

Life cycle benefit/cost ratio

A benefit to cost ratio was developed to weigh the expected safety benefits and improved traffic operations of a modern roundabout against the larger construction cost, as compared to a traffic signal. The benefit to cost ratio for a modern roundabout at the SR 64 and Rye Road intersection is 1.82; a value over one indicates that the modern roundabout is the economically better option.

Safety benefit of a modern roundabout	\$3,000,000
Delay reduction benefit of a modern roundabout	\$2,700,000
Total Benefits	\$5,700,000
Added operations & maintenance costs of a modern roundabout	\$(42,000)
Added capital costs of a roundabout	\$3,166,000
Total Costs	\$3,124,000
Life Cycle Benefit/Cost Ratio	1.82

Project schedule

The final design phase will take place from 2016 to 2018 with right-of-way (land) acquisition in 2017. Construction is expected to begin in 2018 and last approximately 18 months, weather permitting.

FDOT Adopted 5-Year Work Program Fiscal Year 2016/2017 to 2020/2021*

Phase	Fiscal Year
Design	Ongoing
Right-of-Way (Land) Acquisition	2016/2017
Construction	2017/2018

* Fiscal Year begins July 1 and ends June 30

How you can participate

We welcome your comments about the alternatives presented this evening. Please complete a comment sheet and leave it with us this evening, or you can take it home, complete it and mail it to us by October 23, 2016.

Please mail your comments to Patrick Bateman, E.I., Project Manager, at the address shown on the back of the comment sheet. You can also email your comments to Patrick.Bateman@dot.state.fl.us.

To provide comments, ask questions, and make suggestions about the project, please contact:

Patrick Bateman, E.I.
FDOT Project Manager
863-519-2792
Patrick.Bateman@dot.state.fl.us

Robin Stublen
FDOT District Public Information Officer
863-519-2828
Robin.Stublen@dot.state.fl.us



FPID: 196022-5-21-01

State Road (SR) 64 at Rye Road Intersection Improvement Project Public Information Meeting

Manatee County, Florida
October 13, 2016

Welcome

The Florida Department of Transportation (FDOT), District One, welcomes you to a public information meeting regarding an improvement project at the intersection of State Road (SR) 64, Rye Road, and White Eagle Boulevard (future) in Manatee County. FDOT is conducting this meeting to describe the alternatives developed and provide interested persons an opportunity to review the alternatives, ask questions and offer comments.

A predicted increase in traffic and the construction of White Eagle Boulevard necessitate the improvement of the intersection of SR 64, Rye Road, and White Eagle Boulevard (future). FDOT is evaluating a signalized intersection and modern roundabout and both alternatives are on display this evening.

Interim intersection concepts (traffic signal and modern roundabout) were developed to allow the recommended improvements to be phased as traffic increases. It is anticipated that the interim configuration will provide enough capacity through 2028. When the interim improvements reach capacity, the ultimate intersection improvements will be constructed.

We welcome your comments about the alternatives presented this evening.

Life cycle costs

	Traffic Signal	Modern Roundabout
Construction cost	\$1.9M	\$5.0M
Maintenance	\$82k	\$40k
Crashes (projected)	\$5.5M	\$2.6M
Traffic delays (projected)	\$4.4M	\$1.7M
TOTAL LIFE CYCLE COST (20 years)	\$11.9M	\$9.3M

FDOT solicits public participation without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who are hearing or speech impaired can contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

Alternatives evaluation matrix

The cultural, physical, and natural impacts of the modern roundabout and traffic signal alternatives are presented below along with estimated construction and life cycle costs.

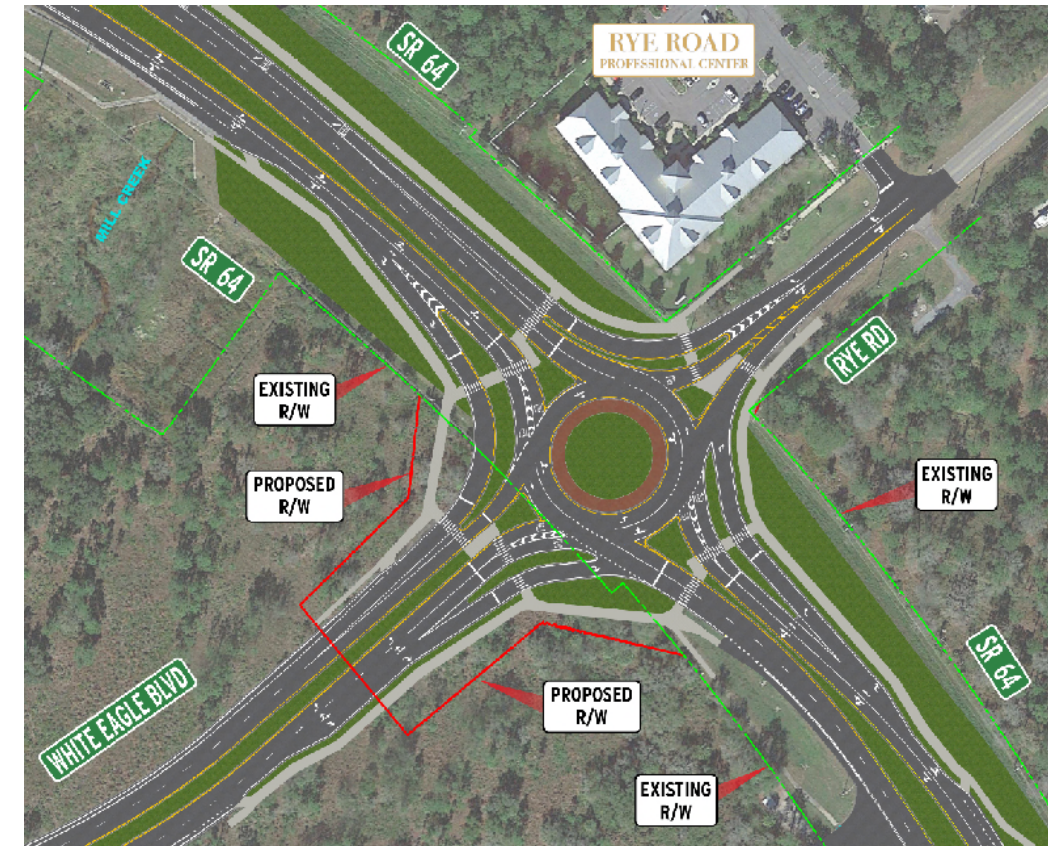
Evaluation Criteria	Traffic Signal	Modern Roundabout
Potential Business Effects		
Number of business relocations	0	0
Potential Residential Effects		
Number of residential relocations	0	0
Potential Environmental Effects		
Archaeological Probability / Historical sites identified	0	0
Section 4(f) sites	0	0
Wetlands (acres)	0	0
Floodplains (acres)	0	0
Threatened and endangered species likelihood of occurrence	Minimal	Minimal
Affected noise sensitive sites	None	None
Petroleum and hazardous material sites (ranked as high / medium)	0	0
Potential Right-of-Way (ROW) Effects		
ROW to be acquired for roadway (acres)	1.14	1.14
ROW to be acquired for stormwater facilities (acres)	0*	0*
Estimated Project Costs (2016 Cost)		
Wetland mitigation	\$0	\$0
ROW acquisition for roadway	\$0	\$174,000
ROW acquisition for stormwater facilities	\$0	\$0
Total ROW and Mitigation Costs	\$0	\$174,000
Construction cost for roadway	\$0	\$0
Construction cost for stormwater facilities	\$0	\$0
Construction Costs	\$1,550,000	\$3,510,000
Design	\$164,000	\$1,000,000
Construction engineering & inspection (CEI; 10% of total construction cost)	\$155,000	\$351,000
Preliminary Estimate of Total Project Costs	\$1,869,000	\$5,035,000
Life Cycle Costs (20 years)		
Construction, design, ROW, and CEI	\$1,869,000	\$5,035,000
Maintenance	\$82,000	\$40,000
Crashes (projected)	\$5,500,000	\$2,500,000
Traffic delays (projected)	\$4,400,000	\$1,700,000
Total Life Cycle Cost	\$11,851,000	\$9,275,000

* Anticipated joint use pond agreement with Schroeder-Manatee Ranch

Alternatives

The modern roundabout and traffic signal alternatives are presented below and are on display tonight. There are a number of videos on display this evening that explain how a modern roundabout functions and provide comparisons between the two types of intersections.

Modern Roundabout



Traffic Signal

