

MARKET ANALYSIS REPORT

APPENDIX A: SOCIOECONOMIC DATA SOURCES AND ASSUMPTIONS

March 2022

Link21 is committed to ensuring that information is available in appropriate alternative formats to meet the requirements of persons with disabilities. If you require an alternative version of this file, please email link21dc@link21program.org.

Prepared By: Link21 Program Management Consultants (PMC)







INTENTIONALLY LEFT BLANK



ISSUE AND REVISION RECORD

| REVISION | DATE | PREPARER(S) | PMC REVIEWER(S) | APPROVER | DESCRIPTION/ | |
|----------|------------|-----------------------|----------------------------|---------------------------|--------------------------------|--|
| | | | BART/CCJPA REVIEWER(S) | BART/CCJPA APPROVER | NOTES | |
| 0 | 10/26/2021 | Derek Cheah, Steer | Elisa Tejedor, Steer | Sudhish Verma, HNTB | Working DRAFT submittal | |
| | 11/29/2021 | | Andrew Tang, BART | Andrew Tang, BART | Working DRAFT submittal review | |
| 1 | 03/18/2022 | Derek Cheah, Steer | Elisa Tejedor, Steer | Sudhish Verma, HNTB | DRAFT submittal | |
| | | | | | No review requirement | |

SHAREPOINT PATH

Records Center/BUSC Record Center/WPA.02/ 1-BUSC-PH0-Market_Analysis_Report_Appendix_A-DRAFT

March 2022 i



INTENTIONALLY LEFT BLANK

ii March 2022



SOCIOECONOMIC DATA SOURCES AND ASSUMPTIONS OVERVIEW

The Metropolitan Planning Organization (MPO) models in *Plan Bay Area 2040* and *Plan Bay Area 2050* have population and employment forecasts that begin at a base year of 2015. These differ from the actual population and employment at that time. In addition, forecast growth assumptions for the models differ from actual population and employment between 2015 and 2019. This appendix provides a discussion comparing the MPO forecasts with the actual population and employment.

Plan Bay Area 2040 contains a data compendium that presents projected growth of the San Francisco Bay Area (including its nine counties) and was adopted by Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) for a coordinated land use and transportation planning process. The report describes the level of employment, household, and population growth the region may incur between 2015 and 2040 based on assumptions about the U.S. economy, demographic changes, how different economic sectors will grow and change, and the region's success in meeting the housing investment strategies as encouraged by the plan.

While *Plan Bay Area 2040* was adopted in 2017, the preparation of the detailed databases underpinning it had been ongoing for several years. When the model and associated data were developed, accurate historical data for 2015 were not yet available. For this reason, 2015 data are from model simulations rather than actual figures.

Population

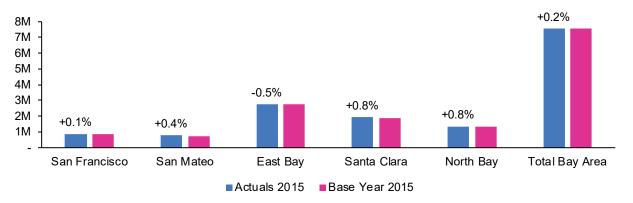
Figure 1 illustrates the actual population by subregion within the Bay Area in 2015 compared with the 2015 base year in MPO data. According to the California Department of Finance, actual population in the Bay Area was 7.60 million in 2015, which is 0.2% higher than the MPO base year population. At a Bay Area subregion level, the differences between actual values and MPO values are less than 1%. Across the overall Northern California Megaregion (Megaregion), as illustrated in **Table 1**, the differences are within 3%. However, actual population was significantly higher for the Northern San Joaquin Valley compared to the other regions. Overall, between 2015 and 2019, the differences between actual and MPO forecast population got proportionally smaller in all regions except the Sacramento Area, where the difference was getting larger.

March 2022 1



Figure 1. Bay Area Population Comparison 2015

The percentages illustrate the differences between Actuals 2015 and Base Year 2015.



Source: Link21 Project Management Consultants (PMC) analysis of data from the California Department of Finance, Employment Development Department, State of California, and MPOs (MTC, Association of Monterey Bay Area Governments [AMBAG], Sacramento Area Council of Governments [SACOG], Stanislaus Council of Governments [StanCOG], and Merced County Association of Governments [MCAG])

Table 1. Megaregion Population Comparison 2015 – 2019

The percent difference between the actual population and MPO forecast population.

| AREA | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------------|--------|-------|--------|--------|--------|
| San Francisco Bay Area | 0.2% | 0.3% | (0.0%) | (0.6%) | (1.3%) |
| Monterey Bay Area | (0.1%) | 0.3% | 0.2% | (0.4%) | (0.7%) |
| Northern San Joaquin Valley | 21.3% | 21.1% | 21.1% | 20.6% | 20.2% |
| Sacramento Area | 1.7% | 1.9% | 2.2% | 2.4% | 2.5% |
| Megaregion | 2.7% | 2.8% | 2.7% | 2.3% | 1.8% |

Source: Link21 PMC analysis of data from the California Department of Finance, Employment Development Department, State of California, and MPOs (MTC, AMBAG, SACOG, StanCOG, and MCAG)

Note: MPO differences from 2016-2019 are interpolations using the 2015 to 2040 compound annual growth rate (CAGR).

2 March 2022



Employment

Figure 2 illustrates the actual employment (jobs) by subregion within the Bay Area in 2015 compared with the 2015 base year in MPO data. According to the California Employment Development Department, there were 3.85 million jobs across the Megaregion in 2015, which is 3.1% higher than the MPO base year employment. The actual number of jobs in San Francisco was 25% below that in the MPO models, while East Bay employment was 20% higher than the MPO base year estimate. In line with population trends, overall Megaregion employment was between 4% and 7% higher during the 2015 to 2019 period, as described in **Table 2**. The difference between actual and MPO forecast employment was increasing over the same period for all regions, compared to a decreasing difference for population in all regions other than the Sacramento Area. However, there are greater differences at a county level. For instance, actual employment data within the Northern San Joaquin Valley counties (San Joaquin, Stanislaus, and Merced) and El Dorado County (Sacramento area) are between 50% and 70% higher than forecast MPO data.

Figure 2. Bay Area Employment Comparison

The percentages illustrate the differences between Actuals 2015 and Base Year 2015.



Source: Link21 PMC analysis of data from the California Department of Finance, Employment Development Department, State of California, and MPOs (MTC, AMBAG, SACOG, StanCOG, and MCAG)

Table 2. Megaregion Employment Comparison 2015 – 2019

The percent difference between the actual employment and MPO forecast employment.

| AREA | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------|--------|-------|-------|-------|-------|
| San Francisco Bay Area | 3.1% | 4.2% | 4.8% | 5.0% | 5.2% |
| Monterey Bay Area | 6.8% | 7.2% | 7.5% | 8.1% | 8.0% |
| Northern San Joaquin Valley | 22.9% | 23.6% | 24.7% | 24.9% | 24.5% |
| Sacramento Area | (0.4%) | 0.7% | 1.3% | 2.5% | 2.9% |
| Megaregion | 4.4% | 5.4% | 6.1% | 6.5% | 6.6% |

Source: Link21 PMC analysis of data from the California Department of Finance, Employment Development Department, State of California, and MPOs (MTC, AMBAG, SACOG, StanCOG, and MCAG)

Note: MPO differences from 2016-2019 are interpolations using the 2015 to 2040 CAGR.

March 2022 3