



TURKEY OAK BYPASS STUDY

PROJECT UPDATE

**MPO BOARD MEETING
JULY 2022**

Introduction

- Study Purpose
- Technical Evaluation
- Key Findings & Recommendations



Study Purpose

Address Potential Impacts of Suncoast Parkway Extension

Legislative Funding – Identify Improvements

MPO Study Phase 1 (Today's Presentation)

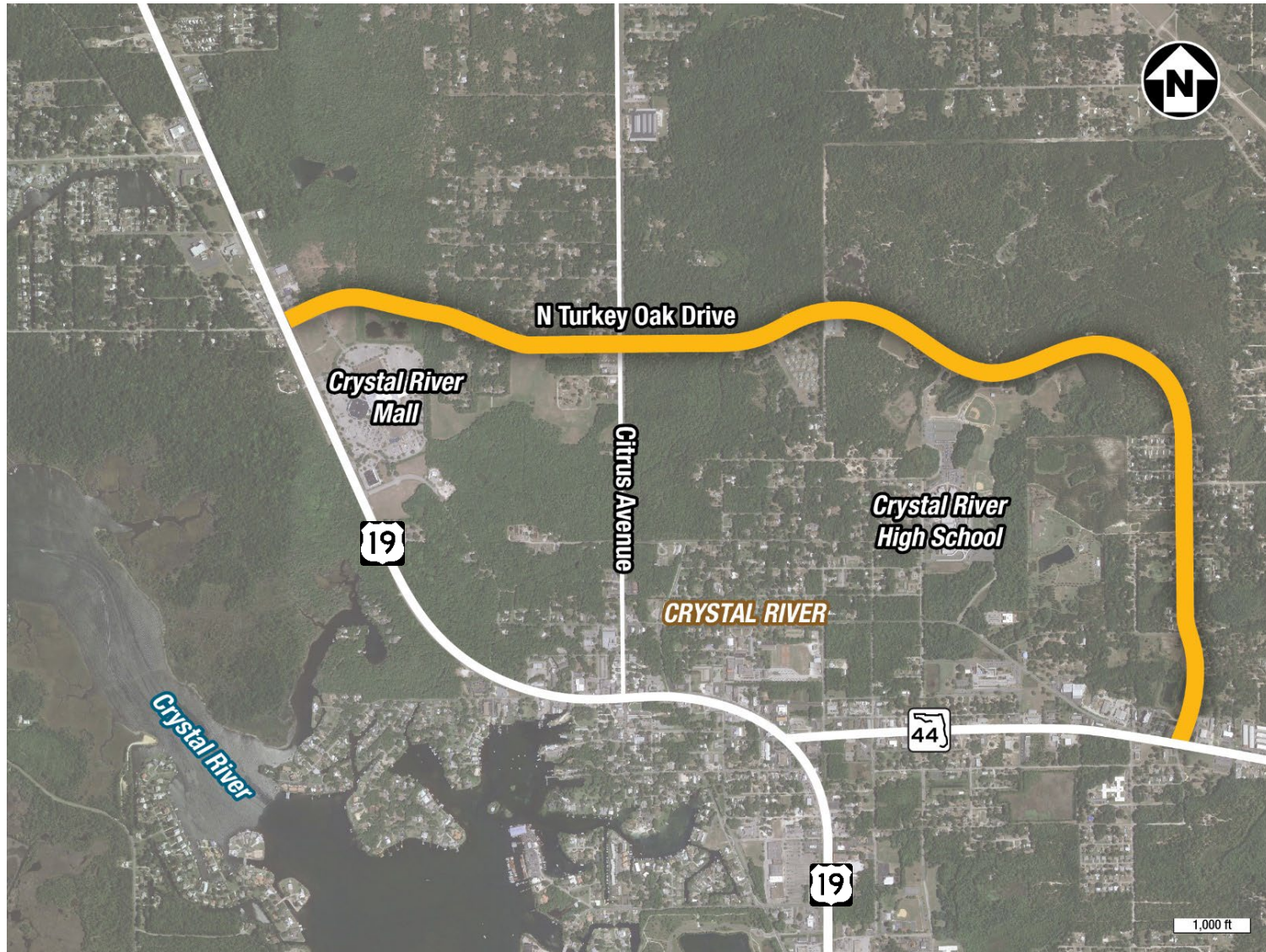
Evaluate Turkey Oak Drive at a Potential By-Pass Corridor

- Traffic Forecasts
- Operational Analysis
- Roadway Condition
- Safety Evaluation
- Other Potential Impacts

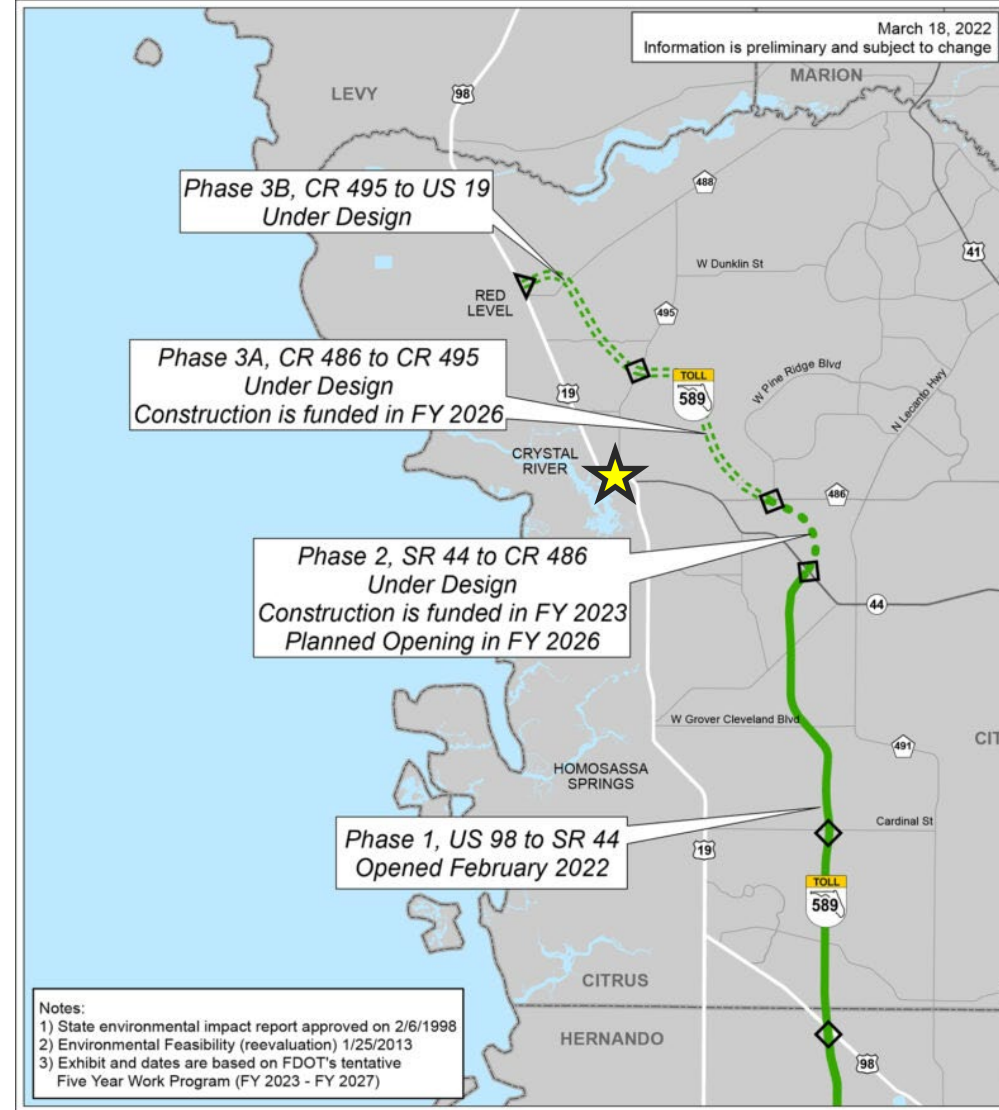
MPO Study Phase 2

Suncoast Parkway Impacts on County Roadways

Area Map



SUNCOAST PARKWAY 2 (SR 589) (Turnpike System Facility)



Alternative Overview

Baseline: 2015 Validation Model

Scenarios

A: 2045 Suncoast Parkway Terminus at CR 486

B: 2045 Suncoast Parkway Terminus at CR 486 + Improvements

- At US 19 (Adding dual SB to EB left turn lanes)
- At Citrus Ave (Left Turn and Right Turn lanes on each approach)
- At SR 44 (WB to NB Right Turn Lane and Dual SB to EB Left Turn Lanes)

C: 2045 Suncoast Parkway Terminus at US 19 (Red Level)

D: Suncoast Parkway Terminus at US 19 (Red Level) + Improvements

(Scenario C Forecast + Scenario B Improvements)

Alternative Overview

Base (2015): 1,878

2045 Scenarios

- Scenario A: 2,261
- Scenario B: 3,080
- Scenario C: 2,172
- Scenario D: 2,498



Base (2015): 3,554

2045 Scenarios

- Scenario A: 4,190
- Scenario B: 5,600
- Scenario C: 3,432
- Scenario D: 4,105

Operational Evaluation

4 Signalized intersections on Turkey Oak Drive

- US 19/ US 98 (N Suncoast Blvd)
- CR 495 (Citrus Avenue)
- Crystal River High School
- SR 44

Traffic volume data was collected over 48-hour window

- AM peak period (7:00 AM to 9:00 AM)
- PM Peak Period (1:45 PM to 3:45 PM)

Operational Evaluation Findings

Existing 2022 Traffic Conditions

- Signalized intersections operate with Level of Service C or better during the AM peak hour and the PM peak hour
- Only deficiency identified is the length of the southbound left-turn lane at intersection of SR 44 and Turkey Oak Drive

Future Volume Forecasting were generated from 2015 to 2045

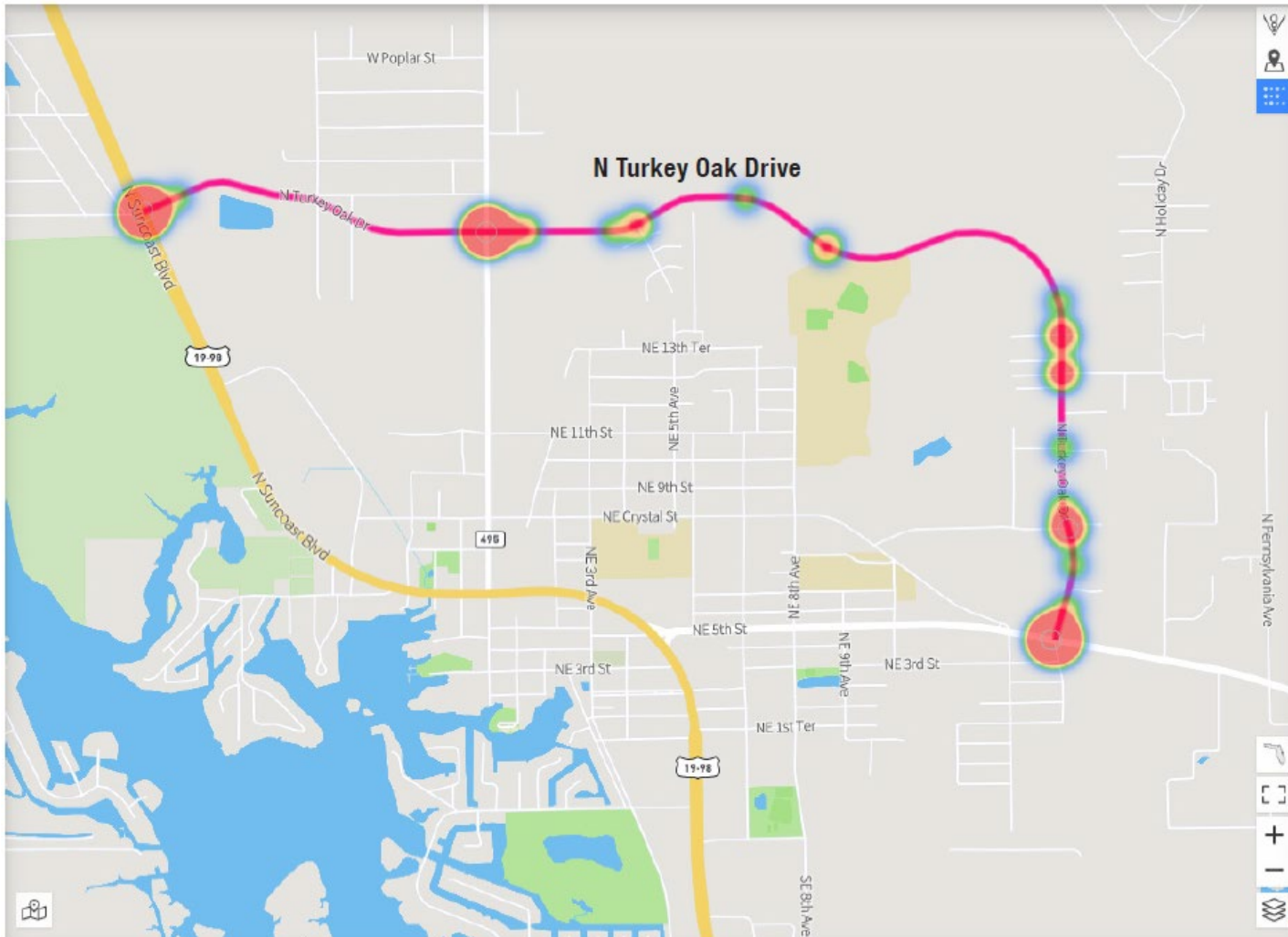
- Design Year (2045) Traffic Conditions
- Southbound left-turn movement at the intersection of SR 44 and Turkey Oak Drive will require improvement

Potential Operational Improvements

Recommended Improvements

- SR 44 and Turkey Oak Drive: Approximate 500 feet extension of southbound left-turn lane
 - Shared through/right-turn lane would be blocked less often by queuing southbound left-turn volumes during AM & PM peak hours
- Minor signal-timing adjustments could likely improve operations of southbound left-turn movement at the intersection

Crash Analysis for N Turkey Oak Drive



- Safety Evaluation Duration: Jan 1st, 2017- Dec 31st, 2021
- Predominant crash types
 - **Rear-end crashes (41.4%)**
 - **Left-turn crashes (22.8%)**
 - **Angle crashes (14.5%)**
- Nearly 15% of crashes occur under dark conditions

Potential Community and Business Impacts

- Crystal River High School impacts
- Existing residential neighborhood impacts
- Citrus River Mall
 - Pending housing redevelopment opportunity on mall site
- New Residential developments along the corridor
- Several businesses at Citrus Avenue and SR 44



Environmental Impacts

Environmental impacts would be limited as potential improvements are focused only intersections improvements or reconstruction of existing roadway.



Pavement Assessment Summary

- 6 Pavement Cores Samples
- Existing Pavement west of Citrus Ave – **Poor Condition**
- Existing Pavement east of Citrus Ave – Good to Fair Condition
- Developed Pavement Design for Forecasted Future Traffic Volumes
- **Conclusion: Pavement Rehab Needed – Remove Existing & Replace with Additional Pavement Thickness (Estimate \$5 Million)**



Key Findings and Recommendation

- Designated By-Pass Not Recommended without Improvements
- Consider Prohibition of Thru Truck Traffic
- Seek Funding for Reconstruction of Deficient Pavement
 - Reconstruction should consider flooding issues
- Seek Funding for Southbound Turkey Oak Dr Improvements
 - Left Turn Lane
 - Signal Timings

Questions and Comments

