

Transportation and Innovation

Looking Toward the Future



Alameda County Transportation Commission (CTC) is planning now to accommodate the future needs of Alameda County residents and businesses.

Alameda County's current and future transportation needs include smoother roads, more frequent and reliable transit services, reduced congestion, connected and safe bicycle and pedestrian facilities, and enhanced services for youth, seniors, and persons with disabilities.¹

Alameda CTC is at the forefront of technology applied to transportation, enabling Alameda County to streamline and get the most capacity from its existing infrastructure. Traffic congestion remains a critical issue on Alameda County's aging highways and roads. Innovative transportation demand-management and parking-management strategies are emerging, including use of high occupancy toll (HOT) lanes, SMART corridors, and other intelligent transportation systems (ITS) and technology.

Alameda CTC's legislative advocacy ensures that Alameda County is well represented in state and federal policies, initiatives, and funding — today and for the future. Building partnerships with state and federal governments to increase multi-modal mobility in the county gives Alameda County a stronger voice. Regional cooperation is necessary to solve regional problems, such as greenhouse gas emission reduction.

ALAMEDA COUNTY OF THE FUTURE

In the decades to come, Alameda County's population will continue to grow. In 2035, Alameda County will be home to about 1.9 million people and 874,000 jobs, representing an increase of 28 and 27 percent, respectively, from 2010.² More people and more jobs in the Bay Area will mean more demand on Alameda County streets and highways.

Without significant changes in land use patterns and transportation investments, the number of vehicle-miles traveled in Alameda County will increase by approximately 46 percent by 2035.³ Without much-needed improvements, the average travel speeds on Alameda County freeways and arterials would decrease by about 15 to 20 percent during peak periods.⁴

Suburban centers such as Dublin, Union City, and Livermore are expected to experience the highest rates of job growth compared to older urban core cities such as Oakland and Berkeley, where the majority of the county's current transit infrastructure exists.⁵

By 2035, the number of daily public transit trips will increase by 130 percent, with more riders on the busiest routes.⁶ There will also be increased demand for bicycling and walking, which will require additional infrastructure investment.

TRANSPORTATION IMPROVEMENTS TO SERVE FUTURE NEEDS

Much of Alameda County's major transportation infrastructure — including highways, bridges, and BART— was built 40 to 70 years ago. Not only is the infrastructure aging and in need of repair, but travel demand has grown immensely.

Since 1986, Alameda County's half-cent transportation sales tax has provided a vital source of revenue to begin to bring our transportation systems into the 21st century. Not since the 1950s and 1960s has this level of funding been available to invest in our county's mobility.

Despite many significant transportation improvements made over the past two decades, the work is not over. The Alameda County Transportation Commission (CTC) — and its Board, advisory committees, and the public at large — are focusing on fixing our current system and planning for and funding the County's future transportation needs.

The Alameda CTC — with extensive input from advisory committees, partner agencies, and the public — has recently updated the Alameda Countywide Transportation Plan. This important document outlines Alameda County's transportation goals and how they can be implemented. The transportation goals in past plans have focused primarily on congestion relief. While congestion relief is still important, the current planning process reflects Alameda County's desire to:

- Create a vibrant and livable community that supports economic growth and environmental safeguards,
- Reduce the number of miles driven in private automobiles,
- Improve multi-modal connectivity and travel choices, and
- Support land use patterns that connect transportation, housing, and jobs.



Pilot Programs Pay Off

Funding small pilot programs has been a great way for Alameda CTC to test new and innovative ideas to improve transportation in Alameda County. Because of their success, many of these pilot programs have gone on to full implementation. For example:

- **Alameda County's Safe Routes to Schools Program** started in 2007 with a small grant to help increase the number of children walking and biking to school and has now grown to a region-wide program.
- Using a grant from Alameda CTC combined with some federal funds, AC Transit has installed **Mobile Data Terminal /Automatic Vehicle Locator** units in the entire East Bay Paratransit fleet. These units reduce the wait times for passengers and quicken the boarding process, thereby increasing available trips.
- Through the **Tri-City Travel Training Program**, seniors and people with disabilities in the Fremont, Newark, and Union City area are learning how to use public transit to improve their mobility and independence.
- AC Transit buses all have **bicycle racks** on the front, thanks in part to a grant from the Alameda CTC. Bicycle racks increase the distances that people can travel.

All of these started with an innovative idea and have since grown into successful programs.

CLOSING THE MOBILITY GAP

The projects and programs in the Countywide Transportation Plan — and in the associated Transportation Expenditure Plan (TEP), which is a major funding component if approved by voters in November 2012 — are designed to strengthen the economy, reduce traffic congestion, improve mobility, and foster vibrant and livable communities in Alameda County. They include maintenance of the existing infrastructure; targeted investments to improve highway safety; the removal of bottlenecks on major commute corridors; enhancements to rail, bus, and ferry transit systems; and safer bicycle and walking facilities throughout the county.⁷

The projects and programs outlined in the TEP will have a tremendous influence on the quality of life of every Alameda County resident and business. Highlights of the \$7.8 billion plan include:

- \$3.7 billion (48%) for mass transit operations and service restoration, including transportation for seniors and people with disabilities and a student transit pass program;
- \$2.3 billion (30%) for maintenance and repairs of local streets and roads;
- \$677 million (9%) for highway improvements and efficiencies, and to close the gaps in the high-occupancy lane system;
- \$651 million (8%) for safer bicycle and pedestrian routes, resulting from a complete-streets policy in the TEP;
- \$300 million (4%) for sustainable land use and transportation to unite transportation, housing, and jobs; and
- \$77.4 million (1%) for technology and innovation to address advances in transportation information and management solutions.

MOBILITY FOR FUTURE DEMOGRAPHICS

The number of people aged 62 and older will increase significantly in the coming years. By 2035, seniors will comprise nearly 20 percent of the population (compared to 10 percent in 2005) – adding 150,000 seniors to the county's population.⁸ Additionally, 37 percent of Americans 65 or older have some form of disability,⁹ which adds significant challenges to maintaining their mobility. Currently, about 23 percent of the population – or 341,000 people – are under 18 years old.¹⁰ Assuming that percentage stays the same, by 2035, there will be about 429,000 youth in Alameda County.

In general, older people have different transportation needs than younger people. Alameda CTC recognizes that sustaining mobility is critical to maintaining good health, quality of life, community engagement, and economic security for all people. Projects and programs funded by Alameda CTC to meet the growing demand for senior and youth mobility include:

- Special transportation services, including paratransit, senior shuttles, services for individuals with dementia, and taxi programs;
- Educational initiatives providing easily accessible, multi-lingual information;
- Travel training to promote use of transit by seniors and people with disabilities;
- Programs to prolong safe driving for older adults;
- Projects and activities that improve the pedestrian environment and access to transit for older adults and people with disabilities,
- The Safe Routes to Schools program to encourage kids to walk or ride to school; and
- A proposed student transit pass program to expand transit access to all youth in Alameda County.

TAPPING INTO THE POWER OF TECHNOLOGY

Technology has transformed many aspects of our lives over the past few decades, and transportation is no different. Alameda CTC is at the forefront of transportation technology that has reduced traffic congestion and streamlined roadway efficiency.

Travel demand management and/or parking-management techniques let travelers make better decisions about whether and where they travel, how they travel (single vehicle, carpool, transit, walking, etc.), when they travel, and which route they take.

Alameda County is implementing several cutting-edge projects and programs. These include, for example, the San Pablo Avenue SMART Corridor, the I-80 Integrated Corridor Mobility project, the I-680 high-occupancy express lanes, and the Webster Street SMART Corridor.

Some of the more innovative components of these projects include:

- Dynamic congestion pricing in the express lanes based on traffic demands during different times of the day,
- Highway ramp metering,
- Dynamic message signs to inform the public of street, freeway, and tunnel conditions in real-time,
- Transit Signal Priority systems along SMART corridors to streamline transit travel through intersections,
- Incident management to improve coordination among responders,
- Real-time data sharing between public agencies and the public, and
- The Guaranteed Ride Home program, which provides transit or rideshare users—as well as walkers and bicyclists—a ride home in emergencies.

ADVOCATES FOR ALAMEDA COUNTY'S NEEDS

The Alameda CTC works hard to make sure that Alameda County's voice is heard in regional, state, and federal transportation policies, initiatives, and funding. For example, Alameda CTC supports legislation to:

- Increase or adjust the gas tax to ensure that adequate funding is made available for infrastructure maintenance and improvements,
- Protect and increase project funds included in the State Transportation Improvement Program (STIP), the federal transportation bill, and other funding sources,
- Give priority funding to voter-approved measures and oppose those that negatively affect implementation of the measures, projects, and programs, and
- Encourage regional cooperation and coordination to develop, promote, and fund solutions to regional problems.

Alameda CTC champions legislation for funding to address climate change, senior population increases, transit security and transit operations, and to ensure transit operators receive anticipated transit funds. Alameda CTC also supports legislative efforts to increase funding and resources for Active Transportation (such as walking, biking, and access to transit) and to support the maintenance and safety of the county's streets, roads, and highways.



Express Lanes are Hot!

September 20, 2010 marked an important milestone in the history of transportation in Alameda County. Express lanes opened along I-680 (southbound between Route 84 near Sunol and Route 237 in Milpitas), the first in the San Francisco Bay area.

Carpools on this 14-mile stretch of freeway are now joined by solo drivers who are charged a toll for the privilege of driving in a lane that moves faster than the surrounding freeway. Allowing solo drivers to use the carpool lane enables Alameda County to get more capacity and use out of its existing transportation system.

The toll amount varies, depending on the level of congestion in the express lanes. When there is more traffic, the toll is higher, to discourage new solo drivers from entering and making the lanes congested. During off-peak periods, when fewer vehicles use the lanes, the toll is lower.

Tolls are collected electronically through the FasTrak program. There are no tollbooths or traffic gates, so drivers need not slow down or stop to pay a toll.

In the first year of operation, nearly half a million people used the express lanes.¹¹ It's no wonder: speeds are 9 or 10 miles per hour faster than the speeds in the general-purpose lanes during the morning commute!

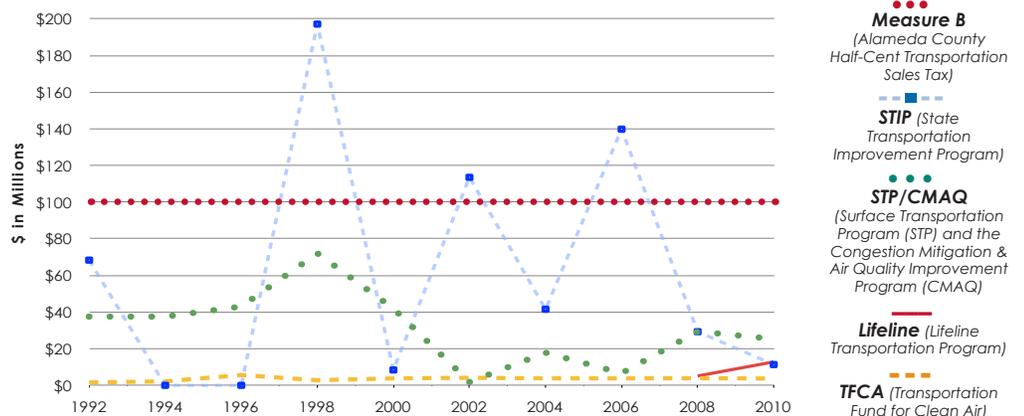
TRANSPORTATION IMPROVES OUR FUTURE

More people and more jobs in the Bay Area will mean more demand on Alameda County streets and regional highways. Despite many significant transportation improvements over the past decade, the work is not over. The need to continue to improve Alameda County's transportation system remains critically important. Innovative thinking, proactive advocacy, and tapping into the power of technology will all be an important part of solving Alameda County's transportation needs.

A new measure to fund a Transportation Expenditure Plan will be on the November 6, 2012 ballot to infuse an additional \$7.8 billion to support jobs, expand mobility, and foster safe and healthy communities in Alameda County. We cannot lose sight of the critical importance of continuing to improve, maintain, and support our vital transportation networks.

While the Alameda CTC has delivered almost all of the voter-approved capital improvement projects in half the time, more transportation investments are needed to support a growing and aging population, and continue to serve the future mobility needs of Alameda County residents and businesses. For the future, Alameda CTC is working to get the most out of our existing infrastructure, and to make alternative transportation modes more attractive and functional.

Historical Funding Levels for Alameda County Transportation ¹²



Alameda CTC has demonstrated that transportation can be improved – with efficiency, transparency, and accountability. Alameda County is at a turning point. People's future quality of life depends on the future of our county's transportation network.

About the Half-Cent Sales Tax

In 1986, Alameda County became one of the first counties in California to authorize a voter-approved sales tax, Measure B, for transportation improvements. In 2000, 81.5 percent of Alameda County voters supported transportation again, authorizing a second half-cent transportation sales tax. Through Measure B, Alameda CTC delivers a specific set of voter-approved transportation projects to improve mobility and enrich the lives of Alameda County residents.

About Alameda CTC

Alameda County Transportation Commission was formed in 2010, the result of a merger of the Alameda County Congestion Management Agency (ACCMA) and the Alameda County Transportation Improvement Authority (ACTIA). The resulting agency serves as the county's transportation planning, funding, and sales tax authority, providing streamlined methods for project and program delivery. As a result of the merger, taxpayers saved over \$3 million in the agency's first year.

Our mission is to plan, fund, and deliver a broad spectrum of transportation projects and programs that expand access and improve mobility to foster a vibrant and livable Alameda County. Alameda CTC is governed by a 22-member commission of elected officials: five members of the Alameda County Board of Supervisors, representatives from the 14 cities within Alameda County (including two from Oakland), as well as an AC Transit director, and a BART director.

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Endnotes

- 1 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 2 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 3 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 4 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 5 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 6 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 7 Alameda County Transportation Commission, Alameda Countywide Transportation Expenditure Plan 2012 to 2042, Commission Review Draft, January 2012.
- 8 Alameda County Transportation Commission, Alameda Countywide Transportation Plan, Revised Draft, May 2012.
- 9 U.S. Census, American Fact Finder, "Selected Social Characteristics in the United States, 2008-2010 American Community Survey 3-year Estimates."
- 10 U.S. Census, State & County QuickFacts, Alameda County, quickfacts.census.gov/qfd/states/06/06001.html.
- 11 www.680expresslane.org/Home.asp, "Express Lane Usage is Rising."
- 12 Alameda CTC, Spreadsheet: "ACCMA Historical Programming Levels," CMA Programming History-update-Apr'11.xlsx.