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**California Child and Youth Well-Being Index,  
1995-2007:  
Trends, Changes and Projections to 2012\***

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## Abstract

For the State of California, the San Francisco Bay Area, and Los Angeles County, this report describes child and youth well-being and its changes over time from 1995 to 2007, and projects the potential impact of the current economic crisis on child poverty from 2008 to 2012. Sixteen Key Indicators of child and youth well-being are classified into five domains/areas of social life. Summary indices of changes over time are calculated for each of five domains and for overall child and youth well-being. Disparity Well-Being Indices also are studied. Results indicate that: (1) Overall well-being in California, the Bay Area, and in Los Angeles County steadily improved over this time period. (2) Girls had an advantage over boys in overall well-being throughout the period under study. (3) But compared to girls, boys made much more progress in overall well-being during these years. (4) All four racial and ethnic groups – African American, Asian, Latino, and Caucasian – showed improvement in their well-being. (5) Nonetheless, Disparity Well-Being Indices show that gaps in well-being among racial/ethnic groups persisted over time. (6) Gender and race/ethnic groups generally showed similar trends over time across most of the well-being domains. (7) The projections of child poverty indicate increasing poverty rates from 2007 to 2010 and then declines to 2012.

**Key Words:** child well-being; California; San Francisco; Los Angeles County; gender well-being disparities; race/ethnic well-being disparities

## I. INTRODUCTION

How has the overall well-being of children and youths in the State of California, greater San Francisco Bay Area (hereafter referred to as the Bay Area) and Los Angeles County changed over time? Specifically, what were the changes from 1995 to 2007? Did well-being converge or diverge between boys and girls and among different racial and ethnic groups? How did particular dimensions or domains of well-being change? How do changes in the well-being of children and youths in the State of California compare to changes in the well-being of children and youths in Los Angeles County or the Bay Area? What does the recent economic downturn have to do with child and youth well-being in the future? These are complex questions for which there can be many answers and approaches to analysis.

The social indicators concept and social indicator methodology are a response to such questions. The use of social indicators is rooted in a decades-old need to chart changes in the quality of life over time (Land, Lamb, Meadows, and Taylor 2007). The importance of this goal is directly related to social policy: only with consistent measurement of well-being and quality of life can a nation, state, or locality compare its current state of being to an historic equivalent. Such comparisons can facilitate changes in policy and governance that alter future trajectories of well-being (Moore, Brown, and Scarupa 2003).<sup>1</sup> Indicators that pertain to children and youths can be used by advocacy groups, policy makers, researchers, the media, and service providers to monitor the changing condition of children and set goals for improvements (Land 2000).

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<sup>1</sup> For a discussion of the need to monitor quality of life and recent developments therein, see the New Economics Foundation (2009) document *National Accounts of Well-Being*, <http://www.neweconomics.org/gen/uploads/iglzyk45xj2jksb01c14fvq424012009010050.pdf>

To effectively address this need, it is necessary to develop statistical measures of a variety of specific indicators that cover several domains or areas of the lives of children. In addition, it is useful to combine the individual indicators into composite or summary indicators that tell us something about the statuses of children on average and overall and how these are changing over time. For decades, the use of *composite* or *summary indicators* has been instrumental in monitoring what is happening to the economy (e.g., the Dow Jones Industrial Average, the Consumer Price Index, the Indices of Leading, Coincident, and Lagging Economic Indicators). More recently, efforts have been devoted to the development of a broader range of composite quality-of-life indices (see Hagerty, Cummins, Ferriss, Land, Michalos, Peterson, Sharpe, Sirgy, and Vogel 2001, for a review).

As an example of this set of broader quality-of-life indices, Land, Lamb, and Mustillo (2001) and Land, Lamb, Meadows, and Taylor (2007) developed evidence-based composite social indicators to assess the social well-being of children and youths and changes therein over recent decades in the United States. The main overall composite indicator in this work – the *Child and Youth Well-Being Index (CWI)* – tracks changes in some 28 Key Indicators of the quality of life of children for the U.S. as a whole. CWI-type composite indicators have also been applied to the nation, state, or local levels and to specific sub-populations such as race/ethnic (see Lamb, Land, Meadows, and Traylor 2005; Lee, Lamb, and Land 2009) and gender groups (see Meadows, Land, and Lamb 2005).<sup>2</sup>

In the present study, we focus on trends, changes and projections for child and youth well-being in the State of California, the Bay Area, and Los Angeles County by constructing CWIs and measuring well-being changes in these areas in a comparable way to the national CWI.

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<sup>2</sup> A more detailed description of the CWI and the presentation of trends in the composite index as well as the summary index for age groups and race/ethnic groups can be found in the CWI website (<http://www.soc.duke.edu/~cwi/>).

More specifically, in addition to updating our previous study of levels and trends in child and youth well-being in the Bay Area and California from 1995 to 2005 (Lee, Lamb, and Land 2009), the present study includes Los Angeles County, which facilitates comparisons of two major metropolitan areas in California with each other and the state as a whole. In addition, this report presents results on overall and gender- and race/ethnic-specific CWI trends for the State of California, the Bay Area, and Los Angeles County from 1995 to 2007.<sup>3</sup>

During the 2007-2008 years, the United States experienced a financial and banking crisis that mushroomed into a severe downturn in the economy with substantial increases in unemployment in 2009 that likely will continue into 2010. This makes salient the question: What will be the impacts of the current period of financial crisis, rising unemployment, and economic recession be on child poverty? Can these impacts be anticipated today, well before the corresponding official statistics are compiled and released some four or five years from now? Using statistical projections, expected impacts of the recession on child and youth poverty from 2008 to 2012 will be charted and described.

Finally, it is noteworthy to mention that the main focus of this study is to track and describe these trends, changes, and projections, rather than to identify and explain the forces behind them.

The paper is organized as follows: In the next section, methods and procedures of constructing the indices are discussed. Overall composite and domain-specific indices are then described with figures for the State of California, Los Angeles County and the Bay Area before cross-group comparisons and the results from projections are presented. The paper concludes with a summary of the main findings.

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<sup>3</sup> Detailed analyses also are available on request from the authors for each of the six counties of the Bay Area (Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara).

## II. DATA AND METHODS

### Data Selection, Imputation and Smoothing

The construction of the Child and Youth Well-Being Indices for this project began with a review of more than 250 child and youth-related indicators acquired from the Kidsdata.org database, which at the time focused only on the San Francisco Bay Area. The vast majority of these indicators are available for only one or two years. A few are in the form of statistical time series with repeated measurements over several years. The earliest year for most of the indicator time series is 1997 and most end in 2003, while a few date back to earlier years and/or extend up to 2007. We set 1995 as the target base year and our goal was to track the trends up to 2007 (or 2006 when 2007 data were not available). We then *selected indicators* whose time series started as late as 1997 and ended at least 2003 *and* had at least three data points over the period.

We identified 16 Key Indicators that met these selection criteria. Table 1 (at the end of this report) contains a list of the Key Indicators, gives brief definitions of each, identifies the age groups on which they are defined, and indicates whether or not data on the indicators used herein can be disaggregated by sex and race/ethnicity.<sup>4</sup> Numerical values for these Key Indicators are based on data from general population surveys conducted by the Census Bureau and the State of California, and Vital Statistics reports to the state and the National Center for Health Statistics. The selected Key Indicators either measure well-being outcomes or are surrogates thereof. The *focal age groups* for the Key Indicators are the childhood and adolescent ages, generally

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<sup>4</sup> As Land, Lamb, and Mustillo (2001) showed, conclusions about trends in child well-being can depend on the specific indicators and domains used in the composition of the summary indices. Thus, this study based on 16 indicators has bounded generalizability in that its conclusions could be altered when data for a more comprehensive set of indicators become available for study. Our prior experience gives us confidence, however, that the indicators and methodology used herein can capture major trends up or down in child well-being.

bounded by ages 0 to 17 at last birthday. In the case of the child/youth death rate and the youth suicide rate, the upper age bound extends to 24. This is greater than age 18, but the larger age bound is constrained by available data. In addition, a principal focus of this study is on trends over time, and the temporal trend for the larger age group is similar to what would be observed if it were possible to include data only up to age 18.

Because the Key Indicators in Table 1 come from extant sample survey and vital statistics data sources, most of them are focused on the incidence or prevalence of ill-being outcomes as contrasted to positive well-being outcomes. The field of child well-being studies has taken note of this and efforts are under way to create data series on direct measures of children's satisfaction, friendships, or quality of family relations. This is also happening for data sources on child well-being in California, the Bay Area, and Los Angeles County. Unfortunately, these recent efforts typically have only produced measurements at one or two time points, and the focus of the present study is on changes in well-being from 1995 to 2007. In addition, it should be noted that the Land et al. (2007) study found a generally positive relationship between changes in the U.S. national CWI and those of a continuous series of sample survey data on responses of High School Seniors (typically age 17) to a life satisfaction question. The present study builds on the national CWI studies, using a similar methodology for studying changes over time, and makes comparisons of the trends among the State of California, the Bay Area, and Los Angeles County with those of the U.S. as a whole. The trends reported herein, while not based on as many indicators of positive well-being as desirable, likely are indicative generally of trends that would be identified with more comprehensive data series.

Since all of the Key Indicators did not have complete time series data points between 1995 and 2007, missing data were *imputed* at various points of the time series. For the Key

Indicators for which statewide values were available but not for the counties, values for the counties were calculated using the ratio of the rates for the counties to the state in one or more preceding years (e.g., the rate of children in poverty, and juvenile felony drug and alcohol arrest rate). For years when both state and county-wide values were not available, missing values were imputed by averaging the values of two adjacent years (e.g., children with access to child care).

Some of the Key Indicator series were subjected to *data smoothing* procedures in order to extract underlying trends independently from stochastic variation from year to year. Such “statistical noise” is particularly large in less populated counties with relatively small numbers of children and youths, and in data disaggregated by gender and race/ethnicity. After careful examination of the movement of each Key Indicator, the whole or partial time series were smoothed by taking three-year moving averages for the counties for which stochastic variation in the data was severe. When the base year rate also showed evidence of being unduly influenced by stochastic variation – that is, the base year value is either too low or too high compared to the overall trend – the base year value was adjusted by taking an average with subsequent year values. Where necessary, data smoothing was conducted more than one time (e.g., self-inflicted injury hospitalization rate).<sup>5</sup>

*Each Key Indicator then was assigned to one of five domains of child and youth well-being: family economic well-being, health, safety/behavioral concerns, educational attainment, and emotional well-being (Table 1). As Land et al. (2001) note, these domains – or similar domains with different names – have been well-established in numerous subjective well-being studies over the past three decades. The literature reviews by Cummins (1996; 1997) of 27 subjective well-being studies found, for example, that there is a relative small number of*

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<sup>5</sup> For details on the imputation and smoothing procedures applied, Excel datasheets with all data series and notes on their construction are available from the authors on request.

domains that comprise most of the subject areas that have been studied, such as material/economic well-being, productive activity, health, safety, place in community, intimacy, and emotional well-being. These domains of well-being recur again and again whether the study uses informal focus group discussions or sample survey questionnaires, and for population groups ranging from national sample surveys to clinical samples, and across age groups from children to adults.

Calculating domain-specific indices allows us to evaluate the trends by the areas of concern and disaggregate the effect of each domain on composite indices. Some Key Indicators tap into phenomena that could be categorized into more than one well-being domain, but for purposes of composite index construction, they were counted only once in the domain to which they were assigned. Compared with the national CWI's seven domains (Land et al. 2001, 2007), our five domains do not include the social relationships and community connectedness domains due to the unavailability of relevant indicators. For the same reason, the emotional well-being domain does not include indicators relating to spiritual well-being unlike the emotional/spiritual domain in the original CWI.<sup>6</sup>

### **Index Calculation Procedures**

To calculate the CWI, each of the 16 time series of the Key Indicators was indexed by the base year (1995). The base year value of the indicator was assigned a value of 100 and subsequent values of the indicator were taken as percentage changes in the index from the base year value. The directions of the indicators are oriented so that a value greater than 100 in

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<sup>6</sup> For details on the definitions, units, and data sources of the Key Indicators used in this study, the Kidsdata.org website (<http://www.kidsdata.org/>) may be consulted.

subsequent years means that the social condition measured has improved and a value less than 100 indicates the well-being measured has deteriorated.

The 16 indexed Key Indicator time series were grouped into the five domains of well-being, and domain-specific CWI values were computed for each year by *equal weighting*. Statistical properties of the equal weighting procedure for the construction of composite quality of life indices were studied by Hagerty and Land (2007), who showed, using a mathematical model of composite indices in the presence of heterogeneous importance ratings among individuals for the component indicators, that the equal weighting method is what is termed a *minimax estimator* in statistics, in the sense that this method minimizes the likelihood of extreme or maximal disagreements among individuals on the composite index. In addition, Hagerty and Land stated and proved mathematically a number of theorems that define the conditions under which there will be agreement or disagreement among individuals with respect to rankings of units of analysis (e.g., sub-population groups, regions, countries) by quality of life in cross-section studies as well as on the direction of temporal changes in quality of life in over-time studies. They also reported on the results of a number of simulation studies of alternative weighting schemes and showed that intuition greatly underestimates the extent of agreement on rankings of units by quality of life in cross-section studies as well as on the direction of temporal changes in quality of life in over-time studies. Given the existence of this study, we do not engage in further methodological analyses in the present article. Rather, we adopt the equal weighting strategy and focus on the resulting substantive findings.

The annual *domain-specific CWI values* were computed until 2006 or 2007, depending on whether the last year data are available for the entire component indicators within the domain. As a result, indices for the economic well-being and safety/behavioral concerns domains were

computed to 2007, while the other three domain-specific indices end in 2006. The five domain-specific indices were then aggregated into an equally weighted composite CWI for each year.

Since only two domain-specific indices were available for 2007, the composite CWI for each county was calculated between 1995 and 2006. For the Bay area, these composite indices for each county were then grouped into an overall composite CWI value. Domain-specific indices for the Bay Area were also computed by equally averaging the corresponding county-specific domain indices. The Los Angeles County and statewide composite CWIs were also calculated in the same way for comparison with the Bay Area.

*Gender- and race/ethnic-specific CWIs* were computed following the same procedures as the overall CWI. Composite indices were calculated separately for males and females. Also, four race/ethnic groups were examined: African American, Asian, Latino, and Caucasian. Since 2000, health-related data in California have distinguished Pacific Islanders from Asians and multiracial groups from Caucasians. Any inconsistency before and after the year 2000 due to these categorical changes was not adjusted due to lack of available data. Thus, Asian and Caucasians categories from 1995 to 1999 include, respectively, Pacific Islanders and multiracial groups.

The limited availability of group-specific time series data necessitated the exclusion of some of the Key Indicators in calculating group-specific CWIs by gender or racial/ethnic groups (e.g., juvenile felony drug and alcohol arrest rate and children with access to child care) or the replacement of group-specific indices with overall indices (e.g., juvenile felony rate for race/ethnic CWIs). Both indicators in the economic well-being domains lack data disaggregated by gender or race/ethnicity, thus overall domain-specific indices were used in computing group-specific CWIs. Group-specific values fluctuate more than overall population values since the

former have much smaller denominators than the latter, leading us to apply more extensive smoothing procedures.

Disparity in child and youth well-being among gender and race/ethnic groups was examined using the methodology developed by Hernandez and Macartney (2008), who showed how to calculate a *Disparity Index* in two steps. First, the percentage difference between each subgroup and the total population is computed, such as girls compared with the total population and boys compared with the total population. The overall population value of each indicator is assigned a value of 100 for each year, and a subgroup-specific value for the year is taken as the percentage of the population value. For example, if the value for girls is 10 percent higher in 1995 than for the population as a whole, a value of 110 would be assigned for that year to show the gap in well-being between girls and the total population. Likewise, a value of 95 would be given if the value for boys is 5 percent lower than for the population. A race/ethnic subgroup-specific value for each year was also calculated in the same way as a percentage of the total population value. For instance, if the value for Latinos is 8 percent higher in 2007 than for the population as a whole, a value of 108 would be given for Latinos for that year. Similarly, a value of 90 would be assigned to Caucasians if their value is 10 percent lower than for the total population. Second, the difference among subgroups in the indexed values was calculated as the Disparity Index over time. For gender, girls' indexed value was used as the base, and boys' values were compared to those of girls. A positive Disparity Index indicates girls do better or have an advantage over boys, and a negative Disparity Index indicates boys do better or have an advantage over girls. In the example above, the calculated gender Disparity Index of 15 points, means girls have a 15-point advantage over boys.

For race/ethnicity, we used Caucasians as the reference group for cross-subgroup comparisons. In other words, African American, Asian, and Latino children were each compared to their Caucasian peers. A positive Latino-Caucasian Disparity Index, for example, means Latino children do better or have an advantage over Caucasian children. In the aforementioned case, the computed Latino-Caucasian Disparity CWI, 18 points, indicates Latinos do better than their Caucasian peers by that amount.

As with the composite CWI, Disparity CWIs for each Key Indicator were aggregated into domain-specific Disparity Indices, and the composite Disparity CWI was calculated by averaging the equally-weighted domain Disparity Indices. To extract actual trends, the indices were subjected to data smoothing procedures with three-year moving averages. In both gender- and race/ethnic-specific Disparity CWIs, only three domains – health, educational attainment, and emotional well-being – were considered due to the lack of group-specific data for the economic well-being and safety/behavioral concerns domains.

## **Projections Procedures**

To anticipate the effects of the economic downturn on child well-being, we used trends in unemployment in California to project economic trends, in particular child poverty rates, in the State of California, the Bay Area, and Los Angeles County.<sup>7</sup> Information was available on current and forecasted unemployment trends for the State of California. The patterning of the projected unemployment trends was used to project California child poverty trends to the year 2012 using the share-of-growth procedure.<sup>8</sup> The average annual difference between California's

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<sup>7</sup> The other economic indicator, housing affordability, displays trends that are more variable and affected by a number of factors besides family income. Accordingly, we did not develop projections for this indicator.

<sup>8</sup> For details on the calculation procedures and accompanying Excel file on projection calculations, please contact the authors.

unemployment rate and child poverty rate for the years 1993 to 2008 was used with the forecasted unemployment rates to project the child poverty rate for the years 2009 to 2012 for the State of California.

As there were no official projections of unemployment for the Bay Area or Los Angeles County, a conventional method for demographic projections for local areas within states was used to project child poverty rates in those areas. Specifically, a constant-share projection method (Smith, Tayman, and Swanson 2001) was used in which the average difference between the annual child poverty trends of California and a region (e.g., the Bay Area) was used to project that region's trends for 2008 to 2012. To check for possible historical period effects due to periods of economic change, four time periods of region-California differences were used to project the regional child poverty trends: 1993-2007 ("overall"); 1993-1997; 1998-2002; and 2003-2007.

### **III. RESULTS**

This section presents composite and domain-specific indices for the State of California, San Francisco Bay Area, and Los Angeles County. First, trends in the overall well-being indices are compared among California, the Bay Area, Los Angeles County, and the United States as a whole. Second, trends in domain-specific well-being indices are presented. Third, gender- and race/ethnic-specific composite and disparity well-being indices are discussed.<sup>9</sup> Fourth, projections of child poverty rates are presented.

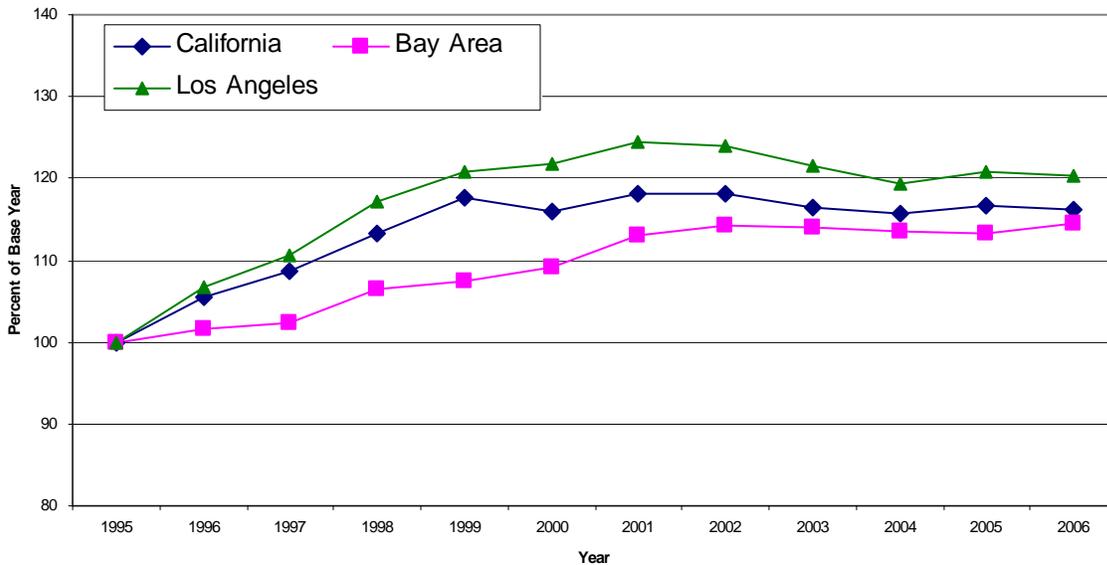
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<sup>9</sup> Results in this paper are largely presented graphically. However, numerical data for each Key Indicator, domain-specific, and composite index are available from the authors on request.

## **Trends and Comparisons of Child and Youth Well-Being in the State of California, the Bay Area, Los Angeles County, and the United States as a Whole**

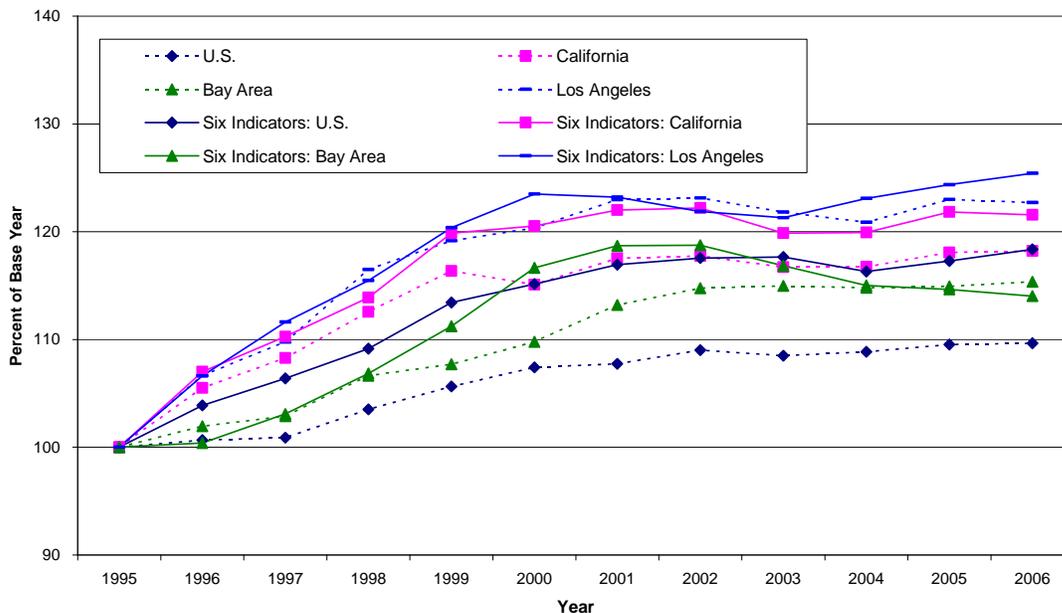
Figure 1 shows trends in the overall composite Child and Youth Well-Being Index for the State of California, the Bay Area, and Los Angeles County from 1995 to 2006. In California the value of the CWI steadily increased from 1995, to 116.2 in 2006 indicating the overall child and youth well-being improved by 16.2 percent from 1995 to 2006. Likewise, the Bay Area and Los Angeles County also show improvement in well-being over these years. The overall composite CWI for the Bay Area and Los Angeles County increased to 114.4 and 120.4, respectively, in 2006 from their bases in 1995. Compared to the other regions, the Bay Area underperformed throughout the period in terms of *the rate of improvement* as measured by the CWI, but the gaps of improvement rates narrowed moderately in recent years. This does not mean that child and youth well-being in the Bay Area was worse than the State of California or Los Angeles County over the period, but rather the latter two regions made greater improvements in child well-being as compared to their 1995 rates. This is largely due to the *higher* levels of well-being in the Key Indicators in the 1995 base year in the Bay Area counties and the fact that improvements in most of the Key Indicators become more difficult to achieve at higher levels of well-being.

**Figure 1. Composite Child and Youth Well-Being Index, California, Bay Area and Los Angeles, 1995-2006**



Comparing these indexed trends with the national CWI is a bit difficult since, as stated above, there is a discrepancy in the composition of indicators between the two sets of analyses. Thus, we recalculated the national CWI with six of its 28 indicators that correspond most closely to the California, the Bay Area, and Los Angeles County indicators: children in poverty, infant mortality rate, infants born at low birth weight, child/youth death rate, teen birth rate, and youth suicide rate. Figure 2 shows the trends of the averages of those six indicators (solid lines) for the State of California, the Bay Area, Los Angeles County, and the U.S. as a whole. Note that indexed values in the calculation are equally-weighted averages of individual indicators, not of equally-weighted domain indices. For comparison, composite indices for the full set of indicators for each group (28 for the U.S. and 16 for California, the Bay Area, and Los Angeles County) are computed in the same way and plotted (dashed lines).

**Figure 2. Comparison of Child and Youth Well-Being Index, U.S., California, Bay Area and Los Angeles, 1995-2006**



Note: The U.S. index is equally weighted average of 28 indicators (Land et al. 2001,2007); Six-component averages for the U.S., the state of California, the Bay Area and Los Angeles are based on six indicators that closely match to the national CWI: children poverty, infant mortality rate, infants born at low birth weight, child/youth death rate, teen birth rate, and youth suicide rate.

Whether comparing the full or limited CWIs in California and the U.S., the state consistently improved at a higher rate than the nation. Using the full sets of indicators California’s rate of improvement was only 3.2 points higher than that of the United States. However, when only using the limited CWI, California’s 2006 rate of improvement is 8.6 points higher.

When limited to the small set of six Key Indicators, the Bay Area CWI for 2006 (114.0) is slightly lower than the Bay Area index for the full set of Key Indicators (115.4), whereas the opposite holds for the full and limited CWIs of Los Angeles County, the State of California and the U.S. as a whole, and the difference is greatest in the national CWI (118.4 vs. 109.6). With the limited set of indicators, the Bay Area CWI increased at a lower rate than the CWI of California as a whole (121.6), while the gap between the two in 2006 was wider for the six indicators than

for the entire set of indicators (7.6 points vs. 2.8 points). Likewise, the Bay Area CWI is consistently lower than the Los Angeles County CWI after 1995, while the gap tends to increase after 2002 and hits a high of 111.4 in 2006. In addition, the Bay Area did slightly worse than the United States as a whole (118.4) in terms of the rate of improvement in 2006. Only from 2000 to 2002 did the Bay Area CWI outperform the national CWI.<sup>10</sup>

In sum, child and youth well-being improved over the period of study in all three focal units of analysis – the State of California, the Bay Area, and Los Angeles County – at levels comparable to those of the United States as a whole. However, the Bay Area Index showed less improvement compared to the Los Angeles County and State of California Indices. Again, these measures of improvements should be interpreted relative to the higher levels of well-being in the Key Indicators in the 1995 base year in the Bay Area counties and the fact that improvements in most of the Key Indicators become more difficult to achieve at higher levels of well-being.

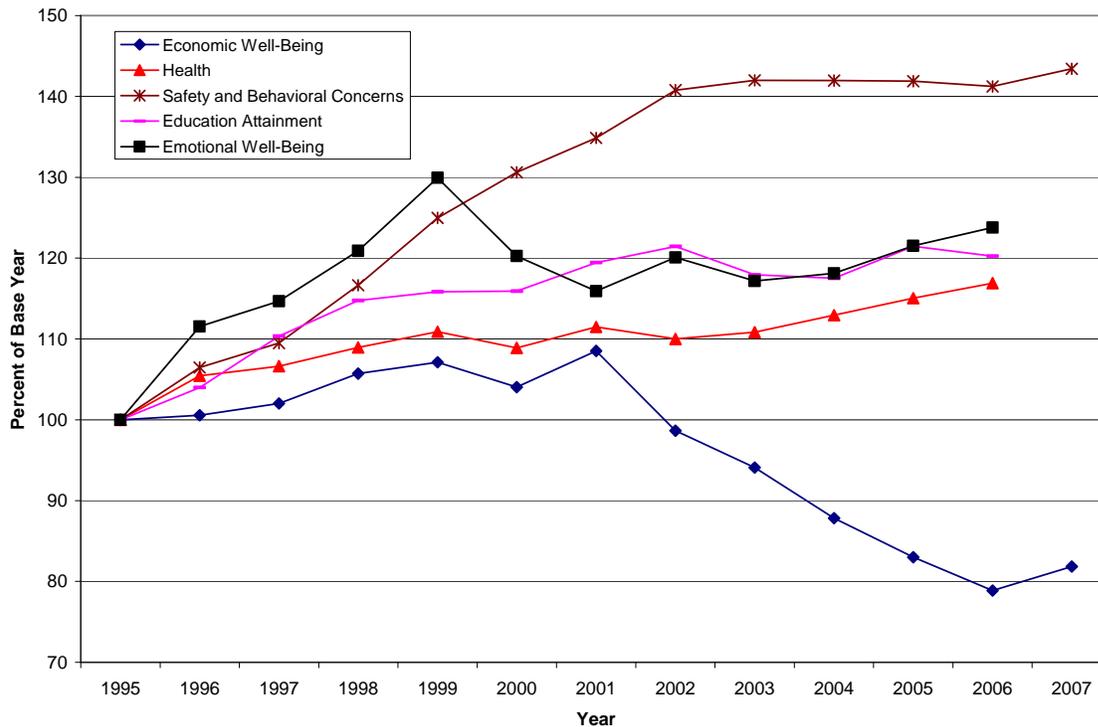
### **Trends in Child and Youth Well-Being by Domain**

The overall composite CWI for the State of California increased and for the years 1995 to 1999 the five domains each improved compared to 1995 (see Figure 3.1). The safety and behavioral concerns had the greatest improvement throughout the entire period of study, and health and educational attainment showed modest improvements. Whereas the economic well-being domain indicated a marked decline after 2001 to 20% below 1995 level in 2006. The emotional well-being domain increased from 1995 to 1999 after which time it fluctuated and showed a trend of improvement from 2003 to 2006.

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<sup>10</sup> The two sets of indices (each based on the full and limited set of indicators, as shown in Figure 2) trend quite similarly for each of the three groups, suggesting these six indicators are not peculiar in trends as compared to its full equivalent. However, the trends should be interpreted with caution, since they are based on a smaller set of indicators that lack any measure from the education domain.

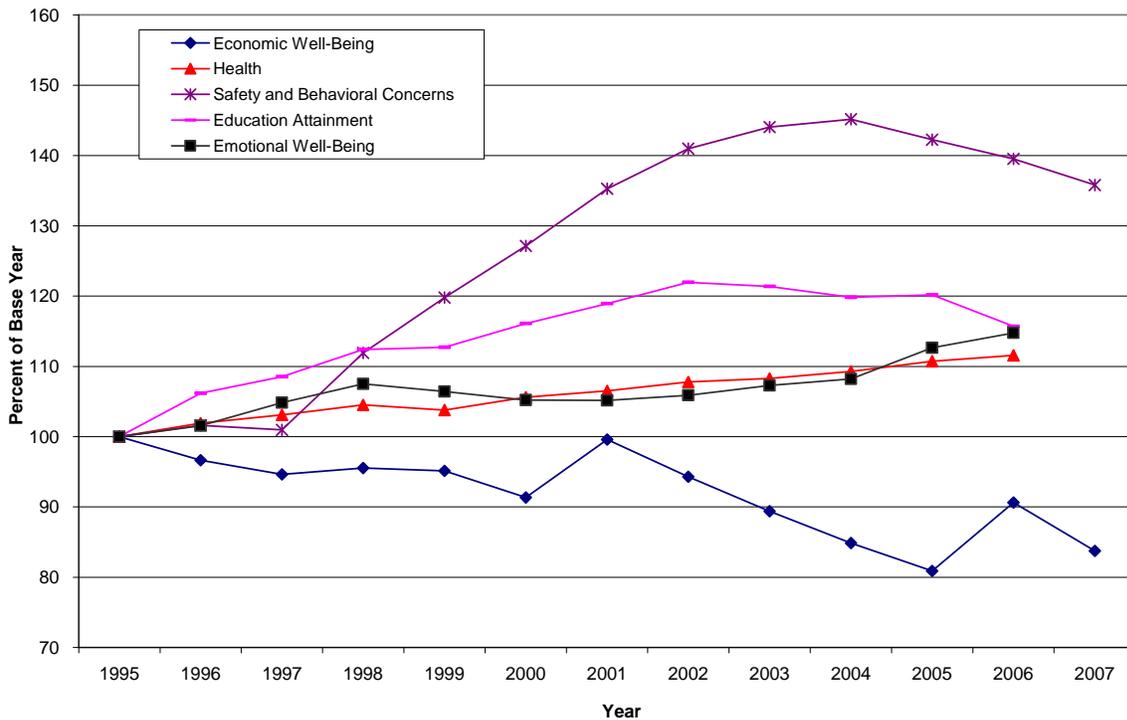
Figure 3.1. Domain-specific Summary Indices, California, 1995-2007



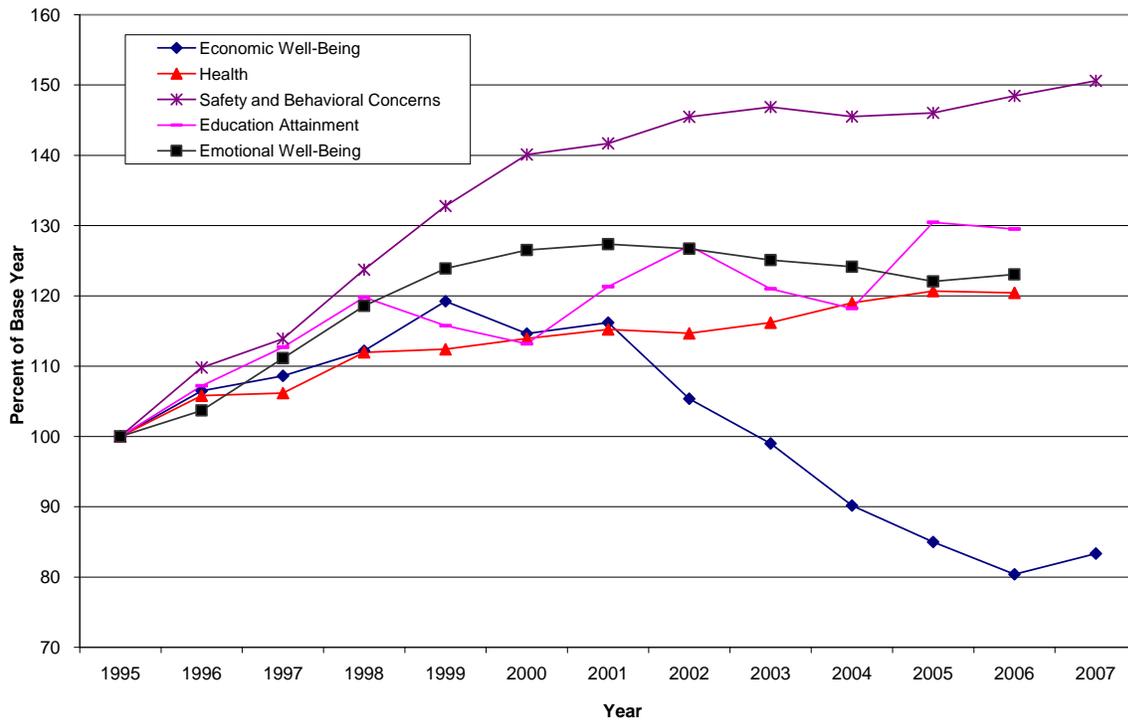
While the overall composite CWI for the Bay Area and Los Angeles County increased, the domain-specific indices moved quite differently from one another, as shown in Figure 3.2 and Figure 3.3, respectively. The safety and behavioral concerns domain dramatically improved for the Bay Area and this upward trend began after 1997, while the same domain shows a steady improvement for Los Angeles County from 1995. In contrast, there was a major decline in economic well-being for both regions, particularly after 2001, due to both increasing rates of children in poverty and decreasing rates of affordable housing during this period. Educational attainment in the Bay Area experienced most of its improvement between 1995 and 2002 and reached its peak at 122.0 in 2002. Afterwards, it began to deteriorate and only improved 15.7 percent in 2006 compared to its base in 1995. The trend of educational attainment for Los

Angeles County fluctuated but showed a steady increase to 29.5 percent in 2006. Emotional well-being for the Bay Area moderately improved (114.8 in 2006) except from 1999 to 2001, while its counterpart for Los Angeles County experienced a steady increase and reached its peak (127.4) in 2001, and then mildly decreased to 123.1 in 2006. Child and youth health for both the Bay Area and Los Angeles County steadily improved over time but shows the smallest rate of improvement among the indicators that showed improvements by 2006. In short, the rise of domain CWIs in safety and behavioral concerns, educational attainment, and emotional well-being largely accounted for the sustained increase of the composite CWI despite the overall decline of economic well-being in the Bay Area and Los Angeles County.

**Figure 3.2. Domain-specific Summary Indices, Bay Area, 1995-2007**



**Figure 3.3. Domain-specific Summary Indices, Los Angeles County, 1995-2007**



### Trends in Gender-Specific Child and Youth Well-Being

This section first examines disparities in the well-being of girls and boys in the Bay Area, Los Angeles County, and California, in terms of differences in levels of composite indices well-being, and then presents the degree to which each of their levels of well-being improved compared to 1995.

In Figure 4, Gender Disparity CWIs are presented for the Bay Area and Los Angeles County, and compared with California as a whole. The positive values shown suggest that girls do better than boys in the three regions of analysis over the entire period. The Gender Disparity CWI in the State of California shows a consistent advantage by girls over boys from 1995 to

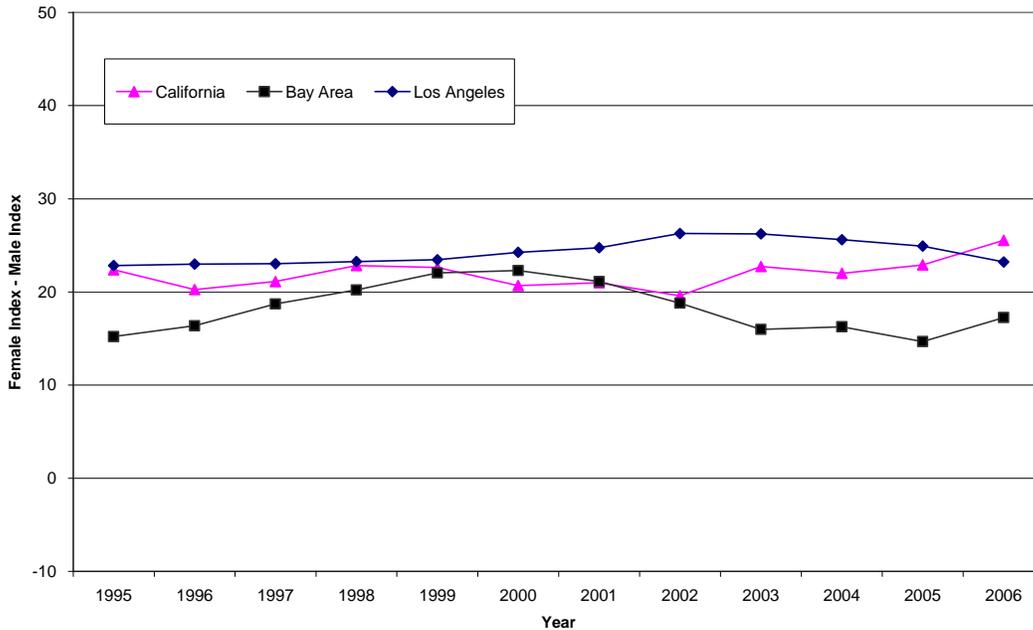
2003, by between 19.6 and 22.7 points over that period, whereas a recent increase from 2004 is salient and the gap reaches its peak at 25.5 points in 2006.

Girls in the Bay Area hold a 15.2 point advantage over boys for the 1995 base year, and their advantage increased up to 22.3 points in 2000, suggesting a widening gender gap. After 2000, however, the gap became narrower up to a point where the Disparity CWI in 2006, 17.3 points, is slightly above the 1995 level, though the gap shows a bit of fluctuation in the last three years. Girls in Los Angeles County had much greater advantage (22.8 points) than their peers in the Bay Area for the 1995 base year, the gap narrows in the late 1990s. The Gender Disparity gap increases for Los Angeles County after 2000, which indicates greater disparities between boys and girls. However, the gap declines slightly after 2003. Females' enduring advantage in health and better educational attainment in recent years relative to their male peers account for the persistent gender gap in well-being in the State of California, the Bay Area, and Los Angeles County, although their advantage in emotional well-being reversed in the Bay Area after 2003<sup>11</sup>.

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<sup>11</sup> For details on the exact values of gender specific CWI, Excel datasheets with all data series and notes on their construction are available from the authors on request.

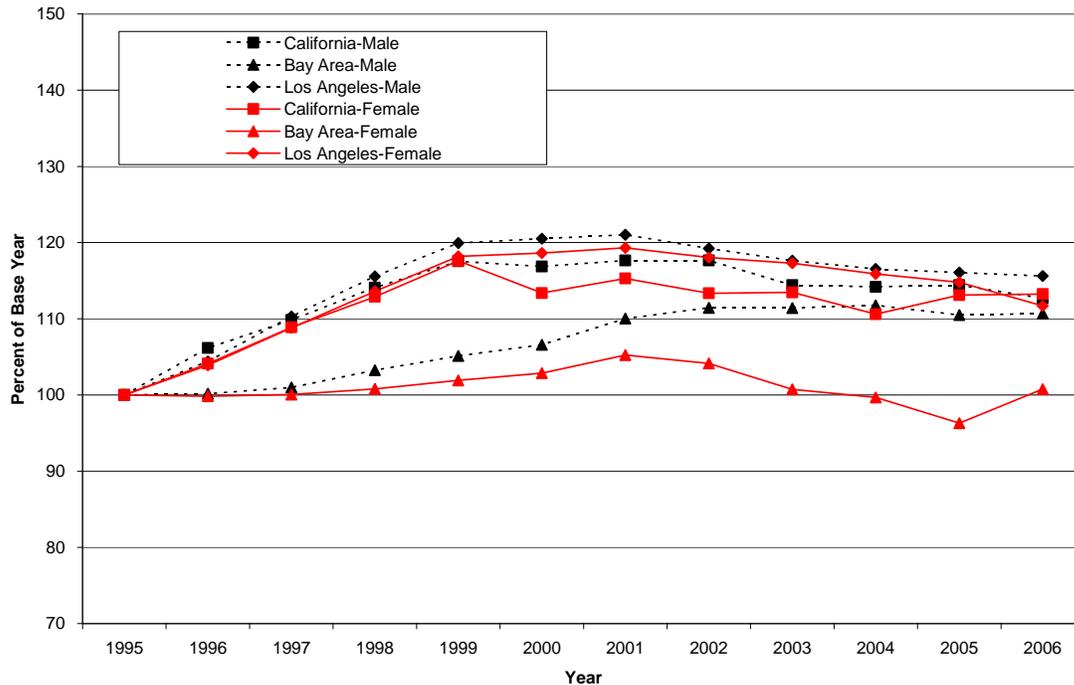
**Figure 4. Gender Disparity of Child and Youth Well-Being, California, Bay Area and Los Angeles, 1995-2006**



Note: economic well-being and safety/behavioral concerns domains are not included because of lack of gender-specific data

Turning next to changes in overall well-being over the decade, Figure 5 shows composite child and youth well-being indices for males (dashed lines) and females (solid lines) in California, the Bay Area, and Los Angeles County. There is a significant difference between boys and girls in terms of well-being improvement in the Bay Area. The composite CWI for males steadily increases from 1995 to 2004, up by 11.8 percent, and then decreases a little to 10.7 percent in 2006. In contrast, Bay Area girls show virtually no progress in well-being during the period. The CWI for females increased until 2001 by 5.2 percent but ended up with only a 0.8 percent increase in 2006 compared with 1995 after a four-year decline and slight bounce up in 2006. It is striking that CWI trends diverged between the Bay Area girls and boys after 2001, although the much more moderate improvement for females is not totally unexpected given the generally higher levels of females' well-being as described above.

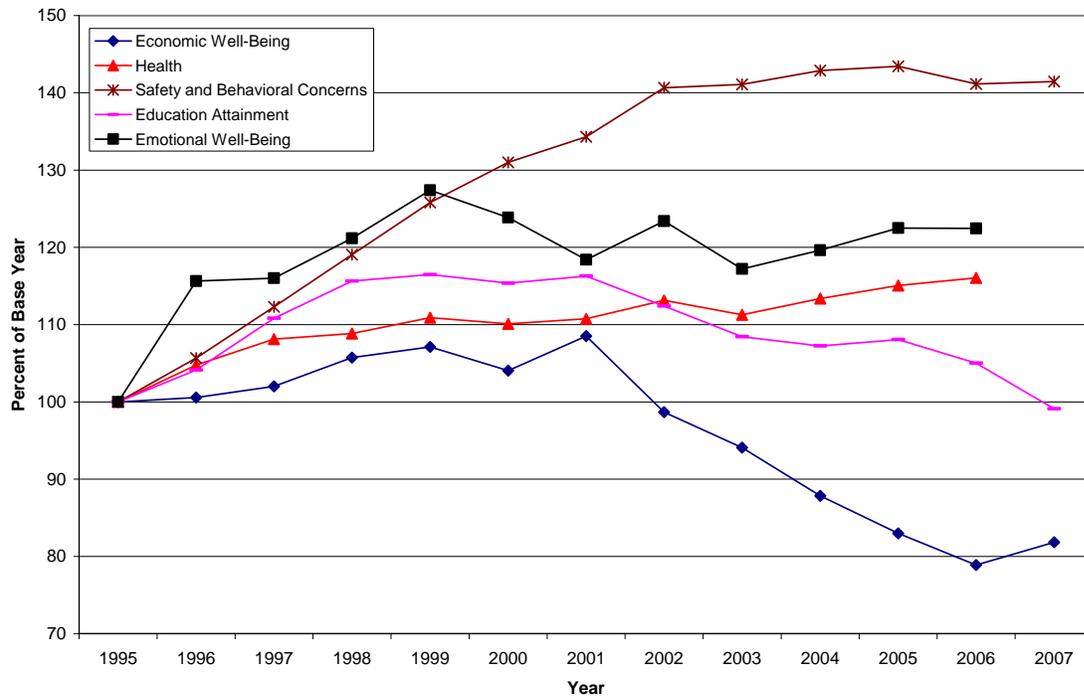
**Figure 5. Composite Child and Youth Well-Being Index by Gender, California, Bay Area and Los Angeles, 1995-2006**



Enhancement in well-being in the State of California and Los Angeles County occurred at a much steadier rate for both males and females compared to the Bay Area. The higher rate of improvement occurred between 1995 and 1999 in the State of California, and between 1995 and 2001 for Los Angeles County, for both males and females, and declined afterwards. Meanwhile, in the Bay Area, the rate of improvement was quite steady over the entire period for boys. It is striking that the gaps in improvement of girls and boys in both California and Los Angeles County were smaller than that in the Bay Area. For Los Angeles County and the State of California, the improvements held by boys were, respectively, 3.9 and 0.5 points higher than those of their female peers in 2006, while boys' CWI was 9.9 percentage points higher than that of girls in the Bay Area for that year.

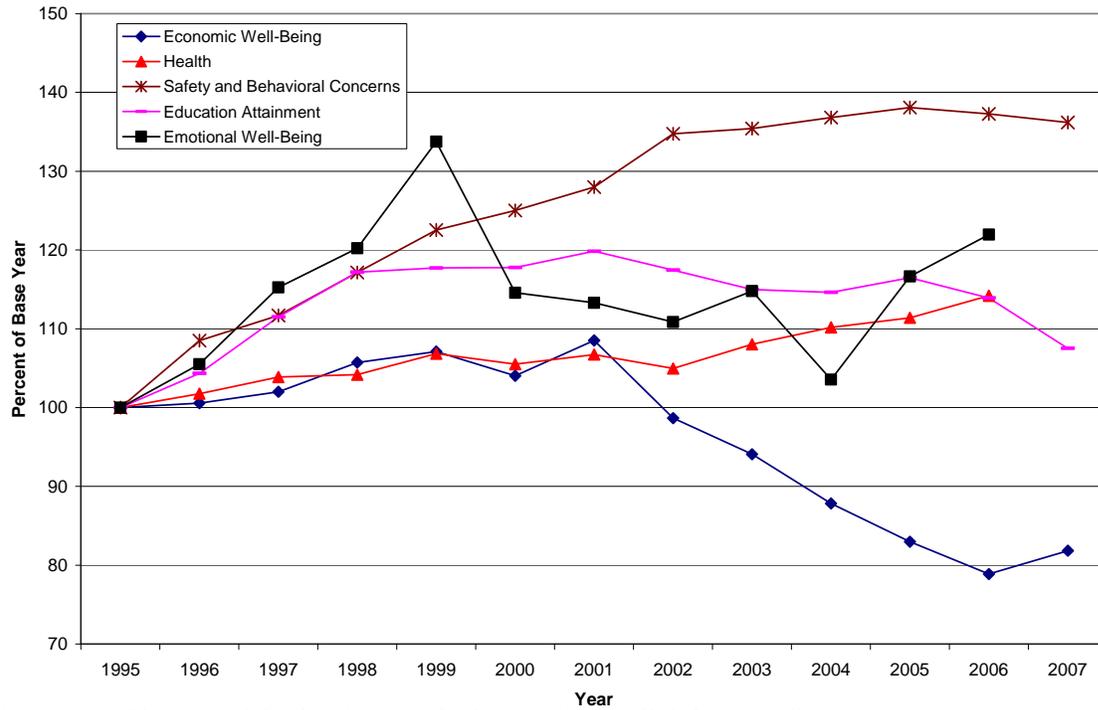
The relatively small gap between the well-being of boys and girls in the State of California is due to the similarity of trends in the separate domains of child well-being, as indicated in Figures 6.1 and 6.2 for boys and girls, respectively. Both boys and girls in the State of California showed great improvement in the safety and behavioral concerns. The emotional well-being indicator fluctuated for both genders over the period and educational attainment declined a bit more for boys compared with girls.

**Figure 6.1. Domain-Specific Summary Indices, Males, California, 1995-2007**



Note: economic well-being domain indices for both males and females are used because of lack of gender-specific data

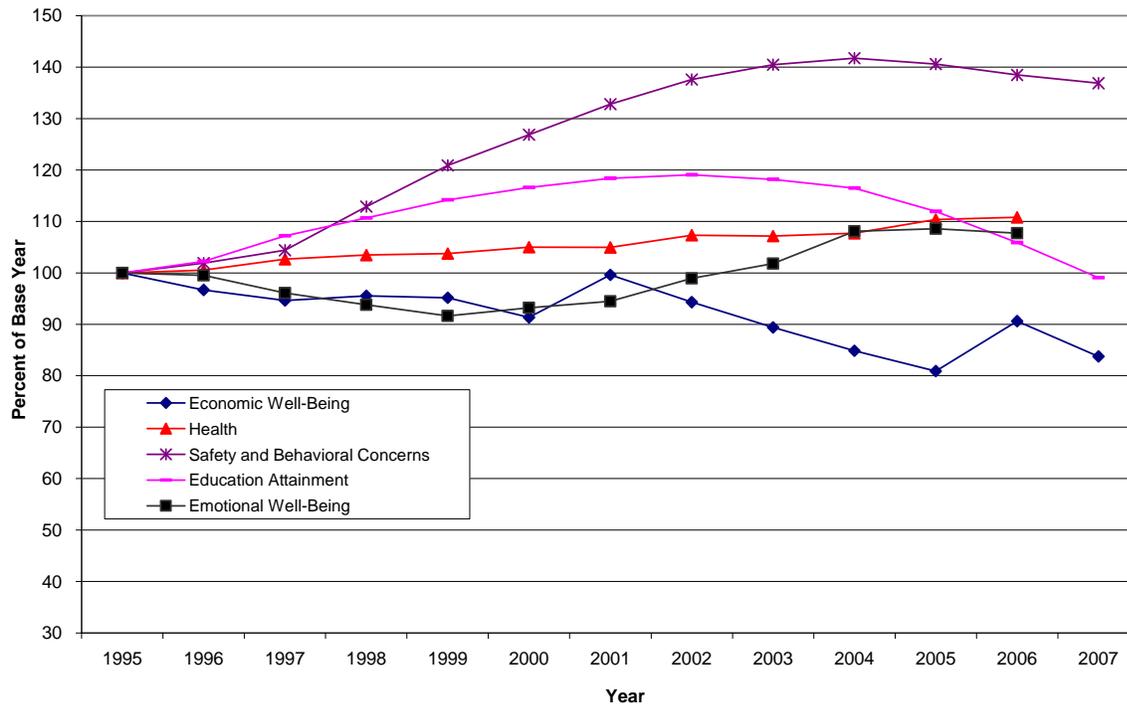
**Figure 6.2. Domain-specific Summary Indices, Females, California, 1995-2007**



Note: economic well-being domain indices for both males and females are used because of lack of gender-specific data

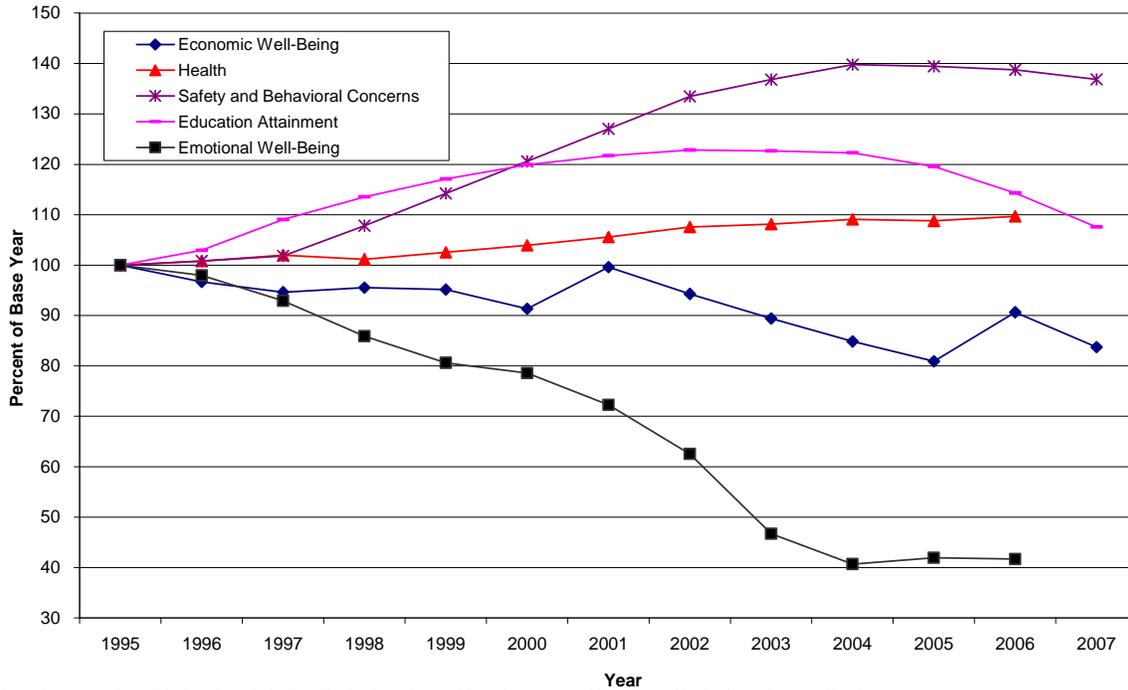
The improvement gaps between boys and girls in the Bay Area are mostly due to diverging outcomes in the emotional well-being domain. While boys in the Bay Area recorded a level of well-being 7.7 percent higher in that domain in 2006 than 1995, their female peers' emotional well-being declined by 49.5 percent over the period under study. As shown, in Figures 6.3 (males) and 6.4 (females), the males' emotional well-being index bounced back substantially from the lowest point in 1999, but the females' emotional well-being continued to drop during the entire period.

**Figure 6.3. Domain-specific Summary Indices, Males, Bay Area, 1995-2007**



Note: economic well-being domain indices for both males and females are used because of lack of gender-specific data

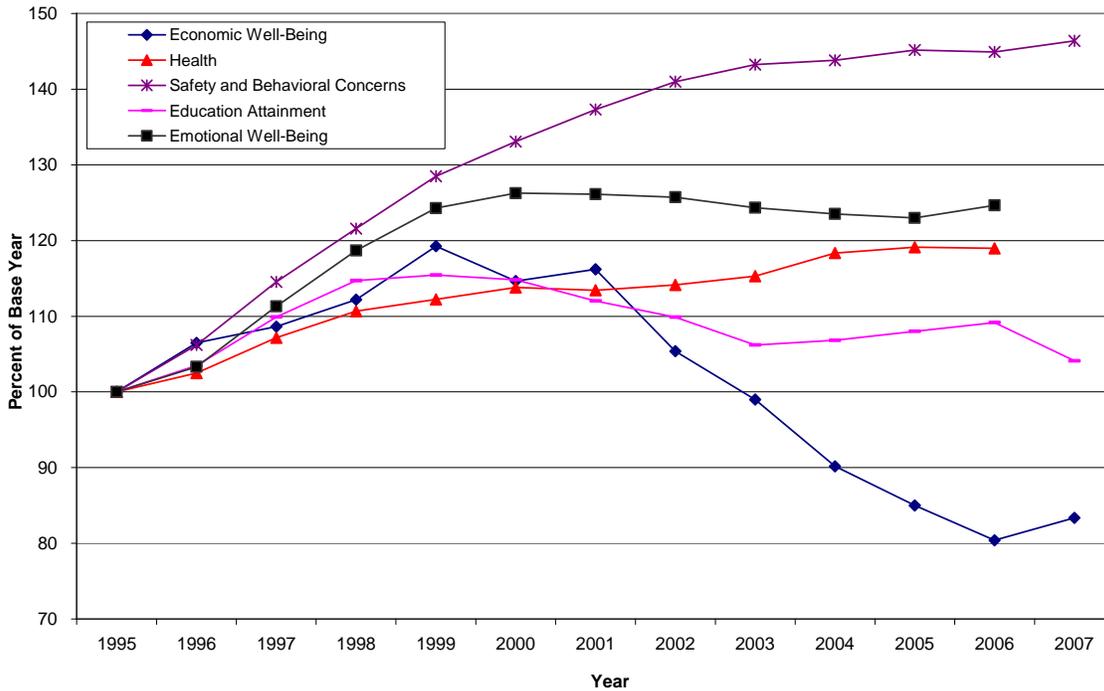
**Figure 6.4. Domain-specific Summary Indices, Females, Bay Area, 1995-2007**



Note: 1. economic well-being domain indices for both males and females are used because of lack of gender-specific data;  
 2. data smoothing is conducted for *emotional well-being* domain from 2004 to 2007.

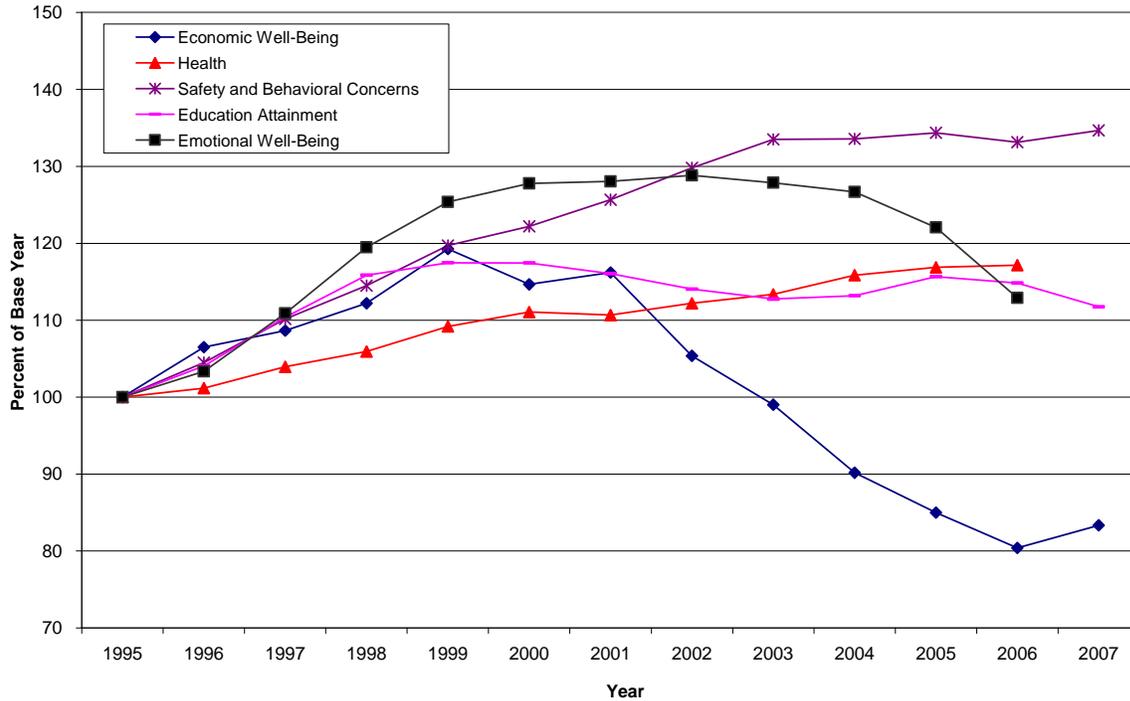
In Figures 6.5 (males) and 6.6 (females), the improvements of boys in Los Angeles County in the emotional well-being domain (124.7 in 2006) and the safety and behavioral concerns domain (146.4 in 2007) together contributed to their moderate advantage over their female peers (112.9 for the emotional well-being domain in 2006 and 134.7 for the safety and behavioral concerns domain in 2007). Whereas the gender-specific differences of the improvements in the health domain are trivial in both the Bay Area and Los Angeles County. Girls had greater improvements in the educational attainment domain (107.6 for the Bay Area and 111.7 for Los Angeles County) than their male peers (99.0 for the Bay Area and 104.1 for Los Angeles County) in 2007.

**Figure 6.5. Domain-specific Summary Indices, Males, Los Angeles, 1995-2007**



Note: economic well-being domain indices for both males and females are used because of lack of gender-specific data

**Figure 6.6. Domain-specific Summary Indices, Females, Los Angeles, 1995-2007**

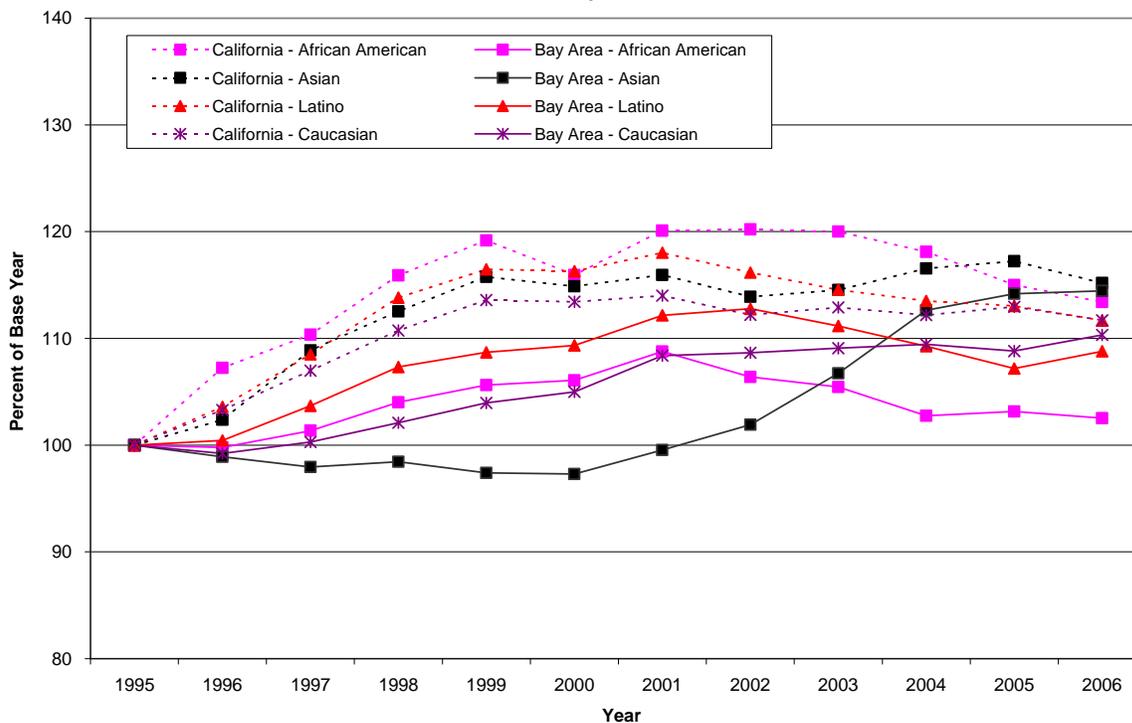


Note: economic well-being domain indices for both males and females are used because of lack of gender-specific data.

## Trends in Race/Ethnic-Specific Child and Youth Well-Being

Figure 7.1 presents composite child and youth well-being indices of each of four race and ethnic groups – African Americans, Asians, Latinos, and Caucasians – in California compared to the Bay Area. While all groups show some progress in children’s well-being over the period of study, the rate of improvement varies among the groups. In the Bay Area, Asians recorded the highest level of CWIs in 2006, 114.5, which is higher than Latinos (108.8), Caucasians (110.3) and African Americans (102.5). African Americans had an upward trend as Latinos and Caucasians did until 2001, but their well-being deteriorated after that year. Initially, Asians fell behind in terms of the rate of progress, but substantial improvement, made from 2000 to 2006, allowed them to quickly catch up and surpass the rest.

**Figure 7.1. Composite Child and Youth Well-Being Index by Race/Ethnicity, California and Bay Area, 1995-2006**



The Bay Area fell short of California as a whole in terms of the rate of race/ethnic-specific well-being improvement. As Figure 7.1 indicates, the well-being of Bay Area children (solid lines) improved less than their racial/ethnic peers across the state (dashed lines). The gap in CWIs in 2006 was largest for African Americans (-10.9) and smallest for Asian children (-0.7). In fact, groups other than African Americans successfully narrowed the gap with California after 2001, while the gap increased for African American children.

Figure 7.2 reveals very similar trends of race/ethnic specific CWIs between California and Los Angeles County. By and large, the CWIs for California and Los Angeles show steady increase until 1999 and then either level off or decline somewhat in subsequent years. A comparison of Figures 7.1 and 7.2 indicates the greater rates of improvement in child and youth well-being shared by the State of California and Los Angeles County compared with the Bay Area.

**Figure 7.2. Composite Child and Youth Well-Being Index by Race/Ethnicity, California and Los Angeles, 1995-2006**

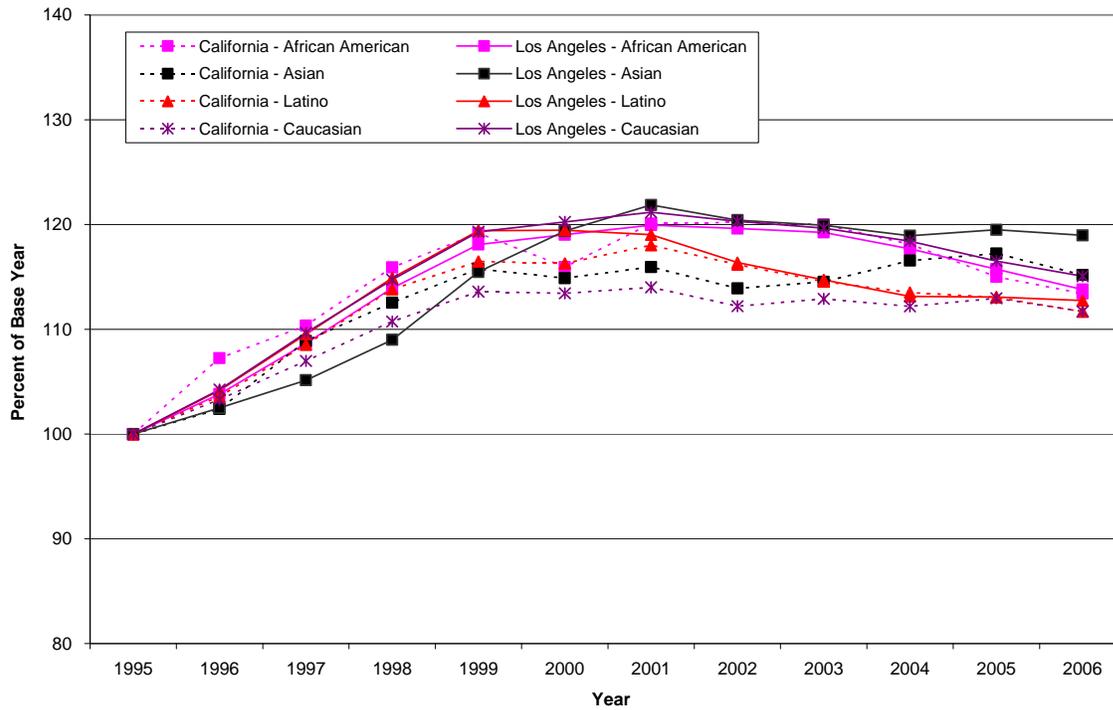
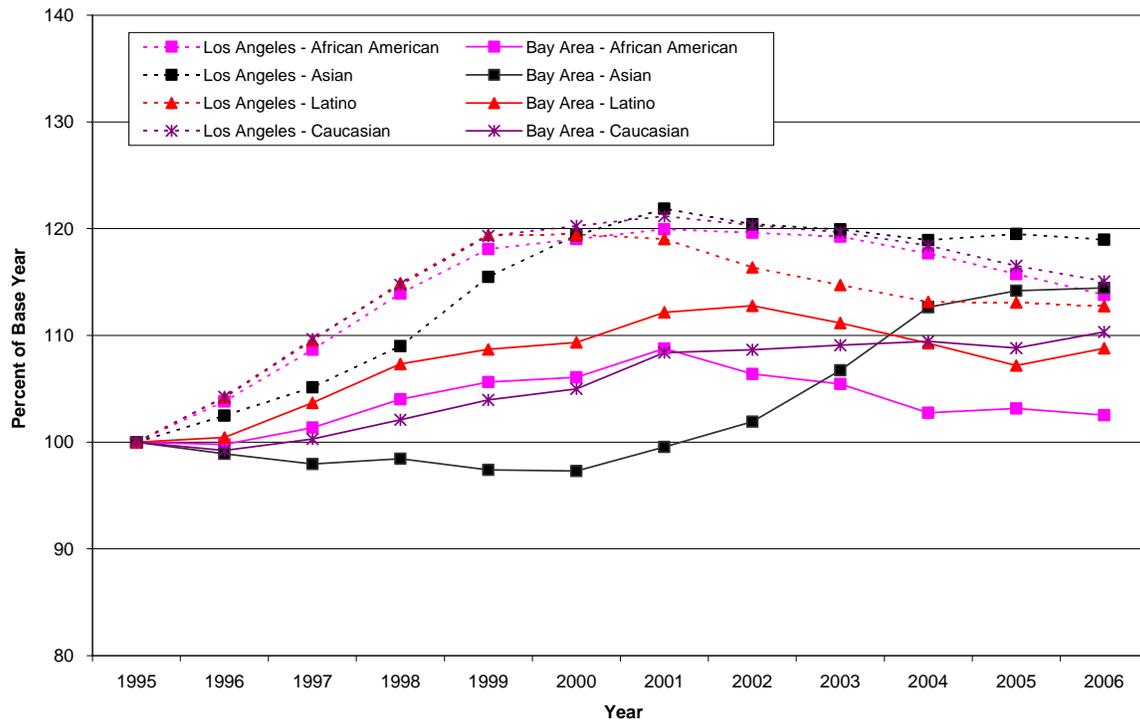


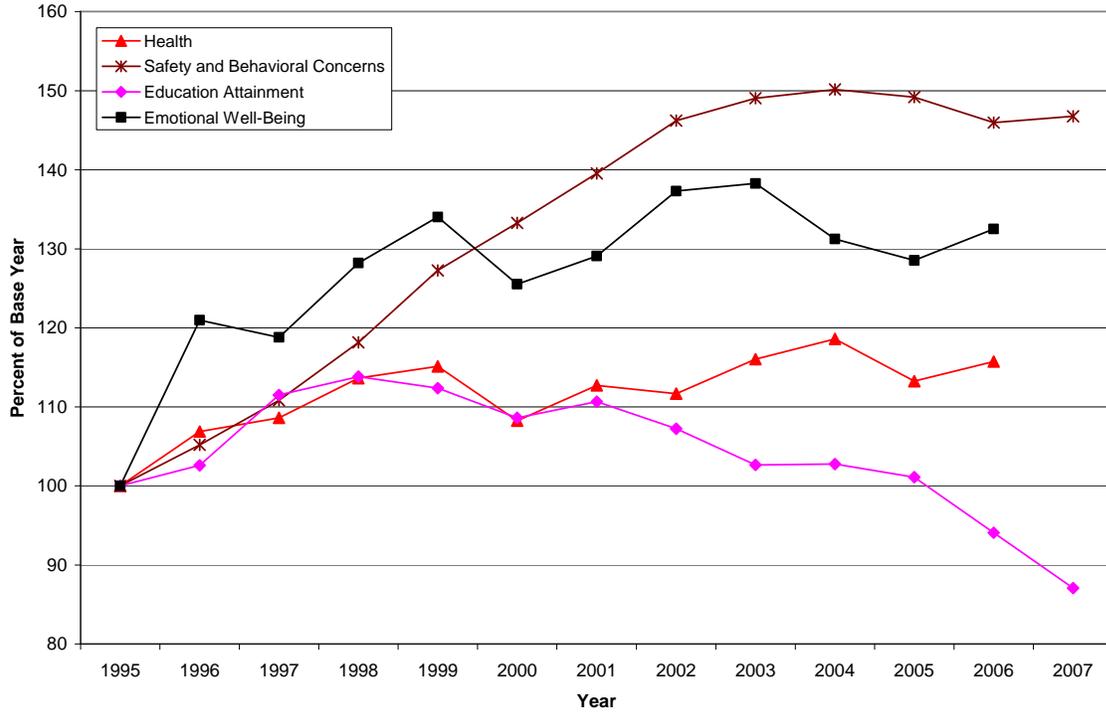
Figure 7.3 presents composite child and youth well-being indices of each of the four race and ethnic groups in Los Angeles County in comparison with the Bay Area. Though child and youth well-being in all race and ethnic groups show improvement over the entire period, it is noteworthy that all race/ethnic-specific CWIs in Los Angeles County converged in 2000, and subsequently decreased thereafter. In 2006, Asian children and youths in Los Angeles County had a higher value of CWI (119.0) than that of Latinos (112.7), Caucasians (115.1) and African Americans (113.8). The gap in CWIs between Los Angeles County and the Bay Area was largest for African Americans (11.3) in 2006, while the gaps for Asians (4.5), Latinos (3.9), and Caucasians (4.8) were quite similar.

**Figure 7.3 Composite Child and Youth Well-Being Index by Race/Ethnicity, Bay Area and Los Angeles, 1995-2006**

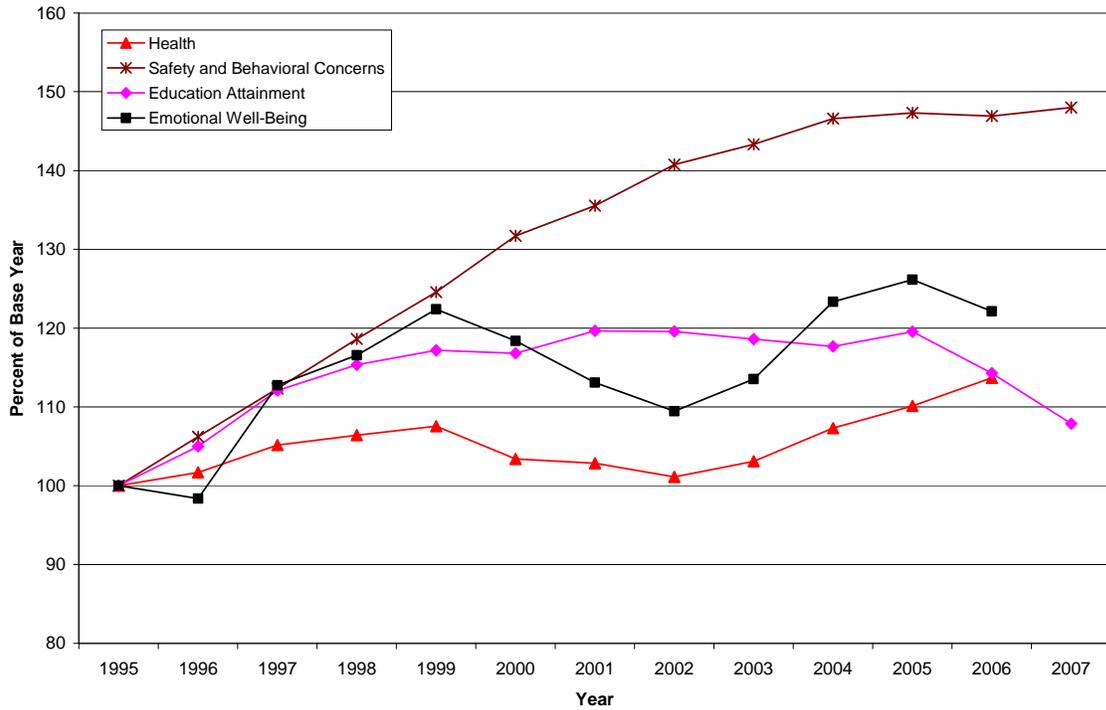


An examination of domain-specific summary indices trends for each race and ethnic group give an indication of the factors affecting overall CWI trends. Focusing on California, African America (Figure 8.1), Asian (Figure 8.2), Latino (Figure 8.3), and Caucasian (Figure 8.4) children and youth experienced great improvement in safety and behavior concerns. African American youth, and to a lesser extent, Asian youth, also had increases in emotional well-being although the gains were not consistent over the period. The emotional well-being of Latinos increased to 1999 and subsequently declined until 2005-2006. Educational attainment showed declines from 2001 for Caucasian and African American youth and from 2005 for Asians and Latinos. There were modest gains in health for all four race and ethnic groups in California.

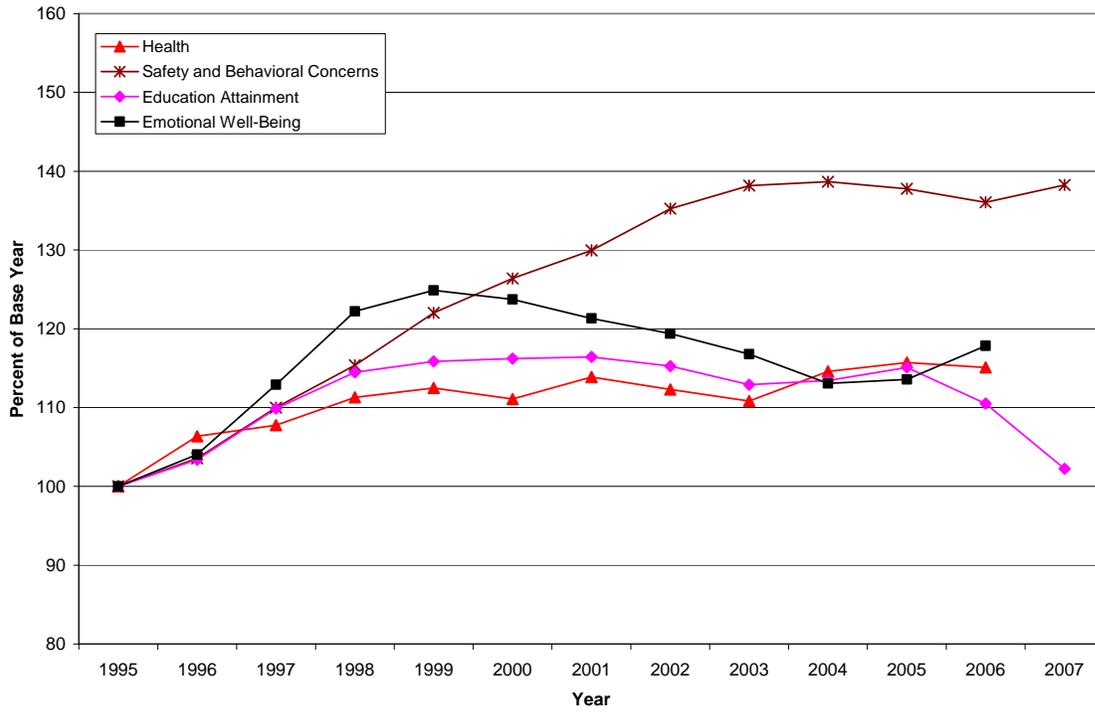
**Figure 8.1. Domain-specific Summary Indices, African Americans, California, 1995-2007**



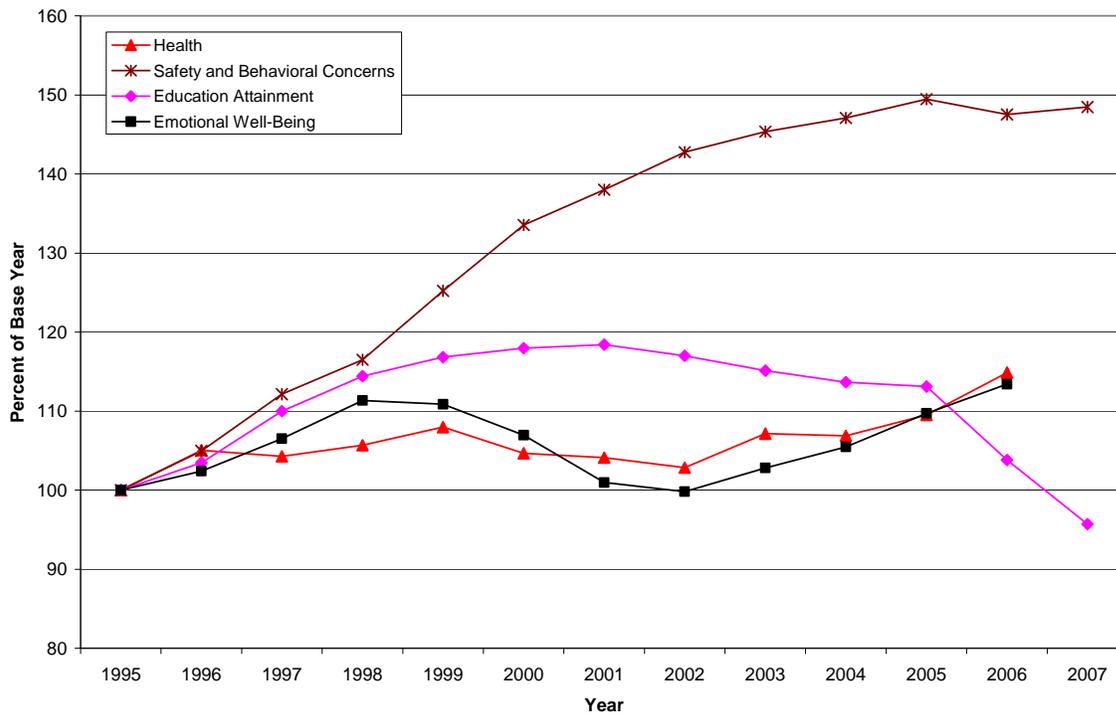
**Figure 8.2. Domain-specific Summary Indices, Asians, California, 1995-2007**



**Figure 8.3. Domain-specific Summary Indices, Latinos, California, 1995-2007**



**Figure 8.4. Domain-specific Summary Indices, Caucasians, California, 1995-2007**



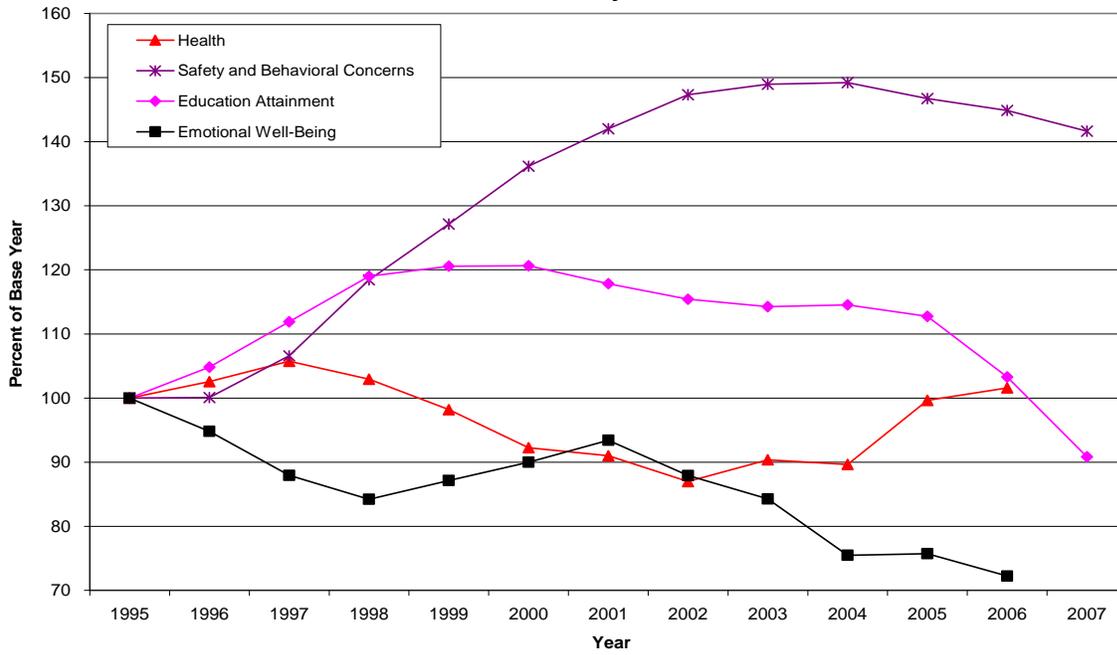
Emotional well-being, again, plays a crucial role in the race/ethnic-specific CWI trends for the Bay Area. For African American children in the Bay Area (Figure 9.1), a decline in emotional well-being in 2001-2006 along with declining educational attainment, pulled down their composite CWI, thus widening the gap with Los Angeles County and the State of California in the rate of improvement. Advances in emotional well-being among Bay Area Asians in 2001-2006 (Figure 9.2), and Latinos in 1995-1999 and 2005-2006 (Figure 9.3), significantly contribute to the higher CWIs in these groups.<sup>12</sup> In the late 1990s, Caucasian children and youth (Figure 9.4) experienced declines in the health and emotional well-being domains. Their health domain began to show improvement after 2001 and the emotional well-being domain did not begin to show improvement until 2004, and remained below the 1995 level in 2006. The health domain for Asians was below the 1995 level after 1999, which can be cause for concern. And although Bay Area African American children and youth show the most sustained decline in educational

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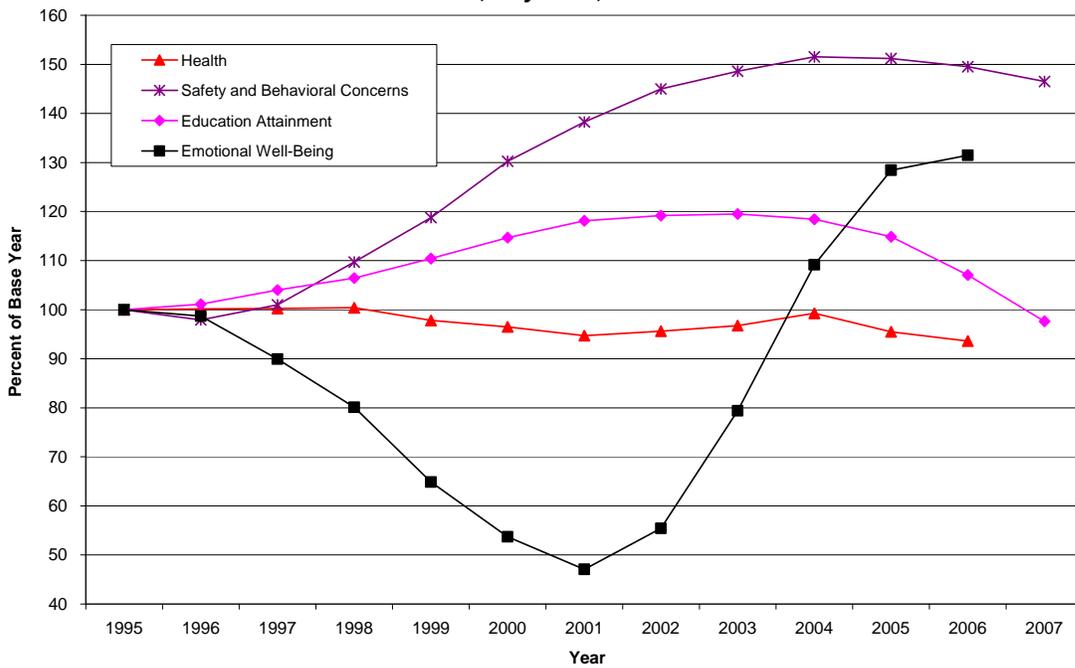
<sup>12</sup> In the race/ethnic-specific domain CWIs, the following indicators were not considered due to the lack of relevant data: Asthma hospitalization rate (African Americans, Asians, and Latinos in Marin County; African Americans in San Mateo County) and youth suicide rate (African Americans, Asians, and Latinos in Marin County). Also juvenile felony rates for the entire population were used for all racial/ethnic groups, since race/ethnic-specific data for the indicator were not available.

attainment, the other three groups also show declines from 2003 to 2007.

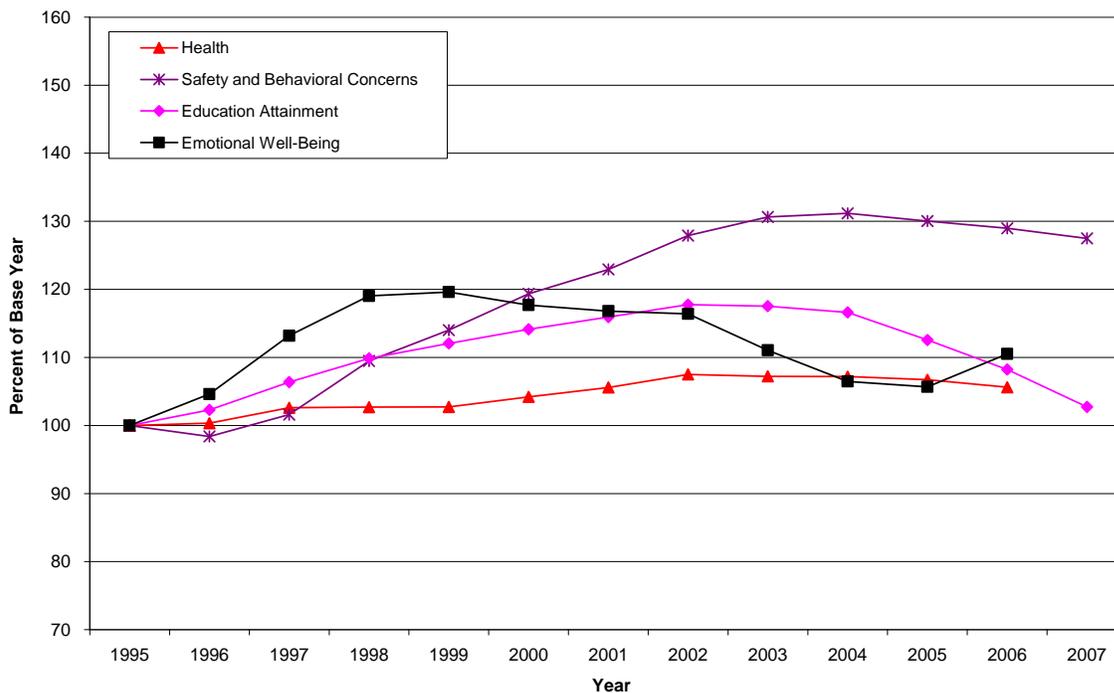
**Figure 9.1. Domain-specific Summary Indices, African Americans, Bay Area, 1995-2007**



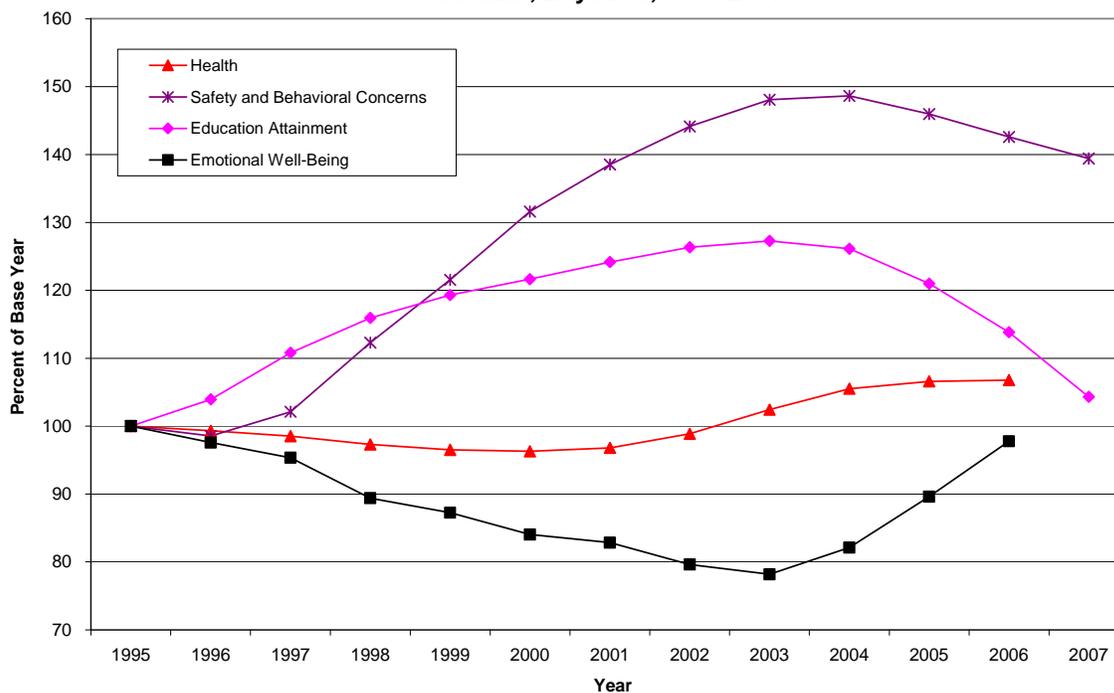
**Figure 9.2. Domain-specific Summary Indices, Asians, Bay Area, 1995-2007**



**Figure 9.3. Domain-specific Summary Indices, Latinos, Bay Area, 1995-2007**

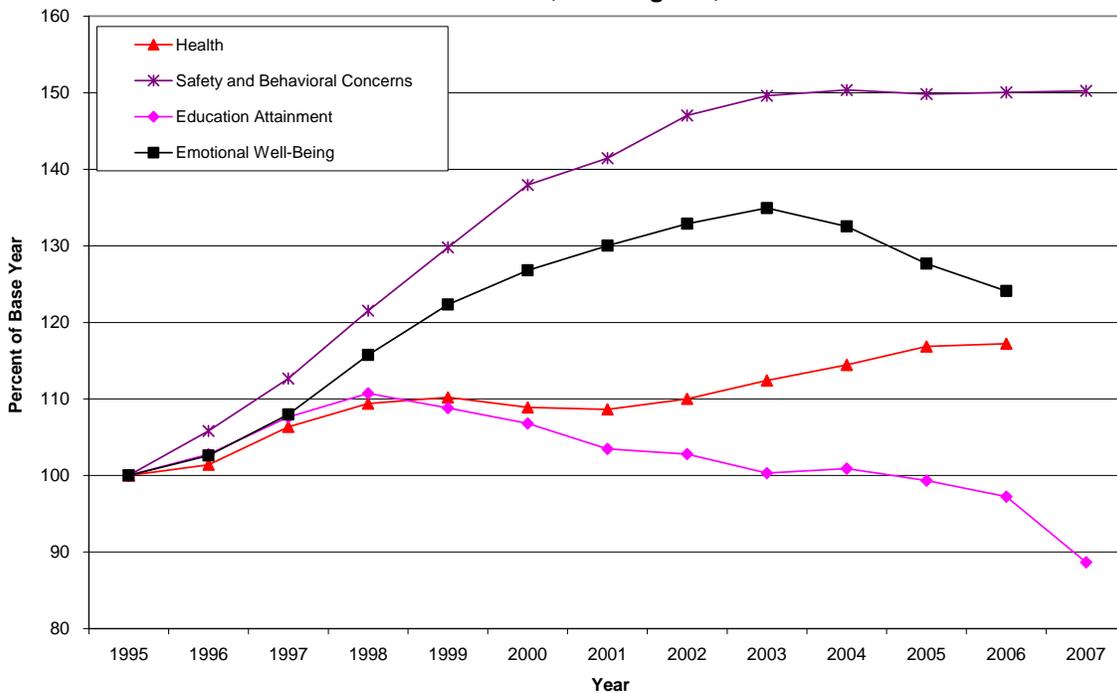


**Figure 9.4. Domain-specific Summary Indices, Caucasians, Bay Area, 1995-2007**

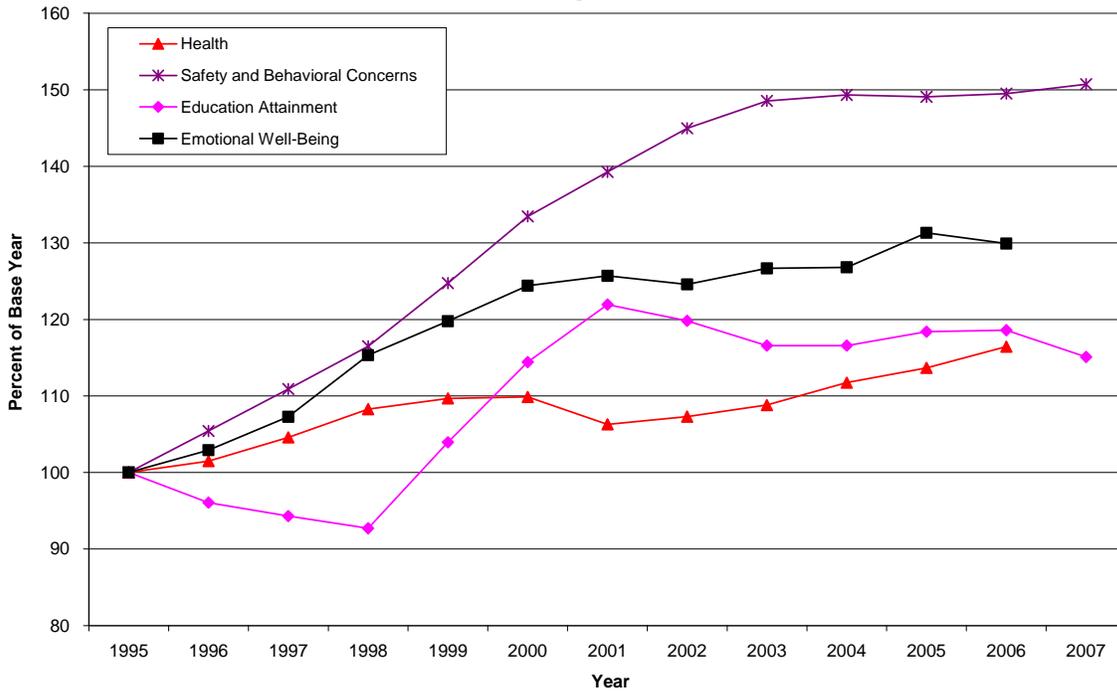


In contrast to the Bay Area, emotional well-being in Los Angeles County generally showed improvement for all race/ethnic groups after 1995, especially for African Americans (Figure 10.1), Asians (Figure 10.2), and Caucasians (Figure 10.4). It is noteworthy that the emotional well-being domain for Asians in the Bay Area (Figure 9.2) experienced a sharp increase after 2001, and the size of improvement was similar to their Asian peers in Los Angeles County by 2006 (Figure 10.2). Latino children and youth in Los Angeles County exhibited improvement in all four domains during late 1990s (Figure 10.3). However, there have been fluctuating declines in emotional well-being domains since 2000. As with the State of California and the Bay Area, the data from Los Angeles County indicate troubling declines in educational attainment for all four groups.

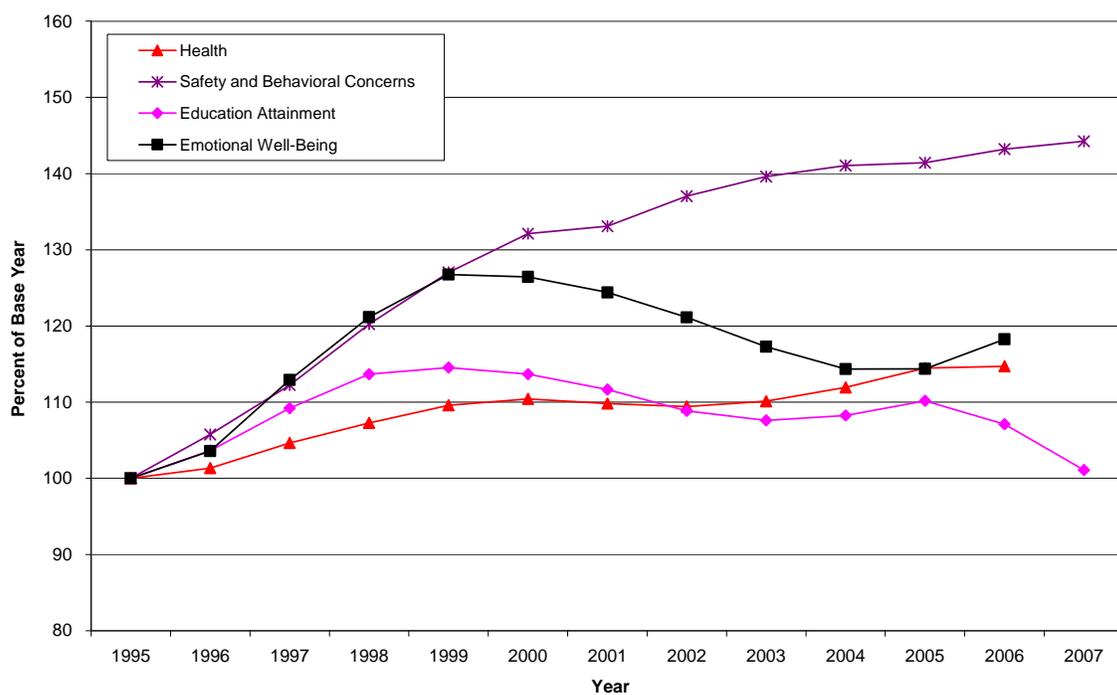
**Figure 10.1. Domain-specific Summary Indices, African Americans, Los Angeles, 1995-2007**



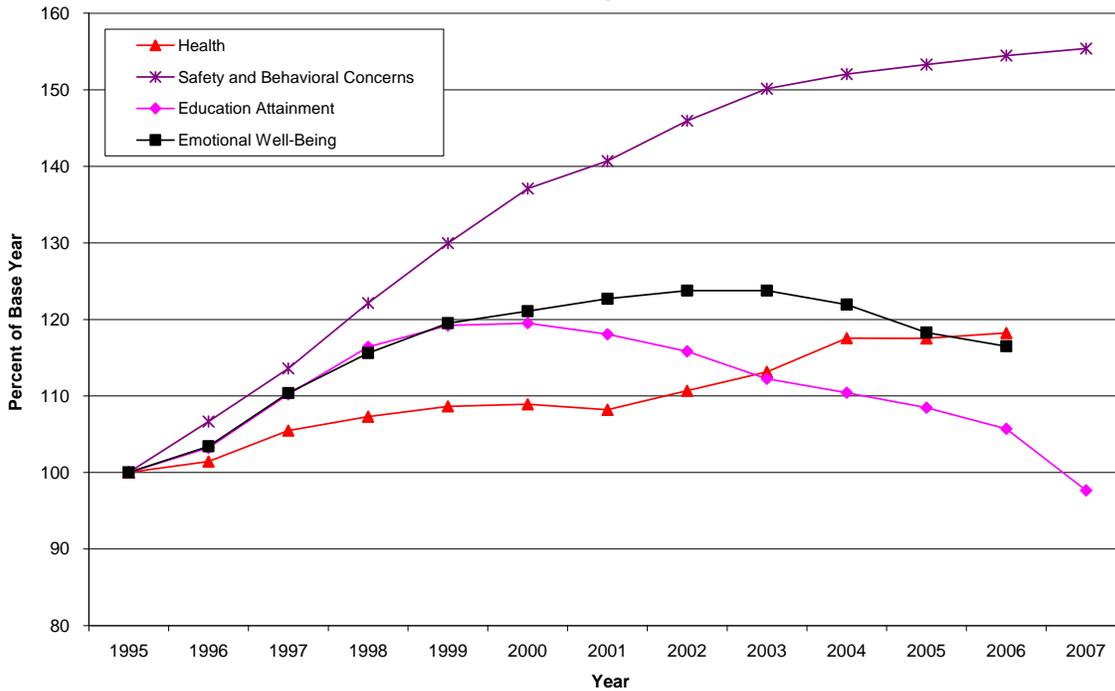
**Figure 10.2. Domain-specific Summary Indices, Asians, Los Angeles, 1995-2007**



**Figure 10.3. Domain-specific Summary Indices, Latinos, Los Angeles, 1995-2007**



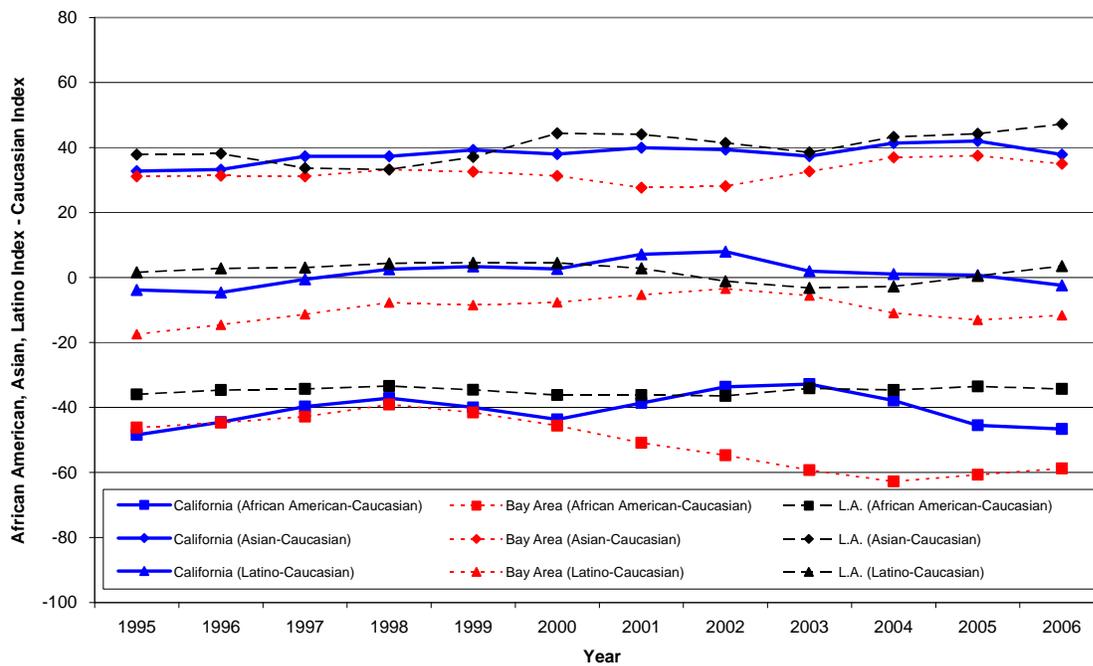
**Figure 10.4. Domain-specific Summary Indices, Caucasians, Los Angeles, 1995-2007**



For our measures of race/ethnic disparities, Caucasian children and youth are used as the contrast group, although any race/ethnic group could be used for comparative purposes. Figure 11 presents race/ethnic child and youth well-being Disparity Indices for the State of California, the Bay Area, and Los Angeles County. Overall, the gaps between racial and ethnic groups persisted over time with little change. In contrast to the substantial advantage of Asian children (diamond symbols) in all three regions, African Americans (boxes) had significant disadvantages compared to their Caucasians peers, as the negative Disparity CWIs suggest. The African American-Caucasian disparity was improving for the State of California from 2000 to 2003. However, since that time the disparity has widened. The smallest disparity gaps were between Latinos and Caucasians (triangles). The racial gap increased between African Americans and Caucasians in the Bay Area after the late 1990s, from -39.1 in 1998 to -62.8 points in 2004, and then improved to -58.7 in 2006. In Los Angeles County, the disparity gap between African

American and Caucasian children was fairly consistent over the period of study ranging from -33.4 to -36.4. In sum, there was great improvement in the Bay Area between 1995 and 2002, but since that time the disparity has increased. The Latino-Caucasian Disparity Index for children and youth in Los Angeles County and the State of California has been rather minimal over the period of study.

**Figure 11. Race/Ethnicity Disparity of Child and Youth Well-Being, California, Bay Area and Los Angeles, 1995-2006**



### Projections of the Impacts of the 2008-2009 Economic Recession

All of the foregoing analyses have focused on tracking, with available statistics, trends in child and youth well-being in the three focal areas for the period 1995-2007. We now turn to an analysis of expected impacts of the 2008-2009 period of financial crisis, rising unemployment, and economic recession. That is, we refocus attention from documenting prior changes to the anticipation of impacts of what has been termed the “Great Recession” on child and youth well-

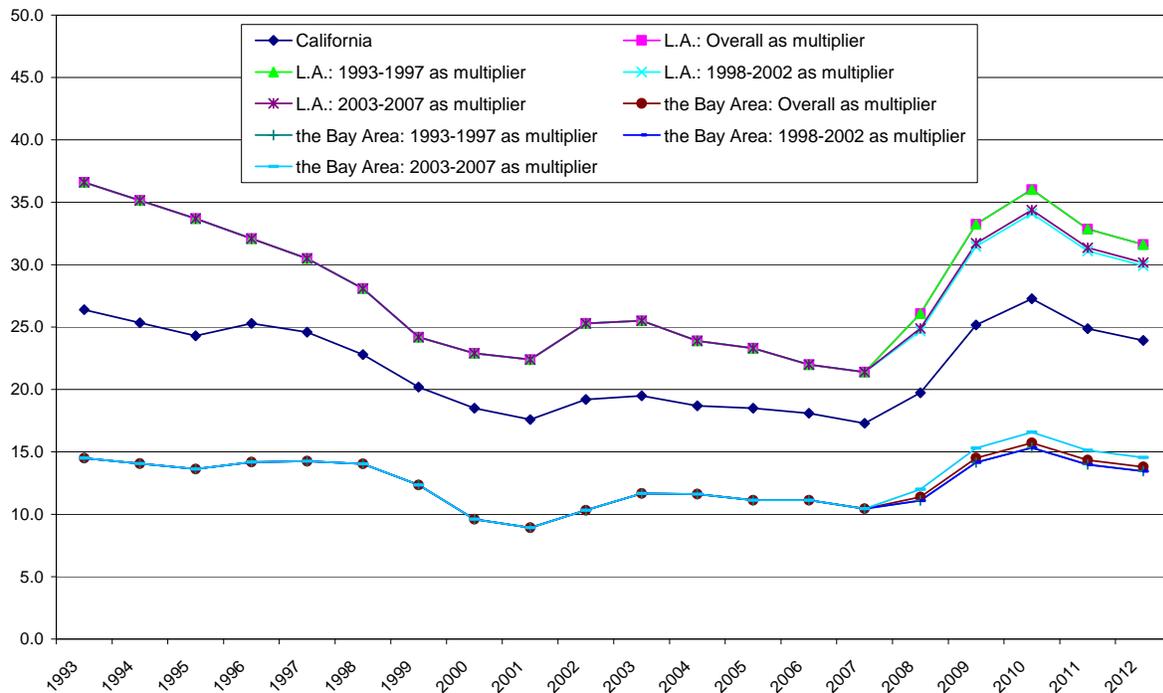
being. Can these impacts be reasonably outlined today, well before the corresponding official statistics are compiled and released some four or five years from now?

To do so, we build on the work reported in the 2009 Foundation for Child Development Child and Youth Well-Being Index Report (Land 2009; hereafter termed the 2009 FCD-CWI Report), which charted such impacts for the U.S. as a whole. In particular, that report noted that two types of impacts can be distinguished – *direct or primary* and *indirect or secondary*. The most direct/primary impacts of the recession will be on the Family Economic Well-Being Domain. Specifically, there will be direct impacts through the employment and income circumstances of families with children, as the economy loses jobs, parents become unemployed, and incomes decline. In addition, with economic downturns there will be many indirect/secondary impacts on other domains and Key Indicators of child and youth well-being. Based on our prior analyses of time series indicators of child and youth well-being and our analyses thereof, the 2009 FCD-CWI Report cited some crosswalks among the Well-Being Domains and Key Indicators to anticipate some of these secondary impacts. However, since they are secondary impacts and based on a limited number of prior recessionary periods in the U.S. since 1975, the Report indicated that these projections are more tentative and stated qualitatively in terms of expected directions of impacts, but not in terms of magnitudes.

For the present analysis of child and youth well-being in the State of California, the Bay Area, and Los Angeles County, the only Key Indicator available to us that corresponds to the Key Indicators of Family Economic Well-Being in the 2009 FCD-CWI Report is the percentage of children ages 0 to 17 at last birthday living in families with incomes below the official poverty line. Application of the projections methods described earlier to this time series yield the results shown in Figure 12. This figure displays the historical record of this Key Indicator for the years

1993-2007 with our projections for the years 2008 through 2012. We projected the time series through this four-year period in order to anticipate the impacts during the recessionary years 2008 and 2009, the lingering impacts in 2010, and a probable recovery period in 2011 and 2012.

**Figure 12. Percentage of Children in Poverty, California, Bay Area and Los Angeles, 1993-2007, Projected to 2012**



Of the three regions for the historical period, it can be seen that Los Angeles County has the highest levels of children in poverty and the Bay Area has the lowest, with the State of California in the middle. The 1990s witnessed a decline in child poverty for all three regions until the economic recession of 2001-2002. At that time child, poverty rates rose during 2002 and 2003 followed by a decline through 2007. But with the impacts of the Great Recession in full swing in 2008 and 2009, all three regions are projected to undergo increases in child poverty until 2010, followed by declines during an anticipated recovery in 2011 and 2012. For California,

the projections indicate child poverty is expected to rise from 17.3 percent in 2007 to a high of 27.3 percent in 2010, after which time the rate falls to 23.9 percent in 2012. Los Angeles County is projected to experience a greater increase in that the child poverty rate of 21.4 percent in 2007 is expected to rise to around 35 percent in 2010 and then decline to 30-32 percent in 2012. More modest increases in child poverty rates are projected for the Bay Area. The rates are expected to rise from 10.5 percent in 2007 to 15-16 percent in 2010 and then decline to 13-14 percent in 2012. In brief, there is little doubt that the Great Recession will have very substantial negative impacts directly on the Family Economic Well-Being Domain and, through that Domain, overall child and youth well-being in the State of California, the Bay Area, and Los Angeles County.

As noted in the 2009 FCD-CWI Report, impacts of the recession on other Domains and Key Indicators will be less direct and less severe and they may be counterbalancing in some cases. But several can be highlighted. For instance, in the Health Domain, the 2009 Report noted that while the rate of overweight children and adolescents has been on an increasing long-term upward trend since the 1970s, there may well be a “recession obesity” impact during 2008-2010. That is, if parents are less able to afford healthy food options for their children during the current recession and instead turn to low-cost fast-food, this indicator may show an additional increase in overweight and obese children above the increasing trend line. While a corresponding indicator is not available for the three focal areas of the present report, it can be anticipated that children in California and its regions will be part of this expected national impact.

Second, in the Safety/Behavioral Domain, the 2009 FCD-CWI Report stated that considerable vigilance should be given to the potential for substantial negative consequences of the recession for the rates of violent crime victimization (ages 12-19) and offending (ages 12-17), Key Indicators that relate to the juvenile felony arrest rates studied in the present report. Not only

will families and their teenage children be stressed by the consequences of the recession for their economic well-being, but these consequences may accumulate within certain neighborhoods and cities and lead to increased crime victimization and offending. These impacts may also be multiplied as local and state governments, due to cutbacks in tax receipts and public funding, are forced to reduce police personnel and programs that are targeted towards juvenile crime reduction and prevention.

Third, another Key Indicator highlighted in the 2009 FCD-CWI Report that likely will be negatively impacted by the recession is the rate of youths ages 16 to 19 who are not working/employed and not attending school. Especially for the ages of 16 to 19, which are beyond the age of mandatory school attendance, an increase in this rate signals a rise in the size of the population of teenagers who, by virtue of their lack of connections to the economic or schooling institutions, are at greater risk of participation in criminal activities. This is a very important indicator of the extent of non-participation of youths in the economic and educational institutions of the society, and it relates to the high school graduation and dropout rates studied in the present report, which may be adversely impacted by the recession.

Fourth, the 2009 FCD-CWI Report noted that the Emotional Well-Being Domain also is likely to show the imprint of the economic recession. In particular, the economic and social stresses cited above generally will impact negatively on emotional well-being, and this may lead to an increase in the suicide rate and a related indicator studied herein, the self-inflicted hospitalization rate.

#### IV. SUMMARY AND CONCLUSIONS

The social indicator concept and methodology address the question, “How are we doing?” and specifically for the youngest members of our population, “How are our kids doing?” Scholars in child and youth well-being research have developed statistical measures of a variety of specific indicators and combined the individual indicators into composite or summary indicators that tell us something about the statuses of children on average and overall, how these are changing over time, and the future patterns of child and youth well-being. These indicators can help us learn where progress has been made and what needs to be done next.

This report has presented measures of changes in child and youth well-being in the State of California, the San Francisco Bay Area, and Los Angeles County for the years 1995 to 2007. It has also presented trends in Disparity Child Well-Being Indices (CWIs) to help ascertain whether levels of well-being have converged or diverged between girls and boys, and among different racial and ethnic groups. In addition, this research projects the impact of the recent economic recession on child poverty in these regions from 2008<sup>13</sup> to 2012. The following major findings resulted from this project:

- First, overall child and youth well-being in the State of California, the San Francisco Bay Area, and Los Angeles County steadily improved during the decade from the mid-1990s to the mid-2000s. Although the rate of improvement in the Bay Area lagged behind the rates for Los Angeles County and the State of California at the early part of the period, the gaps of rates between the Bay Area and the other two regions tend to decrease in recent years.

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<sup>13</sup> It should be noted that although this report is written in 2009 the latest available child poverty data is for 2007; therefore, our projections are for recent years for which data are not yet available (2008 and 2009) and for three years into the future through 2012.

- Second, with respect to our overall composite measures of levels of well-being, our Disparity CWI analyses showed that girls had an enduring advantage over boys during the time period studied: 25.5 points in California, 23.2 points in Los Angeles County, and 17.3 points in the Bay Area, in 2006. Girls' sustained advantage over boys in health and educational attainment in recent years resulted in a persistent gender gap in well-being in all three areas, although their advantage in emotional well-being was reversed in the Bay Area and considerably decreased in California after 2003.
- Third, in terms of the rate of improvement in overall well-being, boys made much more progress relative to a 1995, compared to girls. For the State of California the improvement in the well-being of girls (13.2 percent) was only slightly higher than that of boys (12.7 percent). Boy's composite CWI in the Bay Area increased by 10.7 percent, while girls showed virtually no progress in well-being in 1995-2006. The progress in child and youth well-being made by boys (15.6 percent) in Los Angeles County was also more salient than that made by girls (11.7 percent) over the same period. It was noted, however, that the generally higher level of girls' well-being means that further gains are more difficult to achieve which may account for their relatively moderate improvement.
- Fourth, all four racial and ethnic groups – African Americans, Asians, Latinos, and Caucasians – show improvements in well-being over the period of study. Overall racial and ethnic trends for the state of California showed improvements for all four groups – Asians, 15.2 percent; African Americans, 13.4 percent; Latinos and Caucasians, 11.7 percent. The CWI for Asians, Latinos, and Caucasians in the Bay Area increased around 10 percent, while African Americans' CWI increased less than three percent from 1995 to 2006. The upward trend of African Americans' CWI reversed after 2001, making them

- Fifth, in terms of well-being levels, Disparity CWIs show that gaps in well-being among racial and ethnic groups persisted over time. Caucasian children and youth were the reference category for all comparisons. In California African American children had a distinct and enduring disadvantage that ranged from 32.8 to 48.5 points, averaging 40.7 points. Asians had a strong advantage of 37.8 points over Caucasian children across the state. There was little difference in the state-wide gap between Caucasians and Latinos. Asian children and youths in the Bay Area had a significant advantage, 32.4 points on average over the period. Unlike Asians, African Americans had a significant disadvantage, -50.6 points on average in 1995-2006 with a low of -62.8 in 2004, whereas the disparity gaps for the Latinos compared with Caucasians were quite small. In Los Angeles County the Asian-Caucasian gap increased from 37.8 points in 1995 to 47.2 in 2006. The African American-Caucasian gap in Los Angeles County remained rather consistent at -34.8 on average, whereas the Latino-Caucasian gap hovered around zero.
- Sixth, boys and girls, and children in different race/ethnic groups generally showed similar trends across most of the well-being domains. The safety/behavioral concerns domain recorded the highest in the rate of improvement, followed by education attainment and health. One domain that made a difference across the groups is emotional well-being. Suicide and self-inflicted injury hospitalization rates vary considerably by gender and in different race and ethnic groups. This result, however, should be carefully interpreted since suicide rates were based on a very small number of cases when disaggregated by gender or race/ethnicity.

- Seventh, our projections of the Great Recession on the rates of children in poverty point to an increasing trend for the years 2008 through 2010 for all three regions. Los Angeles County has the largest projected levels of child poverty over the period. It is expected to increase from 21.4 to around 35 percent between 2007 and 2012, whereas the trend for California was projected to increase from 17.3 to 27.3 percent over the same period. The Bay Area has the lowest projected levels of children in poverty overall and the smallest increase between 2007 and 2010. For all three regions, child poverty is projected to decline after 2010.
- Eighth, in addition to these direct impacts of Great Recession, it can be expected that there will be secondary or indirect impacts on child and youth well-being in the three focal regions that correspond to impacts expected at the national level. Specifically, it can be anticipated that there will be adverse impacts on indicators in the health, safety/behavioral, educational attainment, and emotional well-being domains.

## **Conclusions**

On the whole, our results show child and youth well-being in the State of California, the Bay Area, and Los Angeles County considerably improved over the decade. Given the many possible causes of these improvements, it is impossible to ascribe them to one or even a small group of policies or programs. What can be affirmed from the present study is that the sum total of whatever was done to improve child and youth well-being during this period – particularly in the educational attainment and safety/behavioral domains, which our analyses showed to have improved the most and to have led the improvements in overall well-being – by the numerous actors and organizations involved, including parents, schools, community organizations, and

governments appears to have worked. From the present study, we also cannot say that things done in the State of California, the Bay Area, or Los Angeles County worked better than those done elsewhere. We can only say that overall well-being improvements occurred in these specific entities during this time period. In addition, when expressed in a single CWI figure, some of the progress made in one domain or indicator can often be offset by deterioration in others. Or a big advance in one group's well-being may obscure a moderate, still significant, progress in other groups. However, that does not mean the progress is futile or such composite figures are meaningless. Rather, it highlights that efforts to make progress occur should continue and, more importantly, it directs focus on improving the overall well-being of our children and youths regardless of their gender and race/ethnicity.

This brings our attention to the areas potential policy intervention should address: First, the governmental, community, and family efforts that have improved child well-being in the Bay Area, Los Angeles County, and everywhere else in the State of California over this period of study should be continued, as there is a new cohort of children every few years. Second, the overall decline in economic well-being, particularly the lack of affordable housing, may continue to negatively affect child and youth well-being. Recent economic downturns and strained situations in the housing market will make things worse. Therefore, policy and community efforts should pay special attention to the economic well-being of children and youths in these regions. Our projections point to a rising proportion of children in poverty until 2010. Other domains of concern are emotional well-being, education attainment, and health. Unlike economic well-being that declined across the board, more attention should be paid to improving emotional well-being for girls and African American children and youths in particular. Efforts should be devoted to programs that have evidence-based proven effectiveness for suicide and self-inflicted

injury prevention. In addition, there should be greater focus on education attainment for all racial and ethnic groups across the state and in the Bay Area and Los Angeles, and on improvements in health for Asians in the Bay Area.

Finally, we emphasize that these conclusions are based on the specific indicators and domains used in this study. However, prior research using the CWI methodology for the U.S. as a whole indicates that it captures major trends up or down in child well-being. More comprehensive time series data could greatly help to further improve our understanding of the well-being status of children and how it is changing over time.

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**Table 1. Sixteen Key Indicators of Child and Youth Well-Being in the San Francisco Bay Area, Los Angeles County, and the State of California**

Domain	Indicator	Definition	Age Group	Indicator Can Be Disaggregated By:	
				Sex	Race/Ethnicity
<i>Family economic well-being domain:</i>	Children in poverty	Percentage of children ages 0 – 17 in households earning less than the federal poverty level	0–17	No	No
	Households that can afford to purchase a median-priced home	Percentage of households that can afford to purchase a median-priced home	Not Applicable	No	No
<i>Health domain:</i>	Infant mortality rate	Number of deaths per 1,000 live births.	0–1	Yes	Yes
	Infants born at low birth weight	Percentage of infants born at low birth weight, which is defined as less than 2500 grams	0	Yes	Yes
	Child/youth death rate	Number of deaths per 100,000 children/youth ages 1 – 24	1–24	Yes	Yes
	Injury hospitalization rate	Number of non-fatal injury hospitalizations per 100,000 children/youth ages 0–20	0–20	Yes	Yes
	Asthma hospitalization rate	Number of asthma hospitalizations per 1,000 individuals at ages 0–14	0–14	Yes	Yes
	Women receiving prenatal care in the first trimester	Percentage of women who receive prenatal care in the first trimester of pregnancy	Not Applicable	Yes	Yes

**Table 1 (continued). Sixteen Key Indicators of Child and Youth Well-Being in the San Francisco Bay Area, Los Angeles County, and the State of California**

Domain	Indicator	Definition	Age Group	Indicator Can Be Disaggregated By:	
				Sex	Race/Ethnicity
<i>Safety/behavioral concerns domain:</i>	Teen birth rate	Number of births per 1,000 girls ages 15–19	15–19	N.A.	Yes
	Juvenile felony arrest rate	Number of juvenile felony arrests per 1,000 youth ages 10–17	10–17	Yes	No
	Juvenile felony drug and alcohol arrest rate	Number of juvenile felony drug and alcohol arrests per 1,000 youth ages 10–17	10–17	No	No
<i>Educational attainment:</i>	High school graduates completing college preparatory courses	Percentage of public school 12th grade graduates completing courses required for University of California (UC) and/or California State University (CSU) entrance, with a grade of "C" or better	17	Yes	Yes
	High school dropouts	Estimated percentage of public high school students who drop out of high school, by race/ethnicity, according to the four–year derived dropout rate, which is an estimate of the percentage of students who would drop out in a four–year period based on data collected for a single year	14–17	Yes	Yes
	Children with access to child care	Percentage of children ages 0–13 with parents in the labor force who have access to licensed child care	0–13	No	No
<i>Emotional well–being domain:</i>	Youth suicide rate	Number of suicides per 100,000 youth age 15–24	15–24	Yes	Yes
	Self–inflicted injury hospitalization rate	Rate of non–fatal self–inflicted injury hospitalizations per 100,000 children/youth ages 5–20	5–20	Yes	Yes