

ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



STAFF REPORT

MEETING DATE: 10/23/2024

Staff Report No. 24-434

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager/Chief Executive Officer
SUBJECT: Update on Automated Bus Lane and Bus Stop Enforcement Pilot

BRIEFING ITEM

AGENDA PLANNING REQUEST:

RECOMMENDED ACTION(S):

Consider receiving an update on the installation of Automated Bus Lane and Bus Stop Enforcement Technology on 100 buses. [Requested by Vice President Shaw - 3/13/24.]

Staff Contact:
Ahsan Baig, Chief Information Officer
Salvador Llamas, Chief Operating Officer

STRATEGIC IMPORTANCE:

Goal - Safe and Secure Operations
Initiative - Service Quality

Automated Bus Lane and Bus Stop enforcement technology, which features forward-facing cameras and cloud-based software systems for end-to-end citation processing will reduce the number of vehicles illegally parked in District bus lanes and bus stops, thus improving on-time performance and increasing accessibility. This technology will improve operator and passenger safety, reduce scheduled travel time for coach operations in bus-only lanes, and increase efficiency during passenger boarding and alighting.

BUDGETARY/FISCAL IMPACT:

There are no budgetary or fiscal impacts related to this report

BACKGROUND/RATIONALE:

On June 14, 2023, the Board of Directors approved a three year pilot with Hayden AI to provide automated bus lane and bus stop enforcement technology on 100 buses. Over the next six months, staff worked with the vendor to finalize a contract. Using operator feedback, 44 bus routes were selected to deploy the pilot. Installation and validation of all 100 buses was finalized in June 2024. While the hardware installation was taking place, Hayden AI staff began working on mapping the routes in the Alameda County service area to prepare for enforcement.

On June 16, 2024, Hayden AI technology began enforcing the bus only lanes across the Tempo Bus Rapid

Transit (BRT) corridor and the old manual system on the bus fleet was deactivated. From June 16 to July 31, Hayden AI identified 2,320 bus lane incidents, 1,469 events were approved, and 976 were sent for processing by the Alameda County Sheriff’s Office (ACSO). In contrast, the old manual system averaged 41 citations a month during fiscal year 2023.

On August 7th, AC Transit expanded the automated camera enforcement by issuing warning citations for illegally parked or stopped vehicles at bus stops on all bus lines in the Alameda County service area. Initial enforcement only includes the Alameda County service area due to the Contra Costa County Sheriff’s Office (CCCSO) not having the required protocol and process established. The CCCSO was in the middle of a leadership change, which required staff to wait until this was completed to move forward. We estimate Contra Costa County to be active in the first quarter of 2025, pending successful contract negotiations and the required secure data transfer infrastructure is in place.

During the initial 60 days, motorists identified by law enforcement as violating the bus stop zone will receive a warning notice that will be mailed to the vehicle’s registered owner. Starting on October 7, warnings will be replaced with a \$110 citation per AC Transit Ordinance No. 19. During the month of August, Hayden AI identified 20,988 incidents, 12,371 events were approved, and 6,317 were sent for processing by the ACSO. The existing system averaged 242 bus zone citations during fiscal year 2023.

The two tables below summarize the events identified by month and type for the period of June 16 to August 31, 2024.

Summary Report				
Month	Events Identified	Events Approved	Sent to Processor	Process Approved
2024-06	931	458	394	86.03%
2024-07	1,389	1,011	582	57.57%
2024-08	20,988	12,371	6,317	51.06%
Grand Total	23,308	13,840	7,293	52.70%

Details by Event Type				
Event Type	Events Identified	Events Approved	Sent to Processor	Process Approved
Bus Lane	4,327	2,959	2,086	70.50%
Bus Stop	18,981	10,881	5,207	47.85%
Grand Total	23,308	13,840	7,293	52.70%

Due to the number of routes in the pilot, only 26 of 39 Alameda County bus routes have been completed in the dataset presented. Hayden AI continues to work on the remaining routes and will have all 39 completed before October 7, 2024. We expect an increase of approximately 25% in the total number of events.

Staff is in the early stages of establishing and mapping the data required for future reporting in an automated format. It is too early to make any statements related to the success metrics, as enforcement for bus lanes and

bus stops has only been active for less than 30 days. One item that can be confirmed is that the automated technology is successfully capturing the bus stop and bus-only lane violations, without involving the manual operator intervention which allows operators to focus on safe operation of the bus. Conversations have started with the Hayden AI data team to set up automated data feeds using an application programming interface (API) for higher data quality and real-time reporting.

ADVANTAGES/DISADVANTAGES:

This report does not recommend a course of action with notable advantages or disadvantages.

ALTERNATIVES ANALYSIS:

This report does not recommend an alternative analysis.

PRIOR RELEVANT BOARD ACTION/POLICIES:

Staff Report 22-109 Bus Stop and Lane Violation Enforcement
Staff Report 23-343a Adoption of Ordinance 19
Staff Report 23-242 Forward Facing Camera Bus Stop and Bus Lane Enforcement Technology
Board Policy 465 Procurement Policy

ATTACHMENTS:

1. Agenda Planning Request

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In Collaboration with:

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Approved/Reviewed by:

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