

# OneBayArea

## Sustainable Communities Strategy

### ALTERNATIVE LAND USE SCENARIOS Core Concentration, Focused Growth, and Outer Bay Area Growth

REVISED: September 1, 2011

In July, ABAG's Executive Board and the Metropolitan Transportation Commission approved a framework for Five Alternative Scenarios, which will be used to inform the development of the Preferred Scenario of the Sustainable Communities Strategy (SCS). Scenario 1 and 2 are based on unconstrained growth, assume very strong employment growth, and unprecedented funding to support housing affordability. Scenario 1, the Initial Vision Scenario was released in March 2011. Scenario 2, Core Concentration Unconstrained will be developed to provide a more concentrated development pattern along transit corridors. These two scenarios are essential to identify the challenges and policies for an ideal sustainable development path.

This report presents the land use patterns for scenarios 3, 4, and 5 based on an assessment of economic growth, financial feasibility, and reasonable planning strategies. They provide a range of housing and employment distribution patterns across places and cities that support equitable and sustainable development. The three scenarios are as follows:

- *Core Concentration Growth Scenario:* Concentrates housing and job growth at selected Priority Development Areas in the Inner Bay Area along the region's core transit network.
- *Focused Growth Scenario:* Recognizes the potential of Priority Development Areas and Growth Opportunity Areas across the region with an emphasis on housing and job growth along major transit corridors.
- *Outer Bay Area Growth Scenario:* Addresses higher levels of growth in the Outer Bay Area and is closer to previous development trends than the other two scenarios.

These three scenarios assume a strong economy supported by the appropriate affordable housing production. They also assume targeted local and regional strategies and additional funding to support sustainable and equitable growth. They are designed primarily around Priority Development Areas and Growth Opportunity Areas, as places for growth identified by local jurisdictions. (PDAs will refer to both areas in this report) The level of PDA growth is defined based on the Place Type established by the local jurisdiction (i.e., regional center, transit neighborhood, rural town), which provides a regional language to recognize the character, scale, density and expected growth for the wide range of places in the Bay Area. Beyond the PDAs, household growth is distributed based on employment, transit access, household formation, and housing production. Employment distribution is based upon the existing employment pattern, reversing the previous dispersal trends throughout the region.

## ***Regional dialogue on land use scenarios***

The purpose of the land use alternative scenarios is to expand the regional dialogue on the type of development, planning strategies, and investments to define the SCS. We are seeking input from local jurisdictions, community organizations, business organizations, and general public on the following themes:

### *Distribution of growth*

- Shifting from previous trends of dispersed growth, do these three land use scenarios provide an appropriate spectrum for sustainable and equitable development trends? Is growth concentrated at the appropriate places?

### *Development of vital and healthy places*

- Are housing and jobs converging at the appropriate places? Can this convergence support greater access to jobs and housing, particularly for the low and moderate income populations?
- What elements of the scenarios would support the development of complete communities?
- Do the scenarios address the local expectations and necessary adjustments for regional equity and sustainability?

### *Planning strategies and investments*

- How can local jurisdictions, community organizations, and business organizations converge into a coherent regional strategy?
- What policies and investments should be prioritized to support the SCS?

This report includes five sections and two appendices. The first section is a brief summary of the input received from local jurisdictions and stakeholders on local development and equity. The second section is an overview of regional employment and household growth between 2010 and 2040. The third section describes employment trends and distribution, including some details of the recent regional employment analysis undertaken by ABAG and MTC to inform the land use patterns. The fourth section provides an overview of the housing distribution, which relies on the housing analysis presented in previous reports. The fifth section covers the next steps towards the development of the Preferred Scenario. The appendices include, first, details on the methodology for growth distribution; and, second, tables of growth by PDA and local jurisdiction. Scenarios maps are compiled in a separate packet.

## **1. INPUT ON SCS SCENARIOS**

The development of the SCS Core, Focused, and Outer Bay Area Growth Scenarios are informed by a wealth of input we received on the Initial Vision Scenario (IVS) from local elected officials, planning directors, and Congestion Management Agencies (CMAs) as well as from the Regional Advisory Working Group, Equity Group, and stakeholders groups. County-level Basecamp sites have been well noticed and public workshops were held throughout our nine-county region.

As indicated in previous reports, land use decisions are a local responsibility governed by local jurisdictions. The land use scenarios presented here are based upon local input and strong

coordination among local and regional agencies. Regional agencies have incorporated local input into three coherent land use development patterns.

### ***Input on local development***

The input received reflects the unique characteristics of the region's communities. Some communities described the level of housing growth depicted in the IVS as too high, while other jurisdictions responded that IVS housing growth levels would be appropriate if funding for redevelopment, public schools, transit and other community infrastructure were available. Still, a number of common themes have emerged.

- *Addressing the Bay Area economic challenges:* The Bay Area's first Sustainable Communities Strategy should advance a vibrant economy and strong growth for the region. Employment growth should be aligned with existing and planned transit. Employment totals are too high given past performance and the depth of the recession.
- *Sustainable and equitable housing production:* Growth levels in the Initial Vision Scenario are not feasible given current market constraints and funding availability. Infill development challenges require capital investments and supportive policies. The SCS should reward communities that advance sustainable growth at transit nodes.
- *Transit service:* Cuts in transit service will impede sustainable growth. Transit-served, infill areas that have not been nominated by local communities as PDAs should take on comparable levels of growth.
- *Coordination of regional efforts:* Loss of redevelopment agencies will limit infill development. The SCS should provide CEQA benefits for projects in PDAs. Air District and BCDC requirements should be aligned with the SCS.

### ***Input on equity***

Regional agency staff has worked with the Regional Equity Working Group and MTC's Policy Advisory Council to develop inputs to the Alternative Scenarios that will increase access to opportunities and an improved quality of life for residents from all income categories in communities throughout the region. Social equity as well as economic growth and environmental sustainability are promoted through the emphasis on encouraging growth in complete communities served by transit. In addition, each of the alternative scenarios will also distribute growth in a way that ensures each jurisdiction is planning to accommodate a minimum percent of its expected household growth. Factors related to transit service, employment, and net low-income commuters to a jurisdiction will also inform the alternative scenario housing distributions.

## **2. REGIONAL EMPLOYMENT AND HOUSEHOLD GROWTH 2010 – 2040**

The recent national economic recession triggered a major employment decline. Recent data and research indicates that the nation is facing a slower recovery than expected over the next few years, which will in turn impact the recovery of the Bay Area. Beyond this short term recovery, the rates of employment growth for the Bay Area and California have become closer to or lower than the national rates since the 1980s. They were higher than the nation from the 1960s to the 1980s, but as the region and the state matured in its economic composition, growth rates became closer to the national average.

Due to lowered forecasts of national economic and job growth, along with dramatic decreases in state and national immigration levels (even prior to the recession), the Bay Area job forecast for 2040 would be revised downward by an estimated 100,000 jobs than the forecast employment for the Initial Vision Scenario. The total jobs for 2040 would drop by another 200,000 jobs by switching to a forecast where the Bay Area maintains its current share of national employment.

Even under those considerations, the SCS can reasonably assume a healthy economy for the Bay Area by 2040. High expectations are based on the strength of our knowledge-based economy, the development of new high technology sectors as well as the diverse economy to support these leading sectors. In addition, the Bay Area has a highly qualified labor force when compared to other regions and a high quality of life based on access to urban amenities, natural resources, and a Mediterranean climate. The region also provides businesses with a wealth of research and development resources and a strong network of international exchange.

Given these resources, regional and economic experts working with ABAG and MTC suggest the Bay Area could add almost a million jobs up to 4.26 million jobs by 2040. This is an average of 33,000 per year over the next 30 years, which assumes a healthy and strong economy. This is more than three times the 10,000 average annual job growth of the previous two decades. It is close to the 40,000 average annual job growth of the last 50 years when the region experienced the development of the high technology industry and the finance sector.

This employment growth will be supported by strong housing production of about 770,000 units by 2040. This would represent an annual production of 27,000 units per year. The slow recovery of job growth and housing prices are expected to limit housing production in the near-term. This period should be addressed independently from the housing production of the later years. Assuming a suppressed housing production rate of 15,000 units from 2010-2015, this level of growth would increase to almost 30,000 units per year over the 2015-2040 timeframe. In comparison, historical rates were 20,000 per year from 1990-2010 and 36,000 averaging 1970, 1975, 1980, and 1985 rates, periods of much greenfield housing production.

The expected growth of 770,000 housing units by 2040 in the scenarios under discussion is lower than the equivalent one million units in Initial Vision Scenario. The former is the expected housing production while the latter reflects the housing need. The expected housing production addresses lower 2010 household and population counts (Census 2010), lower employment growth than previous forecasts, and reasonable assumptions on market trends, local and regional policies, and infrastructure.

This level of housing reflects a reasonable job to household ratio for the Bay Area and would consider a reasonable pace of recovery of the housing market. For these scenarios we are assuming a job to household ratio of 1.3 by 2040. This ratio is based on the regional average over the past six decades and is also similar to the present-day ratio. It could be expected that demographic shifts would lower this ratio over the next fifteen years as the baby boomer generation retires, but that it would rise again in the later years of the planning horizon.

**Regional Growth: Households, Population, Employed Residents, Jobs, 2010 - 2040**

	Core, Focused, and Outer Bay Area Growth Scenarios			Initial Vision Scenario
	2010	2040	Growth 2010-40	Growth 2010-40
<i>Households</i>	2,608,000	3,378,000	770,000	1,031,000
<i>Population</i>	7,151,000	9,236,000	2,085,000	2,432,000
<i>Employed residents</i>	3,153,000	3,974,000	821,000	1,338,000
<i>Jobs</i>	3,271,000	4,266,000	995,000	1,463,000

These scenario land development patterns will be supported by transportation scenarios that will vary the level of funding for “fix-it-first” maintenance, transit capacity improvements, roadway improvements, and bike/pedestrian funding.

**3. REGIONAL EMPLOYMENT DISTRIBUTION**

The region is experiencing a transformation in its economic activities and in its population composition, both of which have major land use implications. The very strong growth of knowledge-based activities at the intersection with urban amenities brings new strength to employment centers. These economic trends are parallel to some key emerging demographic changes: young professionals’ preferences for vital urban places instead of office parks, an increase in the ethnic diversity of the labor force and residents, and a major wave of retirement and increase in the senior population. Providing that the region can develop and implement a solid SCS, these changes provide an opportunity to strengthen the economic health, social equity, and sustainability of the Bay Area.

SCS tasks to support a healthy economy include:

- Provide the appropriate transit, affordable housing, and urban amenities to support the new wave of industries at urban locations and densified office parks.
- Support a diverse economy through public investments that support strategic sectors, and the retention and expansion of affordable housing close to major employment centers.
- Regain the economic vitality of regional centers, which lost employment over the past decades. Support increased densities and a mix of uses at suburban office parks, which have been major employment growth areas.
- Concentrate urban amenities and affordable housing in downtown areas and along transit corridors across the region.
- Maintain and increase the viability and productivity of industrial lands and agricultural resource areas.

For the purpose of the SCS Alternative Scenarios we have revised the total employment growth by 2040, the growth by industry, and the distribution by PDA and city. The rationale for this healthy economic growth in relation to population and housing growth will be discussed in a

separate memo. This report primarily focuses on growth by industry and distribution patterns based on the employment analysis developed by ABAG and MTC in collaboration with Strategic Economics.

### **Changes in the regional industrial composition**

Starting in the 1970s the region experienced major employment growth in San Francisco's financial district and the emergence of Silicon Valley as the global center of high technology. In contrast to many other metropolitan regions for subsequent decades, the Bay Area's economic sectors developed through very distinct specialized clusters. In the years following the turn of the millennium the region has a more mature economic base with an economic sector composition that is closer to the national average.

Professional and business services and information jobs have become the major leading sectors in the regional economy. Over the last decades they have experienced sharp growth but they have also been the most impacted during periods of economic decline. These regional leading sectors have increased the demand for highly educated labor and provided high wage jobs. Educational and health services have displayed steady growth, but a more moderate level than professional services. These sectors have surpassed manufacturing, government administration, and retail employment. Over the next 30 years, educational and health services sectors are expected to continue their rate of growth. Professional and business services are expected to generate more than one third of the total regional growth by 2040.

Since the 1980s, these growing sectors have more than compensated the loss in manufacturing and finance jobs. During this period, much of the region's traditional manufacturing employment has relocated to low cost labor regions in Asia and Latin America. More recently despite steady growth in professional and business service jobs related to emerging technology industries, high tech manufacturing has also relocated out of Silicon Valley to lower cost locations. Changes in technology have also reduced labor requirements and increased productivity for the remaining manufacturing businesses. On the opposite spectrum of the economic sector location patterns, while the region continues to be an important financial center, finance employment jobs have been eliminated or relocated out of the Bay Area. The decline of these two sectors has resulted in a loss of middle-income jobs for the region. Looking forward to 2040, manufacturing and finance are not expected to significantly expand. However, they will remain essential and stable sectors in the regional economy and are expected to retain approximately the same employment size over the next 30 years.

The Bay Area is a major international destination for business and leisure travel. Leisure, hospitality and retail are growing employment sectors. In particular, leisure and hospitality employment has grown at a faster pace than retail, following the pattern of professional and business services. Both industry groups are expected to retain a steady growth over the next 30 years.

## **Changes in the regional spatial patterns**

Over the past decades the Bay Area experienced a decline of employment at its major regional economic centers while suburban employment centers and office parks emerged and grew throughout the region. These spatial patterns were conditioned by the decline of the finance sector in San Francisco, the growth of the high technology sectors in Silicon Valley, the formation of the Tri-Valley business cluster supported by labor from lower housing cost communities in the eastern part of the Bay Area and the central valley, and the strengthening of medium size downtowns such as Walnut Creek, Santa Rosa and Berkeley.

The growth of professional services in close proximity to urban amenities, point toward a new wave of growth that could be accommodated at major economic centers and a demand for urban amenities, mixed-uses and higher densities at suburban employment locations. Analysis of employment and demographic trends indicates that the SCS can serve to support these emerging trends by increasing access to transit, affordable housing, and urban amenities at employment centers. The SCS would recognize the economic function of each place in the region and the potential they offer for the growth of selected industry groups, jobs and businesses. This recognition is also informed by the community choices on the function and qualities of their places. Some of the expected trends are described below.

### **▪ Renewed regional centers**

Regional centers have reduced their office jobs as a share of the region from 49 percent in 1990 to 41 percent in 2010. Downtown San Francisco and Downtown Oakland also reduced their absolute employment levels. Downtown San Jose had a small increase. In the SCS Scenarios we expect a reversal of this trend. This is based on the rate and scale of growth of professional services urban entertainment, which brings a new economic vitality to the regional centers. Similar to the growth of the financial district in the 1970s, the Bay Area is attracting new businesses and workers that want to locate in close proximity to related firms, services and amenities. The new wave of businesses and young professionals' demand for building space prioritizes flexibility to adjust spaces to multiple functions and requires less office space per worker relative to the early growth of traditional downtown office space. The growth of health and educational services would also support the growth of regional centers.

### **▪ Office parks:**

Office parks have been a dominant building pattern in the two suburban areas that experienced major growth in the Bay Area over the past several decades: Silicon Valley and the Tri-Valley. In the SCS Alternative Scenarios office park employment will continue to grow but at a slower pace than in recent decades. The emerging private shuttle services run by businesses, particularly in San Mateo and Santa Clara County are expected to grow and improve transit access while lessening, but not fully mitigating increased freeway traffic congestion related to employment growth. Growth in office park employment is limited in part by the capacity of the region's congested freeway network. Office parks in the Tri-Valley area would house more workers within their own jurisdictions, but will continue to draw from lower cost labor in the Central Valley. Some office parks would be transformed with additional office buildings and a mix of uses including housing.

- **Downtown areas and transit corridors**

The increasing need and desire for local services in close proximity to residential locations has led to a clustering of services along corridors and in small downtown areas over the past decades. The increasing size of the region's senior population will likely reinforce this trend over the next decades. The SCS Alternative Scenarios assume an increase in local serving jobs in Priority Development Areas proportional to housing growth in PDAs.

- **Industrial land**

The decline of the manufacturing and wholesale employment due to business relocation and changes in technology has resulted in a major contraction of those businesses in industrial areas. In many areas this has not resulted in vacant industrial land, but a different mix of businesses that are necessary to support the local and regional economies. In addition to basic services such as refuse collection or supply distribution, industrial lands are now occupied by a wide range of businesses from food processing to green industry manufacturing, and auto repair to high tech product development drawing employment from many sectors into traditional industrial lands. The SCS Alternative Scenarios assume limited but stable job growth in manufacturing, given retention of industrial land at core locations and an expanding array of production, distribution and repair activities.

- **Agricultural land**

The Bay Area has a wealth of agricultural land unparalleled among our nation's largest metropolitan regions that provides high quality agricultural products including diverse high-value crop production and its world-renowned wine industry. For the most part the region's remaining farmland is policy-protected from urban expansion. All of the counties outside of San Francisco have a growth management framework (e.g. urban growth boundaries, agricultural zoning, etc.) in place. The SCS Alternative Scenarios assume the retention of most agricultural land with some increase in productivity yielding modest employment growth.

### **Core Concentration, Focused Growth, and Outer Bay Area Growth Scenarios**

Given the expected levels of regional growth, changes in the economic sector composition, and changes in the spatial patterns of employment location, the three alternative scenarios provide alternative land use development patterns based on various degrees of employment concentration. All scenarios assume nearly one million additional jobs in the region through 2040. They also assume the same growth rates by industry. The three scenarios assume slowing or reversal in the declining share of employment in Priority Development Areas experienced in previous decades. The three scenarios also assume some growth in local serving jobs proportional to the housing growth by PDAs.

The three employment scenarios are CONCEPTUAL scenarios to understand and assess distinct land use patterns in relation to housing and transit. Starting from the current distribution of employment and growth trends over previous decades, the scenarios add three factors: the concentration of jobs in PDAs, the concentration of knowledge-based jobs (Information, Finance, Professional & Business Services), and the link of local serving jobs (primarily Retail, some Health, Educational, and Recreational Services) to housing growth. They do not yet include input from local jurisdictions or analysis of land constraints, industrial cluster support, or

public and private investments. This input and analysis will be essential to develop the employment distribution for the Preferred Scenario.

**Overview of job growth by scenario**

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<b>Land use trends</b>	Higher growth in major employment centers close to transit	Higher concentration of employment in PDAs than 2010	Continued trends of more growth in Outer Bay Area and more growth outside of PDAs
<b>PDA job growth</b>	Small increase of PDAs share of regional jobs over Focused Growth Scenario	Small increase of PDAs share of regional jobs over 2010	Decline of PDAs share of regional jobs over 2010
<b>Knowledge-based jobs</b>	Additional 15% in inner bay PDAs	Additional 10% across all PDAs	Decline in share of PDAs following previous trends
<b>Local serving jobs</b>	Follows housing growth, more jobs in inner bay area PDAs	Follows housing growth, distributed across all PDAs and jurisdictions	Follows housing growth, more jobs in outer bay area

**Core Concentration Growth Scenario:** This scenario assumes that the concentration of employment in PDAs across most economic sectors will remain as in 2010. Knowledge-based jobs will be more concentrated in regional centers, city centers, urban neighborhoods, and mixed-use neighborhoods in the Inner Bay Area places where jobs are concentrated today. Local serving jobs will follow housing in PDAs, which will be more concentrated in the Inner Bay Area.

**Focused Growth Scenario:** This scenario assumes that the concentration of employment in PDAs across most economic sectors will remain as in 2010. Knowledge-based and local serving jobs will be more concentrated in PDAs by 2040 than in 2010.

**Outer Bay Area Growth Scenario:** This scenario follows the growth trends from the previous 30 years but with lower rates of job dispersal. Regional Centers and large City Centers grow but slower than other Place Types, while Suburban Centers and office parks outside of PDAs continue to grow at higher rates than the regional average.

**Employment by economic sector**

The employment growth by economic sector is based on the forecast prepared by Caltrans and adjusted to the total regional growth established by ABAG and MTC. While the same level of growth by industry is assumed in the three scenarios, the distribution by city and PDA varies across scenarios.

*Employment growth by economic sector 2010 - 2040*

	<b>Jobs 2010</b>	<b>Jobs 2040</b>	<b>Job growth 2010 – 2040</b>	<b>Annual Growth Rate 2010- 2040</b>
<i><b>Total Jobs</b></i>	3,270,906	4,265,736	994,831	1.01%
<i><b>Agriculture and Natural Resources</b></i>	22,142	22,286	144	0.02%
<i><b>Manufacturing Wholesale and Transportation</b></i>	543,974	659,580	115,606	0.71%
<i><b>Retail</b></i>	325,168	402,036	76,868	0.79%
<i><b>Professional and Business Services / Finance</b></i>	774,502	1,153,879	379,378	1.63%
<i><b>Health, Education, Recreation Services</b></i>	853,755	1,106,095	252,340	0.99%
<i><b>Other: Information, Government, Construction</b></i>	751,365	921,860	170,495	0.76%

***Distribution of Employment***

The employment distribution for 2010 is based on NETS data (See appenedix for description of data sources). This data provides employment information by location of a business establishment. This is a high level of geographical resolution, which allows us to capture the employment by PDA more accurately than previous zip code data.

In 2010, it was estimated that PDAs encompassed an estimated 1,586,000 or 48 percent of jobs regionwide. This is 5 percent lower than the PDA share in 1990 according to ABAG analysis of the NETS data. The three scenarios assume different shares of jobs in PDAs as indicated below. Following previous trends but at a slower pace, the Outer Bay Area Scenario assumes a lower PDA share of total jobs in 2040 than in 2010. The Focused Growth and Core Concentration Growth Scenarios both assume a higher concentration of jobs in PDAs in 2040 than in 2010.

*Job Share in PDAs by Scenario: Past and Future Trends 1990 – 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<i>PDA Job Share 1990</i>	53%	53%	53%
<i>PDA Job Share 2010</i>	48%	48%	48%
<i>PDA Job Share 2040</i>	51%	50%	48%
<i>PDA Job Growth Share 2010-2040</i>	58 %	55 %	47 %

Within PDAs, the distribution of jobs varies according to sector and Place Type. The Outer Bay Area Scenario retains a similar distribution in 2010 and 2040 except for the local serving jobs, which shifts according to housing growth. The Focused Growth Scenario increases knowledge-based jobs across all PDAs. The Core Concentration Growth Scenario increases knowledge-based jobs in regional centers, city centers, urban neighborhoods, and mixed-use corridors in the inner Bay Area.

*Share of Regional Job Growth in PDA by Industry Group by Scenario 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<i>Total region</i>	58%	55%	47%
<i>Agriculture and Natural Resources</i>	27%	27%	27%
<i>Manufacturing Wholesale and Transportation</i>	43%	43%	39%
<i>Retail</i>	61%	58%	55%
<i>Professional services/Finance</i>	65%	60%	45%
<i>Health, Education, Recreation Services</i>	48%	48%	47%
<i>Other: Information, Government, Construction</i>	67%	63%	51%

*Share of Regional Job Growth in PDA by Place Type by Scenario 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
Total PDA/GOA Jobs	58.3%	55.3%	46.9%
<b>Inner Bay</b>			
Regional Center	21.4%	19.0%	12.5%
City Center	4.4%	3.9%	4.0%
Suburban Center	1.0%	1.1%	1.0%
Transit Town Center	2.6%	2.7%	2.9%
Urban Neighborhood	5.1%	4.6%	3.5%
Transit Neighborhood	2.3%	2.5%	1.8%
Mixed-Use Corridor	13.3%	12.1%	11.1%
Employment Center	1.4%	1.5%	1.2%
<b>Outer Bay</b>			
Regional Center	0.0%	0.0%	0.0%
City Center	0.7%	0.8%	0.8%
Suburban Center	2.0%	2.2%	2.5%
Transit Town Center	1.7%	1.9%	1.8%
Transit Neighborhood	0.8%	0.9%	1.3%
Mixed-Use Corridor	1.4%	1.6%	1.9%
Employment Center	0.2%	0.2%	0.3%
Rural Town Center	0.1%	0.2%	0.1%
Rural Mixed-Use Corridor	0.0%	0.0%	0.0%

*Share of Regional Professional and Business Services / Finance Job Growth in PDA by Place Type by Scenario 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
Total PDA/GOA Jobs	65.1%	60.0%	45.4%
<b>Inner Bay</b>			
Regional Center	29.5%	25.3%	12.8%
City Center	4.7%	4.0%	5.1%
Suburban Center	0.7%	0.9%	1.4%
Transit Town Center	2.0%	2.4%	2.9%
Urban Neighborhood	4.7%	4.0%	2.8%
Transit Neighborhood	1.9%	2.3%	0.7%
Mixed-Use Corridor	14.3%	12.3%	11.5%
Employment Center	1.2%	1.5%	0.9%
<b>Outer Bay</b>			
Regional Center	0.0%	0.0%	0.0%
City Center	0.7%	0.8%	0.9%
Suburban Center	1.9%	2.2%	1.9%
Transit Town Center	1.5%	1.8%	1.1%
Transit Neighborhood	0.6%	0.7%	1.4%
Mixed-Use Corridor	1.1%	1.4%	1.5%
Employment Center	0.2%	0.3%	0.4%
Rural Town Center	0.1%	0.2%	0.2%
Rural Mixed-Use Corridor	0.0%	0.0%	0.0%

*Share of Regional Retail Job Growth in PDA by Place Type by Scenario 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
Total PDA/GOA Jobs	61.3%	57.9%	55.0%
<b>Inner Bay</b>			
Regional Center	10.2%	9.2%	9.5%
City Center	4.7%	4.4%	4.2%
Suburban Center	3.2%	3.0%	3.2%
Transit Town Center	5.3%	4.8%	3.6%
Urban Neighborhood	5.1%	4.4%	3.6%
Transit Neighborhood	4.5%	4.0%	3.3%
Mixed-Use Corridor	16.2%	14.7%	12.1%
Employment Center	0.6%	0.6%	0.6%
<b>Outer Bay</b>			
Regional Center	0.2%	0.2%	0.2%
City Center	0.9%	1.2%	1.2%
Suburban Center	4.1%	4.3%	6.3%
Transit Town Center	2.2%	2.2%	1.9%
Transit Neighborhood	1.7%	1.9%	2.0%
Mixed-Use Corridor	2.3%	2.7%	2.8%
Employment Center	0.1%	0.1%	0.1%
Rural Town Center	0.1%	0.1%	0.1%
Rural Mixed-Use Corridor	0.0%	0.0%	0.1%

*Job Growth by County and PDA by Scenario 2010 – 2040*

	<b>PDA Jobs</b>			<b>County Jobs</b>		
	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
Alameda	106,300	104,000	93,500	203,800	203,700	216,300
Contra Costa	38,000	41,300	46,500	96,400	104,900	126,300
Marin	6,000	6,800	7,900	31,700	34,600	35,900
Napa	300	300	300	14,600	15,600	22,000
San Francisco	206,500	178,000	127,000	206,900	179,100	127,000
San Mateo	41,900	40,300	35,200	99,600	104,000	112,700
Santa Clara	159,300	154,000	129,300	254,200	257,400	247,400
Solano	6,600	7,300	7,500	42,000	46,200	50,200
Sonoma	15,600	17,600	19,700	45,500	49,200	57,100
TOTAL	580,400	549,700	467,000	994,800	994,800	994,800

#### 4. REGIONAL HOUSING DISTRIBUTION

The three scenarios, Core Concentration, Focused Growth and Outer Bay Area Growth, address the distribution of 771,000 households by 2040 through alternative land use patterns. Each of these scenarios relates to the employment growth and the three distribution patterns described in the previous section. Levels of household growth are specifically linked to the concentration of knowledge-based and local serving jobs. The three scenarios support healthy economic growth by 2040.

Shifting from the dominant development trend of single-family homes in greenfield areas over the last three decades, the three scenarios assume a higher concentration of households within multi-family housing at transit nodes and corridors with appropriate services and stores. Most of the growth is expected to be accommodated through 3 to 6 story wood-frame buildings, with the exception of major downtown areas where steel-frame buildings of more than 10 stories would be constructed.

The scenarios vary in the overall share of households in PDAs as well as by Place Type and city. The distribution of household growth is based on local input and regional criteria established through the densities and scale of Place Types, transit service, employment, and net low-income commuters. In addition, in the three scenarios each city is expected to reach a minimum household growth equivalent to 40 percent of its household formation. This last factor comes from the Regional Housing Need Allocation methodology for 2014-2022, which identifies the housing needs by city to be addressed through local plans and zoning controls.

Local plans and their proposed housing growth are an important component in the distribution of household growth. Local input on household growth from each jurisdiction was utilized in at least one of the three scenarios.

The PDAs and the growth factors directly addressed equity in the SCS. This final approach to the alternative scenarios is the result of in-depth interactions with equity groups. PDAs cover a wide range of neighborhoods with diverse income levels, infrastructure needs, and transit service. Regional staff worked closely with local jurisdictions to identify neighborhoods appropriate for PDA designation that need public investment for current and future populations as well as areas that are ready to accommodate additional housing. Two growth factors are directly linked to equity. The low-income net in-commuters' factor recognizes the potential of cities with high employment and limited affordable housing to accommodate future household growth. Similarly, the minimum growth floor of 40 percent of jurisdictions' household formation level allows cities with good services to accommodate a portion of their own population growth.

In order to appropriately address equity in the SCS, ABAG and MTC will conduct a thorough assessment of regional income levels and distribution. This report only includes some minor revisions to the income distribution factors used in Projections 2009. Current regional economic changes in the type of businesses, jobs, and labor indicate some regional income polarization. This task requires detailed attention and will be a priority over the next several weeks in preparation for the draft Preferred Scenario.

*Overview of household growth by scenario*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<b>Land use trends</b>	More growth in PDAs, particularly in Inner Bay Area's major employment centers and transit nodes	Growth throughout regional transit corridors and job centers	Less growth in PDAs, more growth in Outer Bay Area along transit corridors.
<b>Growth factors</b>	Transit service Employment Net low-income commuters		
<b>Minimum level of growth</b>	40% of the expected household formation rate for each jurisdiction		
<b>PDA household growth</b>	Based on Focused Growth Scenario, increase household growth by 20% in Inner Bay Area, plus or minus housing value factor	Growth within PDAs based on minimum level of growth by Place Type.	Based on Focused Growth Scenario, increase household growth by 5 to 30% in Outer Bay Area depending on job growth

*Core Concentration Growth Scenario:* This scenario assumes a concentration of households in PDAs and jurisdictions in the Inner Bay Area to take advantage of the core transit network.

*Focused Growth Scenario:* This scenario assumes focused household growth in PDAs throughout the region's transit corridors.

*Outer Bay Area Growth Scenario:* Closer to recent development trends than the other two scenarios, this scenario assumes more growth of households in the Outer Bay Area in relation to the employment growth by jurisdiction.

The three scenarios vary in their share of PDA household growth from 67 to 79 percent of all regional growth. PDAs currently account for 24 percent of all households in the region. The PDA share of households increases to between 34 and 37 percent of all households in the three scenarios.

*Households in PDAs by Scenario: Current and Future Trends 2010 – 2040*

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<i>PDA households 2010</i>	634,730	634,730	634,730
<i>PDA households 2040</i>	1,239,900	1,187,740	1,154,970
<i>PDA households growth 2010-2040</i>	605,170	553,010	520,270
<i>PDA share of total households 2040</i>	37%	35%	34%
<i>PDA household growth share 2010-2040</i>	79%	72%	67%

In the Core Concentration Growth Scenario, Inner Bay Area jurisdictions for the most part experience a greater concentration of growth within their PDAs than in the Focused Growth Scenario, whereas in the Outer Bay Area Scenario growth is less concentrated in the PDAs. In each of the scenarios, the 40 percent housing growth threshold has a considerable affect on some of the smaller residential communities throughout the region.

The concentration of households varies by Place Type. In each scenario, the greatest share of regional growth is within the Mixed-Use Corridors, followed by Regional Centers. The Core Concentration Growth Scenario brings a higher concentration of households at Regional Centers, City Centers, Urban Neighborhoods, and Mixed-Use Corridors. This includes downtown areas in Oakland, San Francisco and San Jose and the San Pablo, Mission, and El Camino transit corridors. The Transit Town Centers and Transit Neighborhoods also play an important role in the Core Concentration Growth Scenario, as many of the PDAs along the core transit network in the Inner Bay Area have these Place Types. In the Focused Growth and Outer Bay Area scenarios, growth is more evenly distributed across all Place Types. The Outer Bay Area Growth Scenario shows higher growth in suburban centers such as the Dublin, Livermore, and San Ramon PDAs

**Share of Regional Household Growth in PDA by Place Type by Scenario 2010 – 2040**

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<b>Total PDA/GOA Share of Households</b>	37%	35%	34%
Regional Center	12.6%	11.2%	10.3%
City Center	8.4%	8.3%	7.7%
Suburban Center	8.3%	8.3%	8.5%
Urban Neighborhood	7.3%	6.1%	5.1%
Transit Town Center	11.2%	9.9%	9.8%
Transit Neighborhood	10.2%	9.3%	9.2%
Mixed-Use Corridor	20.2%	18.3%	16.6%
Employment Center	0.1%	0.0%	0.1%
Rural Town Center	0.1%	0.1%	0.1%
Rural Mixed-Use Corridor	0.2%	0.2%	0.2%

The distribution of growth by county varies according to their transit access and the relationship of the county to the Inner and Outer Bay Area. Alameda, San Francisco, San Mateo, and Santa Clara, counties have high levels of existing transit service and are primarily within the Inner Bay Area. As a result these counties have more growth in the Core Concentration Growth Scenario. North Bay Counties—Marin, Napa, Solano and Sonoma— and much of Contra Costa County are identified as part of the Outer Bay Area and many of their cities have limited transit access. Thus they display higher growth in the Outer Bay Area Growth Scenario.

**Household Growth by County and PDA by Scenario 2010 – 2040**

	<b>PDA Households</b>			<b>County Households</b>		
	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
Alameda	132,610	121,050	111,740	167,750	172,990	164,300
Contra Costa	66,790	67,510	72,650	96,880	110,930	136,550
Marin	4,100	6,380	6,690	10,100	11,260	13,250
Napa	1,660	1,660	1,740	5,520	6,290	7,170
San Francisco	105,110	85,940	71,900	110,640	90,470	76,430
San Mateo	54,820	44,130	40,810	72,110	68,570	61,700
Santa Clara	205,960	182,220	167,280	245,990	242,060	227,120
Solano	15,440	16,390	17,230	28,740	30,860	38,690
Sonoma	18,680	27,730	30,230	33,080	37,380	45,620
<b>TOTAL</b>	<b>605,170</b>	<b>553,010</b>	<b>520,270</b>	<b>770,810</b>	<b>770,810</b>	<b>770,830</b>

## 5. NEXT STEPS

The three land use scenarios presented in this report provide the preliminary analysis for the development of the SCS Preferred Scenario. The following additional tasks are pending to inform the Preferred Scenario and will be developed this fall 2011.

1. Land use analysis
  - Further analysis of regional employment and population growth
  - Further analysis of income forecast and distribution
2. Policy Development to support the Preferred Scenario
  - Housing production
  - Infill development investments
  - Transit access
  - Complete Communities
3. Transportation network analysis
4. Performance targets results for the three Alternative Land Use Scenarios
5. Gather input from local jurisdictions and stakeholders to inform development of the Preferred Scenario

## APPENDIX I

### 1. EMPLOYMENT DISTRIBUTION DATA AND METHODOLOGY

#### *Data Sources*

##### **California Department of Transportation Sector Forecast (Caltrans)**

Caltrans uses an econometric model to project employment by industry out to 2040 for each county in California. The agency's model uses variables and assumptions taken from the UCLA Anderson Forecast and historic employment data from EDD. The most recent projections were released in March 2010. In comparison, the most recent EDD and BLS projections available date from 2008 and 2009. A complete description of the 2010 Caltrans projection methodology and data out to 2035 (2040 data was provided upon request) is available at: [http://www.dot.ca.gov/hq/tpp/offices/ote/socio\\_economic.html](http://www.dot.ca.gov/hq/tpp/offices/ote/socio_economic.html).

##### **Walls & Associates / Dun and Bradstreet (NETS)**

Walls & Associates converts Dun and Bradstreet archival establishment data into a time-series database of establishment information called the National Establishment Times-Series (NETS) Database. ABAG has analyzed the NETS data to provide information on the spatial distribution of jobs at the jurisdiction and PDA level by employment sector, as well as changes in spatial distribution at these geographies from 1989-2009. More information on the NETS data is available at: <http://www.youreconomy.org/nets/?region=Walls>

#### *Methodology*

##### **2010 Employment**

Current employment is based on total jobs established for the Current Regional Plans and Initial Vision Scenario and the Caltrans breakdown by employment sector for the region for 2010. NETS 2009 data is used to distribute jobs by geography for each sector.

##### **Scenario Employment Distribution**

The Caltrans forecast – scaled to match the regional constrained employment total established for the three alternative scenarios – was used for the regional growth by employment sector for all three scenarios. Each scenario follows two basic steps for then distributing employment growth by geography for each sector.

1. As a baseline, Focused Growth and Core Concentration Growth Scenarios maintain 2010 employment distribution by Place Type and county into the future and Outer Bay Area Growth Scenarios slows down the 1989-2009 trends in distribution of jobs by Place Type and county.
2. A portion of local-serving jobs and knowledge-based jobs are then distributed to follow the investments and growth pattern for each scenario.

### **Core Concentration Growth Scenario**

The Core Concentration Growth Scenario starts with a baseline of maintaining 2010 employment distribution by sector by geography. 50% of new Retail jobs and 10% of new Health, Educational, and Recreational Services jobs were then allocated by PDA and by jurisdiction in conjunction with the housing growth distribution, reflecting a share of local-serving jobs that follows the housing growth in the Core Concentration scenario. An additional 15% of new Information, Professional & Business Services, and Government jobs were located in Inner Bay PDA locations that were Regional Center, Mixed-Use Corridor, City Center, and Urban Neighborhood Place Types. This reflects a further concentration in these sectors into the transit-served locations where they are already concentrated, corresponding to a stronger agglomeration of the knowledge-based and other vertical-office-user jobs into these core areas. These additional office jobs were also allocated to the corresponding jurisdiction.

### **Focused Growth Scenario**

The Focused Growth Scenario also starts with a baseline of maintaining 2010 employment distribution by sector by geography. 50% of new Retail jobs and 10% of new Health, Educational, and Recreational Services jobs were again allocated by PDA and by jurisdiction in conjunction with the housing growth distribution in the Focused Growth Scenario. The Focused Growth Scenario also includes an additional 10% of new Information, Professional & Business Services, and Government jobs locating in PDA locations, reflecting a further consolidation of office uses in PDAs. These additional office jobs were distributed to PDAs throughout the region in proportion to their existing share of these sectors.

### **Outer Bay Area Growth Scenario**

The Outer Bay Area Growth Scenario starts with a baseline that slows the 1989-2009 trend in job distribution by PDA Place Type (for the PDA distribution) and by County (for the jurisdiction distribution). In general this exhibits higher growth in the outer bay counties and slower growth in PDAs overall and a shift in share from inner bay PDAs to outer bay PDAs. As in the other two scenarios, 50% of new Retail jobs and 10% of new Health, Education, and Recreation jobs were allocated by PDA and by jurisdiction to match the housing growth distribution in the Outer Bay Area Growth Scenario. In this scenario, no additional office jobs were added to PDA locations. However, for the counties with both inner and outer bay designations (Alameda, Contra Costa, and Santa Clara counties), a share of Professional & Business Services jobs were reallocated from the inner bay to outer bay jurisdictions to reflect the trend in greater dispersal of jobs within these counties.

## 2. HOUSING DISTRIBUTION METHODOLOGY AND DATA

### *Data Sources*

U. S. Census Bureau – 2010 Census

U. S. Census Bureau – Longitudinal Employment and Household Dynamics (LEHD)  
MTC Transit Coverage and Frequency by City

### *Methodology*

#### **Scenario Housing Distribution**

Each scenario was developed based on the three key components.

1. ***Growth in Priority Development Areas:*** PDAs define a sustainable and equitable development framework for the SCS. Local and regional efforts support the development of PDAs as complete communities with the appropriate level of services and urban amenities for the current and future residents and workers. The minimum level of growth for each Place Type and local input were used as a basis for the level of growth in the PDAs.
2. ***Growth by local jurisdiction:*** At the city level, jurisdictions' housing levels were based on Projections 2009, with adjustments based on the 2010 Census and local feedback. Household growth by city was determined based on job concentration, transit service, and existing population and jobs. In addition, a factor based on low-wage commuters was applied to the distribution of housing in order to improve access to employment centers served by transit for low-wage workers.
3. ***Growth pattern informed by the Regional Housing Need Allocation (RHNA):*** The scenarios utilized the proposed RHNA approach<sup>1</sup> for setting a minimum level of growth in the jurisdictions to ensure each jurisdiction is doing a reasonable amount of fair share housing to meet the region's housing need. A minimum housing growth threshold for each jurisdiction was set at 40 percent of its household formation growth. The scenarios assume that RHNA, as a short term housing strategy through local general plans, will shape the long term development pattern through a minimum housing floor (jurisdictions would accommodate at least 40 percent of their future household formation). The income distribution component of the proposed RHNA methodology, which is intended to address housing affordability (whereby jurisdictions would move towards the regional distribution of income groups), was not applied for the scenarios. Analysis of regional income levels and distribution is pending.

---

<sup>1</sup> The Regional Housing Needs Allocation (RHNA) is a state mandated process for determining how many housing units, including affordable units, each community must plan to accommodate. See [http://www.onebayarea.org/plan\\_bay\\_area/housing.htm](http://www.onebayarea.org/plan_bay_area/housing.htm) for more information on RHNA.

*Transit and Employment Criteria for Housing Distribution*

<b>TRANSIT TYPE</b>	<b>EXISTING JOB CENTER (10,000+ JOBS)</b>	<b>FOCUSED GROWTH 2035 HOUSING</b>
BART, Muni Metro, VTA Light Rail	Yes	Increase to low-range Place Type density plus 25%
BART, Muni Metro, VTA Light Rail	No	Increase to low-range Place Type density plus 20%
Caltrain	Yes	Increase to low-range Place Type density plus 25%
Caltrain	No	Increase to low-range Place Type density plus 20%
ACE, Capitol Corridor, SMART, eBART, Dumbarton Rail	Yes	Increase to low-range Place Type density plus 10%
ACE, Capitol Corridor, SMART, eBART, Dumbarton Rail	No	Increase to low-range Place Type density plus 5%
BRT Corridors: El Camino Real, San Pablo Avenue, E.14th Street/Mission Bvd	Yes	Increase to low-range Place Type density plus 5%
BRT Corridors: El Camino Real, San Pablo Avenue, E.14th Street/Mission Bvd	No	Increase to low-range Place Type density
PDA's not on major corridors	Yes	Increase to low-range Place Type density plus 10%
PDA's not on major corridors	No	Increase to min Place Type density minus 10%

**Focused Growth Scenario**

For the Focused Growth Scenario, the level of growth in a PDA was taken as the higher of:

- a. the planned level of growth in the PDA, based on jurisdictional feedback on the Initial Vision Scenario, and
- b. the minimum level of growth based on the PDA's Place Type.

The minimum level of growth for a PDA was calculated by multiplying the minimum density for the PDA's Place Type by the redevelopable acreage in the PDA, which was assumed to be 10% of net acreage. The minimum density for each PDA was scaled up or down based on transit tiers and whether the PDA is an existing job center containing 10,000+ jobs. The table below shows the distribution rules for each transit tier/job center combination. If the planned level of growth

in a PDA was lower than the minimum calculated for its Place Type, the growth for that PDA was increased to the calculated minimum.

At the city level, the share of growth within each jurisdictions' PDAs was capped at 95 percent of the jurisdiction's total growth.

### **Core Concentration Growth Scenario**

For the Core Concentration Growth Scenario, growth was shifted to PDAs in the Inner Bay Area. First, housing growth was increased by 20 percent above Focused Growth Scenario levels for these PDAs. Next, housing levels were adjusted up or down based on a housing value factor for each jurisdiction. The housing value adjustment ranged from +15 to -15 percent, based on median home value. ABAG reduced growth in Outer Bay Area PDAs to the desired levels stated by local jurisdictions in their Initial Vision Scenario feedback.

At the city level, housing growth within the Outer Bay Area jurisdictions was reduced to account for the re-distribution of housing to Inner Bay Area PDAs. Housing levels in Inner Bay Area jurisdictions were kept at their Focused Growth Scenario levels or were increased slightly to account for an increase in their PDAs' housing levels, with the share of growth within each jurisdictions' PDAs capped at 95 percent of the jurisdiction's total growth.

### **Outer Bay Area Growth Scenario**

To create the Outer Bay Area Growth Scenario, ABAG first estimated the potential job increase to each jurisdiction. ABAG continued the region's trend in recent decades of jobs shifting from inner to outer counties and from PDAs to outer areas. Within Alameda, Santa Clara and Contra Costa Counties, a share of professional and business growth was also shifted from the Inner Bay Area to Outer Bay Area jurisdictions.

ABAG increased housing growth in those Outer Bay Area jurisdictions that saw significant job growth. Outer Bay Area jurisdictions that had more than 3,000 new jobs received a 30% increase in housing growth in their PDAs over the Focused Growth Scenario, those that grew by 1,000 to 3,000 jobs received a 10% increase in their PDAs, and those that grew by less than 1,000 jobs received a 5% increase.

ABAG reduced growth in Inner Bay Area PDAs to the desired levels stated by local jurisdictions in their Initial Vision Scenario feedback. However, since the City and County of San Francisco did not request a reduction from the Initial Vision Scenario, ABAG reduced each San Francisco PDA's housing growth by 20%.

At the city level, Inner Bay Area jurisdictions' housing units were reduced to desired levels. These housing units were re-distributed to the Outer Bay Area jurisdictions based on each jurisdiction's share of regional growth. Outer Bay Area jurisdiction growth levels may also have increased to account for an increase in units within their PDAs. The share of jurisdictional growth in PDAs within the Outer Bay Area jurisdictions was capped at 85 percent.

## Transportation Assumptions

The following transportation network assumptions, based in part on local jurisdictional feedback on the Initial Vision Scenario, were used to develop the three scenarios:

	<b>Core Concentration</b>	<b>Focused Growth</b>	<b>Outer Bay Area</b>
<i>Bus service</i>	<ul style="list-style-type: none"> <li>▪ Increased frequency and capacity within Inner Bay and along main corridors</li> <li>▪ Bus Rapid Transit service on El Camino Real and E.14th Street/ Mission Blvd.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased frequency and capacity within Inner Bay and along main corridors</li> <li>▪ Bus Rapid Transit service on El Camino Real, San Pablo Ave, and E.14th Street/ Mission Blvd.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased frequency and capacity along main corridors and improved local bus service.</li> </ul>
<i>Rail</i>	<ul style="list-style-type: none"> <li>▪ Increased frequency and capacity along core network</li> <li>▪ Expansion of commuter rail systems in Inner Bay</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased frequency and capacity along core network</li> <li>▪ Expansion of commuter rail systems</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expansion of commuter rail systems in Outer Bay</li> </ul>
<i>Commute patterns</i>	<ul style="list-style-type: none"> <li>▪ Increase transit trips within and between West Bay and East Bay.</li> <li>▪ Reduce number of auto trips</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase transit trips within and between West Bay and East Bay.</li> <li>▪ Reduce number of auto trips</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduce length of auto trips</li> </ul>

## APPENDIX II: TABLES

- Employment Growth by PDA and Jurisdiction
- Household Growth by PDA and Jurisdiction