Transportation Planning Division

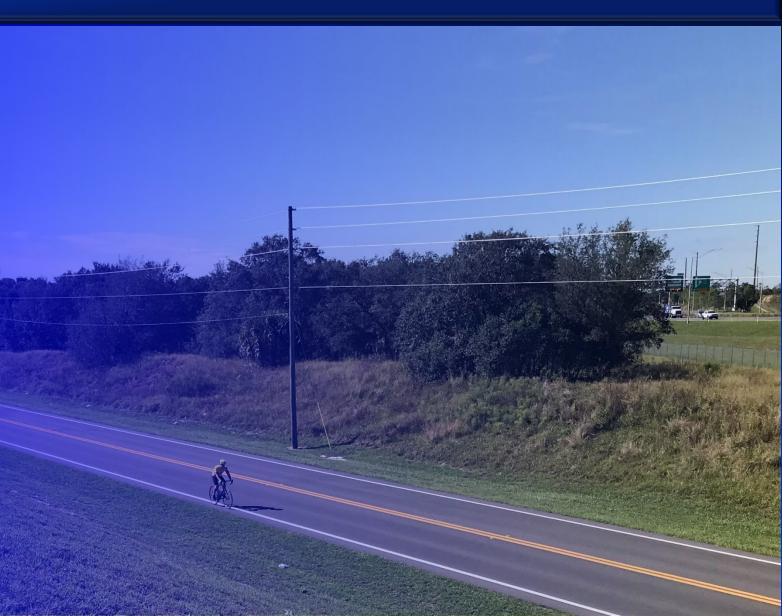
TINY ROAD RCA STUDY Public Meeting

November 2, 2023



Presentation Outline

- Introductions
- Overview
- Existing Conditions
- Preferred Alternative
- Public Engagement
- Public Comment







Nicole H. Wilson
DISTRICT 1 COMMISSIONER



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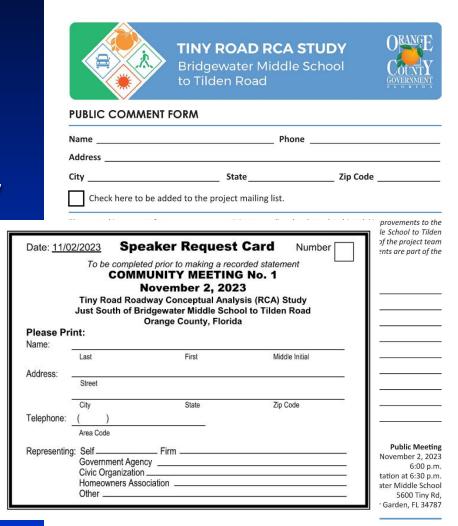
Call, Email, or Visit Website https://tinyroadstudy.com





Meeting Instructions

- The presentation will be followed by a question-and-answer period.
- Comments will be addressed in the order they are received.
- If you received a newsletter, you are on the project mailing list. If you did not, please sign in and provide your address to be added to the mailing list.





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- Tiny Road is on Orange County's Long Range Transportation Plan
- The study begins at the Bridgewater Middle
 School southern property line and ends at Tilden
 Road Approximately 1.9 miles
- The corridor is mostly residential on the east side and bordered on the west by the Water Conserv II property for the majority of the corridor.





IDENTIFY IMPROVEMENTS:

- Document Project Need
- Balance Needs of all users
 - Safety
 - Mobility
 - Comfort
 - Connectivity

















STUDY PROCESS





ANALYZE EXISTING CONDITIONS



DEVELOP PREFERRED ALTERNATIVE











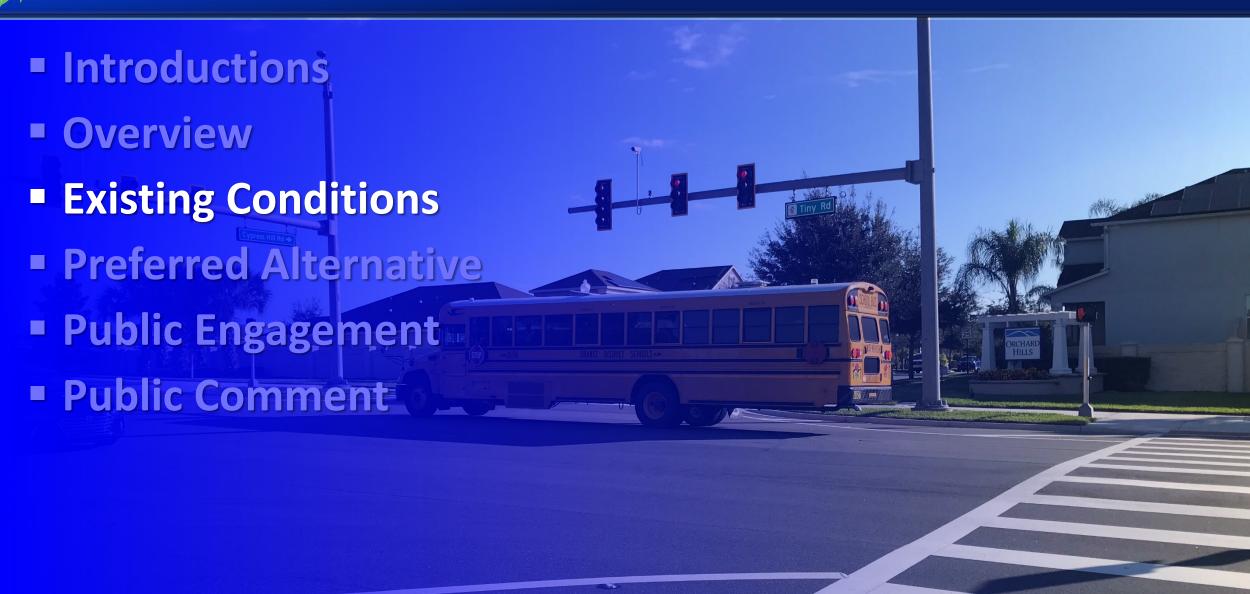








Presentation Outline





ROADWAY GEOMETRY AND CHARACTERISTICS

- Tiny Road is a paved two-lane roadway
- The alignment has several hills throughout the northern portion of the corridor that limit sight distance.
- There is an existing 10' multi-use path on the east side from the southern limit of the project to before the SR 429 overpass.





Existing Conditions

COMMUNITY FEATURES

Schools

- Bridgewater Middle School
- Keene's Crossing Elementary School
- Foundation Academy
- The Goddard School of Winter Garden

Churches

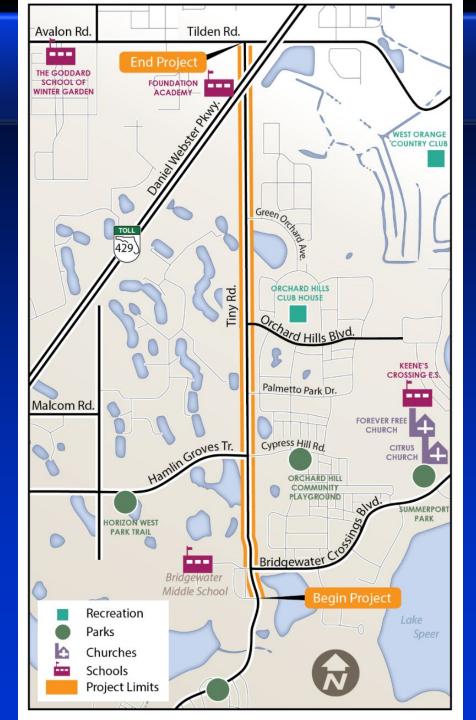
- Forever Free Church
- Citrus Church

Parks

- Summerport Park
- Horizon West Park Trail and future Horizon West Regional Park
- Orchard Hill Community
 Playground

Recreation

- West Orange County Club
- Orchard Hills Club House





LAND USE

Orange County Zoning

P-D: Planned Development District

A-1: Citrus Rural District

R-T-2: Combination Mobile Home and Single-Family Dwelling District

City of Winter Garden Zoning

PUD: Planned Unit Development

R-1: Single Family Residential District





Existing Conditions

CONTEXT CLASSIFICATION C3R SUBURBAN RESIDENTIAL

- Allows for a 35 mph Design Speed
- Representative of Medium Density Population
- Facilitates Inclusion of Shared Use Path for Pedestrian and Bicycle Traffic C2T-Rural Town C3R-Suburban C6-Urban Core CI-Natural C2-Rural C3C-Suburban C5-Urban C4-Urban

Commercial

General

Center

Residential



DRAINAGE

- Project is within the St. John's
 River Water Management
 District (SJRWMD) and the
 South Florida Water
 Management District
 (SFWMD)
- Southern half of the project shown here is in the SFWMD jurisdiction.

Southern Drainage Basin Map (SFWMD)

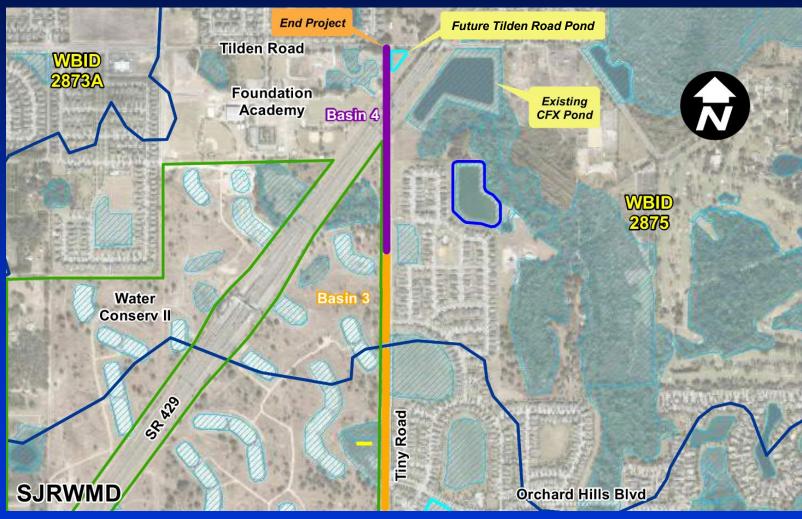




DRAINAGE

- Northern half of the project shown here is in SJRWMD jurisdiction.
- Meet SJRWMD special basin criteria for the Ocklawaha River Hydrologic Basin, Wekiva Recharge Protection Basin, and the Lake Apopka Hydrologic Basin.

Northern Drainage Basin Map (SJRWMD)





EXISTING ENVIRONMENTAL ASSESSMENT

- Wetland impacts are expected to be minimal.
- No protected species were observed in the study corridor; however, habitat supporting flora and fauna species of concern include:
 - Gopher tortoise, Eastern Indigo snake, snail kite, sand skink, Florida sandhill crane, wood stork, little blue heron, tri-colored heron, American alligator, and Florida pine snake
- Surveys for protected wildlife species will be performed during design.
- No historic buildings or archaeological sites were identified.







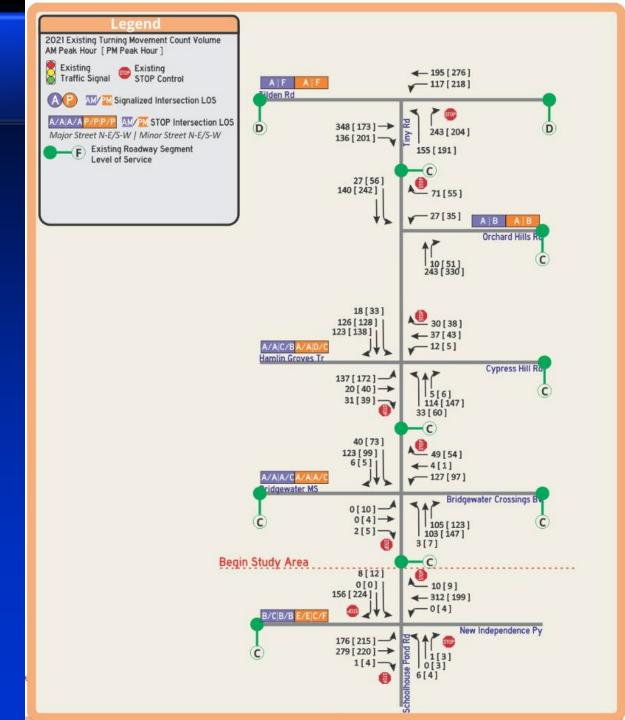




Existing Conditions

TRAFFIC ANALYSIS – NO BUILD CONDITIONS

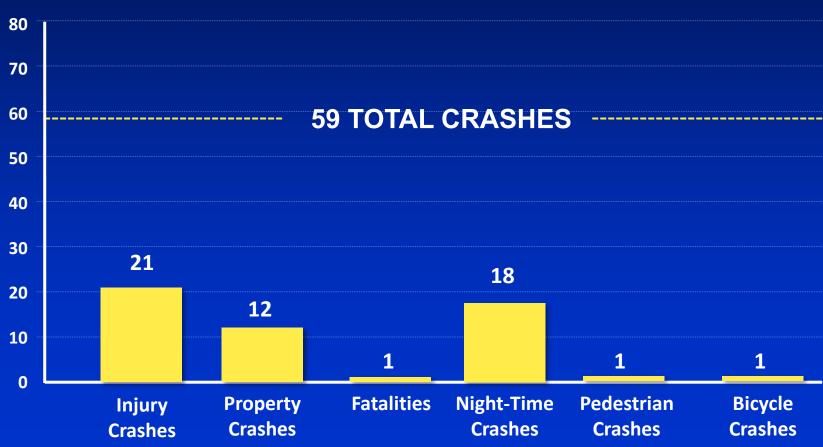
- Existing Year Average Annual Daily Traffic (AADT) Volume: 9,000
- Opening Year 2028 AADT: 15,700
- Mid-Design Year 2038 AADT: 25,100
- Design Year 2048 AADT: 34,600
- Existing Level of Service (LOS) = C, or StableTraffic Flow
- Pedestrian/Bicycle Counts Along Tiny Road (7am-7pm)
 - 37 Pedestrians
 - 18 Bicyclists





SAFETY AND CRASH HISTORY

Seven-Year Period 2015 – 2021





Presentation Outline

Introductions Overview Existing Conditions Preferred Alternative Public Engagement Public Comment



Alternative Analysis

ROUNDABOUT

- Roundabouts have fewer conflict points compared to conventional intersections.
- Roundabouts promote slower speeds through intersection and along the corridor.
- Crash severity can be reduced compared to conventional intersections.
- Pedestrians only cross one direction of traffic at a time as they traverse a roundabout.
- Unlike conventional, signalized intersections, Roundabouts are not affected by power outages.





Alternative Analysis

PEDESTRIAN HYBRID BEACON (PHB)

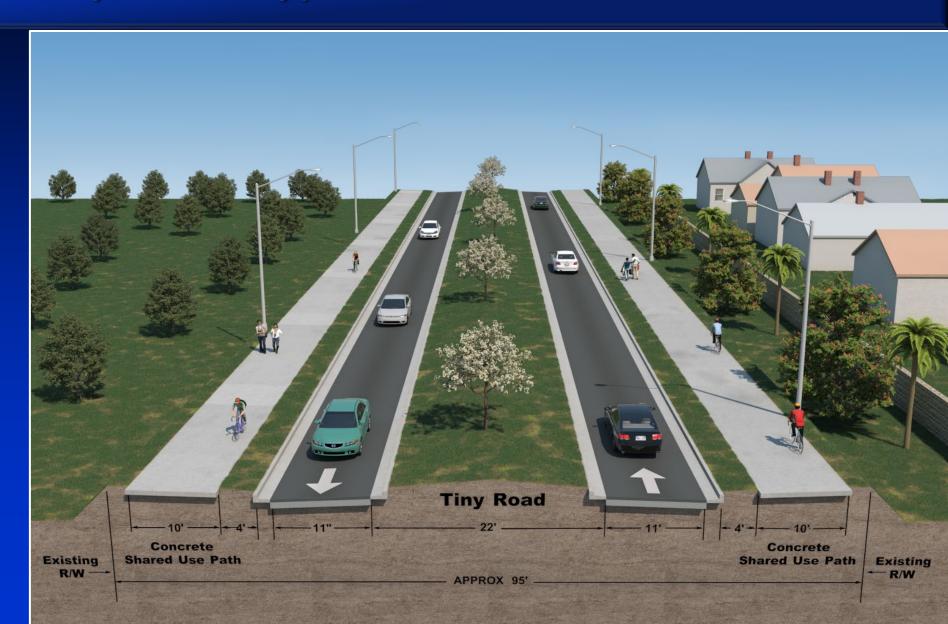


- PHBs remain dark until activated by someone waiting to cross the road.
- They can help increase driver attention to pedestrians crossing the roadway and reduce rear-end collisions.
- The red signal indication requires motorists to make a complete stop.



Preferred Tiny Road Typical Section

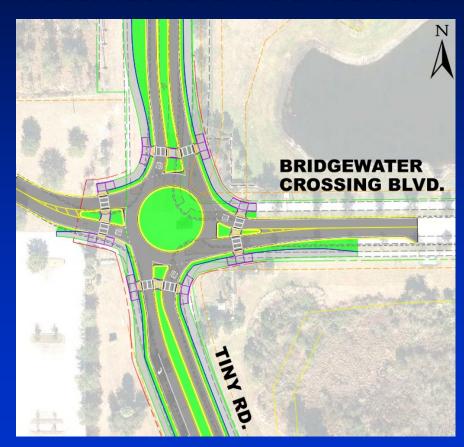
- Two 11-foot-wide travel lanes with 22foot raised median
- Ten-foot-wide shared use paths on both sides
- Design Speed is 35mph
- Closed drainage system with stormwater ponds





Alternative Analysis: Bridgewater Crossing Blvd.

Alternative 1: Roundabout



- Curvature causes drivers to slow down.
- Accommodates school buses and fire trucks.

Alternative 2: Traffic Signal



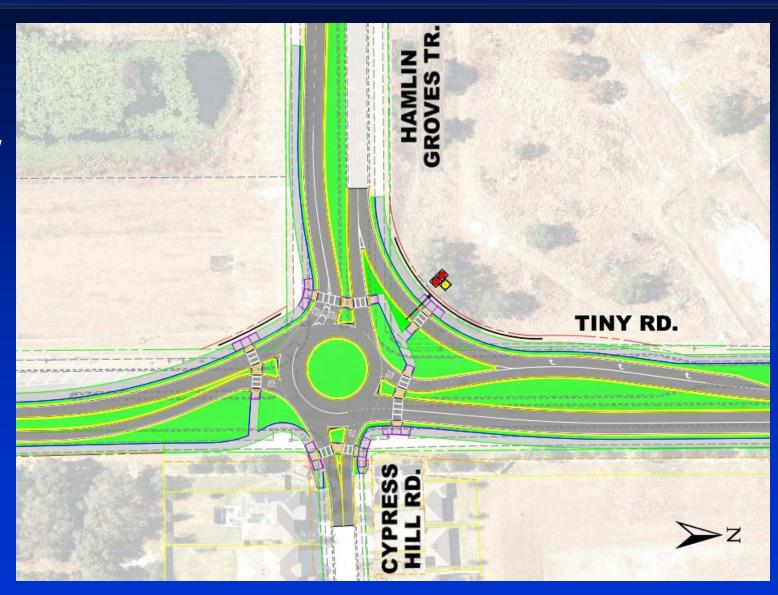
- Protected crossings for pedestrians.
- Raised intersection creates traffic calming.



Alternative Analysis: Hamlin Groves Trail

Alternative 1: Roundabout (Preferred)

- Curvature causes drivers to slow down.
- Design of right turn lane onto Hamlin Groves Trail encourages drivers to turn right to reach shopping/dining and SR 429 rather than cutting through neighborhoods.
- Pedestrian Hybrid Beacon on right turn creates protected crossing for pedestrians.

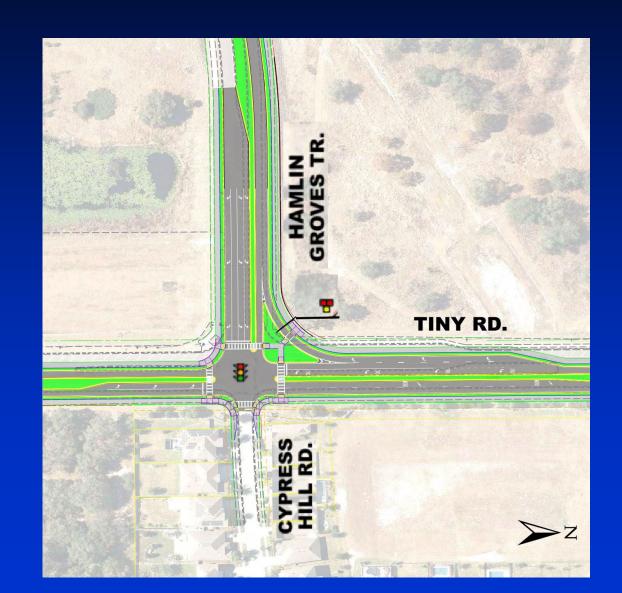




Alternative Analysis: Hamlin Groves Trail

Alternative 2: Traffic Signal

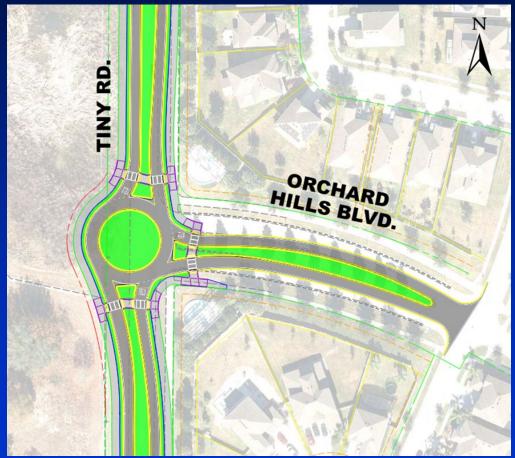
- Adds additional left turn lane onto Tiny Road heading north.
- Design of right turn lane onto Hamlin Groves Trail encourages drivers to turn right to reach shopping/dining and SR 429 rather than cutting through neighborhoods.
- Pedestrian Hybrid Beacon (PHB) on right turn creates protected crossing for pedestrians.





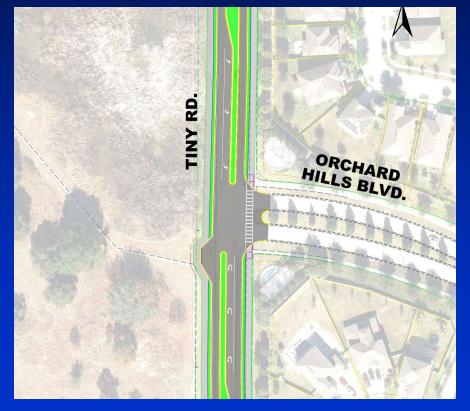
Alternative Analysis: Orchard Hills Boulevard

Alternative 1: Roundabout (Preferred)



- Curvature causes drivers to slow down.
- Left turns from Orchard Hills Blvd are safer.

Alternative 2: Median Opening



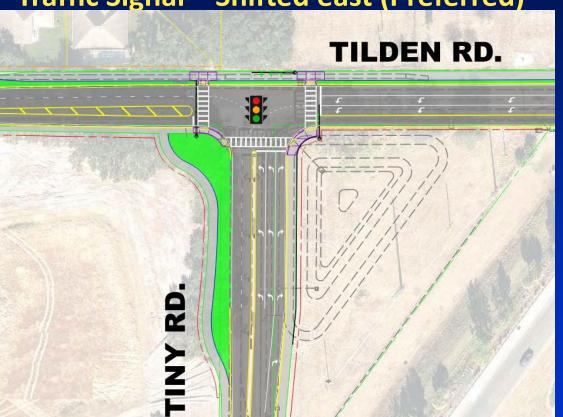
- Maintain existing access
- Additional space added for u-turns.



Alternative Analysis: Tilden Road

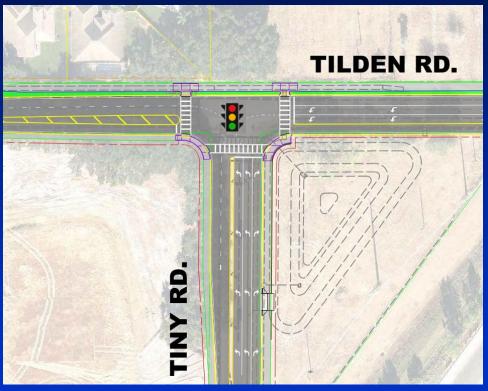
Alternative 1:

Traffic Signal – Shifted east (Preferred)



Alternative 2:

Traffic Signal – Shifted west



- Dual left turns onto Tiny Road and onto Tilden Road
- Multi-use Path (east side) continues across Tilden Rd. and connects with future trail project.



Alternative Pond Sites

- Basin 1Two stormwater pond alternatives
 - Preferred Pond Pond Alt. 1A
- Basin 2Two stormwater pond alternatives
 - Preferred Pond Pond Alt. 2A

Southern Drainage Basin Map (SFWMD)





Alternative Pond Sites

Northern Drainage Basin Map (SJRWMD)

- Basin 3Two stormwater pond alternatives
 - Preferred Pond Pond 3A
- Basin 4Three stormwater pond alternatives
 - Preferred Pond Pond 4A



Preferred Alternative

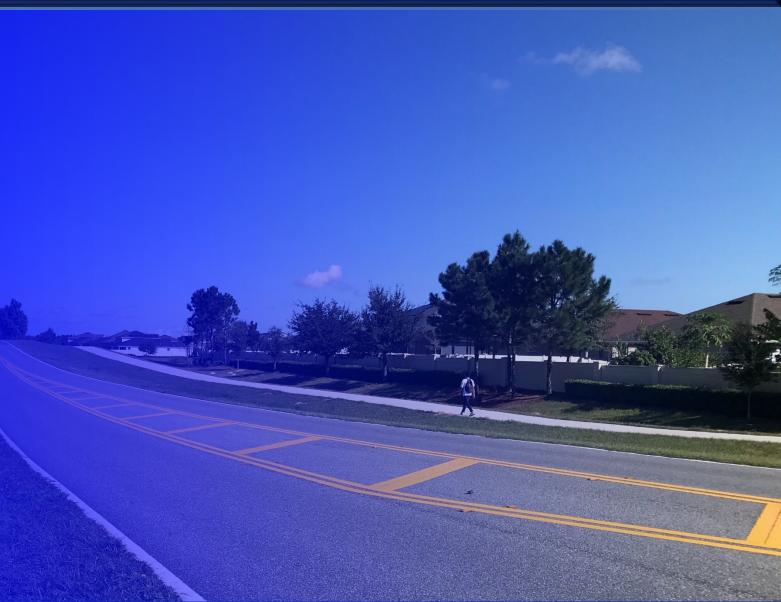
EVALUATION MATRIX

Evaluation Criteria	No-Build Alternative	Alternative 1 (Preferred)	Alternative 2	
Right-of-Way Impacts				
Number of Residential Acquisitions	None	None	None	
Right-of-Way Needed (acres)	None	7.84	7.29	
Number of Parcels Impacted	None	11	8	
Social, Natural, & Physical Impacts				
Social & Neighborhood	None	Low	Low	
National Register Archaeological/Historic Sites	None	Low	Low	
Threatened/Endangered Species	None	Moderate	Moderate	
Acres of Wetlands	None	0.28	0.19	
Acres of Floodplains	None	None	None	
Potential Contamination Sites	None	None	None	
Meets County Level of Service Standard	No	Yes	Yes	
Estimated Costs (Present Day Costs)				
Design (15% of Construction)	No Cost	\$4,652,000	\$4,793,000	
Right-of-Way Acquisition*	No Cost	\$280,000	\$262,000	
Roadway Construction	No Cost	\$31,010,000	\$31,950,000	
CEI (15% of Construction)	No Cost	\$4,652,000	\$4,793,000	
Total Cost **		\$40,594,000	\$41,798,000	



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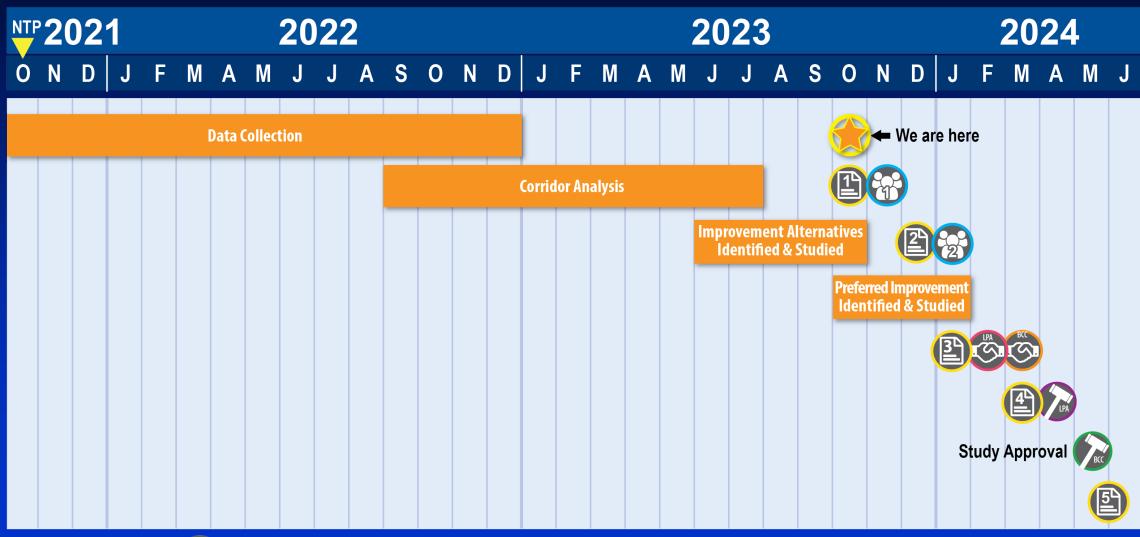
Public Engagement & Schedule

- Community Meeting
- Newsletters
- Project Website
 https://www.tinyroadstudy.com
- Call/Email
- Attend LPA & BCC Hearings





Public Engagement & Study Schedule

















Estimated Design and Construction Schedule

TINY ROAD IMPROVEMENT SCHEDULE										
	2023	2024	2025	2026	2027	2028	2029	2030		
RCA										
DESIGN										
ROW				-			5			
CONSTRUCTION		Ī								



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Ways to Provide Feedback After the Meeting

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