



SFMTA

# **SFMTA Driver-Safety Video Analytics**

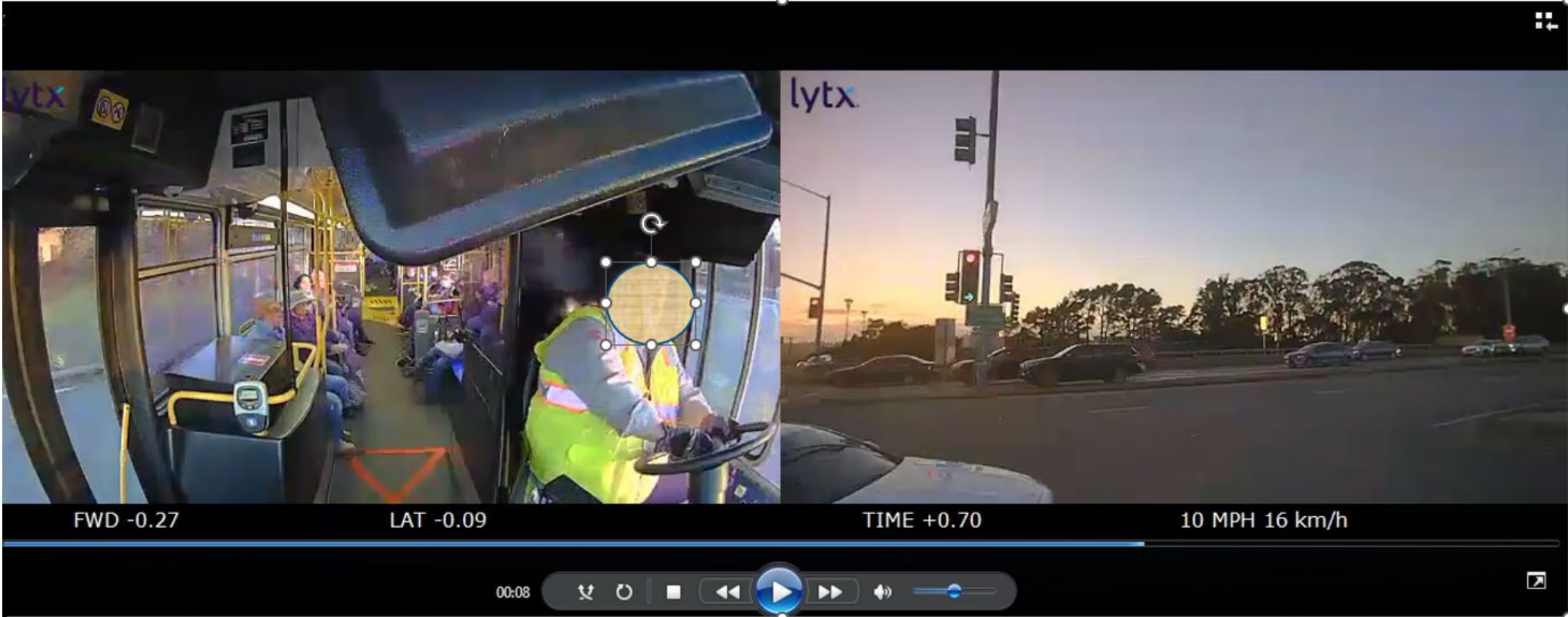
## **BOS Rules Committee Meeting: April 2024**

# Technology Description

- 1) Video Analytics (the Technology) uses video and audio events recorders together with proprietary, vendor-owned algorithms to record and identify certain behavior-based safety events, such as operator looking at cell phone while driving etc.
- 2) The event records are triggered by excess G-forces (e.g., collision impacts, abrupt braking, excessive turning, etc.) and/ or identified by specific AI algorithms (talking on cell phone, eating while driving, drowsy/sleeping, etc.) and captures eight (8) seconds of video and audio prior to the trigger and four (4) seconds after the trigger, for a total of 12-seconds of audio and video.
- 3) This technology is currently in place for Department's Buses (Rubber tires) and planning to implement in Lite Rail Vehicles (LRVs)



# Technology Description (example-1)



Front and back view of Department use technology

# Example of PDF Report

Videos related PDF Report is used for an active investigation and/or disciplinary action may be kept longer than 365 days

## EVENT

EXKQ99 [REDACTED]

## DRIVER

[REDACTED]

## VEHICLE

[REDACTED]

### TRIGGER

Other

### BEHAVIORS

Possible Collision, Suspected Collision



Jan 9, 2023, 12:07:23 AM PST

### Lytix Comments

Algorithms detected significant sensor activity that could indicate a collision.

There is a possibility a collision occurred in this event. Please investigate further and advise Lytx of the outcome so the event can be updated accordingly.

The event was triggered due to a force exceeding the video event recorder's threshold.

### Event Notes

*Ray Shine - Jan 10, 2023, 9:04:57 AM:*

This collision was reported to TMC. It was assigned Tag #1748250. It occurred at Woodside and Portola. It is under investigation.

# Authorized Use Cases

Department's use of the video data from the Driver-Safety Video Analytics technology is limited to the following use cases:

1. To identify collision dynamics, causation, and other factors
2. To investigate passenger, fall events and exploring potential safety improvements
3. To identify infrastructure and signage issues as they relate to MTA transit service and safety
4. To review customer complaints and look for potential ways to improve safety and service
5. To identify operator training issues, misconduct, or negligence
6. To commend operators who demonstrate outstanding defensive driving skills

# Data Lifecycle Steps

- Collection
  - Video is stored on Local Storage and Offloaded to SaaS Cloud. If incident needs further investigation, it may be shared internally using email and Department's file share server
  - Department collects event specific video data based on identified Use Cases
- Processing & Use
  - Video data received by the Department may only be viewed by authorized staff with unique password
- Sharing
  - **Department** : Data is accessed only by authorized department staff
  - **Others** : SFPD, City Attorney's Office (CAO), Public Defender
  - **With Warrant/Subpoena** : Other law enforcement agencies
- Retention
  - Videos (by Vendor) 365 days
  - Video and PDF Reports (by Department): Videos related to an active investigation and/or disciplinary action may be kept longer than 365 days
- Disposal
  - Videos by Vendor: 366<sup>th</sup> Day
  - Local Data (on SD card) is Downloaded every 24-hour to vendor cloud

# PSAB & COIT Meeting Dates

- PSAB Meeting:
  - Initial: January 27, 2023
  - Follow up: February 24, 2023
  
- PSAB Recommendation Date:
  - Date PSAB Recommended this policy for COIT's approval: February 24, 2023
  
- COIT Meeting:
  - April 20, 2023
  
- COIT Recommendation Date:
  - Date COIT Recommended this policy for BOS Review: April 20, 2023

# Team members available to Answer Questions:

## Safety Team:

– Ray Shine

## Program Management Office (PMO)

– Sohail Warsi

– Robert Miller

# Questions