



TECHNICAL ADVISORY COMMITTEE

Ocala Citizens Service Center
201 SE 3rd Street, Ocala FL 34471
2nd Floor Training Room

February 13, 2018
10:00 AM

AGENDA

1. CALL TO ORDER AND ROLL CALL

2. PROOF OF PUBLICATION

3. ACTION ITEMS

A. SAFETY PERFORMANCE MEASURES AND TARGETS

Staff will present and is requesting approval of the following five proposed safety targets and performance measures as required by the Federal Highway Administration (FHWA) for all public roads:

- 1. Number of fatalities;*
- 2. Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT);*
- 3. Number of serious injuries;*
- 4. Rate of serious injuries per 100 Million VMT; and*
- 5. Number of non-motorized fatalities and non-motorized serious injuries.*

Staff is requesting approval of the safety performance targets.

4. PRESENTATIONS

A. SR 35 AND NE 58TH AVENUE TRAIL CROSSING REPORT

Staff will present the final report for the trail crossing study to connect the downtown trail to Silver Springs State Park and to connect the Indian Lake State Forest and Silver Springs State Forest.

B. TRAILS PROJECT UPDATE

Staff will provide an update on the ongoing status of the regional trails projects.

C. METROPOLITAN PLANNING ORGANIZATION ADVISORY COUNCIL (MPOAC) FREIGHT PRIORITIES

Staff will present the MPOAC freight-related priority project application to be submitted for inclusion to the statewide freight priority list with the intent to influence FDOT funding decisions in FDOT's 5 Year Work Program.

5. COMMENTS BY FDOT

6. COMMENTS BY TPO STAFF

7. COMMENTS BY TAC MEMBERS

8. PUBLIC COMMENT (Limited to 5 minutes)

9. ADJOURNMENT

If reasonable accommodations are needed for you to participate in this meeting, please call the TPO Office at (352) 629-8297 forty-eight (48) hours in advance, so arrangements can be made.

*The next regular meeting of the Technical Advisory Committee will be held on **March 12, 2018.***



February 9, 2018

TO: TAC/CAC Members

FROM: Michael Daniels, Director

SUBJECT: Safety Targets and Performance Measures

Nationally, state-specific, and locally, transportation plans exist to enhance safety for all users of the transportation system. A coordinated effort to connect all the safety plans has long been in effect in the transportation realm, but over the last two years, a system of Performance Management has led to a greater push for comprehensive and coordinated transportation and safety planning. Performance Measures for Safety have been developed by the FHWA, for which targets are being established cooperatively between the FDOT and MPO's within the State of Florida (as well as nationally). Through this coordinated effort, the goals of the Highway Safety Improvement Program (HSIP), Highway Safety Plan (HSP), Strategic Highway Safety Plan (SHSP), and region-specific safety and transportation plans can be shown to guide and support one another. In August of 2017, the FDOT adopted a target of "Zero" for the five (5) safety performance measures adopted by the Federal Highway Administration (FHWA) for all public roads.

At the January 9th TAC meeting, the committee recommended to adopt the FDOT target of "0" with an interim performance measure based on an average of the last four-five year rolling averages for each performance measure from 2009 to 2016. On January 31st, the TPO board was opposed to adopting a target of 0 and requested additional information to determine the correct performance measures for each category.

The Performance Measures, along with a brief description of each is provided in the following table:

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Performance Measure	Description
Number of fatalities	The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)	The ratio of total number of fatalities to the number of vehicle miles traveled (VMT, in 100 Million VMT) in a calendar year.
Number of serious injuries	The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.
Rate of serious injuries per 100 Million VMT	The ratio of total number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.
Number of non-motorized fatalities and non-motorized serious injuries	The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

FDOT Adopted Measures	Target	Interim Performance Measure
Number of fatalities	0	3,052
Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)	0	1.65
Number of serious injuries	0	20,861
Rate of serious injuries per 100 Million VMT	0	11.06
Number of non-motorized fatalities and non-motorized serious injuries	0	3,447

Upon adoption by the Florida Department of Transportation (FDOT) of a target of “Zero” and the Interim Performance Measures, the TPO, along with all the other Metropolitan Planning Organizations in the State of Florida, were given 180 days to adopt their targets for the safety measures. The TPO must adopt its Performance Measures and Targets by February 27, 2018.

MPO’s were granted the option of either adopting/supporting the State target, or establishing a specific number or rate for each performance measure. MPOs that choose to establish a rate for a target are required to report not only the estimate used for VMT to establish the target rate, but also the methodology used to arrive at the overall VMT estimate.

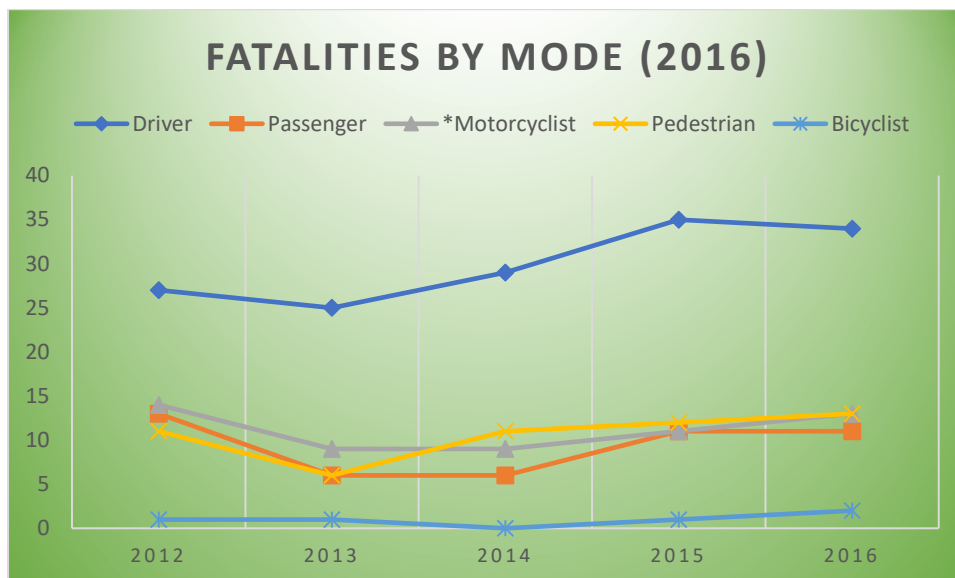
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Additional information has been provided in the packet showing the number of traffic fatalities in the last five years and the fatalities by mode, as well as data regarding additional contributing causes to traffic fatalities such as drug and alcohol use, speeding and distracted driving. See table below:

Fatal and Incapacitating Crashes between 2012 and 2016

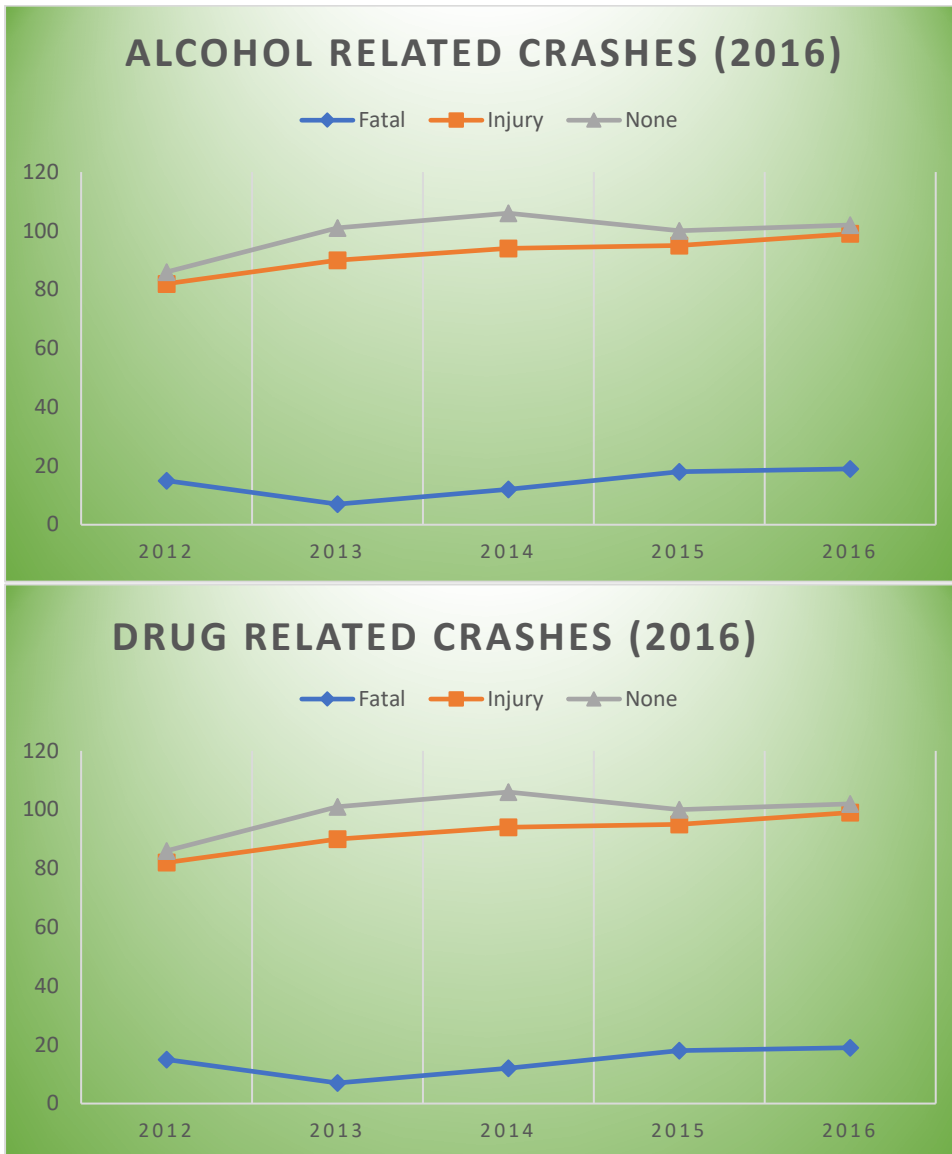
	Fatalities	Incapacitating
Total	289	1276
Alcohol Use	71	102
Drug Use	63	80
Exceeding Speed Limit	90	207
Distracted Driving	35	114



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Drug and Alcohol Related Crashes



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RECOMMENDED MEASURES

- Develop long-term strategies to address traffic safety as part of the 2045 Long Range Transportation Plan, and
- Utilizing data that the TPO has collected as part of the annual traffic counts and trends manual and fatality and serious rate using FDOT's methodology as defined in the attached 2016 FHWA Performance Measures spreadsheet, staff has established the following 2018 performance measure targets:

Safety Performance Measures	Performance Measure Target
Number of fatalities	58
Rate of fatalities per 100 Million VMT	1.48
Number of serious injuries	255
Rate of serious injuries per 100 Million VMT	7.99
Number of non-motorized fatalities and non-motorized serious injuries	42

If you have any questions regarding the ranking of this specific project please contact me in our office at (352) 629-8297.

Safety Performance Targets

Calendar Year 2018 Targets *

Number of Fatalities

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five-year rolling average for total fatalities on Florida's roads is forecast to be between 2,716 and 3,052 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for fatalities is zero in 2018. While the data forecast indicates Florida's five year rolling average for fatalities could continue to trend upward in 2017 and 2018, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities. An interim performance measure is required by our federal funding agencies to receive federal funding. We firmly believe that every life counts and although our target for fatalities is zero in 2018, Florida has forecast an interim performance measure of 3,052 to satisfy the federal requirement.

Number of Serious Injuries

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five-year rolling average for total serious injuries on Florida's roads is forecast to be between 18,831 and 20,861 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for serious injuries is zero in 2018. The data forecast indicates Florida's five year rolling average for serious injuries could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in the number of serious injuries on Florida's roads. An interim performance measure is required by our federal funding agencies to receive federal funding. We firmly believe that every life counts and although our target for serious injuries is zero in 2018, Florida has forecast an interim performance measure of 20,861 to satisfy the federal requirement.

Fatality Rate

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five-year rolling average for fatality rate per 100 million VMT on Florida's roads is forecast to be between 1.06 and 1.65 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for fatality rate per 100 million VMT is zero in 2018. While the data forecast indicates Florida's five year rolling average for fatality rate per 100 million VMT could continue to trend upward in 2017 and 2018, the FDOT State Safety Office expects the projects chosen for

2017 Florida Highway Safety Improvement Program

funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities. An interim performance measure is required by our federal funding agencies to receive federal funding. We firmly believe that every life counts and although our target for fatality rate per 100 million VMT is zero in 2018, Florida has forecast an interim performance measure of 1.65 to satisfy the federal requirement.

Serious Injury Rate

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five-year rolling average for serious injury rate per 100 million VMT on Florida's roads is forecast to be between 7.57 and 11.06 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for serious injury rate per 100 million VMT is zero in 2018. The data forecast indicates Florida's five year rolling average for serious injury rate per 100 million VMT could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in the serious injury rate per 100 million VMT. An interim performance measure is required by our federal funding agencies to receive federal funding. We firmly believe that every life counts and although our target for serious injury rate per 100 million VMT is zero in 2018, Florida has forecast an interim performance measure of 11.06 to satisfy the federal requirement.

Total Number of Non-Motorized Fatalities and Serious Injuries

Describe the basis for established target, including how it supports SHSP goals.

Based on statistical forecasting, the five-year rolling average for non-motorized fatalities and serious injuries on Florida's roads is forecast to be between 3,066 and 3,447 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for non-motorized fatalities and serious injuries is zero in 2018. The data forecast indicates Florida's five year rolling average for non-motorized fatalities and serious injuries could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in non-motorized fatalities and serious injuries. An interim performance measure is required by our federal funding agencies to receive federal funding. We firmly believe that every life counts and although our target for non-motorized fatalities and serious injuries is zero in 2018, Florida has forecast an interim performance measure of 3,447 to satisfy the federal requirement.

Enter additional comments here to clarify your response for this question or add supporting information.

2017 Florida Highway Safety Improvement Program

Florida shares the national traffic safety vision, “Toward Zero Deaths,” and formally adopted our own version of the national vision, “Driving Down Fatalities,” in 2012. FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero deaths is our safety performance target. This target is consistent throughout our Strategic Highway Safety Plan, Highway Safety Improvement Program and Highway Safety Plan.

Florida’s data forecasts have been established using an ARIMA Hybrid Regression Model (0, 1,1) (2,0,0) (12) with VMT. Nine independent variables were tested to assess correlations; only Vehicle Miles of Travel (VMT) and gas consumption have relatively high correlations with fatalities and serious injuries and of these two variables only VMT was useful in predicting future fatalities and serious injuries. The first three performance measures (number of fatalities, number of serious injuries, and fatality rate per 100M VMT) have been forecasted based on a five-year rolling average and the remaining performance measures will be forecasted annually. The forecasts for 2017 and 2018 are based on monthly data from 2005 through 2016 using statistical forecasting methodologies.

[Source: FDOT Highway Safety Plan]

MPO/TPO		Average Annual Fatalities ¹								Average Annual Serious Injuries ²								Average Annual Fatality Rates ³								Average Annual Serious Injury Rates ⁴								Average Annual Pedestrian and Bicyclist Fatalities and Serious Injuries ⁵							
		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16	
		Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ			
Space Coast TPO	Single County	63.8	66.2	3.8%	69.6	5.1%	74.8	7.5%	587.0	607.4	3.5%	601.4	-1.0%	630.8	4.9%	1.053	1.101	3.8%	1.159	5.1%	1.218	7.5%	9.666	10.097	4.5%	10.033	-0.6%	10.363	3.3%	79.8	82.2	3.0%	86.6	5.4%	90.2	4.2%					
Charlotte County-Punta Gorda MPO	Single County	22.8	21.0	-7.9%	21.4	1.9%	22.6	5.6%	164.2	149.2	-9.1%	134.6	-9.8%	127.0	-5.6%	1.048	0.965	-7.9%	0.969	1.9%	0.998	5.6%	7.555	6.864	-9.1%	6.127	-10.7%	5.676	-7.4%	24.2	23.0	-5.0%	21.4	-7.0%	20.4	-4.7%					
Broward MPO	Single County	178.4	175.0	-1.9%	183.0	4.6%	199.6	9.1%	2,080.6	2,004.0	-3.7%	1,888.8	-5.7%	1,776.0	-6.0%	1.099	1.074	-1.9%	1.109	4.6%	1.205	9.1%	12.801	12.278	-4.1%	11.447	-6.8%	10.797	-5.7%	351.4	350.6	-0.2%	341.4	-2.6%	352.2	3.2%					
Okaloosa-Walton TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below								See individual counties below							
Gainesville MTPO	Single County, not countywide	See individual county below								See individual county below								See individual county below								See individual county below								See individual county below							
Hernando/Citrus MPO	Multiple Counties	50.6	47.0	-7.1%	49.2	4.7%	49.8	1.2%	448.4	428.8	-4.4%	445.0	3.8%	461.2	3.6%	1.527	1.416	-7.1%	1.471	4.7%	1.464	1.2%	13.548	12.926	-4.6%	13.329	3.1%	13.560	1.7%	34.4	36.2	5.2%	41.0	13.3%	43.2	5.4%					
Hillsborough County MPO	Single County	157.6	161.0	2.2%	168.4	4.6%	183.8	9.1%	2,066.2	1,921.6	-7.0%	1,752.0	-8.8%	1,618.0	-7.6%	1.245	1.266	2.2%	1.308	4.6%	1.400	9.1%	16.296	15.106	-7.3%	13.650	-9.6%	12.430	-8.9%	254.8	249.6	-2.0%	246.0	-1.4%	242.6	-1.4%					
Indian River County MPO	Single County, not countywide	See individual county below								See individual county below								See individual county below								See individual county below								See individual county below							
North Florida MPO	Multiple Counties	168.4	172.8	2.6%	183.4	6.1%	201.4	9.8%	1,261.0	1,299.2	3.0%	1,341.4	3.2%	1,371.0	2.2%	1.112	1.136	2.6%	1.188	6.1%	1.272	9.8%	8.329	8.547	2.6%	8.717	2.0%	8.727	0.1%	174.2	181.8	4.4%	191.8	5.5%	196.2	2.3%					
Polk TPO	Single County	90.4	94.2	4.2%	99.8	5.9%	108.6	8.8%	566.4	539.0	-4.8%	499.6	-7.3%	480.8	-3.8%	1.520	1.541	4.2%	1.579	5.9%	1.648	8.8%	9.503	8.840	-7.0%	7.959	-10.0%	7.392	-7.1%	63.0	65.2	3.5%	63.6	-2.5%	67.4	6.0%					
Lee County MPO	Single County	75.2	75.6	0.5%	81.0	7.1%	87.0	7.4%	456.6	458.0	0.3%	460.4	0.5%	499.0	8.4%	1.164	1.140	0.5%	1.187	7.1%	1.229	7.4%	7.067	6.921	-2.1%	6.786	-2.0%	7.101	4.6%	76.8	80.0	4.2%	84.0	5.0%	91.0	8.3%					
Martin MPO	Single County	26.2	23.6	-9.9%	24.2	2.5%	25.4	5.0%	124.6	116.4	-6.6%	107.0	-8.1%	103.0	-3.7%	1.273	1.162	-9.9%	1.186	2.5%	1.246	5.0%	6.054	5.739	-5.2%	5.269	-8.2%	5.117	-2.9%	17.6	17.4	-1.1%	16.2	-6.9%	14.0	-13.6%					
Miami-Dade Urbanized Area MPO	Single County	242.8	246.6	1.6%	265.0	7.5%	273.8	3.3%	1,959.0	1,992.0	1.7%	1,992.2	0.0%	1,894.4	-4.9%	1.263	1.284	1.6%	1.378	7.5%	1.417	3.3%	10.206	10.383	1.7%	10.386	0.0%	9.854	-5.1%	411.8	425.8	3.4%	446.0	4.7%	436.0	-2.2%					
Collier County MPO	Single County	37.2	37.2	0.0%	38.8	4.3%	38.0	-2.1%	184.0	174.0	-5.4%	175.2	0.7%	177.2	1.1%	1.169	1.160	0.0%	1.183	4.3%	1.125	-2.1%	5.790	5.445	-6.0%	5.388	-1.0%	5.252	-2.5%	37.2	38.6	3.8%	37.6	-2.6%	40.0	6.4%					
Ocala/Marion County TPO	Single County	61.8	60.6	-1.9%	60.0	-1.0%	61.6	2.7%	423.0	359.4	-15.0%	326.8	-9.1%	327.8	0.3%	1.537	1.507	-1.9%	1.475	-1.0%	1.478	2.7%	10.501	8.952	-14.8%	8.069	-9.9%	7.894	-2.2%	41.8	39.0	-6.7%	38.0	-2.6%	41.2	8.4%					
METROPLAN Orlando	Multiple Counties	208.8	210.6	0.9%	218.4	3.7%	226.0	3.5%	1,539.6	1,893.0	23.0%	2,318.6	22.5%	2,640.0	13.9%	1.049	1.049	0.9%	1.073	3.7%	1.089	3.5%	7.748	9.401	21.3%	11.309	20.3%	12.627	11.7%	261.2	300.0	14.9%	341.8	13.9%	375.8	9.9%					
Bay County TPO	Single County	24.0	24.4	1.7%	27.2	11.5%	30.0	10.3%	257.4	250.4	-2.7%	255.2	1.9%	234.6	-8.1%	1.322	1.340	1.7%	1.476	11.5%	1.596	10.3%	14.172	13.761	-2.9%	13.897	1.0%	12.559	-9.6%	29.8	29.4	-1.3%	34.4	17.0%	37.6	9.3%					
Pasco County MPO	Single County	69.4	67.8	-2.3%	66.8	-1.5%	71.4	6.9%	855.4	871.0	1.8%	933.0	7.1%	1,032.6	10.7%	1.735	1.660	-2.3%	1.592	-1.5%	1.661	6.9%	21.416	21.279	-0.6%	22.077	3.8%	23.905	8.3%	105.6	109.6	3.8%	109.0	-0.5%	115.6	6.1%					
Florida-Alabama TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below								See individual counties below							
Pinellas County MPO	Single County	99.0	101.4	2.4%	102.8	1.4%	105.8	2.9%	1,270.0	1,217.8	-4.1%	1,194.6	-1.9%	1,175.2	-1.6%	1.229	1.272	2.4%	1.296	1.4%	1.310	2.9%	15.746	15.258	-3.1%	15.068	-1.2%	14.594	-3.1%	212.4	213.8	0.7%	217.2	1.6%	221.0	1.7%					
Sarasota/Manatee MPO	Multiple Counties	81.0	81.6	0.7%	87.4	7.1%	99.8	14.2%	770.8	777.8	0.9%	907.0	16.6%	1,131.2	24.7%	1.103	1.104	0.7%	1.160	7.1%	1.289	14.2%	10.492	10.497	0.0%	11.986	14.2%	14.504	21.0%	127.8	134.2	5.0%	142.8	6.4%	160.0	12.0%					
St Lucie TPO	Single County	30.0	29.8	-0.7%	31.0	4.0%	33.6	8.4%	187.4	174.0	-7.2%	166.6	-4.3%	165.0	-1.0%	0.967	0.956	-0.7%	0.985	4.0%	1.064	8.4%	6.027	5.562	-7.7%	5.276	-5.1%	5.236	-0.8%	26.6	28.4	6.8%	26.8	-5.6%	24.0	-10.4%					
Capital Region TPA	Multiple Counties	55.4	53.0	-4.3%	51.4	-3.0%	55.6	8.2%	351.8	313.6	-10.9%	278.6	-11.2%	266.0	-4.5%	1.299	1.249	-4.3%	1.208	-3.0%	1.279	8.2%	8.203	7.360	-10.3%	6.539	-11.2%	6.143	-6.1%	41.8	41.4	-1.0%	42.4	2.4%	44.0	3.8%					
River to Sea TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below								See individual counties below							
Palm Beach MPO	Single County	131.4	127.0	-3.3%	139.8	10.1%	153.4	9.7%	1,047.0	1,039.8	-0.7%	1,026.2	-1.3%	1,054.2	2.7%	1.066	1.022	-3.3%	1.100	10.1%	1.185	9.7%	8.493	8.366	-1.5%	8.105	-3.1%	8.195	1.1%	190.0	193.4	1.8%	200.6	3.7%	203.2	1.3%					
Lake-Sumter MPO	Multiple Counties	62.0	61.2	-1.3%	64.4	5.2%	66.4	3.1%	369.4	348.8	-5.6%	340.4	-2.4%	364.6	7.1%	1.436	1.385	-1.3%	1.410	5.2%	1.423	3.1%	8.571	7.879	-8.1%	7.425	-5.8%	7.742	4.3%	37.2	39.6	6.5%	38.8	-2.0%	40.8	5.2%					
Heartland Regional TPO	Multiple Counties	57.6	55.8	-3.1%	57.4	2.9%	60.8	5.9%	331.2	310.4	-6.3%	299.8	-3.4%	342.0	14.1%	2.053	1.996	-3.1%	2.025	2.9%	2.105	5.9%	11.785	11.089	-5.9%	10.577	-4.6%	11.750	11.1%	32.4	35.0	8.0%	33.2	-5.1%	32.6	-1.8%					

FDOT County Number	County Name	MPO/TPO	Average Annual Fatalities ¹								Average Annual Serious Injuries ²								Average Annual Fatality Rates ³								Average Annual Serious Injury Rates ⁴								Average Annual Pedestrian and Bicyclist Fatalities and Serious Injuries ⁵							
			2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16	
			Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ		
26	Alachua	Gainesville MTPO	30.6		30.6	0.0%	32.8	7.2%	36.6	11.6%	302.8		275.8	-8.9%	265.6	-3.7%	264.0	-0.6%	1.080		1.073	-0.6%	1.137	6.0%	1.242	9.2%	10.669		9.677	-9.3%	9.217	-4.8%	8.959	-2.8%	37.6		38.2	1.6%	37.0	-3.1%	37.8	2.2%
48	Escambia	Florida-Alabama TPO	40.8		41.6	2.0%	44.2	6.3%	44.4	0.5%	472.2		377.8	-20.0%	321.4	-14.9%	281.6	-12.4%	1.206		1.228	1.8%	1.298	5.7%	1.289	-0.7%	13.954		11.152	-20.1%	9.450	-15.3%	8.182	-13.4%	66.0		60.2	-8.8%	55.4	-8.0%	54.4	-1.8%
58	Santa Rosa	Florida-Alabama TPO	23.8		22.2	-6.7%	21.8	-1.8%	20.0	-8.3%	262.2		233.0	-11.1%	218.0	-6.4%	189.6	-13.0%	1.189		1.105	-7.1%	1.081	-2.2%	0.978	-9.5%	13.105		11.602	-11.5%	10.821	-6.7%	9.245	-14.6%	16.4		15.2	-7.3%	15.0	-1.3%	15.8	5.3%
57	Okaloosa	Okaloosa-Walton TPO	22.0		24.0	9.1%	27.0	12.5%	26.6	-1.5%	231.4		212.4	-8.2%	202.4	-4.7%	184.0	-9.1%	1.066		1.153	8.2%	1.284	11.4%	1.247	-2.9%	11.232		10.227	-8.9%	9.681	-5.3%	8.675	-10.4%	28.6		29.0	1.4%	30.8	6.2%	28.6	-7.1%
60	Walton	Okaloosa-Walton TPO	19.4		18.2	-6.2%	14.2	-22.0%	14.2	0.0%	143.4		138.2	-3.6%	137.8	-0.3%	121.0	-12.2%	1.684		1.561	-7.3%	1.198	-23.3%	1.160	-3.2%	12.434		11.849	-4.7%	11.609	-2.0%	9.954	-14.3%	8.6		9.0	4.7%	9.4	4.4%	8.6	-8.5%
73	Flagler	River to Sea TPO	18.4		20.0	8.7%	17.8	-11.0%	18.4	3.4%	176.2		160.0	-9.2%	137.8	-13.9%	119.4	-13.4%	1.720		1.798	4.5%	1.542	-14.2%	1.504	-2.5%	16.497		14.757	-10.5%	12.239	-17.1%	10.274	-16.1%	13.6		14.2	4.4%	15.8	11.3%	15.6	-1.3%
79	Volusia	River to Sea TPO	94.4		93.0	-1.5%	89.2	-4.1%	96.4	8.1%	691.8		658.2	-4.9%	630.2	-4.3%	638.4	1.3%	1.716		1.697	-1.1%	1.624	-4.3%	1.715	5.6%	12.573		12.019	-4.4%	11.485	-4.0%	11.387	-0.9%	92.2		92.8	0.7%	89.0	-4.1%	88.8	-0.2%
88	Indian River	Indian River County MPO	20.0		19.8	-1.0%	19.4	-2.0%	20.6	6.2%	117.2		119.0	1.5%	115.8	-2.7%	127.2	9.8%	1.333		1.312	-1.6%	1.262	-3.8%	1.322	4.8%	7.817		7.885	0.9%	7.568	-4.0%	8.194	8.3%	14.2		14.6	2.8%	16.2	11.0%	17.6	8.6%

Injury 4 - Incapacitating
Injury 5 - Fatal (within 30 days)

Injury 4 - Incapacitating


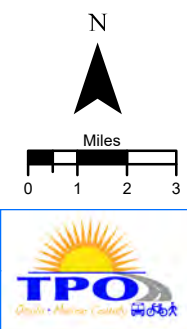
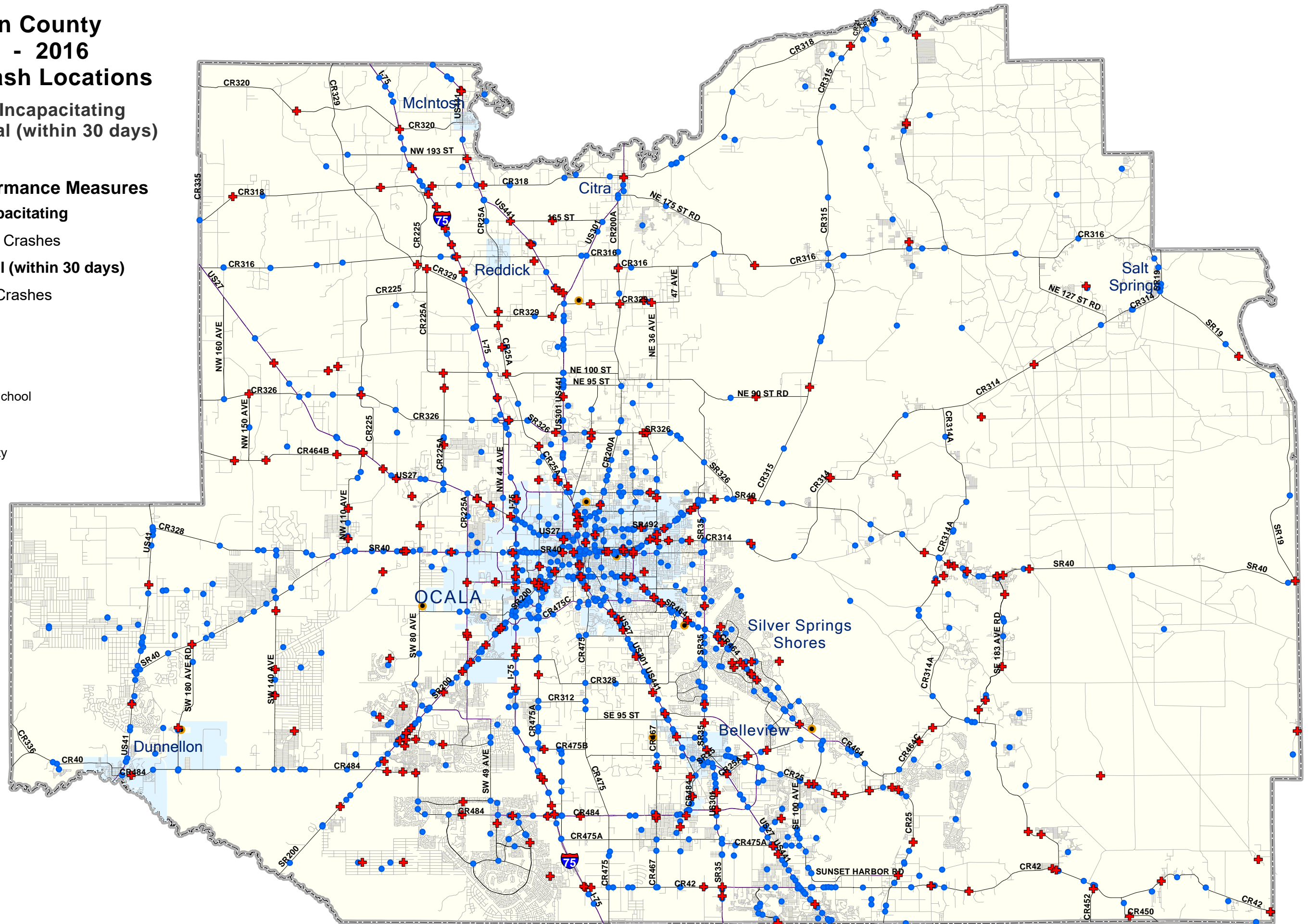
Injury 5 - Fatal (within 30 days)

+ Total 289 Crashes

Streets

- Public High School

 City Limits

 Marion County

Marion County 2012 - 2016 Traffic Crash Locations

Injury 4 - Incapacitating
Injury 5 - Fatal (within 30 days)

Safety Performance Measures

Injury 4 - Incapacitating

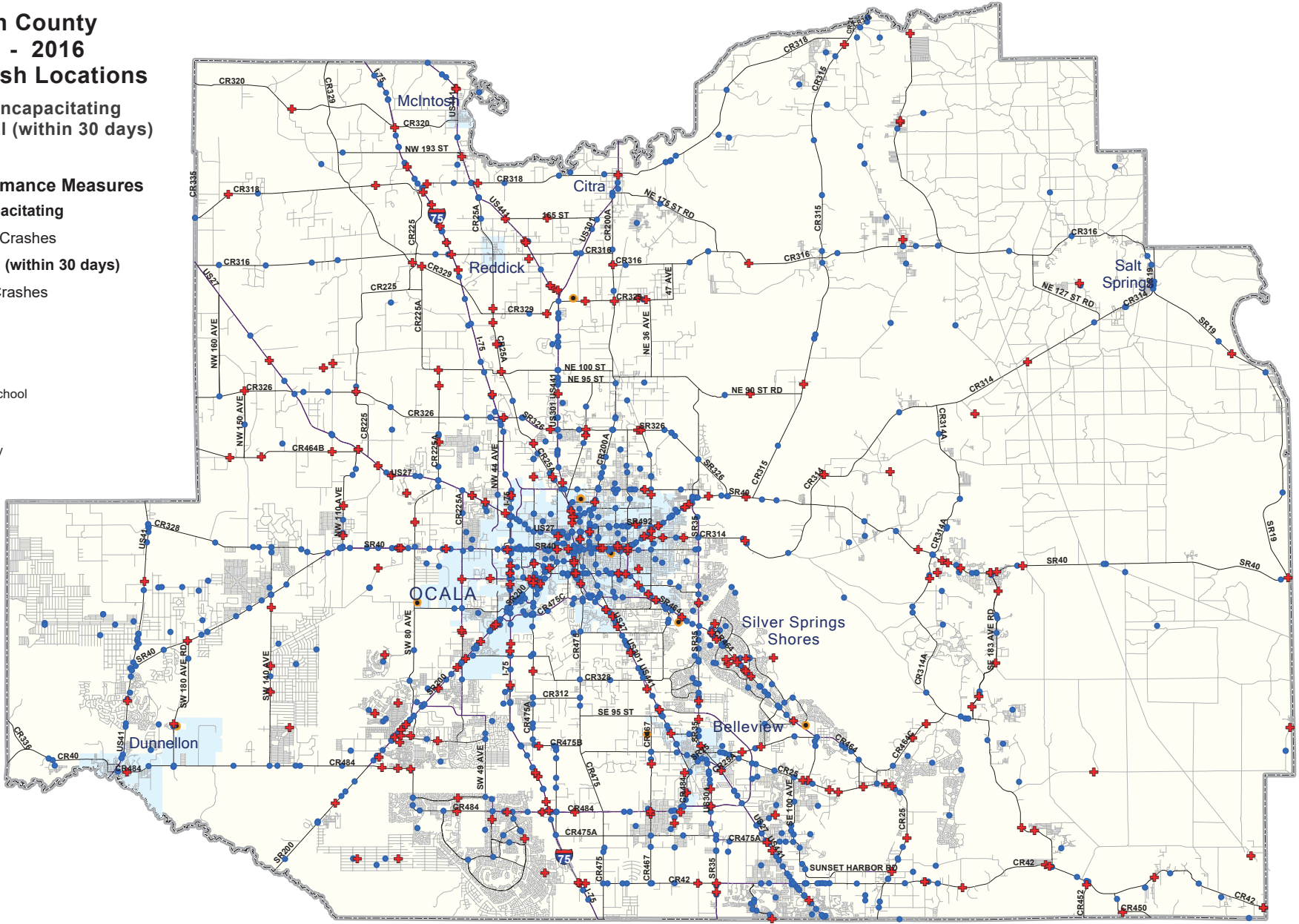
• Total 1276 Crashes

Injury 5 - Fatal (within 30 days)

+ Total 289 Crashes

Legend

- Streets
- Public High School
- City Limits
- Marion County





February 8, 2018

TO: TAC/CAC Committee Members

FROM: Kenneth Odom, Transportation Planner/Project Manager

SUBJECT: Trails Crossing Study

The TPO enlisted Kimley-Horn & Associates to analyze trails crossings on SR 35 and NE 58th Avenue that will be a part of the Silver Springs to Downtown Trail and the Indian Lake State Trail. A FINAL report of the analysis was submitted to TPO staff on January 18, 2018 that documented the existing conditions and recommended treatments at both locations.

This document has been included for your review. TPO staff will offer a brief presentation to outline the purpose and recommended treatments for both crossings at the February 13th meeting. Should you have any questions prior to the regularly scheduled meeting, please contact TPO staff at 352-629-8297.



TRAIL CROSSING STUDY

To: Michael Daniels, Ocala/Marion County Transportation Planning Organization

From: Amber L. Gartner, P.E., Kimley-Horn and Associates, Inc.

A handwritten signature in blue ink, likely belonging to Amber L. Gartner, positioned to the right of the 'From' line.

Date: January 18, 2018

RE: ***SR 35 & NE 58th Avenue Trail Crossing Studies –January 2018 Revision***
Task Order KHA-2017-01
Kimley-Horn Project No. 040868020

The purpose of the study is to evaluate crossing treatment options at two future trail crossing/connection locations and provide recommendations for the appropriate treatment to include in any future design phases of the project. This study focuses on the following two trail crossings, per the request of the Ocala/Marion County Transportation Planning Organization (TPO):

- A trail crossing at State Road (SR) 35 to connect the downtown trail to the Silver Springs State Park
- A trail crossing at NE 58th Avenue to connect the Indian Lake State Forest and Silver Springs State Forest

The existing conditions of the roadways subject to each trail crossing location were reviewed to identify the appropriate facility treatments. The roadway characteristics, posted speed limit, traffic volume, and crash history were evaluated in the review for the appropriate location and treatment. Guidance from the Florida Department of Transportation (FDOT) and the Manual on Uniform Traffic Control Devices were utilized in the determination of the recommended crossing treatment.

A conceptual layout of each recommended crossing location and treatment was prepared and discussed with stakeholders from Marion County Planning, Marion County Parks and Recreation, Florida Park Service, FDOT, and the TPO. This study has been updated to reflect the December 2017 notice from FHWA terminating their approval of the use of Rectangular Rapid Flashing Beacons (RRFB) for mid-block pedestrian crossings. Input from the stakeholders was incorporated into the final recommendations within this study.

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BACKGROUND

Marion County has several miles of planned paved trails to provide connectivity to local destinations, trailheads, and parks within Marion County as well as future connectivity to the regional trail system within North Central Florida. The Ocala/Marion County TPO's *2035 Bicycle & Pedestrian Master Plan* depicts the network of trails planned in and around Ocala, including those for which these crossings are being evaluated (**see Attachments 2 and 3** for maps from the Master Plan).

Consistent with the Master Plan, the SR 35 crossing at Silver Springs State Park would serve to connect the Downtown Ocala Connector on the west side of SR 35 to the Silver Springs Bikeway on the east side of SR 35. The crossing would also provide connection from the Downtown Ocala Connector to the Silver Springs State Park. The NE 58th Avenue crossing at the Indian Lake State Forest would serve to connect the Indian Lake Connector to the Indian Lake Campground and its associated trailheads.

The Ocala/Marion County TPO *2017/18 – 2021/22 Amended Transportation Improvement Program* (TIP) identifies design funding for the Downtown Ocala (Connector) Trail, the Indian Lake Trail, and the Silver Springs Bikeway. **Table 1** summarizes the limits, phases, and years of the funding (**see Attachment 1** for relevant pages from the TIP).

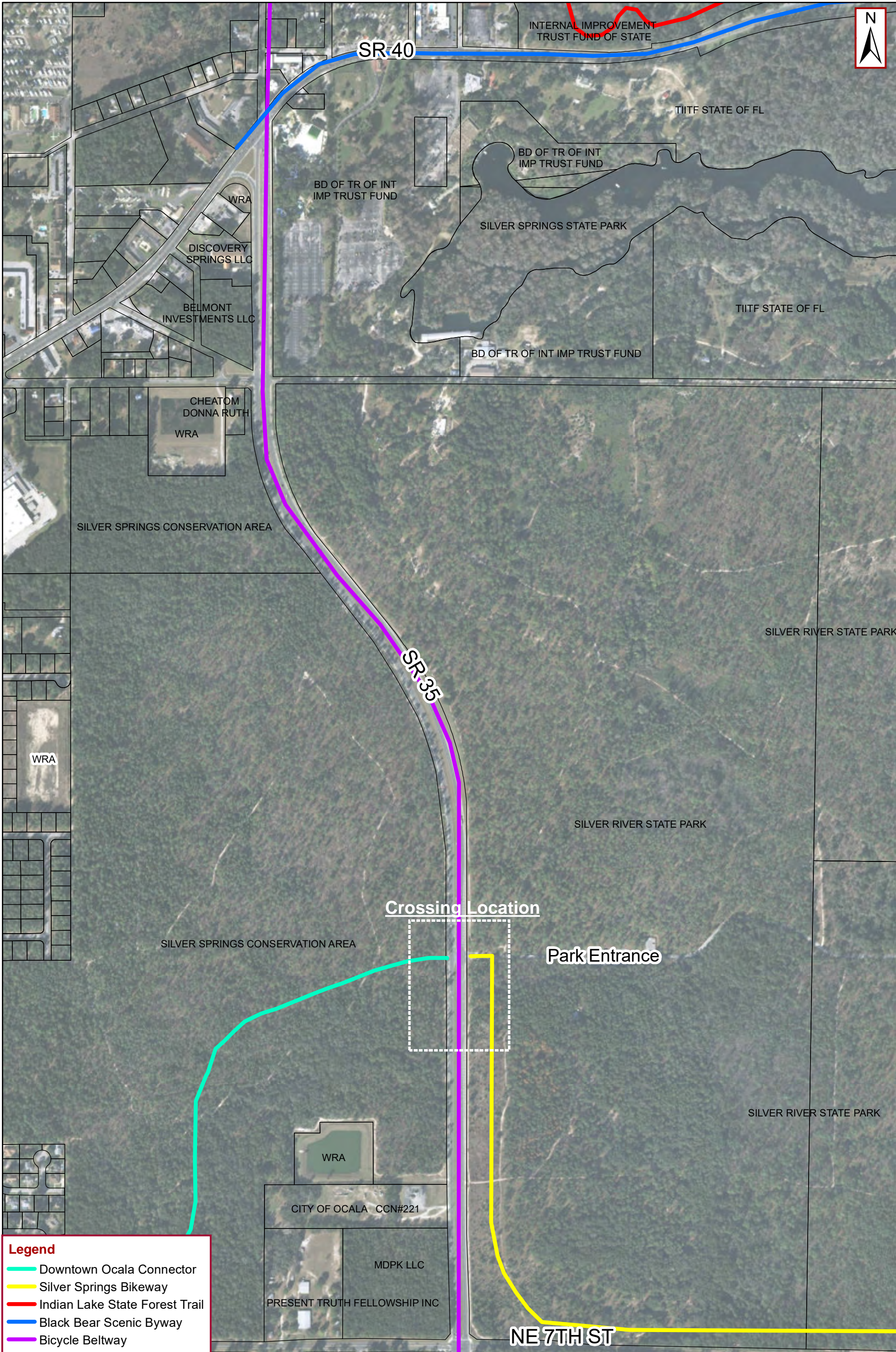
Table 1: Ocala/Marion County TPO TIP Funding Summary

Trail	Limits	Phase	Year
Downtown Ocala Connector	Osceola Avenue to Silver Springs State Park	Design	2020
Indian Lake Trail	Silver Springs State Park to Indian Lake Park	Design	2019
Silver Springs Bikeway	SE 64 th Avenue Road to Silver Springs State Park	Design & Construction	2018 (Design) 2020 (Construction)

The TPO has requested that this study be performed in advance of the design of the respective sections of trail to provide recommendations for the appropriate crossing location and treatment to be incorporated into the design phase of the trail projects.

Figure 1 and **Figure 2** illustrate the location of the two trail crossings evaluated within this study.

K:\Ocala_Civil\040868020 - SR 35 & NE 58th Ave Trail Crossing Studies\GIS\December 2017\SR 35 Trail Crossing Location Map - December 2017.mxd - 12/5/2017 6:23:53 PM - vincent.spahr



Legend

Downtown Ocala Connector

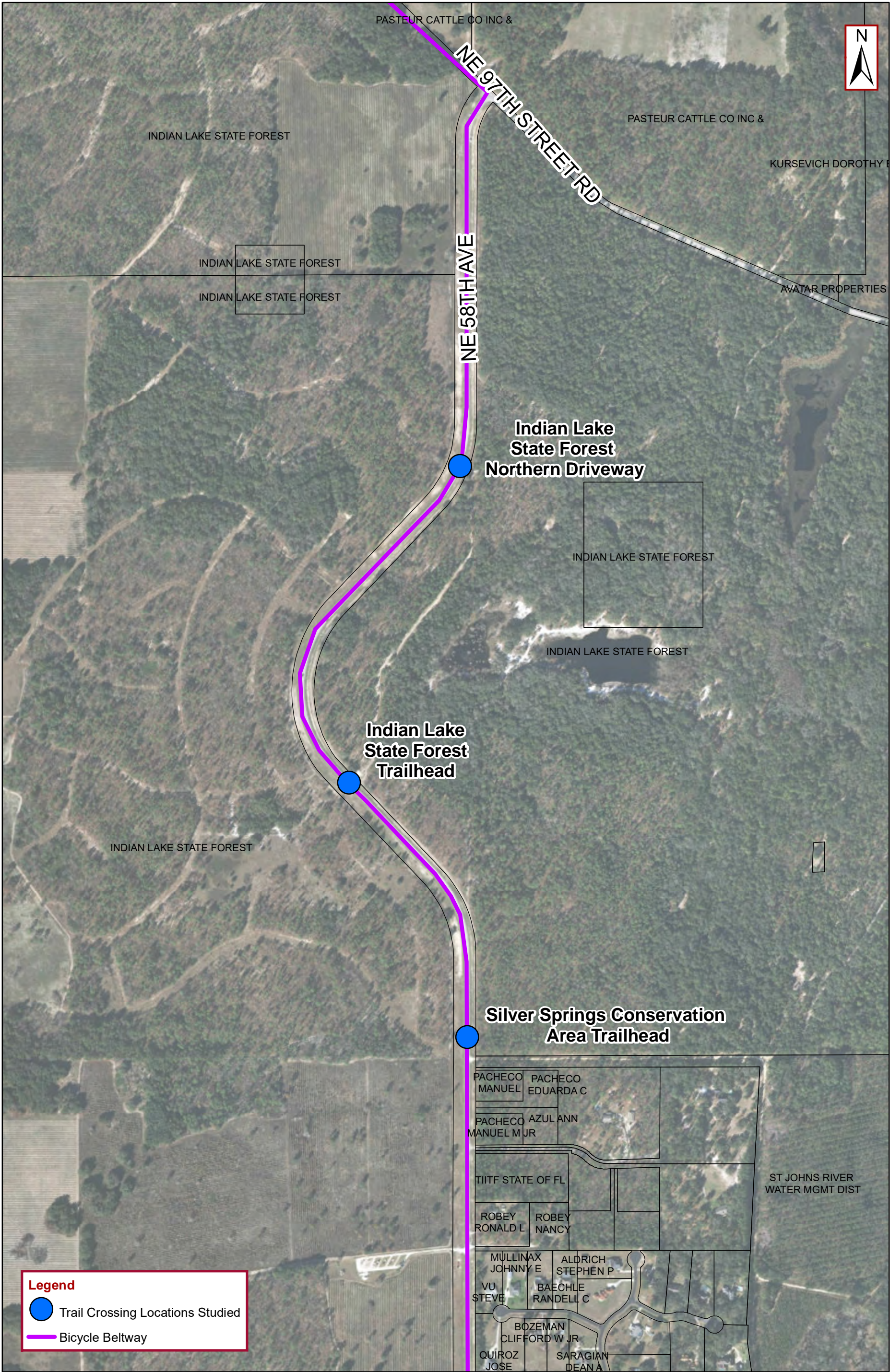
Silver Springs Bikeway

Indian Lake State Forest Trail

Black Bear Scenic Byway

Bicycle Beltway

K:\OCA_Civil\040868020 - SR 35 & NE 58th Ave Trail Crossing Studies\GIS\December 2017\NE 58th Avenue Location Map - December 2017.mxd - 12/5/2017 6:22:58 PM - vincent.spahr



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Phone: 352 438 3000
www.kimley-horn.com CA 00000696

FIGURE 2
NE 58TH TRAIL CROSSING LOCATION MAP

**SR 35 & NE 58TH AVENUE TRAIL CROSSING STUDIES
MARION COUNTY, FLORIDA**

Project No: 040868020

Not To Scale

December 2017

Page 3

EVALUATION CRITERIA

The assessment of each potential trail crossing location included reviews of existing field conditions, existing traffic, speed data, crash history, trail plans, and pertinent FDOT design criteria for mid-block crossings.

The MUTCD and FDOT criteria for mid-block pedestrian crossings were utilized for evaluation and recommendation of the crossing location and treatment type.

Section 3.8 of the FDOT's *Traffic Engineering Manual (TEM)* addresses marked pedestrian crosswalks at midblock and uncontrolled approach locations and establishes definitions, criteria, and standards for installation and operation on the State Highway System.

Section 3.8.5(3)(c) of the TEM states that multi-use trail crossings are not subject to the minimum pedestrian crossing volumes that are otherwise required to warrant mid-block crossing treatments. This exemption is provided "in order to promote the use of multi-use paths and reduce the impacts roadway crossings can create for pedestrians and bicyclists." The same section of the *TEM* states that "care should be given to selecting the appropriate location and crossing treatment for multi-use trails."

The guidance within the TEM was utilized for the recommendations within this study.

SR 35 CROSSING AT SILVER SPRINGS STATE PARK

The Downtown Ocala Connector is a +/- 6 mile trail from downtown Ocala to the Silver Springs Conservation Area located north of NE 7th Street and west of SR 35. The Silver Springs Bikeway Phase I is a +/- 4.5 mile trail that will be partially within the Silver Springs State Park, located on the east side of SR 35, north of NE 7th Street. The SR 35 trail crossing would serve to connect the Downtown Ocala Connector through the Silver Springs Conservation Area on the west side of SR 35 to the Silver Springs Bikeway multi-use trail through the Silver Springs State Park on the east side of SR 35. This crossing would subsequently connect the Downtown Ocala Trail to the Heart of Florida Loop Trail System.

There is a current vehicular entrance to the Silver Springs State Park campground on the east side of SR 35 located approximately one-half mile north of the signalized intersection of SR 35 and NE 7th Street. This was initially discussed as the preferred crossing location for the trail connection across SR 35.

Existing Conditions

SR 35 is classified as an urban minor arterial within the vicinity of the proposed trail crossing and has a posted speed limit of 45 miles per hour (mph). SR 35 has two vehicular travel lanes in each direction, standard designated bike lanes in each direction, and a wide (>30 feet) recessed grass median. At the entrance to the Silver Springs State Park, there is a full median opening with left-turn lanes in both directions and a right-turn lane in the northbound direction. The driveway from the park entrance is stop-controlled with free-flow traffic movements on SR 35.

SR 35 within the vicinity of the project has an AADT of 14,400 vehicles per day based on the FDOT 2016 Florida Traffic Online. The AM peak hour traffic volume is 882 vehicles per hour (500 NB, 382 SB). The PM peak hour traffic volume is 1,331 vehicles per hour (574 NB, 757 SB).

Speed data was collected by Marion County Transportation. The recorded 85th percentile speed along SR 35 is 54 mph northbound and 53 mph southbound, both above the posted 45-mph speed limit.

Sidewalks exist on both sides of SR 35, but no crossings are marked at the intersection. Both sides of SR 35 have curb and gutter drainage. Cross-slopes near the entrance to Silver River State Park were measured at an average of 2.1 percent. A normal crown configuration was observed (either side sloped toward its respective curb).

Potential utility conflicts (gas, water/sewer, and electrical) along SR 35 at the SR 35 crossing were discussed during the stakeholder meeting. Utility coordination will be needed to coordinate any impacts and/or relocations needed due to the mid-block crossing.

Photographs showing the existing roadway conditions on SR 35 are provided below.

Historic Crash Data

Five years (2012-2016) of historic crash data were obtained from the Signal Four Analytics program within 500 feet of the proposed crossing location. Within the vicinity of the proposed crossing, there

was only one crash reported over the five-year period. The crash occurred under dark conditions as a result of a southbound vehicle swerving into a curb to avoid a deer crossing the roadway.



Photograph 1 – Looking north on SR 35 from the proposed crossing location



Photograph 2 – Looking south on SR 35 from the proposed crossing location

Recommended Crossing Treatment

A Pedestrian Hybrid Beacon crossing treatment is recommended for the crossing on SR 35 due to the high traffic volumes on the roadway, high recorded vehicle speeds, and large crossing distance. The Hybrid Beacon will be mounted overhead for greater visibility and due to the multiple vehicle approach lanes. The Hybrid Beacon will be operated as specified in the MUTCD with a combination of steady yellow, steady red, and flashing red indications. The Hybrid Beacon will be pedestrian/bicyclist activated. The signal heads will remain dark until activated by a pedestrian/bicyclist.

Pedestrian Hybrid Beacons are not intended for use at intersections or driveways and are recommended to be placed at least 100 feet from driveways controlled by stop signs. Because of the northbound left-turn and northbound right-turn lanes provided at the park entrance, it is recommended

that the crossing be located approximately 800 feet south of the Silver Springs State Park entrance, outside of the influence area of the turn lanes. This location is more than a quarter-mile north of the signalized intersection of SR 35 with NE 7th Street. Having the crosswalk at this location will reduce the crossing distance by providing a larger median area for refuge.

Sight distance was measured in the field at the proposed crossing location and was documented to be in excess of the 425 feet required for a 50-mph design speed in FDOT's *Plans Preparation Manual (PPM)*.

The *TEM* provides further guidance for Pedestrian Hybrid Beacons being used to cross more than 80 feet. In such cases, consideration should be given to a two-stage crossing, in which Pedestrian Hybrid Beacons serve pedestrians and bicyclists cross each direction of vehicular traffic independently, with a refuge area in the median. The crossing distance of approximately 100 feet at this location meets this criterion. Providing a two-stage crossing will reduce the vehicle delay associated with the crossing.

Ten-foot wide minimum Special Emphasis Crosswalk markings are required per FDOT's Design Standards, Index No. 17346, which is included as **Attachment 4**. Alternative crosswalk treatments, such as patterned/textured pavement, may be implemented to provide for additional emphasis and placemaking at the crossing. Red brick patterned/textured pavement crossing treatments have recently been constructed on SR 40 at the intersection with Martin Luther King Jr. Avenue in the City of Ocala. This crosswalk treatment is also being constructed with the Osceola Avenue multi-modal trail improvements in the City of Ocala. Use of a patterned/textured pavement crossing on SR 35 will require review and approval by FDOT.

Supplemental signage is also recommended, consistent with Index No. 17346. Overhead lighting is recommended for improved visibility of the pedestrians/bicyclists and to be consistent with FDOT Design Standards. Per discussion with Florida Park Service staff, lighting that reduces light emissions to the surrounding Parks and Recreation Areas is preferred.

Additional destination signage may be incorporated into the design of the crossing, in keeping with the branding for the trail system, to provide for enhanced visibility for the crossing and incorporate placemaking into the trail connection.

Utility coordination will be needed to coordinate any impacts and/or relocations needed due to the installation of the pedestrian activated hybrid beacon.

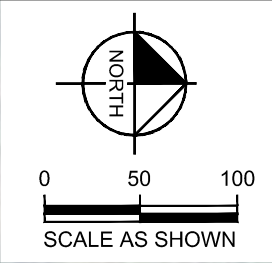
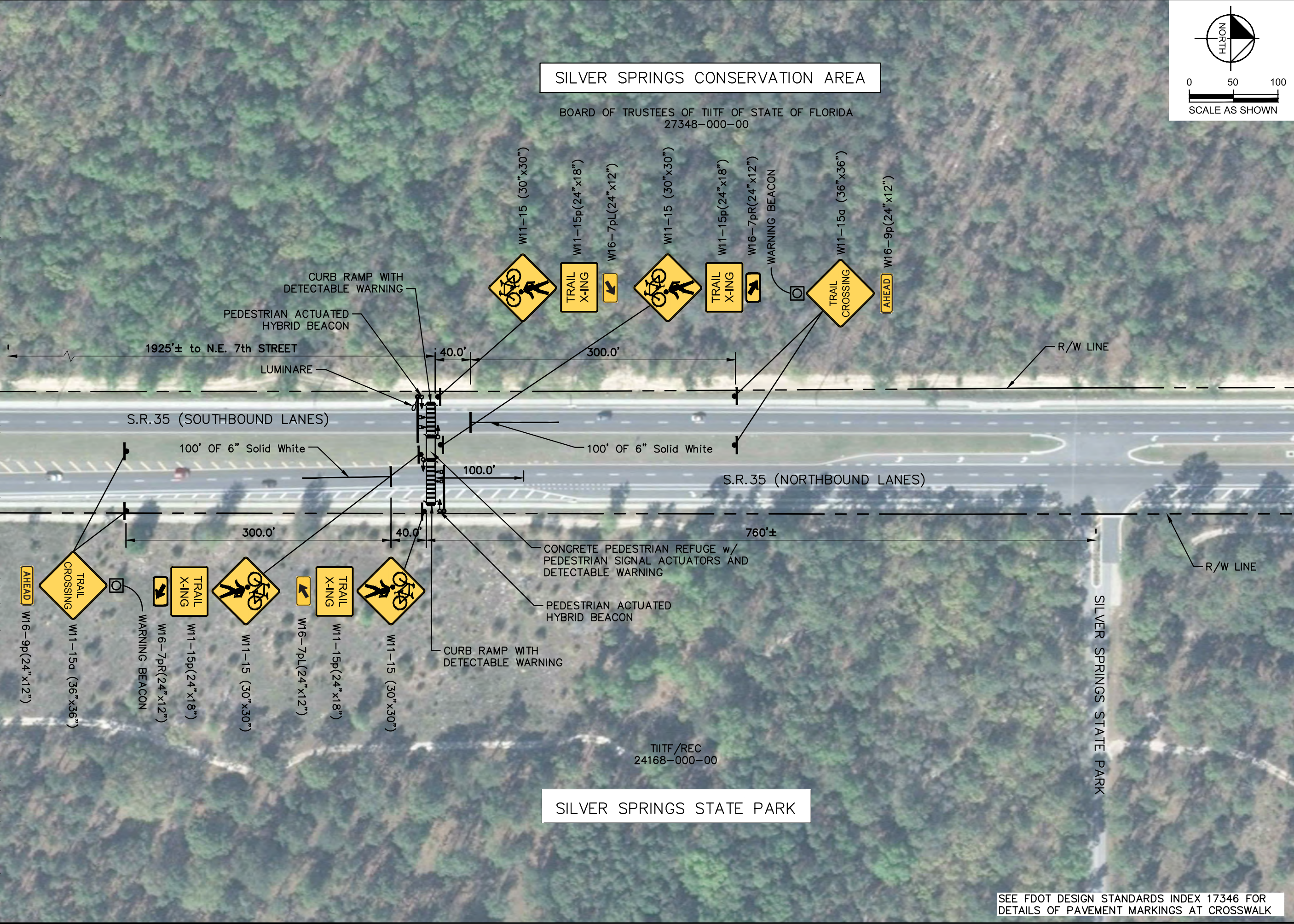
A conceptual layout of the proposed crossing location is provided in **Figure 2**.

Opinion of Probable Construction Cost

A planning-level Opinion of Probable Cost (OPC) was developed for the recommended Pedestrian Hybrid Beacon treatment on SR 35 at the Silver Springs State Park. The estimated construction costs were developed using historical cost information published by FDOT. Due to current conditions in the construction industry, a 25% contingency was added to account for the current escalation in construction costs. However, the OPC may still be below actual bids at the time of construction.

Based on the most recent cost information published by FDOT, the mid-block crossing with Pedestrian Hybrid Beacon at this location is estimated to cost approximately \$285,000. The OPC is provided as **Attachment 6**.

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and signature by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



SILVER SPRINGS CONSERVATION AREA

BOARD OF TRUSTEES OF TIITF OF STATE OF FLORIDA
27348-000-00

SILVER SPRINGS STATE PARK

TIITF/REC
24168-000-00

FIGURE 3

S.R. 35 SILVER SPRINGS CROSSING

PREPARED FOR

OCALA/MARION COUNTY TPO

KHA PROJECT	040868020
DATE	NOVEMBER 2017
SCALE	AS SHOWN
DESIGNED BY	KHA
DRAWN BY	WRC
CHECKED BY	ALG

Kimley-Horn

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101 EAST SILVER SPRINGS BLVD., SUITE 400, OCALA, FL 34470
PHONE: 352-438-3000
WWW.KIMLEY-HORN.COM CA 0000696

NE 58TH AVENUE CROSSING AT INDIAN LAKE STATE FOREST

The NE 58th Avenue trail crossing at the Indian Lake State Forest would serve to connect the Indian Lake Connector Trail to the Indian Lake Campground and its associated trailheads. Three locations were evaluated for the trail crossing of NE 58th Avenue, based on input from Marion County, the TPO, and the Kimley-Horn project team.

Existing Conditions

NE 58th Avenue is classified as a rural minor collector in the area and has a posted speed limit of 55 mph. This segment of NE 58th Avenue is an undivided two-lane facility with no bike lanes, shoulders, or sidewalks. The traffic volume is 2,300 vehicles per day based on FDOT 2016 Florida Traffic Online.

Speed data was collected by Marion County Transportation. The 85th percentile speed recorded along NE 58th Avenue is 50 mph northbound and 54 mph southbound, both below the posted 55-mph speed limit.

Southern Location

The southern crossing location is +/- 1.75 miles north of the signalized intersection of NE 58th Avenue at SR 326. There is a driveway on the east side of the roadway for a gravel parking lot to the Silver Springs Forest Conservation Area. The slope of the roadway was measured to be between 2 and 3 percent. Overhead utilities are present on the west side of the road and a buried gas line was marked on the east side of the roadway.

The driveway to the gravel lot is approximately 800 feet south of a westward curve in NE 58th Avenue. Sight distance was measured in the field at the proposed crossing location and was documented to be in excess of that required for 55-mph design speed in FDOT's *Greenbook*.



Photograph 3 – Looking south at the southern NE 58th Avenue crossing location, Silver Springs Forest Conservation Area driveway

Central Location

The central location is +/- 0.4 miles north of the southern location. There is a driveway on the east side of the roadway for access to a gravel parking lot to the Indian Lake State Forest Bear-N-Oak Trailhead. A buried gas line is marked on the east side of NE 58th Avenue.

This location is in the middle of an S-curve in NE 58th Avenue. The curve to the north begins approximately 250 feet from the trailhead, and the curve to the south begins approximately 850 feet from the trailhead. The slope of the roadway was measured between 3.6 and 5.1 percent, sloping downward to the east. Sight distance was measured in the field at the proposed crossing location and was documented to be in excess of that required for 55-mph design speed in FDOT's *Greenbook*.

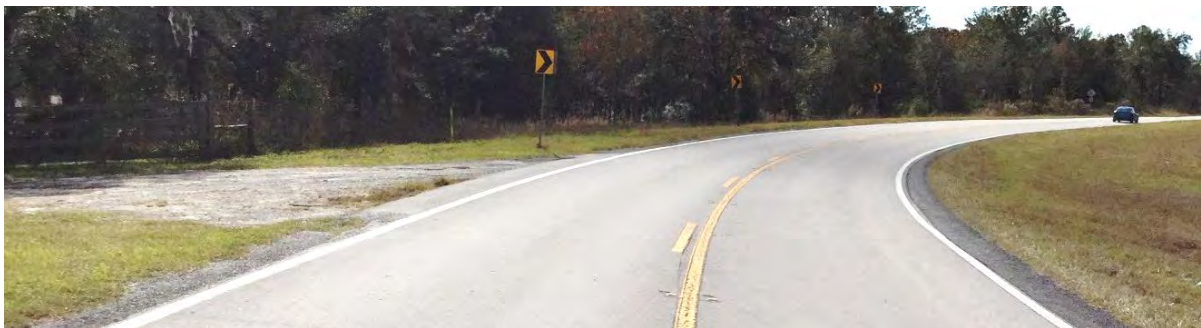


Photograph 4 – Looking north from the central NE 58th Avenue crossing location, Indian Lake State Forest Bear-N-Oak Trailhead driveway

Northern Location

The northern location is +/- 0.5 miles north of the central location. There is a driveway on the east side of the roadway. Overhead utilities span NE 58th Avenue just north of the driveway and continue north along the west side of the roadway. A buried gas line is marked on the east side of NE 58th Avenue.

This location is in the middle of a westward curve in NE 58th Avenue. The slope of the roadway was measured between 7.2 and 8.8 percent, sloping downward to the west. Sight distance was measured in the field at the proposed crossing location and was documented to be in excess of that required for 55-mph design speed in FDOT's *Greenbook*.



Photograph 5 – Looking south at the north NE 58th Avenue crossing location, Indian Lake State Forest, northern driveway

Historic Crash Data

Five years (2012-2016) of historic crash data were obtained from the Signal Four Analytics program within 500 feet of each proposed crossing location. Within the vicinity of the southern location, there was only one crash reported over the five-year period. The crash occurred under dark conditions as a result of a northbound vehicle striking a deer crossing the roadway. Within the vicinity of the central crossing location, there were four crashes reported from 2012 to 2016. All four of the reported crashes were off road crashes. Two crashes occurred under dark conditions, and two crashes were reported as a result of a driver swerving to avoid a deer crossing the roadway. There were no crashes reported between 2012 and 2016 at the northern location.

Recommended Crossing Location and Treatment

The recommended crossing location is the southern location. This is due to the proximity to superelevated curves and high roadway cross-slopes at the northern and central locations. The southern location has sufficient sight distance and has lower cross-slopes when compared to the northern and central locations. The crossing is recommended to be 100 feet north of the driveway at the Silver Springs Conservation Area trailhead to provide for improved sight distance and to meet design requirements for a mid-block crossing.

The recommended treatment for the crossing is post-mounted Flashing Yellow Warning Beacons on both sides of NE 58th Avenue. This treatment is recommended due to the low traffic volumes on NE 58th Avenue, high visibility of the location, and narrow crossing distance for bicyclists/pedestrians. Flashing Yellow Warning Beacons are considered an appropriate crossing treatment for uncontrolled approaches and tend to show high compliance rates at a lower cost than pedestrian signalization. Per the *TEM*, Flashing Yellow Warning Beacons must be pedestrian-actuated either by pushbutton or by passive detection devices. The Warning Beacons should be post mounted with a configuration of two vertically aligned warning beacons, operated in an alternating flash pattern.

As with all pedestrian crossing treatments, ten-foot wide minimum Special Emphasis Crosswalk markings should be used, as shown in FDOT's Design Standards, Index No. 17346. Supplemental signage is also recommended, consistent with Index No. 17346. Overhead lighting is recommended for improved visibility of the pedestrians/bicyclists and to be consistent with FDOT Design Standards. Per discussion with Florida Park Service staff, lighting that will reduce light emission to the surrounding Parks and Recreation Areas is preferred.

A conceptual layout of the proposed crossing location is provided in **Figure 2**.

Opinion of Probable Construction Cost

A planning-level OPC was developed for the recommended treatment on NE 58th Avenue. The estimated construction costs were developed using historical cost information published by FDOT. Due to current conditions in the construction industry, a 25% contingency was added to account for the current escalation in construction costs. However, the OPC may still be below actual bids at the time of construction.

Based on the most recent cost information published by FDOT, the mid-block crossing with Flashing Yellow Warning Beacons at this location is estimated to cost approximately \$46,000. The OPC is provided as **Attachment 6**.

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



SEE FDOT DESIGN STANDARDS INDEX 17346 FOR
DETAILS OF PAVEMENT MARKINGS AT CROSSWALK

FIGURE 4

N.E. 58th AVENUE - INDIAN LAKE TRAIL CROSSING

PREPARED FOR

OCALA/MARION COUNTY TPO

KHA PROJECT
040868020

DATE
NOVEMBER 2017

SCALE
AS SHOWN

DESIGNED BY
KHA

DRAWN BY
WRC

CHECKED BY
ALG

Kimley»Horn

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PHONE: 352-438-3000
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STAKEHOLDER INPUT

A stakeholder meeting was held on November 8th, 2017 to present the recommended trail crossing concepts and receive input. A project background and overview of the project was provided, followed by detailed discussion of each crossing location and recommended treatment.

The following stakeholders were present at the meeting:

- Ocala/Marion County TPO
- Marion County Parks and Recreation
- Marion County Planning
- Florida Department of Transportation

A separate stakeholder meeting was held with Florida Park Service staff on November 17, 2017.

Potential utility conflicts (gas, water/sewer, and electrical) along SR 35 at the SR 35 crossing were discussed during the meeting. Utility coordination will be needed to coordinate any impacts and/or relocations needed for the pedestrian activated hybrid beacon.

Alternative decorative treatment of the crosswalk on SR 35 was discussed. A high-emphasis crosswalk marking is the required treatment by FDOT design standards for a mid-block crossing location.

Potential lighting treatments of the trail crossings was discussed as a safety improvement for increased visibility of bicyclists/pedestrians crossing SR 35 and NE 58th Avenue. Crosswalk illumination is required by FDOT standards for crosswalks at uncontrolled locations. The Florida Park Service expressed concerns about overhead lighting and potential impact to wildlife, as both locations are surrounded by State Lands. Input was provided that the crossings being installed for the trails under construction through the Cross Florida Greenway do not include overhead lighting, and that maybe overhead lighting should not be required at the NE 58th Avenue crossing as the traffic volumes are low and it is not a FDOT facility.

The stakeholders were in support of the proposed crossing locations and treatments. Meeting minutes are included in **Attachment 5**.

SUMMARY

This memorandum summarizes the existing conditions and recommendations for two future trail crossings within Marion County; one on SR 35 to connect the Downtown Ocala Connector trail to the Silver Springs Bikeway trail, and one on NE 58th Avenue to connect the Indian Lake Connector trail to the Indian Lake Campground. These two roadway crossings are essential in the connection of the extensive paved trail system planned throughout Marion County, sections of which have recently been constructed or are planned for construction within the next five years. The recommendations provided within this study will be used during the future design of the respective trail segments.

The trail crossing on SR 35 is recommended to have a pedestrian activated pedestrian hybrid beacon treatment due to the large crossing distance, high traffic volume, and high vehicle speeds. The trail crossing on NE 58th Avenue is recommended to have a pedestrian activated/sensor Flashing Yellow Warning Beacon treatment due to the low traffic volumes, high visibility, and short crossing distance.

The design and construction aspects of the recommended crossing treatments should comply with specifications and requirements in the FDOT *Greenbook*, FDOT *PPM*, FDOT Design Standards, MUTCD and all other pertinent jurisdictional standards. Permitting with FDOT will be required for the trail crossing on SR 35, as this roadway is owned and maintained by FDOT. Permitting with Marion County will be required for the crossing on NE 58th Avenue, as this roadway is owned and maintained by Marion County.

At both proposed crossings, adequate lighting should be provided to improve visibility of pedestrians, bicyclists, and all other trail users. Care should be taken to direct lighting treatments at the crossings to minimize light intrusion on surrounding conservation and wildlife management areas.

Aesthetic features, such as patterned/textured pavement crosswalks and destination signage, may be incorporated into the design of the SR 35 crossing to provide enhanced visibility and placemaking for this major trail connection. Design within SR 35 right-of-way is subject to FDOT review and approval.

During subsequent phases of this project, coordination with utilities along and within the right-of-way of SR 35 and NE 58th Avenue will be required. As necessary, the specific locations of the recommended crossing treatments may be adjusted to avoid conflict with utilities, provided that sufficient sight distance is maintained and adequate distance remains between the crossings and adjacent intersections and driveways.

This letter and attachments summarize the crossing recommendations for the trail crossings on SR 35 and NE 58th Avenue. We appreciate the opportunity to work with you on this project, and look forward to continued support for this project as it moves into the next phase.

Attachments: 1: Ocala/Marion County TIP Excerpt
 2: Marion County Regional Trail Projects Map
 3: Trails and Open Space – Silver Springs Regional Connectivity Map
 4: FDOT Design Standards Index 17346
 5: Stakeholder Meeting Minutes
 6: Opinion of Probable Construction Cost

ATTACHMENTS

ATTACHMENT 1: Ocala / Marion County TIP Excerpt

Ocala/Marion County TPO
Regional Trail Priorities
FY 2016

Priority	Project	From	To	Length (mi)	Regional Trail	Phase	Phase Estimate	Notes
1	Pruitt Trail	Bridges Road	SR 200	9.5	HOF	CST	\$ 3,325,000	CST FY 2021 (Delayed). need to contact Jim Couliard, deal seems to be done. Significant archaeological site (need to set up meeting)
2	Silver Springs Bikeway - Phase I	Baseline Paved Trail - North Trailhead	Silver Springs State Park	7.5	HOF	DES	\$ 225,000	CST FY 2018.
3	Downtown Ocala Trail	Ocala City Hall	Silver Springs State Park	6	-	CST	\$ 1,800,000	DES FY 2020.
4	CR 484 - Pennsylvania Ave. Multi-Modal Improvements w/ Bridge Option	Blue Run Park	Mary Street	0.8	-	DES	\$ 75,000	
5	Indian Lake Trail	Silver Springs State Park	Indian Lake Trailhead	5	-	DES	\$ 155,000	Design funded in FY 2019.
6	Silver Springs Bikeway Phase II	Baseline Paved Trail - North Trailhead	CR 42	18.5	HOF	DES	\$ 555,000	
7	Belleview Greenway Trail	Lake Lillian Park	Cross Florida Greenway	5.3	-	DES	\$ 159,000	Feasibility study FY 2018.
8	Watula Trail	Tuscaawilla Art Park	NE 8th St/SR 492	0.5	-	CST	TBD	Design FY 2018
9	Ocala National Forest Trail	Silver Springs State Park	Wildcat Lake Boat Ramp (1 mi. east of SR 19)	27	HOF	PD&E	\$ 750,000	PD&E FY 2020.
10	Silver Springs to Hawthorne Trail	Silver Springs State Park		Approx. 30	-	PD&E	\$ 750,000	
Funded Projects								
	Land Bridge Gap	SR 200	SW 49th Avenue	8.25	HOF	DES/CST	\$ 3,300,000	Bids received. 240-270 days
	Santos West Gap	SW 49th Avenue	Santos Trail Head	7.4	HOF	DES/CST	\$ 2,200,000	Bids received. 240-270 days Baseline to Santos trail new funding source?

CST - Construction

DEP - Department of Environmental Protection

DES - Design

HOF - Heart of Florida Loop

PD&E - Project Development & Environmental Study

ROW - Right-of-way

DOWNTOWN OCALA TO SILVER SPRINGS TRAIL

4367561

Non-SIS



Work Summary: BIKE PATH

From: OSCEOLA AVE

To: SILVER SPRINGS STATE PARK

Lead Agency: City of Ocala

Length: .000

LRTP #: GOAL 1: Objective 2 -
Page 2-8

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
PE	TALL	0	0	253,000	0	0	253,000
Total		0	0	253,000	0	0	253,000

Prior Cost < 2017/18: 0

Future Cost > 2021/22: 0

Total Project Cost: 253,000

Project Description: Construct/designate an eight to twelve-foot multi-use path from Osceola Avenue to Silver Springs State Park.

SILVER SPRINGS BIKEWAY

4354861

Non-SIS



Work Summary: BIKE PATH

From: SE 64TH AVE RD

To: SILVER SPRINGS STATE PARK

Lead Agency: Marion County

Length: .000

LRTP #: GOAL 1: Objective 2 -
Page 2-8

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
PE	TALT	25,000	0	0	0	0	25,000
CST	TALT	0	0	2,594,547	0	0	2,594,547
CST	SL	0	0	1,412,773	0	0	1,412,773
CST	TALL	0	0	472,724	0	0	472,724
Total		25,000	0	4,480,044	0	0	4,505,044

Prior Cost < 2017/18: 500,000

Future Cost > 2021/22: 0

Total Project Cost: 5,005,044

Project Description: Construct a twelve-foot paved multi-use path from Silver Springs State Park to CR 42 along the Ocklawaha River, primarily along the existing levy system.

INDIAN LAKE TRAIL FROM SILVER SPRINGS STATE PARK TO

4367551

Non-SIS



Work Summary: BIKE PATH

From: SILVER SPRINGS PARK

To: INDIAN LAKE PARK

Lead Agency: Marion County

Length: .000

LRTP #: GOAL 1: Objective 2 -
Page 2-8

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
PE	TALL	0	155,000	0	0	0	155,000
Total		0	155,000	0	0	0	155,000

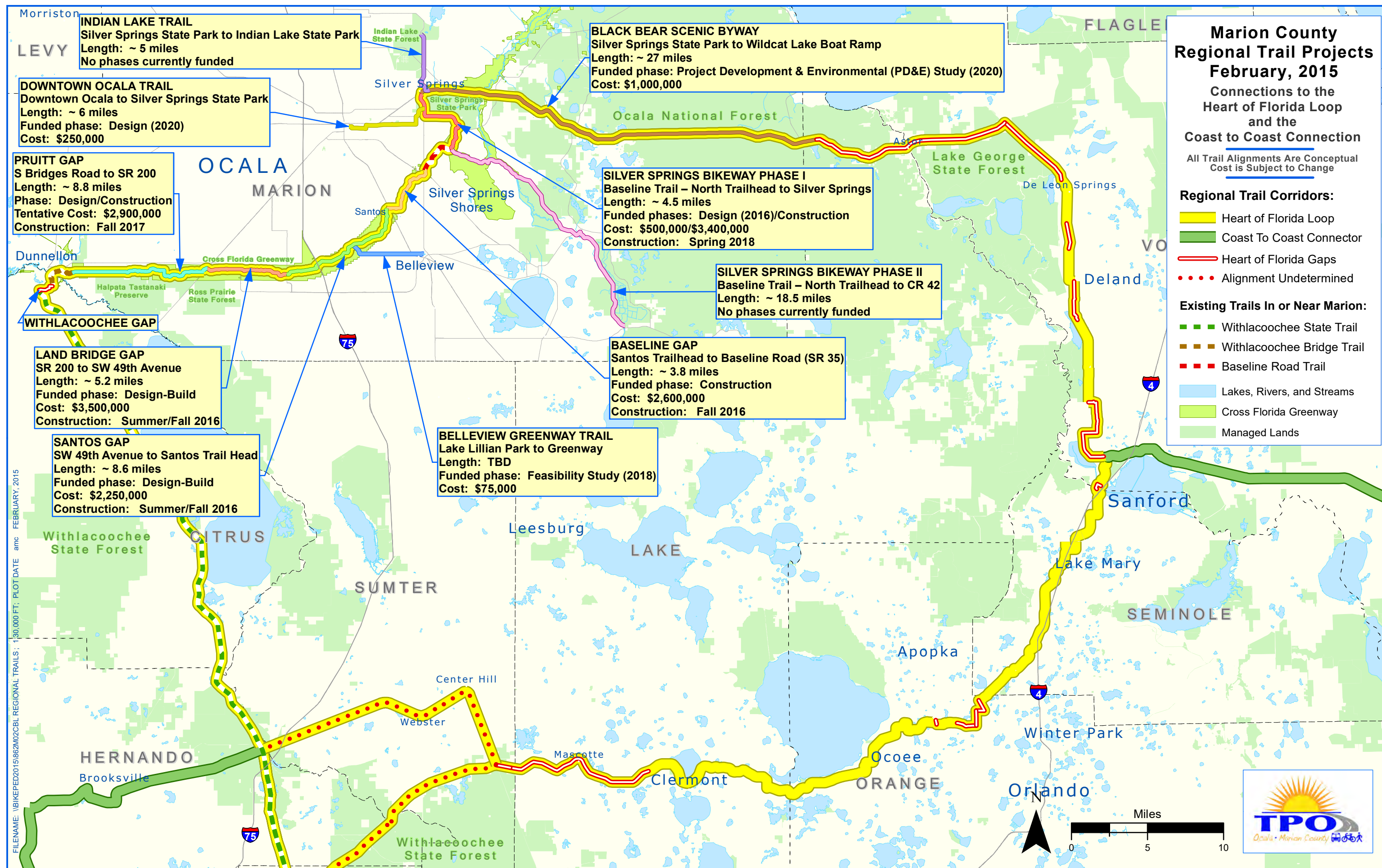
Prior Cost < 2017/18: 0

Future Cost > 2021/22: 0

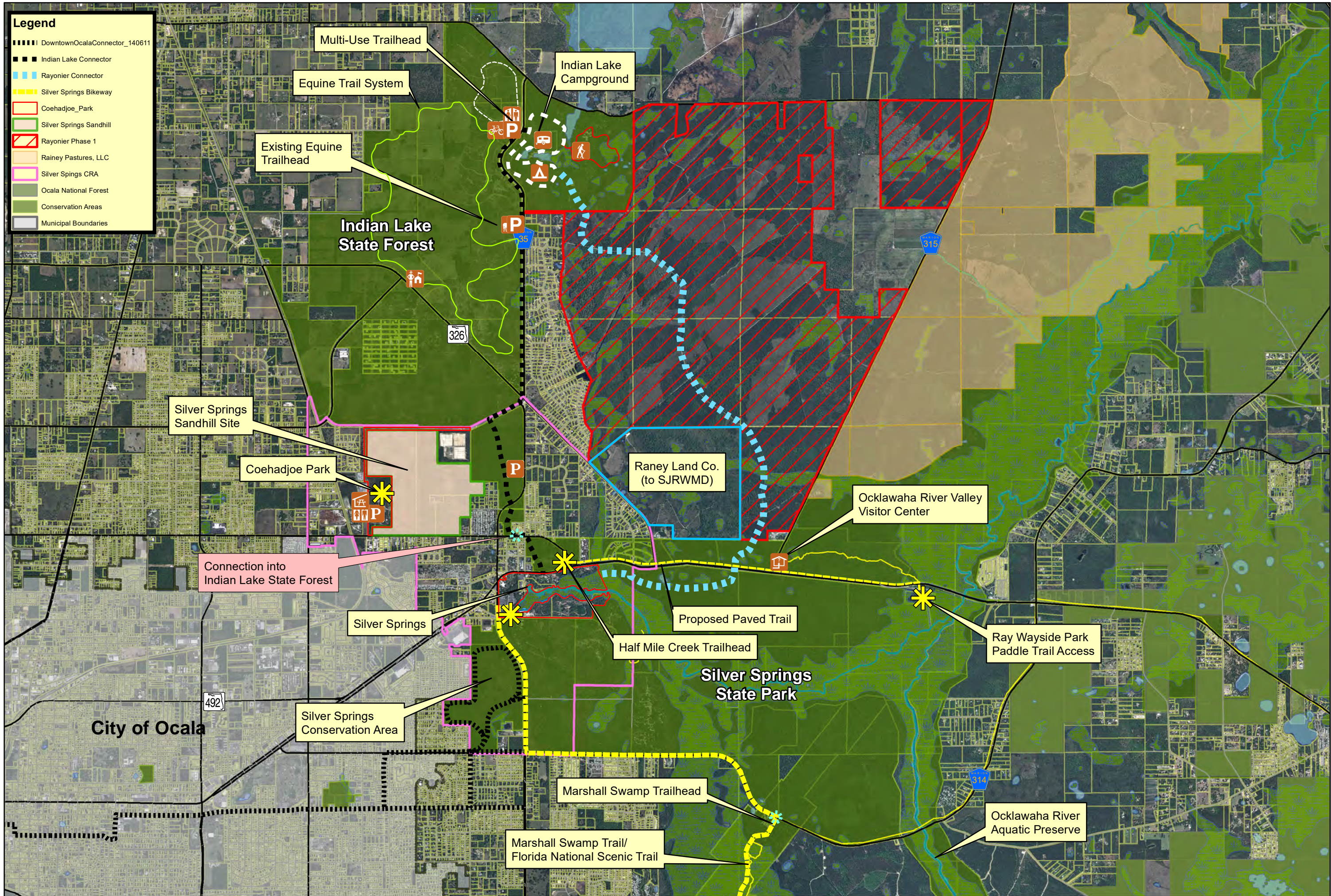
Total Project Cost: 155,000

Project Description: Construct approximately five miles of twelve-foot wide multi-use path from Silver Springs State Park north to Indian Lakes Park.

ATTACHMENT 2: Marion County Regional Trail Projects Map



ATTACHMENT 3: Trails and Open Space – Silver Springs Regional Connectivity Map



Trails and Open Space Connectivity

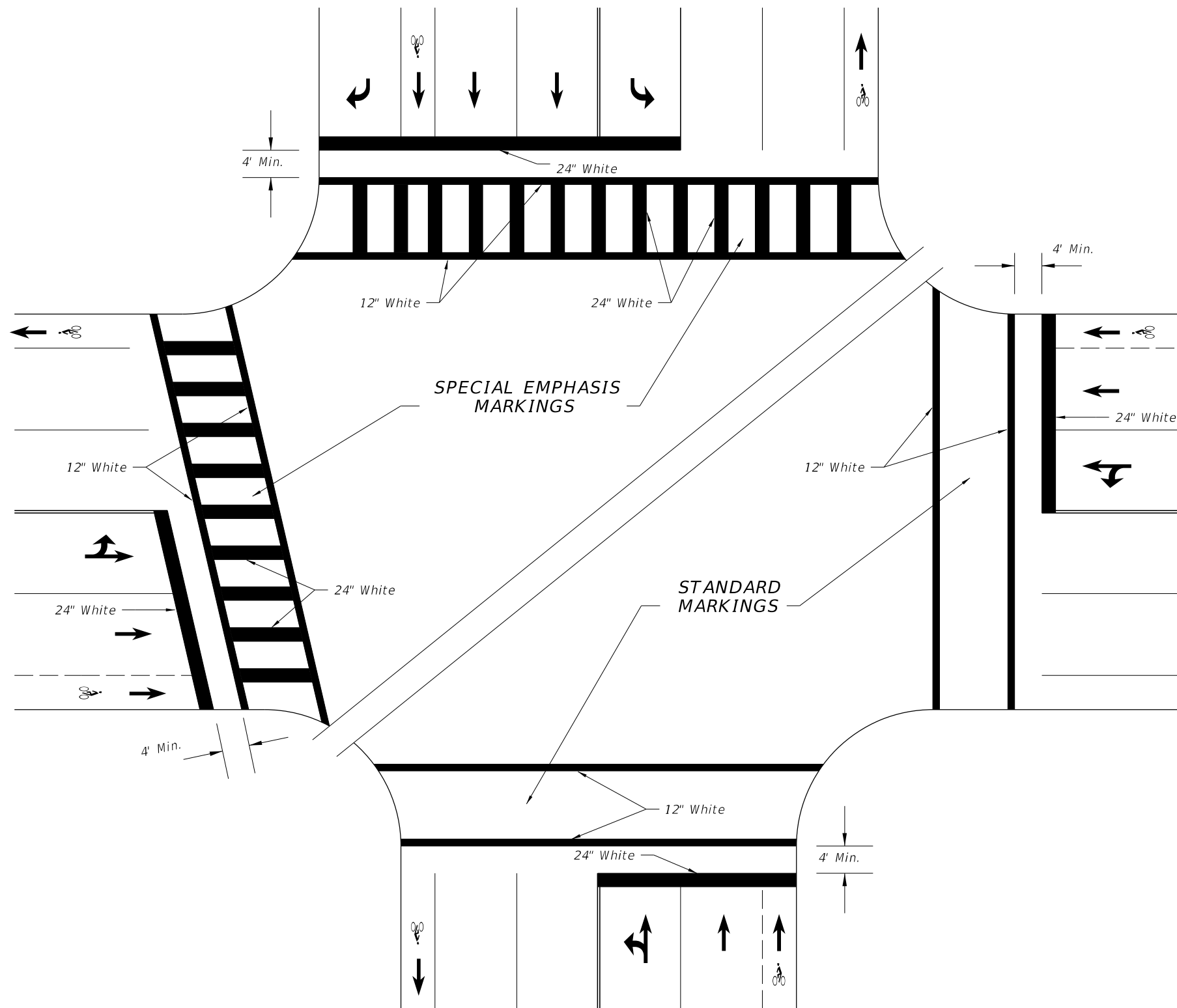
Silver Springs Regional Connectivity

Marion County Parks & Recreation Department 111 S.E. 25th Ave. Ocala, FL 34471 (352) 671-8560



ATTACHMENT 4: FDOT Design Standards Index 17346

10/14/2016 8:38:19 AM



SPECIAL EMPHASIS AND STANDARD CROSSWALKS
SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTION

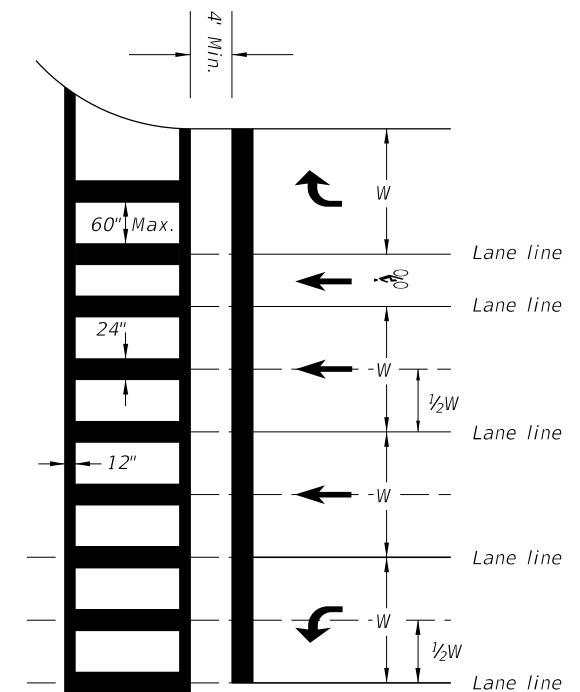
GENERAL NOTES

1. For traffic and pedestrian signal installation, refer to Index No. 17721 through 17890.
2. For public sidewalk curb ramps, refer to Index No. 304.
3. For pavement marking and sign installation, refer to Indexes 11200 through 17356.
4. Crosswalk minimum widths: Intersection Crosswalk 6'. Midblock Crosswalk 10'.
5. All crosswalk marking must be white.
6. Longitudinal markings in Special Emphasis Crosswalk must be 24" wide and spaced to avoid the wheel path of vehicles (see detail). Center the longitudinal markings at each lane line. Place additional longitudinal markings at the center of each lane (1/2W). The maximum spacing allowed between longitudinal markings is 60".

When the Crosswalk is skewed to the lane lines, the longitudinal markings should be parallel to the lane lines.

24" Longitudinal Bars in Special Emphasis Crosswalk must be preformed thermoplastic.

12" Transverse lines in the Special Emphasis Crosswalk may be standard thermoplastic or preformed thermoplastic.



SPECIAL EMPHASIS
CROSSWALK MARKING
DETAIL

LAST
REVISION
11/01/16

REVISION

DESCRIPTION:



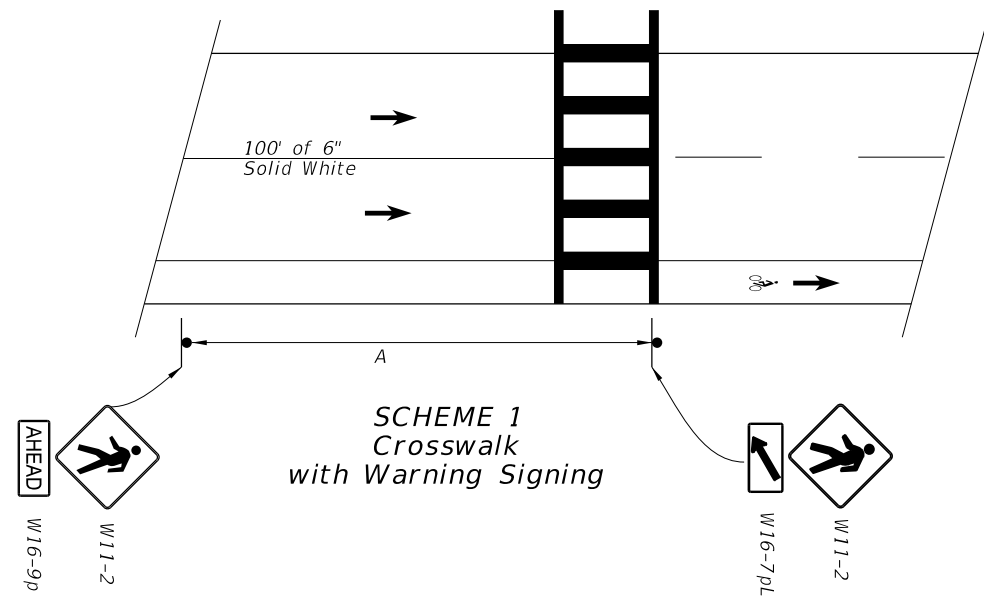
FY 2017-18
DESIGN STANDARDS

PAVEMENT MARKINGS

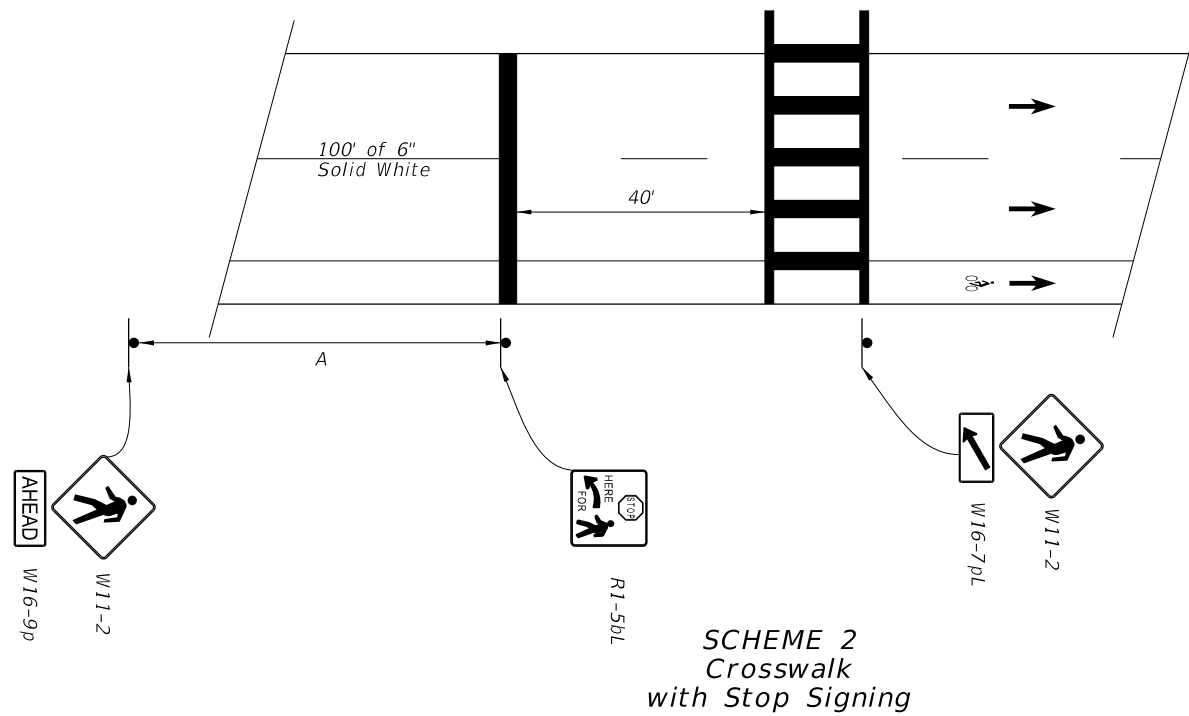
INDEX
NO.
17346

SHEET
NO.
12 of 17

10/14/2016 8:38:20 AM

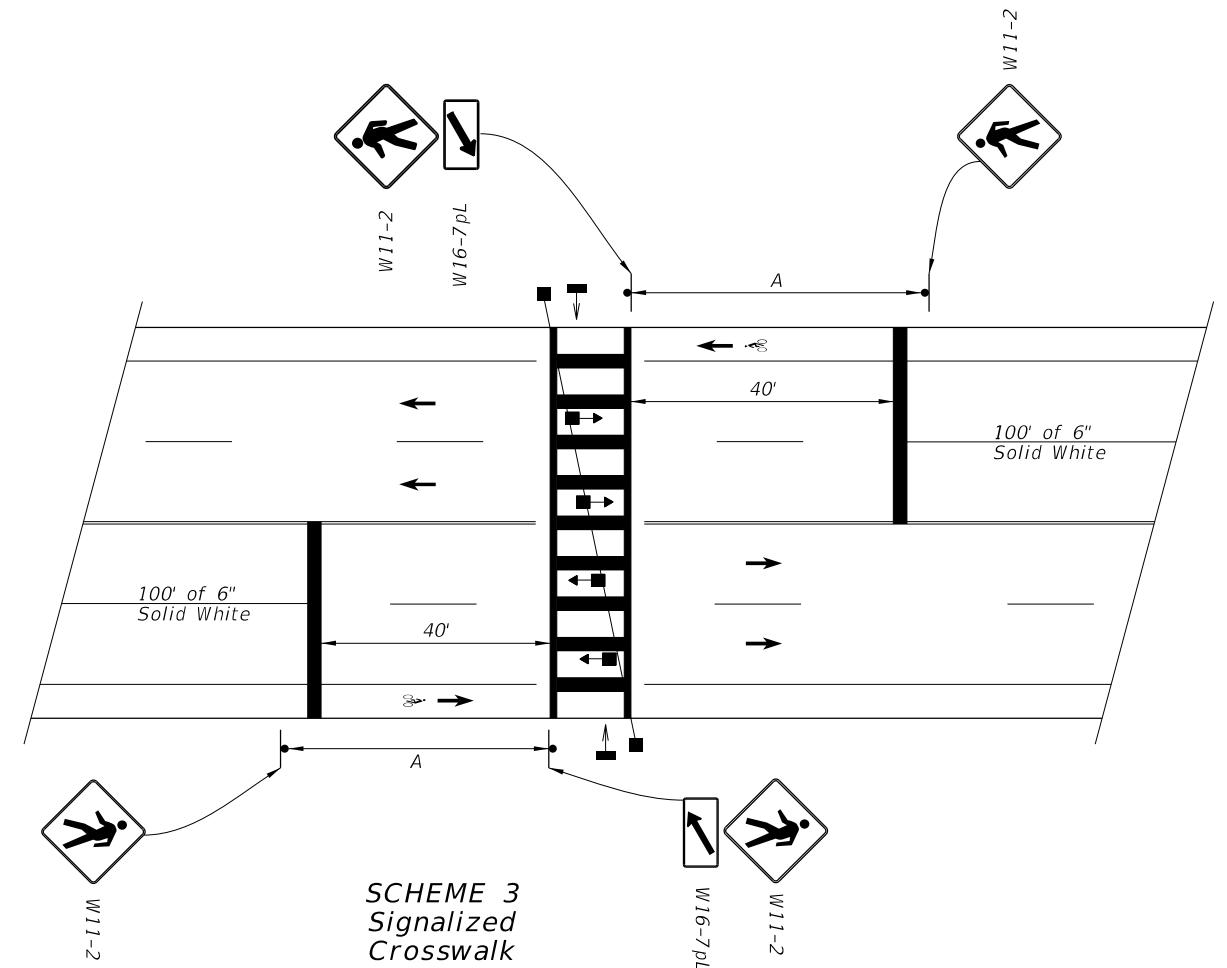


SCHEME 1
Crosswalk
with Warning Signing



SCHEME 2
Crosswalk
with Stop Signing

APPROACH SPEED MPH	A-SUGGESTED DISTANCE (Ft.)
25 Or Less	200
26 To 35	250
36 To 45	300



SCHEME 3
Signalized
Crosswalk

1. Plans shall indicate which crosswalk scheme is to be used.
2. The details shown do not depict the signing and markings for multi-lane roadways with divided medians. For these applications, additional signs shall be installed on the median side. Minimum width of Mid-Block Crosswalks is 10'.
3. All mid-block crosswalks shall use special emphasis crosswalk markings.
4. Crosswalk marking shall be preformed marking materials.

LAST
REVISION
11/01/16

REVISION

DESCRIPTION:



FY 2017-18
DESIGN STANDARDS

PAVEMENT MARKINGS

INDEX
NO.
17346

SHEET
NO.
13 of 17

ATTACHMENT 5: Stakeholder Meeting Minutes



TPO Trail Crossing Study Stakeholders Meeting
SR 35 & NE 58th Avenue Trail Crossing Studies
12:00 PM on Wednesday, November 8, 2017
Ocala/ Marion County TPO Office, Ocala, FL

NAME	AGENCY	EMAIL ADDRESS
Amber Gartner	Kimley-Horn	amber.gartner@kimley-horn.com
Alex Memering	Kimley-Horn	alex.memering@kimley-horn.com
Mike Daniels	Ocala/Marion County TPO	mdaniels@ocalafl.org
Ken Odom	Ocala/Marion County TPO	kodom@ocalafl.org
Ronda Daniell	FDOT – Ocala Operations	ronda.daniell@dot.state.fl.us
Kevin Smith	Marion County	kevin.smith@marioncountyfl.org
Jim Couillard	MCBCC Parks & Recreation	jim.couillard@marioncountyfl.org

A meeting was held with stakeholders for the trail crossing study being performed for the Ocala/Marion County TPO for two future trail crossing locations. The meeting was held to discuss the proposed trail crossings on SR 35/Baseline Road near Silver Springs State Park and on NE 58th Avenue near Indian Lake State Forest and to receive stakeholder input. Highlights of the main discussion points of the meeting are summarized below.

1. Overview of the Project

- a. Amber provided an overview of the purpose and scope of the study and an overview of the overall planned trail network in Marion County was provided.
- b. The trail network was first identified in the TPO's 2035 Bicycle/Pedestrian Master Plan and will provide for miles of paved trail within Marion County and connecting to the Heart of Florida loop.
- c. Portions of the overall trail network have been constructed, others are currently in the construction phase, and others are in the design, planning, or pre-planning phase.
- d. The study will focus on the roadway crossing treatment for two specific trails; the connection of the Downtown Ocala Trail to the Silver Springs Bikeway across SR 35, and the connection of the Indian Lake Trail to the Indian Lake State Forest and Campground across NE 58th Avenue.
- e. The study is being performed in advance of the design phase for the future trail connections to provide a recommendation for the appropriate crossing type and location.

2. SR 35/Baseline Road Trail Crossing

- a. A summary of the existing conditions of SR 35 was provided.

- b. There are two travel lanes in each direction, with additional pavement for left-turn and right-turn lanes. There is a +/- 30-foot grassed median. The posted speed limit is 45 mph.
- c. The appropriate crossing location was reviewed based on the existing conditions and geometry of SR 35.
- d. A conceptual layout of the recommended crossing location and treatment was reviewed.
 - Located +/- 800 feet south of the Silver Springs State Park entrance. This location provides for more median refuge area, separation from the turn lanes at the Silver Springs State Park Entrance, and good visibility for bicyclists and motorists.
 - A pedestrian activated hybrid beacon is the recommended crossing treatment due to the high traffic volumes on the roadway, the high recorded vehicle speeds, and the large crossing distance.
 - A 2-stage crossing will be provided to allow for reduced vehicular delays for crossing pedestrians/bicyclists.
 - The hybrid beacon will be mounted overhead.
 - High emphasis crosswalk markings will be utilized.
 - Advanced warning signage is recommended with flashing beacons. The flashing beacons will only be activated when the pedestrian hybrid beacon is activated.
 - The beacon operations were discussed in detail.
 - A green, yellow, red indication was discussed.
 - The recommendation for this location is a hybrid beacon, which operates in a combination of steady yellow, flashing yellow, steady red, and flashing red indications. The signal is dark until activated by a pedestrian/bicyclist.
- f. Utilities (gas, water/sewer, electrical) along SR 35/Baseline Road were discussed and utility coordination will be needed to coordinate any impacts and/or relocations needed for the pedestrian activated hybrid beacon.
- g. Alternative decorative treatment of the crosswalk was discussed. A high-emphasis crosswalk marking is the required treatment by FDOT design standards for a mid-block crossing location.

3. NE 58th Avenue Trail Crossing

- a. A summary of the existing conditions of NE 58th Avenue was provided.
 - The posted speed limit on NE 58th Avenue is 55 mph.
 - The roadway is a two-lane undivided facility with low traffic volumes.



- There are superelevated curves in the area of the proposed trail crossing.
- b. Three locations were reviewed for a potential crossing location, based on input from Marion County and the TPO; 100 feet north of the Silver Springs Conservation Area trailhead, at the Indian Lake State Forest trailhead, and at the Indian Lake State Forest northern access driveway.
- c. The recommended trail crossing location is 100 feet north of the Silver Springs Conservation Area trailhead based on good sight distance for pedestrians/bicyclists and motorists and that the roadway is a normal crown section in this area, as opposed to a superelevated roadway section at the other two potential crossing locations.
- d. A conceptual layout of the recommended crossing location and treatment was reviewed.
 - Located +/- 100 feet north of the Silver Springs Conservation Area trailhead to provide sufficient distance from the driveway to meet design requirements and provide for improved sight distance.
 - A rectangular rapid flashing beacon is the recommended treatment for this location based on the low traffic volumes, high visibility, and narrow crossing distance.
 - The RRFB will be pedestrian/sensor activated.
 - High emphasis crosswalk markings will be utilized.
 - Advanced warning signage will be provided.
- e. Potential lighting treatments of the trail crossing were discussed as a safety improvement for increased visibility of the bicyclists/pedestrians crossing NE 58th Avenue. Lighting will be included as a recommendation of the study.

4. Conclusion

- a. The stakeholders present at the meeting were generally in support of the crossing locations and treatments reviewed.

This summary serves to document the November 8th, 2017 stakeholder meeting for the SR 35 & NE 58th Avenue trail crossing study. If anyone wishes to modify or append to this account, please contact Amber Gartner either by phone at 352-438-3000 or by email at amber.gartner@kimley-horn.com.

Submitted by:

A handwritten signature in blue ink, appearing to read 'Amber Gartner', written over a horizontal line.

Amber Gartner, PE

K:\OCA_Civil\040868020 - SR 35 & NE 58th Ave Trail Crossing Studies\meetings\2017-11-8 TPO Trail Crossing Study Stakeholder Meeting Minutes.docx

ATTACHMENT 6: Opinion of Probable Construction Cost

OCALA / MARION COUNTY TPO TRAIL CROSSINGS STUDY
STATE ROAD 35 CROSSING AT SILVER SPRINGS STATE PARK
PLANNING LEVEL OPINION OF PROBABLE CONSTRUCTION COST

Construction Costs						
ITEM #	FDOT PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	--	MOBILIZATION	LS	1	\$ 20,000.00	\$ 20,000.00
2	--	MAINTENANCE OF TRAFFIC	LS	1	\$ 20,000.00	\$ 20,000.00
3	0110-4-10	REMOVAL OF EXISTING CONCRETE	SY	40	\$ 13.50	\$ 540.00
4	0522-2	CONCRETE SIDEWALK, 6"	SY	95	\$ 65.00	\$ 6,175.00
5	0527-2	DETECTABLE WARNINGS	SF	80	\$ 40.00	\$ 3,200.00
6	0630-2-11	CONDUIT (OPEN TRENCH)	LF	680	\$ 7.50	\$ 5,100.00
7	0630-2-12	CONDUIT (DIRECTIONAL BORE)	LF	150	\$ 20.00	\$ 3,000.00
8	0630-2-14	CONDUIT (ABOVE GROUND)	LF	20	\$ 26.00	\$ 520.00
9	0632-7-1	SIGNAL CABLE	PI	1	\$ 7,000.00	\$ 7,000.00
10	0635-2-11	PULL & SPLICE BOX (13"x24")	EA	10	\$ 600.00	\$ 6,000.00
11	0639-1-122	ELECTRICAL POWER SERVICE (OVERHEAD)	EA	1	\$ 2,500.00	\$ 2,500.00
12	0639-2-1	ELECTRICAL SERVICE WIRE	LF	100	\$ 7.00	\$ 700.00
13	0641-12-12	PRECAST CONCRETE POLE, TYPE P-II SERVICE	EA	1	\$ 1,500.00	\$ 1,500.00
14	0646-1-12	PEDESTRIAN DETECTOR POST	EA	2	\$ 1,400.00	\$ 2,800.00
15	0649-21-10	STEEL MAST ARM ASSEMBLY, 60'	EA	2	\$ 42,000.00	\$ 84,000.00
16	0653-1-11	PEDESTRIAN SIGNAL, LED COUNTDOWN	AS	4	\$ 680.00	\$ 2,720.00
17	0654-3-10	PEDESTRIAN HYBRID BEACON	AS	4	\$ 1,200.00	\$ 4,800.00
18	0665-1-12	PEDESTRIAN DETECTOR	EA	4	\$ 1,750.00	\$ 7,000.00
19	0670-5-110	TRAFFIC CONTROLLER ASSEMBLY	EA	1	\$ 28,000.00	\$ 28,000.00
20	0700-1-11	SINGLE POST SIGN	AS	6	\$ 350.00	\$ 2,100.00
21	0700-12-21	SIGN BEACON, AC	AS	2	\$ 4,000.00	\$ 8,000.00
22	0706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	10	\$ 7.00	\$ 70.00
23	0711-14-123	THERMOPLASTIC, PREFORM, WHITE, SOLID, 12"	LF	160	\$ 10.00	\$ 1,600.00
24	0711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID, 24"	LF	190	\$ 20.00	\$ 3,800.00
25	0711-16-101	THERMOPLASTIC, 6" WHITE	GM	0.04	\$ 4,700.00	\$ 178.03
26	0715-5-11	LUMINAIRE & BRACKET ARM	EA	2	\$ 2,750.00	\$ 5,500.00
SUBTOTAL =						\$ 226,803
Total Costs						
CONTINGENCY (25%) =						\$ 56,700
GRAND TOTAL =						\$ 285,000
Disclaimer: The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. Due to current conditions in the construction industry, this Opinion of Probable Construction Cost is based on the most recent data published by FDOT. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.						

OCALA / MARION COUNTY TPO TRAIL CROSSINGS STUDY
NE 58TH AVENUE CROSSING AT INDIAN LAKE STATE FOREST
PLANNING LEVEL OPINION OF PROBABLE CONSTRUCTION COST

Construction Costs						
ITEM #	FDOT PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	--	MOBILIZATION	LS	1	\$ 5,000.00	\$ 5,000.00
2	--	MAINTENANCE OF TRAFFIC	LS	1	\$ 5,000.00	\$ 5,000.00
3	0630-2-11	CONDUIT (OPEN TRENCH)	LF	150	\$ 7.50	\$ 1,125.00
4	0630-2-14	CONDUIT (ABOVE GROUND)	LF	20	\$ 26.00	\$ 520.00
5	0635-2-11	PULL & SPLICE BOX (13"x24")	EA	2	\$ 600.00	\$ 1,200.00
6	0639-1-122	ELECTRICAL POWER SERVICE (OVERHEAD)	EA	1	\$ 2,500.00	\$ 2,500.00
7	0639-2-1	ELECTRICAL SERVICE WIRE	LF	150	\$ 7.00	\$ 1,050.00
8	0641-12-12	PRESTRESSED CONCRETE POLE, TYPE P-II SERVICE	EA	1	\$ 1,500.00	\$ 1,500.00
9	0665-1-12	PEDESTRIAN DETECTOR	EA	2	\$ 1,750.00	\$ 3,500.00
10	0700-1-11	SINGLE POST SIGN	AS	4	\$ 350.00	\$ 1,400.00
11	0700-12-22	FLASHING YELLOW WARNING BEACONS, SOLAR	AS	2	\$ 6,000.00	\$ 12,000.00
12	0711-14123	SPECIAL EMPHASIS CROSSWALK MARKING, 12"	LF	50	\$ 10.00	\$ 500.00
13	0711-14125	SPECIAL EMPHASIS CROSSWALK MARKING, 24"	LF	50	\$ 20.00	\$ 1,000.00
14	0715-4-11	LIGHT POLE, 30'	EA	1	\$ 4,500.00	\$ 4,500.00
SUBTOTAL =						\$ 40,795
Total Costs						
CONTINGENCY (25%) =						\$ 6,100
GRAND TOTAL =						\$ 46,000
Disclaimer: The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. Due to current conditions in the construction industry, this Opinion of Probable Construction Cost is based on the most recent data published by FDOT. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.						



February 8, 2018

TO: TAC/CAC Committee Members

FROM: Kenneth Odom, Transportation Planner/Project Manager

SUBJECT: Greenway Trails Update

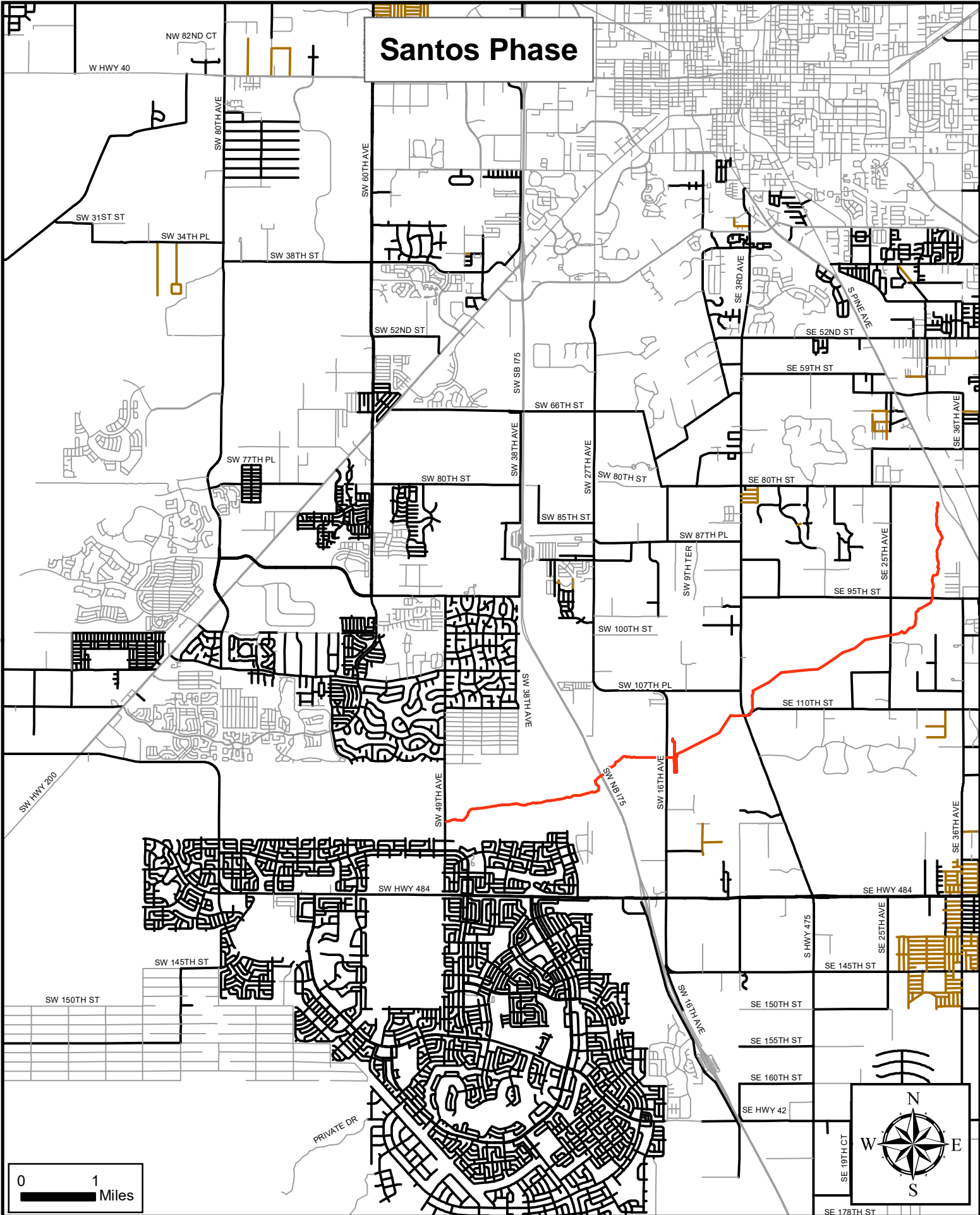
The Santos and Land Bridge Trail sections on the Marjorie Harris-Carr Cross Florida Greenway are nearing completion. These two sections comprise a total of nineteen miles of the approximately twenty-seven miles that are planned from the Santos trailhead to the Bridges Road Trailhead west of the City of Dunnellon.

TPO staff will be presenting an update on the trails construction and basic information regarding each segment. Official opening of these two segments will take place on February 27th at the Santos trailhead, time to be announced.

Should you have any questions prior to the regularly scheduled meeting, please contact TPO staff at 352-629-8297.

Cooperative and comprehensive planning for our transportation needs
Marion County • City of Belleview • City of Dunnellon • City of Ocala

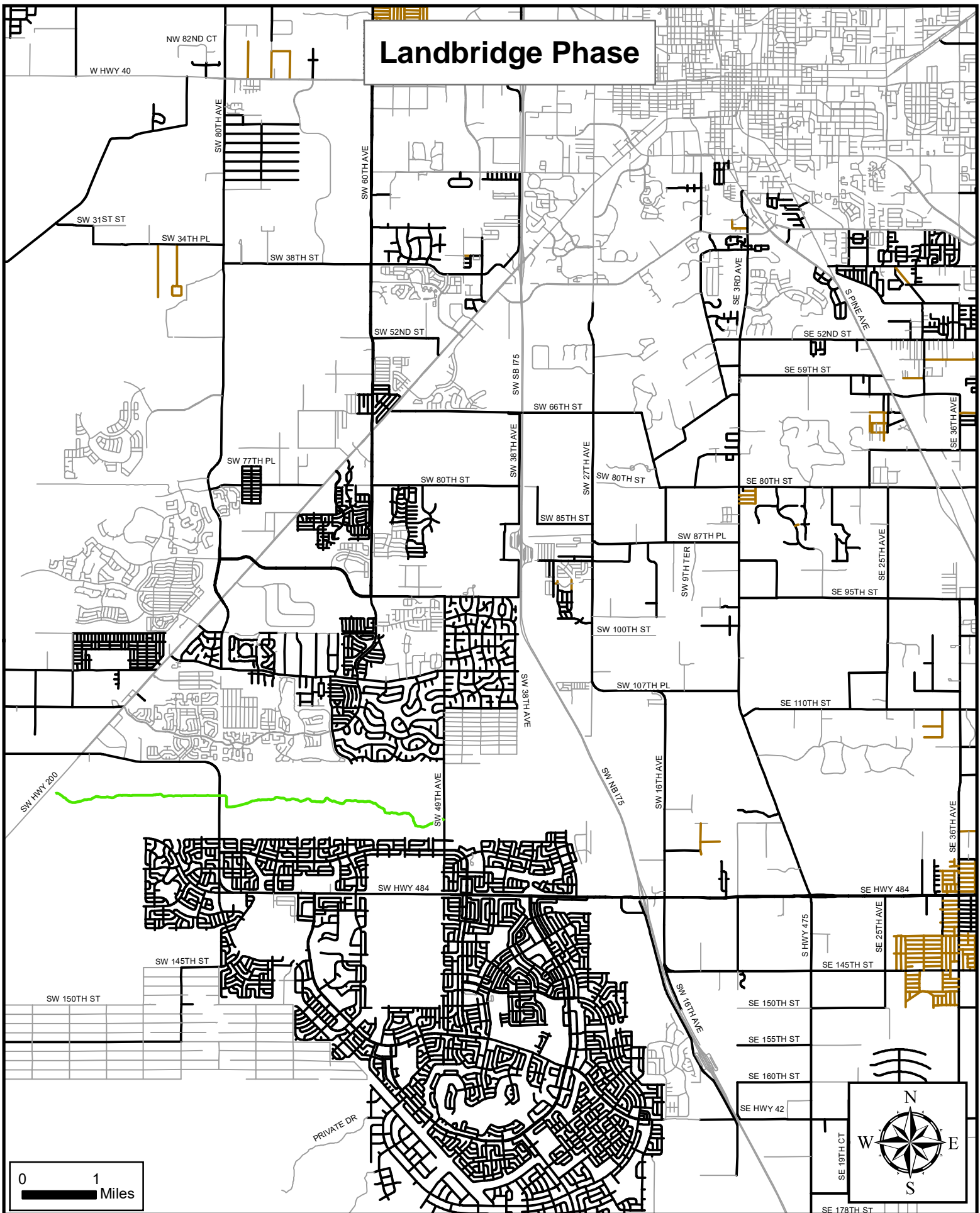
121 S.E. Watula Avenue • Ocala, Florida 34471
Telephone: (352) 629-8297 • Fax: (352) 629-8240 • www.ocalamariontpo.org



Santos Phase



Landbridge Phase



Map Location:
\\mcbcc1\dfs\gis_TR\Loretta.Beam\MAPS\
EngineeringServices\Elton\landbridgephasegw.mxd

Technician:LB
Printed: 05/07/2015

Marion County Office of the County Engineer
Asset Management Section
412 SE 25th Avenue
Ocala, FL 34471





MEMORANDUM

February 9, 2018

TO: TAC/CAC MEMBERS

FROM: MIKE DANIELS, DIRECTOR

SUBJECT: Freight Priority Project Submittal Application

The Florida Metropolitan Planning Organization Advisory Council (MPOAC) Freight Committee developed a Freight Priority Projects list to be included for consideration for FDOT's annual work program.

The purpose of the list is to prioritize high priority projects Statewide and that the MPOAC, as the association representing all MPOs in Florida, has the opportunity to promote and endorse these priorities on behalf of its members for consideration by the FDOT.

The overview of the process is provided below:

- Each MPO can submit up to 3 freight roadway projects annually for inclusion in the freight priority list; projects must fall on state facilities;
- Projects must have completed the PD&E process and be ready for design and/or construction funding;
- A screening checklist must be completed for each project; this information will illustrate the project is a freight priority;
- List of freight priorities will undergo MPOAC approval process annually (Freight Committee, Staff Directors Committee, Governing Board)
- Approved list will be transmitted to FDOT Freight Logistics and Passenger Operation (FLP) Office.
- Intent is to influence funding decisions relating to the new 5th year of FDOT's work program as well any changes to years 1 thru 4.

Cooperative and comprehensive planning for our transportation needs
Marion County • City of Belleview • City of Dunnellon • City of Ocala

121 S.E. Watula Avenue • Ocala, Florida 34471
Telephone: (352) 629-8297 • Fax: (352) 629-8240 • www.ocalamariontpo.org

The project checklist and additional information regarding the MPOAC Freight Priorities as presented to the MPOAC Governing Board has been provided in your packet.

If you have any questions, please feel free to call our office at 629-8297.

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Establishing Freight Project Priorities as Input to FDOT's Work Program

Presented to
MPOAC Staff Directors' Committee
and
MPOAC Governing Board

Presented by
Michael Williamson, Cambridge Systematics, Inc.
Todd Brauer, White House Group, Inc.

Winter 2018



Agenda

- Review purpose and need
- Describe methodology
- Demonstrate methodology
- Request approval to present to Governing Board

Review Purpose and Need

What is the Purpose?

- To ensure MPOs have an opportunity to identify high priority freight projects on an annual basis, and that the MPOAC, as the association representing all MPOs in Florida, has the opportunity to promote and endorse these priorities on behalf of its members, for consideration by the FDOT*



Review Purpose and Need

How Did We Get Here?

- FMTP Policy and Investment Elements completed in 2013 and 2014
- MPOAC Freight Advisory Committee formed in 2013
 - How Should MPOs Engage in Setting Freight Priorities, October 29, 2015
 - Continuing the Discussion, July 18, 2016
 - MPOAC's Opportunity to Enhance the Definition of Florida's Freight Priorities, October 2016
 - MPOAC Freight Committee Workshop, April 6, 2017
 - MPOAC Freight Committee Discussion and Approval, July 19, 2017
- FAST Act signed December 2015
- Florida Freight Advisory Committee Inaugural Meeting, April 21, 2017



Review Purpose and Need

Why is the Setting of Priorities Important?

- Florida's MPOs must have every advantage possible to compete for available funding
- State freight priorities address the most strategic freight needs
- MPOs drive project development and priorities within established planning boundaries
- Each MPO should include freight considerations in project prioritization methodologies
- Unified input by MPOs and the MPOAC to FDOT on freight priorities will help ensure local and regional freight needs are addressed in funding decisions



Describe Methodology

Overview of Process

- Each MPO can submit up to 3 freight roadway projects annually for inclusion in the freight priority list; projects must fall on state facilities
- Projects must have completed the PD&E process and be ready for design and/or construction funding
- A screening check list must be completed for each project; this information will illustrate the project is a freight priority
- List of freight priorities will undergo MPOAC approval process annually (Freight Committee, Staff Directors' Committee, Governing Board)
- Approved list will be transmitted to FDOT FLP Office with cc to each District Freight Coordinator; MPOAC leadership will work with FDOT leadership to ensure this list of freight priorities is considered
- Intent is to influence funding decisions relating to the new 5th year of FDOT's work program as well as any changes to years 1 thru 4



Describe Methodology

Project Check List

MPOAC Freight Priorities				
MPO Name:		Year:		
Project Number:				
Facility Name:				
	From:	To:		
Extent of Project:				
Project Description:				
Describe freight usage of the facility (volumes, connections, etc.):				
Screening Questions	Yes	No	Comments/Description	URL/Link (if applicable)
Has the project completed the PD&E process (ready to move directly to design/construction)?				
Does the project have regional support? If so, please provide documentation.				
Is the project identified as a freight priority by the MPO and its partners (i.e. seaport, airport, railroad)? If yes, how was this priority determined?				
Is the project included in an adopted plan (freight plan, LRTP, TIP, CIP, master plan)? If yes, which one(s)?				
Is the project on a priority freight network (e.g., NHFN, CUFC, CRFC, SIS, regional freight network)? Please describe.				
Does the project support one or more FTP goals? If so, which ones?				
Does the project improve economic competitiveness? If yes, please describe.				
Does the project add capacity or improve operations? If yes, please describe.				
Is the project a critical next step in a series of linked projects? If yes, please describe.				
Please provide the year(s) of your funding request.				

Instructions and Support to be Provided

MPOAC Freight Priority Screening Instructions

Each MPO can submit up to 3 freight projects annually (located within the MPO's jurisdiction) for inclusion in the statewide MPO freight priority list. For 2018, the focus will be on state facilities.

A screening check list must be completed for each project. This information is used to determine freight priority and is ready for advancement. Projects must have progress on construction, must have regional support. Screening questions focus on project readiness, benefits, and funding need. As an annual process, the intent is to influence the new 5th year of FDOT's work program as well as any changes to years 1 through 4.

The MPOAC Freight Committee will review and approve the aggregated list of freight priorities to be presented to MPOAC Executive Committee for endorsement/approval. The list will be transmitted to FDOT FLP Office with cc to each District Freight Coordinator. The list, with FDOT leadership to ensure this list of freight priorities is considered as part of the allocation process.

Florida Transportation Plan – Goals

1. Safety and security for residents, visitors, and businesses
2. Agile, resilient, and quality infrastructure
3. Efficient and reliable mobility for people and freight
4. More transportation choices for people and freight
5. Transportation solutions that support Florida's global economic competitiveness
6. Transportation solutions that support quality places to live, learn, and work
7. Transportation solutions that support Florida's environment and communities

Instructions for Screening Form

MPO Name:	Enter MPO Name
Project Number:	An MPO can submit up to three projects; the project number value should be 1, 2, or 3.
Year	Enter current year (year of submittal)
Facility Name:	Enter roadway/facility name (e.g., state route)
Extent of Project:	Enter a description in to/from fields that establishes project limits (e.g., milepost)
Project Description:	Provide short description of project (e.g., add two lanes)
Describe freight usage of the facility (volumes, connections, etc.):	Provide short description of freight usage (e.g., AADTT, Truck Percent, connector status)
Has the project completed the PD&E process (ready to move directly to design/construction)?	[yes/no] If no, this project is not eligible for the project priority list.
Does the project have regional support? If so, please provide documentation.	[yes/no] If yes, provide description documenting support. The existence of significant opposition should be considered before submitting a project as a priority.
Is the project identified as a freight priority by the MPO and its partners (i.e. seaport, airport, railroad)? If yes, how was this priority determined?	[yes/no] If yes, provide short description of how the priority was determined and by which entity.
Is the project included in an adopted plan (freight plan, LRTP, TIP, CIP, master plan)? If yes, which one(s)?	[yes/no] If yes, identify the plan(s) documenting the project.
Is the project on a priority freight network (e.g., NHFN, CUFC, CRFC, SIS, regional freight network)? Please describe.	[yes/no] If yes, identify the network(s) that contains the project facility.
Does the project support one or more FTP goals? If so, which ones?	[yes/no] If yes, identify the goals addressed by the project.
Does the project improve economic competitiveness? If yes, please describe.	[yes/no] If yes, describe the impacts of the improvement.
Does the project add capacity or improve operations? If yes, please describe.	[yes/no] If yes, describe the impacts of the improvement.
Is the project a critical next step in a series of linked projects? If yes, please describe.	[yes/no] If yes, describe the larger project or group of projects this improvement will support.
Please provide the year(s) of your funding request.	Provide the year for which funding is being requested.

Illustrative List Based on Project Submittals

MPO Name:	Facility Name:	Extent of Project (From)	Extent of Project (To)	Project Description:	Funding Year Request
Bay County TPO	US 231	US 98	US 20	6-laning of US 231	FY 22/23
Bay County TPO	Gulf to Bay Highway	US 98	Bay/Gulf County Line	New four lane road	FY 22/23
Broward MPO	SR 9/ I-95	Interchange @ Broward Blvd/SR 84		Interchange improvement	FY 2023
Broward MPO	Sawgrass Expressway/ SR 869	SR 7	Powerline Rd	Widens the Sawgrass Expressway from six to ten travel lanes.	FY 2022
Florida - Alabama TPO	SR 95 (US 29) Interchange	I-10 and US 29 interchange		I-10 /US 29 interchange Major Improvement Phase 2	FY 22/23
Florida - Alabama TPO	SR 8 (I-10)	SR 10 (90A) Nine Mile Rd	W of SR 95 (US 29)	Widen I-10 to 6 lanes	FY 22/23
MetroPlan Orlando	US 17/92	Polk / Osceola County Line	West of Poinciana Blvd	Wide from 2 to 4 lanes and intersection improvements	FY 2021/2022 for PE & FY 2023/2024 for CST
MetroPlan Orlando	SR 535	Interstate 4	US 192	Widen from 4 to 6 lanes with operational improvements	FY 2021/2022 for PE & FY 2023/2024 for CST
MetroPlan Orlando	SR 15 / 600 US 17/92	Norfolk Ave	Monroe Street	Median and safety improvements & extend road	FY 2019/2020 for CST
Miami-Dade TPO	SR 826/PALMETTO EXPWY	NW 154 STREET	NW 17 AVENUE	Add Special Use Lane (7.143 miles)	2021
Miami-Dade TPO	GOLDEN GLADES INTERCHANGE			Intermodal Hub Capacity	2023
Miami-Dade TPO	GOLDEN GLADES INTERCHANGE	MP 0X		Interchange Improvements (FDOT Turnpike Enterprise)	2021
Okaloosa-Walton TPO	US 98	Mack Bayou Blvd	30 A West	Widen US 98 to six lanes	FY 22/23
Okaloosa-Walton TPO	US 331	US 90	Alabama State Line	Widen US 331 to 4 lanes	FY 22/23
Palm Beach MPO	SR 80 Bypass	US 27/SR 80	US 441/SR 715	Construct a new two lane facility to support an inland logistics center in the Glades Region of Palm Beach County	2025

Describe Methodology

Planned Schedule

- MPOs will submit projects by mid March
- Projects will be reviewed by MPOAC Freight Committee; any requests for clarifications or additional information will be distributed
- Projects will be approved for inclusion on the list at MPOAC Freight Committee Meeting in April
- List of projects will be presented to both the Staff Directors' Committee and the Governing Board for approval in June
- Approved list transmitted to FDOT in July for consideration in development of work program



Next Steps

- MPOAC Staff Directors' Committee Approval
 - Do you approve this program?
- Governing Board Approval
 - Do you approve this program?
- Discuss next steps for 2018 roll out with MPOAC Freight Committee



February 12, 2018

CONSTRUCTION									
<u>Financial Project No.</u>	<u>Description</u>	<u>Work Mix Description</u>	<u>Contractor Name</u>	<u>Original Amount</u>	<u>Original Contract Days</u>	<u>Work Begin</u>	<u>Estimated Completion</u>	<u>Status</u>	<u>Lane Closures</u>
238693-1	SR 35 (Baseline Road) from SE 92nd Loop to SR 464	ADD LANES & RECONSTRUCT	D.A.B. CONSTRUCTORS, INC.	\$17,605,644.00	850	8/28/2015	11/11/2018	Working in all basins with embankment, subgrade, base, sidewalk, gravity wall and asphalt.	Monday, February 5th, 2018 to Wednesday, February 28th, 2018 A traffic shift will be in effect starting Thursday night, Feb. 8. The new traffic pattern begins near the Church @ The Springs, approximately one-half mile south of SE Maricamp Road, and ends at Dogwood Trail Pass. Signage is already posted. Please slow down and be alert while driving through the construction zone.
435057-1	Lighting Project at CR 484, CR 318 and SR 326	Lighting	United Signs and Signals	\$3,075,596.26	290	11/14/2017	9/8/2018	Working at CR 318 and SR 326 with Drilled Shafts and Couduit	No lane closures anticipated.
434408	SR 40 Brooks Road	Mill and Resurface	DAB	\$413,888.88	90	12/9/2017	2/9/2018	Started work on 12/11/2017 with MOT and Erosion Control. Paving will start on 1/8/2018	No lane closures anticipated.
436371	US 441 North	Pavement	ACKA	\$142,000.00	60	10/25/2017	12/19/2017	Completed.	
437828-1	Landscaping at I 75 at 20th and 43	Landscaping	Gainesville Landscape Contractors	\$438,500.00	800	7/27/2017	10/18/2019	Contract in plant establishment time frame now.	N/A
437818-1	Landscape at CR318	Landscaping	Frankie Valdez Co Inc.	\$407,700.00	820	10/31/2016	2/11/2019	Contract in plant establishment time frame now.	N/A
435466-1	Landscaping at I 75 at SR 200 and US 27	Landscaping	Gainesville Landscape Contractors	\$594,750.00	870	08/21/15	01/19/18	Contract in plant establishment time frame now.	N/A
TRAFFIC OPERATIONS									
<u>Financial Project No.</u>	<u>Description</u>	<u>Status</u>							
	US 27/ CR 464B Directional median opening	To be sent to design. Access management team will schedule public hearing and 180 day waiting period. Public Hearing on March 8, 2018, location is TBD.							
	SR 464 at SE 53rd Ave/Rotary Sportplex	Median opening construction and turn lane extension. Design complete. Work Order to be submitted for construction.							
	US 27 @ CR 326	Supplemental warning beacons on signal ahead signs. Design complete. NTP with Work Order #1 submiteed, construction to begin in 90 days.							
	SR 40 @ SR 492	Add right turn signal heads, restripe right turn lane. Waiting on design work order to be sent out.							

Contact Information:

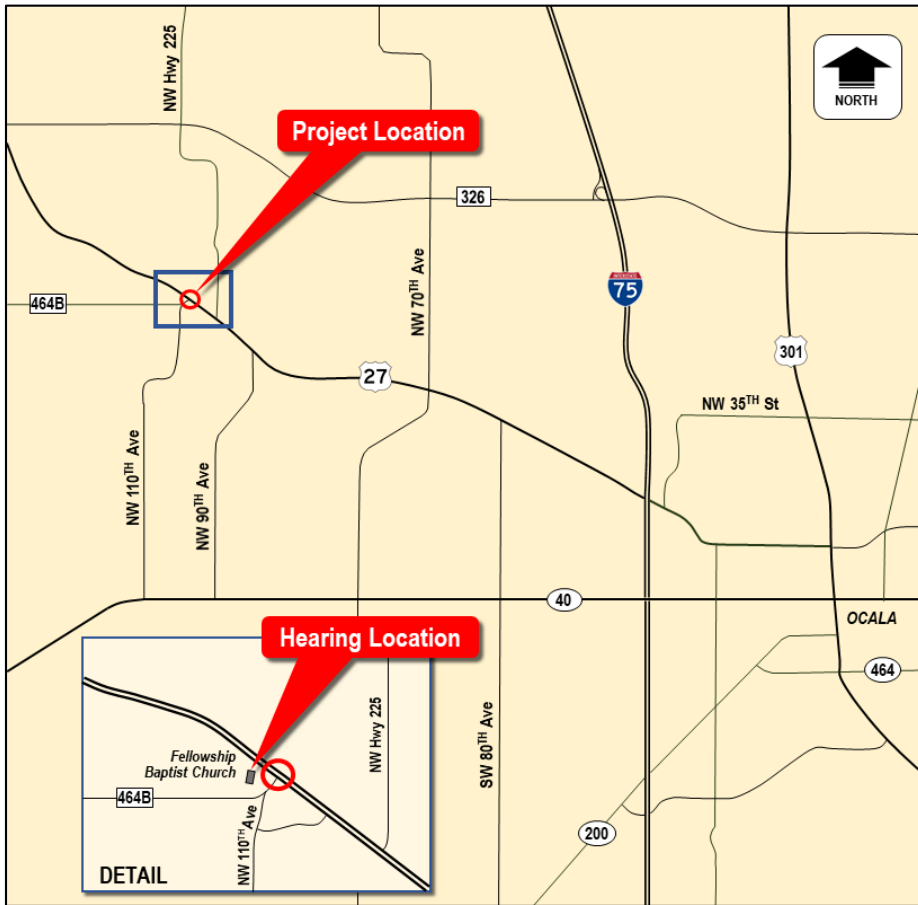
Jamie Kersey, TPO Liaison
386-943-5338
jamie.kersey@dot.state.fl.us

Mike McCammon, Ocala Operations Engineer
(352) 620-3001
Michael.McCammon@dot.state.fl.us

For additional information on these projects as well as future projects, please go to www.cflroads.com



NOTICE OF PUBLIC HEARING



PROJECT
U.S. 27 at
County Road (C.R.) 464B
Safety Improvements
Median Modification
Marion County

LOCATION
Fellowship Baptist Church
10500 U.S. 27
Ocala, FL 34482
Thursday
March 8, 2018
5:00 p.m. – 7:00 p.m.

The Florida Department of Transportation will conduct a public hearing for the proposed safety improvements on U.S. 27 at the intersection of C.R. 464B. The project addresses operational and safety concerns in the area by converting the full median opening to a bi-directional median opening. Northbound and southbound left turns from U.S. 27 will still be permitted, but the C.R. 464B intersection with U.S. 27 will be converted to right turn only. This modification reduces traffic conflict points at the intersection, improving safety.

This public hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements. Draft project documents and other information will be available for public review from February 15 through March 19, 2018 at the Marion County Public Library Headquarters, 2720 E. Silver Springs Blvd., Ocala, FL 34470.

Participants may provide verbal comments directly to a court reporter before and after the formal presentation. Persons wishing to submit statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to: Dave Mixon, Florida Department of Transportation, District Five Roadway Design, 719 S. Woodland Boulevard, M.S. No. 562, DeLand, FL 32720 or Dave.Mixon@dot.state.fl.us.

All statements postmarked on or before March 19, 2018 will become part of the public hearing record.

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Kelly Hiden, Public Involvement Coordinator by phone at 407-508-0839, or via email at Kelly@valerin-group.com at least seven (7) days prior to the meeting. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator at Jennifer.Smith2@dot.state.fl.us.

For additional project information, please visit www.cflroads.com