METROPOLITAN
TRANSPORTATION
COMMISSION

Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607-4700
TEL 510.817.5700
TDD/TTY 510.817.5769
FAX 510.817.5848
E-MAIL info@mtc.ca.gov
WEB www.mtc.ca.gov

# *Memorandum*

TO: MTC Planning Committee, ABAG Administration Committee and Joint Policy Committee

DATE: September 3, 2010

FR: Executive Director

RE: Calculating the Regional Housing Target: Economic & Demographic Assumptions

In addition to Greenhouse Gas (GHG) targets, SB 375 also requires regions to develop regional housing targets. Specifically, SB 375 requires each region to "identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan, taking into account net migration into the region, population growth, household formation and employment growth."

The regional housing target will provide the basis for local agency housing and job distribution that inform the shorter-term (first 8 years) Regional Housing Needs Allocation (RHNA), and the longer- term (25 years) Projections update, both of which will be incorporated into the 2013 Regional Transportation Plan and Sustainable Community Strategy (SCS).

As you might imagine, there are varying assumptions among economic forecasters at the national, state and local levels that inform, and sometime complicate, regional job and population growth forecasts. As ABAG develops growth forecasts, we should be cognizant of these forecast's impacts on the SCS and local governments. If forecasts are too low, we will plan for too few people and jobs than would actually occur. Some would argue that lower forecasts could have a dampening effect on growth, as local jurisdictions and business put these expectations into their plans. When forecasts are too high, they cause the region and local governments to plan for higher levels of population and employment and perhaps overemphasize potential conflicts between land uses that never come to pass.

Attached is a draft memorandum from ABAG staff to its Executive Board describing recent economic trends, the trends' impacts on growth forecasts, and the processes that may be used to develop these forecasts. ABAG staff will provide the joint committee members a brief overview of the attached memorandum at your meeting.

Steve Heminger

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**Attachment A**

Date: August 31, 2010

To: ABAG Executive Board--DRAFT

From: ABAG Staff

Subject: Calculating the Regional Housing Target: Economic & Demographic Assumptions

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**Summary**
SB 375 requires each Metropolitan Planning Organization in California to develop a Sustainable Communities Strategy, a regional land use and transportation plan that demonstrates, amongst other things, areas within the region sufficient to house "all the population of the region." Two key factors in developing the Regional Housing Target are employment growth and household formation forecasts. This memo describes the demographic and employment growth assumptions incorporated into the housing estimate.

Staff requests that the Executive Board:

Provide direction with respect to the:

a) The range of employment growth that ABAG will reflect in the Regional Housing Needs Target methodology. Staff recommends that Bay Area Employment for 2035 be in a range between 4.4 and 4.85 million jobs.
b) Household Formation assumptions that ABAG will incorporate into the Regional Housing Needs Target.

**SB 375 & Regional Housing Target**
Senate Bill 375 states that the Sustainable Communities strategy must "identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan, taking into account net migration into the region, population growth, household formation and employment growth."

The Bay Area regional agencies, as well as the State Department of Housing and Community Development (HCD), interpret this requirement to mean that the region must set a target for housing sufficient to meet natural population increase (net births), household formation and employment growth over the next 25 years.

The net effect of this legislative requirement is that the region must plan for more housing than it has traditionally. Before SB 375, when the regional agency prepared the economic and demographic forecast, staff assumed that there will continue to be a regional imbalance of jobs and housing and an insufficient number of homes to fully accommodate regional employment growth and population increase. To assume that the entire region's housing demand will be fully met within the region will require planning for an additional increase in housing supply. Limitations on housing development are not taken into account, such as local land use constraints that limit housing production.

Under the Sustainable Community Strategy (SCS) workplan, staff will create a Base Case Scenario that will be examined by the region through the County/Corridor engagement process. Following this engagement, a realistic scenario of what the Bay Area can reasonably expect to produce in housing supply will be adopted in the SCS, including planning for natural population increase and housing formation assumptions, but not necessarily including the population expected to reside outside the Bay Area. The Regional Housing Needs Assessment (RHNA) will be consistent with the SCS, and will require cities to zone for their share of the next eight years of allocated growth.

**Employment Growth Trends and Forecasts**

The region's total projected population is directly impacted by economic growth. Economic opportunities are a key driver to in-migration. One of the most significant tasks that ABAG does is estimating the rate that the regional economy will grow and the number of jobs the Bay Area will have in the next 25 years. Job growth typically impacts population and the regions total housing need. In addition, draft employment estimates will be used to construct land use scenarios for the Sustainable Communities Strategy. We expect to refine the job forecast during the next year to incorporate input from local jurisdictions, the release of U.S. Census data, and additional economic information.

ABAG's previous projections estimated a total number of jobs as 5.1 million by 2035. This reflects an average annual growth rate of 1.9 percent from the employment base of 3.1 million in 2010. This trend is far greater than the Bay Area's job production over the last 20 years. One of the key issues in forecasting future employment growth is explaining why the Bay Area has added so few jobs in the last twenty years despite robust growth in the regional economy, and whether this trend will continue into the future The analysis begins with projections about the growth of the national economy and the Bay Area's relative share of this growth.

*State of the National Economy & Gross Domestic Product*

In December of 2007, the United States officially found itself in a severe economic recession. The recession spread to the majority of the industrialized world, and caused a significant drop in economic activity. The recession was triggered by a subprime mortgage "meltdown" that began in 2005. By 2007, the mortgage crash sparked a three-year financial crisis, requiring $700 billion in federal government interventions and massive loan guarantee support from the Federal Reserve. This recession will likely prove to be the longest and most severe since the Great Depression and World War II, as measured in payroll jobs lost and unemployment rates.[1]

The Congressional Budget Office (CBO) projects that economic growth in the next few years "will probably be muted in the aftermath of the financial and economic turmoil."[2] In his statements to the Budget Committee, the Director of the Congressional Budget Office (CBO) goes on to say that the despite actions taken by the Federal Reserve with the Economic Stabilization Act of 2008 and the aggressive stimulus package, which helped to moderate the severity of the recession and shorten its duration, household spending is likely to continue to be restricted due to slow income growth, lost wealth, and limited ability to borrow, due to heightened credit restrictions. Investment spending is also anticipated to be slow because of continued high vacancy rates in both the residential and commercial markets. Government and household deficits are anticipated to further curtail a quick economic recovery.

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[1] Andrew Sum, et.al. "The Economic Recession of 2007-2009: A Comparative Perspective on Its Duration and the Severity of Its Labor Market Impacts." April 2009

[2] Congressional Budget Office. "The Budget and Economic Outlook Fiscal Years 2010 to 2020." Statement of Douglas W. Elmendorf, Director. Statement before the Committee on the Budget United States Senate. January 28, 2010.

Some economists point to further indicators that the recovery will indeed be slow and that the recession will have long-term impacts on the economy. These indicators include a marked increase in household savings, rather than spending, a “deleveraging” of the world’s financial institutions, weak commodity prices, an intensification of government regulations and protectionist policies.[3]

Projected slow economic growth, over the long-term, has prompted the Congressional Budget Office to reduce its projection of gross domestic product, out to the year 2020. Previous long-term GDP rates were estimated at 2.6 percent, the rate in which ABAG used to prepare its most recent long-term job forecast. Current GDP estimates by the CBO have rates at 2.4 percent for the 2015-2020 period. Long term national and State growth is not necessarily stable, and there are numerous uncertainties in the economy, particularly the resolution of long term deficits, that will need to be resolved in order to sustain long term economic growth.

Given that the task for ABAG is a long term forecast, however, staff does not believe that the extended recovery from this recession should be over-weighted when considering a forecast in the year 2035. However, there are structural changes in the U.S. economy related to the retirement of baby boomers and demographic trends that are more significant for long term forecasts. Another important element of the employment growth narrative is the regional competitiveness of the Bay Area and the challenges the region faces with respect to affordable housing, transportation, education, and other quality of life issues.

**Bay Area Historical Employment Trends**

Over the last fifty years the Bay Area has been an economic success story. It is a region that began with a strong base in traditional manufacturing and finance, and has since transitioned to an economy that is known for it leadership in technology-based industries. The growth of those industries- including biotechnology, high technology hardware, software, on-line technologies and social media- continue to drive the region’s diverse economy.

From 1960 to 1990, the Bay Area added over 2.2 million jobs. Over the same period, the region’s economic output also rose, with the Gross Regional Product increasing by an average of over 5.5 percent annually . This economic performance in the Bay Area was fueled by numerous factors, including a substantial investment in transportation infrastructure, including BART, and the urbanization of agricultural land in several counties in the Bay Area.

[3] A. Gary Shilling. “Long-term Outlook: Slow Growth and Deflation.” Insight. March 2009


From 1990 to 2010, however, there has been a marked shift in the trend of employment growth in the Bay Area. If we look at the current decade and the 1990's, we see that overall employment growth has only been about 5 percent; or about 0.25 percent annually. In 1990, total jobs amounted to 3.5 million, in 2000 there were 3.6 million jobs in the Bay Area and by 2010, jobs declined to 3.2 million jobs.

Nationally, between 1991 and 2001 alone, real GDP increased by 49%. While there have been significant job losses during the recent recessions, there has also been a shift in the regional economy over the last two decades. Growth in manufacturing, retail and utilities has been limited, while significant growth has occurred in professional services, education and healthcare; areas that tend to have higher output per employee. Further explaining the continued growth in regional GDP is that jobs are also being restructured. Jobs that can be off shored or relocated to other lower cost areas have increased firms' productivity, but result in less employment in the Bay Area. Therefore, while there is still a relationship of economic growth (or GDP) to employment, the relationship appears to be fundamentally altered. Part of this explanation could result from the type of industries that are expanding in the Bay Area, and part can be explained by the Bay Area's cost of living which impacts regional competitiveness and results in slower job growth in certain income categories, as well as the export of some jobs to the lower cost Central Valley.

Since July 2008, the Bay Area has lost nearly 250,000 jobs, over 2000 totals. The recent decline in jobs mirrors the early 2001 "dot-com bust" recession, where the region also lost 250,000 jobs. The peak of the job loss occurred in January 2010, with job declines lessening in degree over the last six months.

**Bay Area Maintains Significant Economic Strength**

Despite recent job losses, the overall strength of the Bay Area economy has remained intact. According to the Bay Area Council Economic Institute (BACEI), "the Bay Area continues to have high levels of productivity, high per capita GDP, and remains a center for Fortune 1000 and Fortune Global 500 companies." The Bay Area's economy also remains strong due to a highly educated work force graduating from world class research centers and universities. The Bay Area is home to many of the worlds most vital economic sectors, including biotechnology, clean energy technology, and information technology. These sectors are supported by an active venture capital community. The Bay Area's open and multi cultural social structure attracts some of the most innovative and educated persons from around the world.

**Risks to the Bay Area Economy May Be Addressed by the SCS**
BACEI provides a cautionary voice regarding potential threat to long-term economic growth in the region. These include the declining investment in the education system, transportation and public infrastructure, and the state's fiscal crisis.[4]

In addition the threats identified by the BACEI, there are significant barriers to job growth that relate directly to land use and transportation policy, which are the purview of the SCS. These include:

- Jobs-housing fit - access to sufficiently available and affordable housing in relationship to job opportunities
- Increased roadway congestion and delay
- An inefficient transit system
- A lack of transit accessible jobs
- Disparate employment location and attraction policies resulting in region-wide "job sprawl"
- The conversion of industrial lands to commercial and residential use

The Sustainable Communities Strategy presents a unique opportunity to engage in regional dialogue on each of these issues. Our challenge, during the SCS process, is to ensure these issues are raised and adequately addressed in the SCS. The specific places in the process for these issues to be raised could be in scenario developments (to determine the impact various scenarios have on congestion, transit ridership, and access to jobs) and also in the crafting of policies that may be adopted as part of the final Sustainable Communities Strategy (i.e. regional employment, affordable housing, and industrial lands policies).

**Bay Area Employment Growth Forecast**

Considering the magnitude of the recession and anticipated slow recovery, in 2009 ABAG reduced its long-term forecast by nearly 140,400 jobs for the year 2035, compared to earlier forecasts. As we approach the next revision to the job forecast, the data appears to indicate a further retraction in the region's long-term economic outlook.

ABAG used its regional models to estimate Projections 2009 employment growth. Recent employment data indicates that in that forecast the level of 2010 employment was too high, and macro economic forecasts from the federal government suggest we should be using a trend that reflects a slower recovery and slower trend in economic growth. Our initial estimate, prior to running the models is that we expect employment in the year 2035 to be at least 200,000 lower than in the Projections 2009 forecast, resulting in a 2035 employment level of approximately 4.85 million.

Staff anticipates that there would be slow economic growth as we are recovering from the recession, with more positive employment growth in the long term. Staff also expects significantly lower than the average annual growth than the region saw over the last fifty years. Regional industry data reflects the changes in industry mix, occupations and productivity that have occurred in our region over the last several decades. This pattern is also likely to be consistent with our current understanding of the regions population growth.

[4] Bay Area Economic Council Economic Institute. "Recession and Recovery: An Economic Reset." Bay Area Economic Profile. April 2010

The model itself uses macroeconomic information (Personal Consumptions Expenditures, Investment, Government Purchases and Exports) from the national economy as well as regional data describing individual industries to forecast growth. We are using data for 2008, the most current available year to estimate the relationships between economic factors and employment.

The expected rates of national growth and the relative competitiveness of our region are important for forecasting future growth. Competitiveness is primarily affected by industrial productivity and labor costs. The economic impact of regional congestion and housing costs are reflected in the model's labor costs.

To help inform ABAG's forecast, staff has consulted a variety of experts and compared the forecast prepared by Caltrans. The primary differences in ABAG and Caltrans forecasts are attributed to the characteristics of the economic models that are used and how employment is defined. Most other forecasts, including Caltrans, only estimates traditional Wage and Salary employment, while ABAG staff attempts to use a more comprehensive definition which includes self-employment. Increasing proportions of people have jobs outside of traditional "Wage and Salary" employment; rather they are self employed, business owners, consultants, or contractors. As there is a trend toward higher rates of self employment, the ABAG job forecast is somewhat higher, although it is not clear that this trend will continue into the future. A comparable number from the Caltrans forecast would appear to be 4.7 million jobs in 2035.

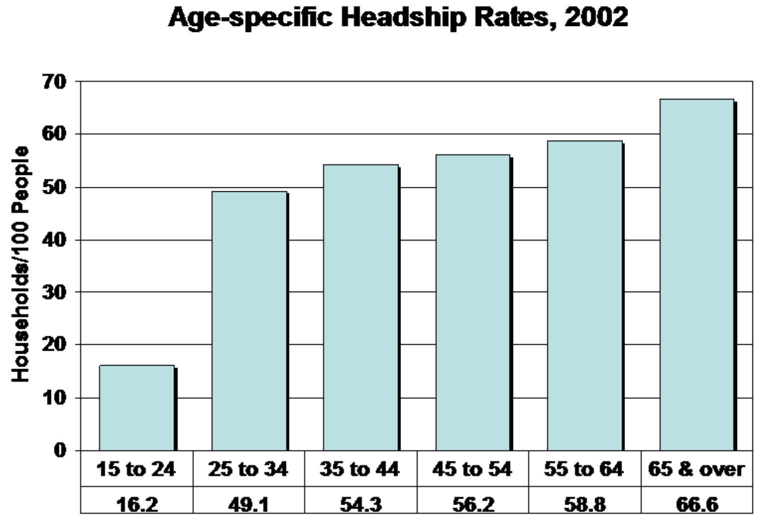
Discussions were also held with a group of economists brought together by the Bay Area Economic Institute, and these discussions suggested that the forecast of employment might be significantly lower. The most specific comment came from Steve Levy of the Center for Continuing Study of the California Economy (CCSCE).

CCSCE undertakes forecasts of employment growth for other regions in the State, including the Southern California Association of Governments (SCAG) and Sacramento Council of Governments (SACOG). CCSCE uses an alternative method to project employment growth. First, CCSCE projects national employment growth, then projects the share that is expected to be generated in the Bay Area. CCSCE projects a lower U.S. job production and growth as a result of a slowdown in the growth of working age population. CCSCE believes that the Bay Area is positioned to grow slightly faster than the nation going forward given that that the nation's future growth will be heavily determined by success in technology and innovation. However, looking at the Bay Area share of U.S. jobs since 1990, Mr. Levy estimates the range of job growth to be substantially lower than the ABAG model, on the order of approximately 4.4 million.

There is interest on the part of the large metropolitan areas, the State office of Housing and Community Development (HCD), and Caltrans to consider developing a more common forecast methodology. This is especially important given the need to measure the SCS inter-regionally through common metrics, such as GHGe reduction. Staff will continue looking into these issues prior to recommending ABAG's official employment forecast.

## HOUSEHOLD FORMATION ASSUMPTIONS

**Headship Rates/Household Formation**

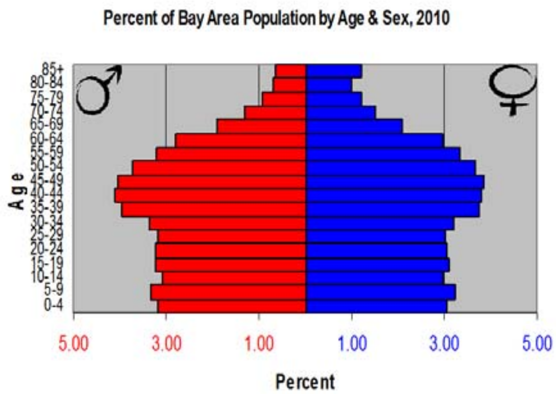


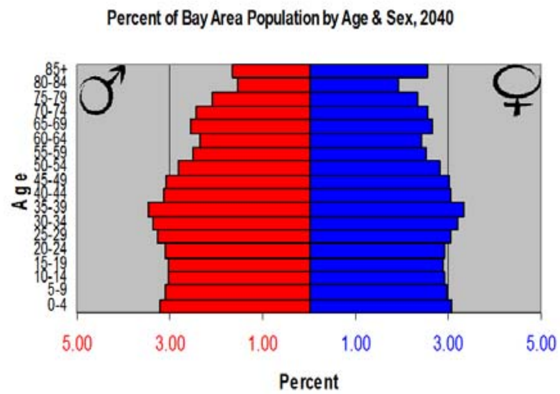

Household formation, or headship rate, is the percentage of people in the population who are heads of household. Every head of household, theoretically, requires a separate housing unit. If there were no restrictions on the number of housing units available, i.e. those that exist due to local land use policies or other financial and/or environmental constraints on development, every head of household would form new "households" or need a home. The rate of new households that are formed is called the household formation rate. It is these rates that are applied to the total population to determine how many housing units are needed to house the entire population.

The chart above, constructed from data compiled by a housing economist at the National Association of Home Builders (NAHB), shows U.S. age-specific headship rates for 2002. Notice that those age 65 and over have a headship rate four times that of 15- to 24-year olds, and about third larger that those in the 25- to 34-year old category.  As the senior age group grows, this difference in headship rates really begins to matter. That the Bay Area's population is dramatically aging over the next 25 years, therefore, has significant implications for the region's total housing need. We will be using headship rate information that is specific to the Bay Area to illustrate the Regional Housing Need at the next Executive Board meeting, and will describe that need by affordability category.

**Aging Population Increases the Need for Additional Housing**

Over the next several decades, the number of people over 65 and over 80 years old will nearly triple. By 2035, one quarter of the population, almost 2.3 million people will be 65 years or older. Over three million people will be over 55; this is one-third of the Bay Area's projected population. As we plan our communities, and move forward with the development of the Sustainable Communities Strategy, we will need to consider the needs of a much older, and perhaps significantly greater non-driving population, including the need for non-auto dependent mobility and smaller homes.




By and large, studies suggest that the older population continues to live in their existing homes. Some studies have shown that segments of that population relocate from suburban areas to urban areas, particularly as they become empty nesters, Others choose to relocate outside the region, presumably where the cost of living is less expensive. We will be performing further analysis on retirement migration as part of our SCS work on overall migration issues to estimate the significance and distributions of these trends for our region.

Of the many issues that will need to be studied, ABAG staff is currently assuming that the aging population will remain in the Bay Area and occupy their own home, or relocate to a smaller unit in the Bay Area. Given the trend in the Bay Area for an aging population, a substantial increase in the Regional Housing Target will be required. This will also result in higher RHNA numbers for cities across the Bay Area, so that additional housing is provided for working families in addition to those units occupied by seniors.

**CONCLUSION**

*Assessing Forecast Risks*

It is important to have accurate forecasts of the region's future growth. But we should also think about the purpose of the forecasts the regional agencies are making for the Bay Area. If forecasts are lower than they should be, we will plan for fewer people and jobs than would actually occur. Some would argue that lower forecasts could have a dampening effect on growth, as local jurisdictions and business put these expectations in to their plans. As part of the Sustainable Communities Strategy, a lower forecast would tend to produce lower numbers of Vehicle Miles Traveled, less CO2 emissions, and a reduced need for additional housing.

When forecasts are higher than they should be, they cause the region and local governments to plan for higher levels of population and employment and potentially overemphasize the conflicts between land uses. At the same time, if the region over projects some level of long term growth, it can be assumed that the net effect is to be planning for a longer time horizon.

Feedback from local governments about population and housing forecasts has been generally supportive of the forecast from Projections 2009. While there are those who think the employment forecast should be lowered, most are supportive of the demographic forecast. There have been comments from several sources that the assumptions for labor force participation are too high. We expect additional comments through the more extensive SCS engagement process.

*Next Steps*

Following direction from the Executive Board on the range of expected employment growth, staff will continue to collect information and prepare a regional housing need methodology for

November Executive Board meeting. The methodology will be described incorporating economic and demographic modeling, and will identify households by income category. In addition we will be constructing initial land use scenarios for the Sustainable Communities Strategy. We expect to refine these estimates during the next year to incorporate the release of U.S. Census data and additional economic information.