Pedestrian Study
Qualitative Assessment
Pedestrian Volume Count

SR A1A at 3rd Street South (Flagler Beach Pier)

FLAGLER COUNTY
SECTION 73030
MP 3.890 to MP 3.942

Prepared for:

THE FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 5 TRAFFIC OPERATIONS
719 South Woodland Boulevard
DeLand, Florida 32720

FDOT

Districtwide Community Traffic Safety Program
Financial Project No. 237995-1-32-09
Contract Number: C-8T80
Consultant No.: 382.15.6
Task Work Order No.: 15.6

Prepared by:
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Maitland, Florida 32751

December 2014

Engineer of Record: Richard S. Jardim
P.E. No. 60127
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EXECUTIVE SUMMARY

Faller, Davis & Associates, Inc. (FDA) conducted a pedestrian study at the intersection of SR A1A and 3rd Street South (Flagler Beach Pier) in Flagler Beach, Flagler County, Florida. Based on the results of the analysis, field observations, and engineering judgment, the following recommendations and conclusions were developed:

1. A curb bulb-out should be constructed on the northwest corner of the intersection. A trench drain with a pedestrian safe cast iron grate should be installed between the existing curb line and the proposed curb bulb-out to maintain existing drainage.

2. The existing crosswalk should be re-striped with special emphasis markings per Index 17346.

3. The northbound advance pedestrian warning sign assembly should be relocated.

4. The existing southbound pedestrian warning sign assembly should be removed, and a new sign assembly should be installed in the proposed bulb-out. The southbound yellow flashing beacon should be relocated to the proposed pedestrian warning sign assembly.

5. A fully actuated pedestrian signal is not recommended since the pedestrian volumes do not meet the requirements of Warrant 4.

6. A pedestrian hybrid beacon was considered for the crosswalk; however, since the crosswalk is located at an intersection, a pedestrian hybrid beacon should not be installed.

7. Rectangular rapid flashing beacons (RRFB) were considered. However, since the pedestrian crossing volume is significant, the RRFB would likely receive constant actuations and operate similarly to the existing flashing beacons.

Additional recommendations are included at the end of the report.
1. INTRODUCTION

The Florida Department of Transportation has retained FDA to perform a pedestrian study at the intersection of SR A1A and 3rd Street South (Flagler Beach Pier) in Flagler Beach, Flagler County, Florida. The analysis methods used in conducting this study are consistent with those set forth in the Manual on Uniform Traffic Control Devices (MUTCD 2009), the Manual on Uniform Traffic Studies (MUTS 2000), the Traffic Engineering Manual (TEM 2014), and FDOT District 5 guidelines and procedures.

Figure 1-Project Location Map
2. EXISTING CONDITIONS

The intersection of SR A1A and 3rd Street South (Flagler Beach Pier) is located in Flagler Beach, Flagler County, Florida. Significant features for the study location are summarized below:

Table 1-Summary of Existing Conditions

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Limits</td>
<td>• SR A1A at 3rd Street South (Flagler Beach Pier)</td>
</tr>
<tr>
<td>Area Location</td>
<td>• The study location is located approximately 500 feet south of SR 100 (Moody Boulevard) and is adjacent to the Atlantic Ocean.</td>
</tr>
</tbody>
</table>
| SR A1A               | • The typical section of SR A1A consists of:  
  Southbound: A 7-foot wide parking lane, a 12-foot wide through lane, curb, and a closed drainage system.  
  Northbound: An 8-foot paved shoulder, a 12-foot wide through lane, and a closed drainage system.  
  Angled parking spaces are located adjacent to the paved shoulder.  
  • The posted speed limit on SR A1A is 30 mph throughout the study limits. |
| Signalized Intersections | • A traffic signal is located at SR 100, 500 feet north of the study location. |
| Pedestrian Generators | • Flagler Beach  
  • Flagler Beach Pier  
  • Wacky Pelican Restaurant  
  • Local businesses  
  • Bank |
| Sidewalks            | • A 5-foot wide sidewalk is located on the west side of SR A1A. A 5-foot wide sidewalk is located on the east side of SR A1A north of 3rd Street South, and a 6-foot wide boardwalk is located on the east side of SR A1A south of 3rd Street South. |
| Street Lighting      | • There is a mixture of conventional and decorative street lighting along the west side of SR A1A and conventional street lighting along the east side of SR A1A. |
| Other Distinct Features | • The Flagler Beach Pier and beach access are located on the east side of the study location. |
Pedestrian Volumes
A four-hour pedestrian/bicycle count was conducted within the study limits from 10:00 AM to 2:00 PM on Saturday, August 23rd, 2014. The count included recording pedestrians and bicyclists traveling along and crossing SR A1A. Table 2 summarizes the counts for the entire corridor.

Table 2-Pedestrian/Bicycle Movement Summary (4 Hours)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Traveling on West Side of SR A1A</th>
<th>Traveling on East Side of SR A1A</th>
<th>Total</th>
<th>Crossing SR A1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pedestrian Movements</td>
<td>347</td>
<td>34</td>
<td>381</td>
<td>452</td>
</tr>
<tr>
<td>Pedestrian Movements per Hour (PMpH)</td>
<td>87</td>
<td>9</td>
<td>96</td>
<td>113</td>
</tr>
<tr>
<td>Corridor Length (mi)</td>
<td>0.052</td>
<td>0.052</td>
<td>0.052</td>
<td>0.052</td>
</tr>
<tr>
<td>Number of 300 foot long sections</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>PMpH per 300 foot section</td>
<td>97</td>
<td>10</td>
<td>107</td>
<td>126</td>
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<tr>
<td>Total Bicycle Movements</td>
<td>26</td>
<td>14</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Bicycle Movements per Hour (BMpH)</td>
<td>7</td>
<td>4</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Corridor Length (mi)</td>
<td>0.052</td>
<td>0.052</td>
<td>0.052</td>
<td>0.052</td>
</tr>
<tr>
<td>Number of 300 foot long sections</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>BMpH per 300 foot section</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>3</td>
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<tr>
<td>Total Pedestrian and Bicycle Movements</td>
<td>373</td>
<td>48</td>
<td>421</td>
<td>462</td>
</tr>
<tr>
<td>Pedestrian/Bicycle Movements per Hour (PBMpH)</td>
<td>94</td>
<td>13</td>
<td>107</td>
<td>116</td>
</tr>
<tr>
<td>PBMpH per 300 foot section</td>
<td>105</td>
<td>14</td>
<td>119</td>
<td>129</td>
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</tbody>
</table>

Note: A 300-foot long section was selected based on the Plans Preparation Manual (PPM) criteria that alternative crossing locations must be at least 300 feet from mid-block crosswalks.

A four-hour pedestrian/bicycle count summary is included in the appendix of the report. The pedestrian/bicycle crossing locations are shown in detail in Figure 2.

Collision Data
Pedestrian and bicycle safety along the corridor are assessed through review of crash reports, identification of significant crash trends, then correlation to field conditions. Following are the observations relating to the safety of the corridor:

A review of FDOT Collision Analysis Reporting System (CARS) and Signal Four Analytics data found one reported bicycle-related collision within the study limits during the five year period ending December 2013. The crash occurred when a northbound bicyclist, riding on the sidewalk, struck the side of a vehicle exiting the bank drive-through. The collision resulted in one injury and occurred during the day on a dry roadway.

- One additional pedestrian crash was reported just south of the study intersection at 4th Street South. The crash occurred when a northbound motorist drove around a northbound left turning motorcycle and onto the east paved shoulder striking a pedestrian. The collision resulted in one injury and occurred during the day on a dry roadway.
TREE/SHRUB
DRAINAGE INLET

FENCE
BENCH
OBSERVED PED MOVEMENT
4 HR PED VOLUME

FALLER, DAVIS, & ASSOCIATES, INC.
258 SOUTHHALL LANE
SUITE 210
MAITLAND, FL 32751

FIGURE 3
4-HR PEDESTRIAN CROSSING VOLUME
DISTRICTWIDE COMMUNITY
TRAFFIC SAFETY PROGRAM

12/10/2014 9:02:45 AM
Z:\192.06\as\CTSP 2009\Work Order-15\TWY 15.5\Data\collision-4 hour ped\2014-10-12\Z:\192.06\as\CTSP 2009\Work Order-15\TWY 15.5\Data\collision-4 hour ped\2014-10-12
### Table 3
PEDESTRIAN/BICYCLE COLLISION SUMMARY

<table>
<thead>
<tr>
<th>No.</th>
<th>HSMV No.</th>
<th>Mile Point</th>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Driver 1 Age</th>
<th>Alcohol Involved</th>
<th>Lighting Condition</th>
<th>Roadway Surface</th>
<th>Weather</th>
<th>Vehicle 1 Direction</th>
<th>Vehicle 2 Direction</th>
<th>Number of Fatalities</th>
<th>Number of Injuries</th>
<th>Harmful Event</th>
<th>Contributing Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70931560</td>
<td>3.895</td>
<td>12/17/09</td>
<td>Thursday</td>
<td>9:11</td>
<td>42</td>
<td>None</td>
<td>Daylight</td>
<td>Dry</td>
<td>Clear</td>
<td>E</td>
<td>N</td>
<td>0</td>
<td>1</td>
<td>Bike</td>
<td>FTYRW</td>
</tr>
</tbody>
</table>

**SUMMARY**

<table>
<thead>
<tr>
<th></th>
<th>Total Number of Crashes</th>
<th>Total Number of Fatalities</th>
<th>Total Number of Injuries</th>
<th>Daylight</th>
<th>Dark (SL)</th>
<th>Dark (No SL)</th>
<th>Dusk</th>
<th>Dawn</th>
<th>Wet</th>
<th>Dry</th>
<th>Rear End</th>
<th>Head-On</th>
<th>Angle</th>
<th>Left Turn</th>
<th>Right Turn</th>
<th>Sideswipe</th>
<th>Backed Into</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>N/A</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
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<td>0%</td>
<td>0%</td>
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</tr>
</tbody>
</table>

**HARMFUL EVENT**

<p>| | | | | | | | | | | | | | | | | |</p>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**INJURIES**

- Total Number of Crashes: 0
- Total Number of Fatalities: 0
- Total Number of Injuries: 0

**LIGHTING**

- Daylight: 100%
- Dark (SL): 0%
- Dark (No SL): 0%

**ROADWAY CONDITION**

- Dusk: 0%
- Dawn: 0%
- Wet: 0%
- Dry: 100%

**HARMFUL EVENT**

- Rear End: 0%
- Head-On: 0%
- Angle: 0%
- Left Turn: 0%
- Right Turn: 0%
- Sideswipe: 0%
- Backed Into: 0%

**CONTRIBUTING CAUSES**

- No Improper Driving: 0%
- Careless Driving: 0%
- FTYRW: 100%
- ImproperBacking: 0%
- ImproperLane: 0%
- ImproperTurn: 0%
- AlcoholUnderInfluence: 0%
- DrugsUnderInfluence: 0%
- AlcoholDrugsUnderInfluence: 0%
- FollowedTooClosely: 0%
- DisregardedTrafficSignal: 0%
- ExceededSafeSpeedLimit: 0%
- DisregardedStopSign: 0%
- FailedToMaintainEquipment: 0%
- ImproperPassing: 0%
- DroveLeftOfCenter: 0%
- ExceededStatedSafeSpeedLimit: 0%

- ObstructingTraffic: 0%
- ImproperLoad: 0%
- DisregardedOtherTrafficControl: 0%
- DrivingWrongSideWay: 0%
- FleeingPolice: 0%
- VehicleModified: 0%
- DriverDistraction: 0%
- AllOther: 0%
- UnknownsNotCoded: 0%
3. PEDESTRIAN OPERATIONS

The intersection of SR A1A and 3rd Street South (Flagler Beach Pier) was reviewed by a registered professional engineer from 9:30 to 11:00 AM on Saturday, August 23rd, 2014 to evaluate pedestrian and bicycle operations. The field review was conducted in fair weather conditions.

- SR A1A is a two lane undivided minor arterial roadway with on-street parking on the west side of SR A1A and angled parking spaces on the east side of SR A1A, adjacent to the shoulder. The alignment within the study corridor is straight and level.

- Per count station 731001, located south of the study corridor, traffic volumes on SR A1A are moderate with an Average Annual Daily Traffic of 8,800 vehicles per day. Heavy vehicles comprise 3.3% of the traffic on SR A1A.
  
  - The count station indicated that traffic volumes on SR A1A are moderate within the study corridor from 10:00 AM to 2:00 PM, averaging 327 vehicles per hour (vph) northbound and 309 vph southbound.

- The west approach, 3rd Street South, is a single lane one-way road. Eastbound movements are prohibited, and only northbound left turn and southbound right turn movements are allowed. No conflicts were observed between southbound right turning vehicles, northbound left turning vehicles, and pedestrians.

- There are marked crosswalks across the west and north approaches of the intersection.
  
  - The west approach crosswalk consists of stamped asphalt with longitudinal pavement marking lines on both edges of the stamped asphalt. The pavement markings are in fair condition.
  
  - The north approach crosswalk consists of special emphasis pavement markings supplemented by W11-2/W16-7P pedestrian warning signs with non-actuated yellow flashing beacons and W11-2/W16-9P advance pedestrian warning signs on the north and south approaches to the intersection. The crosswalk length is approximately 44 feet, and it extends from 3rd Street South across SR A1A at a diagonal, ending at a flat concrete walkway which leads to the restaurant, beach, and pier.

- Pedestrian and bicycle traffic was significant during the 4-hour count period, with 833 pedestrian/bicyclist movements recorded within the study limits; of those, 462 pedestrian/bicyclist movements were across SR A1A.

- Based on the pedestrian/bicycle counts conducted within the study limits, there were a total of 119 PBMpH traveling along SR A1A per 300 foot long section.

- Groups of pedestrians (maximum group size of 7 pedestrians) were observed crossing the north approach of SR A1A throughout the observation period. A majority of these pedestrians originated from parking lots and on-street parking north and west of 3rd Avenue South and traveled south before crossing the north approach of the intersection with final destinations being the beach, Flagler Beach Pier, and the Funky Pelican restaurant. This pattern was also observed in the opposite direction, with pedestrians crossing the north approach of SR A1A, from the east, then traveling north to on-street parking and parking lots.
Most pedestrians traveling along SR A1A were observed to walk on the sidewalk or the boardwalk.

A majority of pedestrians were observed to utilize the crosswalk to cross SR A1A. Motorist compliance of the marked crosswalk and warning signs was observed to be good as they typically stopped to allow pedestrians to cross the road. No conflicts were observed between vehicles and pedestrians at the crosswalk.

Some pedestrians were observed to cross SR A1A outside of the marked crosswalk. These pedestrians would cross when a traffic gap was available. Approaching motorists typically stopped to allow pedestrians to complete their crossings. No conflicts were observed.

Some pedestrians were observed to run across SR A1A if a vehicle approached during their crossing. No conflicts were observed.

At the time of the field review, approximately 10 parking spaces along northbound SR A1A, south of the crosswalk, were occupied as a construction staging area for Flagler Beach Pier pile replacements. Most of these spaces were for city vehicles. All other available northbound parking was occupied.

All available on-street parking on southbound SR A1A was occupied during the field review.

Southbound on-street parking ends approximately 30 feet north of the pedestrian crossing, which exceeds the 20 foot minimum requirement from Index 17346 (12 of 14).

Vehicles parked within the on-street parking were observed to restrict the line of sight for eastbound pedestrians entering the crosswalk and southbound motorists approaching the crosswalk. Eastbound pedestrians do not achieve an adequate line of sight until they have entered approximately 10 feet into the crosswalk. Per Plans Preparation Manual Chapter 8, adequate sight distance shall be provided for both the pedestrian and motorists per PPM Table 2.7.1, Minimum Stopping Sight Distance. Per Table 2.7.1, the minimum stopping sight distance for a 30 mph speed limit is 200 feet. The existing southbound stopping sight distance from the curb is estimated to be 80 feet due to on-street parking. Sight distance can be improved via the construction of a curb bulb-out on the northwest corner of the intersection. The bulb-out will also provide a traffic calming feature on southbound SR A1A approaching the crosswalk. Consideration was given to re-aligning the crosswalk to be perpendicular to SR A1A; however, it is likely that pedestrians would still cross at a diagonal to the pier, as this is the primary destination for pedestrians.
The crosswalk for 3rd Street South was analyzed to determine if the pedestrian and vehicle volumes meet the requirements of Warrant 4, Pedestrian Volume (MUTCD 2009). The vehicle volumes from count station 731001 and the pedestrian hourly volumes were used in the analysis. Based on the results of the analysis, the pedestrian volumes do not meet the warrant requirements for the crosswalk at 3rd Street South (Flagler Beach Pier). As such, a fully actuated pedestrian signal is not recommended.

The signal warrant work sheets, pedestrian volume summary, and count station traffic volume summary are included in the appendix.

A pedestrian hybrid beacon was considered. According to the MUTCD 2009, a pedestrian hybrid beacon may be considered for installation to facilitate pedestrian crossings at a location that does not meet traffic signal warrants, or at a location that meets traffic signal warrants, but a decision is made to not install a traffic control signal. Pedestrian hybrid beacons should not be used at intersections.

The pedestrian volumes do not meet the traffic signal warrants. However, the pedestrian crossing is located at an intersection; therefore, a pedestrian hybrid beacon should not be installed at this location.

Rectangular rapid flashing beacons (RRFB) were considered. However, due to the significant volume of pedestrians, the RRFB would likely receive constant actuations and operate similarly to the existing flashing beacons.
4. RECOMMENDATIONS

Based on the results of the analysis, field observations, and engineering judgment, the following recommendations were developed:

1. Construct a curb bulb-out on the northwest corner of the intersection.
   
   a. Install a trench drain with a pedestrian safe cast iron grate between the existing curb line and the proposed curb bulb-out to maintain existing drainage.

2. Re-stripe existing crosswalk with special emphasis markings per Index 17346.

3. Relocate the northbound advance pedestrian warning sign assembly.

4. Remove the existing southbound pedestrian warning sign assembly and install a new sign assembly in the proposed bulb out. Relocate the southbound yellow flashing beacon to the proposed pedestrian warning sign assembly.

5. A fully actuated pedestrian signal is not recommended as the pedestrian volumes do not meet the requirements of Warrant 4.

6. A pedestrian hybrid beacon was considered for the crosswalk; however, since the crosswalk is located at an intersection, a pedestrian hybrid beacon should not be installed.

7. Rectangular rapid flashing beacons (RRFB) were considered. However, since the pedestrian crossing volume is significant, the RRFB would likely receive constant actuations and operate similarly to the existing flashing beacons.

A conceptual improvement diagram has been developed to further depict the recommended improvements and is included on the following page.
FLAGLER BEACH PIER
FUNKY PELICAN PARKING LOT
ATLANTIC OCEAN REALTY

BANK OF AMERICA
RELOCATE FLASHING BEACON AND INSTALL PEDESTRIAN WARNING SIGN ASSEMBLY
EXISTING PEDESTRIAN WARNING SIGN ASSEMBLY TO REMAIN
INSTALL TRENCH DRAIN WITH PEDESTRIAN SAFE CAST IRON GRATE TO MAINTAIN EXISTING DRAINAGE PATTERN
CONSTRUCT CONCRETE BULB - OUT STOPPING SIGHT DISTANCE=200' RESTRIPE EXISTING CROSSWALK WITH SPECIAL EMPHASIS MARKINGS

EXISTING FLASHING BEACON AND PEDESTRIAN WARNING SIGN ASSEMBLY TO REMAIN
RELOCATE PEDESTRIAN WARNING SIGN ASSEMBLY'S TO APPROXIMATELY 185' SOUTH OF CROSSLINK X...
North Approach Photographs

Looking north along SR MA from the intersection

Looking south along SR MA into the intersection
South Approach Photographs

Looking south along SR MA from the intersection

Looking north along SR MA into the intersection
West Approach Photographs

Looking west along 3rd Street South (Flagler Beach Pier) from the intersection.

Looking east along 3rd Street South (Flagler Beach Pier) into the intersection.
<table>
<thead>
<tr>
<th>TIME</th>
<th>NORTHBOUND</th>
<th>SOUTHBOUND</th>
<th>N/S TOTAL</th>
<th>NORTHBOUND</th>
<th>SOUTHBOUND</th>
<th>N/S TOTAL</th>
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<td>1 2 3 8 13 21</td>
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<td>98 112 81 101 392</td>
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<td>44 42 43 49 179</td>
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<td>71 44 38 42 195</td>
<td>49 69 56 38 212</td>
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<td>2100</td>
<td>30 21 25 18 94</td>
<td>33 37 22 19 111</td>
<td>206</td>
<td>34 28 20 31 113</td>
<td>25 35 41 30 131</td>
<td>244</td>
<td>225</td>
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<td>2200</td>
<td>26 15 11 9 61</td>
<td>18 24 12 8 62</td>
<td>123</td>
<td>21 16 7 14 58</td>
<td>30 21 16 12 79</td>
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<td>2300</td>
<td>12 8 10 4 34</td>
<td>14 10 12 3 39</td>
<td>73</td>
<td>10 10 12 8 40</td>
<td>12 9 4 1 26</td>
<td>66</td>
<td>70</td>
</tr>
</tbody>
</table>

Total Volume (24 Hrs) 8,996
TRAFFIC SIGNAL WARRANT SUMMARY

City: Flagler Beach  Engineer: RSJ  Date: September 12, 2014
County: Flagler  Lanes: 1  Critical Approach Speed: 30

Major Street: SR A1A  Minor Street: 3rd Street South (Flagler Beach Pier)

Volume Level Criteria
1. Is the critical speed of major street traffic > 70 km/h (40 mph)?
2. Is the intersection in a built-up area of isolated community of <10,000 population?

If Question 1 or 2 above is answered “Yes”, then use “70%” volume level

WARRANT 4A - PEDESTRIAN FOUR-HOUR VOLUME
If Condition 1 is satisfied and any four points lie above the appropriate line, then the warrant is satisfied.

Condition 1: The nearest signal or stop controlled intersection along the street that the pedestrians desire to cross is more than 300 feet away, or the nearest signal or stop controlled intersection along the street that the pedestrians desire to cross is within 300 feet, but the proposed traffic signal will not restrict the progressive movement of traffic.

<table>
<thead>
<tr>
<th>Warranting Volumes</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour</td>
<td>Major Street</td>
</tr>
<tr>
<td>1000</td>
<td>553</td>
</tr>
<tr>
<td>1100</td>
<td>632</td>
</tr>
<tr>
<td>1200</td>
<td>671</td>
</tr>
<tr>
<td>1300</td>
<td>692</td>
</tr>
</tbody>
</table>

Satisfied | N

Source: 2009 MUTCD
WARRANT 4B - PEDESTRIAN PEAK HOUR

If Condition 1 is satisfied and any of the plotted points lie above the appropriate line, then the warrant is satisfied.

**Condition 1:** The nearest signal or stop controlled intersection along the street that the pedestrians desire to cross is more than 300 feet away, or the nearest signal or stop controlled intersection along the street that the pedestrians desire to cross is within 300 feet, but the proposed traffic signal will not restrict the progressive movement of traffic.

**Volume Level Criteria**

1. Is the critical speed of major street traffic > 70 km/h (40 mph)?
   - Yes
   - No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level

<table>
<thead>
<tr>
<th>Warranting Volumes</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour</td>
<td>Major Street</td>
</tr>
<tr>
<td>1000</td>
<td>553</td>
</tr>
<tr>
<td>1100</td>
<td>632</td>
</tr>
<tr>
<td>1200</td>
<td>671</td>
</tr>
<tr>
<td>1300</td>
<td>692</td>
</tr>
</tbody>
</table>

**Satisfied**

N

*Source: 2009 MUTCD*
### Pedestrian/Bicycle Movement Summary

- **Section:** 73030
- **Mile Post:** From 3.890 to 3.942
- **Date:** August 23rd, 2014
- **State Road:** A1A
- **Observer:** KLC
- **Time:** 10:00 - 14:00
- **Weather:** Fair

#### Table: Pedestrian/Bicycle Movement

<table>
<thead>
<tr>
<th>Time</th>
<th>Traveling on West Side of SR A1A</th>
<th>Traveling on East Side of SR A1A</th>
<th>Crossing from the West Heading East</th>
<th>Crossing from the East Heading West</th>
<th>Time</th>
<th>Traveling on West Side of SR A1A</th>
<th>Traveling on East Side of SR A1A</th>
<th>Crossing from the West Heading East</th>
<th>Crossing from the East Heading West</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00-10:15</td>
<td>15 Ped, 2 Bike</td>
<td>20 Ped, 20 Bike</td>
<td>19 Ped, 0 Bike</td>
<td>20 Ped, 0 Bike</td>
<td>12:00-12:15</td>
<td>6 Ped, 0 Bike</td>
<td>10 Ped, 0 Bike</td>
<td>21 Ped, 0 Bike</td>
<td>19 Ped, 0 Bike</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>5 Ped, 3 Bike</td>
<td>12 Ped, 10 Bike</td>
<td>15 Ped, 0 Bike</td>
<td>11 Ped, 0 Bike</td>
<td>12:15-12:30</td>
<td>13 Ped, 0 Bike</td>
<td>3 Ped, 110 Bike</td>
<td>110 Ped, 0 Bike</td>
<td>3 Ped, 0 Bike</td>
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<tr>
<td>10:30-10:45</td>
<td>81 Ped, 17 Bike</td>
<td>32 Ped, 12 Bike</td>
<td>14 Ped, 0 Bike</td>
<td>1 Ped, 14 Ped</td>
<td>12:30-12:45</td>
<td>10 Ped, 0 Bike</td>
<td>20 Ped, 0 Bike</td>
<td>20 Ped, 0 Bike</td>
<td>11 Ped, 0 Bike</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>5 Ped, 0 Bike</td>
<td>1 Ped, 110 Bike</td>
<td>7 Ped, 0 Bike</td>
<td>1 Ped, 110 Bike</td>
<td>12:45-13:00</td>
<td>10 Ped, 0 Bike</td>
<td>1 Ped, 172 Ped</td>
<td>172 Ped, 0 Bike</td>
<td>20 Ped, 0 Bike</td>
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<td>11:00-11:15</td>
<td>6 Ped, 11 Bike</td>
<td>15 Ped, 14 Ped</td>
<td>15 Ped, 0 Bike</td>
<td>19 Ped, 0 Bike</td>
<td>13:00-13:15</td>
<td>10 Ped, 0 Bike</td>
<td>18 Ped, 120 Bike</td>
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<tr>
<td>11:15-11:30</td>
<td>18 Ped, 0 Bike</td>
<td>15 Ped, 110 Bike</td>
<td>15 Ped, 110 Bike</td>
<td>0 Ped, 0</td>
<td>13:15-13:30</td>
<td>14 Ped, 0 Bike</td>
<td>16 Ped, 0</td>
<td>110 Ped, 0</td>
<td>110 Ped, 0</td>
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<tr>
<td>11:30-11:45</td>
<td>6 Ped, 16 Bike</td>
<td>15 Ped, 0</td>
<td>15 Ped, 0</td>
<td>9 Ped, 0</td>
<td>13:30-13:45</td>
<td>13 Ped, 0</td>
<td>17 Ped, 0</td>
<td>0 Ped, 10</td>
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<tr>
<td>11:45-12:00</td>
<td>9 Ped, 5 Bike</td>
<td>0 Ped, 0</td>
<td>10 Ped, 7</td>
<td>16 Ped, 0</td>
<td>13:45-14:00</td>
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<td>10 Ped, 0</td>
<td>10 Ped, 0</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td><strong>72 Ped, 91 Bike</strong></td>
<td><strong>81 Ped, 11</strong></td>
<td><strong>8 Ped, 110</strong></td>
<td><strong>21 Ped, 0</strong></td>
<td><strong>Subtotal</strong></td>
<td><strong>85 Ped, 109</strong></td>
<td><strong>8 Ped, 110</strong></td>
<td><strong>11 Ped, 0</strong></td>
<td><strong>22 Ped, 1</strong></td>
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<td><strong>Total</strong></td>
<td><strong>78 Ped, 92 Bike</strong></td>
<td><strong>16 Ped, 13</strong></td>
<td><strong>106 Ped, 114</strong></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>86 Ped, 117</strong></td>
<td><strong>8 Ped, 11</strong></td>
<td><strong>11 Ped, 0</strong></td>
<td><strong>126 Ped, 116</strong></td>
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</tbody>
</table>