

ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



STAFF REPORT

MEETING DATE: 10/27/2021

Staff Report No. 21-234b

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager
SUBJECT: Customer Satisfaction Survey Literature Review

BRIEFING ITEM

RECOMMENDED ACTION(S):

Consider receiving a report on findings from the customer satisfaction survey literature review. [Requested by Director Peeples -5/28/08]

STRATEGIC IMPORTANCE:

Goal - Strong Public and Policymaker Support

Customer satisfaction is critical to attracting and retaining ridership. Customer satisfaction surveys provide valuable feedback about rider perceptions, offering insight into where the District excels and what areas need improvement to ensure high levels of customer satisfaction.

BUDGETARY/FISCAL IMPACT:

There is no immediate budgetary impact associated with this briefing item.

BACKGROUND/RATIONALE:

On June 9, 2021, staff presented Staff Report 21-234a to address Director Peeples' request for a report which included staff's analysis of surveys conducted in Europe, specifically surveys conducted in Helsinki, Finland, to determine how customer satisfaction surveys can be done cheaper, better, and more often.

In preparation for Staff Report 21-234a, staff conducted a thorough review of literature and academic papers from the Transport Research International Documentation database, American Public Transportation Association; Transit Cooperative Research Program; Transportation Research Board; Transit Development Corporation; Transportation Research Record; National Academies of Sciences, Engineering, and Medicine; Federal Transit Association; World Conference on Transport Research; and other transit-focused research at universities and research agencies. Additionally, staff conducted extensive research on surveying practices of transit agencies in Europe and tracked down a report produced by the Planning Unit of Helsinki Regional Transport Authority on passenger satisfaction surveying conducted in Helsinki in 2008 to gain deeper insight into those practices as specified in the request.

When the findings from the literature review and other research conducted in preparation for staff report 21-

234a were presented to the AC Transit Board of Directors, Director Peebles requested a report exclusively covering the findings from the transit literature review. This report addresses that request.

Literature Review Findings Summary

The latest literature indicates best practice for customer satisfaction analysis in the transit industry is to rank bivariate correlation coefficients (the measure of the relationship between two variables) to determine the relative importance of various transit attributes from a customer perspective. In order to allow this analysis, data needs to be collected from customers on their satisfaction with various attributes and the perceived importance of those attributes. The literature suggests a number of options to perform data collection with varying degrees of expense, time, and effectiveness including:

In-Person Intercept Surveying

In-person intercept surveys with random sampling helps ensure results are representative of the target audience. These in-person intercept surveys involve statistically representative sampling and collection plans, conducting of surveying on vehicles or at stops, and digital inputting and coding of any paper responses in addition to data cleaning, analysis, and reporting. This is often an expensive and time-consuming process. One option to limit personnel costs with this approach is to leverage non-professional surveyors (volunteers, students, etc.). This is the approach Helsinki Regional Transport Authority utilized in 2008.

Digital Surveying

Digital surveying has been increasing in popularity. Generally, web-based surveying platforms are utilized to conduct digital surveying offering a variety of question types and interactivity. This is often a faster and more cost-effective option as compared to in-person intercept surveying.

Focused Surveying

There are two ways to implement focused surveying. The first is to use a non-probability sampling method to select a sample which can be accessed in a cost-effective manner. This might mean restricting the surveying sample to those bus lines with a certain ridership threshold, or only surveying during a certain time period. Another option is to use a probability sampling method to generate a sample which is too small to have statistical power but would still provide useful insights into rider satisfaction, such as rider focus groups.

ADVANTAGES/DISADVANTAGES:

The main advantages of conducting an in-person intercept surveys with random sampling are the ability to ensure a statistically significant sample, the ability to reach riders that might otherwise be difficult to reach, and the benefit of professionally trained interviewers to provide survey assistance and better ensure that the riders complete the survey. As discussed, the major disadvantages of in-person intercept surveys include the large recurring costs and lag from survey collection to reporting on results. Additionally, while using untrained surveyors can reduce the cost of in-person surveying, it increases the possibility of selection and response bias due to the increased likelihood of improper surveying technique. It also increases the possibility of non-sampling errors such as introducing incorrect or false data into the survey results.

Digital surveying offers the opportunity to quickly reach a wide audience, eliminates the need to digitally input responses, allows staff to monitor preliminary results in real time, and is relatively cost effective. The major disadvantage of digital surveying is the increased opportunity to produce certain biases and errors in the survey data. Digital surveying introduces selection biases that would render unrepresentative samples.

However, there are ways to mitigate some of these biases and the intent of the survey may lessen the potential detrimental impact of some of these biases.

Focused surveying is also more cost-effective than professional, large scale in-person intercept surveying of a representative sample and could offer the additional benefits of speed, convenience, and in-depth response. However, this option doesn't produce representative results from which large-scale changes can be confidently pursued.

Staff is implementing formal customer satisfaction surveying and will bring a report to the Board of Directors which details the District's research efforts and survey results. AC Transit's customer satisfaction surveying activities will be informed by best practices discussed in this report and Staff Report 21-234a; subject matter expertise in the region; cultural competence around the populations AC Transit serves; and past experience surveying AC Transit customers.

ALTERNATIVES ANALYSIS:

There are no alternatives to this literature review.

PRIOR RELEVANT BOARD ACTION/POLICIES:

21-234a Customer Satisfaction Survey

ATTACHMENTS:

1. Works Cited

Prepared by:

Eden Gerson, Acting Marketing Manager

Approved/Reviewed by:

Nichele Laynes, Acting Director of Marketing & Communications

Beverly Greene, Executive Director of External Affairs, Marketing & Communications

Linda A. Nemeroff, District Secretary

Chris Andrichak, Chief Financial Officer

Jill A. Sprague, General Counsel