



Image: Hanging bike-ped bridge – Source: Google Earth

BPAC

**Bicycle and Pedestrian
Advisory Committee**

May 2, 2024

Ed Ball Building, Room #3112

ABOUT US

The BPAC educates, supports, promotes, & advocates for the needs of pedestrians & bicyclists throughout the City of Jacksonville



Bicycle and Pedestrian Advisory Committee (BPAC)

Agenda for 05/02/2024 Meeting

5:30 – 6:00 PM

**Virtual Presentation: “Near Miss” Cameras
@ Beach Blvd and St Johns Bluff Rd**

Chad Jacobs, VivaCity Labs

6:00 - 6:15 PM

Introductions and adoption of April 2024 minutes

6:15 - 6:30 PM

Core-2-Coast Alignment Study Survey

Matt Fall, COJ Bike-Ped Coordinator

6:30 - 6:50 PM

World Day of Remembrance Event Discussion

Matt Fall, COJ Bike-Ped Coordinator

6:50 – 7:00 PM

Wrap-up / Announcements / Next Meeting Info

Adjourn



Smart Traffic Monitoring & Smart Road Safety

Helping cities to overcome their biggest transportation challenges



24/7 traffic monitoring
and Near Miss insights



Market leading multi-
modal classifications



API integrations and
dashboard access



Privacy by design:
anonymous and secure data



Easy access to
real-time data



97% accuracy validated
by Transport for London

vivacitylabs.com/north-america

Agenda

- Introductions
- The Problems
- The Technology

An aerial photograph of a road with a dashed white center line, flanked by dense green trees. The word 'VIVA' is overlaid in large, white, bold, sans-serif capital letters across the road. The 'V' is on the left side of the road, and the '^' is on the right side.

VIVA

An Introduction to Viva



- ▶ Cutting-edge global tech company w/HQ in London
- ▶ Founded in 2015
- ▶ Over 140+ staff
- ▶ Working with 100+ communities





Tackling the Four Big Problems

Modal Shift

More people moving by bike and on foot and using high density transport more often

Road Safety

Specifically for vulnerable road users transportation networks are not fit for purpose anymore

Congestion

Clogged roads with idling engines produce 4 times more pollutants than when traffic flows

Equity

Disadvantaged groups are disconnected from economic opportunity and access to basic needs

Impact of existing approaches

We strive to make roads more equitable, less congested, and safer...
Yet, are kept further from that goal by the tools we have today.

Example:



Dangerous road flagged

Utilizing...

-  **Traffic accidents and casualties data**
Out of date, incomplete, reactive
-  **Study other behavior**
Inconsistent availability, indirect measures, require data matching
-  **Complaints / comments from the public**
Subjective, time consuming, lack of full context
-  **Near Miss studies / technology deployed**
Definitions vary between studies, time consuming OR *tech used is not effective**

Shutting down a road

Creating a one-way street

Installing speed bumps

Protected lanes

Road paint

Cross-walks, etc.

Partial solutions based on **incomplete** data that is the result of not actually knowing what's going on!

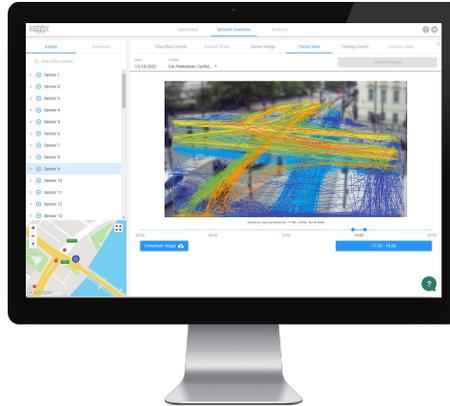
Generated by smart technology

Computer Vision Sensor



➤ Privacy-by-design

Data Platform



➤ Real-time data

API

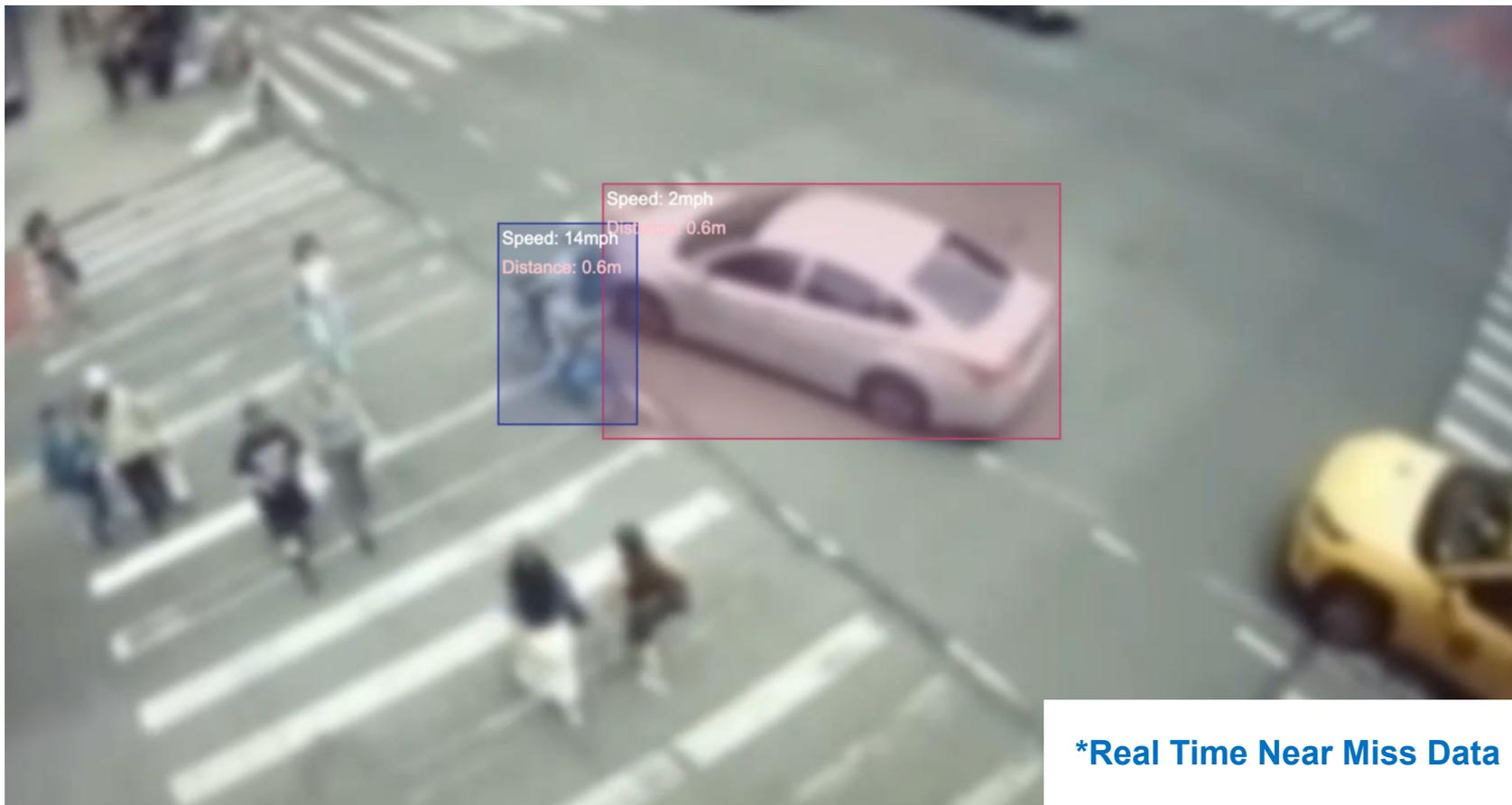


➤ 10 classes > 97% accuracy

NEAR MISS

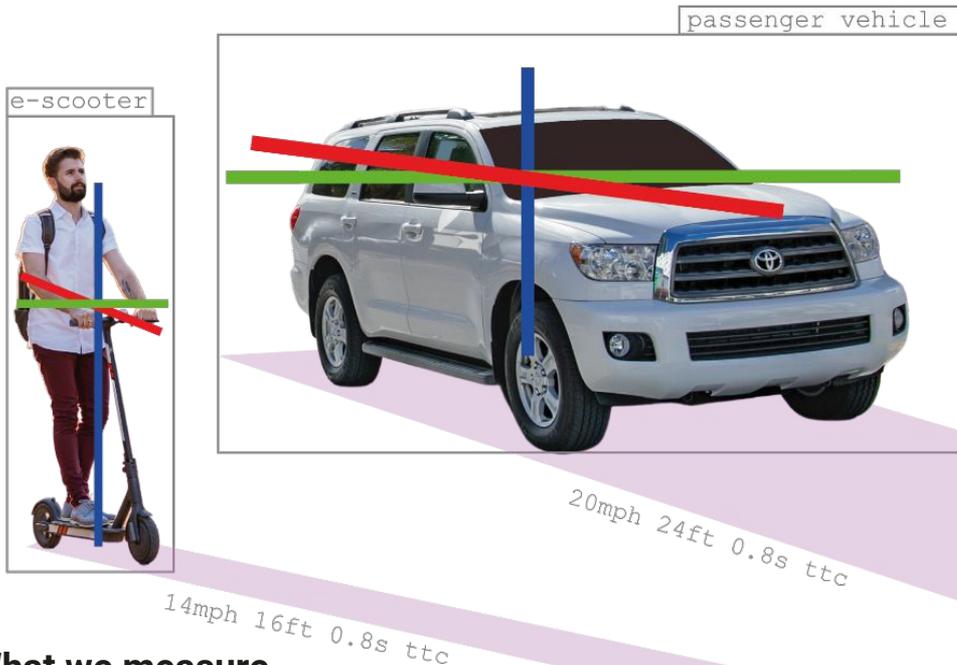


A Measure of Road User Interaction



***Real Time Near Miss Data**

'3D pose' allows us to precisely detect Near Miss events



- Capture and monitor multiple points of an object
- Accurately determine the occupied road space
- Track, analyse and project road user behaviour

What we measure

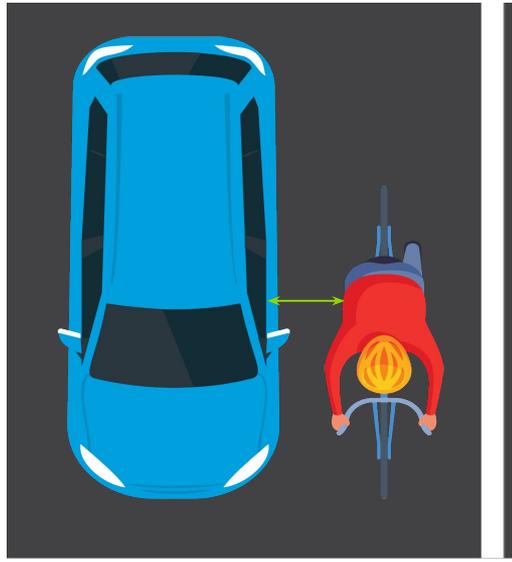
- True centre point and dimensions
- Object path, speed & distances
- Relative proximity of road users



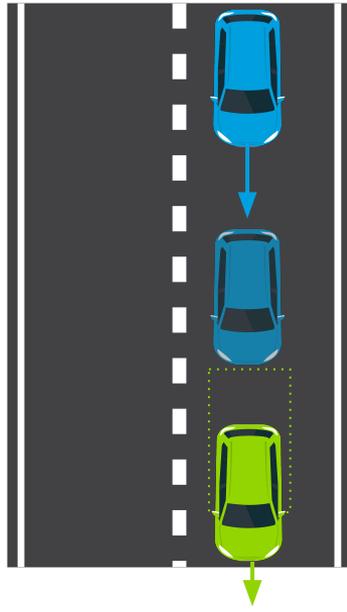
Use of Safety Metrics

We have identified three principle detection methodologies

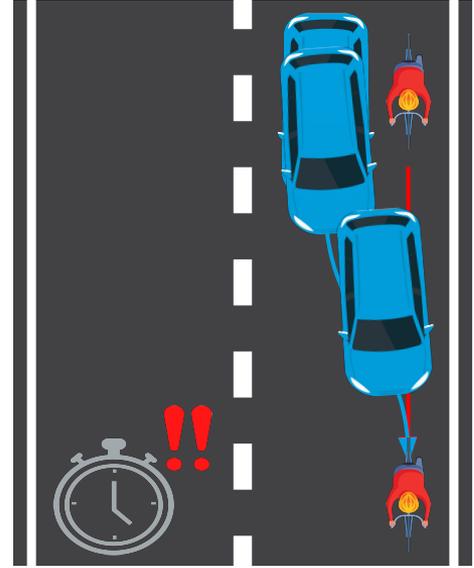
Proximal



Time to collision



Post-encroachment Time



Classified Counts



Home

Network Overview

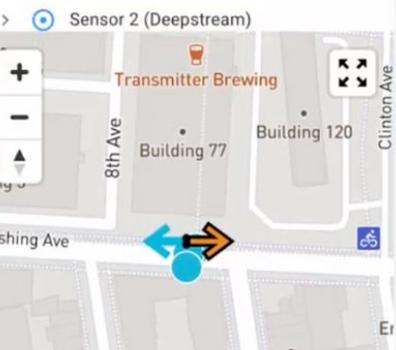
Analysis

Sensor Management

Assets Download

Search for assets

- Sensor 1 (Deepstream)
 - Lens 1
 - S1_FlushingAv_Path-cycleLa
 - S1_FlushingAv_Path-Jaywalk
 - S1_FlushingAv_nyc001 (ID: 44369)
 - S1_FlushingAv_cycleLane_RI



Sensor 1 / Lens 1

Classified Counts

Journey Times

Classified Journey Times

Sensor Image

Tracks View

Turning Counts

Zonal Speeds

Occupancy

Countline Speeds

Dwell

Date	Classes	Time Bucket	Expand Classes	Show Image
25/01/2024	Car, Pedestrian, Cyclist, Motorbike, Bus, OGV1, OGV...	15 minutes	<input type="checkbox"/>	<input checked="" type="checkbox"/>



S1_FlushingAv_Path-cycleLane_LHS_nyc001 (ID: 44369)

Stack

Show Typical Totals

Total

In

Out

40

Classified Counts



Home

Network Overview

Analysis

Sensor Management

Assets

Download

Search for assets

Sensor 1 (Deepstream)

Lens 1

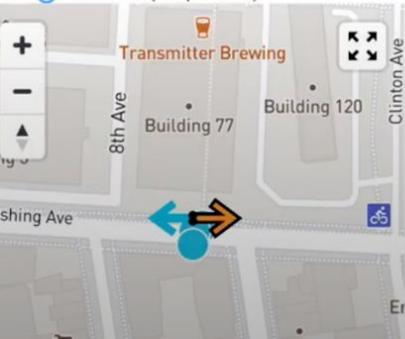
S1_FlushingAv_Path-cycleLa

S1_FlushingAv_Path-Jaywalk

S1_FlushingAv_nyc001 (ID: 4

S1_FlushingAv_cycleLane_RI

Sensor 2 (Deepstream)



Sensor 1 / Lens 1

Classified Counts

Journey Times

Classified Journey Times

Sensor Image

Tracks View

Turning Counts

Zonal Speeds

Occupancy

Countline Speeds

Date

Classes

Time Bucket

25/01/2024

Car, Pedestrian, Cyclist, Motorbike, Bus, OGV1, OGV...

15 minutes

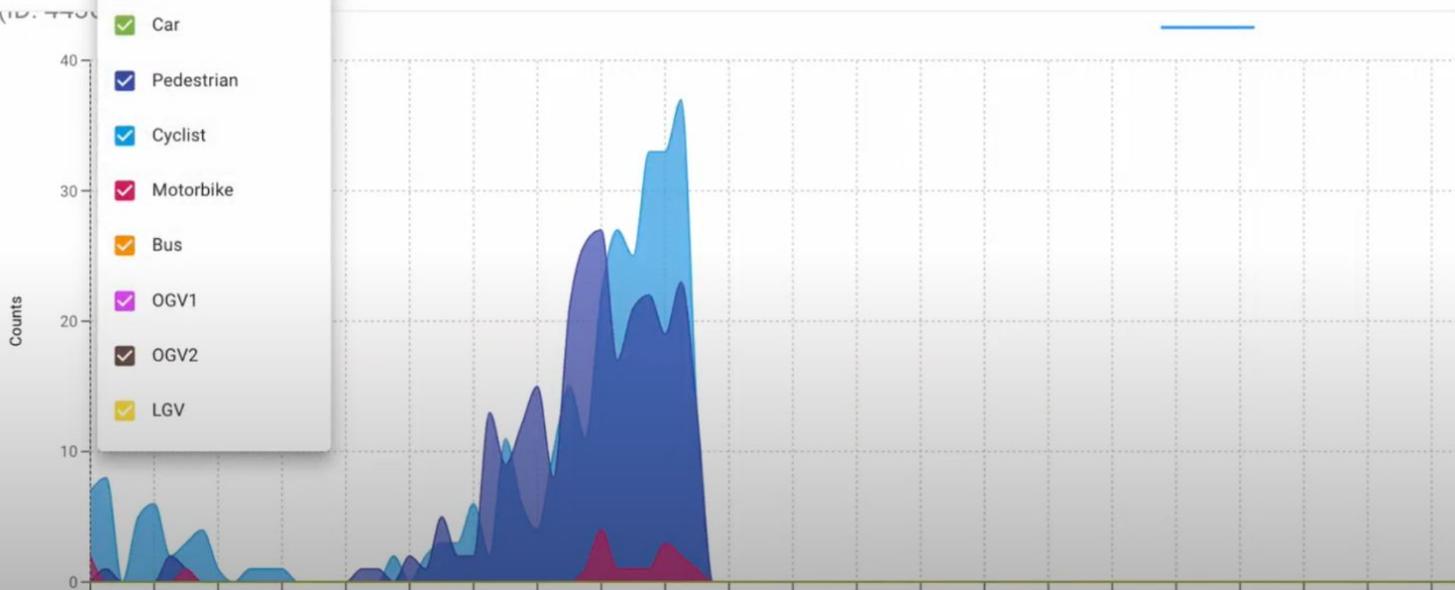


Expand Classes



Show Image

- All Classes
- Car
- Pedestrian
- Cyclist
- Motorbike
- Bus
- OGV1
- OGV2
- LGV



Vehicle Tracks



Home

Network Overview

Analysis

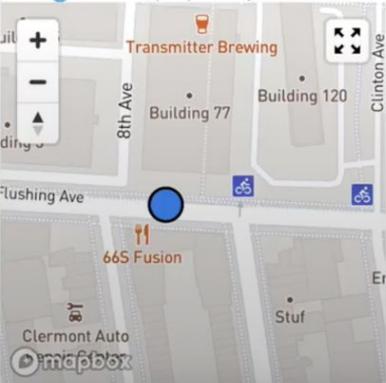
Sensor Management

Assets

Download

Search for assets

- > Sensor 1 (Deepstream)
- > Sensor 2 (Deepstream)
- > Sensor 3 (Deepstream)
- > Sensor 4 (Deepstream)
- > Sensor 5 (Deepstream)
- > Sensor 6 (Deepstream)
- > Sensor 7 (Deepstream)



Sensor 1 / Lens 1

Classified Counts

Journey Times

Classified Journey Times

Sensor Image

Tracks View

Turning Counts

Zonal Speeds

Occupancy

Countline Speeds

Dwell Times

Near

Date
25/01/2024

Classes

Car, Pedestrian, Cyclist, Bus

Expand Classes

Capture new

All Classes

Car

Pedestrian

Cyclist

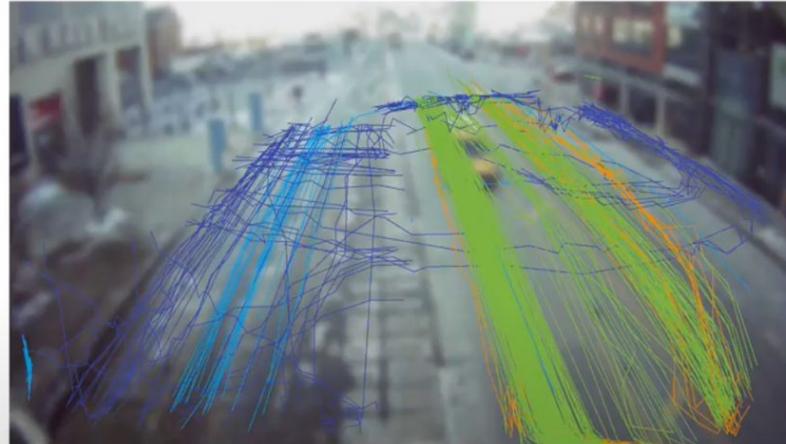
Motorbike

Bus

OGV1

OGV2

LGV



Currently viewing fetched tracks for: 06:40 - 07:25, 25/01/2024

00:00

06:00

12:00

18:00

Download Image

Tracks already fetched for



Near Miss Data



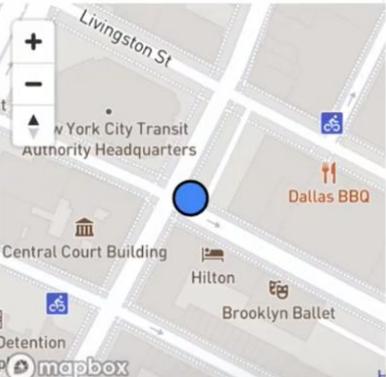
Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024 Daily start time: 00:00 Daily end time: 00:00 Days of the week: Monday, Tuesday, Wed... Interaction pair: All Motorised vehicle classes: All Incident categories: All Speed unit: Miles per hour (mph)

Show near miss rate Maximum PET: 0.1s - max Maximum critical distance: 0.1m - max Maximum TTC: 0.1s - 0.8s Lowest most critical speed: 0mph - 40mph

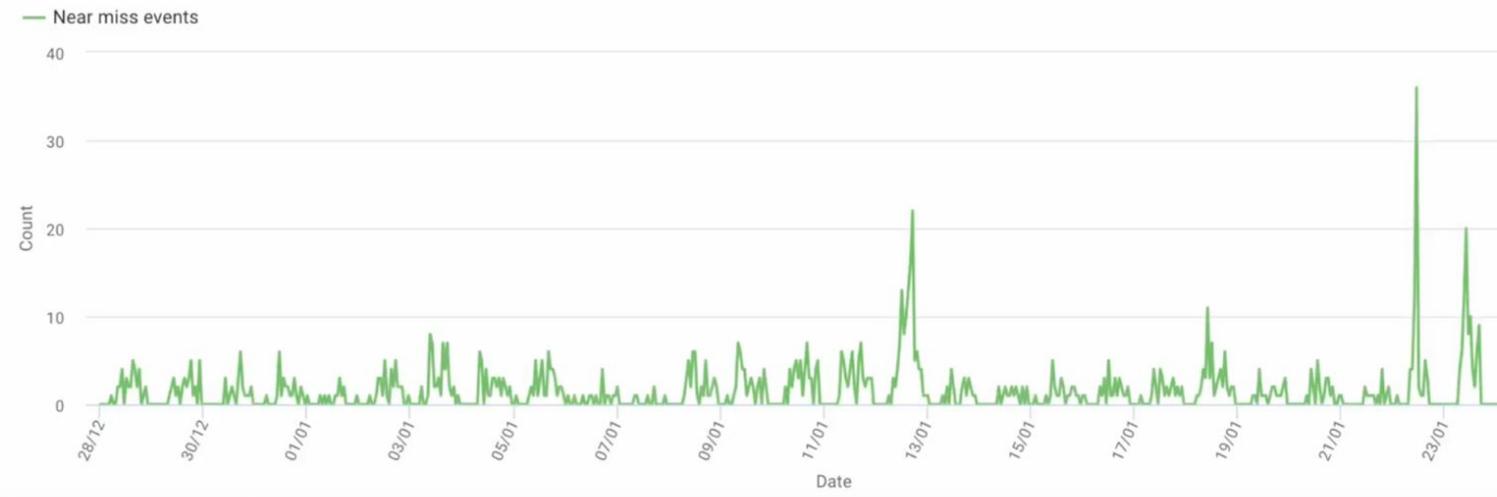
Assets

- Search for assets
- ▼ Lens 1
 - ◆ NearMiss (ID: 8340)
 - > ● Sensor 7 (Deepstream)



DATA VIDEOS HEATMAP

Total events



Near Miss Data



Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: Select all, Cyclist-Vehicle, Pedestrian-Vehicle
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)
Maximum PET: 0.1s
Maximum critical distance: 0.1m
Lowest most critical speed: 0.8s (0mph to 40mph)
Show near miss rate:

Assets

Search for assets

Lens 1

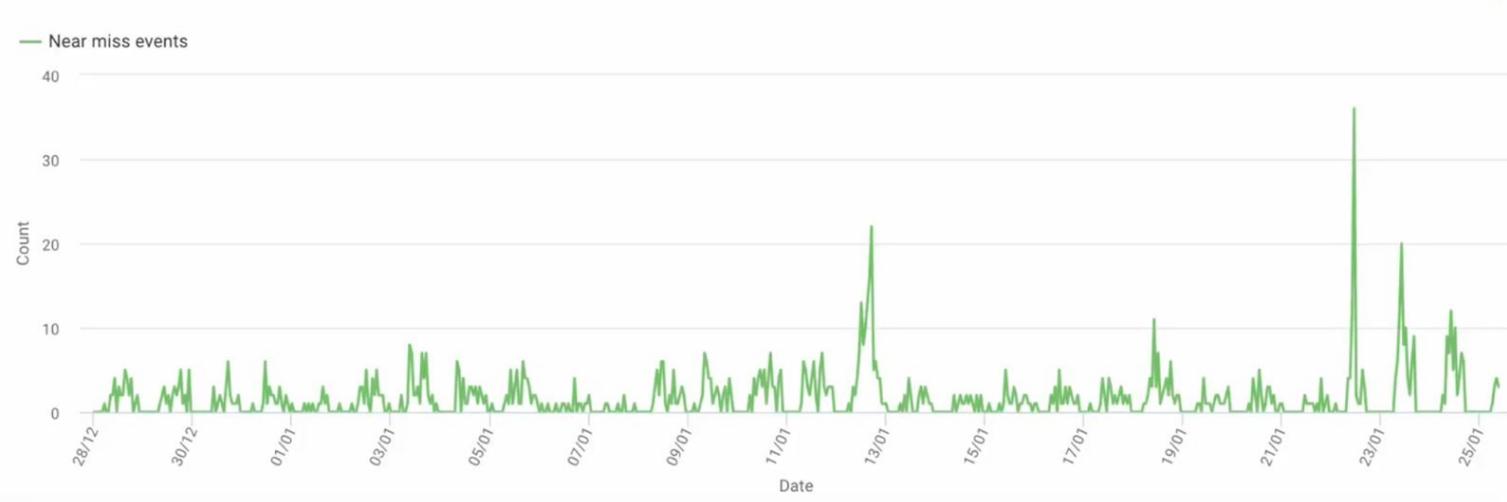
NearMiss (ID: 8340)

Sensor 7 (Deepstream)

mapbox

DATA VIDEOS HEATMAP

Total events



Near Miss Data



< Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024 Daily start time: 00:00 Daily end time: 00:00 Days of the week: Monday, Tuesday, Wed... Interaction pair: All Motorised vehicle classes: **Car** Incident categories: All Speed unit: Miles per hour (mph)

Show near miss rate: Maximum PET: 0.1s Maximum critical distance: 0.1m Maximum TTC: 0.1s

- Select all
- Car
- Van
- Bus
- Large vehicles

Assets

Search for assets

Lens 1

NearMiss (ID: 8340)

Sensor 7 (Deepstream)

Livingston St

New York City Transit Authority Headquarters

Dallas BBQ

Central Court Building

Hilton

Brooklyn Ballet

Detention

mapbox

Total events



Near Miss Data



Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: [Dropdown menu]
Speed unit: Miles per hour (mph)

Show near miss rate: [Toggle]
Maximum PET: 0.1s to max
Maximum critical distance: 0.1m to max
Maximum TTC: 0.1s to 0.8s
Lowest most critical speed: 0mph

- Select all
- Cyclist way blocked
- Cyclist problematic pass
- Cyclist driven at
- Cyclist tailgating
- Cyclist being tailgated
- Cyclist problematic turn

DATA VIDEO

Assets

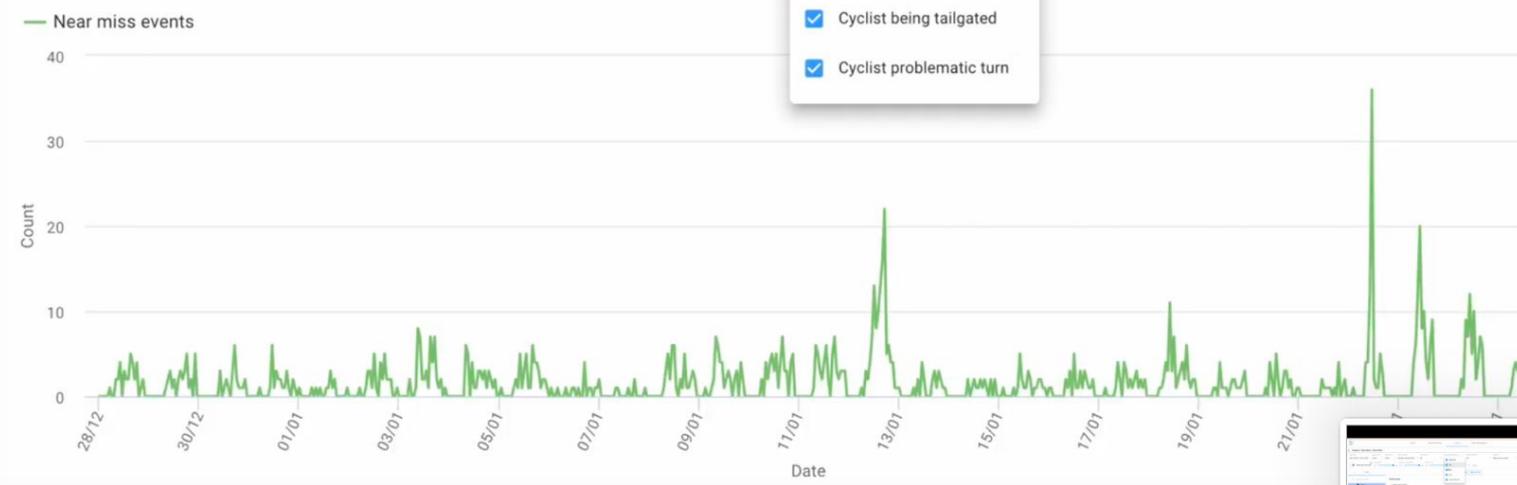
Search for assets

Lens 1

NearMiss (ID: 8340)

Sensor 7 (Deepstream)

Total events



Near Miss Data



Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories:

- Select all
- Cyclist way blocked
- Cyclist problematic pass
- Cyclist driven at
- Cyclist tailgating
- Cyclist being tailgated
- Cyclist problematic turn

Speed unit: Miles per hour (mph)

Maximum PET: 0.1s
Maximum critical distance: 0.1m
Maximum TTC: 0.1s
Lowest most critical speed: 0mph

Show near miss rate:

Assets

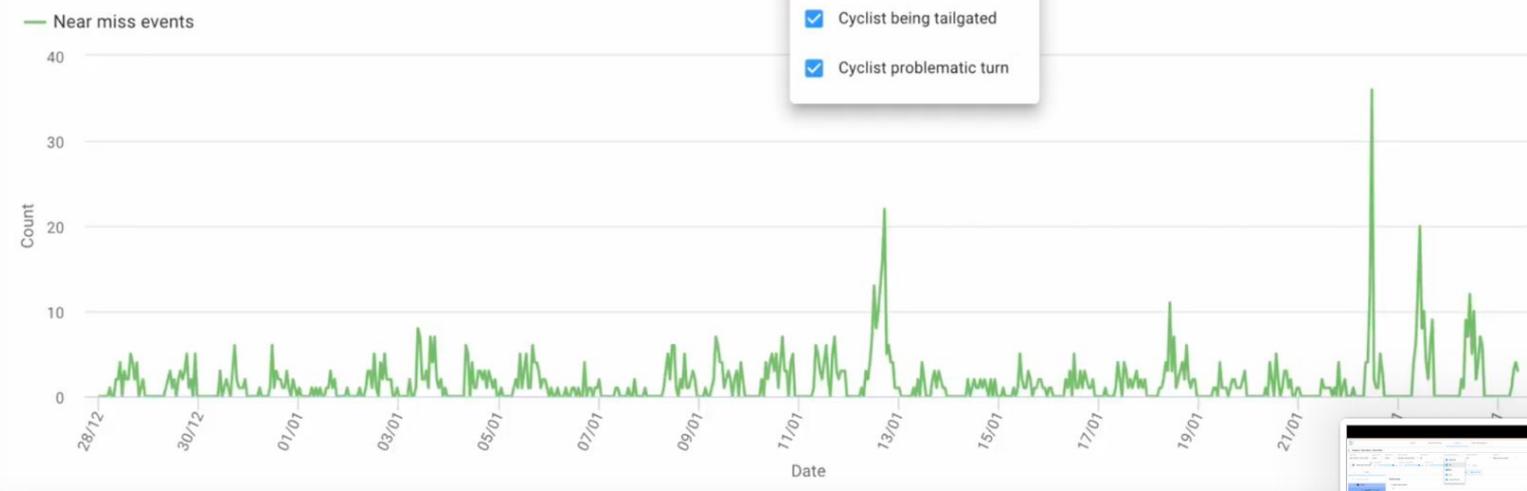
Search for assets

Lens 1

NearMiss (ID: 8340)

Sensor 7 (Deepstream)

Total events



Analysis / Near Miss / Zone 8340

Date range
28/12/2023 - 25/01/2024

Daily start time
00:00

Daily end time
00:00

Days of the week
Monday, Tuesday, Wed...

Interaction pair
All

Motorised vehicle classes
All

Incident categories

Speed unit
Miles per hour (mph)

Show near miss rate

Maximum PET
0.1s

Maximum critical distance
0.1m

Maximum TTC
0.1s

Lowest most critical speed
0mph

- Select all
- Cyclist way blocked
- Cyclist problematic pass
- Cyclist driven at
- Cyclist tailgating
- Cyclist being tailgated
- Cyclist problematic turn

DATA

VIDEO

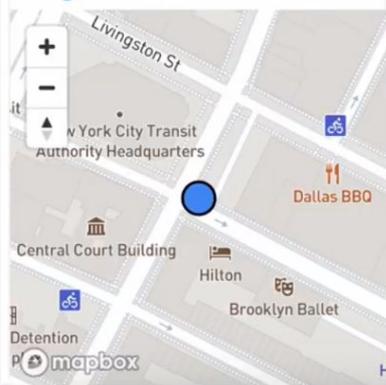
Assets

Search for assets

Lens 1

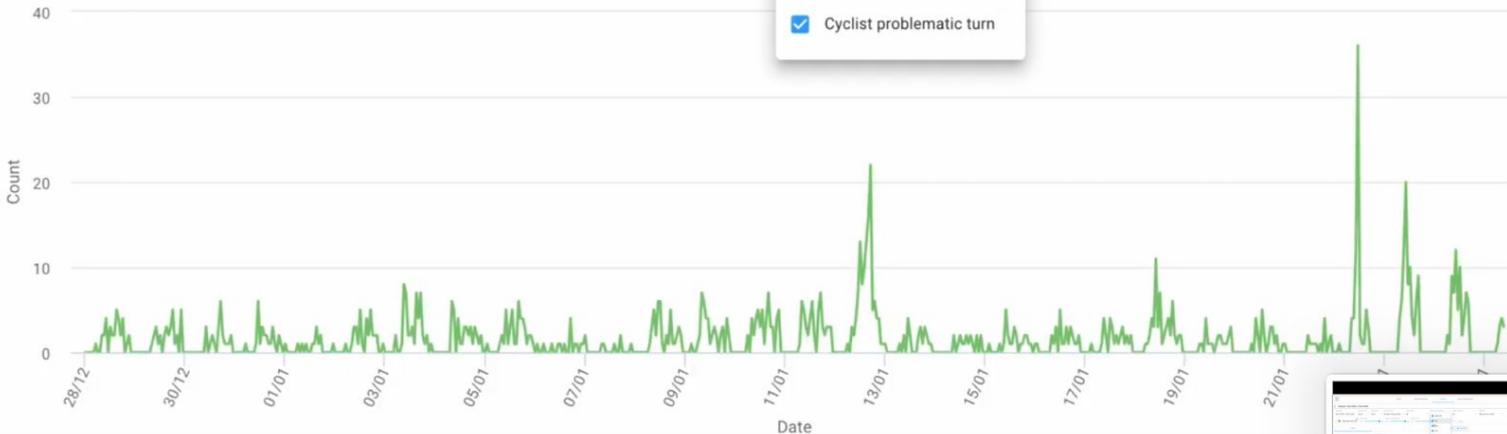
NearMiss (ID: 8340)

Sensor 7 (Deepstream)



Total events

Near miss events



Near Miss Videos



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Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)

Show near miss rate:
Maximum PET: 0.1s to max
Maximum critical distance: 0.1m to max
Maximum TTC: max
Lowest most critical speed: 0mph to 40mph

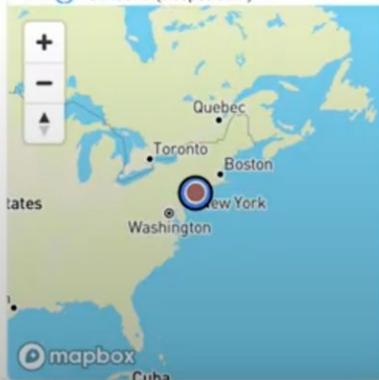
Assets

Search for assets

> Sensor 6 (Deepstream)

> Sensor 7 (Deepstream)

> Sensor 9 (Deepstream)



DATA VIDEOS HEATMAP

Search for video ID

★ My videos

Video ID	Date	Involved vehicles	Incident categories	Most Critical PET	Most critical speed	Most Critical TTC	Most critical distance	Video
97484	14/01/2024 between 15:00 and 16:00	Car - Cyclist	N/A	N/A	9.7 mph	N/A	0.9 meters	VIEW <input type="star"/>
83696	02/01/2024 between 16:00 and 17:00	Taxi - Cyclist	N/A	N/A	13.8 mph	N/A	0.9 meters	VIEW <input type="star"/>
99017	15/01/2024 between 14:00 and 15:00	Car - Cyclist	N/A	N/A	11 mph	N/A	0.9 meters	VIEW <input type="star"/>
111526	24/01/2024 between 10:00 and 11:00	Car - Cyclist	Cyclist problematic turn, Cyclist driven at	N/A	6 mph	N/A	0.9 meters	VIEW <input type="star"/> <input type="eye"/>
97260	14/01/2024 between 12:00 and 13:00	Minibus - Cyclist	N/A	N/A	3.9 mph	N/A	0.9 meters	VIEW <input type="star"/>
83531	02/01/2024 between 12:00 and 13:00	Car - Cyclist	N/A	N/A	9.8 mph	N/A	0.9 meters	VIEW <input type="star"/>
94958	12/01/2024 between 13:00 and 14:00	Car - Cyclist	Cyclist problematic pass	N/A	3.6 mph	N/A	0.9 meters	VIEW <input type="star"/>
108138	22/01/2024 between 10:00 and 11:00	Car - Cyclist	Cyclist problematic turn	N/A	7.8 mph	N/A	0.8 meters	VIEW <input type="star"/>

Near Miss Heatmaps



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< Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
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Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)

Show near miss rate:
Maximum PET: 0.1s ————— max
Maximum critical distance: 0.1m ————— max
Maximum TTC: max ————— max
Lowest most critical speed: 0mph ————— 40mph

Assets

Search for assets

- > Sensor 6 (Deepstream)
- > Sensor 7 (Deepstream)
- > Sensor 9 (Deepstream)



Near Miss Heatmaps



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< Analysis / Near Miss / Zone 8340

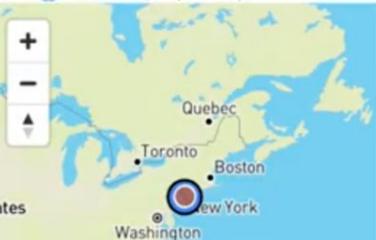
Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)

Show near miss rate:
Maximum PET: 0.1s
Maximum critical distance: 0.1m
Maximum TTC: max
Lowest most critical speed: 0mph

Assets

Search for assets

- > Sensor 6 (Deepstream)
- > Sensor 7 (Deepstream)
- > Sensor 9 (Deepstream)



Near Miss Heatmaps



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Interaction pair: All
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)

Show near miss rate:
Maximum PET: 0.1s to max
Maximum critical distance: 0.1m to max
Maximum TTC: max
Lowest most critical speed: 0mph to 40mph

Assets

Search for assets

- > Sensor 6 (Deepstream)
- > Sensor 7 (Deepstream)
- > Sensor 9 (Deepstream)



DATA VIDEOS HEATMAP

Near Miss Events

Show heat



Near Miss Heatmaps



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Analysis / Near Miss / Zone 8340

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Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: All
Speed unit: Miles per hour (mph)

Show near miss rate: ¹
Maximum PET: 0.1s ————— max
Maximum critical distance: 0.1m ————— max
Maximum TTC: max ————— max
Lowest most critical speed: 0mph ————— 40mph

Assets

Search for assets

- > Sensor 6 (Deepstream)
- > Sensor 7 (Deepstream)
- > Sensor 9 (Deepstream)



Near Miss Data



Analysis / Near Miss / Zone 8340

Date range: 28/12/2023 - 25/01/2024
Daily start time: 00:00
Daily end time: 00:00
Days of the week: Monday, Tuesday, Wed...
Interaction pair: All
Motorised vehicle classes: All
Incident categories: [Dropdown menu]
Speed unit: Miles per hour (mph)

Show near miss rate: [Toggle]
Maximum PET: 0.1s to max
Maximum critical distance: 0.1m to max
Maximum TTC: 0.1s to 0.8s
Lowest most critical speed: 0mph

- Select all
- Cyclist way blocked
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- Cyclist driven at
- Cyclist tailgating
- Cyclist being tailgated
- Cyclist problematic turn

Assets

Search for assets

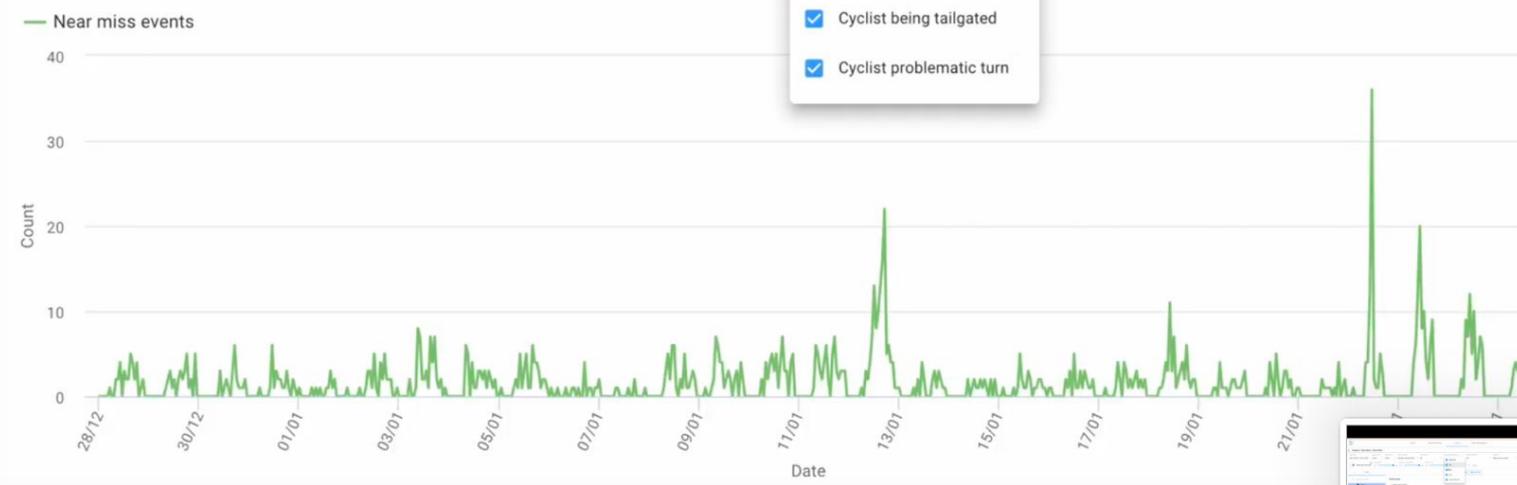
Lens 1

NearMiss (ID: 8340)

Sensor 7 (Deepstream)

DATA VIDEO

Total events



Core to Coast Trail Survey

- NFTPO and COJ
- Alignment study underway
- Continuous shared-use path (SUP)
- Fuller Warren Bridge SUP to the Beaches
- <https://www.surveymonkey.com/r/N6MD72L>
- **Survey closes May 20, 2024**
- Study completion June 30, 2024



Core to Coast Trail Survey



TinyURL.com/TRAILsurveyJAX

World Day of Remembrance 2024

WorldDayofRemembrance.org

The screenshot shows the homepage of WorldDayofRemembrance.org. At the top left is a logo with a flame icon and the text "WORLD DAY OF REMEMBRANCE FOR ROAD TRAFFIC VICTIMS". A navigation menu at the top right includes "HOME", "WDoR 2023", "ABOUT WDR", "MATERIALS", "SOCIAL", "PARTNERS", "NEWS", "EVENTS", and a red "REGISTER EVENT" button. The main content area features a large graphic on the left with the date "19th NOVEMBER 2023" and the slogan "REMEMBER SUPPORT ACT" in a bold, hand-drawn font, with a "REGISTER EVENT" button below it. In the center, a white box contains the text: "We do **NOT** want **MORE** victims to remember, we want to live our lives **TOGETHER!**". To the right, the word "ACT" is written in large, black, hand-drawn letters above a road crossing graphic with the text "DECADE OF ACTION FOR ROAD SAFETY 2021 - 2030". At the bottom, three icons provide details: a hashtag icon for "#WDoR2023", a speech bubble icon for "Slogan: REMEMBER. SUPPORT. ACT", and a book icon for "Theme: JUSTICE".

WORLD DAY OF REMEMBRANCE
FOR ROAD TRAFFIC VICTIMS

HOME WDoR 2023 ABOUT WDR MATERIALS SOCIAL PARTNERS NEWS EVENTS REGISTER EVENT

19th NOVEMBER 2023
REMEMBER
SUPPORT
ACT

REGISTER EVENT

We do **NOT** want **MORE** victims to remember, we want to live our lives **TOGETHER!**

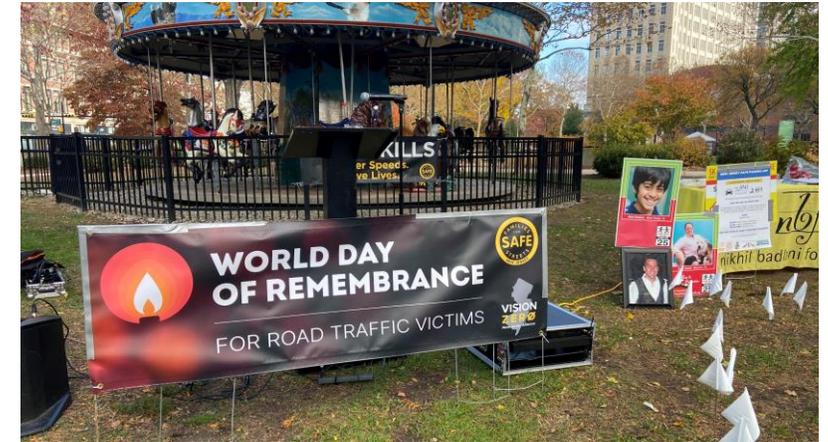
ACT

DECADE OF ACTION FOR
ROAD SAFETY
2021 - 2030

Hashtag: #WDoR2023
Slogan: REMEMBER. SUPPORT. ACT
Theme: JUSTICE



World Day of Remembrance





SR 228 ACCESS MANAGEMENT PUBLIC MEETING

FDOT Urban Office Training Building, 2198 Edison Avenue, Jacksonville, FL 32204

APRIL 25, 2024

Post Street (State Road 228) at Old Roosevelt Boulevard Intersection Improvement Project

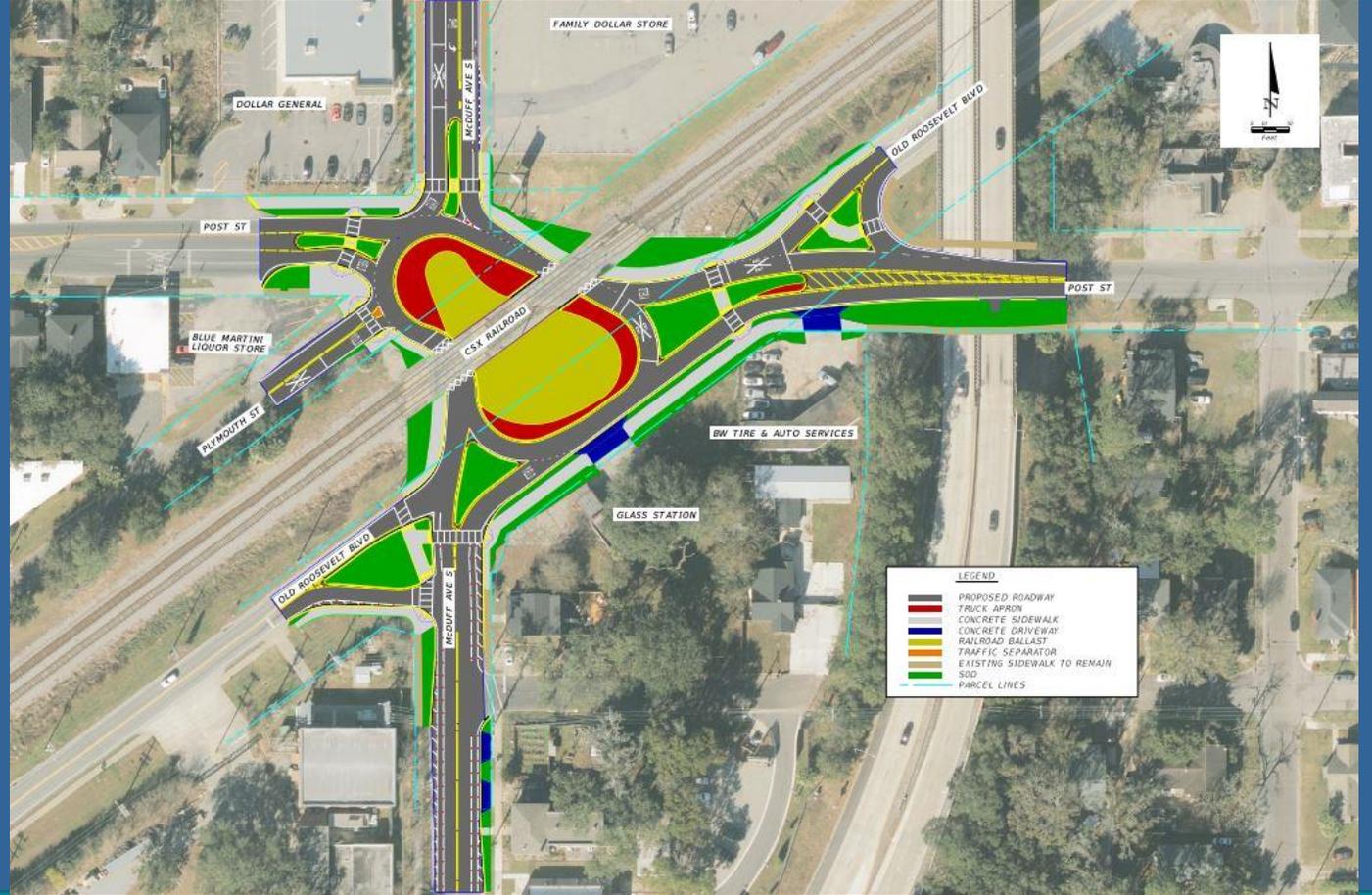
Project type: Resurfacing/Rail Safety

Start date: Early 2025*

Completion: Summer 2026*

Estimated cost: \$6.5 million*

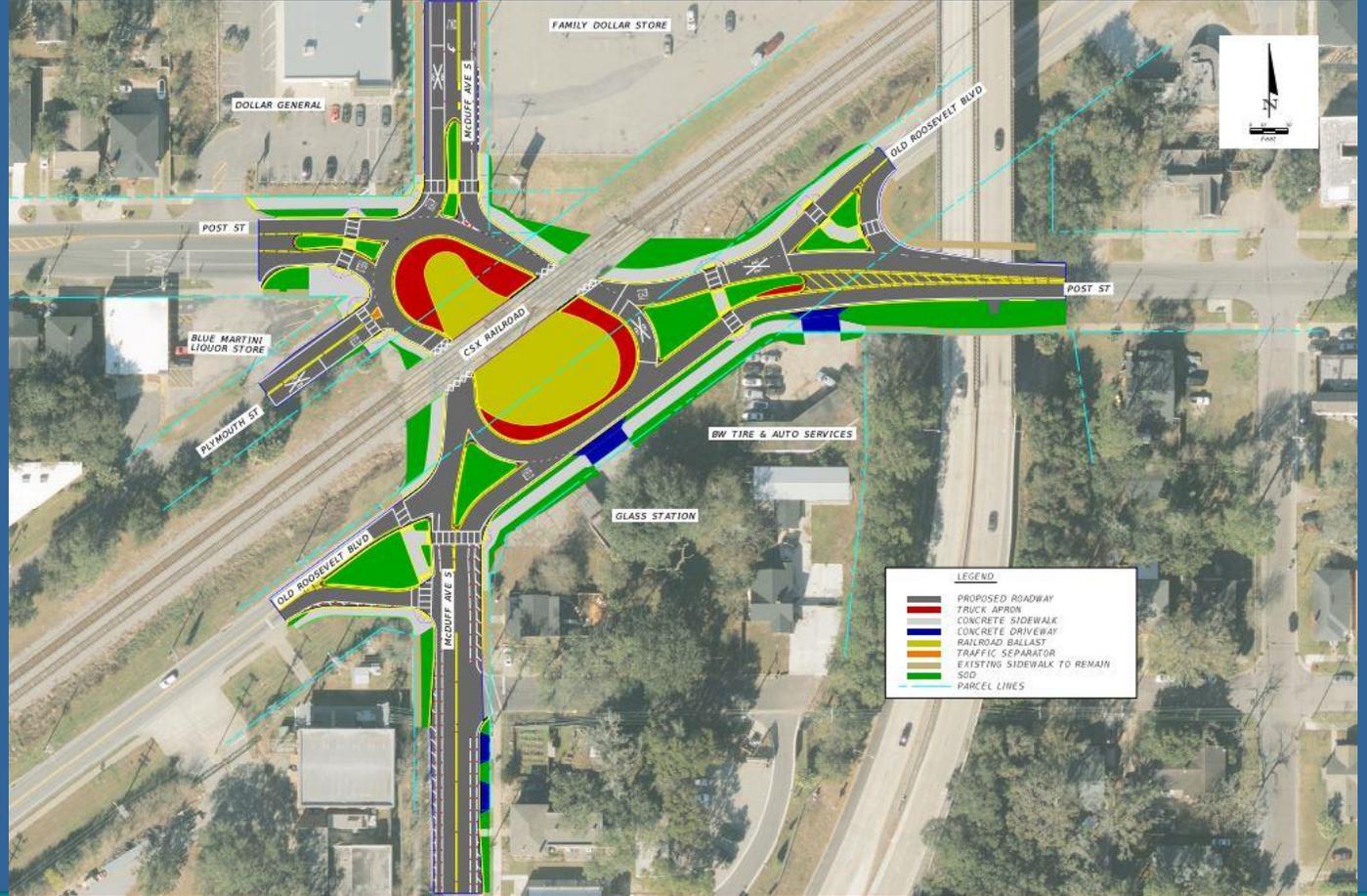
*Details subject to change



Project Overview

Proposed improvements include:

- Intersection modification at Post Street and Old Roosevelt Boulevard to increase rail safety
- Updated signage, lighting and signals
- ADA sidewalk upgrades



Proposed Improvements



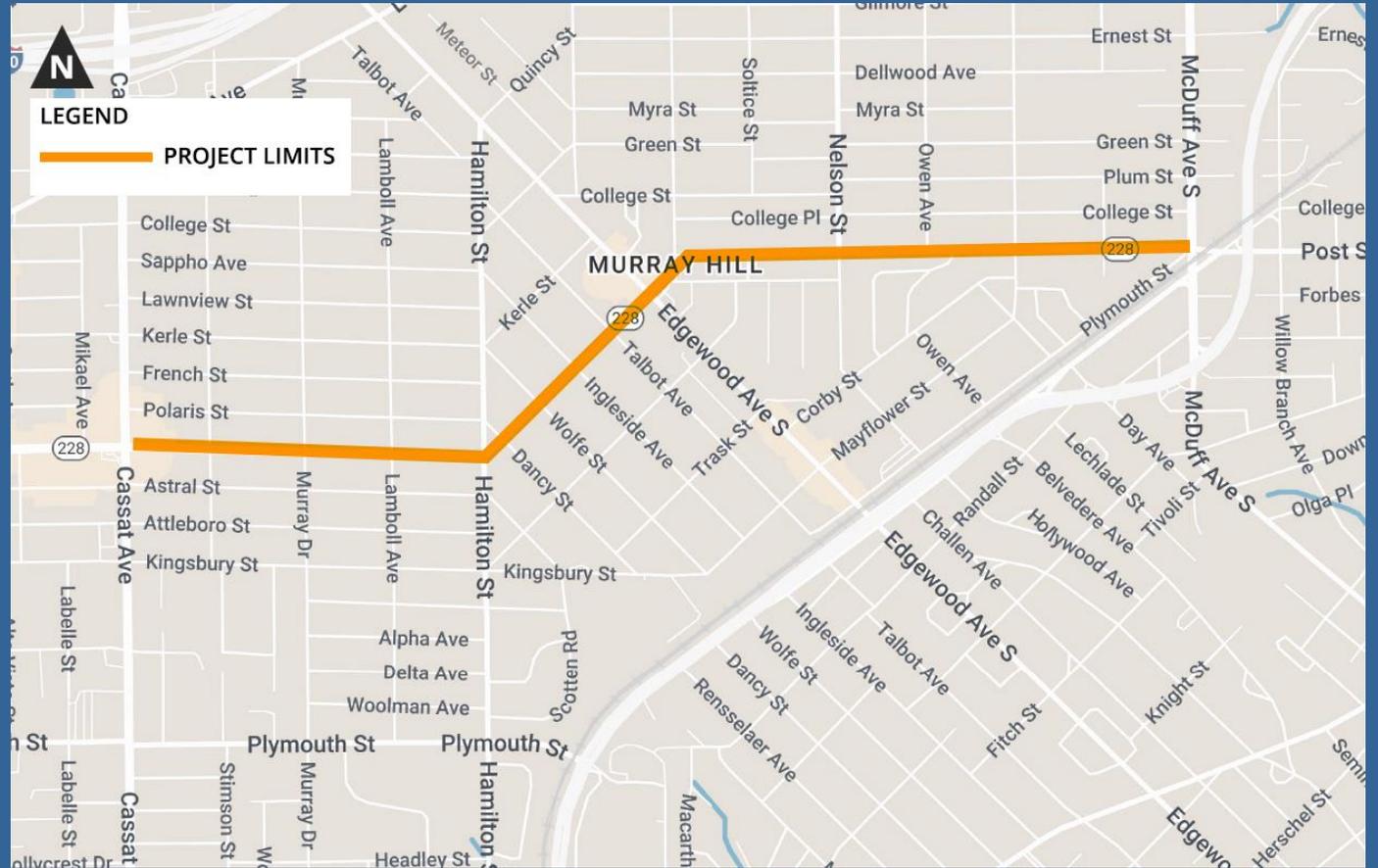
SR 228 ACCESS MANAGEMENT PUBLIC MEETING

FDOT Urban Office Training Building, 2198 Edison Avenue, Jacksonville, FL 32204

APRIL 25, 2024

Proposed improvements include:

- A companion project (209443-2) includes milling and resurfacing Post Street from Cassat Avenue to Old Roosevelt Boulevard.



Proposed Improvements



SR 228 ACCESS MANAGEMENT PUBLIC MEETING

FDOT Urban Office Training Building, 2198 Edison Avenue, Jacksonville, FL 32204

APRIL 25, 2024



Project Limits



APRIL 25, 2024

Written comments must be postmarked, emailed or submitted online at nflroads.com/vph by May 6, 2024 to be included in the public record.

Public participation is sought without regard to race, color, religion, sex, age, national origin, disability or family status.



APRIL 25, 2024

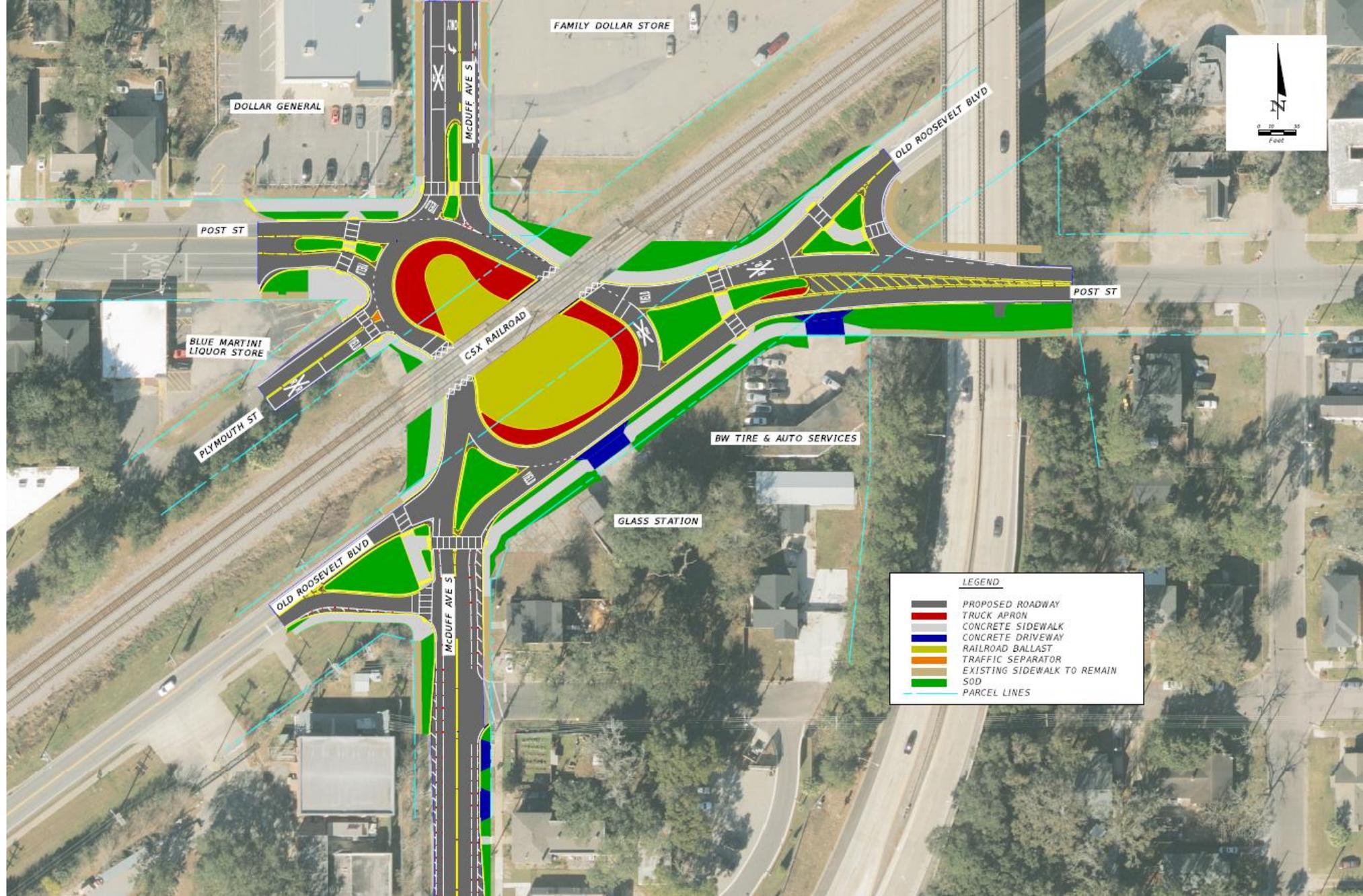
Your comments may be mailed or emailed to

**Renee Brinkley
1109 South Marion Avenue
Lake City, FL 32025-5874**

Renee.Brinkley@dot.state.fl.us

**Comments may also be submitted online at
www.nflroads.com/vph by May 6, 2024**

Thoughts?
Comments?



DOLLAR GENERAL

Questionable

Thoughts?
Comments?

POST ST

Useful

OLD ROOSEVELT P

BLUE MARTINI
LIQUOR STORE

CSX RAILROAD

PLYMOUTH ST

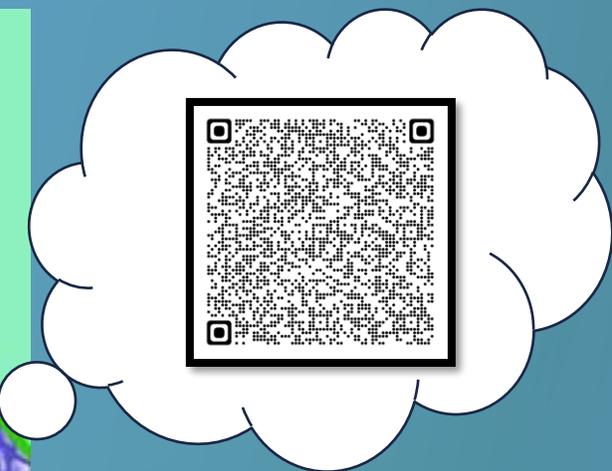
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**NEXT
MEETING**

ADJOURN