PASCO COUNTY MPO

Micromobility Traffic Counts Strategic Plan & Data Collection

MARLIN

CTST Meeting: January 22, 2025

OBJECTIVES

- Assist Pasco County in achieving its primary strategic planning goals of **creating a thriving community**, **enhancing quality of life**, **stimulating economic growth**, and **improving organizational performance**
- Assist Pasco County in gaining **data-driven insights** regarding bicycle/pedestrian/micromobility traffic volumes
- Assist Pasco County in **improving safety for all modes** by using cutting-edge traffic data collection technology
- Deliver a **strategic plan** to Pasco County MPO to assist in developing an efficient and effective micromobility traffic monitoring program to further fulfill transportation planning goals

SCOPE

Task 1 - Host Kick-off Meeting

Task 2 - Develop Documentation and Evaluate Micromobility Counting Programs

Task 3 - Establish Data Partnerships/Coordination

Task 4 - Conduct Site Selection Visits (virtual and on-site)

Task 5 - Collect Data at 3 locations

Task 6 - Develop a Strategic Plan & Final Presentation

SCHEDULE

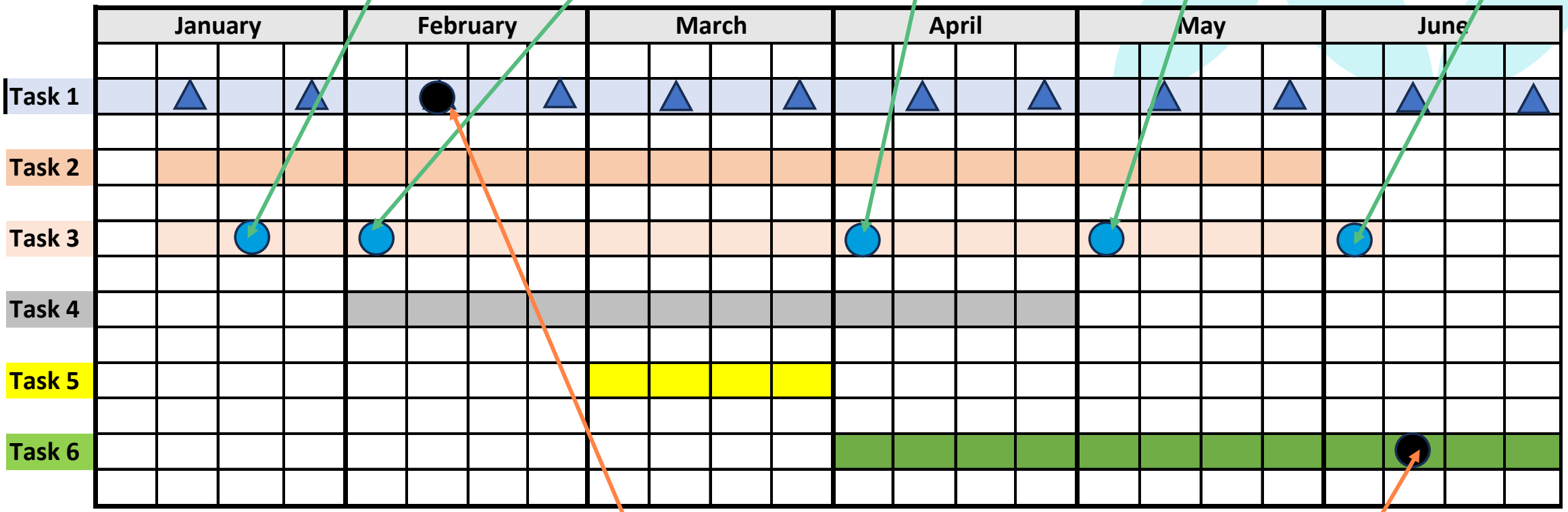
CTST 1/22/25

CAC, TAC, BPAC 2/5/25

Additional Partner meeting Pasco East (April TBD)

Additional Partner meeting Pasco West (May TBD)

CAC, TAC, BPAC 6/4/25



Bi-weekly calls

Partner Presentations

Board Presentations

Board Presentation 2.13.25

Board Presentation 6.12.25

DELIVERABLES

Micromobility Data Collection Results

- **3 Locations**
  1. Starkey Boulevard & Highway 54 - Starkey Gap Trail Crossing/C2C
  2. Ridge Road – Suncoast Trail Crossing/C2C
  3. State Highway 19 & Sea Ranch Road
     - Traffic volume, mode, trajectory, and near-miss analysis

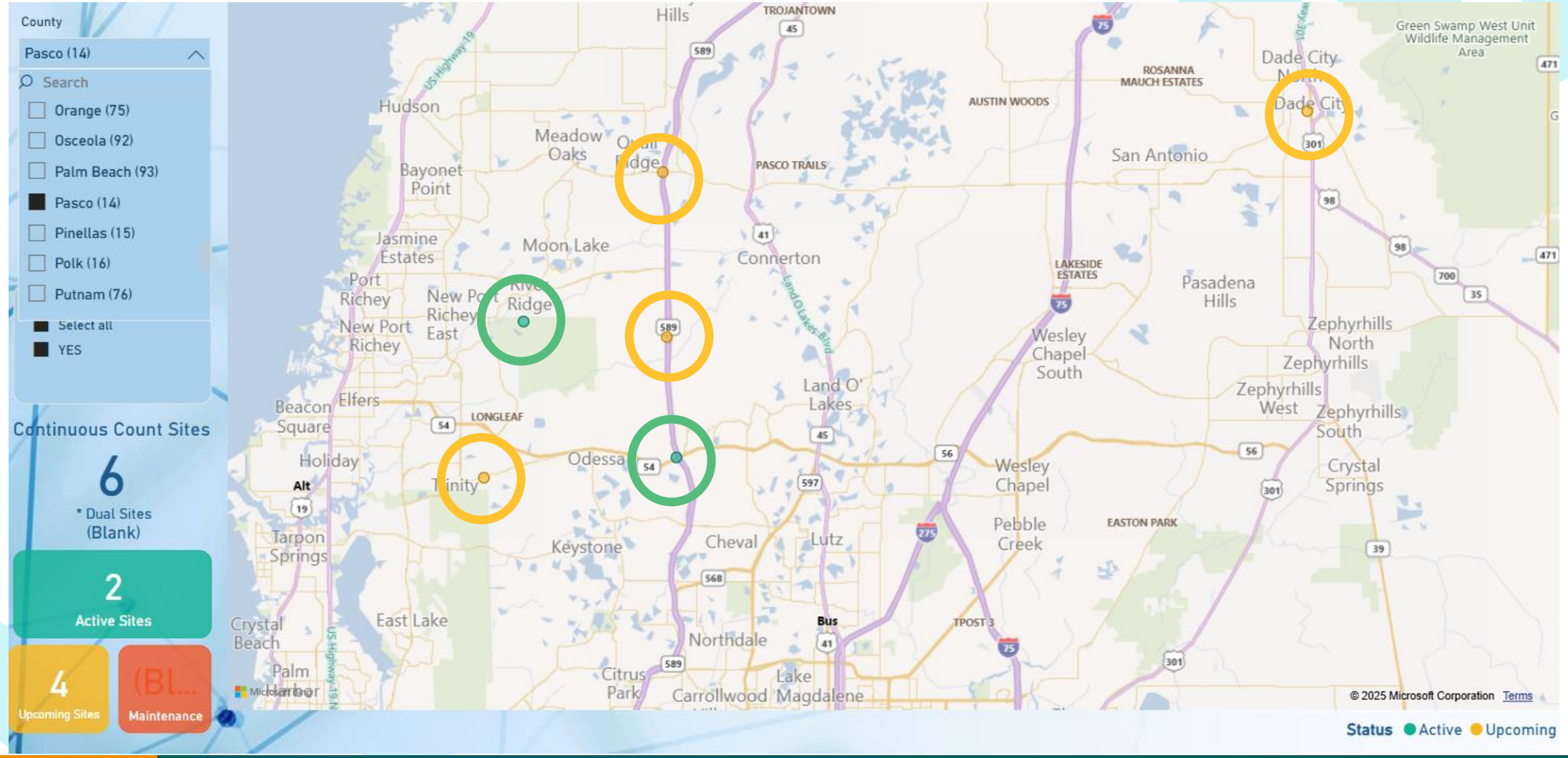
Strategic Plan

- Review of related micromobility counting occurring in Pasco County
- Map past and proposed counting sites county-wide
- Documentation of virtual/onsite evaluations of proposed sites
- Documentation of education and field training to all partners
- Recommendations for the next steps in developing the counting program

PARTNERS

- Pasco municipalities, non-profits, universities, hospitals, FDOT, DEP, and any agency/organizations engaged in bicycle/pedestrian/micromobility data collection

PARTNERS – FDOT STATEWIDE NON-MOTORIZED TRAFFIC MONITORING PROGRAM



TECHNOLOGY

Smart Camera Data Collection

High-quality portable cameras capable of detecting and tracking multimodal classifications

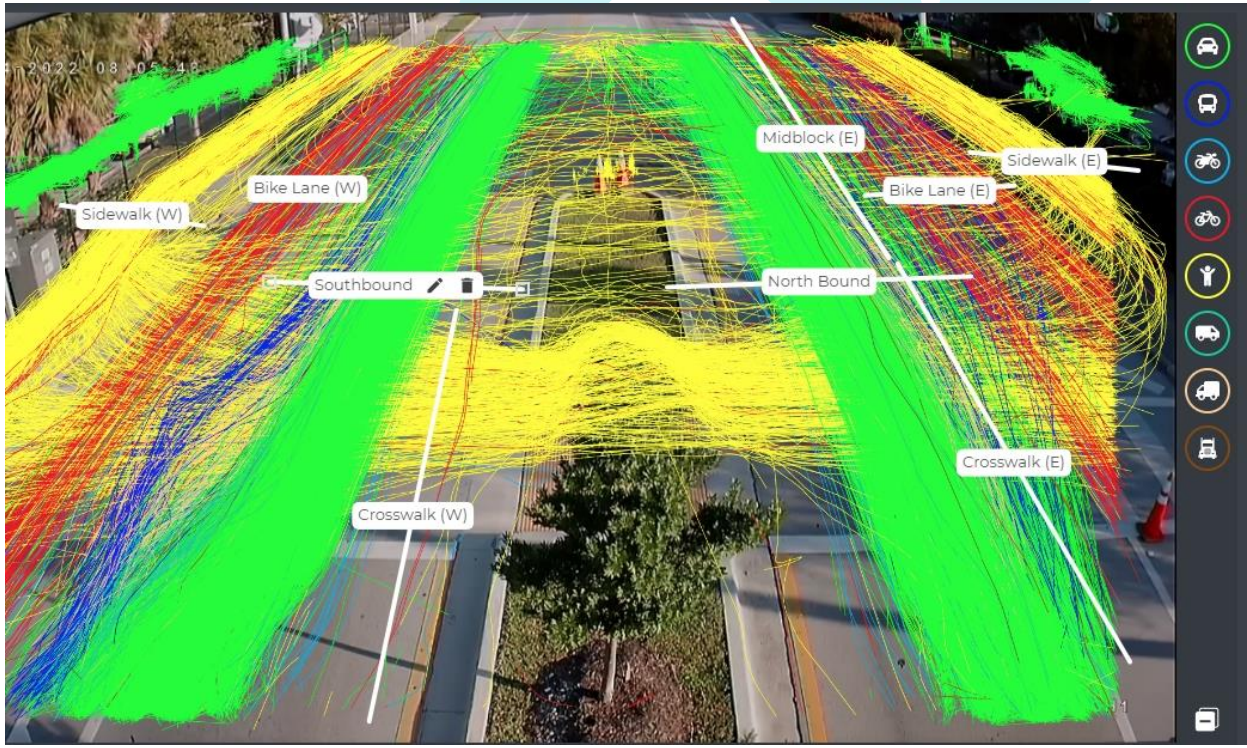
- Vehicle, truck, bus, motorcycles, bike, ped, scooter

AI-Powered Analysis

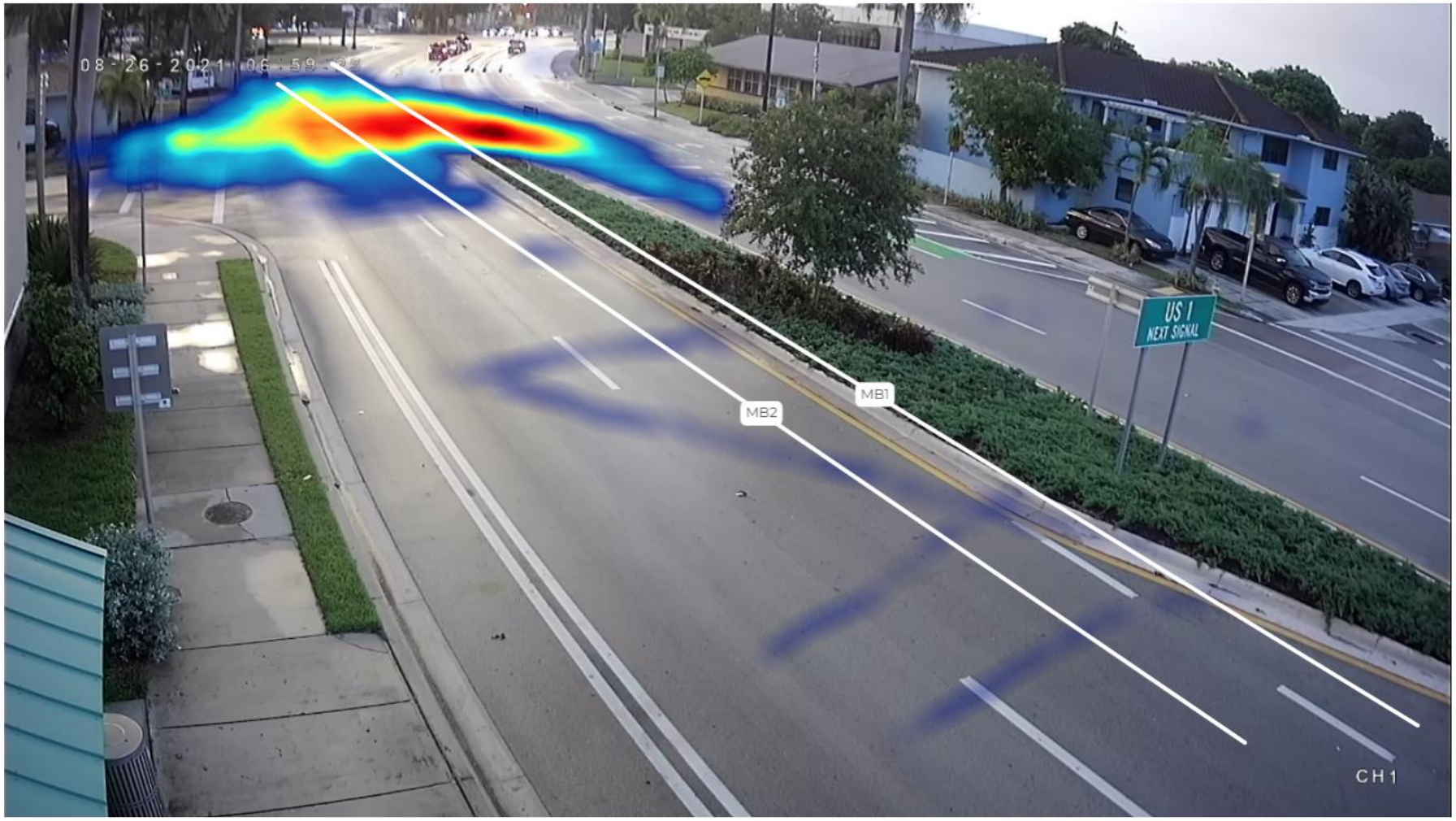
- Volume, mode, directions, trajectory

Near-Miss Analysis

SMART CAMERA DATA COLLECTION

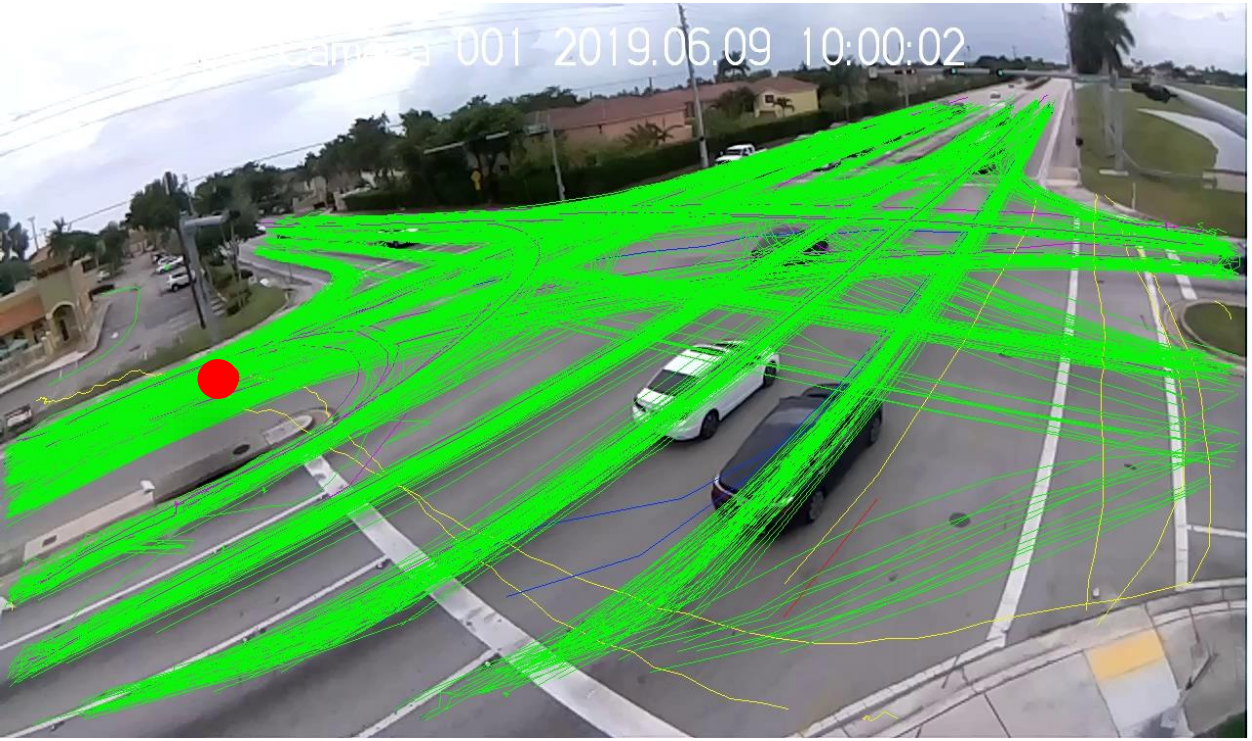


TRADITIONAL NEAR MISS TECHNOLOGY



t are collision points?

PREDICTIVE CRASH DETECTION



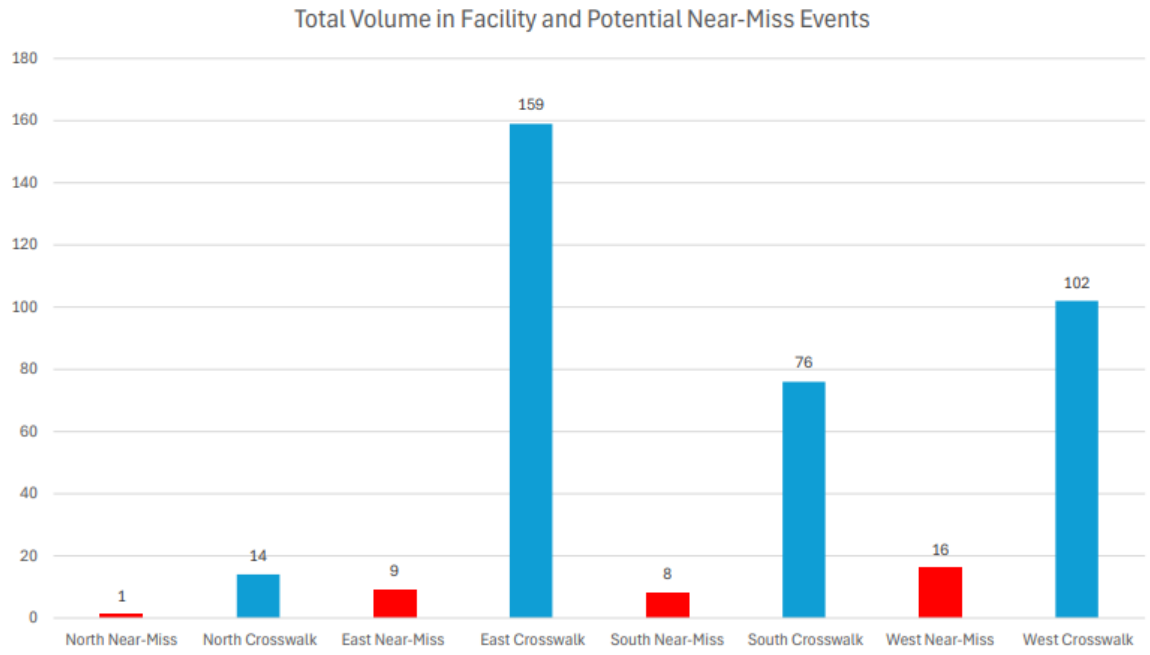
POST PROCESS VIDEO REVIEW

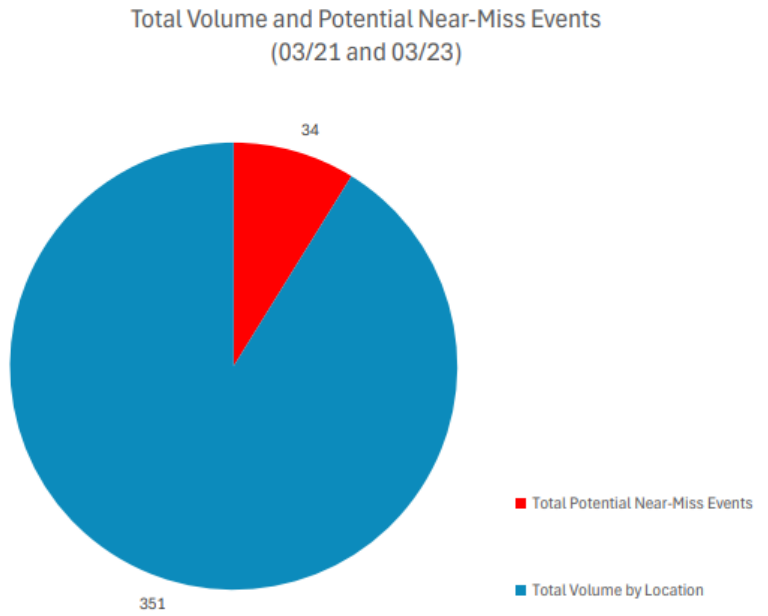
NEAR-MISS EXAMPLES

PEDESTRIAN AND BICYCLE NEAR-MISS ANALYSIS

Site Name:	US Hwy 27 and E Tharpe St	**GPS:**	30.463669, -84.282452
Camera Location:	NW and SE sidewalk	**Location:**	Tallahassee, Florida
Date Collection Period:	03/21/2024 and 03/23/2024	**Count Type:**	Video Object Detection

Date	North Crosswalk	North Crosswalk Near-Miss	East Crosswalk	East Crosswalk Near-Miss	South Crosswalk	South Crosswalk Near-Miss	West Crosswalk	West Crosswalk Near-Miss	Total Volume by Location
3/21/2024	6	1	86	5	41	6	51	9	184
3/23/2024	8	0	73	4	35	2	51	7	167
Total	**14**	**1**	**159**	**9**	**76**	**8**	**102**	**16**	**351**





NEAR-MISS EXAMPLES

Figure 2: A bicyclist travels on Tharpe St and deviates in the middle of the intersection to allow a vehicle to pass and then continues westbound. (Date 03/21/2024 at 08:38 AM)

Figure 4: Another event in which a bicyclist using the west crosswalk properly travels near an incoming vehicle performing a left turn in the intersection. (Date 03/21/2024 at 12:15 PM)

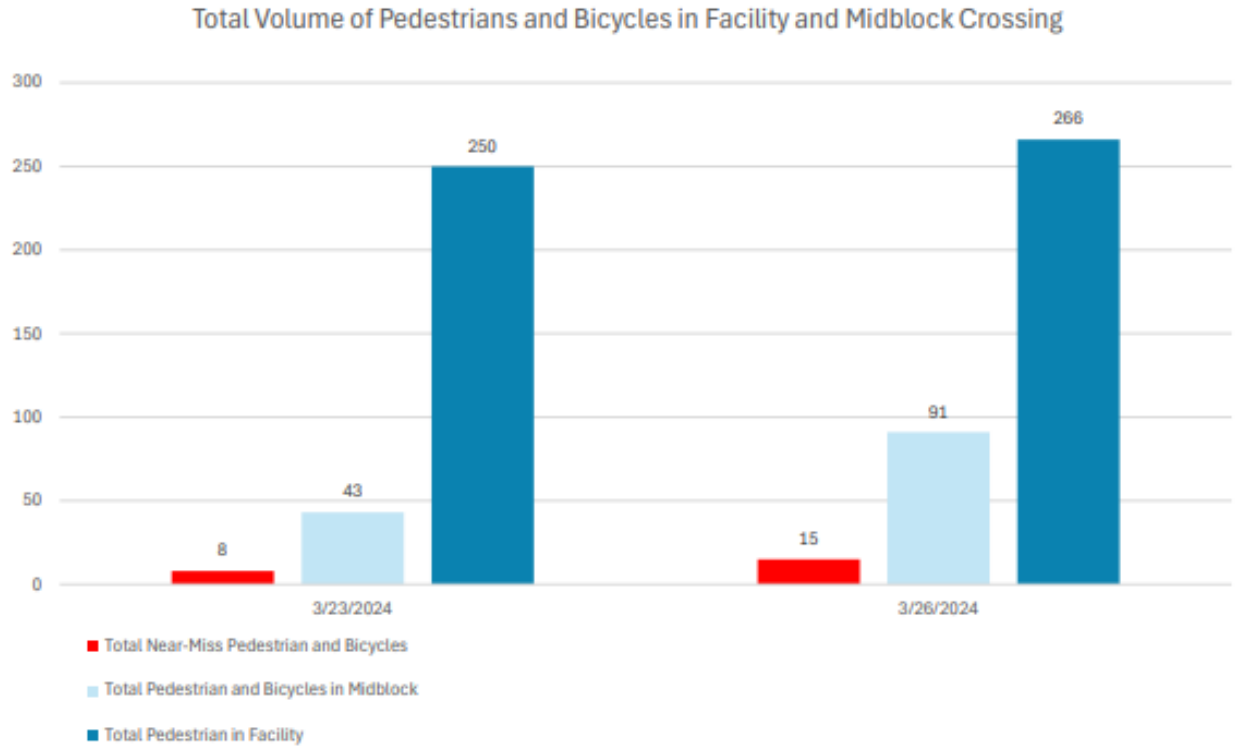
Figure 1: Pedestrian crossing west crosswalk and needs to stop due to vehicle performing a left turn in a low visibility environment. (Date 03/21/2024 at 05:08 AM)

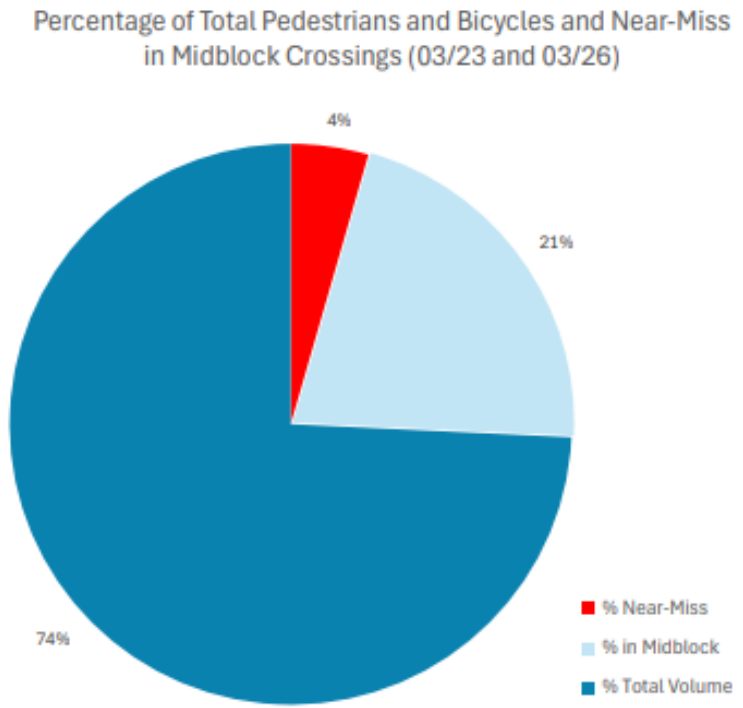
PEDESTRIAN AND BICYCLE NEAR-MISS ANALYSIS

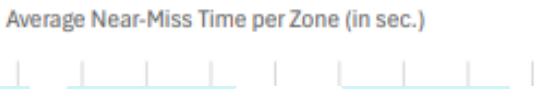
MARLIN

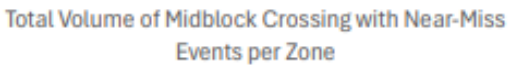
Site Name:	US Hwy 27 between Sharer Rd and Lakeshore Dr (S)	**GPS:**	30.477274, -84.298319
Camera Location:	NE corner	**Location:**	Tallahassee, Florida
Date Collection Period:	03/23/2024 and 03/26/2024	**Count Type:**	Video Object Detection

Date	Total Midblock Crossing Volume	% in Midblock	Total Potential Near-Miss Events	% Near-Miss Events	Total Volume by Location
3/23/2024	43	14%	8	3%	250
3/26/2024	91	29%	15	6%	266
Total	**134**	**21%**	**23**	**4%**	**516**









Aerial Map of Study Area showing Zone 1 and 2
ZONE 2
ZONE 1
27
27
Shaker Rd
Shaker Rd

BICYCLE
PEDESTRIAN

Figure 4: Pedestrian starts crossing westbound near the Gas Station driveway and passes near an incoming vehicle entering US Hwy 27 from the east leg of Sharer Rd. It represents a near-miss case where the driver had to evade the pedestrian. (Date 03/26/2024 at 3:35 PM)

Figure 6: Four pedestrians depart the bus shown in the Bus Stop on the east sidewalk and perform a midblock crossing behind the bus and travel westbound into the median and west sidewalk with incoming traffic. (Date 03/26/2024 at 09:55 AM)

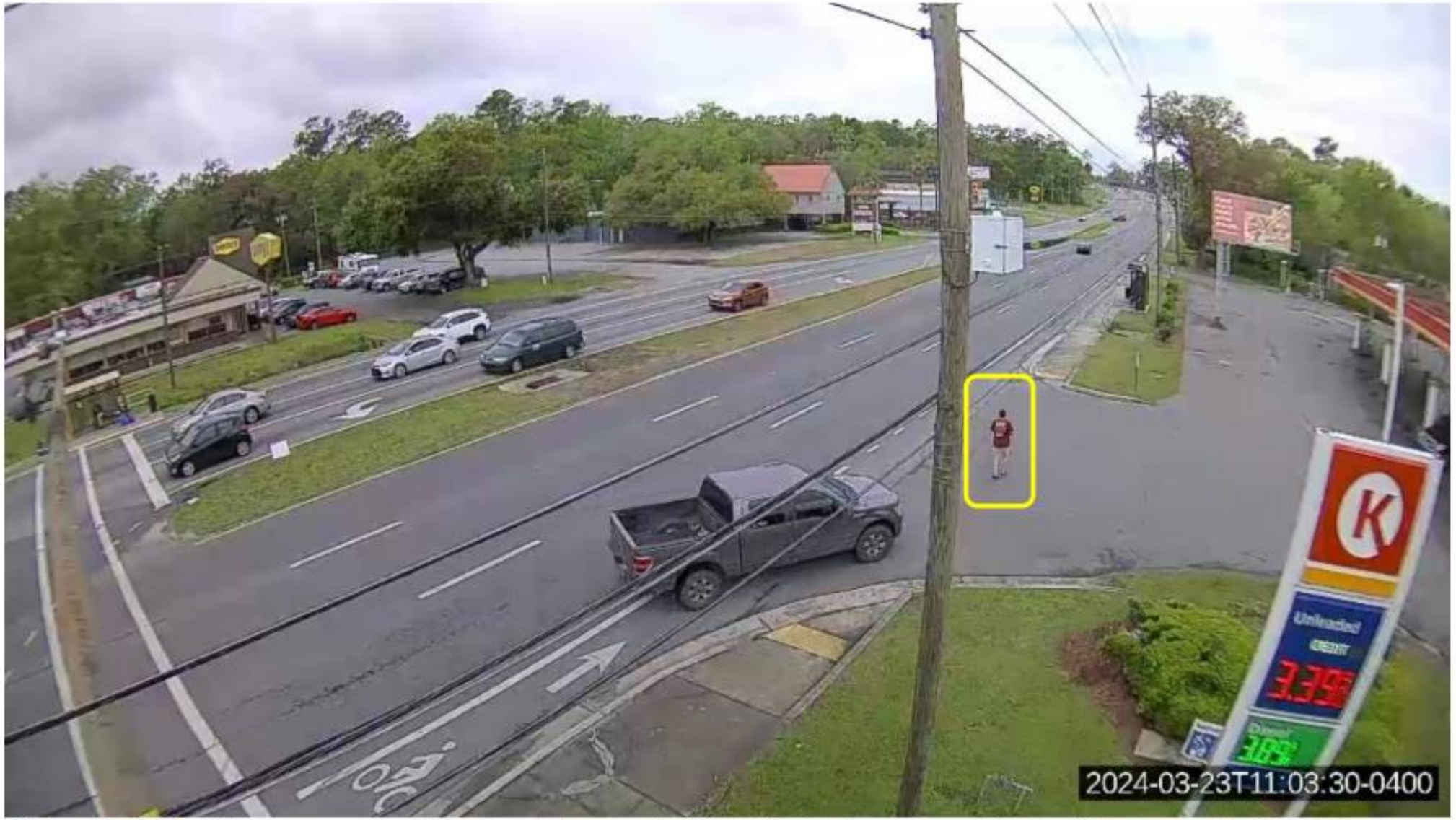


Figure 2: Pedestrian moves north through the east sidewalk. As he passes through the Gas Station driveway, a truck enters the Gas Station representing a possible near-miss incident with the pedestrian. (Date 03/23/2024 at 11:03 AM)

Questions?

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