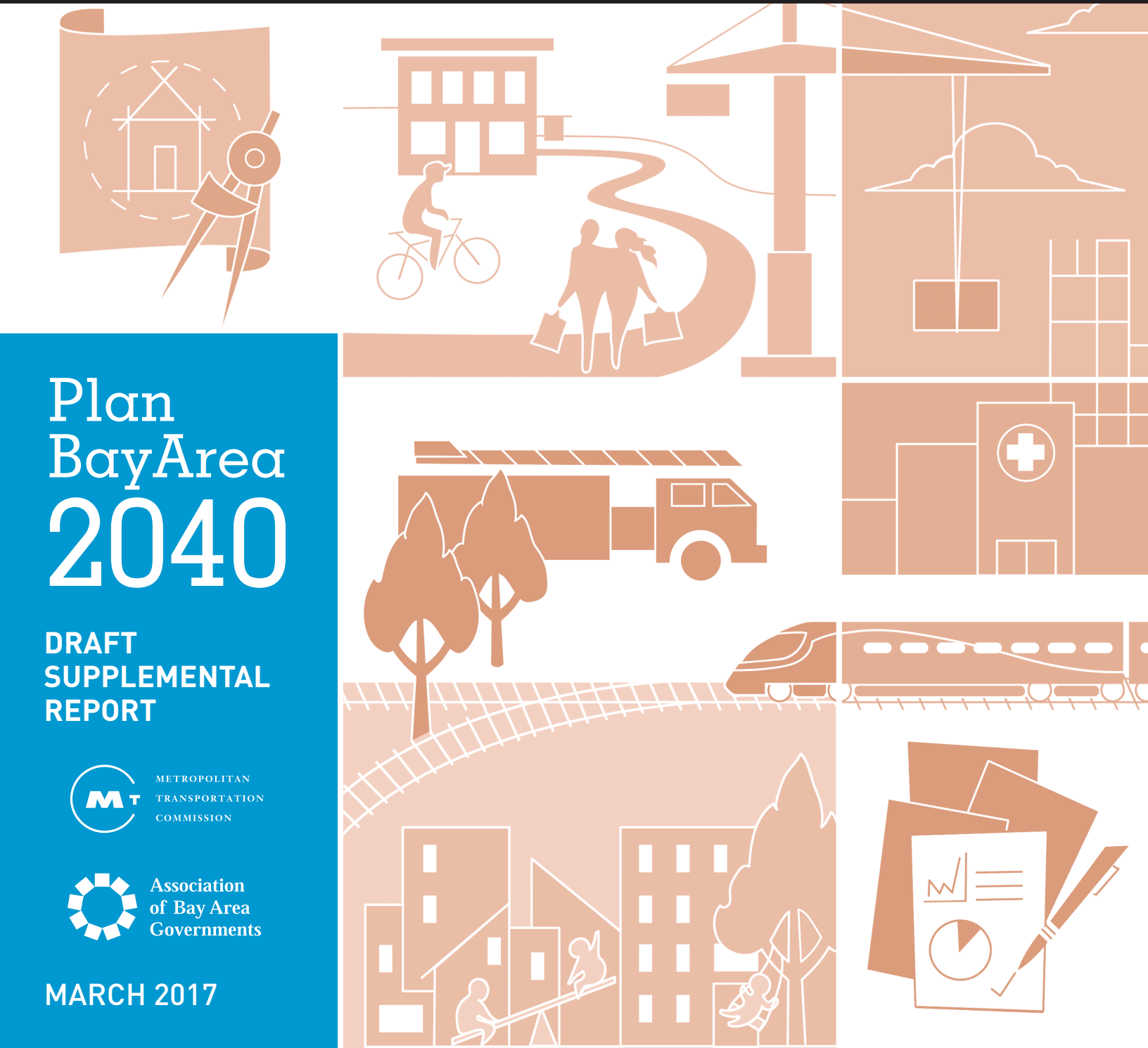**SCENARIO PLANNING REPORT**

Plan BayArea 2040

DRAFT SUPPLEMENTAL REPORT

METROPOLITAN
TRANSPORTATION
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MARCH 2017

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Plan Bay Area 2040:
Draft Scenario Planning Report

March 2017

METROPOLITAN TRANSPORTATION COMMISSION

Association of Bay Area Governments

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Executive Summary

Staff developed and evaluated four alternative land use and transportation scenarios illustrating the effects that different housing, land use and transportation strategies would have on adopted Plan Bay Area 2040 goals and performance targets. Each scenario displayed a different combination of housing development, commercial growth, and transportation investments. Scenario development was a key input for constructing the Preferred Scenario, which is now the Draft Plan.

Introduction

In order to understand what the Bay Area will look like in 2040, MTC and ABAG generated regional forecasts for potential locations and intensities of households and employment as well as travel needs and revenues to fund transportation improvements. To understand how these forecasts might play out over time — and to ensure the region is able to meet the goals and targets for Plan Bay Area 2040 — staff developed and evaluated different scenarios for future growth. Each scenario presented a different combination of housing development, commercial growth and transportation investments. Based on public input, coordination with transportation agencies throughout the region, and scenario evaluation, staff constructed the Preferred Scenario, which is now the Draft Plan.

This report describes the scenario planning process, presents the various scenarios considered, and provides a comparison of land use and transportation strategies across these scenarios. A full description of the Draft Plan is included in the main document. More technical information on the land use and transportation inputs to the scenarios is in the Land Use Modeling Report and the Summary of Predicted Traveler Responses Report. Evaluations of the scenarios against the Plan's adopted targets is in the in the Performance Assessment Report. These supplemental reports can be found here: http://2040.planbayarea.org/reports

Scenario Planning

MTC and ABAG developed and evaluated three alternative land use and transportation scenarios illustrating the effects that different housing, land use and transportation strategies would have on adopted Plan Bay Area 2040 goals and performance targets. The performance of these scenarios, as well as a "No Project" – business as usual – scenario was a primary component of public workshops in Spring 2016. Staff subsequently developed a fourth scenario to consider a full range of alternatives in the environmental assessment of the Draft Plan. This last scenario was not evaluated as part of the scenario planning process but is assessed in the Draft Environmental Impact Report for the Draft Plan.

Land Use Strategies

By 2040, ABAG forecasts an additional 1.3 million jobs and 2.4 million people for the Bay Area and therefore the need for approximately 820,000 more housing units between 2010 and 2040. The scenarios varied combinations of land use strategies and policies that either local jurisdictions or regional and state agencies could enact in order to accommodate this future growth. These strategies could influence land use patterns by adjusting a community's capacity for new development or providing financial incentives for a particular type or location of growth. Each scenario builds on the Bay Area's existing land use pattern and transportation network, while also taking into account local plans for growth, historical trends, and the results of the most recent Priority Development Area (PDA) assessment.

The different land use strategies varied intensity and location of future growth of housing and jobs, highlighting growth distributions within three distinct geographic regions:

- Big 3 (the region's three largest cities – San Jose, San Francisco and Oakland)
- Bayside (generally cities directly adjacent to San Francisco Bay – e.g., Hayward, San Mateo and Richmond)
- Inland, Coastal, and Delta (generally cities just outside the Bayside region – e.g., Walnut Creek, Dublin, Santa Rosa, Antioch, Brentwood and Dixon)

The types of land use strategies and policies considered include the following:

- Changes to allowable zoning densities
- Restrictions on development of open space or beyond urban growth boundaries
- Caps on office development
- Requirements for deed-restricted units in new development
- Eased parking minimums and CEQA streamlining to stimulate development
- Fees on commercial or residential development in high-VMT areas
- Subsidies for affordable housing
- Tax policies, including adjusting the parcel tax; implementing a housing capital gains tax; and adjusting property tax assessments to be based largely on the value of the land and less so on the improvement (e.g. building portion of the property)

Additionally, focusing different levels of household growth in various *geographies* is a key differentiating land use strategy across scenarios. These geographies could be close to transit, close to good schools, and/or locally-nominated areas for growth. One way to measure the differences across scenario is to assess growth levels in Priority Development Areas (PDAs) and Transit Priority Areas (TPAs). PDAs are existing neighborhoods served by transit and nominated by local jurisdictions as appropriate for concentrating future growth. PDAs were developed as part of the process for the last Plan Bay Area and remain an important implementation mechanism for Plan Bay Area 2040. TPAs are half-mile buffers around high-frequency transit stops or stations.

Transportation Strategies

Plan Bay Area 2040 forecasts $303 billion of federal, state, regional and local transportation revenues over the next 24 years. Of this amount, approximately $74 billion (24 percent of total Plan revenues) is assumed to be discretionary. Transportation improvements within the scenarios varied in terms of how this $74 billion was distributed across maintenance, system enhancement and major capital projects.

Each of the scenarios assumes both different shares of funding for major projects or maintenance and different shares of funding for roads (highways and local roads) and public transit. The scenarios maintain a consistent level of investment in system enhancements, comprising several discretionary funding sources including One Bay Area Grant, Regional Transportation Improvement Program and other sources for active transportation and goods movement.

Scenarios for the Planning Process

For comparison purposes, the scenario process included a No Project scenario and three variations of future growth and transportation investment – Main Streets, Connected Neighborhoods and Big Cities. These are described in the following section.

Figure 1. Scenarios evaluated in the planning process

No Project Scenario

Staff evaluated each scenario, including the Preferred Scenario, against a No Project. The No Project scenario assumes no new growth strategies (upzoning, office caps, CEQA streamlining, etc.) would be implemented, meaning future growth likely would follow historic trends. Urban growth boundaries would be allowed to expand at historical rates, while only committed transportation projects (e.g., those under construction) would be allowed to proceed.

Scenario 1 – Main Streets

The Main Streets scenario forecasts the most dispersed growth pattern, meaning cities outside of the region's largest — Oakland, San Jose and San Francisco — are likely to see higher levels of growth than in other scenarios. An emphasis on multi-family and mixed-use development in downtowns would provide opportunities for households of all incomes to live near a mix of jobs, shopping, services and other amenities. For transportation investments, the Main Streets scenario expands express lanes, increases highway capacity, and increases suburban bus service to increasingly-dispersed job centers. This scenario also includes significant investment for maintaining highways and local roads.

Scenario 2 – Connected Neighborhoods

The Connected Neighborhoods Scenario emphasizes growth in medium-sized cities with access to the region's major rail services. Outside of PDAs, this scenario has modest infill development and no growth outside the urban footprint on currently undeveloped land. This scenario most closely follows the footprint of the original Plan Bay Area. The Connected Neighborhoods scenario prioritizes transit efficiency investments and the most cost-effective transit expansion projects in the highest-growth PDAs. It also includes a limited set of highway efficiency investments, and balances maintenance investment between roads and transit.

Ultimately, this scenario was eliminated during the EIR scoping process as it most closely resembled the Draft Plan and was not needed to create a reasonable range of alternatives to the Draft Plan.

Scenario 3 – Big Cities

The Big Cities Scenario targets future population and employment growth within the three largest job centers - San Francisco, Silicon Valley and Oakland. Over two-thirds of household growth and almost half of employment growth would be in these three areas. Neighboring cities already well-connected to the region's three largest cities also would see growth, particularly in their locally adopted PDAs. Growth outside the region's three big cities would be relatively small, with limited infill development in PDAs and no development on currently undeveloped land. This scenario emphasizes core capacity and connectivity by expanding the South Bay transit system and linking regional rail systems into the heart of San Francisco and San Jose. This scenario also includes congestion pricing in San Francisco and significant investment in transit maintenance.

Land Use and Transportation Assumptions across Scenarios

As shown in the following table, land use assumptions varied across the scenarios, with different assumptions for upzoning, open space expansion, parking minimums, affordable housing requirements, development fees based on VMT, and subsidies for affordable housing. Maps of estimated land use distributions resulting from these assumptions, for the three scenarios, are shown in Figures 2 through 4.

Table 1. Land use assumptions across scenarios.

Land Use Strategy	Main Streets	Connected Neighborhoods	Big Cities
Upzoning	Modest increase in all PDAs, with an emphasis on suburban PDAs	PDAs	TPAs in Big 3 & neighboring cities
Open space/UGB expansion	Modest	None	None
Eased parking minimums	PDAs along regional rail	PDAs along corridors	Big 3 & neighboring cities
Affordable housing requirements on new development	5 percent of units deed-restricted in high-opportunity cities	10 percent of units deed-restricted in cities with PDAs	10 percent of units deed-restricted in cities with PDAs
Fees/subsidies for deed-restricted units in low-VMT areas	Yes- fee on new commercial in high VMT areas	None	Yes- fee on new residential in high VMT areas
Subsidies	Stimulate residential and commercial development in PDAs	Stimulate residential and commercial development in PDAs	Stimulate residential and commercial development in PDAs
Caps on Office Space	Preserves office space caps in job-rich cities	Preserves office space caps in job-rich cities	Eliminates office space caps in San Francisco
Tax Policies	Parcel and housing capital gains tax to raise revenues for affordable housing	None	Change property tax assessment to focus on land value rather than structure value

Transportation investments across scenarios provided a comparison between dispersed, roadway-oriented investments and focused growth with major capacity investments in regional transit. In the Main Streets scenario (scenario 1), over half of all discretionary investments were directed towards state of good repair, fully funding state highway pavement needs and moving the region much closer to a state of good repair on local streets. Major projects were more focused on highway improvements – which feature lower operating and maintenance costs than public transit – and thus constituted a smaller share of the distribution. In Connected Neighborhoods (scenario 2) and Big Cities (scenario 3), there were significantly greater needs for transit frequency increases and new core capacity transit lines, resulting in a smaller share of funding going towards maintenance (in particular, highway and local street maintenance).

Table 2. Relative levels of transportation investments across scenarios.

Transportation Mode and Purpose		Main Streets	Connected Neighborhoods	Big Cities
Streets & Highways	State of Good Repair	●●●	●●	●
	Efficiency	●●●	●●●	●●
	Expansion / Extension	●●●	●●	●
Public Transit	State of Good Repair	●●●	●●	●
	Efficiency / Operations	●●	●●●	●●●
	Expansion / Extension	●	●●	●●●
Bicycle / Pedestrian		●●	●●	●●
Climate Strategies		●●●	●●●	●●●

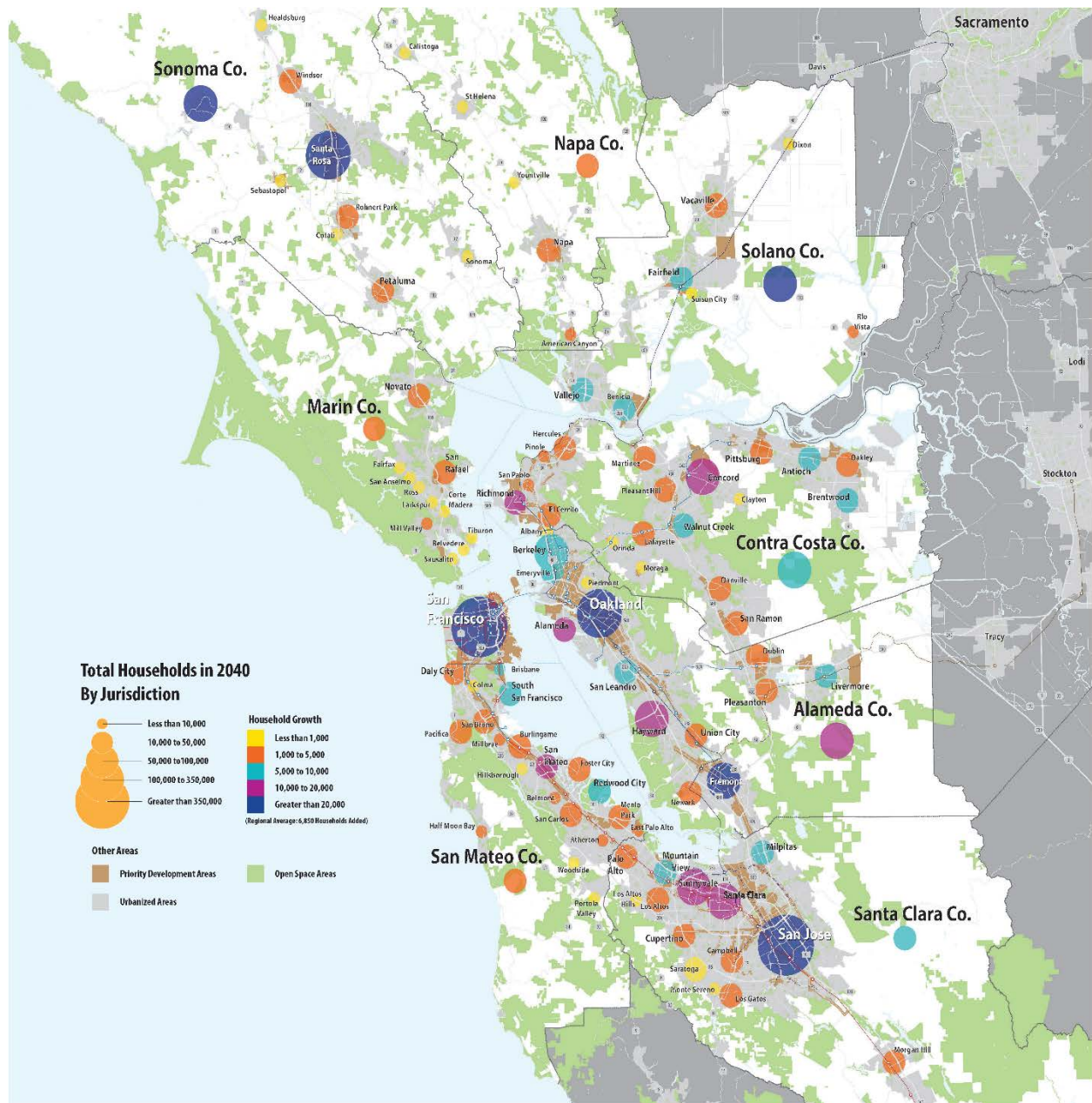*Figure 2. Household growth pattern for Main Streets scenario* Page | 7

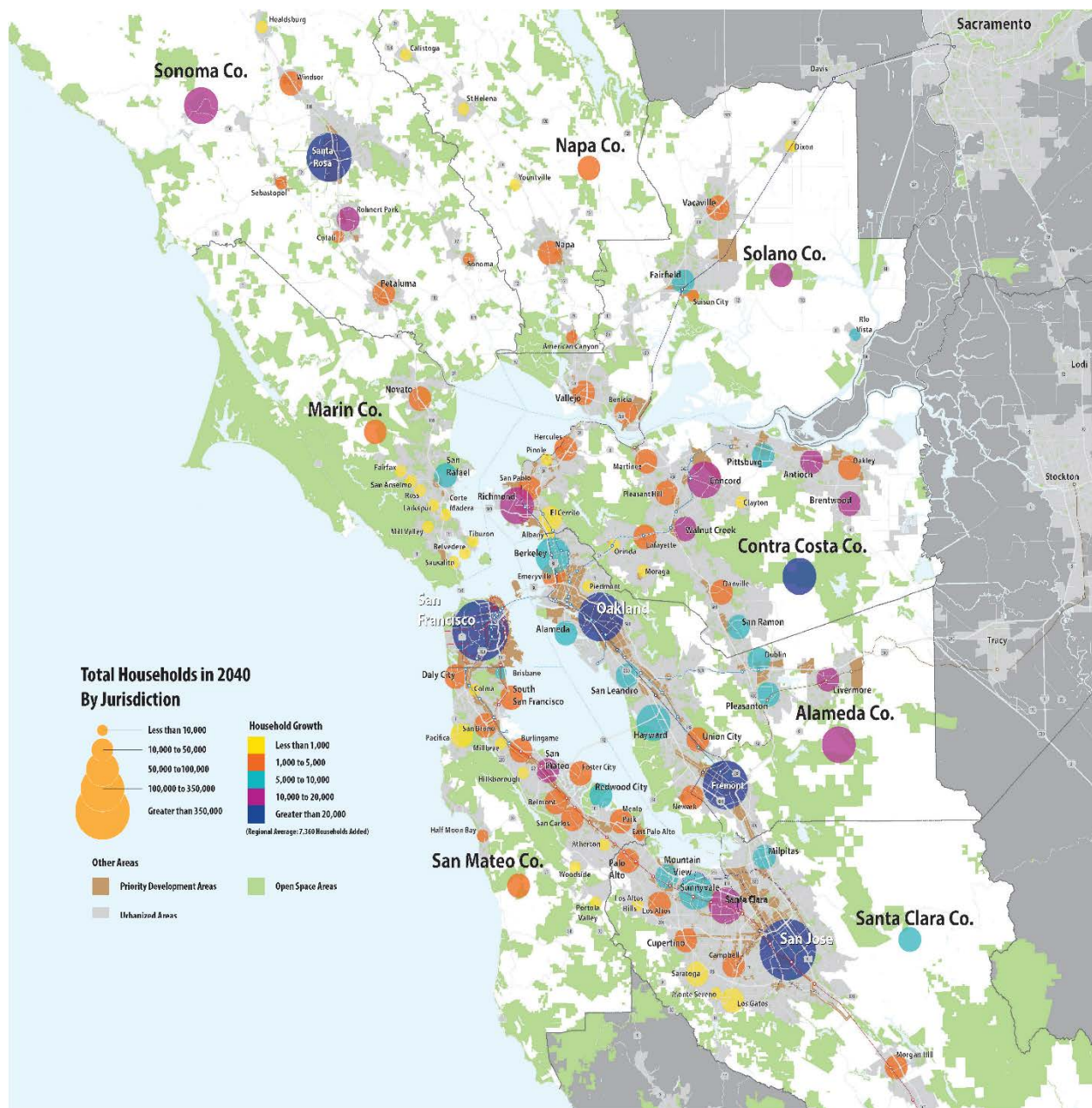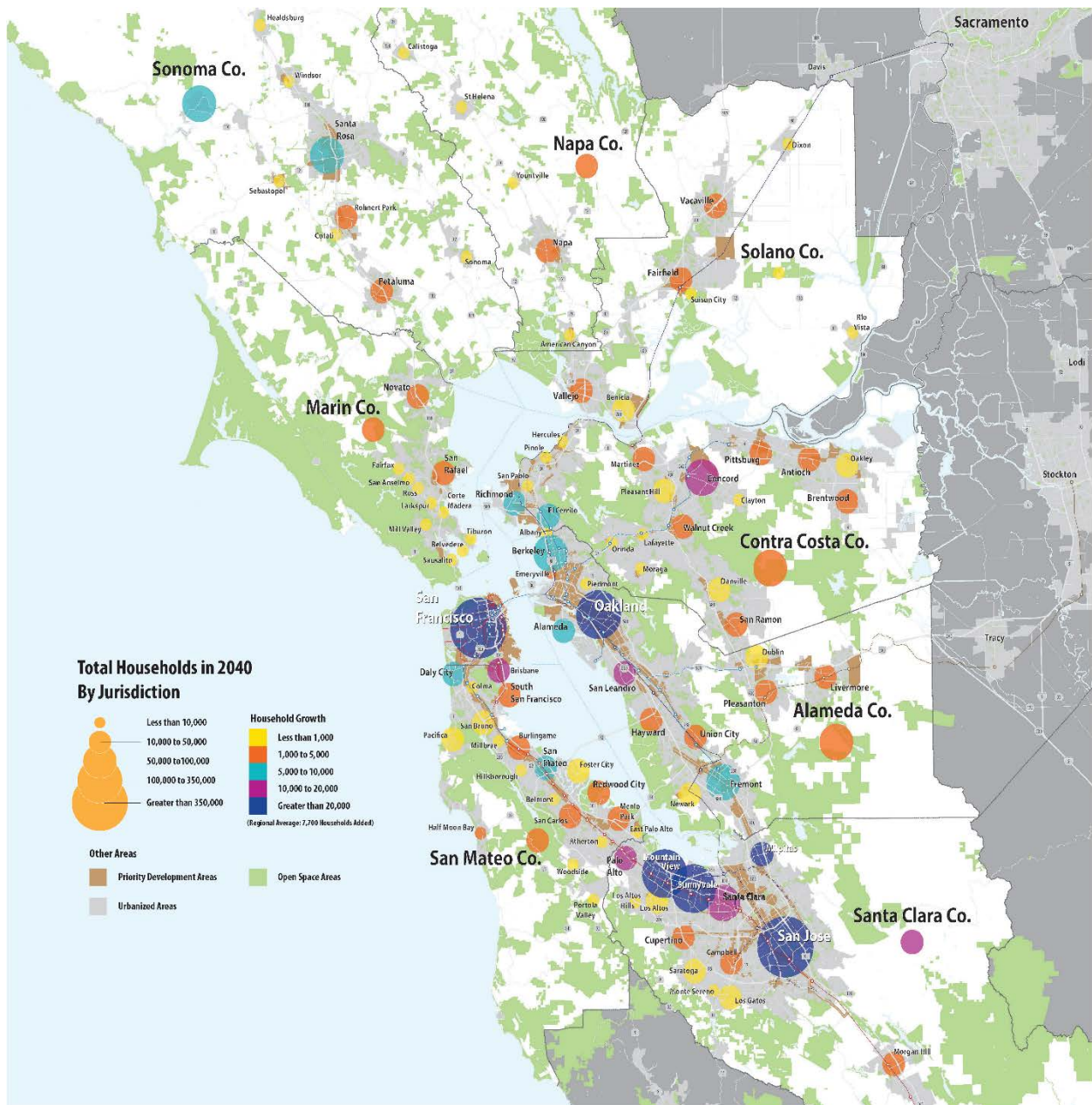Figure 2. Household growth pattern for Main Streets scenario

Figure 4. Household growth pattern for Big Cities scenario

Scenario 4 – Environment, Equity and Jobs

This scenario was not analyzed during the initial round of scenario planning but instead was added as a result of stakeholder comments during the EIR scoping process.

The Environment, Equity, and Jobs (EEJ) scenario was analyzed in the original Plan Bay Area and was subsequently updated for Plan Bay Area 2040 scenario analysis. The updated scenario, EEJ 2.0, emphasizes household growth in PDAs, transit-priority areas, and in suburban communities with high-quality schools and low levels of crime (referred to as high-opportunity areas). This scenario includes more funding for local bus operations in suburban high-opportunity areas to serve lower-income residents, and reduces funding for highway expansion and modernization. This alternative assumes implementation of a two-cent-per-mile vehicle-miles-traveled (VMT) tax on higher-income travelers. By exploring a blend of a more dispersed land use pattern and a transit-focused investment package, the addition of this scenario expanded the range of reasonable alternatives to the Draft Plan.

In comparison to the proposed Plan, the EEJ (v 2.0) alternative includes strategies to focus more growth in high-opportunity areas than the proposed Plan. Assumptions include upzoning in select PDAs, TPAs and suburban communities with high-quality schools and low levels of crime (i.e., high-opportunity areas), assuming for-profit housing developments make 20 percent of units deed-restricted in perpetuity in select cities with PDAs or TPAs and high-opportunity cities, preserving urban growth boundaries, and easing parking minimums in PDAs and TPAs.