

2016 Countywide Transportation Plan - Performance Results

Overview: Most evaluation results are trending in the right direction from existing (2015) to 2040 CTP:

- Non-auto mode share increases. Network connectivity for non-auto modes and transit access to jobs improve.
- Vehicle miles traveled and emissions (CO₂ and PM 2.5) trend downward on a per capita basis.
- Mixed evaluation results are mixed for system efficiency, primarily due to major projected growth in population (31%) and employment (42%) in Alameda County. The planned CTP investments and efficient future land use patterns moderate the impacts of this projected growth on the county transportation system.

2016 CTP Performance Measure		2015 Existing Year	2040 CTP	Trend
MEASURES OF TRANSIT USE AND ACTIVE TRANSPORTATION				
Transit and Active Transportation Mode Share	% trips by non-auto modes that begin and/or end in Alameda County (all trips)	19%	23%	<ul style="list-style-type: none"> • A higher share of people using transit and active transportation modes (bike, walk) is projected.
Transit Ridership	Daily public transit ridership (all transit modes) that begin and/or end in Alameda County	534,440	920,229	<ul style="list-style-type: none"> • Bus ridership is projected to increase 72%.
Transit Efficiency	Daily bus transit passengers carried per daily bus transit revenue hours of service for trips that begin and/or end in Alameda County	46	52	<ul style="list-style-type: none"> • Efficiency of bus transit is projected to improve with more riders per hour of service.

MEASURES OF CONNECTIVITY AND SAFETY				
Maintenance	Unmet maintenance needs over 25 years assuming current pavement conditions	See attached bar chart – Attachment 1		<ul style="list-style-type: none"> Alameda County jurisdictions have significant need for street re-paving and rehabilitation to improve overall state of good repair; needs exceed projected funding available.
Safety	Safety incidents	Vehicle Miles Traveled per capita decreases from 20.4 to 19.9.		<ul style="list-style-type: none"> Reduction in vehicle miles traveled per capita is expected to improve safety outcomes.
Network Connectivity	Change in the number of bicycle facility miles in Alameda County	762 miles	823 to 1,091 miles	<ul style="list-style-type: none"> The number of miles of bike facilities increases by 8% to 43% over today's system This expansion is associated with local bike-related projects (268 miles) that could be funded locally and/or through programmatic funding (DLD and grants) as well as specific CTP projects (61 miles).
	Change in bus transit service miles in Alameda County during off-peak periods	644 miles of service with 30-minute or better headways	950 miles of service with 30-minute or better headways	<ul style="list-style-type: none"> The number of miles of bus transit service operating at 30-minute headways or better during off-peak periods is expected to increase by 48%.

MEASURES TO IMPROVE THE ECONOMY, GOODS MOVEMENT, JOBS, AND ACCESS					
Employment Accessibility	Total jobs within 30-minute auto trip		950,322	1,013,055	<ul style="list-style-type: none"> The number of jobs accessible by both auto and transit is projected to increase. <i>Note:</i> Land use is a critical driver of job accessibility.
	Total jobs within 45-minute transit trip		407,710	608,344	
Equitable Transit Availability	Low Income households within 0.25 miles of bus transit by off-peak period headway	10 minute headways or better	20,879	133,118	<ul style="list-style-type: none"> A higher number of low-income households are expected to have access to higher frequency service in the future.
		15 minute headways or better	81,136	165,159	
		30 minute headways or better	114,937	172,496	
		60 minute headways or better	162,595	225,894	

MEASURE OF TRAVEL EFFICIENCY					
Network Congestion	Percentage lane miles with moderate to severe congestion	AM Peak Period	10%	17%	<ul style="list-style-type: none"> • Congestion is projected to increase. • About 20% of the congested lane miles are on arterial streets and 80% are on freeways in Alameda County. • <i>Note:</i> Population growth significantly impacts congestion. Investments keep the congestion increase much below the 26% population growth in the Plan period.
		PM Peak Period	11%	19%	
Auto Travel Times	Average county-wide travel time in minutes for auto trips that begin and/or end in Alameda County	Peak Period	19	21	<ul style="list-style-type: none"> • Travel time projected to increase slightly.
		Off-Peak Period	16	17	
Transit Travel Times	Average county-wide travel time in minutes for transit trips that begin and/or end in Alameda County Peak (Off-Peak)	Peak Period	41	43	<ul style="list-style-type: none"> • Travel time projected to improve slightly in off-peak and increase slightly in peak
		Off-Peak Period	33	32	

Auto Travel Time Reliability	Average county-wide peak period to off-peak period ratio for auto travel time	1.2	1.2	<ul style="list-style-type: none"> Reliability remains constant because both Peak Period and Off-Peak Period travel times increase at similar rates.
Transit Travel Time Reliability	Average county-wide peak period to off-peak period ratio for transit travel time	1.2	1.3	<ul style="list-style-type: none"> Reliability worsens slightly between 2015 and 2040 because the peak period average travel time degrades slightly with the additional congestion caused by land use growth and off-peak travel time improves.
MEASURES OF TRANSPORTATION IMPACT ON THE ENVIRONMENT				
Vehicle Miles Travel	Vehicle miles of travel per capita for all auto and light duty truck travel that occurs within the boundary of Alameda County	20.4	19.9	<ul style="list-style-type: none"> VMT per capita is projected to decrease. <i>Note:</i> The CTP investments are making an impact while Land use patterns, population growth, and economy are largest drivers of VMT.

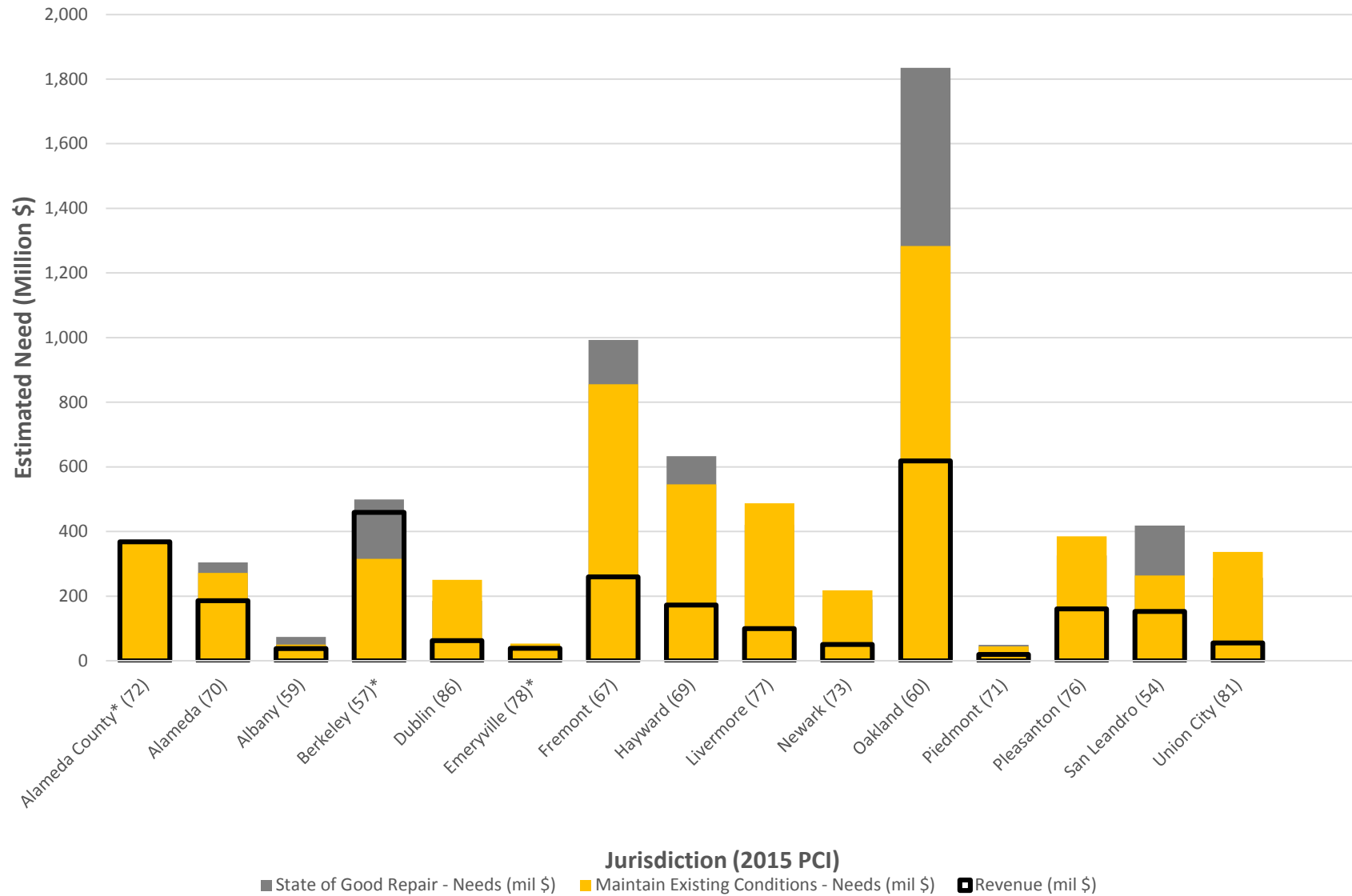
Carbon Emissions	Carbon emissions (CO2) pounds per capita for autos and light duty trucks that occurs within the boundary of Alameda County.	16.40	8.38	<ul style="list-style-type: none"> CO2 emissions per capita are projected to go down approximately 49%.
Particulate Emissions	Daily particulate matter (PM2.5) per 1,000 population for autos and light duty truck travel within Alameda County.	0.910	0.815	<ul style="list-style-type: none"> Particulate matter emitted per 1,000 people is projected to go down slightly.

Notes –

1. Activity Center Accessibility measure is not reported as it was determined to be a non-effective measure. While 100% of the households were found to be near to at least one activity center, it may not be an appropriate activity center for the household.
2. Model Assumptions – To conduct the evaluation, Alameda CTC’s countywide travel demand model was used (last updated in August 2015). It includes 2013 Plan Bay Area Sustainable Communities Strategy land use. The 2015 data that is reported here is estimated based on 2010 and 2040 model outputs.

Attachment 1:

Pavement Maintenance Needs for Alameda County Jurisdictions Through 2040



Source – Metropolitan Transportation Commission, Plan Bay Area 2040 Needs Assessment, April 2016.
 *MTC revenue estimates are preliminary and will be updated pending collaboration with jurisdictions.