AC TRANSIT FLEX

THE FUTURE OR FOLLY?
USING ON-DEMAND TRANSIT TO BUILD A FREQUENT CORE NETWORK

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SENIOR TRANSPORTATION PLANNER
AC TRANSIT | OAKLAND, CA
On-demand public transit launched in July 2016

Operated on AC Transit vehicles by AC Transit operators

Targeted as cost neutral replacement of fixed-route service in low-density areas
WHAT IS AC TRANSIT FLEX?

1. BOOK YOUR TRIP ON-DEMAND OR IN ADVANCE
   - CONFIRM YOUR 10-MINUTE PICKUP WINDOW

1a. WE’LL SEND YOU A PICKUP ETA WHEN YOUR BUS IS ON THE WAY
1b. TRAVEL TO BUS STOP
1c. TRACK YOUR BUS WHILE WAITING AT INTERSECTION

2. SHARE YOUR RIDE AS OTHER PASSENGERS GET PICKED UP AND DROPPED OFF
   - BOARD BUS AND PAY WITH CASH, CLIPPER, OR PASS

2a. TRACK YOUR BUS WHILE WAITING AT INTERSECTION

3. ARRIVE AT DROP-OFF POINT AND WALK TO DESTINATION
   - TRANSFER AT BART FOR DESTINATIONS IN THE EAST BAY AND SAN FRANCISCO

3a. ON YOUR RETURN, BOARD FLEX AT BART EVERY 30 MINUTES WITHOUT RESERVATION

*RESERVATIONS CAN ALSO BE MADE IN ADVANCE, OR ON A SUBSCRIPTION BASIS

flex.actransit.org
510-891-5470

Alameda-Contra Costa Transit
actransit.org
WHERE IS AC TRANSIT FLEX?

CASTRO VALLEY
- 1 bus in service
- Scheduled departure every 60 minutes
- Flex Bus Stop

NEWARK
- 2 buses in service
- Scheduled departure every 30 minutes
- Flex Bus Stop
In sufficiently low-density areas, could on-demand transit improve service quality at an equal or reduced cost, freeing up resources that could be invested in a higher-frequency fixed-route network?
WHY AC TRANSIT FLEX?

Ridership down 6% since 2014

AC TRANSIT SERVICE SUPPLY AND CONSUMPTION (2011-PRESENT)
WHY AC TRANSIT FLEX?

Ridership down 6% since 2014; Revenue hours up 12%
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AC TRANSIT SERVICE SUPPLY AND CONSUMPTION (2011-PRESENT)
WHY AC TRANSIT FLEX?

AC TRANSIT SERVICE SUPPLY AND CONSUMPTION (2002-PRESENT)

The end of the world as we know it…
“District 2” Ridership down 20% since 2014, Revenue hours up 10%

AC TRANSIT SERVICE SUPPLY AND CONSUMPTION (2011-PRESENT)
WHO AC TRANSIT FLEX?

Director Davis rides the bus...for three hours

- 17 minutes (6 miles)
- 33 minutes
  - + X minutes + 30 minutes
  - + 7 minutes
CAN WE DO BETTER HERE...
While responding to this...
AND STILL SERVE THOSE IN NEED?
1. Mobility
2. Resource Efficiency
3. Equity
GUIDING PRINCIPLES

1. Mobility
2. Resource Efficiency
3. Equity

FLEX PILOT

Goals of AC Transit Flex

Public Transit Goals

City and Regional Goals

1. Economy
2. Equity
3. Environment and Public Health
**GUIDING PRINCIPLES**

**Goals of AC Transit Flex**

1. Mobility
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**Public Transit Goals**

**City and Regional Goals**

1. Economy
2. Equity
3. Environment and Public Health

**FLEX PILOT**
PROJECT TIMELINE

2013  |  2014  |  2015  |  2016  |  2017  |  2018

October | September | May | November | July | March | April | March

- Mobility Management Task Force
- Released RFP
- Contract Award
- Service Planning, Testing, & Training
- Flex "Soft" Launch
- Official Launch & Elimination of Fixed Route
- Pilot Ends/Board Decision
**Costs and Funding**

- **Technology**
  - Small contract for technology services

- **FLEX**
  - Low/no added cost ("Hours" neutral)
  - 2 Buses
Maintenance and Operating **Cost Neutral**

### **Costs and Funding**

- **Line 275**
  - **STANDARD BUS**

- **Flex**
  - **SMALL BUS**
    - **TECHNOLOGY COST**

<table>
<thead>
<tr>
<th>Maintenance and Operating Cost</th>
<th>$0</th>
<th>$20,000</th>
<th>$40,000</th>
<th>$60,000</th>
<th>$80,000</th>
<th>$100,000</th>
<th>$120,000</th>
<th>$140,000</th>
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<tbody>
<tr>
<td><strong>ANNUAL O&amp;M + TECHNOLOGY COST</strong></td>
<td>30’ Diesel</td>
<td>26’ Cutaway</td>
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*Source: Alameda-Contra Costa Transit, actransit.org*
Ridership is growing
23,000+ passenger trips in first year

PERFORMANCE TO DATE

700+ Unique Riders
70% Return Customers

2017 2018
March 40 39
April 39 39
May 32 37
June 54 48
July 59 52
August 45 55
September 59 59
October 59 41
November 59 41
December 54 39
January 59 33
February 49 37

Castro Valley | Newark
---|---

Alameda-Contra Costa Transit
actransit.org
PERFORMANCE TO DATE

Online Booking: 48%
Call Agent Booking: 30%
Walk On: 22%
5 to 7 boardings per hour

Ridership Target

Passengers Per Revenue Hour

0 1 2 3 4 5 6 7 8
0 1 2 3 4 5 6 7 8

6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM

Castro Valley

Newark

Performance to Date
PERFORMANCE TO DATE

AVERAGE SUBSIDY PER PASSENGER TRIP

Newark Flex: $71.52
Castro Valley Flex: $63.57
275: $24.71
**PERFORMANCE TO DATE**

- 40% of passengers riding *from* BART are not taking the service *to* BART

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**Blue = Boarding, Red = Alighting**
**Lessons Learned**

Reservation-less + Scheduled + On-demand trips boost productivity (but lower reliability)

Upper limit of 7 (or 3?) passengers/revenue hour

Technology leads to greater efficiency and on-time performance (and lots and lots of headaches)
THE FUTURE OF FLEX: REDESIGNING THE NETWORK

Existing network (District 1 vs District 2)

Ridership

- District 1: 96%
- District 2: 4%

Cost

- District 1: 92%
- District 2: 8%

28 passengers per hour
14 passengers per hour
6 Hourly Routes + 4 Half-Hourly Routes = 100% Coverage
Proposed network

(4) 15-Minute Routes
THE FUTURE OF FLEX: REDESIGNING THE NETWORK

Proposed network

(4) 15-Minute Routes + 5 Flex Zones = 70%-30% Frequent-Coverage
THE FUTURE OF FLEX

→ Will a **high frequency + flex** network sustain ridership?

High Ridership

High Fixed Route

Low Fixed Route

Low Ridership

- 22 pax/hour
- 14 pax/hour
- 7 pax/hour
- 3 pax/hour
• Visit www.actransit.org/flex/ or call (510) 891-5470 more information