



West Orange Trail Extension Study



Executive Summary

West Orange Trail (Phase 4)

Rock Springs Road

From Lester Road to Kelly Park Road

Ponkan Road

From Wolf Lake Elementary and Middle Schools to Rock Springs Road

Welch Road

From Rock Springs Road to Wekiwa Springs State Park Entrance

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Table of Contents

Abstract.....	3
Introduction	3
Purpose and Need	5
Existing Conditions	5
Safety Analysis	6
No-Build Alternative	7
Alternatives Considered.....	7
Recommended Trail Alternatives	8
Alternative Selection and Recommendations.....	8
Right-of-Way Needs.....	8
Impacts Summary	10
Cost Estimates	10
Public Involvement.....	11
Surveys	11
Local Agency and Stakeholder Meetings.....	11
Public Meetings.....	12
Additional Community Engagement.....	12
Final Recommendations and Next Steps	13
Funding.....	13

List of Figures

Figure 1 Study Area Location	4
Figure 2 Recommended Trail Alternatives Locations.....	9

List of Tables

Table 1 Bicycle and Pedestrian Crash Summary.....	6
Table 2 Recommended Alternatives ROW Impacts.....	10
Table 3 Recommended Alternative Cost Estimates Summary	11

Abstract

MetroPlan Orlando conducted a Trail Extension study for the West Orange Trail in Apopka, Florida. Three main sections were identified for trail improvements: along Rock Springs Road from Lester Road to Kelly Park Road, along Welch Road from Rock Springs Road to the Wekiwa Springs State Park entrance, and along Ponkan Road from the Wolf Lake Elementary and Middle schools to Rock Springs Road. Trail alternatives were developed, analyzed, and shared with the public and local agencies for input to develop a Recommended Alternative for each of the above-mentioned sections of the project. The total estimated project cost for the final design and construction of all three of the Recommended Trail Alternatives is \$20.6 million, not including the cost of right-of-way (ROW) acquisition. The anticipated additional ROW for the Recommended Trail Alternatives is 11.9 acres from 98 parcels of land.

Introduction

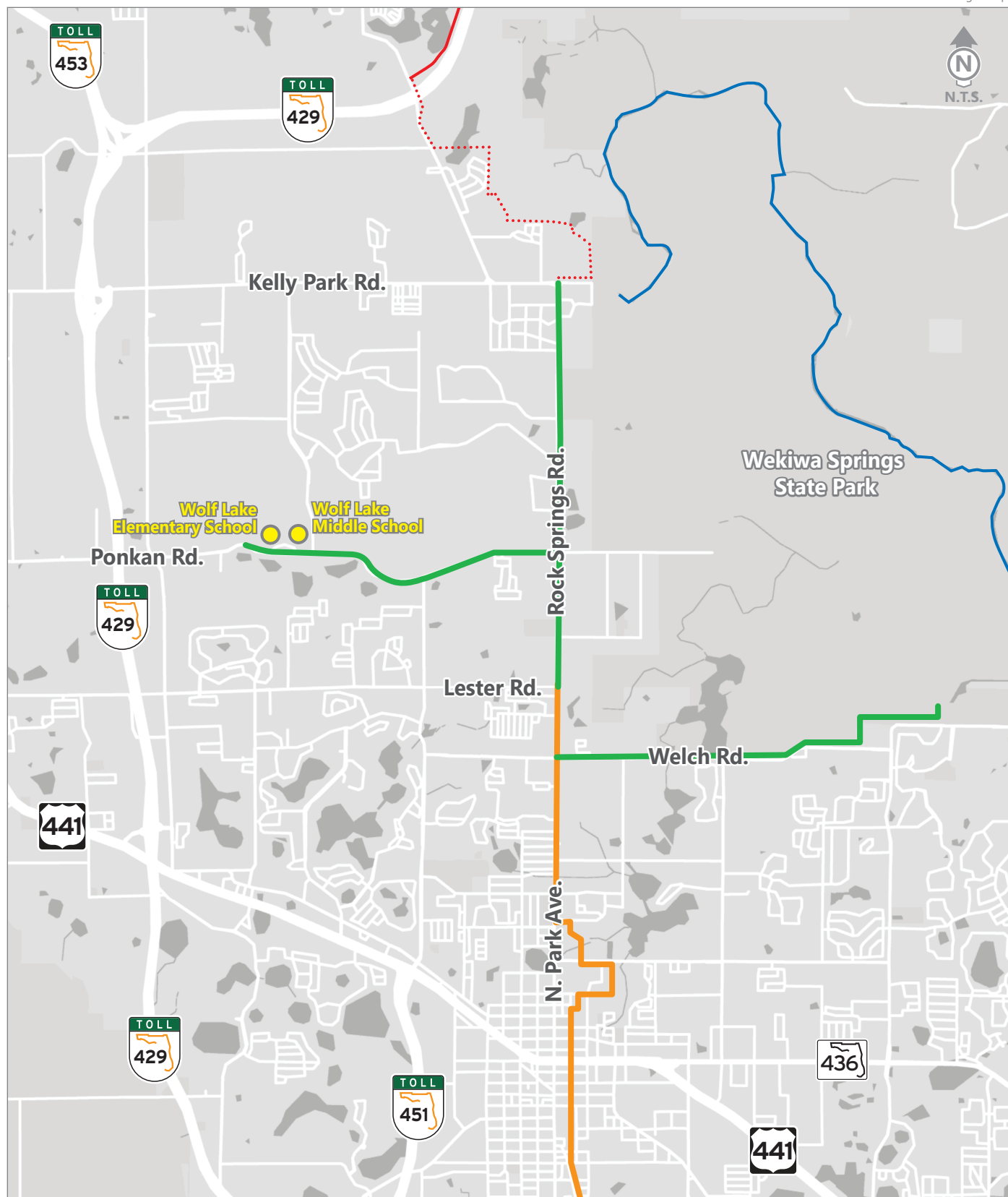
MetroPlan Orlando conducted a Trail Extension study for the West Orange Trail (Phase 4) in Apopka, Florida. The Orange County Trails Master Plan identifies a gap in the regional trail network between the northern terminus of the existing West Orange Trail (at the intersection of Rock Springs Road with Lester Road) and the southern terminus of the Wekiwa Trail (at the interchange of SR 429 with Mount Plymouth Road). The proposed West Orange Trail (Phase 4) extension will run along Rock Springs Road to the intersection with Kelly Park Road, filling a portion of the existing gap. The remaining gap will be filled by the proposed Wekiwa Trail extension. Additionally, the trail spur along Welch Road and Wekiwa Springs Road will provide connection to the Wekiwa River Blueway Trail.

This trail study covers a total corridor length of approximately 8.29 miles along the following three corridors:

- Rock Springs Road
 - From Lester Road (the existing termination of the West Orange Trail) to Kelly Park Road, tying into the proposed Wekiwa Trail.
 - Approximately 3.31 miles
- Welch Road and Wekiwa Springs Road
 - From the existing West Orange Trail at Rock Springs Road to the Seminole County Wekiwa River Blueway Trail at the Wekiwa State Park entrance, located at Wisteria Street and Wekiwa Springs Road.
 - Approximately 3.00 miles
- Ponkan Road
 - From west of Jason Dwelley Parkway to connect Wolf Lake Elementary and Middle Schools, as well as the City of Apopka's Northwest Recreation Complex to the proposed West Orange Trail (Phase 4) at Rock Springs Road.
 - Approximately 2.27 miles

Rock Springs Road, Welch Road, and Ponkan Road are all urban major collectors serving the surrounding residential and commercial properties. They provide access to US 441 to the south and both US 441 and SR 429 to the west.

The study area location map is shown in **Figure 1**.



- West Orange Trail - Phase 4
- Existing West Orange Trail
- Wekiwa River Blueway Trail
- ... Proposed Wekiwa Trail
- Existing Wekiwa Trail

Purpose and Need

The purpose of this study is to evaluate the feasibility of extending the West Orange Trail to the proposed Wekiva Trail while providing connections to the Wekiva River Blueway Trail, Wekiva Springs State Park, Wolf Lake Elementary and Middle Schools, and the City of Apopka's Northwest Recreation Complex. This study determined and evaluated potential routes for the trail within the study area. The primary extension is proposed along Rock Springs Road with spurs along Welch Road and Ponkan Road. Based on the findings of the analysis, recommendations have been made for the optimal alignment of the trail as described in the Recommended Trail Alternatives section.

Existing Conditions

The West Orange Trail is an approximately 22-mile-long pedestrian/bicycle trail running from Killarney Station at the intersection of SR 50 with Lake Boulevard in Winter Garden, around the east side of Lake Apopka into Clarcona Road, then turning north to run along Clarcona Road, Old Apopka Road, Forest Avenue, and Park Avenue/Rock Springs Road to where it terminates at the intersection of Rock Springs Road with Lester Road. Within the study area, the West Orange Trail runs along the east side of Rock Springs Road from south of Welch Road to where it terminates at Lester Road.

The West Orange Trail is one of the most popular trails in the Orlando metropolitan area due to its length; at its southern end the trail connects to the South Lake and Lake Minneola Scenic Trail as well as the Hancock Trail, increasing the effective length to approximately 41.5 miles. The existing and projected growth of the population living along or near the West Orange Trail, the trail's popularity, and the projected growth of residential properties in the area surrounding the study area indicate the need to extend the trail at its northern end. Extending the West Orange Trail will also serve to improve the pedestrian/bicycle transportation network in the City of Apopka.

Bicycle Facilities

Four-foot-wide bicycle lanes are present on both sides of Rock Springs Road from Ponkan Road to Kelly Park Road.

There are no paved shoulders or separated bicycle lanes on either side of Ponkan Road throughout the length of the study area. For most of its length through the study area, Welch Road also does not have paved shoulders or separated bicycle lanes on either side of the roadway. However, on Welch Road there are four-foot-wide paved shoulders from about 400 feet east of Cedar Glen Drive to Thompson Road on both sides of the corridor. Grass has grown over the edge of the pavement along Welch Road at many points, effectively reducing the shoulder width.

Sidewalks

Along Rock Springs Road, there is a five-foot-wide concrete sidewalk present along both sides of the roadway throughout the length of the study corridor. The sidewalk is generally separated from the roadway by a three-foot-wide utility strip, although there are locations where the sidewalk is at the back of the curb and other locations where the separation from the roadway is over 15-feet.

Along Welch Road, there is a five-foot-wide concrete sidewalk on the south side of the roadway between Rock Springs Road, from east of the driveway of Wekiva Plaza to the entrance of Duke Energy, and between the Wellsprings Residence entrance (1,300 feet east of Ustler Road) and Wekiwa Springs Road. A five-foot-wide concrete sidewalk is also present on the north side of the roadway between

Rock Springs Road and Cedar Glen Drive, and for two very short segments (150 feet and 215 feet) just west of Wekiwa Springs Road.

Along Ponkan Road, a five-foot-wide concrete sidewalk runs along the north side of the roadway from the Wolf Lake Elementary and Middle Schools to just east of Pinenut Drive, and along the south side of the roadway from Vick Road to Rock Springs Road.

Safety Analysis

Bicycle and pedestrian crash data were obtained from Signal Four Analytics for a five-year period (January 01, 2016 to December 31, 2020) along Rock Springs Road, Ponkan Road, and Welch Road within the study area limits.

A total of seven crashes involving bicycles and pedestrians have occurred in the study area: three involving bicycles and four involving pedestrians. **Table 1** provides a summary of the locations and conditions of each crash. Of the seven crashes, four caused injuries, all the crashes occurred in daylight and dry conditions, one was distraction related, and none were alcohol or drug related. None of the pedestrian/bicycle crashes were fatal.

Table 1 | Bicycle and Pedestrian Crash Summary

Crash Type	Severity	Report Number	Location	Weather Condition	Lighting Condition	Road Surface Condition	Alcohol/Drug Related	Distraction Related
Pedestrian	Injury	8537729	Rock Springs Rd at Welch Rd	Clear	Daylight	Dry	No	Yes
		8746823	Rock Springs Rd at Welch Rd	Clear	Daylight	Dry	No	No
	Property Damage Only	8809351	Rock Springs Rd at Lester Rd	Clear	Daylight	Dry	No	No
		8840030	Welch Road at Wekiwa Springs Road	Clear	Daylight	Dry	No	No
Bicycle	Injury	8625158	Rock Springs Rd at Welch Road	Clear	Daylight	Dry	No	No
		8801025	Rock Springs Rd at Welch Road	Clear	Daylight	Dry	No	No
	Property Damage Only	8526312	Rock Springs Road at Alexandria Place Drive	Cloudy	Daylight	Dry	No	No

Source: Signal 4 Analytics

No-Build Alternative

The No-Build Alternative, carried as a viable option throughout the corridor study process, assumes no construction of a new trail facility. The advantages of the No-Build Alternative include no additional ROW acquisition, no impacts to the environment from construction, no disruption of traffic during construction, and no project cost. The disadvantages of the No-Build Alternative are the purpose and need for the project are not satisfied: existing and future pedestrian and bicyclist demand is not accommodated, and safety for pedestrians and bicyclists is not improved.

Alternatives Considered

Several trail route alternatives were developed and analyzed for the study trail segments. Three alternatives were developed for the Rock Springs Road segment, two alternatives were developed for the Welch Road and Wekiwa Springs Road segment, and two alternatives were developed for the Ponkan Road segment. Ultimately one alternative was recommended for each segment. The alternatives developed and analyzed, but not recommended, are summarized below.

Rock Springs Road

The two trail alternatives for Rock Springs Road not recommended have the same start and end points as the Recommended Alternative but had a significant portion of the trail run within the edge of Wekiwa Springs State Park property. Although the public preferred these options, Orange County Board of County Commissioner Resolution No. 98-M-09 was discovered after the Alternative Community Meeting held in January 2022. The resolution specifically requires the West Orange Trail be extended along Rock Springs Road. Therefore, the Recommended Alternative was the only viable alternative for the Rock Springs Road segment of the project.

Welch Road and Wekiwa Springs Road

The one trail alternative for Welch Road and Wekiwa Springs Road not recommended has the same beginning and end points as the Recommended Alternative but stayed directly adjacent to Welch Road and Wekiwa Springs Road and did not wrap around Sweetwater Park Village. This alternative greatly increased the number of driveway and side street crossings, and increased the number of parcels that required ROW acquisition; therefore, this alternative was not selected as the Recommended Alternative.

Ponkan Road

The one trail alternative for Ponkan Road not recommended begins at the intersection of Lester Road and Rock Springs Road and would have used the existing shared-use path along Lester Road, before continuing north to the intersection of Vick Road and Ponkan Road. This alternative was longer than the Recommended Alternative, had more wetlands impacts, and was the least preferred alternative by the public; therefore, this alternative was not selected as the Recommended Alternative.

Recommended Trail Alternatives

Alternative Selection and Recommendations

After analyzing the existing conditions, seven total trail alternatives were developed – three along Rock Springs Road, two along Welch Road, and two along Ponkan Road. After the development of each trail alternative, the alternatives were further evaluated and a recommended trail alternative was selected for each section of the trail: Rock Springs Road, Welch Road and Wekiwa Springs Road, and Ponkan Road. The preferred trail alternative for each section is described below, and the location of the alternatives are shown in **Figure 2**. See the West Orange Trail Corridor Study Report, under separate cover, for the concept plans for the preferred trail alternatives.

Rock Springs Road

The Recommended Alternative for the Rock Springs Road section of the trail is a 12-foot wide shared-use path that begins at the intersection of Rock Springs Road and Lester Road, continuing north along the east side of Rock Springs Road until Kelly Park Road. Here, the trail heads east along the south side of Kelly Park Road until Baptist Camp Road, where the trail heads north along the east side of Baptist Camp Road until it reaches the entrance to Kelly Park. The entirety of the alternative is located just off Rock Springs Road, East Kelly Park Road, and Baptist Camp Road.

Welch Road and Wekiwa Springs Road

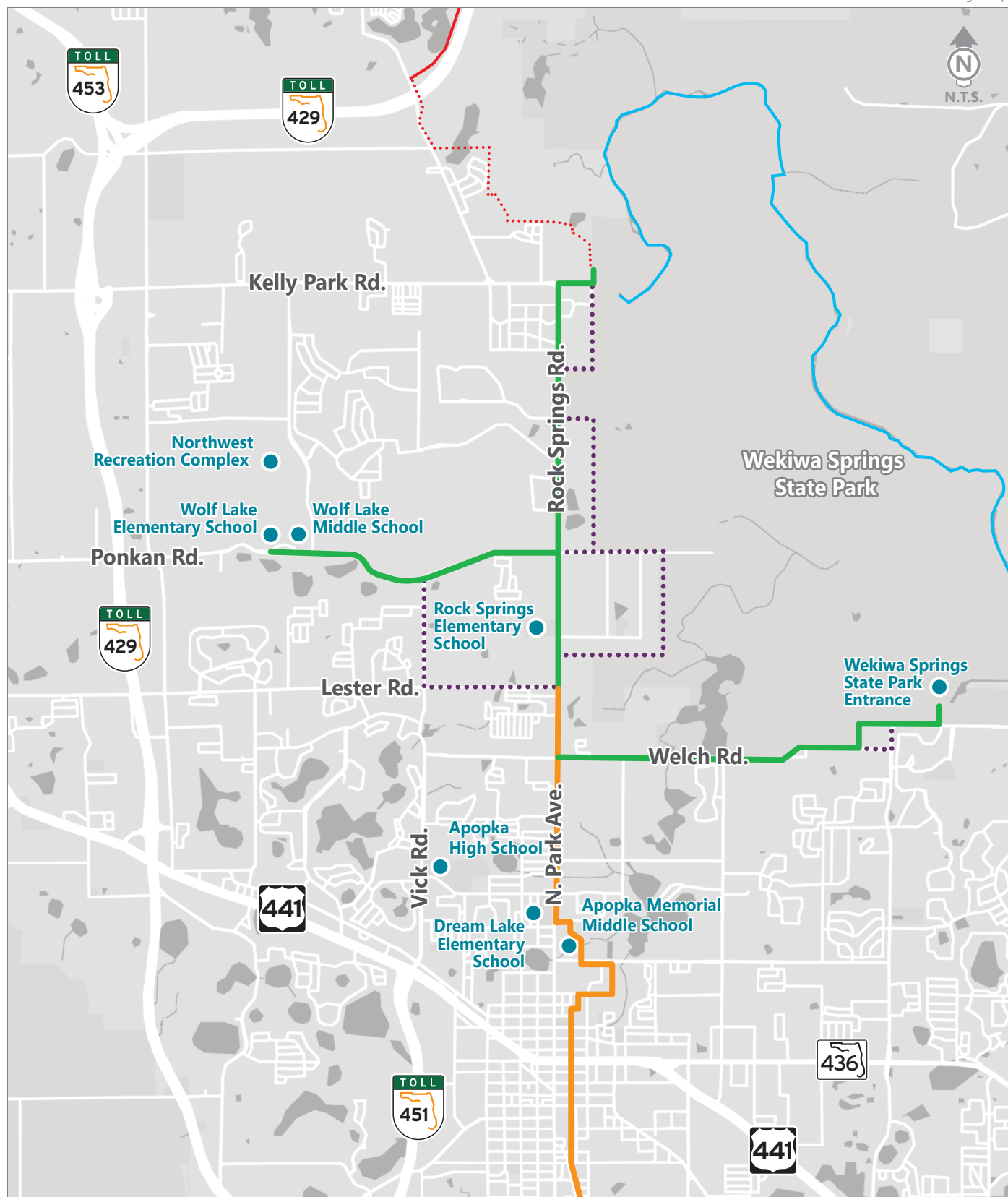
The Recommended Alternative for the Welch Road and Wekiwa Springs Road section of the trail is a 12-foot wide shared-use path that begins at the intersection of Rock Springs Road and Welch Road, continuing east along the north side of Welch Road until just west of Sweetwater Park Village. Here, the trail heads north along the west side of Sweetwater Park Village subdivision, then continues east, wrapping around the north edge of Sweetwater Park Village within Wekiwa Springs State Park property. Finally, the trail connects with the north side of Wekiwa Springs Road, continuing east on Wekiwa Springs Road until the entrance to Wekiwa Springs State Park.

Ponkan Road

The Recommended Alternative for the Ponkan Road section of the trail is a 12-foot wide shared-use path located along Ponkan Road. The trail begins on the south side of Ponkan Road at the intersection of Rock Springs Road and Ponkan Road. The trail heads west along the south side of Ponkan Road until the east leg of the intersection of Ponkan Road and Vick Road, where the trail crosses to the north side of Ponkan Road at a protected crossing with the signalized intersection. From here, the trail continues west along the north side of Ponkan Road until it reaches the entrance to Wolf Lake Elementary School.

Right-of-Way Needs

The total amount of anticipated ROW required for the Recommended Alternatives is 11.9 acres. The Recommended Alternatives are anticipated to require ROW from 98 parcels. These amounts are further broken down by trail segment in **Table 2** below. No relocations are anticipated for any segment of the Recommended Alternatives. The concept plans shown in the West Orange Trail Corridor Study Report, under separate cover, provide an overview of the anticipated impacts for the Recommended Alternative.



- West Orange Trail Recommended Alternative
- ⋯ West Orange Trail Alternative Route, Considered but Not Recommended
- Existing West Orange Trail
- Wekiwa River Blueway Trail
- ⋯ Proposed Wekiwa Trail
- Existing Wekiwa Trail



Figure 2

Proposed Trail Routes
West Orange Trail
Extension Study

Table 2 | Recommended Alternatives ROW Impacts

Preferred Trail Segment	Impact (acres)				Parcels Impacted			Relocations
	Total	Privately-owned	Publicly-owned	Wekiwa Springs State Park	Total	Privately-owned	Publicly-owned	
Rock Springs Road	2.5	1.9	0.1	0.5	53	50	3	0
Welch Road and Wekiwa Springs Road	7.3	0.1	4.7	2.7	14	12	2	0
Ponkan Road	2.1	1.3	0.8	N/A	31	28	3	0

Impacts Summary

The Recommended Alternatives are not contained within the existing ROW and will require approximately 11.9 acres of additional ROW. Within the Recommended Alternatives, the most prominent land use is Residential followed by Agricultural. No additional drainage ponds are required, and no floodplain encroachment is anticipated for the project area. It is unlikely that contamination would affect completion of any of the Recommended Alternatives. No social or cultural facilities are located within the Recommended Alternatives. No Cultural Resource Assessment Surveys (CRAS) have been conducted within the area of the Recommended Alternatives to identify historic or archeological resources. Five wildlife crossings were identified for analysis but will need further investigation to determine the viability for inclusion.

The Recommended Alternative may affect, but is not likely to adversely affect the following species:

- Wood Stork
- Eastern Indigo Snake
- Sand Skink

Cost Estimates

The Recommended Alternative has an estimated total project cost (Rock Springs Road, Welch Road, and Ponkan Road segments) of \$20.6 million, which includes costs for final design and construction. Estimated ROW cost has not yet been determined and will be analyzed during the design phase of this project. **Table 3** provides a summary of the Recommended Alternatives cost estimates by segment. The detailed construction cost estimates are included in the West Orange Trail Corridor Study Report, under separate cover.

Table 3 | Recommended Alternative Cost Estimates Summary

Recommended Alternative Segment	Estimated Design Cost (millions)	Estimated Construction Cost (millions)	Estimated Total Cost* (millions)
Rock Springs Road	\$1.7	\$6.9	\$8.6
Welch Road and Wekiwa Springs Road	\$0.8	\$4.4	\$5.2
Ponkan Road	\$1.4	\$5.4	\$6.8

Notes:

Project Costs are in 2022 dollars.

* Does not include ROW

Public Involvement

Local input was sought throughout the study process. Engagement with local stakeholders and the community began early on with a survey and questions for input on the issues and opportunities.

Surveys

Over the course of the project, three surveys were developed and shared with the public. The surveys were developed to provide the opportunity for the public to view proposed concepts and give feedback on the preferred West Orange Trail study alternatives. A summary of each is provided below.

Survey #1

The first online survey was posted along with the website launch. The purpose of the first survey was to help the study team better understand the public perception of existing conditions in the study area and the types of improvements the public would like considered. It ran from June 5 to July 18, 2021, and received 366 responses.

Survey #2

The second online survey was posted to the project website following the virtual public meeting. The purpose of the survey was to receive input on the public's preference for the proposed alternatives. This survey was open from January 27 to February 28, 2022, and received 307 responses.

Survey #3

The third online survey was posted to the project website along with the second public meeting. The purpose of the survey is to receive input from the public regarding the study recommendations prior to finalization. This survey was open from September 22 to October 20, 2022, and received 111 responses.

Local Agency and Stakeholder Meetings

Over the course of the study, several meetings were held with local agencies and stakeholders. MetroPlan Orlando, the City of Apopka, Orange County, Orange County Parks and Recreation, Bike/Walk Central Florida, Florida Department of Environmental Protection (FDEP), Wekiwa River Basin State Park, and LYNX were amongst the groups that were engaged with the project's development.

Public Meetings

Two public meetings were held during the study. The public meetings were held at two key milestones in the study (1) during the alternative's development and selection stage and (2) during the recommended improvements refinement and documentation stage. The first public meeting, Alternatives Community Meeting, was held on January 27, 2022. The second public meeting, Recommended Alternative Community Meeting, was held on September 22, 2022.

Alternatives Community Meeting

The following is a summary of questions and feedback received during the Q&A session of the first public meeting:

- Questions about trailheads/facilities being proposed for the West Orange Trail
- Questions about separate bike lanes being included with the project in addition to the shared-use path
- Desire for the trail to be located along the border of Wekiwa Springs State Park
- Request for pedestrian/cycling safety and comfort to be integrated into the design process
- Questions about potential pedestrian/bicyclist safety improvements at intersections of the trail and driveways/side streets

Recommended Alternative Community Meeting

The following is a summary of questions and feedback received during the Q&A session of the second public meeting:

- Questions about impacts of the trails to Wekiwa Springs State Park
- Questions about fencing/barriers to keep trail users out of both the state park and the homes within Sweetwater Park Village
- Desire for the Welch Road trail to continue along Welch Road and not travel behind the houses in Sweetwater Park Village
- Questions about connectivity of the West Orange Trail to other nearby trails and Wekiwa Springs State Park
- Request for trees and landscaping to be provided along the trails to provide a buffer from the roadway and protection from the sun
- Questions about the timeline and funding for the project

Additional Community Engagement

A study website was developed and made live at the start of the study. The website was frequently updated and a constant contact list, populated by email sign up, was used through the study to provide up to date information on changes to the website and information relating to upcoming events including public meetings to the public. Reports from the study were also made available for download on the website. A record of all communication received outside of scheduled meetings was documented throughout the study.

Yard signs were placed throughout the study area along Rock Springs Road, Welch Road, and Ponkan Road for the website launch and prior to the two public meetings. The signs contained a quick response (QR) code which directed to the study website.

Post card mailers were distributed to property owners adjacent to the study area for the website launch. Direct mail notifications were sent to property owners along Sandpiper Street prior to the first public meeting and sent to property owners along Sandpiper Street, portions of Welch Road, and to the Sweetwater Park Village community prior to the second public meeting.

Final Recommendations and Next Steps

The next steps for the West Orange Trail Phase 4 Trail Extension are design and ROW acquisition. The design phase will refine the conceptual plans recommended in this corridor study to provide implementable construction plans for the trails. Based on the current MetroPlan Orlando Metropolitan Transportation Plan (MTP), the design phase (and subsequent phases) for the different segments will occur at different times.

Funding

The Recommended Trail Alternatives along Rock Springs Road, Welch Road, and Ponkan Road are not currently funded for design, ROW acquisition, or construction.