

**FOUNDATION FOR CHILD DEVELOPMENT**

**2010**

*Child and Youth Well-Being Index (CWI)*

## The Foundation for Child Development (FCD)

The Foundation for Child Development (FCD) is a national, private philanthropy dedicated to the principle that all families should have the social and material resources to raise their children to be healthy, educated, and productive members of their communities.

The Foundation seeks to understand children, particularly the disadvantaged, and to promote their well-being. We believe that families, schools, nonprofit organizations, businesses, and government at all levels share complementary responsibilities in the critical task of raising new generations of children.

## Kenneth C. Land, Project Coordinator

Kenneth C. Land, Ph.D., is the John Franklin Crowell Professor of Sociology and Demography at Duke University. He has conducted extensive research on contemporary social trends and quality-of-life measurement, social problems, demography, criminology, organizations, and mathematical and statistical models and methods for the study of social and demographic processes. He is the co-author or co-editor of five books, more than 100 research articles, and numerous book chapters. Dr. Land has been elected a Fellow of the American Statistical Association, the Sociological Research Association, the American Association for the Advancement of Science, the International Society for Quality-of-Life Studies, and the American Society of Criminology.

**June 8, 2010**

Kenneth C. Land, Project Coordinator

Duke University

Durham, North Carolina

# Executive Summary

## 1. Overview

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Each year, the **Foundation for Child Development** and the **Child and Youth Well-Being Index Project at Duke University** issue a comprehensive measure of how children are faring in the United States. The Overall Composite Child Well-Being Index (CWI) is based on a composite of 28 *Key Indicators* of well-being that are grouped into seven *Quality-of-Life/Well-Being Domains*. These domains are economic well-being, safe/risky behavior, social relationships, emotional/spiritual well-being, community engagement, educational attainment, and health. This year's overall CWI is an updated measure of trends over the 33-year period from 1975 to 2008, with projections for 2009.

Each annual CWI report also includes a Special Focus Report on a particular topic of interest. This year's Special Focus report expands on research reported in our 2009 annual report, in which we projected the likely impacts of the 2008-2009 recession (hereafter termed the "Great Recession") on children's well-being into 2012. These projections are drawn from time series forecasting of data from the CWI databank and from an analysis of past recessions.

The impact of recessions on children and youths is often overlooked in economic analyses despite children's vulnerability to economic hardship. The Great Recession has been particularly hard on children and youths, as state and local government budgets continue to be cut, resulting in significant reductions in educational, health, and other programs that support children and youths — particularly those at risk.

Today children under 18 are the single largest group in America living in poverty. Research shows that children who slip into poverty, even for a short time, can suffer significant setbacks, even when their families regain their economic footing. These setbacks are particularly acute for children in their first 10 years of life. This research, along with findings from this year's CWI report, offer compelling evidence that policymakers should be investing *more* to provide support to the next generation of children, particularly during an economic downturn. Indeed, the impact of the current recession underscores the need to rethink current budgetary policies for children's programs so they are not subject to the chopping block whenever our governments face budget shortfalls.

## 2. Major Findings: Recent Trends in the Overall Child and Youth Well-Being Index

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The major trends that can be drawn from the 2010 Overall CWI Update include:

**Progress in American children's quality of life has fluctuated since 2002, and began a decline in 2009.**

Overall well-being – as measured by the composite *Child and Youth Well-Being Index (CWI)* – first peaked in 2002, after 9/11, at 102. This was followed by a decline below the 2002 level in 2003, 2004, and 2005. The CWI then rose by small amounts in the 2006 to 2008 period, reaching an estimated higher peak of 103.8 in 2008, and began a decline in 2009, as the effects of the Great Recession took full force.

**The CWI in 2008 -- the period leading into the Great Recession -- increased over 5 percent in overall value, relative to key indicator levels at the year 2000.** During this period from 2000 to 2008, declines were observed for the Family Economic Well-Being Domain (-6.8%), the Emotional/Spiritual Well-Being Domain (-2.2%), and the Health Domain (-6.6%). But improvements in the Safe/Risky Behavior Domain (+27.9%), Social Relationships Domain (+13.3%), and Community Engagement Domain (+11.1%) were enough to pull up the overall index.

### 3. Major Findings: Special Focus Report on the Anticipated Breadth and Depth of Impacts of the Great Recession on Child Well-Being into 2012

The Special Report updates and extends the projections made in the 2009 FCD-CWI Report on the impacts of the Great Recession on child and youth well-being. This year's report shows that the impact will be notably broad and deep. Our projections show that:

- **The Family Economic Well-Being domain began declining in 2007, and the overall composite CWI began to decline in 2009.** While data on most of the CWI Key Indicators for 2009 will not be available for two to three years, early indicators point in this direction.
- **The worst has yet to come.** Our research shows that **conditions for children deteriorated through 2009 and are projected to bottom out in 2010.** Virtually all the progress made in the family economic well-being domain since 1975 will be wiped out. Families, schools, neighborhood and community organizations, and governments continue to cope with budget cuts and the loss of jobs, producing the anticipated "lag time" in economic recovery.

#### *The Impact on Family Economic Well-Being*

As in past recessions of the early '80s, '90s, and 2001-2002, it is likely that today's macroeconomic problems will impact a number of indicators of **Family Economic Well-Being** for families with children and adolescents.

- **The percentage of children living below the poverty line is expected to peak at 21 percent in 2010,** the highest rate of child poverty in 20 years. We estimate that **approximately 15.6 million children will be living in poverty in 2010.**
- **The rate of children living in "extreme poverty," defined as less than 50 percent of the poverty line, is projected to climb to 10.1 percent in 2010.** That translates into 7.41 million children living in extreme poverty in 2010.
- **The percentage of children living in families with no secure parental employment—defined as not having at least one parent employed full-time, year-round—will increase from 22 percent in 2006 to 26 percent in 2010.** This represents about 20 million children.
- **For all families, median annual family income (in constant 2008 dollars) is expected to decline from \$61,460 in 2007, to about \$57,760 in 2010.** For single female-headed households, median annual family income is expected to decline from \$25,908 in 2007, to \$24,248 in 2010. The steepest drop, however, will be among single male-headed households where median annual family income is expected to decline from \$39,546 in 2007 to \$35,091 in 2010.
- **The total number of children with health insurance is expected to remain at just under 90 percent in 2010,** due to the fact that publicly supported health insurance policies and programs will provide a public safety net for children who have lost private coverage.
- Food insecurity occurs when all family members do not at all times have access to sufficient, safe, and nutritious food to maintain an active and healthy life. We project the **percent of children living in food-insecure households to climb from 16.9 percent in 2007 to 17.7 percent in 2010, which is an increase of 750,000 additional children at risk over this time period.**
- Households with housing problems have been increasing since the early 2000s, and will continue to increase, but at a slower pace in 2009-2011. **It is projected that 2 of 5 households will face cost burdens associated with housing in 2009-2011.**

### *Impacts of the Recession on Selected CWI Key Indicators*

The significant decrease in the family economic well-being domain combined with decreases in public budgets and strains on community organizations (civic and religious) are projected to cause negative ripple effects across other well-being domains that the CWI measures. Because the projections for these domains reflect indirect impacts drawn from time series forecasting of data from the CWI databank and from an analysis of past recessions, they are less quantifiable. Therefore, these impacts are stated qualitatively in the report.

While the overall impact of the recession on children's well-being is expected to resemble similar impacts from recessions past, a few trends make this economic downturn unique. Among them:

- **Health Domain:** Children's overall health is expected to decline due to obesity. Though obesity has been on the rise for several years, it is now likely to spike as the recession drives parents to rely more on low-cost fast food or filling but less nutritious food.
- **Community Engagement Domain:** The connections that children have to their communities, through participation in mainstream social institutions such as schools and the workforce, are likely to be negatively impacted by declines in PreKindergarten enrollments.

In addition, it is expected that there will be substantial increases in the proportion of youths ages 16-19 who will neither be in school nor working. **Unemployment of youths aged 16-19 is expected to peak around 2009.** Unemployment rates in 2009 are expected to be at 40 percent for African American youth and 30 percent for Latino youth.

These "detached youths" will be at elevated risk of involvement in drug and crime cultures and activities.

- **Safe/Risky Behavior Domain:** Children's risky behavior and safety is expected to fare worse due to higher rates of violent crime where youths are both victims and perpetrators. This is based on historic recessionary trends of budget cuts for policing and juvenile crime prevention and impacts on increased numbers of detached youths just noted.

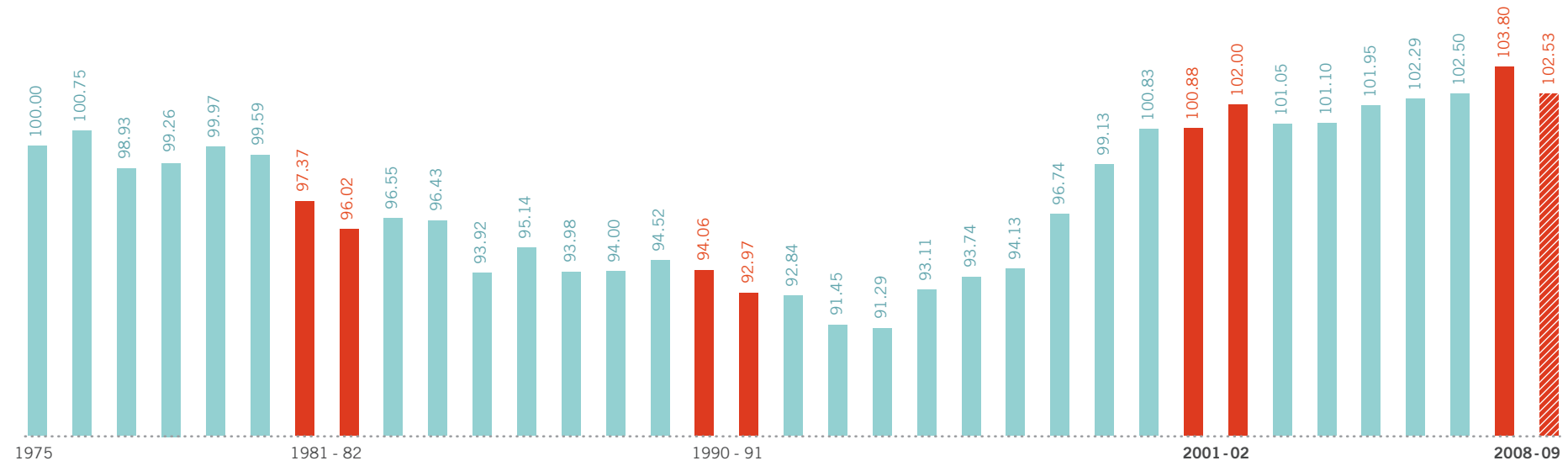
- **Emotional/Spiritual Well-Being Domain:** Current trends in spiritual well-being indicate that fewer youths are attending weekly religious services or reporting religious beliefs to be important. This negative trend is expected to continue.

### *Well-Being of Homeless Children and Youth Outside the Statistical Net*

Survey data, from which many of the CWI Key Indicators are derived, are based on data collection from household residences. Such sampling techniques miss an important component of risks for the well-being of children – children who are literally homeless. We estimate that **by 2010 there may be as many as 500,000 homeless children in the U.S.**, based on the latest government reports. The unmeasured plight and disadvantages of this segment of the child and youth population means that our estimates are, if anything, conservative on the varied effects of the current recession on the well-being of young people.

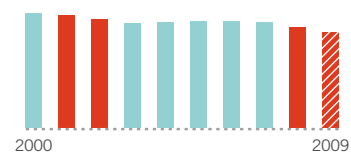
### *A Diversity of Impacts*

Finally, the focus of the CWI and its Key Indicators is on national averages across the U.S. and across the population of all children and youths. However, it must be emphasized that there will be a diversity of impacts of the current economic downturn – geographically across the nation and across racial/ethnic subpopulations and socioeconomic groups. Low-income African American and Latino children are generally more susceptible to the consequences of economic fluctuations, as are the children of immigrant families. When the economy is doing well, their well-being gains are more dramatic and when the economy slumps, they are harder hit than their white counterparts because a larger proportion of children of color live in poverty.

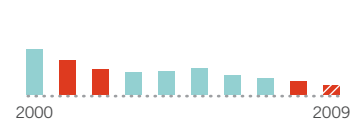


# CHILD WELL-BEING INDEX (CWI)

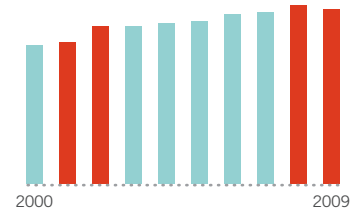
Family Economic Well-Being



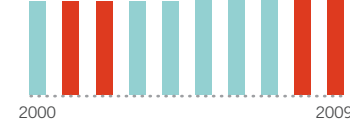
Health



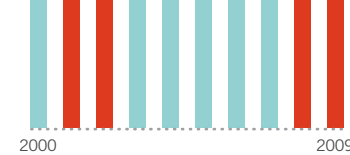
Safe/Risky Behavior



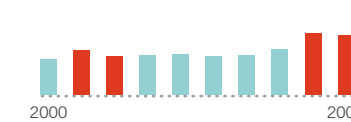
Educational Attainment



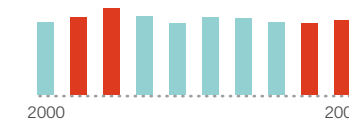
Community Engagement



Social Relationships



Emotional/Spiritual Well-Being



## The Past Ten Years of Child Well-Being

### Children and the Recession

The Child Well-Being Index (CWI) offers a look back at how children's well-being has improved or deteriorated since 1975. The CWI analyzes national data from 28 Key Indicators, grouped into the seven Quality-of-Life/Well-Being Domains seen above. The 2010 edition of the CWI Report is the first to offer comprehensive data on the impact of the Great

Recession on American children's overall health, safety and quality-of-life. The graph along the top of the page highlights recessions since 1975, and their corresponding impact on children's well-being. It illustrates the lag time that historically occurs between when a recession first hits, and when that recession has the worst impact on children, as well as the long recovery time

that follows. The second set of graphs shows how the current recession has had a negative ripple effect across nearly all of the domains with the exception of Educational Attainment, which has essentially remained flat since 1975.

*The CWI was developed by Kenneth Land, Vicki Lamb, and colleagues at Duke University, and funded by the Foundation for Child Development.*

- Period of recession
- ▨ Projected Values
- Non-recession periods

# The Child and Youth Well-Being Index (CWI)

1975 – 2008, with Projections for 2009

## I. Child and Youth Well-Being Index:

### A Brief Overview

The *Child and Youth Well-Being Index (CWI)* is an evidence-based composite measure of trends over time in the quality of life of America's children from birth to age 18.<sup>1</sup> The CWI tracks changes in the well-being of children annually as compared to 1975 base year values.

The CWI is designed to address questions such as the following:

- Overall, on average, how did child and youth well-being in the U.S. change in the last quarter of the 20th century and beyond?
- Did it improve or deteriorate?
- By approximately how much?
- In which domains of social life?
- For specific age groups?
- For particular race/ethnic groups?

The CWI, based on data from 28 Key Indicators, is computed and updated annually, with complete data through 2006. Updates on most Key Indicators currently are available for the years 2007 and 2008, and three are available for 2009. The remaining indicators are projected for 2007, 2008, and 2009 by use of statistical time series models. Past experience has shown that these short-term projections are quite accurate.

The objective of the overall CWI is to give a view of changes over time in the overall well-being of children and youth in the United States. The composite CWI, an equally-weighted

average of the seven Well-Being Domains, provides a sense of the overall direction of change in well-being, as compared to a base year of the indicators, 1975. For this reason, the focus of the Index is not primarily on specific indicators, but rather on the way in which they interact and change over time. As a composite index of changes over time, the important information in the CWI pertains to its directions of change over sequences of years: Are they up and thus indicative of overall improvements? Down and thus indicative of deterioration? Flat and thus indicative of stability?

Children and youth live unique lives and as such, at some point, each experiences a range of social conditions. The Index is comprised of Key Indicators associated with different stages of the life course in the first two decades of life.

The overall CWI includes the following 28 Key Indicators organized into seven Domains of Well-Being that have been found in numerous social science studies to be related to an overall sense of subjective well-being or satisfaction with life. Appendix A briefly describes the Methods of Index Construction for the CWI. Sources for time series data on the Key Indicators are presented in Appendix B. Unless otherwise noted, indicators refer to children ages 0-17:

#### *Family Economic Well-Being Domain<sup>2</sup>*

1. Poverty Rate (All Families with Children)
2. Secure Parental Employment Rate
3. Median Annual Income (All Families with Children)
4. Rate of Children with Health Insurance

<sup>1</sup>Or, equivalently, in Census/demographic notation, ages 0 to age 17 at last birthday, which is abbreviated 0-17 in the text.

<sup>2</sup>The label "material well-being" has also been used for this domain.

### Safe/Risky Behavior Domain<sup>3</sup>

1. Teenage Birth Rate (Ages 10-17)
2. Rate of Violent Crime Victimization (Ages 12-19)
3. Rate of Violent Crime Offenders (Ages 12-17)
4. Rate of Cigarette Smoking (Grade 12)
5. Rate of Binge Alcohol Drinking (Grade 12)
6. Rate of Illicit Drug Use (Grade 12)

### Social Relationships Domain

1. Rate of Children in Families Headed by a Single Parent
2. Rate of Children who have Moved within the Last Year (Ages 1-18)

### Emotional/Spiritual Well-Being Domain

1. Suicide Rate (Ages 10-19)
2. Rate of Weekly Religious Attendance (Grade 12)
3. Percent who report Religion as Being Very Important(Grade 12)

### Community Engagement Domain<sup>4</sup>

1. Rate of Persons who have Received a High School Diploma (Ages 18-24)
2. Rate of Youths Not Working and Not in School (Ages 16-19)
3. Rate of PreKindergarten Enrollment (Ages 3-4)
4. Rate of Persons who have Received a Bachelor's Degree (Ages 25-29)
5. Rate of Voting in Presidential Elections (Ages 18-20)

### Educational Attainment Domain

1. Reading Test Scores (Ages 9, 13, and 17)
2. Mathematics Test Scores (Ages 9, 13, and 17)

### Health Domain

1. Infant Mortality Rate
2. Low Birth Weight Rate
3. Mortality Rate (Ages 1-19)
4. Rate of Children with Very Good or Excellent Health (as reported by parents)
5. Rate of Children with Activity Limitations (as reported by parents)
6. Rate of Overweight Children and Adolescents (Ages 6-19)

<sup>3</sup>The label "safety/behavioral concerns" has also been used for this domain.

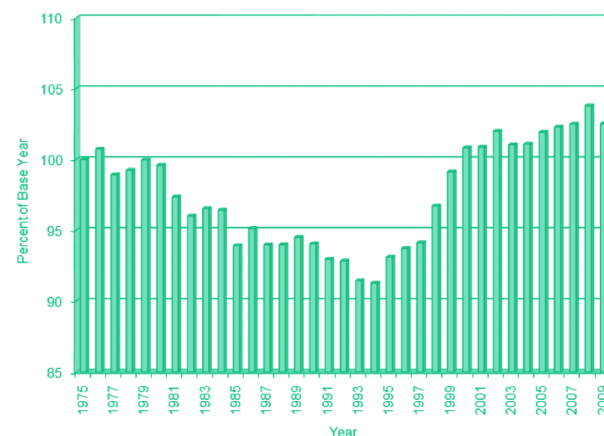
<sup>4</sup>The labels "place in community" and "community connectedness" have also been used for domain.

Taken together, changes in the performance of these 28 Key Indicators, and the seven domains into which they are grouped, provide a view of the changes in the overall well-being of children and youth in American society. Each domain represents an important area that affects well-being/quality of life: family economic well-being, safe/risky behavior, social relationships, emotional/spiritual well-being, community engagement (participation in schooling, economic, and political institutions), educational attainment, and health. The performance of the nation on each indicator also reflects the strength of America's social institutions: its families, schools, and communities. All of these Key Indicators either are well-being indicators that measure outcomes for children and youths or surrogate indicators of the same.

## 2. Annual Update of the Overall CWI

Each year, we report the updated values of the overall CWI through the three most recent years – 2007, 2008, and 2009 in the current report. Figure 1 charts changes since 1975 in the overall composite CWI<sup>5</sup>.

**Figure 1:** Child Well-Being Index, 1975-2008, with Projections for 2009



For the three most recent years, Figure 1 shows that:

- **With a value of 102.5 for 2007**, the last year for which data are available for almost all 28 Key Indicators, the CWI showed an increase of 0.21 from 2006 and was slightly higher than the previous peak at 102 in 2002.

<sup>5</sup>The specific annual numerical values of the overall CWI, from which Figure 1 is constructed, are given in Appendix C.



- For 2008, the partially projected<sup>6</sup> CWI increased to 103.8.
- This is followed by a primarily projected<sup>7</sup> decline to 102.53 in 2009.

*Recent Changes in Overall CWI, Domains, and Key Indicators: 2000-2008*

Figure 2a displays changes in the overall CWI and the seven domain-specific indices from 2000-2008, and Figure 2b indicates changes in the Key Indicators of the CWI for 2000-2008. We use 2000 as the base year for these two figures, rather than 1975, to show changes in the composite CWI and CWI domains compared to the year 2000. The comparison is with 2008, the year for which we project only 7 of the 28 Key Indicator values.

Figure 2a presents the domain changes in the CWI. Within each domain is a graph of the annual change between 2000 and 2008. To interpret the graphs and the changes in the indices shown in the figure, note again that the CWI and its component domains measure percentage changes from base year values and that the Key Indicators of the CWI are oriented so that positive percentage changes in the CWI and its domain indices indicate improvements in well-being and negative changes indicate deteriorations. Accordingly, the boxes in Figure 2a are highlighted in green if the respective index shows a percentage increase from 2000 to 2008 and in red if the index shows a percentage decrease from this base year.

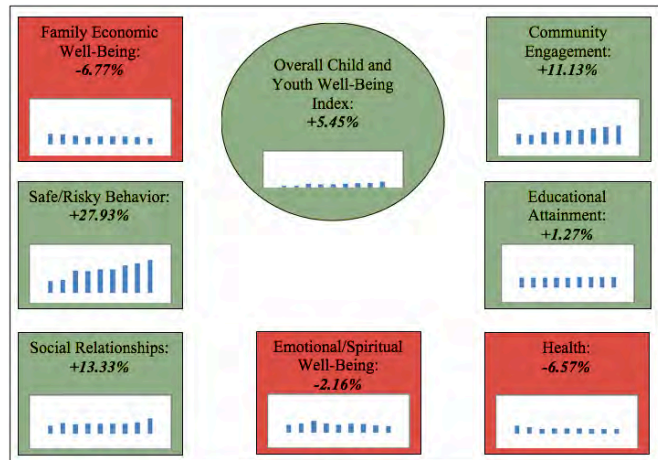
**Between 2000 and 2008 the overall CWI increased by 5.45 percent.** The domain and indicator contributions to the change in the CWI indicate:

- There was a decline of 6.77% in the Family Economic Well-Being Domain from 2000 to 2008, which shows the long-term trend in increased economic disadvantages for children during this period.

- The Health Domain declined by 6.57%, primarily due to increasing child and youth trends in percent overweight.
- Emotional/Spiritual Well-Being Domain decreased by 2.16%. There were decreasing trends of youth attachments to religion. However, teen suicide rates decreased during the same period, which slowed the overall decline of this well-being domain.
- Positive changes in well-being from 2000-2008 were in the Safe/Risky Behavior Domain (27.93%), Social Relationships Domain (13.33%), and Community Engagement Domain (11.13%). There were declines in all of the 2008 rates of risky behaviors compared to the 2000 rates, as shown in Figure 2b. Involvement in community institutions, such as school and work, all increased, and voting in presidential elections spiked in 2008.

Long-term (since 1975) changes in the Overall CWI, the CWI Domains of Well-Being, and Key Indicators are described in Appendix D.

**Figure 2a:** Percentage Changes in the CWI and Its Component Domains of Well-Being, 2000-2008, With Charts Showing Year-To-Year Changes



**Note 1:** The base year for the percentage changes in the figure is 2000 = 100.

**Note 2:** The Key Indicators of the CWI are oriented so that positive percentage changes in the CWI and its domain indices indicate improvements in well-being and negative changes indicate deteriorations.

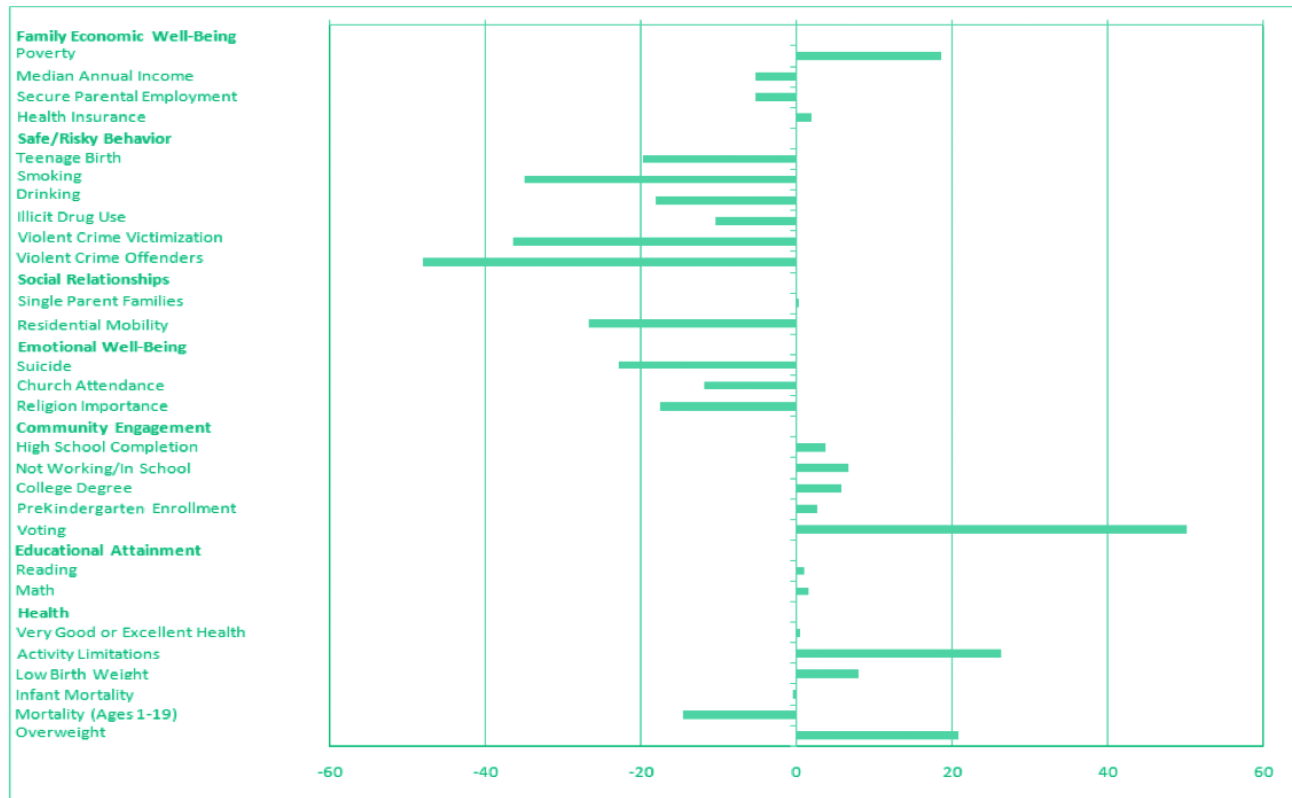
**Note 3:** The boxes in the figure are highlighted in green if the respective index shows a percentage increase from 2000 to 2008 and in red if the index shows a percentage decrease from this base year.

<sup>6</sup>As reported in Appendix C, 7 of the 28 Key Indicators are projected for 2008.

<sup>7</sup>As reported in Appendix C, 25 of the 28 Key Indicators are projected for 2009.

To provide details on changes in specific indicators in the CWI for a comparable time period, Figure 2b shows the Key Indicator changes from 2000 to 2008. Bars to the left indicate that there has been a decline in the indicator rates, whereas bars to the right indicate an increase.

**Figure 2b:** Percentage Changes in the Key Indicators of the CWI, 2000-2008



# Special Focus Report

## *The Impacts of the Great Recession on Child and Youth Well-Being: How Broad? How Deep?*

The financial and banking crisis of 2008 mushroomed into a severe downturn in the economy in 2008 and 2009, a downturn so severe that it has been termed the “Great Recession.” **It is especially important to consider its impact on children and youths, the oft-forgotten victims of difficult economic times.** Children under 18 are the largest group of U.S. citizens in poverty. The Great Recession has been particularly hard on children and youths as state budgets continue to be cut, resulting in significant reductions in educational, health, and other programs that support children and youths, particularly those at risk. At a time when children are most vulnerable to the effects of budget cuts we should be investing more to support and prepare the next generation of children, especially those in their early years, to be healthy and properly prepared to learn when they enter school. Studies have shown that children who start school with disadvantages do not catch up, and will continue to fall behind their better-prepared peers. In addition, state budget cuts are likely to affect funding for afterschool programs, summer school, subsidized meals, and other important resources for school-aged children. The future effect will be cohorts of children struggling through school. Subsequently, future test scores will drop, and these children may never reach their true potential.

In the 2009 FCD-CWI Report, we addressed the questions: What will be the impacts of this period of financial crisis, rising unemployment, and economic recession on child and youth well-being? Can these impacts be anticipated today, well before the corresponding official statistics are compiled and released some four or five years from now?

We suggested in the 2009 Report that the impacts can be anticipated, at least to some extent. Our long-term record

of changes in the CWI and its component domains and Key Indicators provide a basis on which to do so. This was the special focus of the 2009 Report. In the current report, we:

- update our previous projections; and
- continue our study of these impacts by focusing on anticipating the breadth and depth of the impacts of the Great Recession.

Specifically, in addition to updating the projections in our 2009 Report, our objective is to give some indication of:

- **the extensiveness of impacts** of the recession on many aspects of the lives of children (including several additional indicators of well-being that are examined and projected); and
- **how many of America’s children will be impacted** (in addition to projections of rates or percentages for the indicators, we also project the numbers of children or families expected to be impacted).

Predictions of the future are always precarious. However, based on our studies of the behavior of the CWI and its component domains and indicators over the years, we can at least make approximate estimates of these aspects of the well-being of America’s children and youths over the next two to three years, as we work our way through this economically difficult period. The anticipated impacts stated below are tentative, as this is uncharted territory—no one, to the best of our knowledge, has engaged in this kind of systematic anticipatory exercise for child and youth well-being.

**A Note on Terminology and the Time Frame of the Predictions:** For clarity of the exposition, as stated in our 2009 Report, we emphasize the following properties of the predictions/projections given below.

**First, we distinguish two types of impacts—direct and indirect.** The most **direct impacts** of the recession will be on the Family Economic Well-Being Domain and its four Key Indicators, as identified above.<sup>8</sup> 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. We project these direct impacts and state them quantitatively. In addition, however, as families cope with losses of jobs of one or more employed parents, corresponding losses or declines in family income, and stable employment, and as communities cope with declining public sector budgets due to decreases in taxes collected and with strained resources available to community organizations and voluntary associations, there will be many indirect impacts on other Well-Being Domains and Key Indicators of child and youth well-being in the CWI. Based on the CWI databank of time series indicators of child and youth well-being and our analyses thereof, we can crosswalk among the Well-Being Domains and Key Indicators of the CWI to anticipate some of these indirect impacts. However, since they are indirect impacts and our projections are based on only three prior recessionary periods in the U.S. since 1975, these projections are more tentative and are stated qualitatively in terms of expected directions of impacts, but not in terms of magnitudes.

**Second, concerning the time frame of the predictions/projections stated below, the reality of the Great Recession is clear.** Generally, it is dated from December 2007. The recession gained momentum through 2008 and extended into 2009. By some indicators, the economy began to turn around and improve in late 2009. However, there will be a substantial period of time before unemployment levels, family incomes,

and stable jobs return to pre-recession levels. Therefore, while the official time period of the recession may date from December 2007 to late 2009, the predictions/projections stated below have the negative impacts of the recession on the family economic well-being indicators extending into 2010 and beyond.<sup>9</sup> Accordingly, our projections of direct impacts of the economic recession on the Family Economic Well-Being Domain and its four Key Indicators are reported for the years 2008 to 2012 in order to include the years of expected downturn, 2008-2009; as well as possible/potential recovery in 2010-2012. By comparison, our projections of indirect impacts on other Well-Being Domains and Key Indicators use 2010 as the focal year, as 2010 likely will be the worst year of the 2008-2012 period for these impacts.

## 1. Impacts on the Overall Composite CWI

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For the overall composite CWI, we anticipate a decline of about 3 points—about 3 percent—from its recent peak of about 104 in 2008 to a low point of about 101 in 2010. This will bring the CWI down to just above the 100 at which it is set in its base year 1975.

This overall decline in the CWI will occur through several of the Well-Being Domains of the CWI and their Key Indicators. As indicated above, however, the overall decline in the CWI will be driven most directly by a decline in the Family Economic Well-Being Domain Index, to which we turn our attention.

## 2. Impacts of the Great Recession on Family Economic Well-Being Domain

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Figure 3 shows an expected trajectory of the Family Economic Well-Being Domain Index from the year 2008, the last year for which we currently have observed data on the Key Indicators of this domain, through 2009, 2010, 2011, and 2012. This expected trajectory in Family Economic Well-Being is based on the assumption that the current economic decline will

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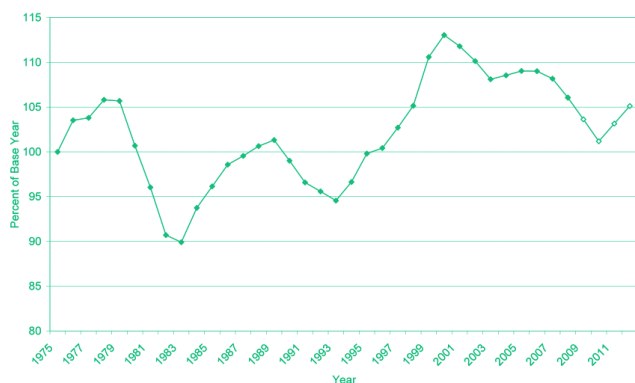
<sup>8</sup>See also Appendix A for a list of Well-Being Domains and Key Indicators in the CWI.

<sup>9</sup>Details on the assumptions on which our projections are based, and the methods of their derivation, were described in the 2009 FCD-CWI Report and are reviewed in Appendix E.

be in the form of a *severe recession*, on the order of that of 1981-1982, and not a depression that lasts several years.

In particular, the scenario depicted in Figure 3, and the associated Key Indicators for this domain index given below, assumes that the U.S. civilian unemployment rate in the current downturn peaked at an annual level of 9.5 percent in 2009 and then slowly recovers through 2010-2012. In Section V below, we describe how the trajectory depicted in Figure 3 could be affected if the recession becomes more severe or extended in time.

**Figure 3:** Family Economic Well-Being Index, 1975-2008, with Projections for 2009-2012



Note: Observed data are solid. Projected data points are hollow.

**Figure 3 shows that the Family Economic Domain Index is expected to decline from a recent peak of 109 in 2006 to a low point of about 101 in 2010.**

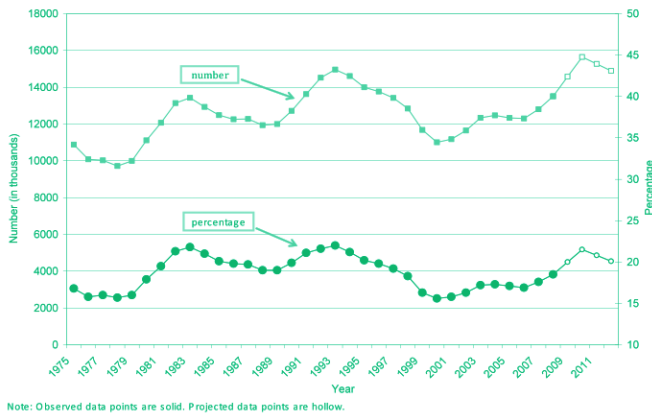
This low will be reached in 2010 rather than 2009 because of lags in the impact of recessions on the Key Indicators in the Family Economic Well-Being Domain. Carrying our projections out through the years 2011 and 2012, we then expect to see a slow recovery in the Family Economic Well-Being Domain Index.

**Importantly, however, since the Family Economic Well-Being Domain Index has an initial value of 100 in 1975, this scenario implies that by 2010 it will have declined, for all practical purposes, to its level of 35 years earlier. Thus, the current recession will wipe out the Family Economic Well-Being gains, particularly since the late 1990s, of this 35-year-period.**

As noted earlier in this report, the Family Economic Well-Being Domain Index is comprised of four Key Indicators: the poverty rate for all families with children, the secure parental employment rate (children living in families with at least one parent with full-time employment year round), median annual income for all families with children, and the rate of children living in families with some form of health insurance. In the 2009 FCD-CWI Report, we reported our projections of each of these Key indicators through 2012. Those projections are updated in Figures 4 through 8. These help to interpret the changes over time in the Family Economic Well-Being Index shown in Figure 3.

Figure 4 gives the over time and expected trajectories for the first of these four Key Indicators, the percentage of children ages 0 to 17 living in families classified as having incomes below the official poverty line as set each year by the U.S. Census Bureau. While this official poverty line is somewhat arbitrary and has been critiqued widely and frequently for not providing an adequate accounting of levels of poverty, its important attribute for the CWI is not its level but rather its trend over time and across the years. That is, even if alternative definitions of poverty lines would yield different estimates of the percentage of children living in families with poverty level incomes, their trends over time in terms of ups and downs from year to year would likely be quite consistent with those given by the official poverty line and exhibited in Figure 4.

**Figure 4:** Number and percentage of children ages 0-17 living in families below the 100% poverty line, 1975-2008, with projections for 2009-2012



To assist in the interpretation of the extent of population impacts of the expected upturn in this poverty rate during the current recession on the economic well-being of families with children, Figure 4 also contains the corresponding trend in the number of children living in families with incomes below the official poverty line.

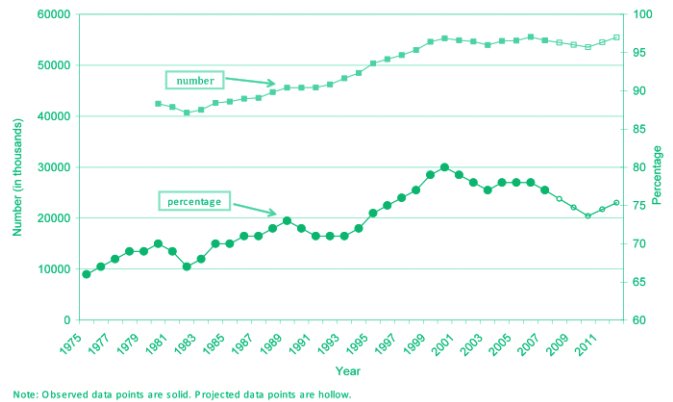
**Figure 4 shows that, under the assumptions described above, the percentage of children living in families with incomes below the official poverty line is expected to peak at about 21.5 percent in 2010, a level comparable to that of the economic recessions of 1981-1982 and 1990-1991.**

**Correspondingly, the number of children living in families with incomes below the official poverty line will rise from a recent low of 12.3 million in 2006 to about 15.6 million in 2010 —an increase of over 3.3 million.**

Figure 5 presents the historical and expected trajectories of the second Key Indicator in the Family Economic Well-Being Domain: the percentage and, correspondingly, the number of children living in families with secure employment, defined as having at least one parent employed full-time on a year-round basis. The percentage of children in families who meet this criterion has had a secular increase across the decades from the high 60s to the high 70s, as more and more couples with children have had both members in the labor force and employed, and more single parents were also working.

However, single parents found it increasingly difficult to maintain full-time work year-round, and one or both working parents in couples also faced such problems. With the loss of jobs and the rise in the unemployment rate during the current recession, this percentage is anticipated to decline, as shown in the figure.

**Figure 5:** Number and percentage of children ages 0-17 living with at least one parent employed year-round, full-time, 1975 or 1981 to 2007, with projections for 2008-2012.



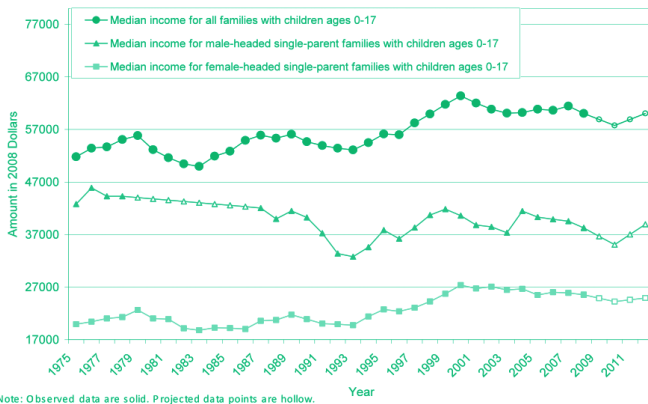
Note: Observed data points are solid. Projected data points are hollow.

**Specifically, it is expected that the percentage of children living in families with at least one parent employed full-time, year-round, will decline from a recent peak of 78 percent in the years 2004-2006 to about 74 percent in 2010.**

**Over the same time frame there will be a corresponding decrease of about 1,989,000 in the number of children in families with at least one parent employed full-time year-round.**

The historical and expected trajectories of the third Key Indicator in the Family Economic Well-Being Domain, median annual family income in constant 2008 dollars, are given in Figure 6. In addition to median family income for all families with children ages 0 to 17, the figure also gives the corresponding trends of the median annual incomes of single-parent families, both female-headed and male-headed. Median incomes of all three types of families with children are expected to decline during the current recession. Indicators of unemployment and job losses show that men are particularly vulnerable to such outcomes, as compared to women.

**Figure 6:** Median family income in families with children under 18 years old in 2008 Dollars, 1975-2008, with projections for 2009-2012



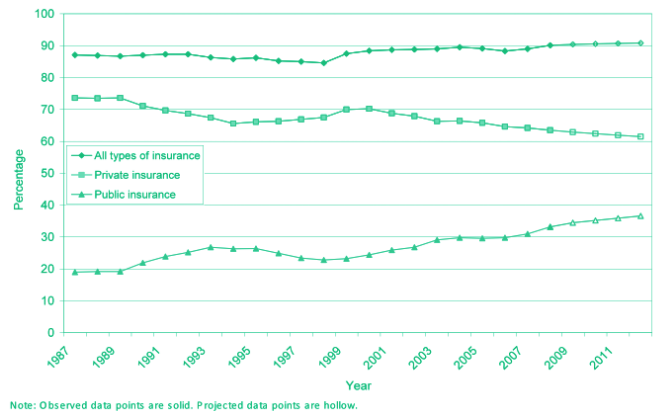
**For all families with children, it is expected that median annual income will decline from \$61,500 in 2007 to almost \$57,800 in 2010.**

**For children in female-headed single-parent families, median annual income is expected to decline from just over \$25,900 in 2007 to about \$24,250 in 2010.**

**The median annual income of male-headed single-parent families will be even more severely impacted, declining from about \$39,500 in 2007 to about \$35,100 in 2010. This is largely a consequence of more severe job losses for males than females during this recession.**

The fourth Key Indicator in the Family Economic Well-Being Domain is the rate (percentage) of children living in families with some form of health insurance. This is an important indicator of children’s access to health care, and therefore of the material well-being of children, trends in which the economic domain index seeks to measure. Data on this indicator series are available back to 1987 rather than the base year of 1975 for most of the CWI indicators. Figure 7 shows the historical and expected trajectories of three versions of this indicator: the percentage with all types of health insurance (which is used in the overall CWI), the percentage with private health insurance, and the percentage with public health insurance.

**Figure 7:** Percentage of Children Living in Families With Health Insurance, 1987-2008, with Projections for 2009-2012



**Of all of the Key Indicators in the Family Economic Well-Being Domain, the health insurance indicator will be the least negatively impacted by the current recession. The main reason is that health insurance coverage for children is substantially impacted by public programs, such as the State Children’s Health Insurance Program (SCHIP) and other publicly financed health care programs.**

**Thus, the percentage of children in families with some form of health insurance likely will remain relatively stable at around 90 percent, as in recent years.**

**In addition, the trend towards substitution of publicly-funded health insurance programs for children for private-sector funding likely will continue and perhaps even accelerate during the recession because working families may lose access to private health insurance plans.**

### 3. Indirect Impacts on Other Domains and Indicators

In brief, there is little doubt that the current economic recession will have very substantial negative impacts directly on the Family Economic Well-Being Domain of the CWI and its component Key Indicators. 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. And, because these indirect impacts are based on a historical record of only three prior recessionary periods since 1975, our analyses are more

tentative and stated qualitatively in terms of expected directions of impacts, not in terms of magnitudes. Specifically, in the 2009 Report we cited expected impacts on 12 Key Indicators and 5 Well-Being Domains. These are summarized in Table 1.<sup>10</sup>

Children's overall health is expected to decline primarily due to more overweight children and youth. This Key Indicator is likely to increase as the recession drives parents to rely more on low-cost fast food or filling but less nutritious food to feed their children. In addition, based on the historical record of impacts of past recessions, the overall child mortality rate for children and youth ages 1 to 19 may show an increase.<sup>11</sup>

The connections that children have to their surrounding communities is likely to be negatively impacted by declines in PreKindergarten enrollments as more parents are unemployed and more children are living in poverty and as states and local communities reduce the availability of PreKindergarten programs due to budget cuts. Such declining trends could lead to poorer future performance of children in elementary school and beyond, particularly for those children at-risk due to poverty and other social inequalities. In terms of Key Indicators in the CWI, with a lag of about five years, the impacts of these reductions in PreKindergarten enrollments may take the form of a **cohort effect** on academic skills. In the CWI, this will be evidenced in future years by reduced Reading and Mathematics scores for children at age 9 (third and fourth graders) in the National Assessment of Educational Progress tests. With additional lags a few years beyond age 9, reductions in academic abilities may lead to higher school dropout rates at age 16, thus resulting in a further cohort effect on increased numbers of detached youths beyond the more immediate increases associated with the Great Recession cited in the next paragraph.

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<sup>10</sup> Combined with impacts on the four Key Indicators in the Family Economic Well-Being Domain cited above, this is a total of 16 of the 28 Key Indicators of the CWI from 6 of its 7 Domains of Well-Being for which we anticipate impacts of the economic recession. For the other 12 Key Indicators, the data do not indicate that there will be detectable impacts, either because changes therein are driven by other logics or mechanisms or because any impacts will be very small.

The economic downturn and rising youth unemployment rates associated with the Great Recession can result in an increase in detached youths. It is expected that there will be substantial increases in the 2009-2010 period in the proportion of youths ages 16-19 who will be both not in school and not working—and thus not connected to, or involved with, two major mainstream social institutions (schools and the economy) of American society. These “detached youths” will be at elevated risk of involvement in drug and crime cultures and activities. This is based on historic recessionary trends of budget cuts for policing and juvenile crime prevention efforts, and subsequent detached youth activities.

Current trends in spiritual well-being indicate that the rate of youths attending weekly religious services has declined as has the proportion who report religious beliefs to be important, and this trend is expected to continue in the 2009-2010 period.

Some early indicators for 2009 are consistent with these expected impacts. For instance, the 2009 Monitoring the Future Survey data show increases in alcohol drinking and illicit drug use among 12th graders and increases in cigarette smoking, alcohol drinking, and illicit drug use among 10th graders. Trends in these indicators often lead trends in other Key Indicators. In general, however, data to fully assess the presence and/or extent of these impacts generally will not be available for two to five years.

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<sup>11</sup> One reason for this is that, unlike a number of the Key Indicators in the CWI which are based on residential sample surveys of the civilian noninstitutional population and thus miss children living in homeless families (see Section V of the text below), vital statistics on deaths are comprehensive of the entire residential U.S. population and thus will include deaths to children and youths ages 1 to 19 regardless of whether they or their families are homeless. Since being homeless is indicative of extreme poverty and deprivation, children and youths in these circumstances are at higher risk of health problems and death.



**Table 1. Projected Indirect Impacts of the Great Recession on Other Domains/Indicators of Child Well-Being for 2010**

Well-Being Domain	Key Indicator	Qualitative Direction of Expected Impact
Health	Rate of Overweight Children and Adolescents	+
	Mortality Rate (Ages 1-19)	+
Safe/Risky Behavior	Rate of Violent Crime Offending (Ages 12-17)	+
	Rate of Violent Crime Victimization (Ages 12-17)	+
Community Engagement	Rate of Youths ages 16 to 19 Who are Not Working/Employed and Not Attending School	+
	Rate of PreKindergarten Enrollment (Ages 3-4)	-
	Rate of Young Adults Who Have Received a Bachelor's Degree (ages 25-29)	+
Social Relationships	Rate of Residential Mobility of Families	-
	Rate of Children Living in Families Headed by a Single Parent	+
Emotional/Spiritual	Suicide Rate (Ages 10-19)	+
	Rate of Participation in Religious Services	-
	Rate of Assessed Importance of Religious Beliefs	-

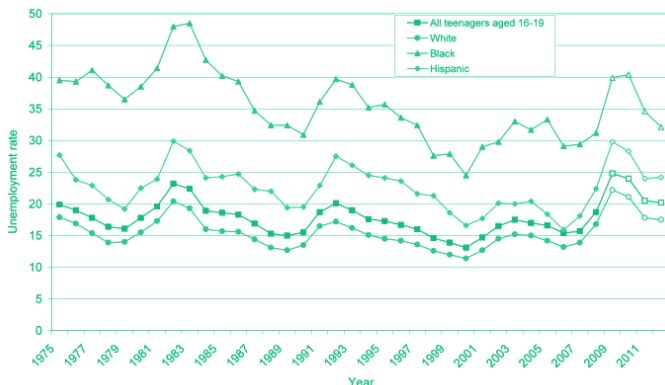
**Note:** A positive sign indicates that an increase is anticipated in the Key Indicator, whereas a negative sign indicates a decrease is anticipated.

## 4. Other Indicators of Breadth and Depth of Impacts

In order to highlight the extensiveness of the deleterious impacts of the Great Recession on child and youth well-being both in terms of the breadth of aspects of life that will be affected and the numbers of children and youth impacted, consider the following four additional indicators that are not part of the 28 Key Indicators of the CWI.

First, Figure 8 shows the historical record of the rate (percent) of the civilian labor force, ages 16-19, unemployed for the years 1975 to 2008, with our projections for the years 2009 through 2012. This indicator time series is of importance for the CWI, because the rate of youths ages 16 to 19 who are not enrolled in school or not working is a Key Indicator in our Community Engagement Domain of Well-Being. At these ages, youths who are not connected to one of these two social institutions are at an increased risk of engaging in deviant and/or criminal behavior, including drug use and violent crime victimization or offending.

**Figure 8:** Percentage of labor force aged 16 to 19 unemployed, 1975-2008, with projections for 2009-2012



Note: Observed data points are solid. Projected data points are hollow.

The time series of youth unemployment displayed in Figure 8 show that its range of variation for all teenagers is 15 to 25 percent, with higher levels observed during the recessions of the early 1980s, early 1990s, and early 2000s. Because the severity of the current Great Recession is comparable to that of the early 1980s, we project that levels of this overall rate of unemployment approached 25 percent in 2009. In addition,

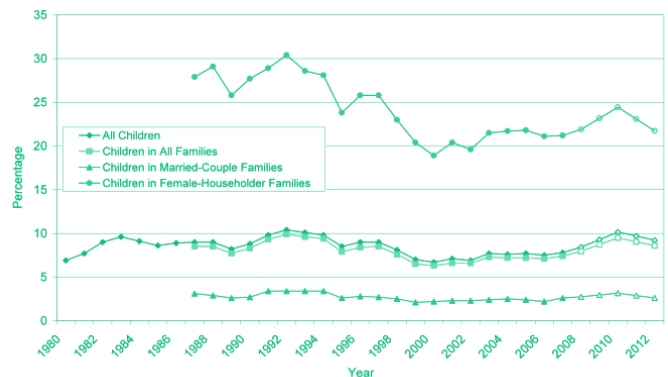
we project substantial variability among the major race/ethnic groups of teenagers, with the 2009 unemployment rate for Latino youths near the 30 percent level and 40 percent for African American youths. While the downturn in the economy and the corresponding scarcity of jobs for youths will be partially compensated for by increased rates of participation in schools of various types, it likely will not be the case that all youths who previously would have sought and obtained jobs will be able to stay connected to mainstream society through school continuation. Therefore, the surges in youth unemployment rates shown in Figure 8, and the corresponding potential for lives lost is most troublesome.

**Unemployment rates for youth ages 16-19 are expected to peak around 2009.**

**These rates will be particularly high for African American and Latino youths.**

Next, Figures 9 and 10 emphasize the significance of the upturn in the poverty rate for families with children living at extreme poverty levels. These figures show, respectively, trends in a) the rate (percent) and b) the numbers of all children ages 0 to 17 at last birthday living in families (for all families and by type of family head) with incomes below 50 percent of the official poverty line for the years 1980 to 2007, with our projections for the years 2008-2012. Suffice it to say that children reared in families at these income levels are in highly deprived circumstances relative to average levels of income. These children are at an increased risk of a number of developmental problems and their families are at an increased risk of homelessness.

**Figure 9:** Percentage of all children and related children ages 0-17 living in families with incomes below 50% of official poverty levels, 1980-2007, with projections for 2008-2012

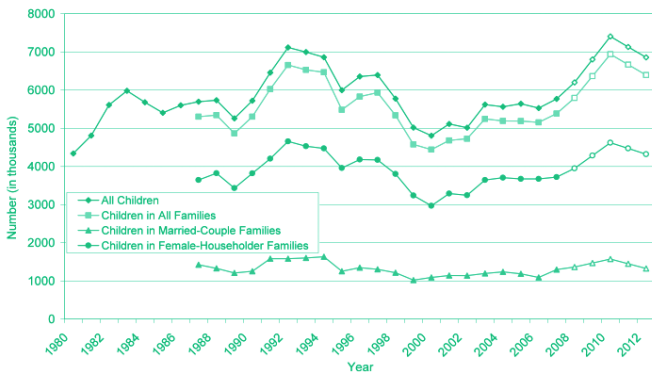


Note: Observed data points are solid. Projected data points are hollow.

From Figure 9, it can be seen that we are projecting the percent of all children living at these deep poverty levels to top out at 10.1 in 2010, a level nearly as high as the 10.4 percent observed in 1992. The percent of children in single-female headed families that are living below 50 percent of the poverty level is expected to climb to almost 25 percent in 2010.

Figure 10 shows the approximate number of children ages 0 to 17 living in extreme poverty in the U.S.

**Figure 10:** Estimated Numbers of all children and related children ages 0-17 living in families with incomes below 50% of official poverty levels, 1980-2007, with projections for 2008-2012

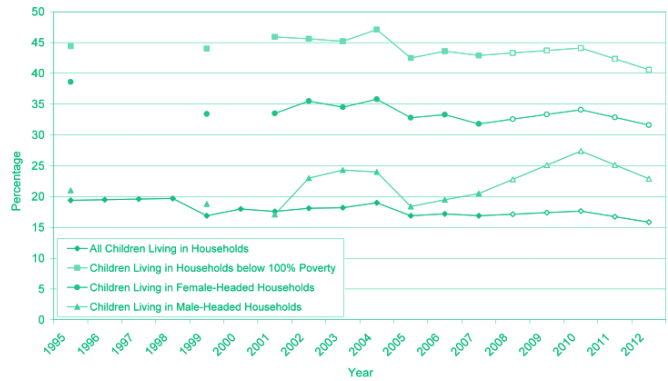


Note: Observed data points are solid. Projected data points are hollow.

The numbers of all children living in situations with incomes at deep poverty levels will show an increase of 1.88 million children from 5.53 million in 2006 to a projected 7.41 million in 2010, an increase of about 34 percent.

Figures 11 and 12 exhibit trends and projections for another indicator of the severe impacts of poverty on the basics of child well-being, namely food insecurity. Food insecurity indicates that all members of the family do not at all times have access to sufficient, safe, and nutritious food to maintain an active and healthy life. These figures report, respectively, trends in a) the rate (percent) and b) the numbers of all children ages 0 to 17 at last birthday living in food-insecure households for the years 1995 to 2007, with projections for the years 2008-2012.

**Figure 11:** Food security: Percentage of children ages 0-17 in food-secure households by selected characteristics, selected years 1995-2007, with projections for 2008-2012



Note: Observed data points are solid. Projected data points are hollow.

Figure 11 shows that we are projecting the percent of all children living in food-insecure households to increase from 16.9 in 2007 to 17.7 in 2010.

For children in households 100 percent below the poverty line, food insecurity is projected to increase from 42.9 percent in 2007 to 44.1 percent in 2010.

**Figure 12:** Food security: Number of children ages 0-17 in food-secure households by selected characteristics, selected years 1995-2007, with projections for 2008-2012



Note: Observed data points are solid. Projected data points are hollow.

Figure 12 shows that between 2007 and 2010 there will be an increase of over 750,000 children who will be at risk of living in a food-insecure household.

Figures 13 and 14 display trends and projections for a final indicator of the breadth and depth of impacts of the recession on the well-being of children—housing problems. These figures report, respectively, trends in a) the rate (percent) and b) the numbers of households with children ages 0 to 17 that had housing problems for selected years 1978 to 2007, with our projections for 2009 and 2011.

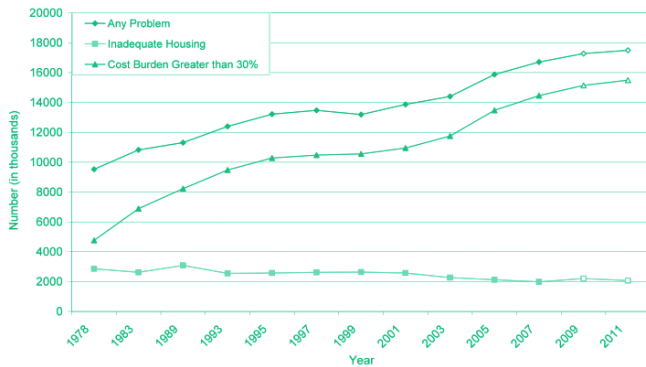
**Figure 13:** Housing problems: Percentage of households with children ages 0-17 that reported housing problems by type of problem, selected years 1978-2007, with projections for 2009-2011



Note: Observed data points are solid. Projected data points are hollow.

**In Figure 13, we project that the percent of households with housing cost problems (mortgage or rent) continued the uptrend that began in the early 2000s into 2009 and 2011, but at a slowing pace and leveling out at about 39 percent or about two out of five households.**

**Figure 14:** Housing problems: Number of households with children ages 0-17 that reported housing problems by type of problem, selected years 1978-2007, with projections for 2009-2011



Note: Observed data points are solid. Projected data points are hollow.

**Figure 14 translates these percentages into numbers, showing a projected increase of about 4.5 million households bearing housing cost burdens from 2001 to 2011.**

**Figures 13 and 14 show that we project an 11 percent increase, or about 218,000 households, living in inadequate housing from 2007 to 2009.**

## 5. Well-Being of Children Outside the Statistical Net

All of the foregoing analyses and, indeed, the CWI itself are based on Census, Vital Statistics, and sample survey data. While the decennial census attempts to be as comprehensive as possible in its count of the U.S. population and virtually all births and deaths are recorded in the Vital Statistics, most sample survey data are based on samples of residences, that is, of households and individuals, including children, who live in domiciles with residential addresses. This includes the ongoing and continuous American Community Survey conducted by the Bureau of the Census to provide data on the demographic, social, and economic characteristics of the population. It also includes the Annual Social and Economic Supplement to the monthly Current Population Survey, conducted in February, March, and April of each year, as well as the many other federally sponsored sample surveys from which we obtain data series that are at the core of the CWI.

During a severe downturn in the economy such as we have experienced in the past two years, the *limitations* of this residence-based sampling frame of surveys become more salient. The reason is that, during a recession, an increasing fraction of the population of children in the U.S. live in families that become homeless and thus do not have residential addresses and are not within the frame of most sample surveys.

In a non-recession period like 2006-2007, the federal Department of Housing and Urban Development Annual Homeless Assessment Report to Congress estimated

330,000 “literally homeless” children—defined as living in sheltered facilities or unsheltered places not meant for human habitation.<sup>12</sup> In addition, it is estimated that the homeless population in the U.S. increased by about 15 percent during 2008.<sup>13</sup> Applied to a base of 330,000, that implies an increase of approximately 50,000 literally homeless children, children whose families have no residential address, and thus, who are outside of the standard sampling frame of most sample surveys. **In addition, if the 15 percent rate of increase in annual rates of homeless children is cumulative and extends into 2009 and 2010, the impact of the recession on the prevalence of homeless children could be an increase on the order of 50 percent, yielding as many as 500,000 homeless children in 2010.**

Because homeless children and youth live in relatively precarious and deprived environments, they are likely to have relatively low well-being in general and in terms of the domains and indicators that comprise the CWI. An implication of this for the CWI is that our estimates of prevalence of deleterious outcomes of many of the Key Indicators and the Domain-Specific and Overall Composite Indices of Child and Youth Well-Being are biased downward. That is, the actual annual prevalence of such well-being outcomes as teenage unemployment, food insecurity, and inadequate housing is higher than the estimates we have reported above. In addition, our projections are on the low side. ***In short, the estimates of the breadth and depth of impacts of the recession on the well-being of America’s children that we have reported here are, if anything, conservative.***

## VI. Conclusion

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The comprehensive, composite view of well-being—as comprising several domains or areas of social life—taken by the CWI leads to cross-walks and comparisons among the various dimensions tapped by its indicators. This analysis of interdependencies and interactions among indicators and dimensions of child and youth well-being alerts us to a

number of negative consequences of the current economic downturn. It is certain that there will be a reversal of decades-long improvements in family economic well-being. In addition, through its impacts on budgets of community associations and government funding, the recession will have deleterious consequences for a number of additional aspects of well-being. It is important for citizens, parents, and community and political leaders to be aware of these potential deteriorations so that actions at all levels of society can be taken for their amelioration.

In concluding, it should be emphasized that the focus of the CWI is on statistical indicators of child and youth well-being at the national level. Accordingly, all of the economic and social impacts cited above have been for the nation as a whole. Beneath these national level indicators and associated impacts, there will be a diversity of impacts across the U.S.

Geography is one important dimension of this diversity. Some local communities and some of the 50 states will be impacted much more severely and negatively by the recession than the national averages. Specifically, **some local communities and states will experience civilian unemployment rates in the 12 to 25 percent range—levels that define economic depressions, not recessions. In these communities and states, the negative impacts on child well-being cited above will be much more severe than the national averages.** There also will be some communities and states that will be less severely impacted than the national averages.

A second dimension of diversity of impacts pertains to variations across race/ethnic and socioeconomic lines. In prior studies of the CWI and the temporal changes in child well-being across the last quarter of the 20th century and the first decade of the 21st century that it measures, we have found that when the general trend is one of improving child well-being, children from most minority racial and ethnic groups, of lower socioeconomic strata, and in communities that have lesser economic resources often experience rates of

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<sup>12</sup>U.S. Department of Housing and Urban Development (HUD). (2007). Annual Homeless Assessment Report to Congress. Retrieved from [www.huduser.org/Publications/pdf/ahar.pdf](http://www.huduser.org/Publications/pdf/ahar.pdf).

<sup>13</sup>See Exhibit 2.1 in U.S. Conference of Mayors, 2008, Hunger and Homelessness Survey. [www.usmayors.org](http://www.usmayors.org)

improvement in well-being that are above the national average. On the other hand, the reverse is true when the general trend is one of declining child well-being. That is, when the general trend is one of deteriorating child well-being—as will be the case during the 2008-2010 period—children from most minority racial and ethnic groups, of lower socioeconomic strata, and in communities that have lesser economic resources and reserves experience rates of deterioration that are greater than the national average.<sup>14</sup>

## Acknowledgements and Contact Information

The **Foundation for Child Development Child and Youth Well-Being Index Project** at Duke University is coordinated by Kenneth C. Land, Ph.D., John Franklin Crowell Professor, Department of Sociology and Center for Demographic Studies, P.O. Box 90088, Duke University, Durham, NC 27708-0088 (e-mail: kland@soc.duke.edu). Other researchers involved in the project include Vicki L. Lamb, Ph.D. (North Carolina Central University and Duke University), and Hui Zheng, M.A. (Duke University). The Project is supported by grants from the Foundation for Child Development (<http://www.fcd-us.org/>). We especially acknowledge the support and encouragement of Ruby Takanishi, President, and Fasaha Traylor, Senior Program Officer, Foundation for Child Development. We also thank Kristin A. Moore, Ph.D. and Brett Brown, Ph.D. of Child Trends, Inc. (<http://www.childtrends.org>), Donald Hernandez, Ph.D. of the State University of New York at Albany, and the FCD-CWI Advisory Panel for invaluable advice and assistance in this project.

**On the Web:** More information about the CWI, its construction, and the scientific papers and publications on which it is based can be found on the World Wide Web:

<http://www.soc.duke.edu/~cwi/>  
and at [www.fcd-us.org](http://www.fcd-us.org)

## Appendix A

### Methods of Construction and Indicator List for the CWI

#### Methods of Construction

Annual time series data (from Vital Statistics and sample surveys) were assembled on 28 national-level indicators in seven quality-of-life domains: *Family Economic Well-Being, Safe/Risky Behavior, Social Relationships, Emotional/Spiritual Well-Being, Community Engagement, Educational Attainment, and Health*. These seven domains of quality-of-life have been well-established as recurring time after time in over three decades of empirical research in numerous subjective well-being studies. They also have been found, in one form or another, in studies of the well-being of children and youth.

To calculate the CWI, each of the time series of the indicators is indexed by a base year (1975). The base year value of the indicator is assigned a value of 100 and subsequent values of the indicator are taken as percentage changes in the CWI. The directions of the indicators are oriented so that a value greater (lesser) than 100 in subsequent years means the social condition measured has improved (deteriorated).

The indexed Key Indicator time series then are grouped into the seven Domains of Well-Being by equal weighting to compute the Domain-Specific Index values for each year. The seven Domain-Specific Indices then are grouped into an equally-weighted Child and Youth Well-Being Index value for each year. The CWI Project uses an equal-weighting strategy for constructing its composite indices for two reasons. First, it is the simplest and most transparent strategy and can easily be replicated by others. Second, statistical research done in conjunction with the CWI Project has demonstrated that, in the absence of a clear ordering of the indicators of a composite index by their relative importance to the composite and on which there is a high degree of consensus in the population, an equal weighting strategy is privileged in the sense that it will achieve the greatest level of agreement among the members of the population. In statistical terminology, the equal-weighting method is a *minimax estimator*. See Hagerty Michael R. and Kenneth C. Land 2007 “Constructing

<sup>14</sup>For example, our prior studies imply that for every one point decline of the composite CWI during a period of deteriorating child well-being for all children, there will be approximately a two point decline in the CWI among African American and Latino children and youths.

Summary Indices of Quality of Life: A Model for the Effect of Heterogeneous Importance Weights," *Sociological Methods and Research*, 35(May):455-496.

Since it builds on the subjective well-being empirical research base in its identification of domains of well-being to be measured and the assignment of indicators to the domains, the CWI can be viewed as *well-being-evidence-based measures of trends in averages of the social conditions encountered by children and youth in the United States across recent decades*.

**Table A-1. Twenty-Eight Key National Indicators of Child and Youth Well-Being in the United States.**

*Family Economic Well-Being Domain*

1. Poverty Rate (All Families with Children)
2. Secure Parental Employment Rate
3. Median Annual Income (All Families with Children)
4. Rate of Children with Health Insurance

*Safe/Risky Behavior Domain*

1. Teenage Birth Rate (Ages 10-17)
2. Rate of Violent Crime Victimization (Ages 12-19)
3. Rate of Violent Crime Offenders (Ages 12-17)
4. Rate of Cigarette Smoking (Grade 12)
5. Rate of Binge Alcohol Drinking (Grade 12)
6. Rate of Illicit Drug Use (Grade 12)

*Social Relationships Domain*

1. Rate of Children in Families Headed by a Single Parent
2. Rate of Children who have Moved within the Last Year (Ages 1-18)

*Emotional/Spiritual Well-Being Domain*

1. Suicide Rate (Ages 10-19)
2. Rate of Weekly Religious Attendance (Grade 12)
3. Percent who report Religion as Being Very Important (Grade 12)

*Community Engagement Domain*

1. Rate of Persons who have Received a High School Diploma (Ages 18-24)
2. Rate of Youths Not Working and Not in School (Ages 16-19)
3. Rate of PreKindergarten Enrollment (Ages 3-4)
4. Rate of Persons who have Received a Bachelor's Degree (Ages 25-29)
5. Rate of Voting in Presidential Elections (Ages 18-20)

*Educational Attainment Domain*

1. Reading Test Scores (Ages 9, 13, and 17)
2. Mathematics Test Scores (Ages 9, 13, and 17)

*Health Domain*

1. Infant Mortality Rate
2. Low Birth Weight Rate
3. Mortality Rate (Ages 1-19)
4. Rate of Children with Very Good or Excellent Health (as reported by parents)
5. Rate of Children with Activity Limitations (as reported by parents)
6. Rate of Overweight Children and Adolescents (Ages 6-19)

Note: Unless otherwise noted, indicators refer to children ages 0-17.

## Appendix B

### Sources of Data for the CWI

Child Poverty	US Bureau of the Census, March Population Survey, Current Population Reports, Consumer Income, Series P-60, Washington, D.C.: US Bureau of the Census. <a href="http://www.census.gov/hhes/www/poverty/histpov/hstpov3.xls">http://www.census.gov/hhes/www/poverty/histpov/hstpov3.xls</a> 1975-present
Secure Parental Employment	US Bureau of the Census, March Current Population Survey, Washington, D.C.: US Bureau of the Census. Available from Forum on Child and Family Statistics, <a href="http://www.childstats.gov/americaschildren/tables/econ2.asp?popup=true">http://www.childstats.gov/americaschildren/tables/econ2.asp?popup=true</a> 1980-present. Special tabulation from CPS CD 1975-1979.
Median Annual Income	US Bureau of the Census, March Current Population Survey, Historical Income Tables – Families, Washington, D.C.: US Bureau of the Census. <a href="http://www.census.gov/hhes/www/income/histinc/f10AR.xls">http://www.census.gov/hhes/www/income/histinc/f10AR.xls</a> 1975-present.
Health Insurance	US Bureau of the Census, Housing and Household Economic Statistics Division, unpublished tabulations from the March Current Populations Surveys, Washington, DC: US Bureau of the Census. Special tabulation by Federal Intra-agency Forum <a href="http://www.census.gov/hhes/www/hlthins/historic/hihistt3.xls">http://www.census.gov/hhes/www/hlthins/historic/hihistt3.xls</a> 1987–present.
Infant Mortality	CDC, National Center for Health Statistics, National Vital Statistics System, Monthly Vital Statistics Repvort (v25-v46), National Vital Statistics Report (v47-v49): Hyattsville, MD: NCHS. <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_01.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_01.pdf</a> 1975-present.
Low Birth Weight	CDC, National Center for Health Statistics, National Vital Statistics System, Report of Final Natality Statistics, Monthly Vital Statistics Reports (1975-1996), National Vital Statistics Reports (1997-present). Hyattsville, MD: NCHS. <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16.pdf</a>
Child and Adolescent Mortality	CDC, National Center for Health Statistics, National Vital Statistics System, Leading Causes of Death. <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_01.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_01.pdf</a> 1975–present.
Subjective Health and Activity Limitations	CDC, National Center for Health Statistics, National Health Interview Survey, Hyattsville, MD: National Center for Health Statistics. <a href="http://www.cdc.gov/nchs">www.cdc.gov/nchs</a> Available from Forum on Child and Family Statistics, <a href="http://www.childstats.gov/">http://www.childstats.gov/</a> 1984–present.
Obesity	CDC, National Center for Health Statistics, Health United States, 2003 and National Health and Nutrition Examination Survey (NHANES), Hyattsville, MD. <a href="http://www.cdc.gov/obesity/data/index.html">http://www.cdc.gov/obesity/data/index.html</a> 1975-present.
Teen Births	CDC, National Center for Health Statistics, National Vital Statistics System. Monthly Vital Statistics Reports (1975-1996), National Vital Statistics Reports (1997-present). Hyattsville, MD: National Center for Health Statistics. <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16.pdf</a>
Crime Victimization	US Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey and FBI Supplementary Homicide Reports. Available from Sourcebook of Criminal Justice Statistics Online, <a href="http://www.albany.edu/sourcebook/pdf/t342008.pdf">http://www.albany.edu/sourcebook/pdf/t342008.pdf</a> 1975-present.
Violent Crime Offenders	US Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey. <a href="http://www.ojp.usdoj.gov/bjs/">http://www.ojp.usdoj.gov/bjs/</a> 1975-present.



## Sources of Data for the CWI (con't.)

Smoking, Drinking, and Drugs	The Monitoring the Future Study, Institute for Social Research, University of Michigan: Ann Arbor, MI. <a href="http://www.monitoringthefuture.org/data/data.html">www.monitoringthefuture.org/data/data.html</a> , 1975-present.
Reading and Mathematics Scores	US Department of Education Statistics, National Assessment of Education Progress (NAEP). <a href="http://nces.ed.gov/nationsreportcard">http://nces.ed.gov/nationsreportcard</a> 1975-present.
High School Completion	US Bureau of the Census, October Current Population Surveys, Washington, D.C.: US Bureau of the Census. <a href="http://www.census.gov/population/socdemo/school/TableA-5a.xls">http://www.census.gov/population/socdemo/school/TableA-5a.xls</a> 1975-present.
Not Working and Not in School	US Bureau of Labor Statistics, Current Population Surveys, Washington, D.C.: US Bureau of the Census. Available from Forum on Child and Family Statistics, <a href="http://www.childstats.gov/">http://www.childstats.gov/</a> 1985-present. Special tabulation from CPS CD, 1975-1984.
PreKindergarten Enrollment	US Department of Education, National Center for Education Statistics, Digest of Education Statistics and Bureau of the Census, Current Population Survey. <a href="http://www.nces.ed.gov/programs/digest/d08/tables/dt08_006.asp">http://www.nces.ed.gov/programs/digest/d08/tables/dt08_006.asp</a> , 1980-present, interpolated years 1976-1979.
Bachelor's Degree	US Department of Education, National Center for Education Statistics, Condition of Education <a href="http://nces.ed.gov/programs/coe/2009/section3/table-eda-1.asp">http://nces.ed.gov/programs/coe/2009/section3/table-eda-1.asp</a> , 1975-present.
Voting in Presidential Elections	US Bureau of the Census, Current Population Reports, Series P-20, Voting and Registration, Washington, D.C.: US Bureau of the Census <a href="http://www.census.gov/hhes/www/socdemo/voting/publications/p20/2008/tables.html">http://www.census.gov/hhes/www/socdemo/voting/publications/p20/2008/tables.html</a> 1975-present.
Single Parent Families	US Bureau of the Census, Current Population Reports, Marital Status and Living Arrangements, Annual Reports. <a href="http://www.census.gov/population/socdemo/hh-fam/cps2008/tabC3-all.xls">http://www.census.gov/population/socdemo/hh-fam/cps2008/tabC3-all.xls</a> 1975-present.
Residential Mobility	US Bureau of the Census, Series P-20, Geographic Mobility, Washington, D.C.: US Bureau of the Census. <a href="http://www.census.gov/population/socdemo/migration/cps2008/tab01-01.xls">http://www.census.gov/population/socdemo/migration/cps2008/tab01-01.xls</a> 1975-present.
Suicide	CDC, National Center for Health Statistics, National Vital Statistics System. <a href="http://www.cdc.gov/nchs/nvss/mortality_tables.htm">http://www.cdc.gov/nchs/nvss/mortality_tables.htm</a> 1975-present.
Church Attendance and Importance	The Monitoring the Future Study, Institute for Social Research, University of Michigan: Ann Arbor, MI. <a href="http://www.monitoringthefuture.org/">http://www.monitoringthefuture.org/</a> 1975-present.

## Appendix C

### Child and Youth Well-Being Index Values, 1975-2008, with Projections for 2009

Year	CWI	Change in CWI
1975	100.00	0.00
1976	100.75	0.75
1977	98.93	-1.82
1978	99.26	0.32
1979	99.97	0.71
1980	99.59	-0.37
1981	97.37	-2.23
1982	96.02	-1.35
1983	96.55	0.53
1984	96.43	-0.11
1985	93.92	-2.51
1986	95.14	1.22
1987	93.98	-1.15
1988	94.00	0.01
1989	94.52	0.52
1990	94.06	-0.46
1991	92.97	-1.09
1992	92.84	-0.13
1993	91.45	-1.40
1994	91.29	-0.16
1995	93.11	1.83
1996	93.74	0.63
1997	94.13	0.39
1998	96.74	2.61
1999	99.13	2.39
2000	100.83	1.70
2001	100.88	0.05
2002	102.00	1.12
2003	101.05	-0.96
2004	101.10	0.05
2005	101.95	0.85
2006	102.29	0.35
2007	102.50	0.21
2008*	103.80	1.30
2009**	102.53	-1.27

\*As of release date, 7 Key Indicators were projected for 2008.

\*\*All except 3 Key Indicators were projected for 2009.

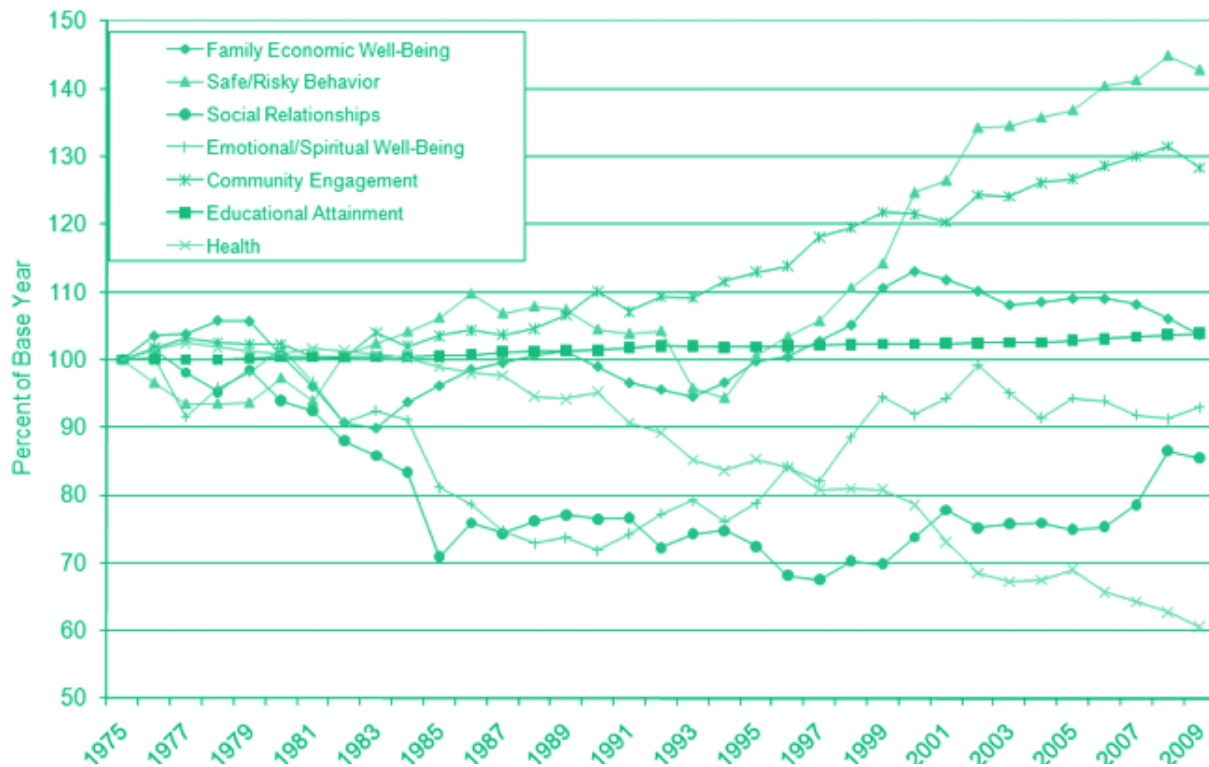
## Appendix D

### Long-Term Changes in the CWI

Section II of the Annual Update part of this report has highlighted short-term (2000 to 2008) changes in the CWI and its components. In addition, Figure 1 of that section displayed the long-term (since 1975) pattern of changes in the CWI since the base year 1975. Here we describe in more detail the long-term changes in the CWI, each of its domains, and each of its Key Indicators.

Corresponding to Figure 1 of Section II of the Annual Update, Figure D-1 shows long-term changes in the seven Well-Being Domains of the CWI. In the following discussion, we describe the long-term changes through 2007, the last year for which data are available for all of the Key Indicators of the CWI and thus for which no projections are necessary.

**Figure D-1:** Domain-Specific Summary Indices, 1975-2008, with Projections for 2009



#### Since 1975:

- As noted in Section II of the Annual Update, the overall composite CWI is **up only about 3 percent** over its 1975 base year value of 100.
- In addition, Figure D-1 shows that four of the domains of well-being improved:
  - family economic well-being,
  - risky behavior,
  - educational attainment, and
  - community involvement.
- Three of the domains of well-being deteriorated:
  - health,
  - social relationships, and
  - emotional/spiritual well-being.
- Twenty-one of the 28 specific Key Indicators improved:
  - median family income,
  - health insurance,
  - secure parental employment,
  - residential mobility,
  - infant mortality,

- child and adolescent mortality,
- very good or excellent health reported by parents,
- teenage births,
- smoking,
- drinking,
- drug use,
- violent crime victimization,
- violent crime offenders,
- high school completion,
- not working or in school,
- college degree,
- PreKindergarten enrollment,
- voting,
- reading,
- math, and
- suicide

- Seven of the 28 Key Indicators deteriorated:
  - poverty,
  - single parenthood,
  - low birth weight,
  - activity limitation reported by parents,
  - overweight,
  - religion importance, and
  - church attendance.

*Comparisons by Time-Period*

An analysis of the CWI by time-period over the 32 years from 1975 to 2007 helps to clarify the pattern of trends.

Period	Starting Index Value	Ending Index Value	Change During Period
1975 – 1980	100.00	99.59	-0.41%
1980 – 1985	99.59	93.92	-5.69%
1985 – 1990	93.92	94.06	+0.15%
1990 – 1995	94.06	93.11	-1.01%
1995 – 2000	93.11	100.83	+8.29%
2000 – 2007	100.83	102.50	+1.66%

In brief:

- The CWI showed **relative stability** in overall child and youth well-being in the five years from 1975 to 1980 followed by a **sharp decline** from 1980 to 1985.

- This was followed by **further deterioration** through the mid-1990s.
- The last half of the 1990s saw a **strong recovery** of the CWI to, or above, its 1975 value of 100.
- In the most recent period from 2000 to 2007, the Index **improved slightly while exhibiting fluctuations up and down**—down in 2003 after 9/11 and the 2001-2002 recession, and up slightly from 2004 to 2007.

**APPENDIX E**

*Methodology of the Projections and the Range of Potential Impacts of the Economic Downturn*

In the 2009 FCD-CWI Report, we based our projections of the impacts of the Great Recession on domains and indicators of the CWI on the assumption, shared among many economic forecasters at the time, that the economic downturn would be in the form of a severe economic recession similar to that of 1981-82, with the monthly civilian unemployment rate peaking in the 9 to 11 percent range and a duration of two to three years. To date (March 2010), that assumption appears to have been accurate.

A second assumption on which our anticipated impacts were, and are, based is that the negative consequences of the current economic downturn are not accompanied by other major economic, demographic, and social changes that lead to a cascade of negative consequences for child well-being. A confluence of several sources of societal changes occurred in the early 1980s and accounts for the fact that the 1981-1982 economic recession was the leading event in a long recession/decline in child and youth well-being that—as shown in Figure 1 of Section II of the Annual Update in this report—lasted into the early-1990s. In brief, the economic recession of the early 1980s occurred at the same time as other major economic and demographic changes. This included economic restructuring—the decline of the “rust belt” heavy industrial sectors of the economy to be replaced by the beginnings of the e-economy—and the demographic succession of the World War II generation of parents by their Baby Boomer children

as parents, with all of the changes in family structures (e.g., more single-parenting) and childcare that they wrought. If the similar economic, demographic, and social changes occur along with the Great Recession, then the anticipated impacts we have described could again cascade into a prolonged downturn/long recession in child and youth well-being.

Based on these two assumptions, the projections reported both in the 2009 Report and in the current report were calculated as weighted averages of the historical records of impacts (changes from peak to valley) on the Key Indicators in the CWI during the 1981-1982, 1990-1991, and 2001-2002 recessions, with the 1981-1982 recession weighted twice as much as the last two. As noted previously, this weighting is based on the diagnosis by many analysts that the Great Recession is the most severe in a quarter century and more like the 1981-1982 effects of the three previous recessions. The particular scenario of the recession that we utilized for the projections assumes that the U.S. civilian unemployment rate in the current downturn peaked at an annual level of 9.5 percent in 2009 and then begins a slow recovery through 2010-2012. As noted previously, since employment and income levels rebound slowly during a recovery period, this scenario still implies that the most severe impacts of the downturn on child and youth well-being will occur in 2010, which is the focal year we have used for many of the impacts reported above.

Granting the foregoing two assumptions as the basis for calculation of the anticipated impacts described above, we

close by emphasizing that they are based on a particular scenario of the civilian unemployment cycle for the current recession. The actual course of the Great Recession and recovery therefrom is not deterministic and we are not infallible forecasters.

Thus, in addition to the foregoing two provisos under which the projections described above have been developed, we note that, as with any demographic, economic, or social projection or forecast, there are bands of uncertainty around the projections—in all economic, demographic, and social projections, the bands of uncertainty grow with distance into the future from the most recent data available. In part, this is due to the inherent stochastic or statistical uncertainty in such projections. For instance, a source of uncertainty pertains to what will become the unique features of the current recession. As with all recessions, there will be unique features of the Great Recession, such as its concentration in the housing-construction-real estate sector of the economy, the impacts of which are difficult to fully anticipate. These unique features also will produce observed outcomes that deviate somewhat from the expected values that we have charted. We believe, however, that the general outlines of the impacts that will be available in the historical record a few years from now when the data have been collected will be similar in many respects to our expectations—both for the Family Economic Well-Being Domain and its Key Indicators and for the other Well-Being Domains and Key Indicators—that have been stated above.