

## INFRASTRUCTURE CASE STUDY:

# *Oakland Airport Connector*

## SUMMARY

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PROJECT TYPE	YEAR
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Light rail transit	2014
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### DEAL STRUCTURE

Design-build-finance-operate-maintain agreement

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### TOTAL COST

\$484 million plus annual operating costs of \$3 million

### FINANCING

TIFIA loan

### FUNDING

Bridge toll user fees and FTA Small Starts grant

### PUBLIC BENEFIT

Links transit system to the airport and reduces congestion

# Background

The Oakland Airport Connector (OAC) is a 3.2-mile extension of the Bay Area Rapid Transit (BART) system that travels from Coliseum Station to Oakland International Airport via a new, driverless, Automated Guideway Transit system.<sup>1</sup> Planning for the project began in 1970, with planning and authorization continuing until 2009, when the design-build contract was approved. The purpose of the OAC is to link the BART system with the Oakland International Airport with the intent of making the area more desirable for business and travel.<sup>2</sup> The project may also serve to reduce congestion along Hegenberger Avenue, one of the main roads in the area. Because the cost of a trip is less than other modes of transport, residents and visitors will be economically incentivized to make use of this new option.<sup>3</sup> In addition, the project was projected to create and/or support approximately 13,000 direct and indirect jobs and generate \$1.2 billion in economic activity during construction.<sup>4</sup> The OAC opened in November 2014.

## Project Description

The original intention was for BART (a regional transportation authority and not a part of any local or state government) to use a P3 DBFO (design-build-finance-operate) structure, with the private consortium expected to finance half of the project's capital costs, with monthly payments back to the consortium drawn from fare revenue.<sup>5</sup> However, this did not come to pass. The Request for Qualifications (RFQ) for a DBFO contract was sent out in 2006.<sup>6</sup> Three potential teams qualified, and a Request for Proposals (RFP) was issued in 2007.<sup>7</sup> However, all private partners eventually left the project (the final partner withdrawing in 2008) as projected costs rose and projected ridership declined, citing "lack of confidence in the opportunity for any return on investment".<sup>8, 9, 10</sup>

The OAC project ultimately followed a design-build-operate-maintain (DBOM) structure.<sup>11</sup> Flatiron Corporation led the venture with a 70 percent share, and was in charge of the design and construction of a fixed, elevated guideway (a design-build agreement).<sup>12</sup> Parsons also entered into a design-build agreement, in the role of design and construction of the system.<sup>13</sup> Doppelmayr Cable Car served as the third partner in the project in a DBOM capacity. Their role was to install the ropeway, guideways, and cable liner vehicles. Also, Doppelmayr has a 20-year operations and maintenance contract for the system.<sup>14</sup> They are to be paid to run the system, provided that trains are available to passengers at least 99.5 percent of the time.<sup>15</sup> In addition, Turner Construction Company worked as a 'major subcontractor'<sup>16</sup> alongside more than 70 other subcontractors that included local and small businesses.<sup>17</sup> The involvement of local businesses was considered a major success of the investment.<sup>18</sup>

The total cost of the project was \$484 million, with a \$3 million annual operational budget.<sup>19</sup> The connector is expected to generate revenue through a \$6 fare per rider. The projected ridership was 2,745 passengers a day at opening, which is projected to increase over time.<sup>20</sup> This system replaces the AirBART bus system (which used to connect the same two points). The project ran over its expected completion date of June 2014 by a few months, holding its grand opening in November 2014.<sup>21</sup>

The project was financed through a \$105.7 million TIFIA loan, \$20 million from the Metropolitan Transportation Commission (MTC), and a mix of local, state, and federal resources for the remaining portion.<sup>22</sup>

## Benefits and Criticisms

The development of the OAC was not without controversy. Arguments against the system were that it would not serve enough people, the travel time (8 minutes) is too slow, and it is unfair to the AirBART shuttle drivers who would likely be laid off.<sup>23</sup> The project also failed to attract significant private investment. From the project's inception, some argued that dedicated bus lanes or improvements to the larger

BART rail network would have been a better allocation of funds.<sup>24</sup> However, BART did analyze alternatives, and concluded that a bus alternative would not match the daily ridership, capacity, wait time, or trip time of the connector project (although it would have been substantially cheaper).<sup>25</sup>

BART employed the skills and technology of Doppelmayr Cable Car to design and operate the system, establish a rail connection to an international airport, and create jobs for local residents in the process.<sup>26</sup> The project also offered an alternative to driving.<sup>27</sup>

The project planners originally anticipated \$70 million in money from the American Reinvestment Recovery Act from the Federal Transit Administration, but that money was revoked due to equity concerns related to the fare price and concerns that the project violated Title VI of the Civil Rights Act of 1964.<sup>28</sup> These concerns were raised by local advocacy groups, and the money was revoked when it was found that BART had not prepared a service equity study. This financing support loss was made up through project cost reductions and additional borrowing from TIFIA. The challenge from the FTA was ultimately dismissed when BART's service equity analysis concluded that fare increases produced no significant adverse impacts to minority or low-income passengers.<sup>29</sup>

## Takeaways

This project shows that private investors will not hesitate to walk away from a deal, and they may be inclined to do so if the planning processes draw on for extended periods. BART faced an extremely vocal critic, the advocacy group Transform. Transform's criticisms of the costs and potential civil rights issues of the project caused a loss of public support for the OAC.<sup>30</sup> As the costs of the project expanded, the project's unpopularity increased. However, BART stuck with the project, arguing that the rising costs were due to an inaccurate initial projection not done by their analysts, with other increases due to delays and the economic recession.<sup>31</sup>

Despite challenges, the project can be deemed an overall success. Despite complaints regarding the high \$6.00 fare (double the cost of the bus), 2,600 people rode the system in February 2015, in line with projected ridership and 36.9 percent higher than ridership of the old bus system at the same time the previous year.<sup>32</sup>

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## Endnotes

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