	M / BR	T	T	T					S/HEDGE	S/L	
5c. Obstruction Grade		7	7	9	7	8	8	8	8	8	10	10			8	6	
6a. Lighting Type / Grade		YES	YES	YES	YES	YES	YES	YES	YES	YES	I	I			7	7	
6b. Lighting Coverage		I	I	I	7	7	7	7	7	7	YES	YES			YES	YES	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	PALM	PALM			TREES	TREES	
7b. Shade Coverage		30%	30%	20%	40%	70%	70%	60%	45%	35%	60%	20%			25%	50%	
8. Bike Lane Type / Grade		NO	NO	NO	NO - BIKE SHARE	NO	NO	NO - BIKE SHARE	NO	NO					NO	NO	
9. Parking Lane/Type		YES-ANGLE	YES-ANGLE	YES-ANGLE	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL					YES-P	YES-PARALLEL	

Figure Z-Eu
PPZ Data Collection - Euclid Ave

PPZ Criteria		3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	14 Place	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type			YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PAR	YES-PAR	YES-PARALLEL	
8. Bike Lane Type / Grade			NO	NO	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND / BIKE SHARE	
7b. Shade Coverage			40%	30%	10%	25%	35%	20%	30%	25%	15%	25%	15%	15%	10%	20%	20%	
7a. Shade type / Grade			TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	
6b. Lighting Coverage			YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade			I	I	7	7	7	7	7	7	7	7	7	7	7	7	7	
5c. Obstruction Grade			9	10	7	9	9	9	9	8	7	9	9	9	8	5	5	
5b. Obstruction Type			CP	--	Pr/S	HEDGE	--	HEDGE	NS/HEDGE	SIGN/PS	U/SIGN	--	--	--	NS	S/M/FH	S/L	
5a. Obstruction density			1	0	2	0	0	0	0	2	2	0	0	0	1	8	10	
4d. Sidewalk Grade			A	A-	B	B+	A-	B+	B+	B+	B+	A-	B+	B+	B	B-	B-	
4c. Sidewalk Continuity			YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width			8' (6')	8' (6.4')	5' (3')	5' (5')	5' (5')	5' (5')	5' (5')	5' (4.5')	5' (3')	5' (3.5')	5' (5')	5' (5')	5' (4.5')	5' (3.6')	5' (3.6')	
4a. Sidewalk Type			CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade			A-	A-	B	B+	A-	B+	B+	B+	B+	B+	B+	B+	B	B-	B	
3a. Land Use			RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	
2. Lane Width			10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	
1. Speed			--	--	--	--	--	--	--	--	--	--	--	15 SCH	15 SCH	--	30	
NOTES					N.L.	R.N.L.		TRIM	TRIM		R.N.L.	TRIM	TRIM	TRIM/N.L.				
PPZ Criteria		3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	14 Place	Espanola	15 Street	16 Street	Notes



PPZ Criteria		3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	14 Place	Espanola	15 Street	16 Street	Notes
NOTES						DRIVEWAYS	DRIVEWAYS	TRIM						TRIM				
1. Speed			--	--	--	--	--	--	--	30	--	--	--	15 SCH	15 SCH	--	--	
2. Lane Width			10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	
3a. Land Use			RESIDENTIAL/MIXED	MIXED	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	
3b. Walkability Grade			B	B+	B-	B+	B+	B+	B+	B	B	B	B+	B+	B+	B+	B-	
4a. Sidewalk Type			CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
4b. Sidewalk width			8' (4.6')	8' (5')	5' (4.5')	5' (5')	5' (3.7')	5' (4.5')	5' (4.5')	5' (3')	5' (3')	5' (4.5')	5' (4.5')	5' (4.5')	5' (5')	5' (3.8')	5' (3.8')	
4c. Sidewalk Continuity			YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade			B	B+	B-	B+	B+	B+	B+	B	B	B	B+	B+	B+	B+	B-	
5a. Obstruction density			5	1	3	0	1	1	1	3	1	1	1	1	0	2	9	
5b. Obstruction Type			L	--	S/P	--	HEDGE	HEDGE	HEDGE	HEDGE/PS/L/SIGN	FH	HEDGE	M	HEDGE	--	S	S/L	
5c. Obstruction Grade			9	9	8	9	7	8	8	7	7	8	8	8	9	7	5	
6a. Lighting Type / Grade			I	I	7	7	7	7	7	7	7	7	7	7	7	7	7	
6b. Lighting Coverage			YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade			TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	
7b. Shade Coverage			20%	20%	15%	20%	20%	45%	50%	30%	40%	15%	30%	15%	10%	30%	30%	
8. Bike Lane Type / Grade			NO / BIKE SHARE	NO	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	DIAMOND	
9. Parking Lane/Type			YES-ANGLE	YES-ANGLE	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PAR	YES-PAR	YES-PARALLEL	

Figure Z-Pe
PPZ Data Collection - Pennsylvania Ave

PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	Y-P	YES-PARALLEL	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO / BIKE SHARE	NO	NO	NO / BIKE SHARE	
7b. Shade Coverage		50%	55%	65%	25%	20%	40%	45%	20%	15%	25%	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I & 7	7	7	7	7	7	7	7	7	
5c. Obstruction Grade		10	9	9	7	7	9	8	8	6	6	
5b. Obstruction Type		--	L/NS	--	SIGN	U/SIGN	--	CP/G/SIGN	PS/G	S/L	S/FH/L	
5a. Obstruction density		0	3	0	1	2	0	3	2	6	9	
4d. Sidewalk Grade		A	A-	B+	B+	B+	A-	B+	B+	B	B	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		6' (6')	6' (4.8')	5' (5')	5' (3')	5' (3')	5' (5')	5' (4.5')	5' (4.5')	5' (4')	5' (4.5')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONC.	CONCRETE	
3b. Walkability Grade		A	A-	B+	B+	B+	A-	B+	B+	B+	B+	
3a. Land Use		RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL / SCHOOL	RES.	RESIDENTIAL	
2. Lane Width		10'	10'	17	17	17	17	17	17	11	11	
1. Speed		--	--	--	--	--	--	--	15 SCH	15 SCH	--	
NOTES					~ N.L.	< NO RTOR	N.L.			N.L.	N.L.	
PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes



PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
NOTES			~ N.L.	~ N.L.	~ N.L.		~ N.L. / TRIM					
1. Speed		--	--	--	--	--	30	15 SCH	15 SCH	15 SCH	30	
2. Lane Width		10'	10'	17	17	17	17	17	17	11	11	
3a. Land Use		MIXED	MIXED	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	SCHOOL	MIXED	RESIDENTIAL	
3b. Walkability Grade		B+	A-	B+	B+	A-	B	B+	A	B	B+	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONC.	CONCRETE	
4b. Sidewalk width		6' (4')	6' (6')	5' (4.5')	5' (3')	8' (6.3')	5' (4.5')	5' (4.5')	9' (7.6')	9' (6.7')	5' (3.1')	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4d. Sidewalk Grade		B+	A-	B+	B+	A-	B	B+	A	B	B+	
5a. Obstruction density		5	0	1	2	1	2	1	0	4	8	
5b. Obstruction Type		Pr/U/L	0	FH	M/SIGN	SIGN	TR/M/HEDGE	HEDGE	--	CP/S	S	
5c. Obstruction Grade		9	10	8	7	9	8	8	10	9	5	
6a. Lighting Type / Grade		7	7	7	7	7	7	7	7	7	7	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
7a. Shade type / Grade		TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	TREES	
7b. Shade Coverage		20%	35%	30%	25%	55%	50%	40%	50%	15%	25%	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	Y-P	YES-PARALLEL	

Figure Z-Dr
PPZ Data Collection - Drexel Ave

PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	ESPANOLA	15 Street	16 Street	Notes
9. Parking Lane/Type							YES-ANGLE	YES-ANGLE		Y-P	YES-PARALLEL	
8. Bike Lane Type / Grade							NO	NO		NO	NO	
7b. Shade Coverage							30%	40%		50%	40%	
7a. Shade type / Grade							TREES	TREES		TREES	TREES	
6b. Lighting Coverage							YES	YES		YES	YES	
6a. Lighting Type / Grade							7	7		I	7	
5c. Obstruction Grade							8	8		10	4	
5b. Obstruction Type							S/T/HEDGE	S/T		WP	S/FH/L	
5a. Obstruction density							2	4		0	11	
4d. Sidewalk Grade							B+	B+		A-	B	
4c. Sidewalk Continuity							YES	YES		YES	YES	
4b. Sidewalk width							5' (4.6')	5' (4.6')		9' (8')	5' (4')	
4a. Sidewalk Type							CONCRETE / B.S.	CONCRETE / B.S.		CONC.	CONCRETE / DS / NL	
3b. Walkability Grade							B+	B+		A-	B	
3a. Land Use							RESIDENTIAL	RESIDENTIAL		COMMERCIAL	RESIDENTIAL	
2. Lane Width							9'	9'		10'	10'	
1. Speed							--	15 SCH		15 SCH	--	
NOTES							TRIM HEDGE / D.S.	ONE-WAY/D.S.			N.L. / D.S.	
PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	15 Street		16 Street	Notes

Drexel Ave

PPZ Criteria	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	15 Street		16 Street	Notes
NOTES							ONE-WAY NB	ONE-WAY NB			D.S.	
1. Speed							--	15 SCH		15 SCH	--	
2. Lane Width							9'	9'		10'	10'	
3a. Land Use							RESIDENTIAL	MIXED		MIXED	MIXED	
3b. Walkability Grade							B	B+		B	B	
4a. Sidewalk Type							CONCRETE / D.S.	CONCRETE		CONC.	CONCRETE / DS	
4b. Sidewalk width							5' (3.8')	5' (4.6')		9' (6')	5' (4')	
4c. Sidewalk Continuity							YES	YES		YES	YES	
4d. Sidewalk Grade							B	B+		B	B	
5a. Obstruction density							5	2		0	8	
5b. Obstruction Type							G/Pr/S	S		CP/S	S	
5c. Obstruction Grade							7	8		10	6	
6a. Lighting Type / Grade							7	7		7	7	
6b. Lighting Coverage							YES	YES		YES	YES	
7a. Shade type / Grade							TREES	TREES		TREES	TREES	
7b. Shade Coverage							30%	25%		30%	35%	
8. Bike Lane Type / Grade							NO	NO		NO	NO	
9. Parking Lane/Type							YES-ANGLE	YES-ANGLE		Y-P	YES-PARALLEL	

Figure Z-Co
PPZ Data Collection - Collins Ave

PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO	
8. Bike Lane Type / Grade		NO	NO	NO	NO	NO	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	SHARROW	
7b. Shade Coverage		60%	60%	70%	30%	40%	15%	40%	20%	15%	25%	10%	15%	15%	10%	20%	20%	20%	
7a. Shade type / Grade		TREES	PALM	PALM	PALM	PALM	TREES/AWNING	TREES/AWNING	TREES/AWNING	TREES	TREES	TREES/BLDG	TREES	TREES	TREES	TREES	PALM	PALM	
6b. Lighting Coverage		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade		I	I	I	I	I	I*	7*	7*	7*	7*	7*	7*	7*	7*	7*	7*	7*	
5c. Obstruction Grade		8	9	10	10	10	10	10	9	7	9	7	7	7	4	7	9	9	
5b. Obstruction Type		Tr/L	NS	--	--	--	S/REST TC	--	S	S/L/Pr	S	S/L/Pr	S/L/Pr/G/PS	S/L/Pr	S/L/Pr	S/L/Pr	SIGN/S/G/PS/TC	S	
5a. Obstruction density		5	1	0	0	0	0	0	5	8	5	9	9	10	13	10	3	2	
4d. Sidewalk Grade		A	A	A	A-	A	A-	A	B+	A-	B+	B+	B+	B+	B+	B+	A-	A	
4c. Sidewalk Continuity		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		7.5' (3.1')	9.5' (5')	9.8' (5')	9.5' (7.5')	9.5' (5')	12' (8.4')	9' (4.8')	6.4' (4.5')	8' (6.2')	7.4' (4')	6.5' (4')	6.5' (4.2')	6.5' (5')	5.5' (4')	6' (5')	12.7' (6')	8' (6')	
4a. Sidewalk Type		CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade		A-	A-	A	A-	A	A-	A-	B+	A-	B+	B+	B+	B+	B+	B+	A-	A-	
3a. Land Use		NURSING/RES.	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	
2. Lane Width		10'	10'	10'	10'	10'	10'	10'	10'	10'	9.5'	9.5'	10'	9.5'	9.5'	9.5'	10'	10.5'	
1. Speed		--	--	--	--	--	30	--	--	--	--	--	--	--	30	--	--	--	
NOTES					CONSTRUCTION														
PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	16 Street	Notes

Collins Ave

[illegible]

Figure Z-Oc
PPZ Data Collection - Ocean Dr

PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	Notes
9. Parking Lane/Type		YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	NO	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PAR-VALET	YES-PARALLEL	
8. Bike Lane Type / Grade		YES-GREEN	YES-GREEN	YES-GREEN	YES-GREEN	YES-GREEN	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
7b. Shade Coverage	40%	50%	60%	60%	60%	50%	20%	20%	35%	30%	40%	25%	30%	30%	30%	30%	45%	
7a. Shade type / Grade	PALM	PALM	PALM	PALM	PALM	PALM	PALM/AWNING	PALM / AWNING	PALM / AWNING	PALM / AWNING	PALM / AWNING	PALM / AWNING	PALM / AWNING	PALM / AWNING	PALM	PALM	PALM/AWNING	PALM
6b. Lighting Coverage	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
6a. Lighting Type / Grade	I	I	I	I	I	I	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	TREE LIGHTS	I + TREE LIGHTS
5c. Obstruction Grade		10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	
5b. Obstruction Type	--	--	--	TRIM	--	--	--	REST-TC	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	REST-TC/Tr	L
5a. Obstruction density	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	
4d. Sidewalk Grade	A	A	A	A	A	A	A	A	B+	B+	B+	B+	A	B+	B+	A-	A-	
4c. Sidewalk Continuity	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
4b. Sidewalk width		11' (5.5')	10' (5')	10' (5')	10' (5')	16' (10')	20' (10')	15' (5.5')	15' (5.5')	15' (5.5')	15' (6.7')	15' (5.5')	15' (5.5')	15' (5.5')	15' (5.5')	9.5' (4.5')	9.5' (4.5')	
4a. Sidewalk Type	PAVER	PAVER/CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	
3b. Walkability Grade	A	A	A-	B+	A-	A	A-	A	A	A	A	A	A	A	A	A	A-	
3a. Land Use	MIXED	MIXED	MIXED	MIXED	MIXED	MIXED	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	MIXED	
2. Lane Width	18'	10.5'	11'	11'	11'	11'	2x9'	11.5'	10'	10'	11'	11'	11'	11'	11'	11'	11'	
1. Speed	--	--	--	--	--	--	--	30	--	--	--	--	--	--	--	--	--	
NOTES				CONSTRUCTION		CONSTRUCTION			CONSTRUCTION									
PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street	Espanola	15 Street	Notes



PPZ Criteria	S Pointe	1 Street	2 Street	3 Street	4 Street	5 Street	6 Street	7 Street	8 Street	9 Street	10 Street	11 Street	12 Street	13 Street	14 Street		15 Street	Notes
NOTES																		
1. Speed	--	--	--	--	--	--	--	30	--	--	--	--	--	--	--		--	
2. Lane Width	18'	10.5'	11'	11'	11'	11'	9'	10'	10'	11'	11'	11'	11'	11'	11'		11'	
3a. Land Use	MIXED	PARKING	MIXED	OPEN	RES./HOTEL	RES./HOTEL	BEACH	BEACH	BEACH	BEACH	BEACH	BEACH	BEACH	BEACH	BEACH		COMMERCIAL	
3b. Walkability Grade	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	
4a. Sidewalk Type	PAVER	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE		CONCRETE	
4b. Sidewalk width		11' (5.9')	11' (7')	10.5' (5.9')	10' (7.5')	10.7' (7.2')	10' (8')	10' (9')	10' (8')	10' (7')	10' (8')	10' (6.5')	10' (9')	10' (7')	10' (9')		7.5' (4.2')	
4c. Sidewalk Continuity	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	
4d. Sidewalk Grade	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	
5a. Obstruction density	0	1	0	1	1	1	0	1	1	0	2	1	0	1	1		8	
5b. Obstruction Type	--	NP	--	NP	Pr	U	--	SIGN	SIGN	--	FH/S	SIGN	--	S	S		Tr	
5c. Obstruction Grade		9	10	9	9	9	10	9	9	10	9	9	10	9	9		7	
6a. Lighting Type / Grade	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I		TREE LIGHTS	
6b. Lighting Coverage	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	
7a. Shade type / Grade	PALM	TREES	TREES	TREES	TREES	TREES	PALM	PALM	PALM	PALM	TREES	TREES	TREES	PALM	PALM		PALM	
7b. Shade Coverage	30%	50%	40%	25%	15%	30%	20%	20%	20%	20%	30%	25%	20%	20%	20%		50%	
8. Bike Lane Type / Grade	NO	GREEN / BIKE SHARE	GREEN	GREEN / BIKE SHARE	GREEN	GREEN	NO/BIKE SH.	NO	NO	NO	NO	NO	NO/BIKE SHARE	NO	NO		NO/BIKE SHARE	
9. Parking Lane/Type	NO	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL	YES-PARALLEL		YES-PARALLEL	

ATTACHMENT 3

List of Pictures Showing Short-Term Improvements

ATTACHMENT 3
Pictures Damaged Sidewalks and Obstructions

<u>Street/Picture Names</u>	<u>Removal Difficulty</u>
1st Street	
01-EB-10-CC&CA 2	3
01-WB-03-CA&CC 1	2
01-WB-05-WA&ME 1	4
2nd Street	
02-WB-09-ME&JE 2	2
3rd Street	
03-EB-05-ME&EU 5	3
03-EB-06-EU&WA 2	4
4th Street	
04-EB-03-MI&JE 1	5
04-EB-04-JE&ME 2	1
04-EB-06-EU&WA 1	2
04-EB-06-EU&WA 2	2
04-EB-10-CC&CA 3	3
04-EB-12-OC&OD 3	5
04-WB-05-WA&EU 1	2
5th Street	
05-EB-03-MI&JE 2	2
05-EB-05-ME&EU 2	1
05-EB-05-ME&EU 3	2
05-EB-09-WA&CC 1	1
05-WB-11-MI&LE 3	1
6th Street	
06-EB-02-LE&MI 2	3
06-EB-02-LE&MI 4	3
06-EB-03-MI&JE 2	5
06-EB-06-EU&WA 2	3
06-EB-06-EU&WA 3	4
06-EB-06-EU&WA 4	3
06-WB-08-EU&ME 3	5
7th Street	
07-EB-06-EU&PE 3	3
07-EB-12-OC&OD 1	2
07-WB-12-LE&AL 3	3

8th Street

08-EB-02-LE&MI 1	4
08-EB-02-LE&MI 2	4
08-EB-03-MI&JE 3	3
08-WB-05-WA&PE 3	3
08-WB-08-EU&ME 2	5
08-WB-12-LE&AL 2	3

9th Street

09-EB-01-AL&LE 2	3
09-EB-02-LE&MI 2	5
09-EB-05-ME&EU 1	5
09-EB-09-WA&CC 2	5
09-WB-03-CA&CC 4	2
09-WB-08-EU&ME 1	5
09-WB-08-EU&ME 3	5
09-WB-10-JE&MI 1	5
09-WB-10-JE&MI 2	4

10th Street

10-EB-05-ME&EU 3	2
10-EB-06-EU&PE 1	5
10-EB-08-PE&WA 4	3
10th St Sidewalk cracks	2
10-WB-11-MI&LE 1	4

11th Street

11-EB-04-JE&ME 3	1
11-EB-05-ME&EU 2	2
11-WB-01-OD&OC 2	4
11-WB-10-JE&MI 5	5

12th Street

12-EB-02-LE&MI 1	4
12-EB-05-ME&EU 2	4

13th Street

13-EB-07-PE&DR 5	2
13-WB-05-WA&DR 3	3
13-WB-06-DR&PE 4	3
13-WB-11-MI&LE 3	5
13-WB-11-MI&LE 4	2

14th Street

14-EB-05-ME&EU 4	5
14-EB-06-EU&PE 1	5

14-EB-06-EU&PE 2	1
14-EB-07-PE&DR 1	2
14-WB-12-LE&AL 3	3

15th Street

NONE

16th Street

16-EB-01-AL&LE 3	2
16-WB-04-CO&WA 2	2

Alton Rd

AL-NB-09-08&09 2	4
AL-NB-12-11&12 2	3
AL-NB-12-11&12 4	4
AL-NB-18-15&16 1	4
AL-NB-18-15&16 2	2
AL-SB-01-16&15 1	1
AL-SB-01-16&15 4	3
AL-SB-02-15&14 5	4
AL-SB-05-14&13 3	3
AL-SB-05-14&13 4	2
AL-SB-06-13&12 3	3
AL-SB-07-12&11 2	1
AL-SB-08-11&10 3	4
AL-SB-09-10&09 1	5
AL-SB-09-10&09 2	2
AL-SB-18-01&SP 1	1

Collins Avenue

CA-NB-02-01&02 2	4
CA-NB-04-03&04 1	3
CA-NB-07-06&07 2	4
CA-NB-10-09&10 2	3
CA-NB-11-10&11 2	2
CA-NB-11-10&11 5	2
CA-NB-17-ES&15 1	2
CA-SB-10-09&08 1	2
CA-SB-18-01&SP 4	3

Drexel Avenue

DR-NB-17-ES&15 1	3
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Euclid Avenue

EU-NB-08-07&08 3	5
EU-NB-12-11&12 1	4
EU-NB-12-11&12 4 major tree damage	2

EU-NB-14-13&14 2	5
EU-NB-18-15&16 6	5
EU-SB-02-15&ES 2	2
EU-SB-08-11&10 1	4
EU-SB-08-11&10 5	2
EU-SB-09-10&09 2	5
EU-SB-12-07&06 4 sidewalk damage	3
EU-SB-14-05&04 3	3

Jefferson Avenue

JE-NB-03-02&03 1	5
JE-NB-04-03&04 1	5
JE-NB-08-07&08 1	5
JE-NB-08-07&08 2	3
JE-NB-10-09&10 2 tree damage	2
JE-NB-11-10&11 2	3
JE-NB-11-10&11 3	3
JE-NB-18-15&16 2 sidewalk damage	2
JE-SB-08-11&10 6	3
JE-SB-10-09&08 2	3
JE-SB-11-08&07 3 inc sidewalk damage	2
JE-SB-12-07&06 4	3
JE-SB-13-06&05 2	3

Lenox Avenue

LE-NB-08-07&08 2	2
LE-NB-13-12&13 3 major damage	1
LE-NB-15-14&15 4	2
LE-SB-10-09&08 2	2
LE-SB-11-08&07 2	2
LE-SB-11-08&07 4	3

Meridian Avenue

ME-NB-05-04&05 1	4
ME-NB-07-06&07 2	3
ME-NB-08-07&08 3 sidewalk damage	2
ME-NB-09-08&09 2	3
ME-NB-12-11&12 3	2
ME-NB-13-12&13 3	3
ME-NB-15-14&ES 6	4
ME-SB-01-16&15 5	4
ME-SB-05-14&13 4	3
ME-SB-06-13&12 3	3
ME-SB-09-10&09 5	3
ME-SB-10-09&08 3	3
ME-SB-10-09&08 4 sidewalk damage	2
ME-SB-11-08&07 1	5

ME-SB-11-08&07 2	5
ME-SB-11-08&07 6 sidewalk damage	3
ME-SB-11-08&07 7	5
ME-SB-12-07&06 4	5
ME-SB-17-02&01 4	5

Michigan Avenue

MI-NB-04-03&04 1	5
MI-NB-06-05&06 4	3
MI-NB-07-06&07 1	3
MI-NB-08-07&08 1	5
MI-NB-08-07&08 4 including storm damage	2
MI-NB-09-08&09 2	3
MI-NB-09-08&09 3 including storm damage	3
MI-NB-10-09&10 3 including major storm damage	3
MI-NB-10-09&10 4	3
MI-NB-14-13&14 1	4
MI-SB-02-15&14 2	5
MI-SB-02-15&14 3	5
MI-SB-08-11&10 2 including tree damage	2
MI-SB-08-11&10 4 including tree damage	3
MI-SB-12-07&06 3	2
MI-SB-14-05&04 3	5

Ocean Drive

OD-NB-05-04&05 2	3
OD-SB-06-13&12 4	3
OD-SB-10-09&08 2	3
OD-SB-15-04&03 2 near construction site	4

Pennsylvania Avenue

PE-NB-11-10&11 4	4
PE-NB-13-12&13 1	5
PE-NB-17-ES&15 2	2
PE-SB-06-13&12 4	3
PE-SB-07-12&11 3	2
PE-SB-10-09&08 1	5
PE-SB-11-08&07 5 major tree damage	4
PE-SB-11-08&07 7	2

South Pointe

SP-WB-01-OD&CA 6	4
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Washington Avenue

WA-NB-01-SP&01 3 tree damage	3
WA-NB-03-02&03 3	5
WA-NB-16-ES&15 3	1

WA-SB-01-16&15	4	5
WA-SB-03-ES&14	1	4
WA-SB-03-ES&14	5	3
WA-SB-05-14&13	3	2
WA-SB-05-14&13	4	3
WA-SB-09-10&09	1	2
WA-SB-09-10&09	2	2
WA-SB-09-10&09	5	2
WA-SB-12-07&06	1	2

Note: Difficulty = 1 hardest to remove (ex: mast arm, concrete pole)
Difficulty = 5 easily removed (ex: mailbox, news stand, sign)

Picture filenames indicate location and are coded as follows:

AA-BB-XX-YY&ZZ.jpg

Where:

AA= first two digits of the street name (ex: 13 or AL)

BB= Direction (ex: EB or NB)

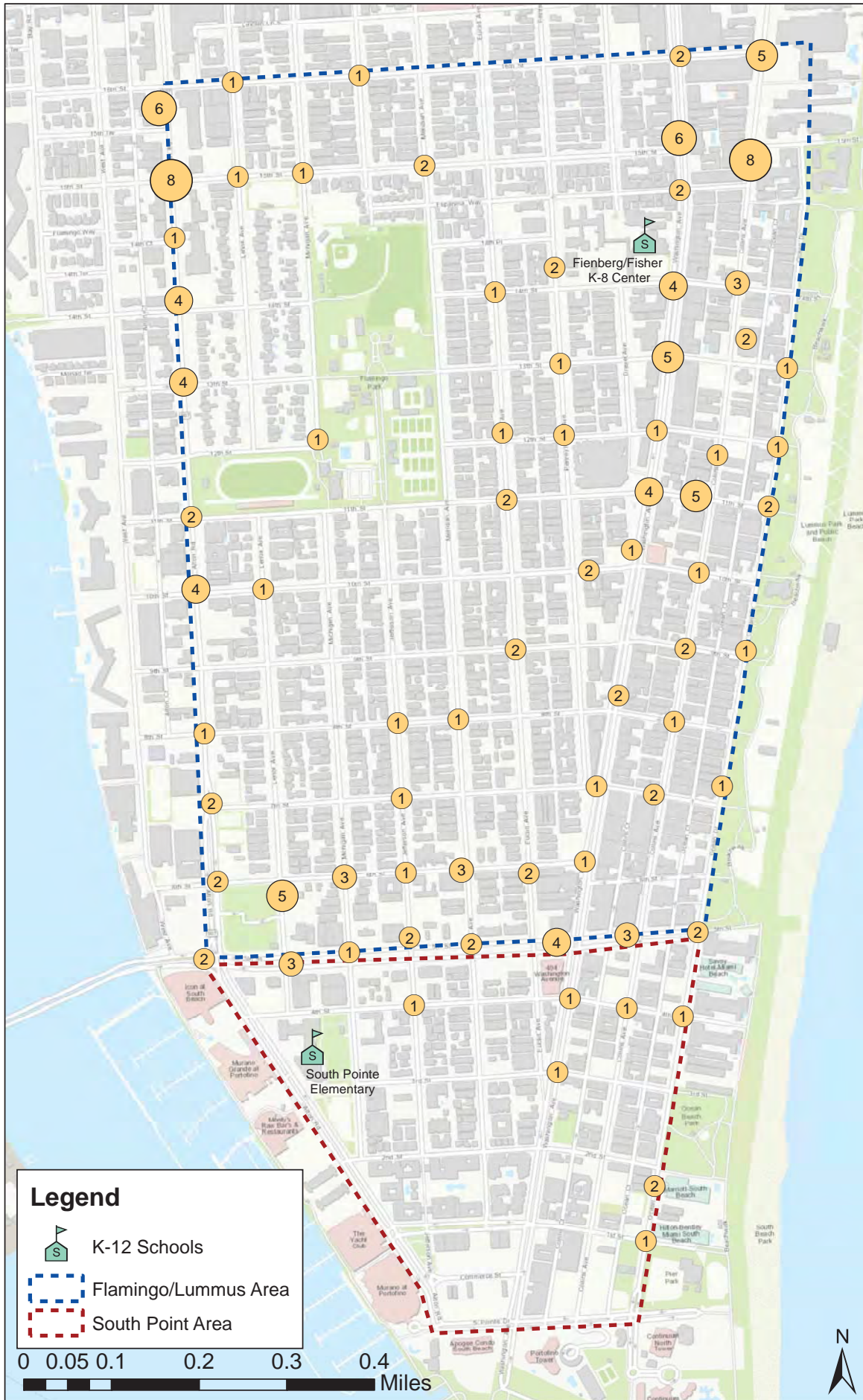
XX= Picture sequence number within the specified road segment

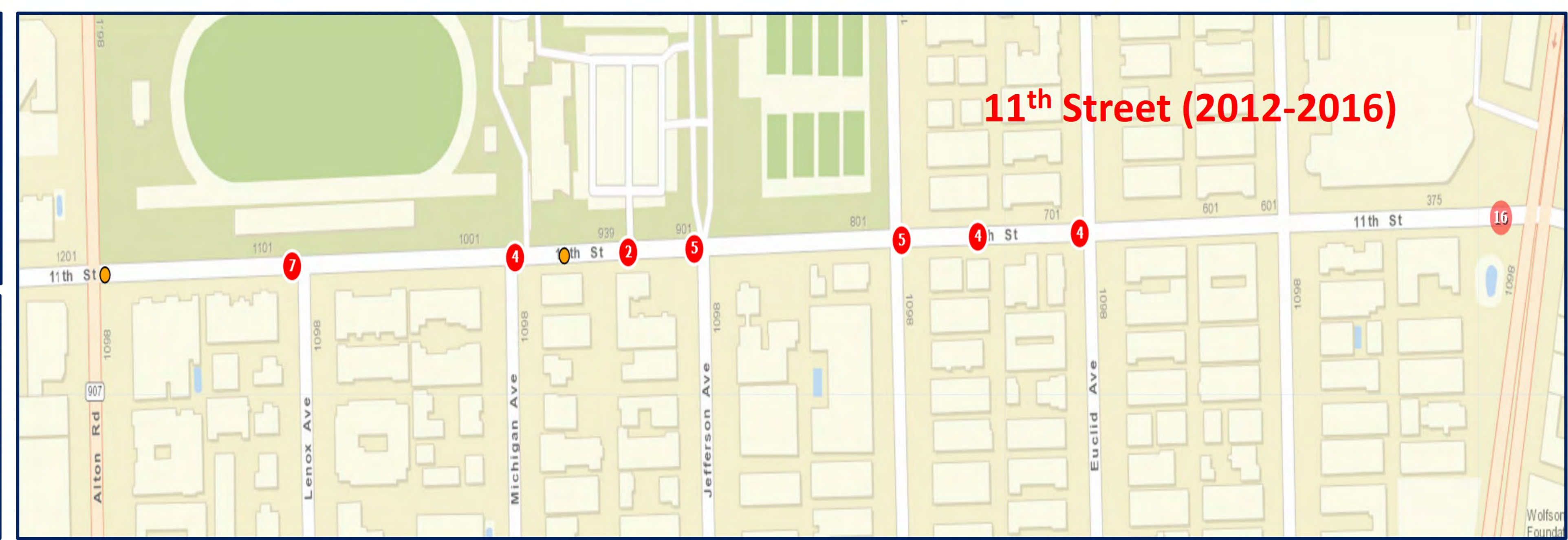
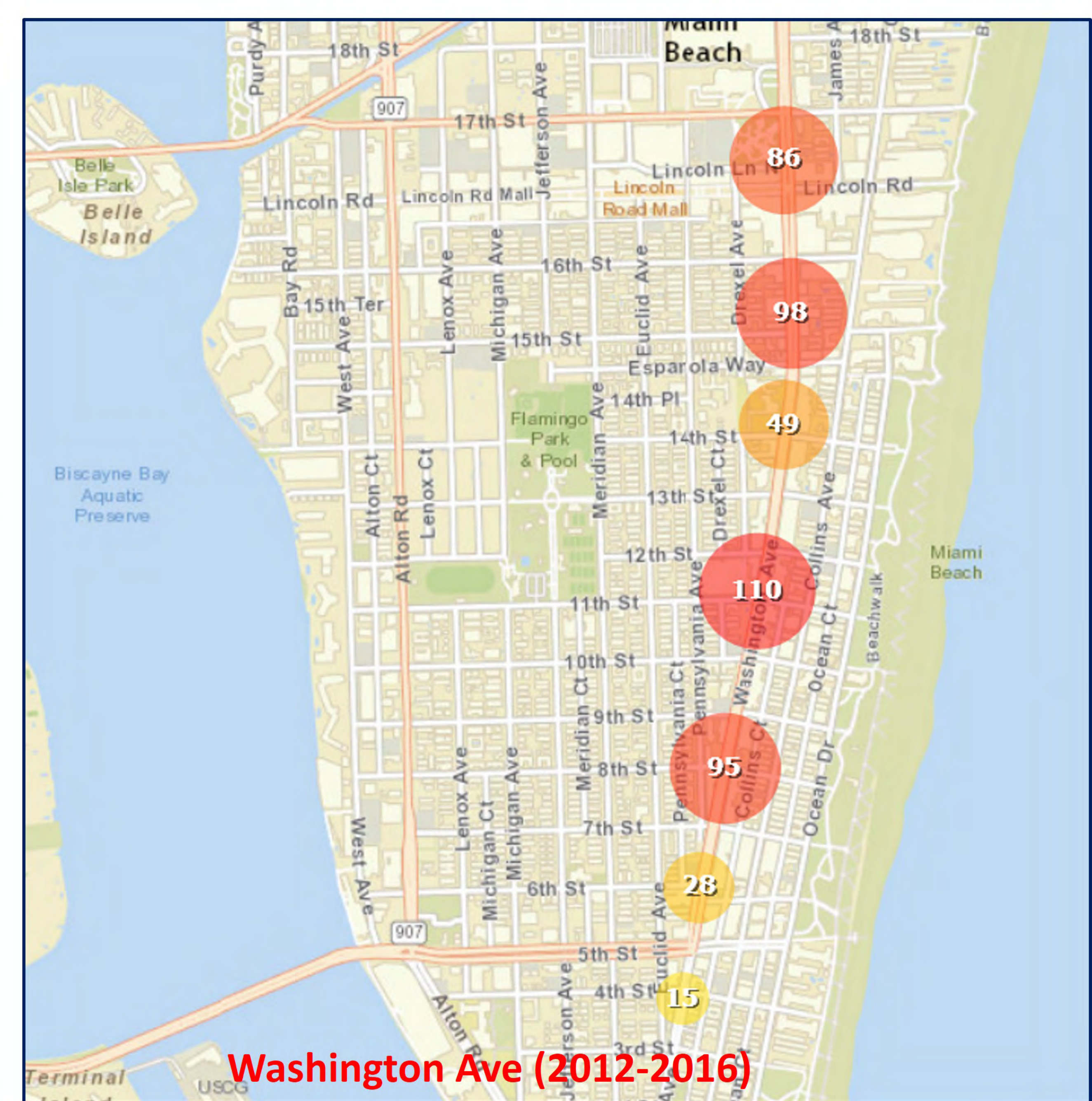
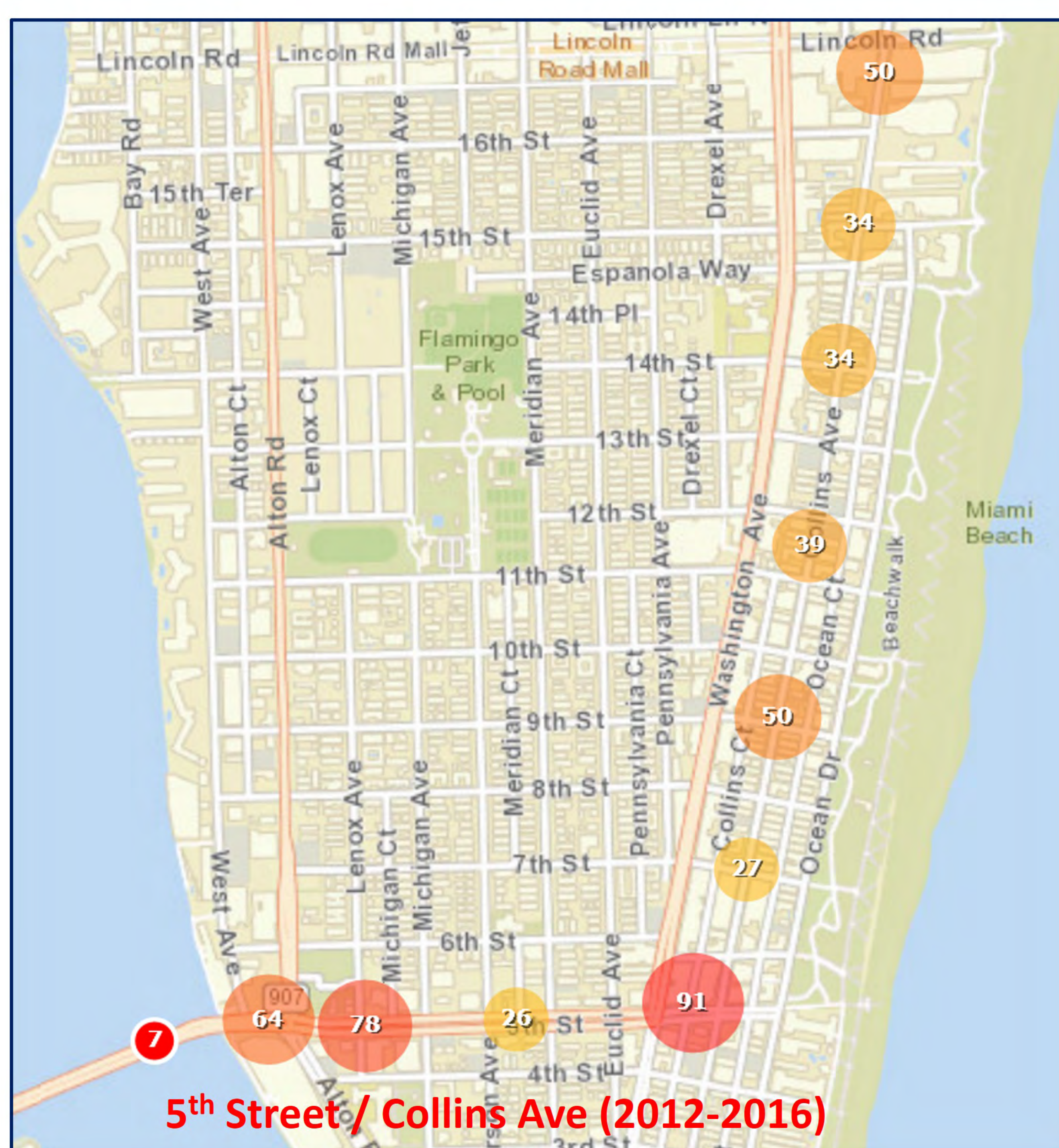
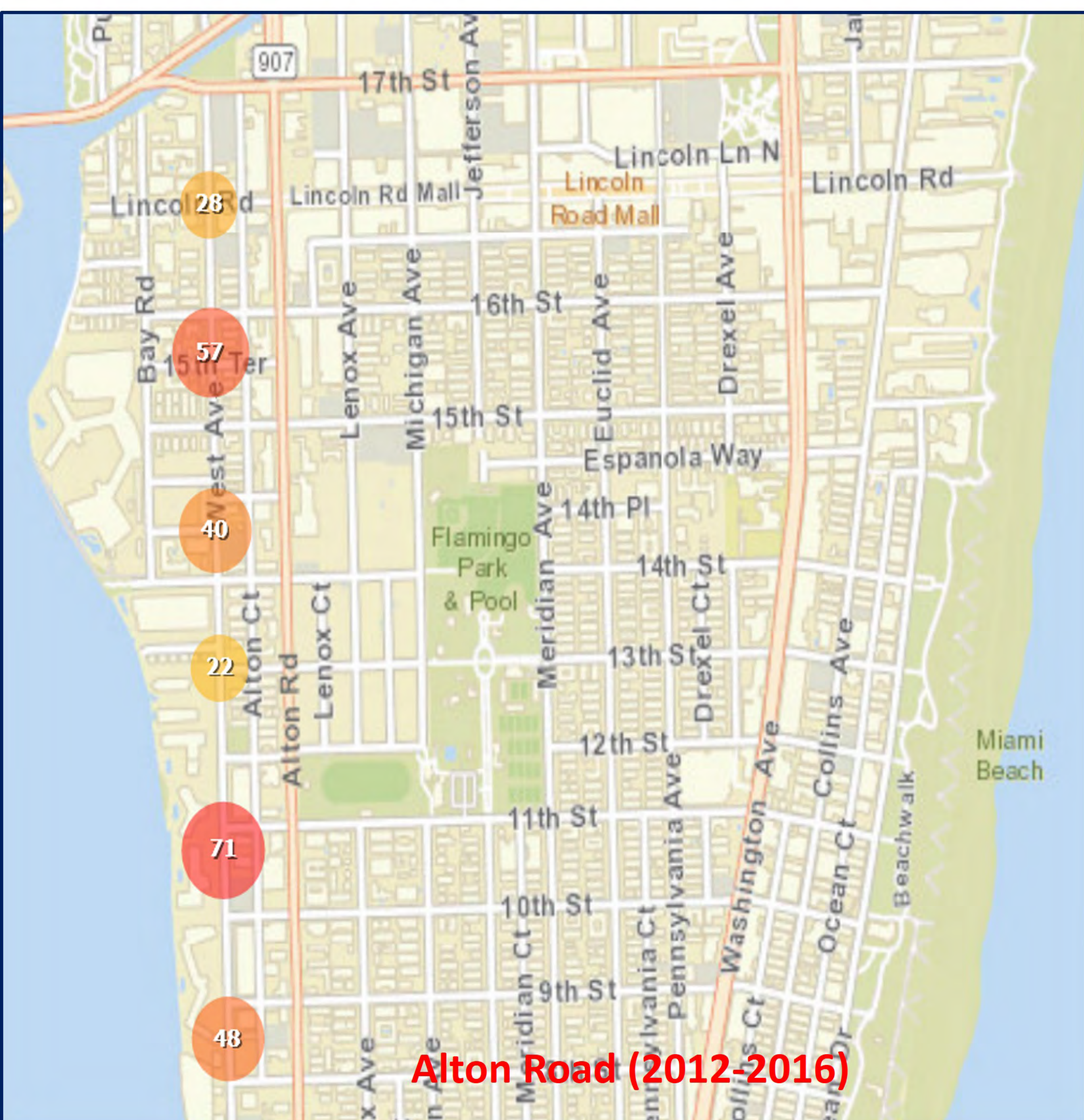
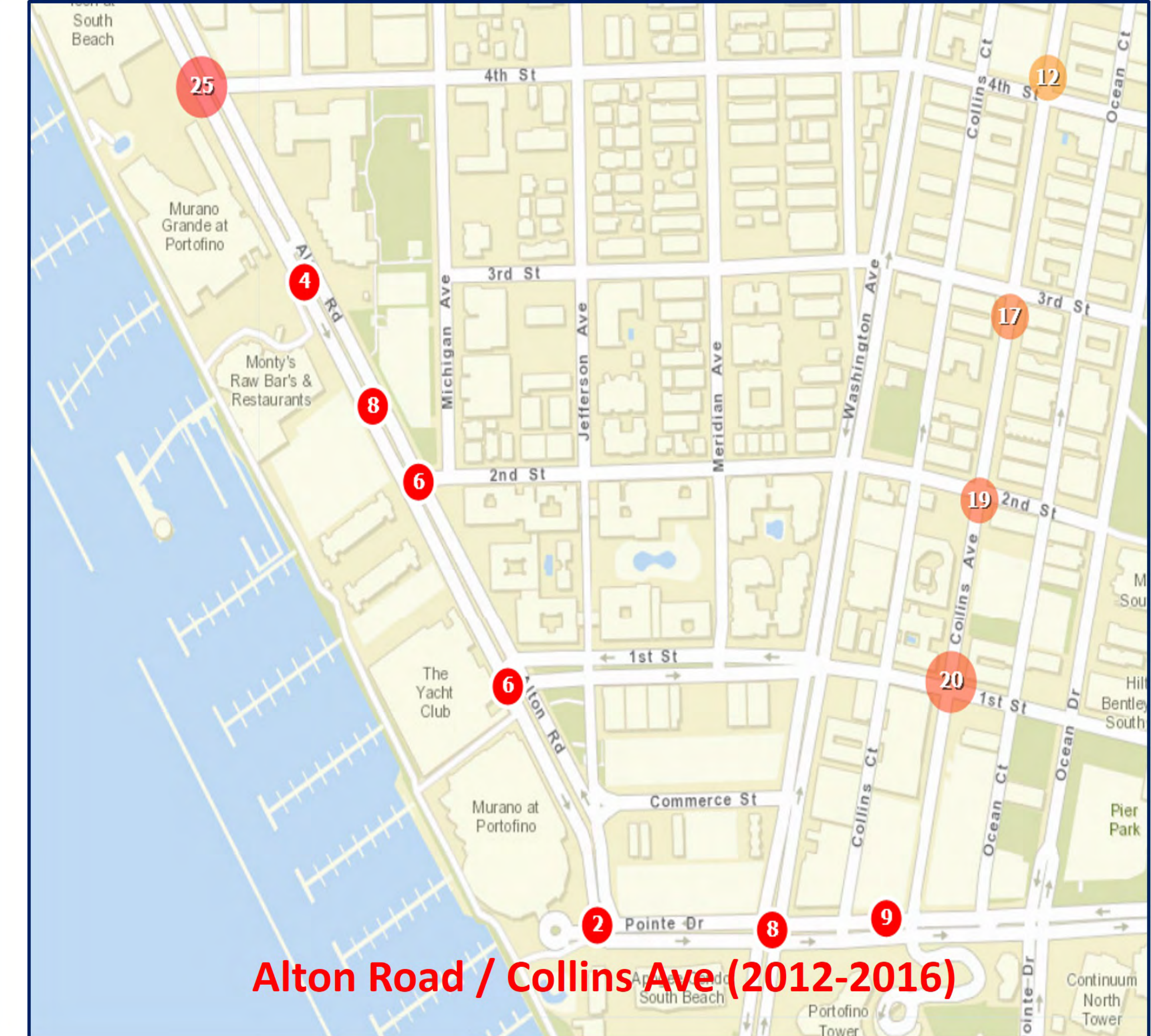
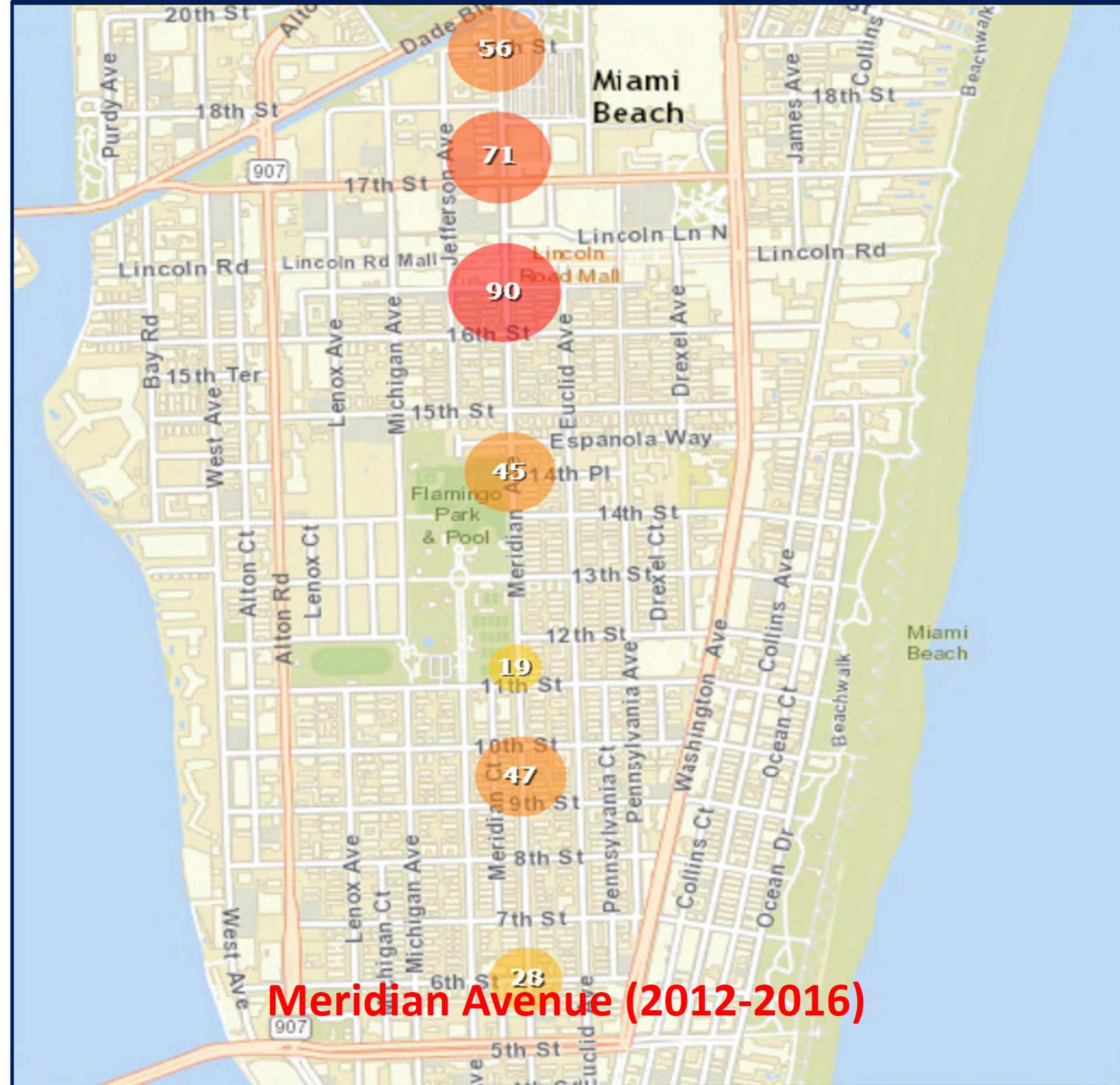
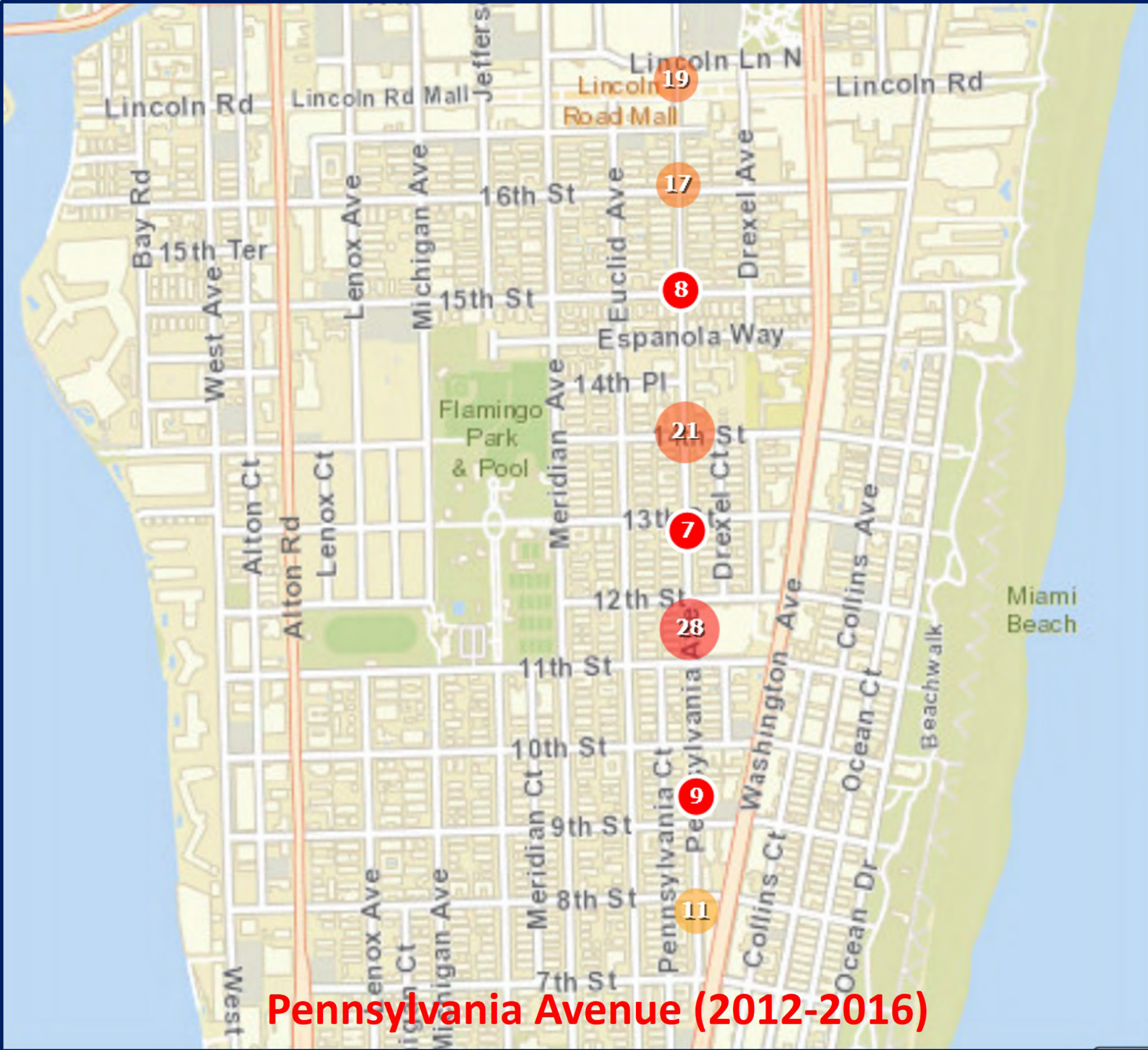
YY&ZZ= Between street YY and street ZZ (first two digits)

ATTACHMENT 4

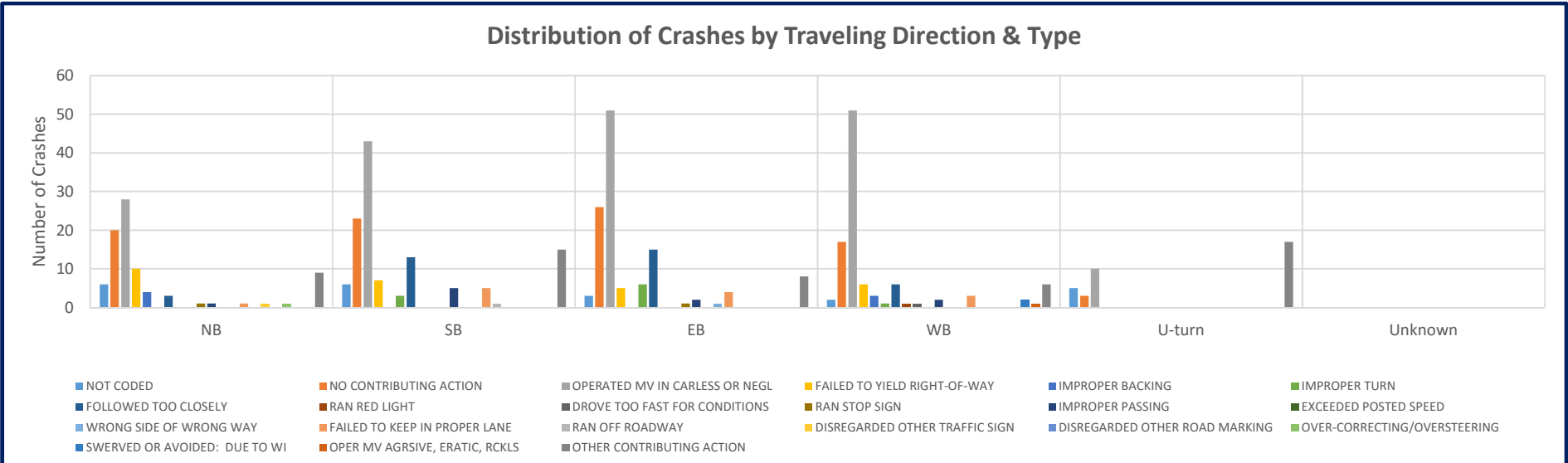
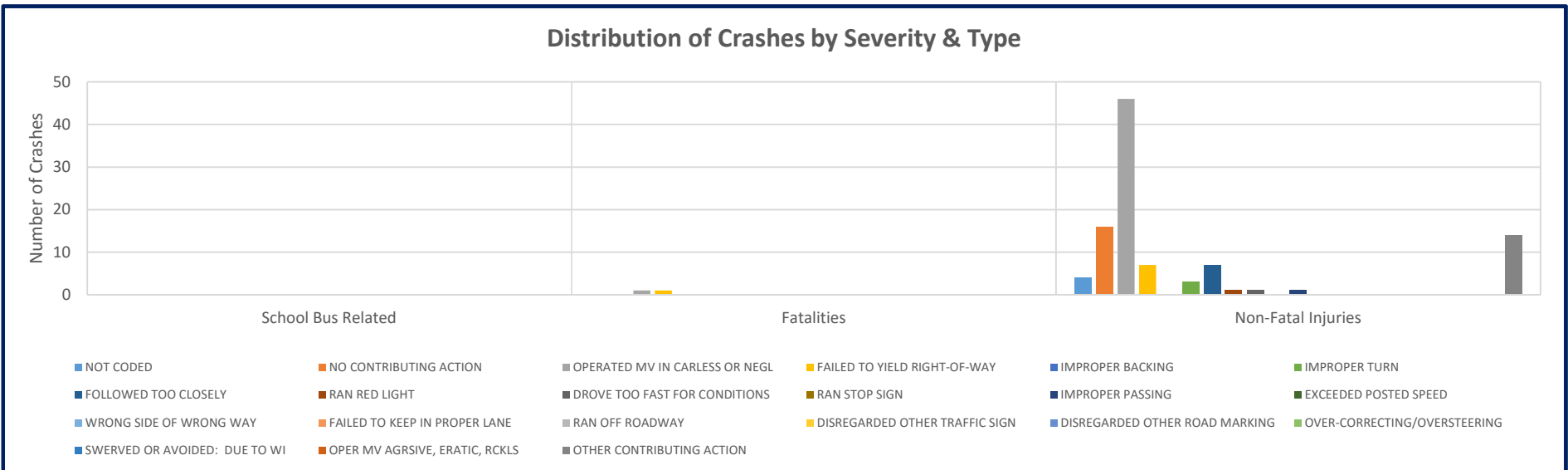
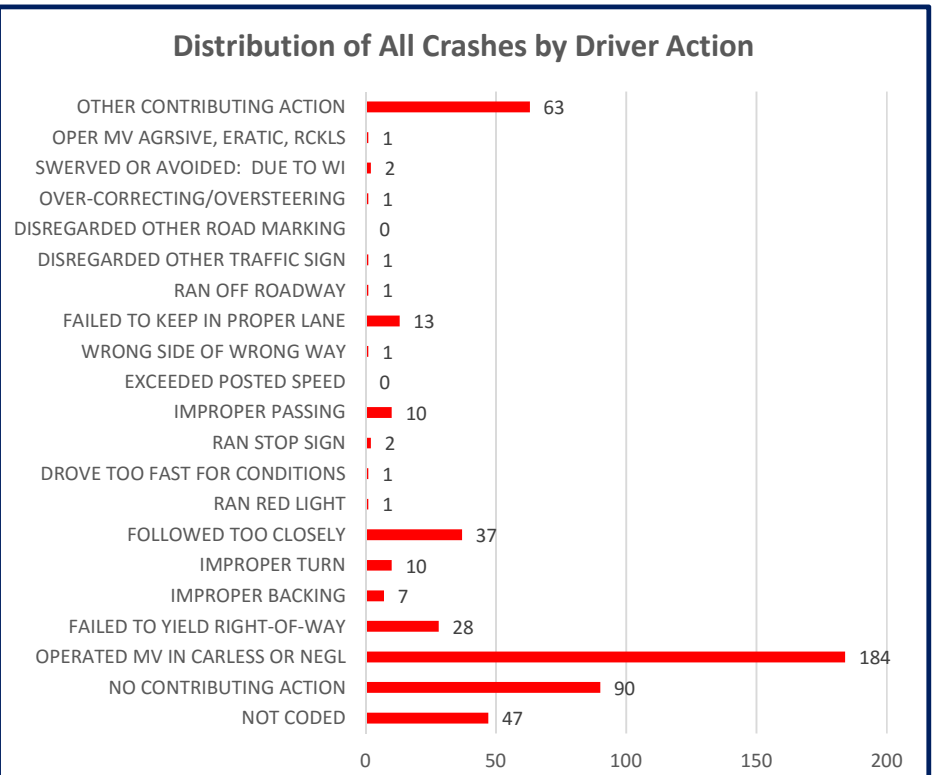
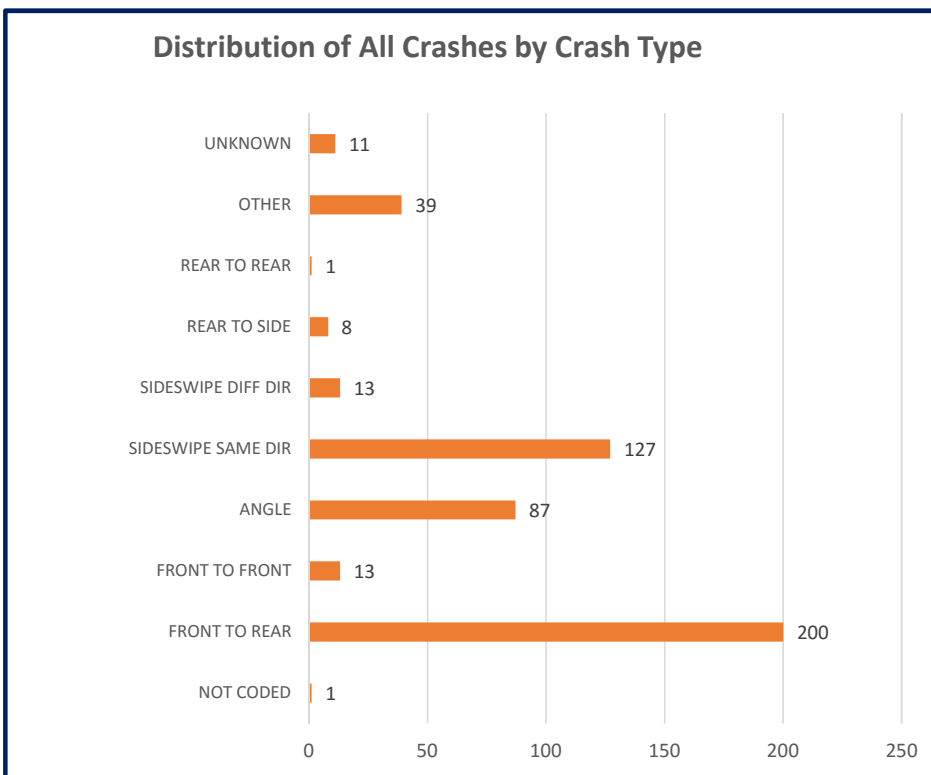
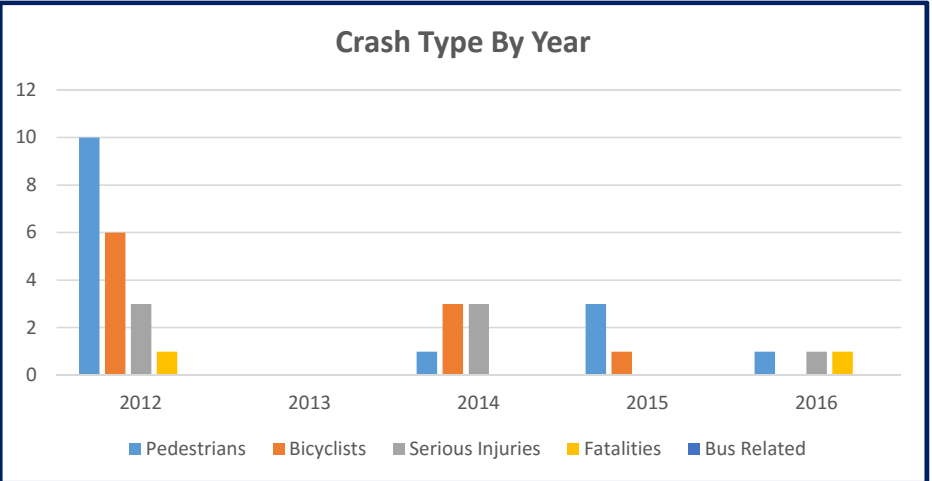
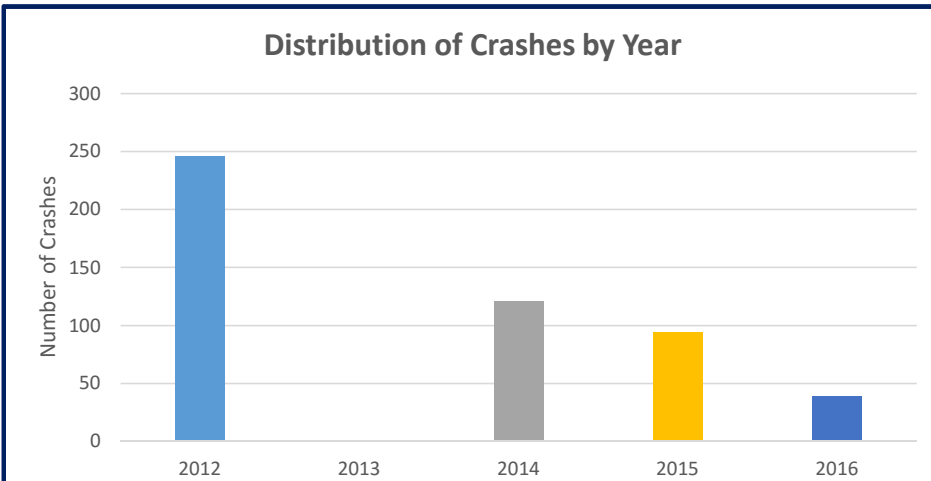
Crash Summaries
Parking and Hotel Maps
Places of Worship
Pedestrian Generators

South Beach Collision Type Pedestrian 2012-Present

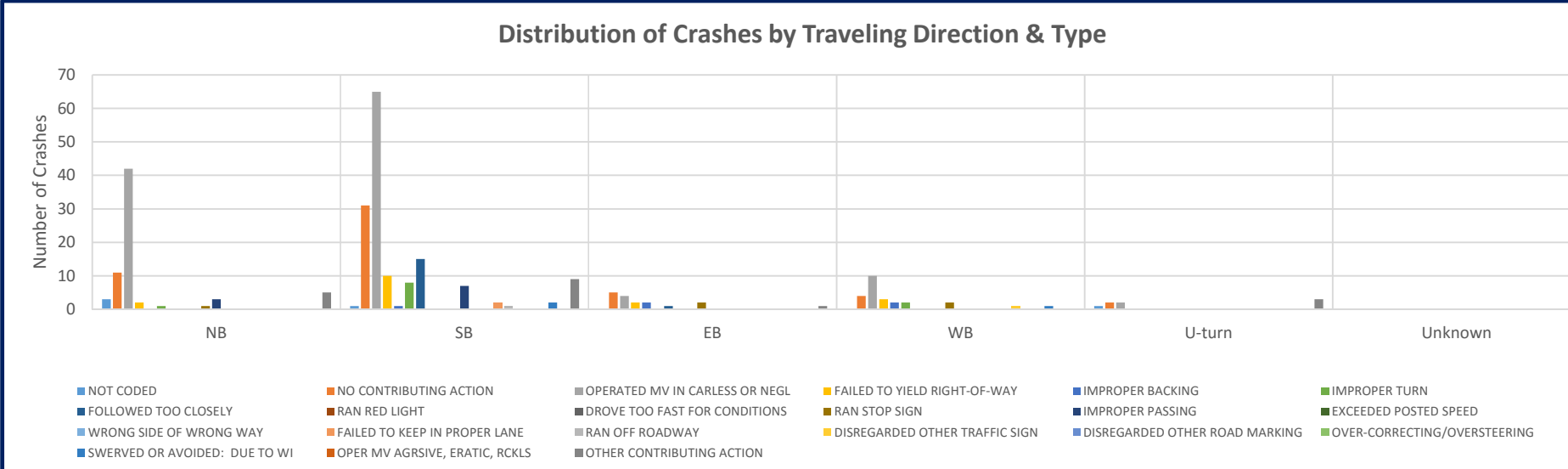
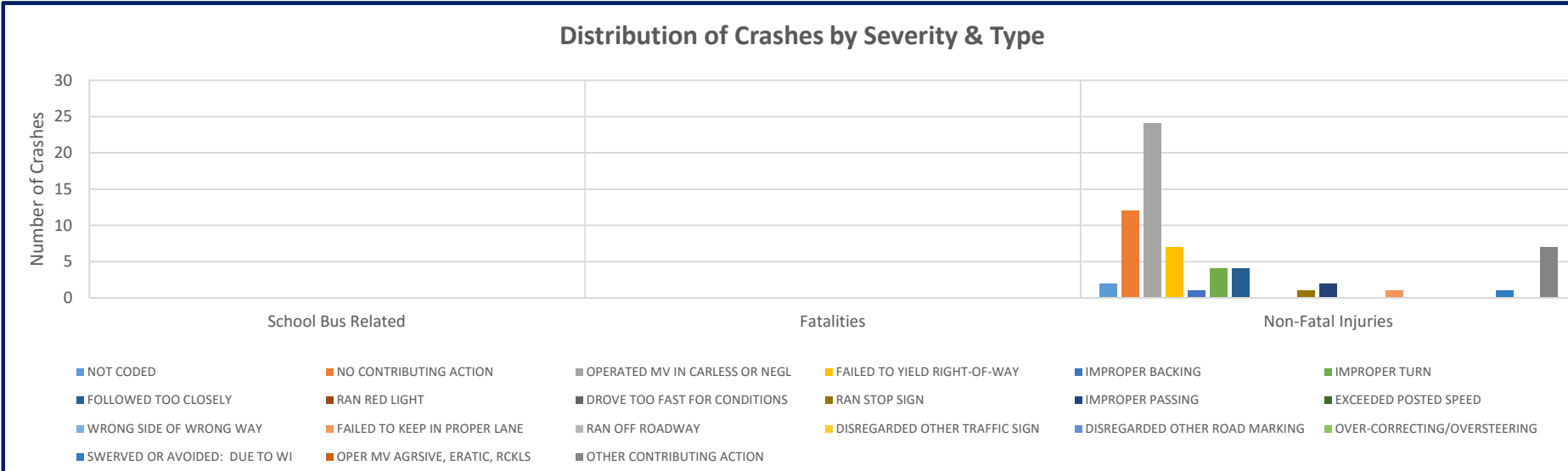
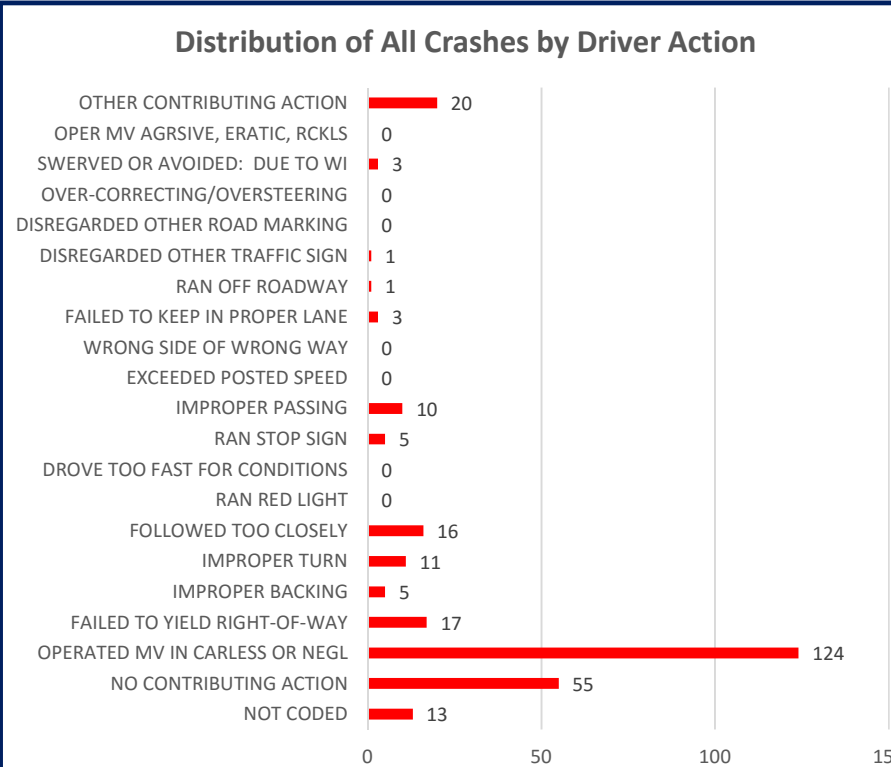
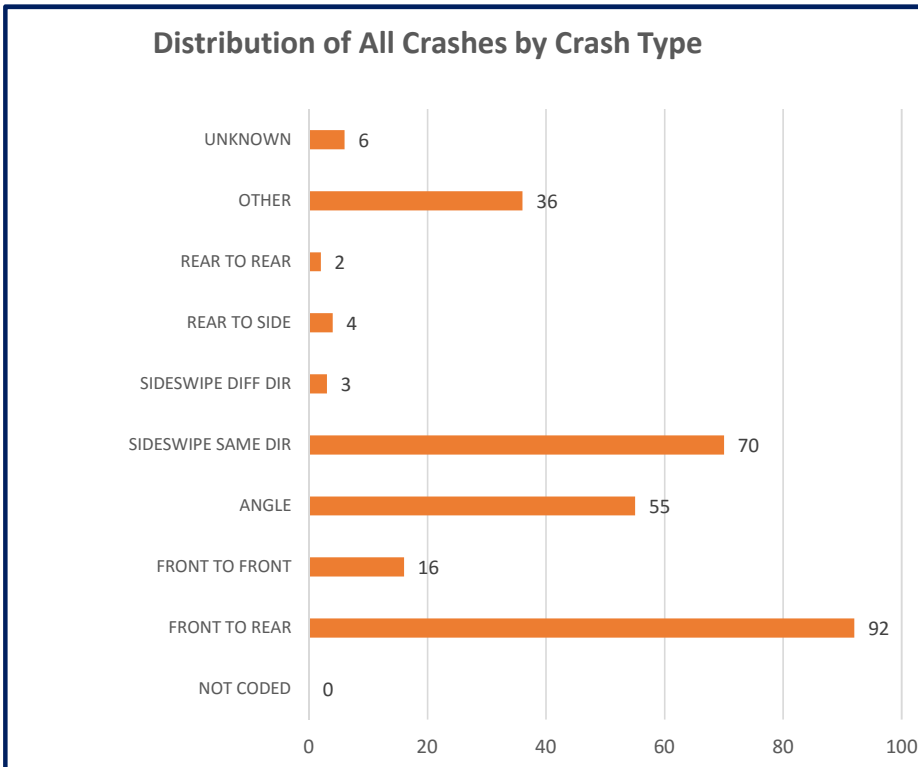
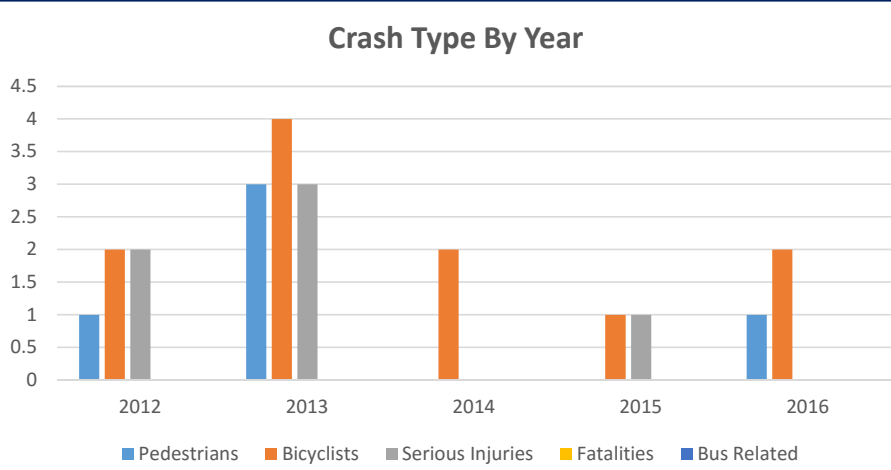
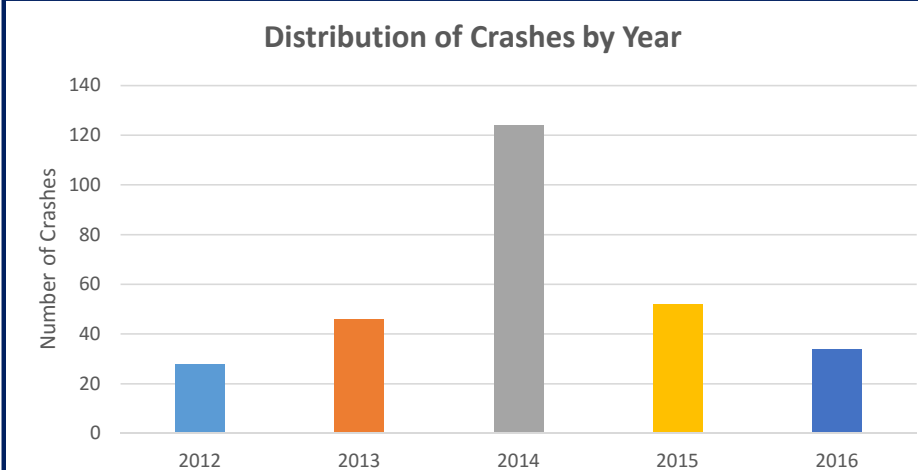


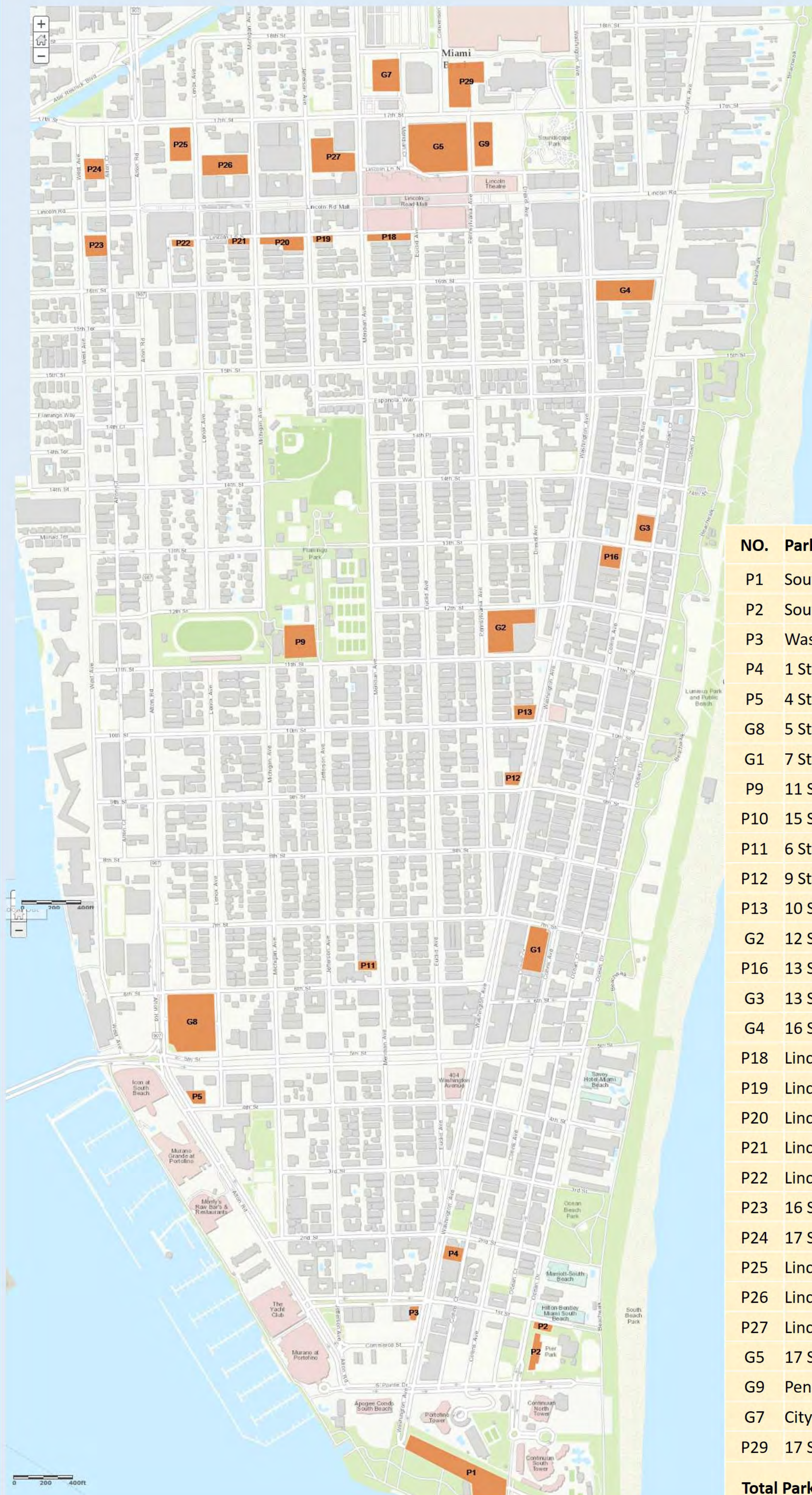


Ocean Blvd / 5th Street - Crash Summary (2012-2016)



Alton Road - Crash Summary (2012-2016)





Public Parking Spaces south of 17 Street

NO.	Parking Lot or Garage Location	Spaces
P1	South Pointe Park	241
P2	South Pointe Drive & Ocean Drive	59
P3	Washington & Commerce	14
P4	1 Street & Washington Avenue	29
P5	4 Street & Alton Road	25
G8	5 Street & Alton Road - Garage	520
G1	7 Street & Collins Avenue - Garage	659
P9	11 Street & Jefferson Avenue	117
P10	15 Street & Michigan Ave (Softball Lot)	144
P11	6 Street & Meridian Avenue	27
P12	9 Street & Washington Avenue	22
P13	10 Street & Washington Avenue	37
G2	12 Street & Drexel Avenue - Garage	140
P16	13 Street & Collins Avenue - West Side	50
G3	13 Street & Collins Avenue - Garage	293
G4	16 Street & Collins Avenue - Garage	820
P18	Lincoln Lane S & Meridian Avenue	38
P19	Lincoln Ln S & Jefferson Ave - East Side	20
P20	Lincoln Ln S & Jefferson Ave - West Side	65
P21	Lincoln Lane S & Michigan Avenue	22
P22	Lincoln Lane S & Lenox Avenue	20
P23	16 Street & West Avenue	32
P24	17 Street & West Avenue (Epicure)	68
P25	Lincoln Ln N & Lenox Ave - West Side	86
P26	Lincoln Lane N & Lenox Ave - East Side	106
P27	Lincoln Lane N & Meridian Avenue	151
G5	17 Street & Pennsylvania Ave - Garage	1,490
G9	Pennsylvania Ave (17 Street) - Garage	572
G7	City Hall Garage (18 St & Meridian)	667
P29	17 Street & Convention Center Drive	160
Total Parking btw South Pointe and 17 St:		6,433

