Alameda County’s Freeway System Connects the Region

As the geographic center of the San Francisco Bay Area, Alameda County connects the region with an extensive freeway network of almost 140 miles on six Interstates and four state routes. These freeways provide critical mobility for millions of commuters each day, and they are some of the most heavily-used and congested roads in the entire Bay Area.

Alameda County’s freeways also facilitate the movement of more goods than any other county in the Bay Area. The freeway network includes 96 miles of managed lanes (carpool and express lanes), which extend the overall capacity of the network.

importance of freeways

Alameda County’s freeways are key regional and interregional connectors.

- More than two-thirds of traffic on the eight bay-crossing bridges travels to, from, or through Alameda County.
- The freeway network carries goods between the Port of Oakland, the region, and domestic markets beyond.
- The county’s freeways carry the most pass-through trips in the region i.e., trips with origins and destinations outside Alameda County – 47 percent.

Managed Lanes

Alameda County has express lanes on I-580, I-680, with more under construction on I-880 as well. These lanes are free for carpools, buses and motorcycles, and available to those driving alone for a fee based on distance and demand at peak hours. Express lanes in Alameda County have been shown to improve overall performance where after studies have been conducted.

Alameda County has another 47 miles of carpool lanes. These lanes are free to high-occupancy vehicles (two or three persons per vehicle) and off-limits to single-occupancy vehicles during peak hours.
## Alameda County Freeway Inventory (2018)

<table>
<thead>
<tr>
<th>Freeway</th>
<th>Direction</th>
<th>Freeway Length*</th>
<th>Express Lanes</th>
<th>Peak Daily No. of Vehicles</th>
<th>Severe Vehicle Delay (hours per day)</th>
<th>AM Congested Miles** (morning peak)</th>
<th>PM Congested Miles** (afternoon peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80</td>
<td>N/S</td>
<td>8.0</td>
<td>–</td>
<td><strong>275,000 vehicles at SR-13</strong></td>
<td>11,519</td>
<td>6.0</td>
<td>11.2</td>
</tr>
<tr>
<td>I-238</td>
<td>E/W</td>
<td>2.5</td>
<td>–</td>
<td>155,000 vehicles at I-580</td>
<td>94</td>
<td>2.5</td>
<td>–</td>
</tr>
<tr>
<td>I-580</td>
<td>E/W</td>
<td>46.7</td>
<td>yes</td>
<td>254,000 vehicles at SR-13, Oakland</td>
<td>9,176</td>
<td>8.1</td>
<td>17.5</td>
</tr>
<tr>
<td>I-680</td>
<td>N/S</td>
<td>21.3</td>
<td>yes</td>
<td>172,000 vehicles at I-580, Pleasanton</td>
<td>7,730</td>
<td>4.0</td>
<td>9.6</td>
</tr>
<tr>
<td>I-880</td>
<td>N/S</td>
<td>35.3</td>
<td>–</td>
<td>277,000 vehicles at A Street, Hayward</td>
<td>19,456</td>
<td>19.2</td>
<td>19.2</td>
</tr>
<tr>
<td>I-980</td>
<td>E/W</td>
<td>2.5</td>
<td>–</td>
<td>134,000 vehicles at I-580, Oakland</td>
<td>60</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>SR-13</td>
<td>N/S</td>
<td>5.9</td>
<td>–</td>
<td><strong>83,000 vehicles at Broadway Terrace</strong></td>
<td>640</td>
<td>1.1</td>
<td>3.0</td>
</tr>
<tr>
<td>SR-24</td>
<td>E/W</td>
<td>3.5</td>
<td>–</td>
<td><strong>173,000 vehicles at Caldecott Tunnel</strong></td>
<td>2,269</td>
<td>–</td>
<td>4.5</td>
</tr>
<tr>
<td>SR-84</td>
<td>E/W</td>
<td>6.2</td>
<td>–</td>
<td>76,000 vehicles at I-880</td>
<td>180</td>
<td>5.1</td>
<td>1.2</td>
</tr>
<tr>
<td>SR-92</td>
<td>E/W</td>
<td>8.4</td>
<td>–</td>
<td><strong>125,000 vehicles at I-880, Hayward</strong></td>
<td>1,400</td>
<td>1.9</td>
<td>–</td>
</tr>
</tbody>
</table>

*Centerline miles; **Directional miles of LOS F with average speeds below 35 mph.

### CONGESTED FREEWAY SEGMENTS IN ALAMEDA COUNTY IN 2018

![Map of Alameda County Freeways](image)

Source: Alameda CTC, 2018 Level of Service Monitoring Report.
Freeway System Performance

After peaking in 2016, congestion declined slightly in 2018. Average freeway speeds stayed stable — improving 1.2 mph — and the number of congested freeway-miles decreased. Despite the recent incremental improvement, freeways remain far more congested today than they were a decade ago.

Freeway speeds increased slightly in 2018, after a multi-year decline, but remain below recession-era highs. While average speeds improved, about one-quarter of the freeway network is still congested during the afternoon peak-period. This consistent congestion can be attributed to a growing population, a booming economy and related job growth.

Total collisions have increased 31 percent from post-recession lows. Fatal collisions declined in 2016 to the lowest number since 2011, while total collisions continue to increase. Alameda County accounts for 24 percent of total collisions in the Bay Area.

Bay Bridge Transbay Corridor at capacity.

Overcrowding on BART and congestion on the Bay Bridge have slowed growth in the number of trips across one of the most economically significant water crossings in the country. Transbay ferry and bus trips continue to grow, but carry many fewer trips than other modes.
Freeway System Challenges and Opportunities

As the geographic center of the Bay Area, Alameda County’s extensive freeway network has experienced consistent congestion due to population and job growth, housing demand and an increasing number of commuters. Strategic improvements are underway or planned, which present the opportunity to increase overall network throughput and promote the use of alternative transportation modes.

**CHALLENGES**

As the region’s freeway network hub, Alameda County experiences a disproportionately high share of the region’s congestion.

Alameda County freeways carry a high number of commuters traveling either to, from or through Alameda County. Although only 21 percent of the Bay Area’s population lives in Alameda County, it hosts one in three commutes regionwide.

The absolute number of drive-alone trips and vehicle miles traveled are increasing.

Congestion across more of the network remains severe, despite recent incremental improvements.

**OPPORTUNITIES**

Using local sales tax dollars and other regional, state and federal funds, Alameda CTC funds operational improvements and limited strategic improvement projects on the county’s freeways, many of which are already underway, and more are planned. Many of these projects are on major freight corridors and benefit goods movement.

Working with partners at all levels, Alameda CTC is maximizing existing capacity. As most freeways are built out, and the options for improvements are limited, Alameda CTC is working with partners at all levels of government to explore opportunities to maximize use of existing capacity through improved operations and to promote use of alternative modes on Alameda County’s major local roads.

Although the absolute number of commuters who drive alone has increased since 2000, the drive-alone mode share has fallen almost 10 percent since that time.

Increasing the number of managed lanes facilitates carpool expansion, offers excess capacity at the appropriate marginal cost, and provides the opportunity to reinvest revenues into the corridors.

Data sources: