

LA ORANGE LINE

SUMMARY

The Los Angeles Orange line, operated by Los Angeles County Metropolitan Transportation Authority, began operations October 29, 2005 and is the first bus line to be distinguished by a color rather than its route number. It serves a 14-mile corridor between the Warner Center and the North Hollywood Metro Red Line subway station with 14 stops. The Orange Line operates between approximately 3:45AM to 1:30AM seven days a week and operates every four to five minutes during peak travel periods.

BRT ELEMENTS

In order to provide efficient and reliable service, the Orange Line offers off-board ticket vending machines, transit signal priority using loop detectors at intersections, real time information signs at stations using automated vehicle location systems, larger 60 foot articulated buses, level boarding at stops, increased spacing between stops, and additional doors to the bus for easier boarding and alighting. By building an efficient and reliable system more riders have been attracted and the Orange Line has seen an increase in total monthly boardings of 32 percent over the past two years.

BRT PERFORMANCE

According to the rider survey, approximately two-thirds of the riders who



previously drove on the US 101 said their travel time had been reduced by the Orange Line. Of respondents who made the same trip by any mode prior to the opening of the Orange Line, 85 percent reported a reduction in travel time by switching to the Orange Line. Metro projected 5,000 to 7,500 average weekday boardings for the first year of Orange Line service and

22,000 average weekday boardings by 2020. By May 2006, only seven months after opening, the Orange Line had achieved its 2020 goal, attracting 21,828 average weekday boardings.

BRT BENEFITS

The Orange Line buses also positively effecting Los Angeles' pollution problem putting out only 5% as much carbon monoxide, less than 8% as many volatile organic compounds, and nearly half as much carbon dioxide and nitrogen oxides as the buses passenger's cars would have created going along the same route. In December 2005, the California Center for Innovative Transportation (CCIT) analyzed the impact of the Orange Line on US 101 peak hour commutes. CCIT found that, since the opening of the Orange Line, southbound traffic flow during the morning peak had improved roughly seven percent, while total time spent stuck in congestion had dropped by about 14 percent, Due to BRT's versatility in implementation, it was the obvious choice over a light rail system due to Los Angeles' decentralized urban layout.

BRT COSTS

The Orange Line cost roughly \$349.6 million to build, or \$25 million per mile. In capital cost efficiency, the Orange Line compares quite favorably with the Gold Line rail system. Metro spent approximately \$859 million to build the Gold Line, or \$62.7 million per mile. After just seven months in service, the Orange Line was outperforming the much more expensive light rail service, with capital costs per weekday boarding about one-third of the Gold Line's costs.