

Average speeds on the CMP network declined and almost returned to pre-recession speeds in 2014, after peaking in 2010 during the economic recession.

Alameda CTC has been monitoring the performance of the CMP road network since 1991. In recent times, there has been a noticeable change in congestion on the network and overall performance influenced by the economic conditions in the Bay Area and the nation. This section analyzes the long term trends since 2005/06, and relates the performance of the transportation network to external factors that likely influence the traffic volume on the network such as the economy, levels of employment, demographics and transit ridership.

Overall, average speeds on the CMP network almost returned to pre-recession speeds in 2014, after peaking in 2010 during the economic recession. **Figure 7-1** shows the average CMP network speeds on freeways and arterials between 2006 and 2014. Considering the large extent of the CMP network being monitored, the slight increase in average network speed, peaking in 2010 by 0.8 mph to 51.8 mph on freeways and 0.4 mph to 26.1 mph on arterials, represents a significant improvement in network performance for both freeways and arterials.

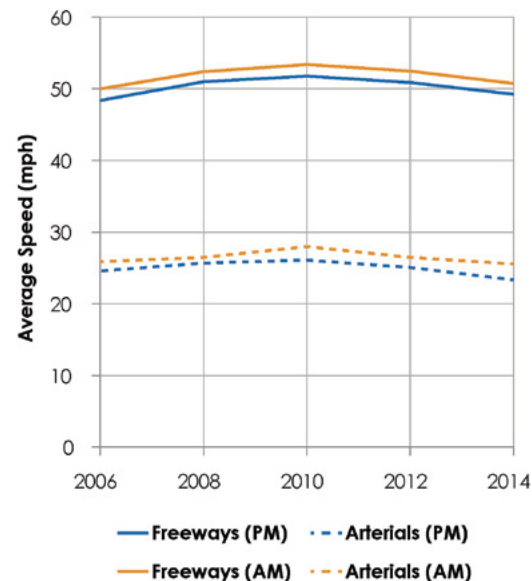


Figure 7-1: Average Speed on CMP network (mph)

7.1 | Review of Jobs and Economic Recovery

The economic activity and residential population in Alameda County were reviewed and compared to the traffic conditions experienced on the CMP network (**Figure 7-2**). While the number of residents in Alameda County continued to increase since 2006, employment has seen its ups and downs due to the recession. In 2009, employment in the county dropped significantly and was

at its lowest level in 2010. By 2011, it began to recover with more significant improvements in 2012 and 2013.

As mentioned previously, average freeways and arterials speeds show a close correlation to employment. Employment decreased around 2010 and therefore fewer workers commuted during the peak periods, resulting in improved speeds across the roadway network. As employment recovered after 2012, CMP roadway speeds declined demonstrating that the roadway performance was more closely correlated to employment levels than the residential population.

Although employment in the county increased from 2012 to 2013, employment was still not as high as pre-recession years. If employment continues to improve, it would likely further impact the roadway performance, and this may be captured in the next monitoring cycle.

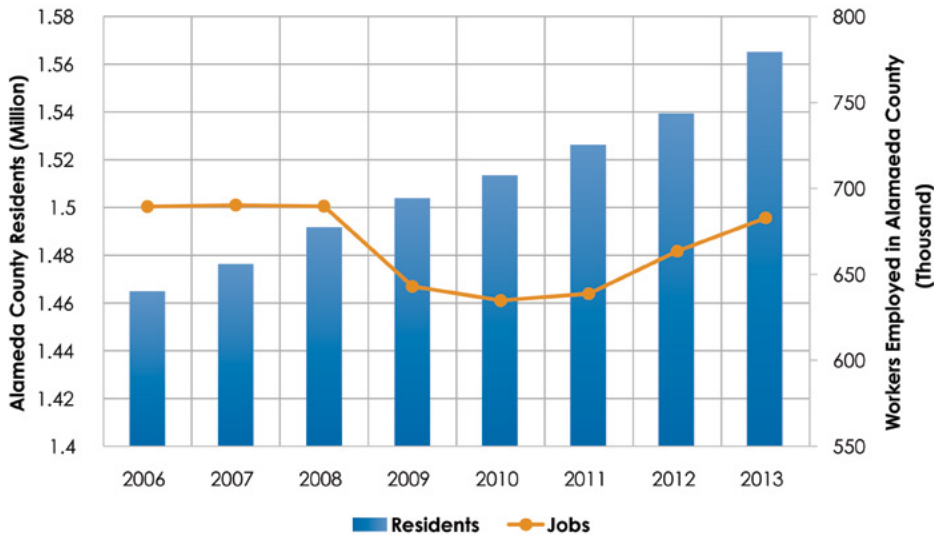


Figure 7-2: Alameda Population and Employment (Source: 2010 US Census)

Since Alameda County is the geographic center of the Bay Area, regional and inter-regional commutes impact many of the regional connectors; particularly I-880 and the three bridge crossings connecting Alameda County with the regional employment centers of Silicon Valley (Santa Clara County), San Francisco and the Peninsula (San Mateo County). Employment data shows that there were fewer unemployed workers in the wider Bay Area than in Alameda County between 2009 and 2013 (**Figure 7-3**). In other words, Alameda County lags behind the other neighboring counties in employment recovery. With higher employment levels in other counties, as evident from **Figure 7-4**, there has been an increase in vehicle volumes across the bridges and regional corridors to other counties between 2012 and 2014 in both the morning and afternoon peak periods. There has also been a 5% increase in vehicle volume on I-880 towards Santa Clara County.

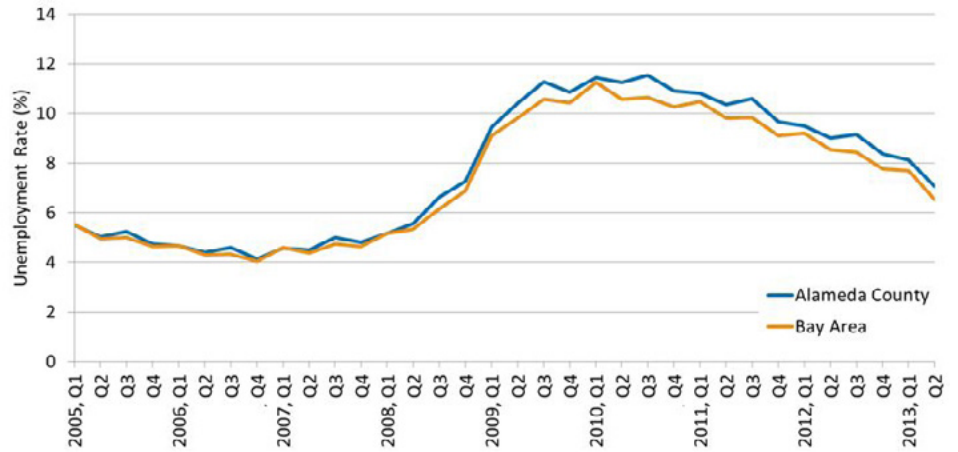


Figure 7-3: Quarterly Unemployment Rate (Source: Bureau of Labor Statistics)

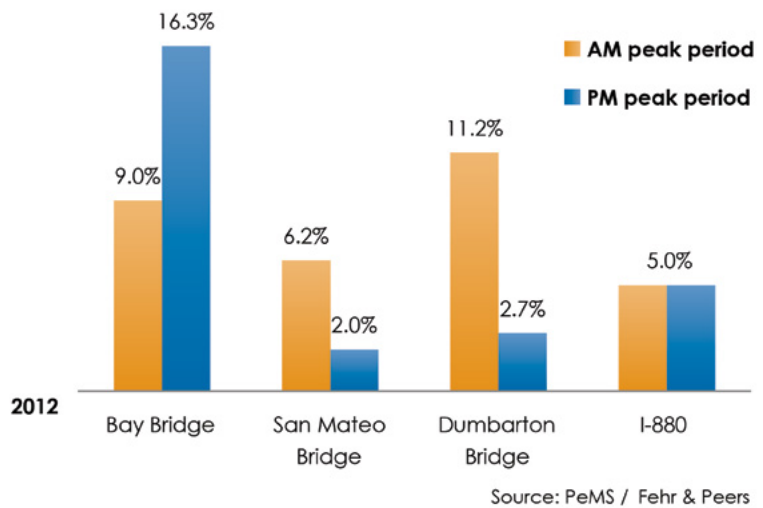


Figure 7-4: Percent Change in AM/PM Peak Volumes from 2012 to 2014 (five hour peak period)

The CMP roadway speeds were also compared to public transit ridership, specifically on BART, a major regional transit system. **Figure 7-5** shows the relationship between average freeway speeds and BART ridership. In 2010, at the peak of recent unemployment, BART ridership was low and the demand on freeways had lessened as is evident from the reported faster freeway speeds. During the economic recovery in 2012 and 2014, the demand on these two transportation services has increased, showing increasing BART ridership and declining average freeway speeds.

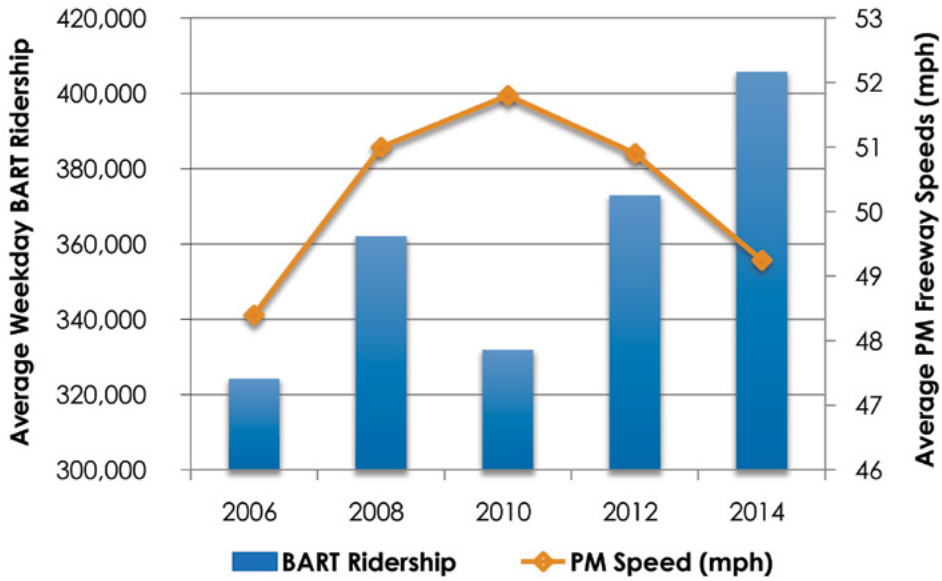


Figure 7-5: PM Peak Average Freeway Speed and BART Ridership (Source: BART)

