EQUITY AND PERFORMANCE OUTCOMES

The **Plan Bay Area 2050 Draft Blueprint** is a package of 25 transformational strategies that aim to make the Bay Area more affordable, connected, diverse, healthy and vibrant for all. Strategies are either public policies or packages of investments that could be advanced on the local, regional or state levels. This document describes the outcomes of the Draft Blueprint based upon the strategies approved by the MTC and ABAG Boards in February (refer to strategies document for more information).

What Does This Document Include?

1 | How Does the Draft Blueprint Allocate Anticipated Revenues Toward Strategies?

2 | How Does the Draft Blueprint Influence the Regional Growth Pattern?

3 | What are the Key Equity and Performance Outcomes of the Draft Blueprint?

4 | What are the Key Takeaways from the Draft Blueprint?

5 | How Did We Analyze the Draft Blueprint?

6 | What's Next, COVID-19 Impacts on Final Blueprint, and How You Can Get Involved

Key Definitions in Metrics

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

2050 Trend Reflects the 2050 outcomes if population and job growth continue according to the Plan Bay Area 2050 Growth Forecast and all Draft Blueprint land use strategies are implemented, without any changes to the transportation system **(only available for transportation metrics)**.

2050 Blueprint Reflects 2050 outcomes with all 25 Draft Blueprint strategies.

LIHH Low-Income Households with household incomes less than $45,000 in today's dollars; shown where feasible to parse out equity impacts.

CoCs Communities of Concern; 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 Areas within 1/2 mile of a rail station, ferry terminal or frequent bus stop (every 15 minutes or less) consistent with MTC/ABAG-adopted criteria.

Priority Production Areas Industrial districts that support industries that are critical to the functioning of the Bay Area economy and are home to "middle wage" jobs.

1 | How Does the Draft Blueprint Assign Anticipated Revenues Toward Strategies?

The Draft Blueprint anticipates total inflation-adjusted revenues of $783 billion across four topic areas of Transportation, Housing, Economy and Environment during the Plan period from 2021 to 2050, integrating the impacts of the COVID-19 recession as well as future regional revenue measures. The chart below highlights how these revenues are assigned among various strategies. Zero-cost strategies (e.g., increased development capacity for housing) that do not require significant financial investment are not shown. On the right, key metrics help characterize the investments. **NOTE: There is a $66 billion reserve in the Transportation Element for Final Blueprint strategies not included in the Draft Blueprint; this reserve can help fund other county and regional priorities like Express Lanes and commuter rail lines.**

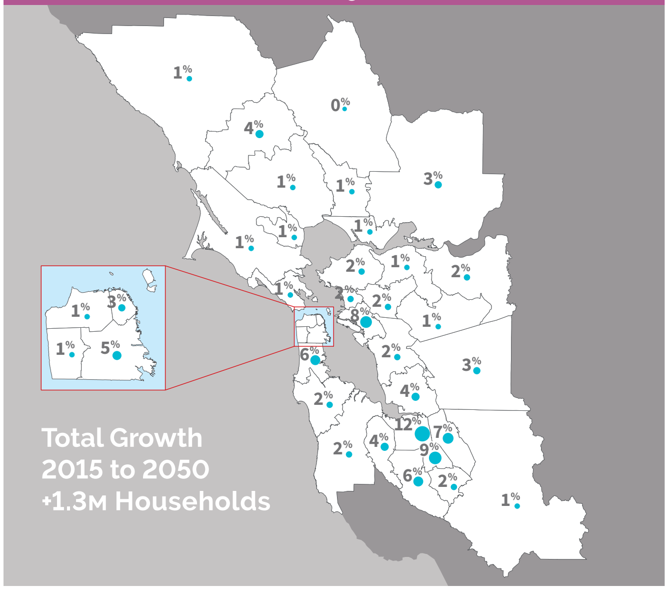
Topic Area and Total Anticipated Revenues ($783B)

Topic Area	Strategy	Funding	Share of Total Topic Area Investment
TRANSPORTATION $526B	**Maintain** Existing System	$392B	75%
	Optimize System: Transit Fare Policy Reform	$10B	2%
	Optimize System: Seamless Mobility	$0.1B	.2%
	Optimize System: Freeway Tolling	$1B	.2%
	Safe Streets: Complete Streets Network	$7B	1%
	Safe Streets: Regional Vision Zero Policy	$1B	.2%
	Projects: Low-Cost High-Performing Transit	$20B	4%
	Projects: New Transbay Rail Crossing	$29B	6%
	(Not in Draft) Projects: Other Regional Priorities	$22B	4%
	(Not in Draft) Projects: County Priorities	$44B	8%
HOUSING $171B	**Fund Affordable Housing** Production	$166B	97%
	Fund Affordable Housing Preservation	$2B	1%
	Fund Affordable Housing Protection	$3B	2%
ECONOMY $33B	**Expand** Childcare Support	$30B	91%
	Create Job Incubator Programs	$3B	9%
ENVIRONMENT $53B	**Adapt** to Sea Level Rise (SLR)	$17B	32%
	Retrofit Existing Buildings	$20B	38%
	Protect High-Value Conservation Lands	$15B	28%
	Expand Climate Initiatives Program	$1B	2%

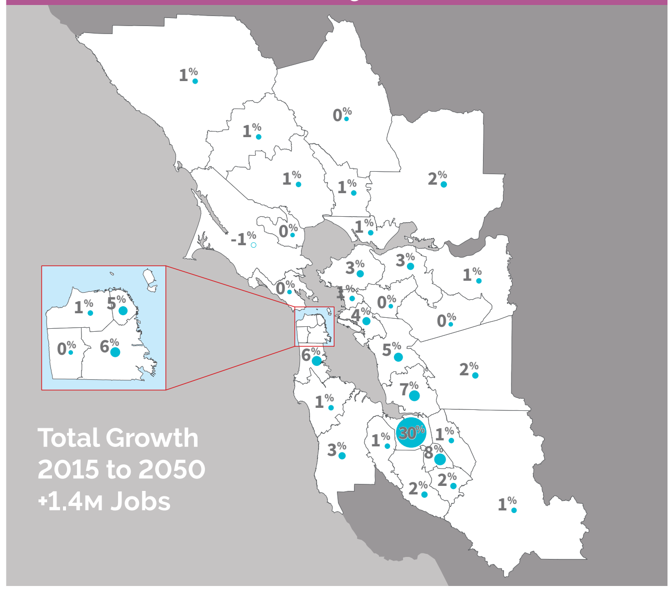
Key Metrics		
Funding by Mode: Maintain System	Transit	70%
	Road/Bike/Ped	30%
Funding by Mode: All Other Strategies	Transit	79%
	Road	4%
	Bike/Ped	17%
Benefits for Low-Income Households	Share of Population	24%
	Share of Road Funding	27%
	Share of Transit Funding	44%
Benefits for Minorities	Share of Population	60%
	Share of Road Funding	52%
	Share of Transit Funding	63%
Share of Housing Production Funding, by Area Type	High-Resource Areas	75%
	Transit-Rich Areas	76%
	Communities of Concern	26%
Annual Subsidy per Low-Income Households	Childcare Support	$10K
	Job Incubator Programs	$1K
Share of Funding in Communities of Concern*	Adapt to Sea Level Rise	25%
	Retrofit Existing Buildings	15%

* Environment investment in Communities of Concern is fully sufficient to meet identified needs.

Housing Growth between 2015-2050
(as a Share of Region's Growth)



Job Growth between 2015-2050
(as a Share of Region's Growth)

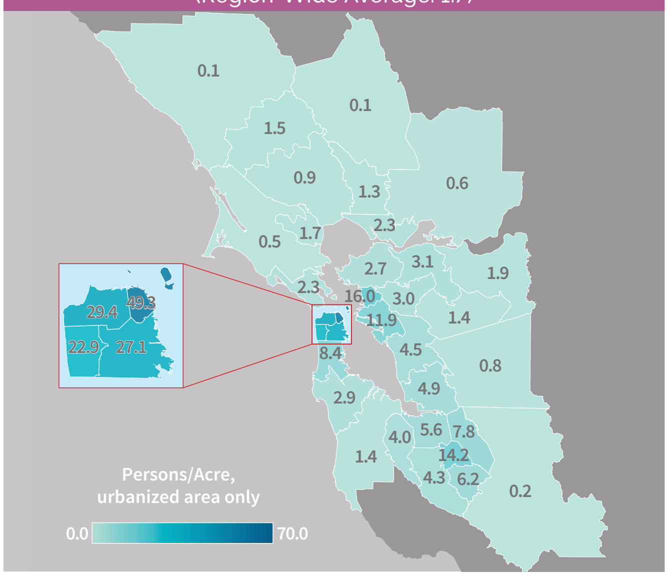


The nine-county Bay Area is divided into 34 subcounty areas, called "superdistricts."

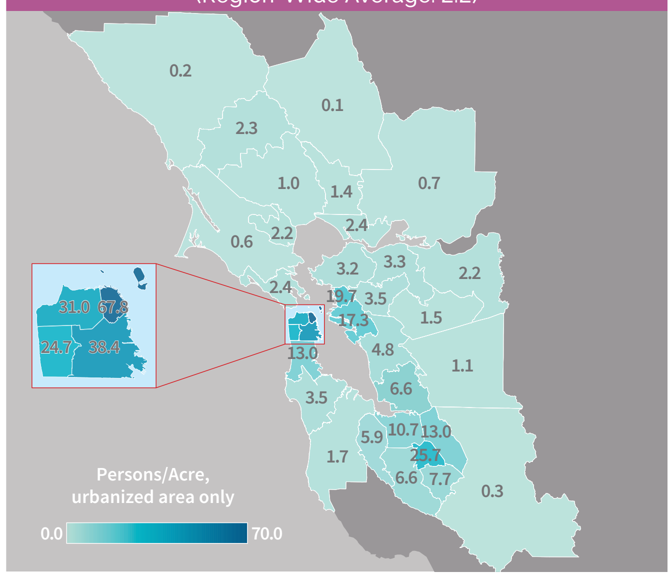
Superdistricts are combinations of cities, towns and unincorporated areas that allow the public to see the more localized growth pattern in Plan Bay Area 2050.

More information on the superdistricts can be found in the layer documentation.

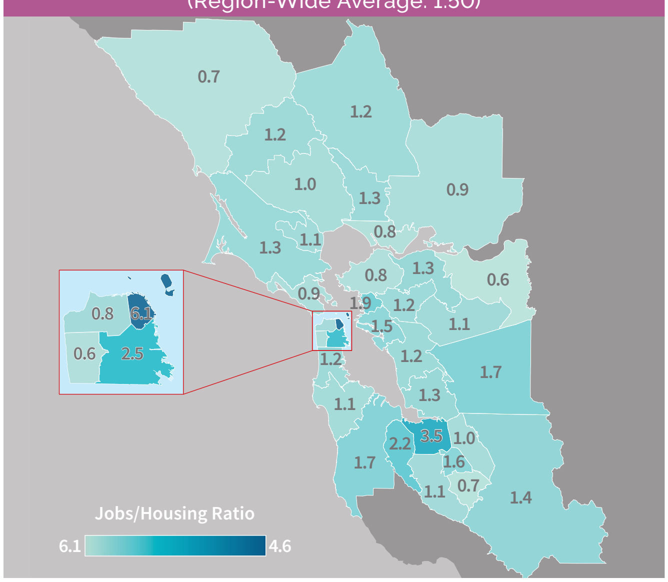
Population Density 2015
(Region-Wide Average: 1.7)



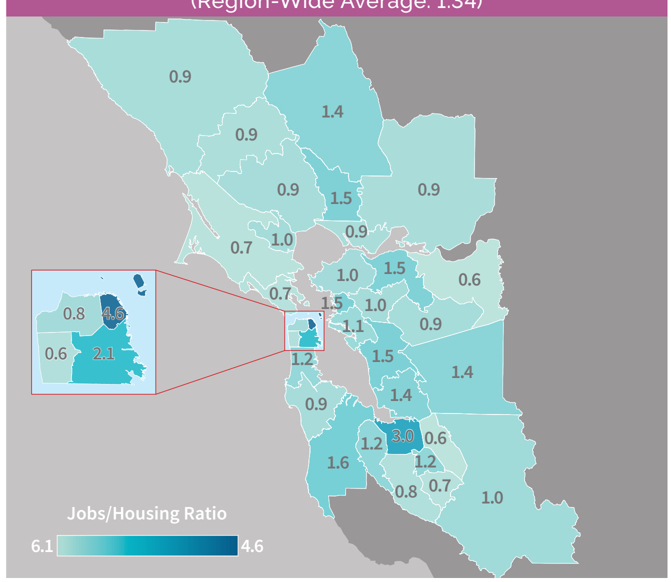
Population Density 2050
(Region-Wide Average: 2.2)



Jobs/Housing Ratio 2015
(Region-Wide Average: 1.50)



Jobs/Housing Ratio 2050
(Region-Wide Average: 1.34)



3 | What are the Key Equity and Performance Outcomes of the Draft Blueprint?

How does the Draft Blueprint advance or impede achievement of the Plan Vision? This section is organized by the five Plan Bay Area 2050 Guiding Principles with two key questions presented to frame the exploration. Each question is accompanied by one or more metrics, highlighting impacts on disadvantaged populations where feasible and indicating whether the 2050 Blueprint outcomes are equitable and favorable. Explanatory text sheds light on how Draft Blueprint strategies and assumptions contribute to performance outcomes. On the left, outcomes that move in the right direction are represented by upward arrows, while outcomes that move in the wrong direction or fail to meet state-mandated targets are represented with downward arrows.

AFFORDABLE

WILL BAY AREA RESIDENTS SPEND LESS ON HOUSING AND TRANSPORTATION?

In 2015, low-income households have an extreme housing and transportation (H+T) cost burden, with costs exceeding average incomes when accounting for circumstances such as zero-income, financial assistance or unhoused status. With all Draft Blueprint housing strategies in place in 2050 Trend, H+T costs as a percentage of income decrease for all households. The addition of Draft Blueprint transportation strategies, including means-based tolls and fares, further reduces H+T costs for low-income households, though their cost burden remains deeply unaffordable.

H+T COST AS A PERCENT OF INCOME	2015	2050 TREND	2050 BLUEPRINT
Low-Income Households (LIHH)	109%	86%	83%
All Households	57%	48%	48%

Average transit fares per trip, while up in 2050 Trend due to recent fare increases since 2015, decrease in 2050 Blueprint with fare reform policies. The decrease is substantial for low-income households with means-based fares. Average tolls per auto trip increase due to the freeway per-mile tolling strategy, with reduced impact on low-income households due to means-based toll discounts.

TRANSPORT EXPENSES PER TRIP		2015	2050 TREND	2050 BLUEPRINT
Average Fare per Transit Trip	Low-Income Households	$2.78	$3.13	$1.60
	All Households	$3.16	$3.41	$2.96
Average "Out-of-Pocket" Cost per Auto Trip	Low-Income Households	$1.02	$1.10	$1.11
	All Households	$1.26	$1.45	$1.53
Average Toll per Auto Trip	Low-Income Households	$0.05	$0.08	$0.10
	All Households	$0.08	$0.12	$0.21

WILL THE BAY AREA PRODUCE AND PRESERVE MORE AFFORDABLE HOUSING?

28 percent of all new homes built between 2015 and 2050 are permanently affordable (deed-restricted) for low-income households, with an even greater share of these units in High-Resource Areas due to strategic investments in these locations.

The Draft Blueprint's 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 (deed-restricted) homes.

SHARE OF NEW HOUSING PRODUCTION (2015-50) THAT IS DEED-RESTRICTED AFFORDABLE	Region-Wide	28%
	High-Resource Areas	37%
SHARE OF AT-RISK AFFORDABLE HOUSING PRESERVED	Region-Wide	100%

CONNECTED

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

The number of jobs accessible within a 30-minute drive is forecasted to decrease in 2050 Trend due to population growth and subsequent road congestion, but it increases marginally with the Draft Blueprint. Meanwhile, the number of jobs accessible within a 45-minute transit trip is significantly lower than auto accessibility in 2015. Focused housing growth near transit routes increases transit accessibility in 2050 Trend, and performance improves further with investments in transit service in the Draft Blueprint. Biking and walking access to jobs also increases with land use strategies in 2050 Trend.

(Metric under development for Final Blueprint: Accessibility to Community Places)

PERCENT OF ALL BAY AREA JOBS THAT ARE ACCESSIBLE BY		2015	2050 TREND	2050 BLUEPRINT
By Car within 30 Minutes	CoC Residents	19.2%	13.6%	14.4%
	All Residents	17.8%	12.2%	12.6%
By Transit within 45 Minutes	CoC Residents	5.2%	6.6%	7.2%
	All Residents	3.4%	4.3%	4.7%
By Bike within 20 Minutes	CoC Residents	2.9%	3.5%	3.5%
	All Residents	2.3%	2.8%	2.8%
By Foot within 20 Minutes	CoC Residents	0.3%	0.4%	0.4%
	All Residents	0.2%	0.2%	0.2%

More households will live close to high-frequency transit, including rail, ferry and frequent bus stops, in 2050 under the Draft Blueprint. Growth geographies focus more growth in Transit-Rich Areas, supported by more transit service in these communities. 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 BLUEPRINT
Households	Low-Income Households	40%	46%
	All Households	32%	43%
Jobs	Manufacturing/Warehouse/Utilities	45%	43%
	All Jobs	52%	52%

CONNECTED

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

Travel times on freeways are forecasted to increase significantly between 2015 and 2050 Trend, again due to a growing population. Under 2050 Draft Blueprint conditions, per-mile freeway tolling on key corridors helps to alleviate this effect, even as speed limits reduce free-flow travel times.

PEAK-HOUR TRAVEL TIME (MINUTES)		2015	2050 TREND	2050 BLUEPRINT
Most of Route Features All-Lane Tolling (>75%)	Oakland-SF	30	53	41
	Antioch-SF	75	118	96
	Antioch-Oakland	47	67	57
	SJ-SF	64	100	87
	Oakland-SJ	56	77	66
	Oakland-Palo Alto	54	67	61
Part of Route Features All-Lane Tolling (25-75%)	Livermore-SJ	48	75	74
	Vallejo-SF	57	103	87
Limited or No Tolling on Route (<25%)	Fairfield-Dublin	48	62	65
	Santa Rosa-SF	69	136	138

Overcrowding on transit vehicles, which risks denial of boarding, is anticipated to rise significantly under 2050 Trend conditions. Crowding decreases in the 2050 Draft Blueprint for agencies with planned investments, such as Muni and AC Transit, as well as in the transbay corridor thanks to the New Transbay Rail Crossing. Agencies not listed are not forecasted to have overcrowding challenges in 2050.

PERCENT OF PERSON HOURS IN TRANSIT SPENT IN CROWDED CONDITIONS	2015	2050 TREND	2050 BLUEPRINT
SFMTA Bus	20%	40%	29%
AC Transit Local	0%	22%	20%
AC Transit Transbay	48%	64%	50%
GGT Express	30%	87%	85%
BART	19%	62%	44%
Caltrain	8%	32%	50%
WETA	23%	59%	43%
SFMTA LRT	32%	37%	25%
VTA LRT	0%	82%	83%

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

	2015	2050 BLUEPRINT
SHARE OF TRANSIT REVENUE VEHICLE ASSETS PAST THEIR USEFUL LIFE BENCHMARK	30%	30%

DIVERSE

WILL BAY AREA COMMUNITIES BE MORE INCLUSIVE?

Focused production of deed-restricted affordable housing in High-Resource Areas increases access to areas of highest opportunity for low-income households, helping reverse historically exclusionary policies in many of these communities. In Transit-Rich Areas, the total number of low-income households continues to rise, but the share declines over time. This indicates that affordable housing growth may not be keeping pace with overall development in Transit-Rich Areas.

SHARE OF HOUSEHOLDS THAT ARE LOW-INCOME	2015	2050 BLUEPRINT
High-Resource and Transit-Rich Areas	28%	23%
High-Resource (only) Areas	18%	22%
Transit-Rich (only) Areas	40%	36%

WILL BAY AREA RESIDENTS BE ABLE TO STAY IN PLACE?

At the neighborhood level, the risk of displacement persists in many low-income communities and communities of color. The Urban Displacement Project has identified 850 census tracts with ongoing or risk of displacement, gentrification or exclusion. In the Blueprint, 31% of these tracts experience displacement between 2015 and 2050 – defined here as a net loss in number of Low-Income Households. Further, nearly half of them experience gentrification – defined here as when the share of low-income households in the neighborhood drops by over 10 percent between 2015 and 2050. Even more significant impacts are forecasted for Communities of Concern.

SHARE OF NEIGHBORHOODS THAT EXPERIENCE DISPLACEMENT AND GENTRIFICATION BETWEEN 2015 AND 2050	DISPLACEMENT	GENTRIFICATION
High Displacement Risk Tracts (total 850 neighborhoods)	31%	44%
Communities of Concern (total 339 neighborhoods)	42%	56%
Transit-Rich Areas (total 114 areas)	13%	46%
High-Resource Neighborhoods (total 638 neighborhoods)	18%	26%

HEALTHY

WILL BAY AREA RESIDENTS BE HEALTHIER AND SAFER?

With Draft Blueprint strategies, 98 percent 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 would be retrofitted to reduce the likelihood of damage in future earthquakes and wildfires.

PERCENT OF HOUSEHOLDS IN RISK-PRONE AREAS OR RISK-PRONE BUILDINGS, THAT ARE PROTECTED OR 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%

The rate of fatalities and injuries decreases in the Draft Blueprint with reduced speed limits and enhanced street design under the Vision Zero strategy, but remains far from zero incidents.

ANNUAL INCIDENTS, PER 100 MILLION VMT	2015	2050 TREND	2050 BLUEPRINT
Fatalities	0.98	0.99	0.91
Injuries	4.23	4.35	4.20

Total fine particulate matter emissions ($PM_{2.5}$) are forecasted to increase under 2050 Trend conditions as population and miles driven continue to rise. The Draft Blueprint strategies help bring this metric down below 2015 levels.

	2015	2050 TREND	2050 BLUEPRINT
DAILY $PM_{2.5}$ EMISSIONS (TONS)	5.5	5.7	5.2

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

Draft Blueprint strategies result in a drop in CO_2 emission levels per capita in 2035 (9% below 2005 levels), but are insufficient to curb them to state-mandated levels (19% below 2005 levels). Further, CO_2 emission levels are forecasted to increase between 2035 and 2050 (in both Trend and Blueprint), primarily due to assumed adoption of driverless vehicles that can potentially generate "zero occupant" mileage.

CHANGE IN DAILY CO_2 EMISSIONS PER CAPITA RELATIVE TO 2005	2015	2035 TREND	2035 BLUEPRINT	2050 TREND	2050 BLUEPRINT
Cars and Light-Duty Trucks (SB 375)	0%	8%	-9%	14%	-3%
All Vehicles (Including Fuel Efficiency Gains)	-7%	-36%	-42%	-38%	-43%

With an assumed growth in telecommuting by 2050, the mode share of single occupancy auto travel is forecasted to drop in 2050 Trend conditions. With the Draft Blueprint strategies in play, this share drops slightly further, with increases in transit, walking and bicycling mode shares.

COMMUTE MODE SHARE	2015	2050 TREND	2050 BLUEPRINT
Auto: Single Occupancy	54%	42%	40%
Auto: Other	21%	19%	18%
Transit	14%	19%	20%
Active Modes (Bike/Walk)	5%	6%	8%
Telecommute	6%	14%	14%

VIBRANT

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

County-level jobs-to-housing ratios decrease in most counties, reflecting a higher ratio of housing to job production. Further, the ratios in Alameda, San Francisco and Santa Clara counties approach the region-wide ratio in 2050, indicating an improved jobs-housing balance. However, other counties trend further away from the region-wide ratio. These trends indicate that housing strategies in the Draft Blueprint may bring housing to job-rich areas such as Silicon Valley, but strategies to move jobs to housing-rich areas are not sufficient. (Metric under development for Final Blueprint: Jobs-Housing Fit for low-wage jobs)

JOBS-HOUSING RATIO	2015	2050 BLUEPRINT		2015	2050 BLUEPRINT
Region-Wide	1.50	1.34	San Francisco	2.55	2.21
Alameda	1.48	1.33	San Mateo	1.29	1.21
Contra Costa	0.98	0.98	Santa Clara	1.69	1.41
Marin	1.09	0.75	Solano	0.87	0.89
Napa	1.24	1.46	Sonoma	1.05	0.89

Mean commute distances rise from 2015 to 2050 Trend with Draft Blueprint land use strategies, due to the clustering of jobs in existing centers far from housing-rich communities. Transportation strategies on their own affect this metric only marginally in 2050 Blueprint.

MEAN COMMUTE DISTANCE (MILES)		2015	2050 TREND	2050 BLUEPRINT
	Low-Income Workers	9.5	12.0	11.9
	All Workers	12.0	13.1	12.9

WILL BAY AREA BUSINESSES THRIVE?

The region's economic recovery is expected to be robust through 2050, even when accounting for the inclusion of new regional tax measures to fund transportation and affordable housing, among other areas.

GROWTH IN PER CAPITA GROSS REGIONAL PRODUCT (FROM 2015 TO 2050)	65%

A key pillar in the region's middle-wage workforce, manufacturing and warehouse jobs are anticipated to grow at a higher rate than other industries, with some of that growth occurring in newly-designated Priority Production Areas.

GROWTH IN NUMBER OF JOBS (FROM 2015 TO 2050)		
Region-Wide	All Jobs	35%
	Manufacturing/Warehouse/Utilities Jobs	48%
Priority Production Areas	All Jobs	42%
	Manufacturing/Warehouse/Utilities Jobs	48%

4 | What are the Key Takeaways from the Draft Blueprint?

Highlights

- Housing and transportation costs are significantly reduced, especially for low-income residents.
- New revenues enable a significant uptick in production of deed-restricted affordable homes.
- Most new homes are focused in walkable communities with frequent transit service.
- Strategies to reduce vehicle speeds and build protected bicycle/pedestrian infrastructure help to save lives.
- Seismic retrofits and sea level rise infrastructure protect thousands of homes from damage.
- Despite significant tax increases to pay for new strategies, Bay Area businesses continue to thrive.

Challenges

- Affordable housing production is insufficient to address the existing need for affordable units in the Bay Area.
- Traffic congestion and transit crowding increase significantly with population growth and will not be sufficiently addressed with existing strategies.
- Low-income residents continue to face a high risk of displacement, particularly in Communities of Concern.
- Per capita greenhouse gas emissions decline, but still fail to meet state-mandated reduction targets.
- More ambitious strategies are needed to shift jobs closer to the region's workforce.

5 | How Did We Analyze the Draft Blueprint?

INPUTS
Baseline Data
(Zoning, Pipeline, Growth Boundaries, etc.)

INPUTS
Strategies and Growth Geographies
(February 2020 Approval for Analysis)

ANALYSIS & MODELING
Economic, Transportation and Land Use Analysis and Modeling
(Spring 2020)

OUTCOMES
Performance Metrics and Growth Pattern
(July 2020 Release)

What's Next for the Final Blueprint?

JULY/EARLY AUGUST 2020
- Public Engagement: Online and Remote Offline Opportunities

MID-AUGUST 2020
- Refine Strategies
- Close of Blueprint Comment Period

SEPTEMBER 2020
- Seek Approval of Final Blueprint for Analysis

DECEMBER 2020
- Release Final Blueprint and Seek Action on Preferred EIR Alternative

How Will COVID-19 Affect the Final Blueprint?

COVID-19 has upended everyday life throughout the world and intensified existing challenges, and we all feel uncertain about what the future holds. While Plan Bay Area 2050 is a 30-year vision for the Bay Area, many of the strategies approved for analysis by the MTC Commission and ABAG Executive Board in February have only become more timely.

The Final Blueprint will continue to focus on strategies such as:

BUILD A COMPLETE STREETS NETWORK: Enhance streets to promote walking, biking, and other micromobility through improvements to the pedestrian environment and thousands of miles of bike lanes or multi-use paths with investments targeted in Communities of Concern and near transit.

STRENGTHEN RENTER PROTECTIONS BEYOND STATE LEGISLATION: Building upon recent tenant protection laws, limit annual rent increases to the rate of inflation, while exempting units less than 10 years old.

EXPAND CHILDCARE SUPPORT FOR LOW-INCOME FAMILIES: Subsidize childcare for low-income households with children under 5, enabling more parents with young children to remain in (or to enter) the workforce.

PROTECT HIGH-VALUE CONSERVATION LANDS: Provide strategic matching funds to help conserve high-priority natural and agricultural lands, expand regional trails, and restore marshlands.

How Can You Get Involved in July/Early August? (From Home!)

- Virtual Public Workshops
- Online Survey and Official Comment Period (ends August 10)
- Telephone Townhalls