



Alameda-Contra Costa Transit District

STAFF REPORT

TO: Planning Committee
 AC Transit Board of Directors

FROM: Michael A. Hursh, General Manager

SUBJECT: Transbay Ridership

BRIEFING ITEM

RECOMMENDED ACTION(S):

Consider receiving the report on Transbay ridership.

EXECUTIVE SUMMARY:

In the past two years, Transbay service has undergone substantial ridership growth, whilst fleet changes have reduced capacity. These two events have led to regular overcrowding on some peak trips, causing the District to exceed the Board Policy 550 standard of no standees on Transbay service. To help relieve the overcrowding on the worst affected trips, staff added additional trips into the schedule and monitored the loads to reassign higher capacity buses where needed most. These measures have stemmed the overcrowding and maintained the percentage of peak trips with standees at 20 percent, despite the 20 percent ridership growth. Staff's efforts to manage overcrowding are reflected in the reduced level of customer complaints; however, a number of operational constraints prevent entire elimination of standees in the short term on some trips during the peak.

2017 is the earliest the District can implement some major solutions to the overcrowding: up to 20 double decker buses will be in service on the highest demand trips, the reopening of Division 3 will allow for fleet expansion, and operations will transition to the new Transbay Transit Center, which provides more operational flexibility. After 2017, larger solutions require further regional consideration along with additional capital and operating funds.

BUDGETARY/FISCAL IMPACT:

There is no budgetary/fiscal impact associated with this report.

BACKGROUND/RATIONALE:

Current Conditions

Board Policy 550 provides the standards for vehicle load factors for all types of service. For Transbay service, the standard is a load factor of 1.0 - no standees. Unfortunately, due to unprecedented growth, the existing service cannot accommodate the demand and many peak trips experience standees. Since 2013, Transbay ridership has grown 20% from an average daily

ridership of just over 11,000 to nearly 13,500 today. This growth is mainly due to two factors: the BART strike of summer and fall 2013, and the overall economic recovery from the Great Recession. Figure 1 below shows the sharp ridership growth between spring 2013 (before the first BART strike) and fall 2013 (after both strike events).

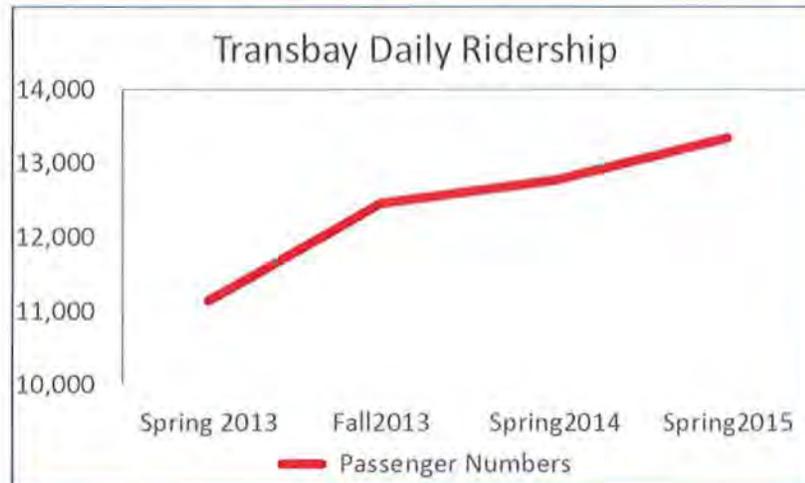


Figure 1 – Transbay Daily Ridership Growth

In addition to the increased ridership, another constraining factor on the Transbay service is the reduced Transbay fleet seat capacity. The Transbay service requires 130 buses in the afternoon peak, 100 of which are a dedicated fleet; 46 Motor Coach Industries (MCI) coaches with 57 seats, and 54 suburban-style Gillig buses with 36 seats. In 2014, the District retired the first series of 31 MCIs and replaced them with the 36-seat suburban-style Gillig buses, reducing the overall dedicated Transbay fleet seating capacity. The main reason behind this change was accessibility; the MCIs provide poor access with only a single door, mid-coach wheelchair lift and high-floor, narrow aisle. The Gilligs provide much better accessibility and faster dwell times with the wheelchair ramp deployment, low-floor aisle, more accessible wheelchair securement area, and multiple doors, however, the tradeoff is reduced seating capacity.

Managing Increased Demand

To help lower the numbers of standees on the most crowded trips, staff took two approaches:

1. Added trips where possible given limited resources
2. Monitored loads and reassigned the fleet to place the higher capacity buses where needed

Firstly, staff identified the most overcrowded trips and inserted additional trips where resources allowed. Between 2013 and 2015, 20 trips were added across the AM and PM peaks at a total cost of \$750,000 per year.

Figure 2 below shows the effect of adding the last round of trips in the latest summer service change. These trips did not require additional peak buses; staff identified seven scheduling opportunities where one bus already in service could make one more trip for either the last or the penultimate trip. Additional trips were added adjacent to those trips with most standees (and in some instances, pass-ups) in the morning in order to spread the peak load. The aim was

to shift some passengers to the adjacent new trip and relieve the load on the original trip. Looking at the highest maximum load, six out of nine affected trips showed a reduction in the highest maximum load. Collectively, the original and new trips showed a year over year ridership increase of 29% compared to the overall Transbay growth of 5%. This shows not only a load shift to the added trip, but also additional growth, which is reflective of latent demand.

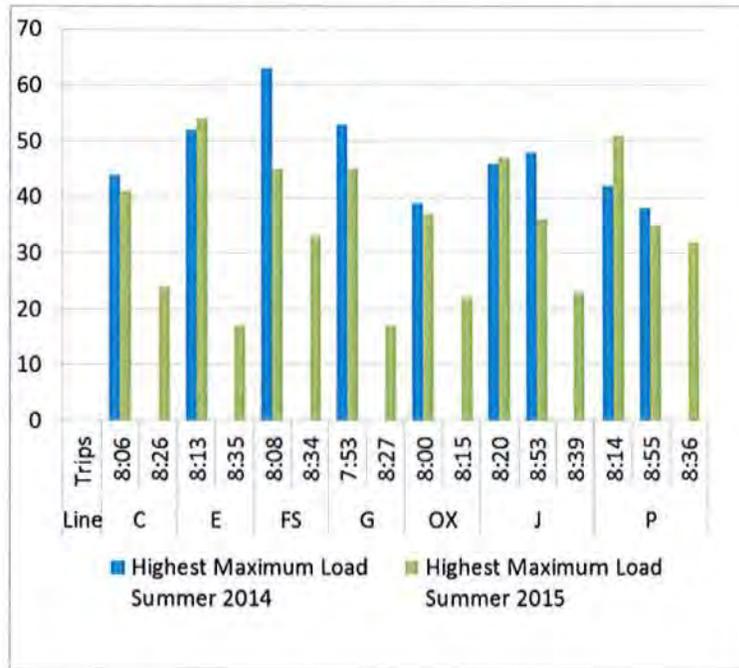


Figure 2 – Year over year comparison of the highest maximum loads by trip and the added adjacent trip in summer 2015

The second way to address the overcrowding issue was to reassign the remaining higher capacity vehicles (MCIs) according to the fluctuations in demand. Below, Figure 3 shows how through added trips and reassigning vehicles, the percentage of trips with standees remained constant at around 20% of peak trips, despite the 20% increase in ridership.

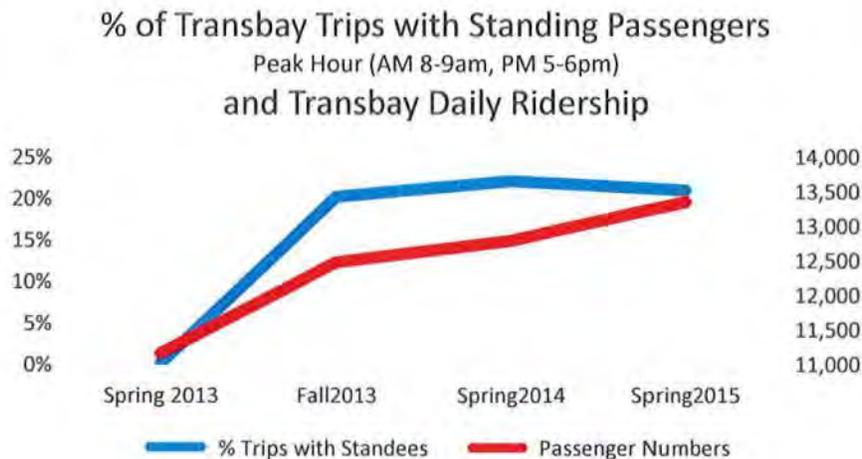


Figure 3 – Average Daily Ridership and % of Transbay Trips with Standees

While passenger complaints are one of the outcomes of the overcrowding, staff analyzed the complaints to see if the measures taken had a positive effect on passengers’ perceptions. Figure 4 shows the numbers of passenger complaints relating to Transbay overcrowding starting from spring 2013 through spring 2015. The graph clearly shows the period in spring 2014 when the effect of ridership growth and reduced capacity buses most affected passengers. In fall 2014, staff started adding trips and reassigning the MCIs to address highest demand trips. The drop in customer complaints is in line with these measures taken. However, despite this positive trend, the preliminary customer complaints numbers for summer 2015 are looking much higher, at about half the number of spring 2014. This could be due to the overall 5% year on year growth which is pushing some loads over capacity and making existing standee conditions worse. Staff continues to implement the measures outlined above, and may be able to add a handful of new opportunity trips in the winter signup by reblocking some schedules. However, the remedies are limited at this point, which is why the medium term solutions are critical to help solve the problem moving forward.

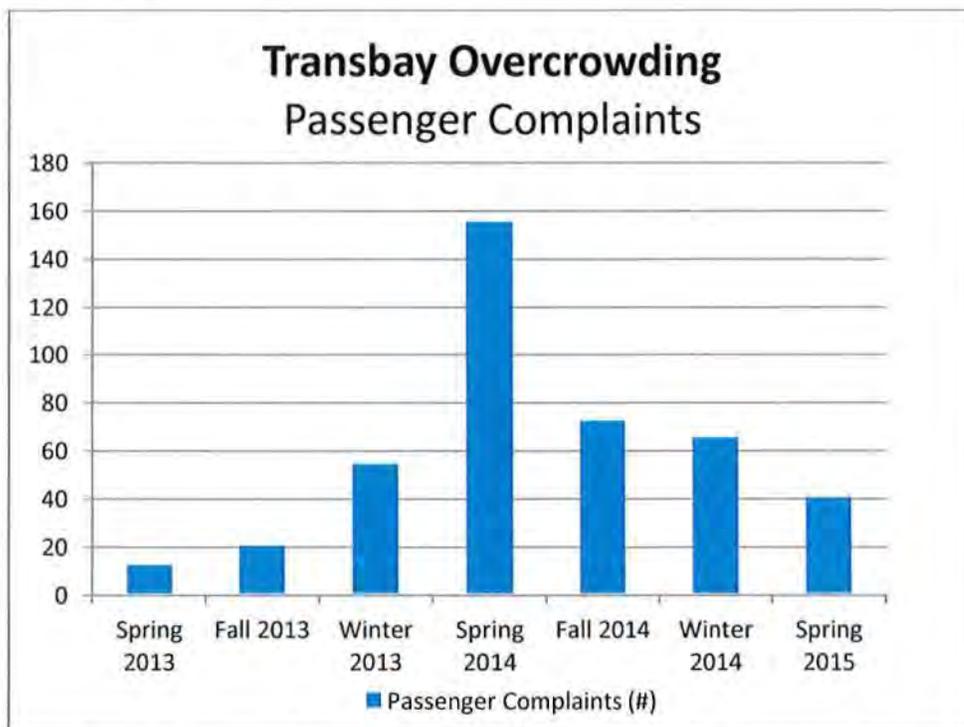


Figure 4 – Numbers of Passenger Complaints relating to Transbay Overcrowding

Existing Constraints

Staff recognizes that the measures described above are only minimizing the level of standees and not meeting all demand. However, the District has the following constraints, which make accommodating the current demand impossible in the short term:

Operators – The District is currently recruiting at the maximum levels possible in anticipation of the Service Expansion Plan increases planned for spring 2016. This will not provide additional operators for Transbay service.

Yard Capacity – The current three bus divisions are operating at the maximum capacity. The peak service cannot include more buses as a result. When the Richmond Division re-opens in

2017, there will be the potential to add up to 50 additional peak Transbay buses if the District commits to dedicating 50% of the parking capacity to Transbay service.

Temporary Terminal Capacity – The temporary terminal is only intended for temporary use and has less capacity than the original Transbay Terminal. In addition, there are only eight bays in the temporary terminal that can accommodate an articulated bus, which limits the ability to assign 60-foot articulated buses for more Transbay capacity. Finally, the on-street staging space required for the afternoon pullout is at capacity and it would be difficult to negotiate more staging required for any additional buses.

Bus Manufacturing Lead Time – It takes 18-24 months from the time the District procures a bus until the time it goes into service. If the District procures buses in the next few months, the earliest they will be available for service will be mid-2017.

Medium-term Solutions for 2017

Plans to increase Transbay capacity include:

New fleet - The District plans to purchase 10 double decker buses to be in service by mid-2017. These buses can provide up to 80 seats and could increase the Transbay daily capacity by 1,000 seats.

Additional Regional Funding – The District has programmed 10 additional double deckers in the replacement plan for 2018. If additional funding is available earlier, this could add a further 1,000 daily seats. In addition, when the Richmond Division reopens, there will be available capacity for up to 50 additional Transbay buses if capital/operating funds are available to expand service.

Transbay Transit Center – The new terminal is scheduled to open at the end of 2017. This new facility will accommodate 30 bays for AC Transit, and can be reconfigured to include more articulated bays, compared to 17 total bays in the Temporary Terminal. The additional bays provide room for service expansion, up to three times more than existing service with a maximum 300 buses an hour.

Medium-term Solutions to Consider

There are solutions that will take longer to implement and staff are considering the following:

- Increasing park and ride opportunities
- Piloting limited stop routes in the urban core
- Partnering with BART to optimize peak demand between modes
- Incentivizing off-peak travel

In addition to the District's efforts, the following is a list of regional plans that are also looking at capacity issues for Transbay service.

- Core Capacity Transit Study (MTC)
 - This will include a service plan and investigate the viability of a contra-flow transit lane on the Bay Bridge

- Managed Lanes Implementation Program (MTC)
 - This study will look at the approaches to the freeway and transit in managed lanes along the freeway corridors
- Western Contra Costa Express Bus Study (CCCTA)
 - This study is analyzing improvements to the Express bus services along the I-80 corridor
- Alameda Countywide Transit Plan (ACTC)
 - This study looks at connecting transit-competitive markets including connections between the East Bay and San Francisco

MTC presentation – On September 9, 2015, then Interim General Manager, Kathleen Kelly, joined BART’s General Manager and WETA’s Executive Director to present the transit capacity issues along the Transbay Corridor as detailed in this report. The intent of the presentation was to encourage the Commission to work with the three transit agencies to develop short-term capacity solutions that provide immediate relief to growing demand along the corridor.

ADVANTAGES/DISADVANTAGES:

This report is for information on Transbay Ridership.

ALTERNATIVES ANALYSIS:

This report does not recommend an action.

PRIOR RELEVANT BOARD ACTIONS/POLICIES:

None.

ATTACHMENTS:

None.

Executive Staff Approval:	Aida R. Asuncion, Interim Chief of Planning Engineering and Construction
Reviewed by:	Robert del Rosario, Director of Service Development
Prepared by:	Linda Morris, Senior Transportation Planner