Attachment F

PLAN BAY AREA 2050

THE FINAL BLUEPRINT

EQUITY AND PERFORMANCE OUTCOMES

Organized by the Plan Bay Area 2050 Guiding Principles, several metrics help answer two key questions per Guiding Principle. Icons indicate whether outcomes are favorable. Accompanying text sheds light on how Final Blueprint strategies and assumptions contribute to performance outcomes, and metrics highlight impacts on disadvantaged populations where feasible.

KEY DEFINITIONS IN METRICS

2015 Refers to simulated 2015 conditions, which were calibrated to closely match on-the-ground conditions.

2050 Blueprint Reflects simulated 2050 outcomes if population and job growth continue according to the Plan Bay Area 2050 Regional Growth Forecast and all 35 Final Blueprint strategies are implemented.

Households with Low Incomes Households with an annual income of less than $45,000 in today's dollars; shown where feasible to parse out equity impacts.

Communities of Concern (CoCs) Census tracts with a significant concentration of underserved populations, including people of color and households with low incomes; updated using latest ACS data.

High-Resource Areas State-designated areas with access to well-resourced schools, open space, jobs and services.

Transit-Rich Areas State-designated areas within ½ mile of a rail station, ferry terminal, or frequent bus stop (every 15 minutes or better in peak periods).

Priority Production Areas Locally-identified industrial districts that support industries that are critical to the functioning of the Bay Area economy and are home to middle wage jobs.

What are the Key Equity and Performance Outcomes of the Final Blueprint?

All dollar values shown as part of the Equity and Performance outcomes are in year 2020 dollars.

OUTCOMES LEGEND ↗ Moving in the Right Direction — Mixed Outcomes ↘ Moving in the Wrong Direction

AFFORDABLE

WILL BAY AREA RESIDENTS SPEND LESS ON HOUSING AND TRANSPORTATION?

↗ In 2015, households with low incomes had an extreme housing and transportation cost burden. Accounting for people with no incomes, people on financial assistance, and the currently unhoused, housing and transportation costs exceeded average incomes for households with low incomes. Strategies in the Final Blueprint geared toward housing production at all income levels, preservation of affordable housing, universal basic income and means-based fares and tolls are forecasted to make the region more affordable for all.

HOUSING AND TRANSPORTATION COSTS AS SHARE OF INCOME		2015	2050 FINAL BLUEPRINT
Housing and Transportation	Households with Low Incomes	113%	58%
	All Households	58%	45%
Housing	Households with Low Incomes	68%	29%
	All Households	33%	21%
Transportation	Households with Low Incomes	45%	29%
	All Households	25%	24%

— Transit fare integration significantly reduces average transit fares per trip by 2050, with greater reductions for households with low incomes due to the introduction of means-based fare discounts. Meanwhile, the average "out-of-pocket" cost per auto trip, which includes fuel, maintenance, parking and tolls, increases for all households in 2050. This increase is driven primarily by the introduction of parking fees and all-lane freeway tolling that are critical for curbing emissions and managing congestion. The impact on households with low incomes is mitigated through a means-based toll discount and reinvestment of revenues into historically disinvested communities.

TRANSPORT EXPENSES PER TRIP		2015	2050 FINAL BLUEPRINT
Average Fare per Transit Trip	Households with Low Incomes	$2.78	$1.49
	All Households	$3.16	$2.87
Average "Out-of-Pocket" Cost per Auto Trip	Households with Low Incomes	$1.39	$2.37
	All Households	$1.57	$2.73
Average Parking Cost per Auto Trip	Households with Low Incomes	$0.37	$1.11
	All Households	$0.31	$0.93
Average Toll per Auto Trip	Households with Low Incomes	$0.05	$0.11
	All Households	$0.08	$0.23

WILL THE BAY AREA PRODUCE AND PRESERVE MORE AFFORDABLE HOUSING?

↗ The share of Bay Area homes that are permanently affordable (i.e., deed-restricted) is significantly higher in 2050, driven by the reuse of public land for affordable housing, subsidies to build new and acquire existing affordable homes, and minimum affordability requirements for major housing projects.

SHARE OF HOUSING THAT IS DEED-RESTRICTED AFFORDABLE	2015	2050 FINAL BLUEPRINT
Region-Wide	4%	27%
Communities of Concern	11%	39%
High-Resource Areas	2%	24%

↗ 35% of all new homes built between 2015 and 2050 are permanently affordable for households with low incomes, with an even greater share of these units in High-Resource Areas due to strategies that emphasize the need for affordable housing in these locations.

SHARE OF NEW HOUSING PRODUCTION (2015-50) THAT IS DEED-RESTRICTED AFFORDABLE		
	Region-Wide	35%
	Communities of Concern	33%
	High-Resource Areas	42%

↗ Along with acquisition of currently affordable homes, the affordable housing preservation strategy ensures that all existing deed-restricted affordable units at risk of conversion to market-rate units are converted to permanently affordable homes.

SHARE OF AT-RISK AFFORDABLE HOUSING PRESERVED AS PERMANENTLY AFFORDABLE		
	Region-Wide	100%

What are the Key Equity and Performance Outcomes of the Final Blueprint?

CONNECTED

WILL BAY AREA RESIDENTS BE ABLE TO ACCESS THEIR DESTINATIONS MORE EASILY?

The number of jobs accessible within a 30-minute drive increases by over 200,000 jobs between 2015 and 2050; however, the share of the region's jobs that can be accessed is forecasted to stay roughly similar, with marginally improved outcomes for Community of Concern residents. While the number of jobs accessible within a 45-minute transit trip remains lower than the number within a 30-minute drive, focused housing growth in Transit-Rich Areas and transit expansion strategies significantly improve the share of jobs accessible by transit. Biking and walking access also both increase slightly, mainly due to greater housing and commercial densities in growth areas. Overall, Community of Concern residents have greater job accessibility than the average Bay Area resident in 2015, with Final Blueprint strategies further advancing equitable outcomes.

NUMBER AND SHARE OF ALL BAY AREA JOBS THAT ARE ACCESSIBLE BY		2015		2050 FINAL BLUEPRINT	
		Number of Jobs	Share of Jobs	Number of Jobs	Share of Jobs
Auto (30 min)	Communities of Concern Residents	741,000	19.2%	1,060,000	19.6%
	All Residents	687,000	17.8%	930,000	17.2%
Transit (45 min) (access by walk)	Communities of Concern Residents	201,000	5.2%	427,000	7.9%
	All Residents	131,000	3.1%	276,000	5.1%
Bike (20 min)	Communities of Concern Residents	112,000	2.9%	184,000	3.4%
	All Residents	89,000	2.3%	146,000	2.7%
Walk (20 min)	Communities of Concern Residents	12,000	0.3%	22,000	0.4%
	All Residents	8,000	0.2%	11,000	0.2%

Nearly half of all households, and over two-thirds of households with low incomes, live within a half-mile of high-frequency transit, including rail, ferry and frequent bus stops, in 2050. The Final Blueprint focuses new affordable housing development in Transit-Rich Areas, while also investing in transit service increases. Due to the more dispersed nature of job growth, the share of jobs near high-frequency transit remains relatively constant.

SHARE OF HOUSEHOLDS AND JOBS WITHIN 1/2 MILE OF FREQUENT TRANSIT		2015	2050 FINAL BLUEPRINT
Households	Households with Low Incomes	42%	71%
	All Households	33%	46%
Jobs	All Jobs	49%	51%
	Retail Jobs	45%	50%

WILL BAY AREA RESIDENTS HAVE A TRANSPORTATION SYSTEM THEY CAN RELY ON?

Given a 35% increase in population by 2050, increases in freeway travel times are inevitable in the absence of new measures. Final Blueprint strategies such as per-mile tolling on key freeway corridors and other transportation demand management strategies, along with focused housing growth in key growth geographies, help maintain travel times near existing levels, even as lower speed limits reduce free-flow travel times.

FREEWAY CORRIDOR PEAK-HOUR TRAVEL TIME (MINUTES)		2015	2050 FINAL BLUEPRINT
Most of Route Features All-Lane Tolling	Oakland-San Francisco	30	31
	Vallejo-San Francisco	57	58
	Antioch-San Francisco	75	79
	Antioch-Oakland	47	50
	San Jose-San Francisco	64	68
	Oakland-San Jose	56	56
	Oakland-Palo Alto	54	56
Partial or No Tolling on Route	Fairfield-Dublin	48	50
	Livermore-San Jose	48	62
	Santa Rosa-San Francisco	69	75

With population growth and the full suite of Final Blueprint strategies, transit boardings nearly triple by 2050. While increased ridership supports critical climate goals, overcrowding on transit vehicles, which risks denial of boardings, is anticipated to rise. Final Blueprint strategies that optimize and expand transit service help maintain crowding levels close to existing conditions for some operators, but the transit service improvements are insufficient to fully manage overcrowding in the long term. Operators not listed do not have overcrowding challenges in 2050.

PERCENT OF PERSON HOURS IN TRANSIT SPENT IN CROWDED CONDITIONS		2015	2050 FINAL BLUEPRINT
Local Transit	Muni Bus	20%	28%
	AC Transit Local Bus	0%	31%
	Muni Light Rail	32%	22%
	VTA Light Rail	0%	33%
Regional Transit	AC Transit Transbay Bus	47%	32%
	Golden Gate Express Bus	30%	72%
	BART	19%	18%
	Caltrain	8%	46%
	WETA Ferry	14%	9%

In 2015, 30% of all transit vehicles had exceeded their federally recommended lifespans. As the Final Blueprint only includes sufficient maintenance funding to retain existing conditions, this metric remains mostly unchanged through 2050.

SHARE OF TRANSIT ASSETS PAST THEIR USEFUL LIFE BENCHMARK	2015	2050 FINAL BLUEPRINT
Vehicle Assets	30%	30%
Non-Vehicle Assets	18%	18%

What are the Key Equity and Performance Outcomes of the Final Blueprint?

DIVERSE

WILL BAY AREA COMMUNITIES BE MORE INCLUSIVE?

The share of households with low incomes increases in Transit-Rich and High-Resource Areas. Further, the same share decreases in Communities of Concern. Together, these trends suggest lower concentrations of poverty or affluence, and more mixed-income communities in 2050. Focused production and preservation of affordable housing in High-Resource Areas increases access to places of greatest opportunity for households with low incomes, helping reverse historically exclusionary policies in many of these communities.

NOTE: The positive effects of the Universal Basic Income strategy in reducing income inequality and decreasing the share of households with low incomes were omitted from the calculation to have a clearer understanding of the trends.

SHARE OF HOUSEHOLDS THAT ARE HOUSEHOLDS WITH LOW INCOMES	2015	2050 FINAL BLUEPRINT
Region-Wide	26%	28%
Transit-Rich and High-Resource Areas	24%	36%
Transit-Rich Areas	32%	39%
High-Resource Areas	20%	24%
Communities of Concern	43%	41%

The Final Blueprint enables intergenerational wealth-building opportunities with strategies that support nearly 100,000 households with low incomes to own their first home.

	2015	2050 FINAL BLUEPRINT
HOME OWNERSHIP RATE FOR HOUSEHOLDS WITH LOW INCOMES	37%	47%

WILL BAY AREA RESIDENTS BE ABLE TO STAY IN PLACE?

Region-wide, the share of neighborhoods that experience a net loss in the number of households with low incomes between 2015 and 2050 is 48%. This metric is mainly driven by households with low incomes relocating to growth geographies – neighborhoods near frequent transit and/or in high-resource areas – where much of the new affordable housing is being developed under Final Blueprint strategies. Growth geographies also experience some displacement, but analysis indicates that much of this displacement is actually households with low incomes relocating between these neighborhoods, rather than being displaced to neighborhoods that lack quality transit or access to opportunity. Furthermore, the displacement risk metric does not fully capture the positive impact of protection policies at the local level, which could further reduce displacement risk and prevent homelessness.

NOTE: Displacement is defined as a net loss in number of households with low incomes in the neighborhood (tract) between 2015 and 2050. Gentrification is defined as a drop of over 10% in the share of households with low incomes. The positive effects of the Universal Basic Income strategy in reducing income inequality and decreasing the share of households with low incomes were omitted from the calculation to have a clearer understanding of displacement trends.

SHARE OF NEIGHBORHOODS (TRACTS) THAT EXPERIENCE DISPLACEMENT AND GENTRIFICATION BETWEEN 2015 AND 2050		DISPLACEMENT	GENTRIFICATION
Region-Wide	All Neighborhoods (total 1579 neighborhoods)	48%	53%
	Communities of Concern (total 339 neighborhoods)	40%	49%
	High Displacement Risk Tracts (total 850 neighborhoods)	37%	44%
Within Growth Geographies	Growth Geographies (total 492 neighborhoods)	17%	28%
	High-Resource Areas (total 199 neighborhoods)	17%	19%
	Transit-Rich Areas (total 344 neighborhoods)	9%	11%

HEALTHY

WILL BAY AREA RESIDENTS BE HEALTHIER AND SAFER?

With Final Blueprint strategies in place, 98% of all Bay Area households that would be affected by two feet of sea level rise are protected. All common seismically deficient housing types and homes built in high wildfire-risk zones are retrofitted to reduce the likelihood of damage in future earthquakes and wildfires. Retrofit strategies are expected to reduce the risk of damage from earthquakes or wildfire by 25 to 50%.

PERCENT OF HOUSEHOLDS IN RISK-PRONE AREAS/BUILDINGS THAT ARE PROTECTED/RETROFIT			
	Sea Level Rise (2ft)	Communities of Concern	100%
		All Households	98%
	Earthquake	Communities of Concern	100%
		All Households	100%
	Wildfire High / Medium Risk	Communities of Concern	100%
		All Households	100%
REDUCTION IN BUILDING RISK EXPOSURE TO DAMAGE FROM EARTHQUAKE OR WILDFIRE			25 to 50%

The rate of fatalities and injuries decreases in 2050 with reduced speed limits and enhanced street design under the Vision Zero strategy, but it remains far from zero incidents. Additional education and enforcement actions would be required to make further headway toward this important goal.

ANNUAL INCIDENTS PER ONE HUNDRED THOUSAND RESIDENTS	2015	2050 FINAL BLUEPRINT
Fatalities	6.0	4.9
Injuries	26.0	22.7

Despite increases in population and total miles driven, fine particulate matter emissions ($PM_{2.5}$) are forecasted to be lower than 2015 levels, driven by cleaner and more fuel-efficient vehicles.

	2015	2050 FINAL BLUEPRINT
DAILY $PM_{2.5}$ EMISSIONS (TONS)	5.5	4.4

Bay Area residents have increased access to recreation opportunities, thanks to Final Blueprint strategies to protect natural lands and invest in parks and trail facilities. Prioritized investments in Communities of Concern help close the gap in park access in historically disinvested communities.

PARKS AND TRAILS PER THOUSAND RESIDENTS		2015	2050 FINAL BLUEPRINT
Urban Park Acres	Communities of Concern	1.4	2.3
	Region-Wide	1.7	2.1
Trail Miles	Region-Wide	0.2	0.3
Publicly Accessible Open Space Acres	Region-Wide	118	148

What are the Key Equity and Performance Outcomes of the Final Blueprint?

WILL THE ENVIRONMENT OF THE BAY AREA BE HEALTHIER AND SAFER?

Greenhouse gas emission levels per capita are forecasted to drop by 22% in 2035 relative to 2005 levels, meeting the state-mandated target of 19% for the region. This is driven by strategies across all four elements of the plan (transportation, housing, economy and environment) primarily by allowance of increased housing and commercial densities in growth geographies, transportation demand management strategies including parking and tolling fees, and significant investment in clean vehicle initiatives. The projected decrease in emissions is even greater when the metric accounts for all vehicle types and future state-imposed restrictions on fuel efficiencies.

DAILY CO2 EMISSIONS PER CAPITA, RELATIVE TO 2005	2015	2035 FINAL BLUEPRINT	2050 FINAL BLUEPRINT
Cars and Light-Duty Trucks (SB 375)	-1%	-22%	-20%
All Vehicles (Including Fuel Efficiency Gains)	-7%	-48%	-52%

With more efficient land use patterns, tolling and parking fee strategies, sustainable commute targets for major employers, and increased investment in active and shared modes, the commute mode share of single-occupancy auto travel drops from 51% in 2015 to 36% in 2050, thanks to more people choosing transit, telecommuting, walking and bicycling.

COMMUTE MODE SHARE	2015	2050 FINAL BLUEPRINT
Auto: Single Occupancy	51%	36%
Auto: Other	20%	17%
Transit	13%	20%
Active Modes (Bike/Walk)	5%	10%
Telecommute	10%	17%

Retrofit strategies for making the Bay Area's existing residential building stock more resource-efficient contribute to significant reductions in the region's carbon footprint as well as water consumption.

EXISTING RESIDENTIAL BUILDING STOCK EFFICIENCY, RELATIVE TO 2015	2050 FINAL BLUEPRINT
CO_2 Emissions	-16%
Energy Consumption	-16%
Water Consumption	-8%

VIBRANT

WILL JOBS AND HOUSING IN THE BAY AREA BE MORE EVENLY DISTRIBUTED?

The region-wide jobs-to-housing ratio decreases from 1.50 to 1.34 by 2050, reflecting a higher ratio of housing to job production to accommodate pent-up demand for housing. Final Blueprint strategies that enable more housing in job-rich areas, such as allowances for increased densities in growth geographies and accelerated reuse of public land, were particularly successful in the West and South Bay, bringing the ratio closer to the region-wide average in San Francisco, San Mateo and Santa Clara counties. Meanwhile, encouraging job growth in housing-rich areas continues to be a challenge. Incentives to encourage employers to shift jobs to housing-rich areas bring the ratio closer to the region-wide average in Napa and Solano counties, while Contra Costa and the other North Bay counties continue to have more housing than jobs.

JOBS-HOUSING RATIO	2015	2050 FINAL BLUEPRINT	JOBS-HOUSING RATIO	2015	2050 FINAL BLUEPRINT
Region-Wide	1.50	1.34	San Francisco	1.86	1.59
Alameda	1.57	1.40	San Mateo	1.48	1.29
Contra Costa	1.05	0.97	Santa Clara	1.77	1.50
Marin	1.24	0.79	Solano	0.93	1.14
Napa	1.42	1.56	Sonoma	1.18	1.14

The mean commute distance for all workers decreases slightly, further highlighting the impact of a more balanced distribution of jobs and housing.

MEAN ONE-WAY COMMUTE DISTANCE (MILES)	2015	2050 BLUEPRINT
Workers with Low-Income	9.5	9.0
All Workers	12.0	11.5

WILL THE BAY AREA ECONOMY THRIVE?

The region's economic recovery is expected to be robust through 2050, with a real growth of 66% between 2015 and 2050, even when accounting for the inclusion of significant new regional tax measures to fund transit expansion projects, affordable housing, universal basic income, sea level rise mitigations, and more.

	2015	2050 FINAL BLUEPRINT
GROSS REGIONAL PRODUCT PER CAPITA (2020 DOLLARS)	$107,000	$178,000

The long-term growth in number of jobs in high-wage industries continues to outpace overall job growth region-wide. Meanwhile, jobs in middle-wage industries keep pace, with some of that growth occurring in newly designated Priority Production Areas. Universal basic income programs also help to reduce income inequality for those continuing to work in lower-wage occupations.

GROWTH IN NUMBER OF JOBS (FROM 2015 TO 2050)	
All Jobs	35%
Low-Wage Industries	30%
Middle-Wage Industries	34%
High-Wage Industries	40%
Priority Production Areas	83%