BART Sustainable Financial Strategy

1. Introduction

As the fifth-busiest heavy rail rapid transit system in the United States, Bay Area Rapid Transit (BART) provides fast and reliable service in connecting San Francisco and Oakland with multiple suburban area in different counties. For more than 60 years, BART brings more convenience to residents and travelers through downtown, shopping area, offices, tourist sites and other destinations. As a long period running economy entity, BART authority sustains its physical service with unique funding structure. However, like many other transit agencies, it faces similar financial obstacles and deficit. BART authority develops its own funding solutions in getting rid of these issues. In addition, BART authority has also published relevant financial policies to ensure its aim of keeping operation cost within estimated revenue compensation.

2. BART funding structure

According to funding reports of recent few years, there are two budget categories at BART, operating source and capital source. Both of them contains revenue part and use part. Specifically, operation revenue is the revenue that are directly related to transit operations and principally derived from passenger fares. It also contains the revenue from parking fee, advertising and financial assistance by means of sale and property tax. Some funding from variant geography agencies for transit related activities is also classified as the operating revenue. In the operation expense, there is no depreciation and the effect of expense adjustments associated with changes in unfunded pension and post-employment obligations. In addition, operating source also include allocations to support capital projects, funds to cover debt service for outstanding sales tax revenue bonds, and allocations to fund operating reserves. Capital funding is majorly composed of four parts, which are grants, other funding from federal, state and local agencies, voter-approved bond measures, and allocation of BART operating funds. Capital improvement and capitalized maintenance of the transit system composed the capital expenses.

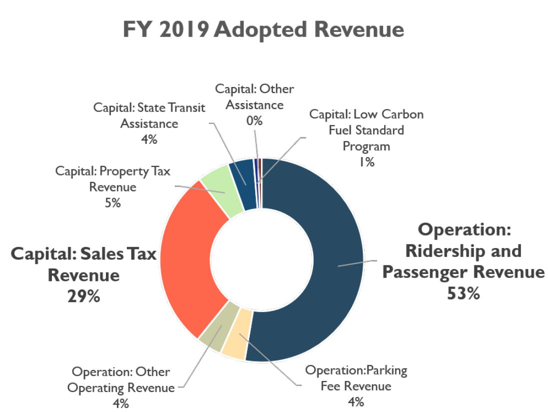

Figure 1. FY 2019 Adopted Revenue. *Source: FY 19 Adopted Budget*

Before the COVID-19 pandemic, the BART system already had funding balance obstacles, especially due to the decline of ridership and fare revenue. As a significant share of operation revenue, ridership and passenger revenue have taken up more than 50%. However, it is undergoing a successive decline since FY17. Competition with other transit agencies and concerns about the quality of life might have contributed to the loss of ridership and worsen the fiscal balance issue. Aimed at getting rid of ridership problem in the long run, BART is actively engaged in multiple programs and also increased investment in order to improve riders' satisfaction, whereas it increases the financial burden imminently. Unfortunately, the pandemic brings an even greater calamity of the BART system, with more than 90% ridership decline and possible negative impact on sales tax revenue. As for BART, how to survive in this unprecedented period? Our group provides 5 following suggestions.

3. Short term funding suggestions

3.1 Carbon Credits

The California Low Carbon Fuel Standard (LCFS) credits is one of the most important financial assistance sources since 2016 when the electrically powered rail systems were included to generate credits in the LCFS such as BART. In FY 2018, 2019 and 2020, BART's LCFS budget was at $4M, $6.5M and $14.1M according to the *FY20 Adopted Budget Report*. However, due to the exceptionally favorable LCFS market conditions, the actual fiscal year sales for 2018 and 2019 exceeded $19.2M and $15.8M. Considering the huge impact of the pandemic, people would prefer to drive alone than carpool or public transit to keep the social distancing, which means there would be more actual fiscal year sales of LCFS credits for FY20 than the budget. Using LCFS credits as a financial assistance source helps to offset the operating costs in one hand, and in the other hand relieve the road congestion brought by COVID-19.

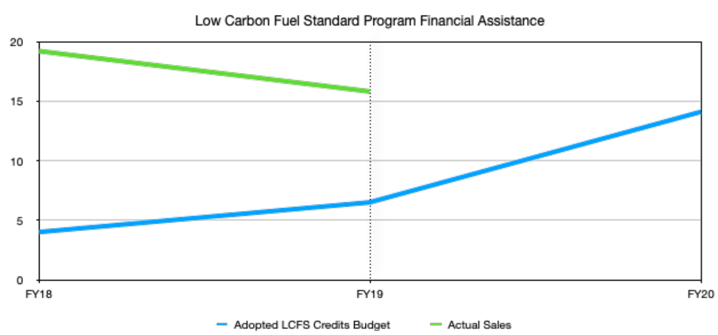

Figure 2: LCFS program financial assistance. *Source: FY 20 Adopted Budget*

3.2 Prioritizing capital projects.

BART's plan for capital projects ambitious. It addressed nearly every aspect of problems within the existing system, including aging infrastructure, homeliness, fare evasion, customer experience, system expansion and so on. However, current funding sources are now yet abundant to support the huge amount of investment. Therefore, BART needs a detailed order of priority for all these projects. Large projects, such as modernization of infrastructure, should be divided into phases. For instance, the priority could be based on Biennial Customer Satisfaction Survey, identifying sites where the satisfaction rate went down fastest. Other factors, such as safety, cost-efficiency and specific funding available, should also be taken into account when prioritizing projects.

BART also needs to seek partnership for funding these capital projects. For example, the construction cost of BART's Silicon Valley Berryessa Extension is fully funded by the Santa Clara Valley Transportation Authority (VTA). VTA will also reimburse BART for all costs associated with rail service, including operations, maintenance, core system impacts, and funding of a share of core system capital expenses. Such pattern lessens the financial burden of BART to a large extent.

3.3 Other Available Funding Source:

There are a bunch of funds or grants possible for BART to apply for. These could bring more stability in the operation. Here is a list of funding sources that might be appropriate for BART: Alameda Measures B/BB and Additional County-Controlled Funds; San Francisco Development Impact Fees; Lifeline Grant Program for the Elevator Attendant Program; Transportation Fund for Clean Air; California Office of Emergency Services Hazard Mitigation Grant Program.

4. Long run funding suggestions

4.1 Further support on TOD programs

Transit-oriented development is a sustainable funding source for BART's operating budget. Up to now, BART's TOD program has completed twelve developments at eleven stations, totaling 1,975 housing units and 194,000 square feet of commercial space. Every BART project has resulted in a net gain of riders, and in turn increases the fare revenue. As of 2020, it is estimated that existing TOD programs will generate $6.8 million in fare box revenue. In addition, these projects will also generate $1.3 million in ground lease revenue and $167,000 in participation.

In the short term, this amount is not sufficient to compensate shortfall of funding. However, by demand management and discouraging parking within the TOD projects, there is still space to increase the fare revenue generated by TOD programs, and BART owns 250 acres of land around stations available for new TOD projects. BART should keep investing in TOD programs in the following years. TOD is not only beneficial to keep the financial stability of BART but can alleviate the regional housing crisis and help with environmental-friendly transportation choice and complete communities as well.

4.2 Congestion Pricing

Congestion pricing is a method to reduce the car numbers on the road during the peak hours while generating the funding for transportation projects. Since it will go into effect in New York City by 2021 and Southern California has started to explore congestion pricing, it is possible for the Bay Area to manipulate congestion pricing across the region in the following years to raise the funding to rescue transit agencies. Since BART is a transit system connecting multiple counties and cities, congestion pricing based on the corridor would be the most efficient way, such as I-80 which connects San Francisco with Berkley, I-280 and I-880 along Peninsula and East Bay.