

# ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



## STAFF REPORT

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**MEETING DATE:** 1/9/2019

**Staff Report No.** 19-009

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**TO:** AC Transit Board of Directors  
**FROM:** Michael A. Hursh, General Manager  
**SUBJECT:** Flex Service

### BRIEFING ITEM

#### **RECOMMENDED ACTION(S):**

Consider receiving report on current bus routes that might be better suited for Flex service.

#### **BUDGETARY/FISCAL IMPACT:**

There is no budgetary or fiscal impact associated with this briefing item.

#### **BACKGROUND/RATIONALE:**

In July 2016, the District launched an on-demand transit service called AC Transit Flex, which enables customers to book trips from selected bus stops using: any internet-enabled mobile or desktop device, the District's customer service call center, or in-person at scheduled departure times at the Union City and Castro Valley BART stations. Operated by AC Transit operators on District-owned 14-passenger small transit vehicles, the service aimed to test whether on-demand service could improve service quality at an equal or reduced cost in sufficiently low-density service areas. In March 2018, the Board of Directors voted to continue the service in Castro Valley and Newark beyond the pilot year.

The principles and lessons learned from the Castro Valley and Newark Flex service areas should guide the consideration of expansion into new areas. To date, the service has had mixed-results. During the pilot year, over 700 unique customers tried Flex, completing 23,000 trips and returning 70 percent of the time after taking their first trip. On-time performance improved from 70% to 85%, even though operators drive a different route every hour. Service frequency increased at the schedule point - the BART station - where two-thirds of passenger trips begin or end (thanks to the bus serving only requested trips). Customers like the service: 94 percent of riders surveyed preferred Flex over restoring the discontinued fixed route, and 70 percent said they would take AC Transit more if the service were expanded.

But by other measures, Flex has not performed as well. Just three passengers per hour use the service on average, which is less than half of the Line 275 route Flex service replaced in Newark. Around seven passengers per hour do use the service during peak periods, which staff believes is the achievable maximum, but it is a fact that on-demand transit carries fewer passengers per hour than even a low ridership fixed route.

The gross cost to provide Flex compared to fixed route service is roughly the same per an hour of service because both services generally have the same cost components - vehicle cost, operator cost and overhead.

Where the two vary greatly is in the return on investment. The cost/passenger on the Newark Flex service is \$72 per passenger, while it was \$25 per passenger on the Line 275 that it replaced.

As such, staff does not recommend replacing additional individual fixed routes with Flex service. Flex is appropriate in areas where current fixed route ridership is less than seven passengers per revenue hour. There are currently no routes within the district that meet this criterion (see Attachment 1 - Productivity of Least Performing Routes Compared to Flex Productivity).

That said, staff does still recommend implementation of a South County service restructuring plan that involves expanding Flex service following a network approach that couples increased fixed-route frequency on major corridors while providing Flex service at every bus stop in Fremont and Newark not on a major corridor. AC Transit's current low-frequency network in Fremont and Newark consists of six hourly routes. With the new network concept being developed with input from city partners and the community, the District would invest more service hours in frequent service on a smaller number of key corridors, with Flex zones anchored at major transit centers providing coverage service everywhere else. How well this new network performs will depend on the new fixed routes, which could see two to four times as much service. If these higher-frequency routes perform as well as the best performing route in Fremont today, ridership could grow 11 percent. If the new routes merely maintain the current average of 14 passengers per hour, ridership may decrease.

All transit agencies have dual and often competing goals of "coverage" - ensuring everyone, particularly those in need, have access to some transit service - and "frequency" - investing in service levels that make taking transit convenient and useful to more people. If tackling declining ridership is the goal, it makes sense to invest in the attributes that make transit more useful to more people - fast, frequent, reliable fixed route service. If expanding coverage is the goal, then Flex service could make sense in sufficiently low-density areas. However, without new funding, expanding coverage will necessarily mean reducing service elsewhere in the district.

AC Transit's current split between frequency and coverage routes is about 70% to 30%, respectively. Therefore, the District already focuses a majority of service on increasing ridership. Staff recommends maintaining that goal and potentially increasing the amount of service allocated toward frequency in order to raise ridership. The use of Flex as coverage service could help the District achieve our goals by trying to minimize our coverage costs. Coverage and Frequency goals will be addressed in a future update of the District's service policies.

#### **ADVANTAGES/DISADVANTAGES:**

The advantages of not expanding Flex service into new areas include:

- Maintaining existing ridership
- Avoiding shifting resources from areas of higher ridership to areas of lower ridership

The disadvantages of not expanding Flex service include:

- Lowering customer expectations with respect to the proliferation of on-demand transportation services

#### **ALTERNATIVES ANALYSIS:**

Staff evaluated whether there were opportunities for replacing low-frequency routes with Flex service. However, given that all of the District's routes currently operate at above the capacity of Flex service, this would mean a reduction in ridership. Staff therefore does not recommend this approach.

Staff also considered using Flex to expand service into areas currently without transit service. Flex service can be a good means of testing the viability of transit in new areas because it captures rich ridership data used for transportation planning, such as complete origin and destination trip pairs. Should ridership exceed the capacity of Flex service, this data can be used to plan fixed-route service. However, without new sources of funding, expanding into new areas would mean cutting more productive service elsewhere. Therefore, staff does not recommend this approach without identifying additional sources of funding.

**PRIOR RELEVANT BOARD ACTION/POLICIES:**

Staff Report 14-247b: Flex Public Hearing

Staff Report 17-128: AC Transit Flex Service Update

**ATTACHMENTS:**

1. Chart - Productivity of Least Performing Routes Compared to Flex Productivity
2. Flex Presentation

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