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A LONG-RANGE VISION FOR THE ECONOMY

Since the 1800s, booms and busts have characterized the Bay Area's economy. Through the 19th century Gold Rush, the "dot-com" bubble of the 1990s, record economic growth into the 21st century, and the latest recession in the wake of the COVID-19 pandemic, a spirit of innovation and perseverance has defined the region through both good times and downturns.

The Bay Area has long prided itself on a diverse range of industries, including its internationally renowned technology sector and world-famous wine industry, and a well-educated labor force. The region's economy guides the magnitude and location of job growth, which in turn influences commute flows and workforce development. Economic trends can either provide pathways to upward economic mobility or deepen wage inequality.

Over the next three decades, continuing cycles of economic growth and decline are sure to be a reality. Policies and investments that strengthen existing social safety nets and train the next generation of Bay Area workers and entrepreneurs can help families weather periods of economic recession. In times of economic booms, policies that balance out the locations of new housing and jobs can lessen the potential negative side effects of a vibrant economy, such as congested freeways and crowded trains. With the right partnerships and policies, the economy can be a force for equity and societal growth.



Photo: Noah Berger

ADVANCING EQUITY THROUGH THE ECONOMY

With a gross domestic product of over \$900 billion,¹ the Bay Area economy has ample opportunity to better serve historically marginalized communities as it recovers from the impacts of COVID-19. In an equitable economy, all residents would be secure in their finances, even under deeply uncertain and shifting conditions.

Plan Bay Area 2050's universal basic income strategy would help Bay Area residents with low or no incomes and people with disabilities — who are over-represented in the ranks of the economically disadvantaged and unemployed — to meet their basic needs. Job training programs and guaranteed high-speed internet access would prepare residents for the future economic landscape. The Bay Area's economy would return to its pre-pandemic vigor, but future economic gains would be shared more evenly across the region's population. Small local businesses would sustain vibrant neighborhoods where residents could reinvest their money in local goods and services.

With equity in sight, government support would help people who have been historically excluded from wealth-generating opportunities — like homeownership — to achieve these goals.

1 MTC, ABAG and Partners (2019). Vital Signs: Economic Output. <https://www.vitalsigns.mtc.ca.gov/economic-output>

Planning for Resilience to Economic Uncertainty

The future of the Bay Area's economy will be shaped in large part by forces outside of the region's control. Decisions made by national and state leaders will ripple through regional and local levels, affecting everything from interest and tax rates, minimum wages, and trade policies to transit funding and housing policy. Automation may render large swaths of jobs obsolete in the retail, service and manufacturing sectors while the rise of online platforms continues to shape those job markets, escalating the upward trend of employment in warehouses and from part-time to full-time gig work. Economic recovery from the pandemic may be swift or slow, robust or weak. Income inequality may worsen over the next three decades, or society may find more equitable solutions. Leading economists and world leaders who grapple with such questions often disagree, further underscoring the need for policy and investment designed to withstand these uncertainties.

To remain resilient in the face of these unpredictable forces, Plan Bay Area 2050 includes strategies that work together to address a variety of economic situations. The strategies outlined in this chapter fall into two overall themes to improve economic resilience:

- 1. Improve economic mobility:** The plan aims to reduce poverty and bolster the middle class by investing in a suite of job training programs that prepare Bay Area residents for the future economic landscape. Relatedly, the plan strategizes to ensure that every resident has high-speed internet to take advantage of all current job and education opportunities. A universal basic income further improves economic security for residents most in need.
- 2. Shift the location of jobs:** The plan supports a more balanced distribution of housing and jobs throughout the Bay Area, resulting in communities where people can live near where they work (if they choose), by promoting more dense growth near transit and incentivizing employers to locate jobs near homes and transit. Finally, the plan protects and improves key industrial lands that are important for both middle-wage jobs and services such as manufacturing across the Bay Area.



THE FUTURE OF JOBS

PERSPECTIVE PAPER

MAY 2019

HORIZON INITIATIVE AND THE FUTURE OF JOBS

As part of the planning process leading up to Plan Bay Area 2050, MTC and ABAG explored the changing nature of jobs and other economic issues, as well as potential solutions, through the Horizon initiative. *The Future of Jobs Perspective Paper*² looked at the Bay Area economy from four different lenses: automation and the risks it could entail; organizational changes, including the gig economy and the decline of salaried jobs; longstanding increases in regional inequality as top incomes rise; and the location and type of jobs that are growing in the region. Shaped by robust public engagement, the most promising strategies identified in the paper were carried forward into Plan Bay Area 2050, ranging from job retraining programs to the integration of a universal basic income.

² ABAG and MTC. (2019, May). *The Future of Jobs Perspective Paper*. <https://mtc.ca.gov/tools-and-resources/digital-library/future-jobs-perspective-paper>

STRATEGIES

Improve Economic Mobility

As the types of jobs available to Bay Area residents continue to shift, fewer and fewer middle-wage options are on the horizon looking out to 2050. This trend is typified by the manufacturing sector, which has seen employment numbers fall as automation enables more output with fewer workers. The outsourcing of work to states and countries with lower wages further drives the disappearance of middle-wage jobs in the region. Concurrently, the Bay Area's cost of living has risen significantly, buoyed by a self-reinforcing cycle of higher-wage job growth and rising housing costs. A stronger safety net, coupled with a concerted effort to open up more pathways to middle-wage jobs, is critical to ensuring that no one is priced out of the Bay Area.

Improving economic mobility is a complex undertaking beyond MTC's and ABAG's jurisdictional spheres that will require a coordinated, multi-pronged approach, as well as strong partnerships. Employers, educational institutions and job-training providers have a large role to play in reaching for economic equity, as do agencies at all levels of government. Private, public and community-based leaders will need to align policies, strategies and tactics to create a sustainable and thriving economic ecosystem that focuses explicitly on equity.

In the face of an ever-evolving labor market and increasing rates of job automation, a flexible workforce with in-demand skills is critical to ensuring continued economic growth and shared prosperity. While government has historically played a limited role in shaping the future labor market, a suite of approaches to **expand job training and incubator programs** could help to align the region's workforce with future needs and launch a next generation of entrepreneurs. Business incubators are organizations that offer leadership training, support, technical assistance and physical workspace for entrepreneurs at all career stages, and they may become central hubs for workforce development in the coming decades.

Funding assistance programs for establishing new businesses, as well as job training programs in partnership with community colleges, could make a major difference in preparing workers for the jobs of tomorrow. Locating these programs primarily in historically disinvested communities and in Priority Production Areas³ that are identified by cities and towns for future jobs growth can ensure that the process is done equitably and in sync with local economic development plans.

Paired with training programs to make sure workers and entrepreneurs have the right skills to match market demand, a strategy to **invest in high-speed internet in underserved, low-income communities** provides the necessary infrastructure to connect all Bay Area residents to remote work, education or e-commerce. Public health restrictions during the COVID-19 pandemic spurred a broad new swath of workers to telecommute in 2020, demonstrating that working from home, while certainly bringing its own challenges, can also be more effective and desirable than it may have seemed. From 2021 onward, telecommuting may become more commonplace than it was prior to the pandemic, though the full extent of the pandemic's effects on the workplace will likely take years to unfold. The recent shifts from in-person to online activities could become a long-term cultural shift as well, requiring everyone to have internet access for educational opportunities, healthcare appointments and more.

For most, working from home or engaging in other remote activities requires access to high-speed internet capable of video conferencing and transferring large amounts of data. However, many communities, both rural and urban, do not have the infrastructure needed to support such connectivity, and they could be left behind in a future economy that revolves around long-term remote connections. Plan Bay Area 2050's strategy to expand internet access envisions direct subsidies for families with low incomes to provide high-quality connectivity at a low cost. Looking out to 2050, infrastructure upgrades to extend high-speed internet cables along roads and other publicly owned rights-of-way could provide more Bay Area families with access to this increasingly important resource.



Photo: Karl Nielsen

ADVANCING ACCESS TO HIGH-SPEED INTERNET

High-speed internet service is no longer a luxury. As a utility approaching the importance of water or electricity in present-day California, internet connectivity is essential to both daily life and a vision of a more equitable future. A plan to provide affordable, reliable, high-speed internet to all Bay Area residents is one step in overcoming historic barriers to opportunity. More than 1.5 million California households do not have access to high-speed internet, and most of these households are in poor or historically disinvested communities or in rural areas.⁴

Even before COVID-19, the need for a coordinated approach to ensure affordable high-speed internet access to all Bay Area residents and businesses was apparent, but the pandemic made the gaps all the more glaring. Whether you are a student trying to learn remotely, a patient that relies on telehealth services, an employee collaborating with a remote team or a job-seeker jumpstarting a new career, reliable internet connectivity is essential.

Recent state and federal actions have opened up new funding streams to advance more equitable high-speed internet access, including a \$6 billion investment in the 2021 California state budget to improve infrastructure and access in underserved communities. These new funds, combined with existing programs in Oakland, San José and Marin County, hold the promise of extending internet connectivity to tens of thousands of Bay Area residents in the near term.

4 California Emerging Technology Fund. (2021). Statewide Surveys: California Broadband Adoption by the Numbers. <https://www.cetfund.org/action-and-results/statewide-surveys/>

3 Learn more about these areas in the Growth Geographies section in the Introduction.



Photo: Noah Berger

Building a truly inclusive economy will require bold action to ensure no one is left behind, embodied by a proposal to work with partners across the state to **implement a statewide universal basic income**. While job training programs and high-speed internet access are targeted strategies to improve economic mobility, a more transformational approach could guarantee a baseline level of income for all households in California. Because the Bay Area is part of the larger Northern California megaregion — and due to the significant amount of new funding required to advance a universal basic income program — this strategy would be deployed on a broader geographic scale than other strategies, in partnership with neighboring regions and key state partners.

Stimulus checks that were sent out as part of the Coronavirus Aid, Relief, and Economic Security Act in response to COVID-19 were a recent example of universal basic income in action, providing much-needed funds to help struggling families pay for essentials like food and rent. Plan Bay Area 2050 builds upon this approach with a vision of regular monthly payments to all residents statewide to supplement wages and existing social safety nets. These payments would average \$500 per month but vary based on household size — a baseline income set low enough to not disincentivize work but instead supplement income and allow it to circulate through communities and spur local economic development. All households across the state would receive the universal basic income regardless of their resources, but tax increases on more affluent households would support the program, effectively canceling out any additional benefit for families with higher incomes.



Photo: Courtesy of Eden Housing

UNIVERSAL BASIC INCOME CASE STUDIES

Universal Basic Income (UBI) is an often-touted policy response to address growing income inequality and poverty by providing a guaranteed minimum income to all people in a certain area. At the national level, a UBI bill passed the House of Representatives twice in the 1970s, but it did not go further due to senators' concerns about expanding welfare.

At the state level, in July 2021, the Legislature passed a \$35 million guaranteed income program (differing from a UBI program in that only select groups, not all residents, will receive the funds) that will go toward monthly payments to pregnant people and foster youth phasing out of the system. It is the first state-funded guaranteed income program in the country.⁵

Despite promising early results, UBI remains in the testing stage, and the many pilots underway may provide more clarity on the questions surrounding it. One California UBI test that may offer valuable lessons to the Bay Area is the Stockton Economic Empowerment Demonstration project. Between February 2019 and February 2021, a

group of 130 Stockton residents, selected at random and making below the city's median income, received \$500 a month. The median household income in Stockton, which borders the Bay Area, is \$46,033 — 25% below the state's and nearly 50% below the Bay Area's median household income. Results of the study indicated that full-time employment rose among those who received the basic income and that their financial, physical and emotional health improved.⁶ Several Bay Area jurisdictions are considering or have launched UBI test programs as well, including Oakland, San Francisco, South San Francisco, Marin County and Santa Clara County.

Recognizing that larger and much longer studies are needed before any conclusions about UBI in America can be made, Plan Bay Area 2050 proposes to implement a statewide UBI that provides an average payment of \$500 a month to all households. Although not enough to live on, this baseline income amount may help with everyday emergencies, reduce anxiety and health concerns, and improve family stability and access to opportunity. Plan Bay Area 2050's UBI strategy is also an opportunity to help test, refine and improve similar policies worldwide.

5 Beam, A. (2021, July 15). California approves 1st state-funded guaranteed income plan. *AP News*. <https://apnews.com/article/government-and-politics-california-4fea151e0425f8188337e44a02ab8177>

6 Treisman, R. (2021, March 4). California Program Giving \$500 No-Strings-Attached Stipends Pays Off, Study Finds. *NPR*. <https://www.npr.org/2021/03/04/973653719/california-program-giving-500-no-strings-attached-stipends-pays-off-study-finds>



Photo: Karl Nielsen

STRATEGIES Shift the Location of Jobs

In addition to improving economic mobility for all residents — particularly our most underserved — the Bay Area must also address its **jobs-to-housing imbalance**. This term refers to the current distribution of where jobs and housing are located in the Bay Area. San Francisco and Silicon Valley have many more jobs than homes, and many communities in the East Bay see residents commuting across the bay each day to reach their jobs. This trend is decades in the making, a result of land use policies focused on local needs and a transportation system that has been able to grow just enough to meet increased peak-period demand. It is also a product of the power of economic agglomeration, where like industries locate together (for example, information sector jobs clustered in the West Bay and South Bay).

This pattern of development cannot be sustained forever. If the status quo persists, commutes will continue to get longer, and the region risks losing jobs to other metro areas outside of the Bay Area with lower costs of living and more convenient commutes. In tandem with strategies to allow more housing near jobs (discussed more in the housing chapter), strategies to incentivize job creation in communities with limited employment opportunities can build toward a more sustainable and equitable land use pattern for the decades to come.

Negative impacts of the Bay Area's jobs-to-housing imbalance go beyond the traffic congestion and transit crowding typical of a pre-pandemic workday. Extended commute times negatively affect quality of life and the health of commuters, and they present a challenge to employers looking to attract and retain skilled workers. Balancing home and work centers to create live-work communities could alleviate these concerns, more equitably distribute business tax revenue between local jurisdictions, and stimulate economic activity across the region. Solving the problem requires a mix of synchronous housing and economic solutions that shift housing to areas with high concentrations of jobs and shift jobs to areas with high concentrations of housing. Plan Bay Area 2050's housing strategies encourage more housing across the board, particularly in areas of opportunity where access to jobs is high, while the following economic strategies seek to shift the location of jobs by using a mix of local land use changes and employer incentives.



JOBS AND HOUSING A BAY AREA BALANCING ACT

Why do so many Bay Area communities have far more jobs than homes, while others have more homes than jobs? In some places, zoning restricts development exclusively to commercial buildings or single-family homes, and other policies also can limit the amount of housing or commercial space that can be built. Another factor is the tendency of similar types of businesses to cluster near one another — most notably in Silicon Valley, where many information and technology firms have co-located since the 1970s. Proximity to transit or to highways also plays a role, as businesses and workers choose locations that will enable quicker travel.

Compounded over many decades, these forces have resulted in a significant spatial imbalance of jobs and housing throughout the Bay Area. Generally, there is more housing than jobs in Alameda, Contra Costa, Solano and Sonoma counties, while there are more jobs than housing in Marin, Napa, San Francisco, San Mateo and Santa Clara counties. This creates a number of associated problems, such as traffic congestion and transit overcrowding in major commute corridors. The imbalance also reinforces other challenges, such as the displacement of longtime residents from neighborhoods where home values and rents have spiked.

Several Plan Bay Area 2050 strategies promote a more balanced distribution of jobs and housing across the region. Economic strategies encourage greater commercial densities in targeted growth areas and incentives for employers to locate in housing-rich communities with frequent transit service. Housing strategies encourage both market-rate and affordable housing development in High-Resource Areas and Transit-Rich Areas near major employment centers. Together, these strategies promote a healthier balance of jobs and housing throughout the Bay Area's nine counties.



MAP 3-1
Jobs-to-Housing
Balance (2017)

- ≤0.5 Jobs per Household
- 0.5–1.0 Jobs per Household
- 1.0–1.5 Jobs per Household
- 1.5–2.5 Jobs per Household
- 2.5–4.0 Jobs per Household
- 4.0–9.1 Jobs per Household

Protected Open Space and Unincorporated Areas

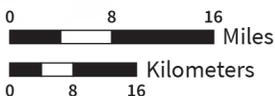
REGIONAL TRANSPORTATION

Major Airport

Major Seaport

SCALE

- OAKLAND** > 350,000
- Novato 50,000 – 350,000
- Pacifica 35,000 – 50,000



Source: TomTom North America, 2019
 Map Author: PB, 10/21

Source: Jobs from LEHD LODS WAC 2017; households from U.S. Census, American Community Survey B25003; Protected areas from GreenInfo Network, The California Protected Areas Database (CPAD).

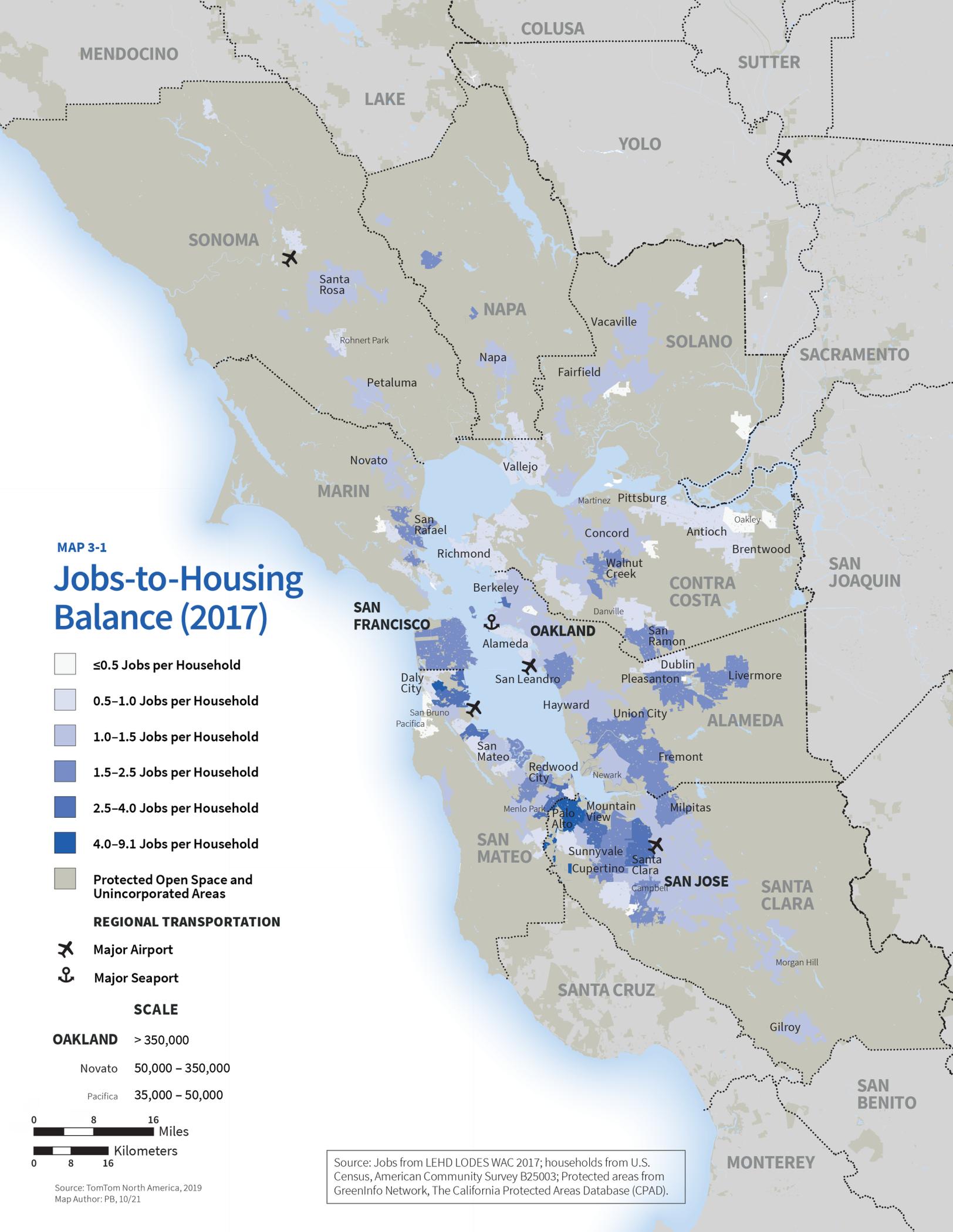




Photo: Karl Nielsen

First, local jurisdictions can support a more balanced distribution of job growth by **allowing greater commercial densities in Growth Geographies**. Growth Geographies, like Priority Development Areas and Transit-Rich Areas, are prime locations for additional commercial construction (for example, stores, offices or light-industrial spaces), given their location near areas of increased housing production or high-frequency transit. Tailoring locally determined land use regulations to allow for more job growth in strategic Growth Geographies would encourage employers to create jobs in places where employees can walk, bike or take transit to work easily. Locating jobs near transit is crucial for reducing greenhouse gas emissions and slowing climate change. Placing housing and jobs together will also allow for more complete, healthy communities — walkable places where housing, shopping, services and recreational spaces are intermingled.

Land use that allows for more commercial development alone may not be enough to attract employers to build in areas near housing or transit. A complementary strategy to **provide incentives to employers to shift jobs to housing-rich areas that are well served by transit** could further improve the balance of jobs and housing. This strategy would support the construction of offices and other workplaces in the East Bay; namely, along BART lines in suburban Contra Costa and Alameda counties, and adjacent to Capitol Corridor stations in Fairfield and Vacaville. Transit-rich North Bay communities like San Rafael and Santa Rosa are also poised to accommodate more workplaces. In turn, these new employment centers would draw in workers from the surrounding areas, shortening the distance that workers have to drive or enabling commutes by transit, walking or biking. For employees coming from elsewhere in the Bay Area, location near regional transit routes would encourage workers to commute sustainably, reducing vehicle miles traveled and contributing to climate goals.



Finally, a strategy to **retain key industrial lands by establishing Priority Production Areas** would both support a more even jobs-to-housing balance regionwide and protect industrial land from the risk of conversion to residential uses. Priority Production Areas (PPAs) are locally identified places that are prime opportunity sites for job growth in middle-wage sectors like manufacturing or logistics. While some PPAs are located in jobs-rich places like San Francisco and the South Bay, the majority are concentrated in the North Bay and East Bay, where housing is plentiful but job opportunities are more limited. PPAs provide opportunity sites to grow jobs where people already live, benefitting the region's overall jobs-to-housing balance, particularly for workers in middle-wage industries.

Declining employment in these industries contributes to a self-reinforcing trend that further threatens industrial lands. As more and more job losses lead to lower demand for industrial land, employment in industrial sectors contracts even more. PPA sites are important for middle-wage job creation, and they also play a critical role in the everyday operations of the region, providing light manufacturing, prototyping, distribution and logistical services that power the information and professional service sectors. Losing functions like these to sites in the Central Valley and beyond would be a major loss to the Bay Area's innovation industry and the vibrancy of its economy.

In addition to local land use policies that would ensure industrial uses in Priority Production Areas, targeted infrastructure improvements like building upgrades and high-speed internet would further support individual businesses and make it possible for them to stay in the Bay Area despite the potentially lower costs of competing regions. Combined with upgrades to commercial buildings for energy-efficiency, described in detail in the environment chapter, this strategy highlights the potential for co-benefits between economic development and environmental sustainability.



Photo: Karl Nielsen



Photo: Karl Nielsen

THE NORTHERN CALIFORNIA MEGAREGION AND GOODS MOVEMENT

The Northern California megaregion includes the nine-county Bay Area, the six-county Sacramento region, San Joaquin County and the three-county Monterey Bay region. The industry sectors that comprise the **goods movement sector** across this 19-county area support nearly one-third of related industries in the Bay Area. Industries in the goods movement sector are a key component of the region’s economic strategy for increasing access to living-wage jobs that have low educational barriers to entry. The goods movement sector is growing, with today’s nearly \$1 trillion in Northern California freight flows projected to double by 2040.⁷

Approximately 69% of freight-dependent goods movement sector employment in the Northern California megaregion is concentrated within the Bay Area. Dominant freight-dependent goods movement industries include agriculture, construction, manufacturing, wholesale trade and retail trade. Together, these industries employ roughly 1.5 million people in the megaregion, 28% of whom work in manufacturing.⁸

The megaregion serves as a domestic trade gateway to other regions in California and the rest of the U.S., and it is dependent on goods movement to provide consumer products, food and parcels. Although California has the fifth largest global economy, continued growth in global trade and the megaregion’s population have stressed the existing transportation system. Plan Bay Area 2050’s transportation strategies help to address these challenges.

The exponential growth in e-commerce has also transformed industrial land and the real estate market for warehouse and distribution centers. Strategic investments in freight infrastructure would support supply-chain efficiencies, allowing the megaregion to maintain its economic competitiveness, and better economic coordination would grow middle-wage jobs. Without sufficient investment in industrial lands, skills development programs and training opportunities, the Bay Area could miss out on opportunities to grow more middle-wage jobs for current and future residents.

7 MTC. (2019, June). *Northern California Megaregion Goods Movement Study*.
<https://mtc.ca.gov/tools-and-resources/digital-library/northern-california-megaregion-goods-movement-study-executive>

8 Ibid.



Photo: Noah Berger

FUNDING AND IMPLEMENTATION Economic Strategies

Together, Plan Bay Area 2050’s six economic strategies advance the Bay Area toward a more equitable future by improving economic mobility where most needed and by shifting the location of jobs throughout the region. Through advocacy, legislation, initiatives, planning and research over the next 30 years, MTC and ABAG can work with partners to secure a \$234 billion investment in the Bay Area’s future economy, ensuring that everyone — and especially those historically and systemically marginalized, underserved and excluded — can afford to both live and work where they desire.

 Economic Strategies — Cost: \$234 Billion		
Improve Economic Mobility	EC1. Implement a statewide universal basic income. Provide an average \$500 per month payment to all Bay Area households to improve family stability, promote economic mobility and increase consumer spending.	\$205 BILLION
	EC2. Expand job training and incubator programs. Fund assistance programs for establishing new businesses, as well as job training programs, primarily in historically disinvested communities.	\$5 BILLION
	EC3. Invest in high-speed internet in underserved low-income communities. Provide direct subsidies and construct public infrastructure to ensure all communities have affordable access to high-speed internet.	\$10 BILLION
Shift the Location of Jobs	EC4. Allow greater commercial densities in Growth Geographies. Allow greater densities for new commercial development in select Priority Development Areas and Transit-Rich Areas to encourage more jobs to locate near public transit.	N/A
	EC5. Provide incentives to employers to shift jobs to housing-rich areas well served by transit. Provide subsidies to encourage employers to relocate offices to housing-rich areas near regional rail stations.	\$10 BILLION
	EC6. Retain and invest in key industrial lands. Implement local land use policies to protect key industrial lands, identified as Priority Production Areas, while funding key infrastructure improvements in these areas.	\$4 BILLION

NOTE: Numbers may not sum due to rounding.