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Travel Time Results for Bay Crossing Bridges



Alameda County is the geographic center of the region. It borders with the San Francisco Bay on the western side and the three bay crossing bridges (Bay Bridge, San Mateo Bridge, and Dumbarton Bridge) provide critical transportation conduits to major employment centers in San Francisco, the Peninsula and Silicon Valley. As background information, the Bay Bridge toll is currently priced at \$6 in the weekday commute periods (between 5:00 AM and 10:00 AM, and between 3:00 PM and 7:00 PM) and \$5 on weekends. The San Mateo and Dumbarton Bridges tolls are \$5. Also, the speed limit is lower on the Bay Bridge (50 mph) compared to 65 mph on the other two bridges.

Alameda CTC has been monitoring the performance of these three bridges using travel time data since 2002. This was accomplished by using data collected by Caltrans or MTC or from Toll Tag information. The methodology and end points used to monitor the bridges have varied in the previous monitoring cycles depending on the data source.

Starting in 2014, commercial data was used to collect the speed data on the bridges similar to freeway segments. This is expected to allow a direct comparison of trends in the future due to consistency in methodology, which was not possible with data from previous years. The 2014 data presented in **Appendix B, Tables B-12 through B-14** can be used as a baseline to enable comparisons in future years.

Based on the 2014 data, it was possible to compare the performance of the bridges to each other. It is recognized that some commuters may have the choice of using two bridges for their daily work commute or for weekend travel. The likely choices for drivers may be between the Bay Bridge and San Mateo Bridge, or between San Mateo Bridge and Dumbarton Bridge. **Figure 5-1** compares the performance of each bridge from the county line to the first exit on the SF/Peninsula side. Generally, more congestion was experienced around the toll both areas. **Appendix B, Tables B-1 to B-3** provides detailed supporting data for segments within Alameda County, and **Appendix B, Tables B-12 to B-14** provides data for segments in adjacent counties.

A typical Alameda County resident accessing San Francisco or the Peninsula for work, would travel westbound towards SF/Peninsula in the morning and eastbound towards Alameda County in the afternoon. For such residents choosing between the Bay Bridge and San Mateo Bridge, there is little difference in the average speed (with 2 mph in the morning peak and 4 mph in the afternoon peak approximately). For residents choosing between the San Mateo

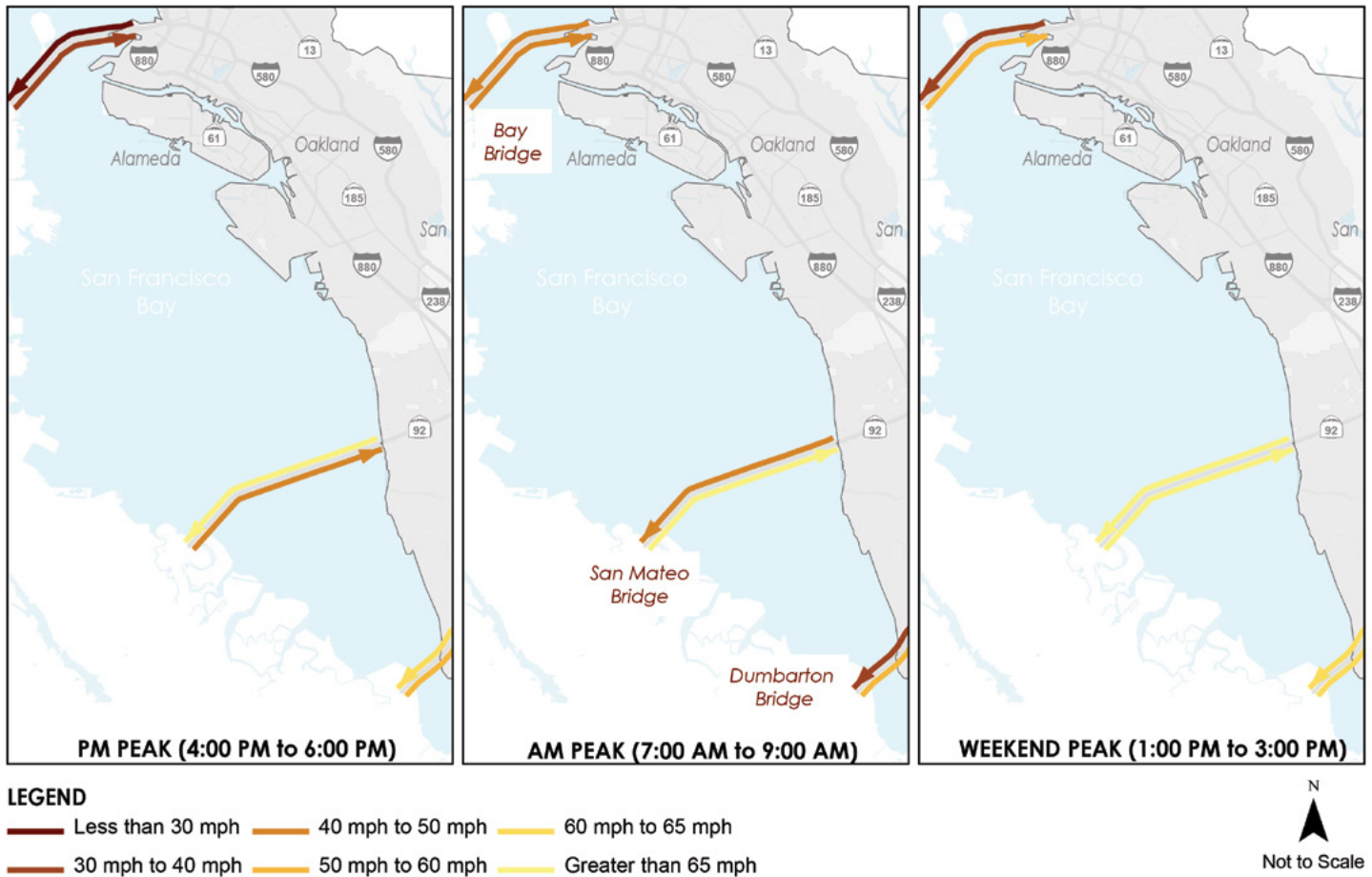


Figure 5-1: Map of Bridges across San Francisco Bay and Average Speeds in each Peak Period (mph)

and Dumbarton Bridges, the difference is higher (with 10 mph in the morning peak and 11 mph in the afternoon peak approximately). Interestingly, San Mateo Bridge shows faster speeds in the morning and Dumbarton has faster speeds in the evening. On the weekend, the San Mateo Bridge has fastest speeds reported in both directions of the three bridges.

As expected, the average speed on the Bay Bridge is lower compared to the other two bridges in all time periods. This highlights the higher interregional and regional traffic demands on this key connection to San Francisco. On the weekend, recreation trips to San Francisco make the Bay Bridge congested and experience slow speeds comparable to the weekday peak periods.