

ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



STAFF REPORT

MEETING DATE: 5/14/2025

Staff Report No. 25-269

TO: AC Transit Board of Directors
FROM: Kathleen Kelly, Interim General Manager/Chief Executive Officer
SUBJECT: Accessible Wayfinding Technology Updates

ACTION ITEM

AGENDA PLANNING REQUEST: ☐

RECOMMENDED ACTION(S):

Consider receiving an update on accessible wayfinding hardware and software technology solutions.
[Requested by President Shaw - 8/7/2024]

Staff Contact:
Ahsan Baig, Chief Information Officer

STRATEGIC IMPORTANCE:

Goal - Prioritize Diversity, Equity, Inclusion and Accessibility

Initiative - Internal and External Diversity, Equity, Inclusion and Accessibility Programs and Priorities

Convenient, safe, and accessible wayfinding remains a challenge for AC Transit's diverse ridership. By integrating modern accessible technologies, the District can better serve all riders, particularly those with vision impairments.

BUDGETARY/FISCAL IMPACT:

This report has no fiscal impact. Funding for the tactile maps was allocated in prior and current fiscal years. The website contract is an ongoing expense in the operating budget under software licenses.

BACKGROUND/RATIONALE:

Improving accessibility in transit services is a core objective of AC Transit. In FY 2024 and FY 2025, the District allocated funding for accessibility pilot projects and enhancements focused on meeting the needs of riders with vision impairments. Staff in the Marketing, Communications, and Customer Service Department, working in collaboration with other departments, has led several initiatives to expand access for low- and no-vision riders.

Tactile Stop Maps

To support blind riders, staff partnered with Lighthouse for the Blind to produce tactile paper-based maps featuring embossed graphics and braille that identify bus stops and the bus lines that serve them. Used alongside the accessible AC Transit website, these maps help riders navigate complex transit hubs.

In collaboration with the Accessibility Department, staff piloted the maps with potential end users, including members of the General Manager’s Accessibility Advisory Committee, the California School for the Blind, and the Orientation Center for the Blind. Participants tested the maps and provided feedback on design, usability, and improvement opportunities through interviews.

Feedback confirmed the maps’ value and suggested expanding coverage and making refinements. As a result, staff commissioned additional maps for stops at or near Fremont BART, Hayward BART, 12th St/City Center BART, and Uptown Oakland/19th St BART. Staff also implemented minor revisions to the existing El Cerrito del Norte and Downtown Berkeley prototypes.

At-Stop QR Codes and Stop Pages

As AC Transit’s bus stops offer printed schedule information, the text size can pose a barrier for low-vision riders due to ability and various conditions. To improve this situation and knowing that printed schedules are a valuable amenity for all riders, the Communications team worked with the Department of Innovation and Technology to develop web-based stop pages and custom QR codes that link riders directly to relevant information.

Each stop’s unique five-digit ID now corresponds to a dedicated web page featuring location details, schedules, real-time bus arrival data, live bus maps, and service alerts. These pages meet accessibility standards and support screen readers and magnifiers.

QR codes printed at each stop allow riders to access this information easily via mobile devices. The codes follow a secure and distinct design to prevent tampering. AC Transit also launched an educational campaign on buses and online to help riders recognize official QR codes, which only link to [ACTransit.org](https://actransit.org) or [ACTransit.us](https://actransit.us) URLs.

Website ADA Improvements and Audit

The AC Transit website is a vital resource for low- and no-vision riders who use assistive tools compatible with HTML. Over the past two years, Communications and IT staff implemented several accessibility enhancements:

- 1. Reduced use of PDFs:** Staff replaced key PDF documents with HTML content to improve screen reader compatibility; for example, converting the fare brochure into an expanded HTML page. Staff also configured the site to prevent search engines from indexing outdated PDFs.
- 2. Annual ADA audit:** IT and the website vendor completed a full ADA audit based on current federal web standards. All identified issues were resolved. An annual audit is now scheduled, and feedback from the General Manager’s Access Committee informed several improvements, particularly to screen reader accessibility.

Emerging Technologies: Clever Devices Integration / Ride Hailing App

As part of the District’s long-term strategy to modernize its computer-aided dispatch and automatic vehicle location (CAD/AVL) systems, staff is exploring a ride hailing feature or app-based request system. This would allow riders, particularly those with disabilities, to electronically notify drivers to stop or assist without relying on visual cues or physical gestures.

This concept is under consideration as a pilot project within the CAD/AVL 2.0 Capital Improvement Program (CIP). It may leverage Clever Devices technology, which integrates rider-operator communications directly through bus operator control heads. The proposed feature supports accessibility by reducing barriers to boarding, particularly for visually impaired or mobility-constrained riders.

Evaluation of Third-Party Wayfinding Technologies

Staff has also explored third-party accessible wayfinding solutions, including NaviLens, GoodMaps, and the now open-source Microsoft Soundscape. NaviLens was reviewed for its long-distance scannable QR technology but was determined not to be cost effective at this time.

Further evaluation of GoodMaps, Soundscape, and other similar platforms has been consolidated into the Mobile App 2.0 roadmap, allowing for a more unified and sustainable implementation of wayfinding features using AC Transit's in-house technology stack.

Grants and Timeline Considerations

While the District continuously monitors funding opportunities, no grants have been identified to date to support the implementation of the ride hailing or wayfinding app pilot. Due to the absence of targeted grant funding, no formal timeline has been established for deployment. However, the initiative remains a strategic priority and is included in the Mobile App 2.0 roadmap for future development as resources allow.

ADVANTAGES/DISADVANTAGES:

Advantages: Improving accessibility for riders with vision impairments enhances the transit experience, increases ridership, fulfills legal obligations, and strengthens community support for public transportation.

ALTERNATIVES ANALYSIS:

Staff previously evaluated braille plates as an alternative to QR codes. However, feedback from pilot participants and the Access Committee indicated that braille plates were impractical in busy urban environments. Other digital solutions were considered but proved cost prohibitive. The Metropolitan Transportation Commission has included an accessibility consultant in its regional wayfinding project, but it remains unclear whether the project's recommendations will align with or diminish AC Transit's current accessibility offerings.

PRIOR RELEVANT BOARD ACTION/POLICIES:

SR 24-253 - Accessible Wayfinding Technology Opportunities

ATTACHMENTS:

1. Agenda Planning Request Form

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