Factors Determining California’s Share of Federal Formula Grants

Second Edition

Tim Ransdell
The Public Policy Institute of California (PPIC) is a private operating foundation established in 1994 with an endowment from William R. Hewlett. The Institute is dedicated to improving public policy in California through independent, objective, nonpartisan research.

PPIC’s research agenda focuses on three program areas: population, economy, and governance and public finance. Studies within these programs are examining the underlying forces shaping California’s future, cutting across a wide range of public policy concerns, including education, health care, immigration, income distribution, welfare, urban growth, and state and local finance.

PPIC was created because three concerned citizens—William R. Hewlett, Roger W. Heyns, and Arjay Miller—recognized the need for linking objective research to the realities of California public policy. Their goal was to help the state’s leaders better understand the intricacies and implications of contemporary issues and make informed public policy decisions when confronted with challenges in the future.

David W. Lyon is founding President and Chief Executive Officer of PPIC. Raymond L. Watson is Chairman of the Board of Directors.
About This Series

Federal Formula Grants and California

The federal government uses formula grants to distribute more than $400 billion annually to state and local governments to help them implement federal policies in such areas as health, transportation, and education. How much each government receives is determined by complex formulas that consist of many factors such as state population growth and per capita income. This series of reports provides detailed information on California’s current and historical funding under the major federal grants and on the formulas used to determine California’s share of funding under various specific grants.

All reports are posted on the PPIC website at www.ppic.org.
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Overview
To accomplish most of its policy objectives, Congress mandates that federal government agencies undertake specific functions, from national defense to trade negotiations. However, Congress also enlists the assistance of other entities through formula grants when programs are best administered at the state or local level. Through these grants, state and local governments are currently funded to implement federal policies in such areas as health, transportation, housing, agriculture, education, and law enforcement.

In fiscal year 2002, the federal government distributed $407 billion through more than 170 formula grant programs; California received $48 billion or 11.8 percent of those funds. This report is an updated version of the first in an ongoing series of reports examining federal funding formulas and California. It describes the major factors used by federal formula grant programs to allocate funds and describes why California’s share of programs varies by the factors employed.

A companion document, published in conjunction with the first edition of this report in December 2002, illustrates California’s current and historical shares of various federal grant programs from 1991 through 2001. Since release of those initial reports, this series has published reports providing objective, in-depth information on the mechanics and operation of funding formulas within

1The author wishes to acknowledge the valuable assistance of Alla Vorobets, State-Federal Relations Fellow at the California Institute for Federal Policy Research, in updating the data in this report.

five major grant program areas. These in-depth reports examined welfare funding through the Temporary Assistance for Needy Families (TANF) program, highway program funding through the Transportation Equity Act for the 21st Century (TEA-21), special education funding for disabled children through the Individuals with Disabilities Education Act (IDEA), Head Start, and homeland security grant funding.

This series is intended to add depth and detail to our understanding of federal funding formulas—which allocate one-sixth of the federal budget—and their effect on policymaking in California.³

Federal Formula Grants

Formula grants (sometimes known as block or categorical grants) differ from other federal grants in that they employ a predetermined mathematical construct to accomplish distributive goals. Unlike discretionary or project grants (which are allocated on a competitive basis by a federal agency) and congressional earmarks (through which a specific recipient or program receives funding), formulas generally use uniform, objective means to allocate funds on an ongoing basis. Formula grant spending represents approximately 85 percent of all federal grant expenditures; the remainder is spent on competitive or project grants.

Allocation formulas are typically prescribed in statutory language, although Congress sometimes leaves decisions regarding specific details—and occasionally design of the entire formula—to the implementing agency.

Congress often distributes formula funding as block grants, which typically allocate a specified sum or percentage of total funds to a state or local entity by formula and usually allow flexibility in implementation. An alternative approach is the matching grant, which may contain similar elements but requires state or local expenditure of funds before federal funds are provided as a match. The open-ended Medicaid entitlement program functions in this manner, with federal funds reimbursing state-reported expenditures at rates that vary depending on formula statistics.

³This series focuses on the amount and percentage share of grants by state, but it makes no distinction between federal dollars once they have crossed state borders. Some formula programs distribute funding to state governments for states to spend, whereas other programs require that states pass through a specified portion of the funds to local governments or other recipients within the state. Some programs provide grants to both states and other recipients, whereas other programs bypass state governments and fund only substate entities.
Top Ten Federal Formula Grant Programs
(ranked by total federal expenditures in fiscal year 2002)

1. Grants to States for Medicaid
2. Highway Planning and Construction
3. Temporary Assistance for Needy Families—Family Assistance Grants
4. Title I Grants to Local Educational Agencies
5. Special Education—Grants to States
6. Head Start
7. National School Lunch Program
8. Foster Care—Title IV-E
9. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
10. State Children’s Health Insurance Program (SCHIP)

Formula Factors

Some federal programs distribute funding according to simple census figures; others employ more complex factors, such as total number of vehicle miles traveled or number of children in families at or below 130 percent of the poverty level established by the federal government. The following is a brief discussion of some of the most common factors employed when distributing federal funding through formula grants and how the factors operate with respect to California, with some factors working to the state’s advantage and others to its disadvantage. Other reports in this series discuss formulas used to determine funding levels in specific federal grant programs.

In some formulas, convoluted mechanisms achieve deliberate results. The Low-Income Home Energy Assistance Program (LIHEAP) employs an elaborate formula that skews funding toward colder Northeastern states and away from warmer Southwestern states. One component of the Community Development Block Grant formula allocates funds on the basis of population loss and the stock of “pre-1940 housing,” which naturally favors older Northeastern and Midwestern states, whereas an alternative calculation emphasizing poverty and overcrowding yields a very different outcome—and results in California receiving 16 percent of total funds.
### Factors and Program Components Discussed in This Report

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### Population

A few formulas, such as that contained in the law governing the Social Services Block Grant (SSBG) program, distribute funding based solely on overall state population. As the crudest benchmark for examining alternative formula allocations and federal fund distributions generally, California’s population on July 1, 2003, was 35.5 million, representing 12.2 percent of the U.S. population, which totaled 290.8 million.4 (The primary source for population data used in

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this report is the U.S. Census Bureau. With the exception of a dramatic slowdown in the 1990s, population growth in California outpaced growth in the nation for most of the past century. As shown in Figure 1, California’s population growth during the 1980s far exceeded that in the rest of the nation (11.7 percent compared to 5.0 percent from 1980 to 1985 and 12.8 percent compared to 4.6 percent from 1985 to 1990). However, between 1990 and 2000, California and the nation grew at roughly similar rates: California’s population increased by 5.7 percent between 1990 and 1995 and 7.6 percent between 1995 and 2000. Population in the United States as a whole grew only slightly more slowly, by 5.6 percent between 1990 and 1995 and by 7.1 percent between 1995 and 2000.6

Population projections for the next two decades suggest that the state will continue to grow at a faster rate than the nation as a whole. Census Bureau demographers anticipate 5.9 percent growth for California between 2000 and 2005, slightly faster than the nation’s projected 4.1 percent increase. By the

![Figure 1—Population Growth in Five-Year Increments, California and the United States, 1980–2005](chart.png)

5There may be some variation with statistics produced by other entities, such as the California Department of Finance’s (DOF’s) State Demographic Research Unit and private observers. The use of Census Bureau statistics is for consistency alone and does not represent an endorsement of one source over another. In fact, DOF statistics, which take into account driver’s license registrations, often prove to be more accurate than the Census Bureau totals. The last Census Bureau estimates of the 2000 population released before the decennial census, based on extrapolations from the 1990 decennial census, predicted that California’s 2000 population was 33.1 million. DOF’s estimated figure of 34 million proved to be notably closer to the actual 2000 census headcount of 33.9 million.

middle of the decade, however, California is expected to begin to grow at a rate more than twice that of the nation as a whole, as shown in Figure 2. During the ten-year span between 2005 and 2015, California’s population is expected to grow by 20.1 percent, whereas population within the country as a whole is projected to grow by only 8.5 percent. Similarly, the growth rate between 2015 and 2025 is projected to be 19.1 percent in California and just 8.0 percent in the rest of the country.7

Overall, California’s population represented 9.8 percent of the U.S. population in 1970, 10.5 percent in 1980, 12.0 percent in 1990, and 12.0 percent in 2000. California’s population is projected to remain at approximately 12 percent of the nation’s total population through 2005, growing to 13.3 percent in 2015 and then to 14.7 percent in 2025.8

Many formula grant programs distribute funding using population data, and the choice of the year for which these data are analyzed can significantly

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Figure 2—Projected Population Growth, California and the United States, 2005–2025

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influence grant amounts. For faster-growing states such as California, use of a more recent data year generally yields a larger share of grants.

**Poverty**

Poverty rates and statistics for the number of persons living in poverty are used to calculate distributions for a number of federal programs. In 1997, as shown in Figure 3, 16.6 percent of Californians lived in families whose income fell below the federal poverty line—a far greater concentration of poor persons than is evident in the 13.2 percent rate in the nation as a whole. California was home to 5.5 million, or nearly 15.3 percent, of the nation’s 35.6 million people living in poverty in 1997, giving the state the 8th highest poverty rate in the nation.9

Poverty statistics for the nation and especially for California have declined substantially since then. By 2001, California’s poverty rate had declined to 12.6 percent, before retreating to 13.1 percent in 2002.10 During the same 1997–2002 period, the nation’s poverty rate experienced a similar fall and rise.

![Figure 3—Poverty Rates, California and the United States, 1997–2002](image)


dipping to 11.3 percent in 2000 and increasing to 12.1 percent in 2002. In 2002, 13.3 percent of the nation’s residents living below the poverty line resided in California—down from 14.5 percent two years before—and California’s ranking among states fell from 12th highest poverty rate in the nation to 18th highest.11

In addition to releasing data for persons and households living at or below the federal poverty line, the Census Bureau also prepares counts of persons, families, and households at particular percentages above or below a given year’s poverty level. Some federal allocation formulas calculate eligible populations precisely at the official poverty level, whereas others use a specified percentage of that level. For example, families with incomes up to 130 percent of poverty may be eligible for Food Stamps; eligibility for the WIC program is based on whether a parent, child, or guardian lives in a household with income at or below 185 percent of the federal poverty income level; and the 185 percent threshold is the upper limit of Medicaid eligibility, which varies by state.12 In some cases, formula programs employ multiple thresholds to determine eligibility—the National School Lunch Program offers free meals to students living in households with incomes at or below 130 percent of poverty, whereas students in households with incomes between 131 percent and 185 percent of poverty are eligible for reduced-price meals.

California’s percentage share of the nation’s persons, families, and households at a given percentage threshold above or below the poverty line largely approximates the state’s share at 100 percent of poverty for the same data set, although there is some variation. For example, Figure 4 shows that, in 2002, California housed 13.3 percent of the nation’s population living at or below the poverty line, and its share of persons at 125 percent of poverty and 200 percent of poverty was also 13.3 percent. However, the state’s share of persons at 150

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12A number of federal program eligibility thresholds are left in part to state discretion. For example, the top income limit for the TANF program in Texas is 17 percent of the federal poverty line, and the top income limit for basic Medicaid eligibility is 24 percent of the poverty line. Nationwide, the maximum eligibility limit for Medicaid funding is 185 percent of poverty, although minimums and maximums may vary by a number of factors such as age, and requirements sometimes change from year to year.

For example, states were required to provide Medicaid coverage to children under age six with incomes below 133 percent of poverty and to children born after 1993 with incomes below 100 percent of poverty. California extends Medicaid eligibility to children under age 19 in families with incomes below 100 percent of poverty.
percent of poverty was considerably higher—13.8 percent.13 Thus, whereas California houses an above-average proportion of the nation’s low-income individuals at all levels, the state includes an even greater concentration of the nation’s population living above, yet not far above, the federal poverty line. (Figure 4 also shows child poverty rates, which are discussed below.)

The federal government employs two slightly different measures of poverty—poverty thresholds and poverty guidelines—and federal grant programs use one or the other measure when formulas call for a poverty factor. Poverty thresholds, calculated by the Census Bureau, estimate the number of persons in poverty by determining whether a household’s income is adequate based on family size and other family circumstances. For 2002, the Census Bureau published 61 income threshold levels depending on the number of persons in the household and whether children were related. (For example, a single person was considered poor if he or she earned $9,183 per year, whereas a family of four with one related child was poor if household income was below $18,859, and a family of four with three related children was poor if household income was less than $18,307.)14 Poverty guidelines, on the other hand, are a simplified poverty measure developed by the Department of Health and Human Services (HHS) to

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determine eligibility for some federal programs. (For 2002, the HHS poverty guidelines considered a single person poor if his or her income was below $8,980, whereas a family of four was poor if household income was below $18,400.) Both data sets are adjusted for inflation using the Department of Labor’s consumer price index. HHS poverty guidelines are used to distribute funds for various HHS and U.S. Department of Agriculture formula grant programs, including the Community Development Block Grant; Head Start; Low-Income Home Energy Assistance; State Children’s Health Insurance Program; Food Stamps; Special Supplemental Nutrition Program for Women, Infants, and Children; National School Lunch Program; School Breakfast Program; and some peripheral aspects of Medicaid. The Census Bureau’s poverty threshold statistics are used where most other formulas call for a poverty factor.\footnote{For additional information regarding poverty thresholds, poverty guidelines, and the differences between them, see the Institute for Research on Poverty at the University of Wisconsin, available at http://www.ssc.wisc.edu/irp.}

**Child Poverty**

The number of children living in poverty is an important factor in determining the distribution of funds under the $8 billion Title I Grants to Local Educational Agencies program—the largest federal education grant program and the 4th largest formula grant of any kind. It is also a factor in a number of other programs. In 1998, 22.3 percent (or 1.5 million) of California’s 6.5 million children between the ages of 5 and 17 years were living below the federally defined threshold for poverty. California’s child poverty rate was well above that year’s national rate of 17.8 percent.\footnote{U.S. Census Bureau, *Current Population Survey: Annual Demographic Survey*, formerly March Supplement, Table POV46, “Poverty Status by State,” Washington, D.C., March 2001 and March 2002.}

By 2002, California’s child poverty rate had declined to 18.4 percent, with 1.3 million of the state’s 7 million school-age children living below the federal poverty line. In the nation as a whole, the school-age child poverty rate had also declined, to 15.5 percent in 2002, with 14 percent (8.2 million) of the nation’s 52.7 million school-age children in poverty.\footnote{U.S. Census Bureau and Bureau of Labor Statistics, *Current Population Survey: Annual Demographic Survey*, Table POV46, “Poverty Status by State: 2002,” Washington, D.C., March 2003.} The percentage of California children living in households with incomes between 125 percent and 150 percent of poverty was somewhat larger than the state’s share of children in households with incomes both below and above that income range (see Figure 4).

Because the Title I program ostensibly focuses on poor children, California’s receipts from the program might be expected to reflect the state’s relatively high share of children in poverty. Yet in fiscal year 2001, the state’s $1 billion share of Title I
funding was only 12.4 percent of the nation’s $8.1 billion total, and that figure actually represented a high watermark for the state’s Title I share.

Historically, a key reason for the state’s low share of Title I funds is that poverty statistics were updated only every ten years. As late as 1992, the program was funded based on 1980 decennial census numbers for poverty, resulting in a misallocation of Title I dollars. A California-promoted remedy during the 1994 reauthorization of the Elementary and Secondary Education Act required semiannual updates of poverty data, which were to be used for Title I allocations. However, in 1997, appropriators from slow-growth states inserted a 100 percent “hold harmless” clause, stating that no school district in fiscal year 1998 could receive less than it had received in fiscal year 1997, thus preventing funding shifts to school districts in California and other fast-growth states. The 100 percent hold harmless or successor language remained attached to annual appropriations measures for several years.

However, total Title I funding grew substantially during recent fiscal years, blunting the effect of the hold harmless provision. In fiscal year 2002, California’s $1.4 billion Title I allocation represented 14 percent of the nation’s total, a sharp increase from the state’s share in previous years.

Per Capita Income

Some formulas use a measure of “fiscal capacity”—the ability of a state or locality to raise revenues of its own through state or local taxes—in an attempt to shift federal funding toward poorer states and away from wealthier ones. Per capita income (PCI) is commonly used as a measure of fiscal capacity, and its use in the huge Medicaid program makes it arguably the most significant formula factor used in federal grant distribution. A state’s federal matching rate for Medicaid is based on the state’s per capita income compared to the national average, and high-income states receive a lower reimbursement percentage than low-income states.

Although California remains wealthier than the national average, its relative wealth has declined considerably over the past two decades. The state had the 9th highest per capita income among states (including the District of Columbia) in 2000, a slight decline from its 8th ranking in 1990 and well down from its ranking as the 3rd richest state in 1980. As shown in Figure 5, California’s per capita income in 2000 was $32,149, whereas the national level was $29,469. The state with the highest per capita income that year was Connecticut, where its $40,702 per capita

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18 Opponents of intercensal updating of these poverty figures for Title I, typically from slow-growth states, argue that because poverty data are collected from only one in every 20 census respondents, attempts to estimate persons in poverty at small geographic levels (such as a county or school district) have too great a margin of error. Supporters counter that such errors would not likely be worse than ignoring pronounced growth shifts for as much as a decade.
income was nearly twice that of the state with the lowest, Mississippi, which had a per capita income of $20,900. In 2002, the state’s per capita income was $32,898, as compared to a U.S. level of $30,832. California ranked as the 10th richest state that year. Mississippi again ranked as the poorest state with a per capita income of $21,643. For the first time in a decade, the District of Columbia, with a per capita income of $43,371, became the richest jurisdiction on the list, surpassing Connecticut, which had a per capita income of $42,289.

In 2002, California’s personal income per capita was 6.7 percent above the national average. In comparison, it was 9 percent higher than the national average in 2000, 12 percent higher in 1990, and 18 percent higher in 1980. Thus, although California’s ranking among the states fell by only two notches between 1990 and 2002—from 8th to 10th place—the state’s income level relative to the national average declined more sharply, largely as a result of the state’s deep recession in the early 1990s.

Figure 5—Personal Income per Capita, California and the United States, 1990–2001

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th>United States</th>
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<tbody>
<tr>
<td>1990</td>
<td>21,882</td>
<td>19,572</td>
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<tr>
<td>1991</td>
<td>21,983</td>
<td>20,023</td>
</tr>
<tr>
<td>1992</td>
<td>22,833</td>
<td>20,960</td>
</tr>
<tr>
<td>1993</td>
<td>23,348</td>
<td>21,539</td>
</tr>
<tr>
<td>1994</td>
<td>24,339</td>
<td>22,340</td>
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<tr>
<td>1995</td>
<td>25,373</td>
<td>23,255</td>
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<td>1996</td>
<td>26,521</td>
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<td>32,148</td>
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<td>32,678</td>
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<td>2002</td>
<td>30,832</td>
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Per capita income data are used to determine the Federal Medicaid Assistance Percentage (FMAP) to reimburse states for a portion of the costs of providing health care services to low-income patients. Medicaid’s use of PCI disadvantages California, as the formula reimburses states with lower per capita income at higher rates than higher-income states.22 The use of per capita income also reduces California’s share of funding for federal foster care, vocational education, and a range of other formula programs.

According to the General Accounting Office (GAO), PCI was first used in the 1950s for two reasons. First, it was seen as an indicator of states’ ability to finance programs using their own resources. Second, because Medicaid’s funding structure pre-dates the concept of a federal poverty line, the use of per capita income in the Medicaid formula was also meant to roughly approximate a state’s poverty level—the assumption being that low-income states would have higher poverty rates.23 Since that time, a formal poverty definition has been created,24 and GAO argues that alternative and more accurate measures of fiscal capacity (such as Total Taxable Resources or TTR) now exist.25 It is important to note that California has a high per capita income but also a high poverty rate—a phenomenon that has come to be known as income inequality.26 Thus, whereas the Medicaid matching formula’s original design in part sought to assist poor persons by bettering the fortunes of low-income states, it actually exacerbates the poverty problem for a few states, including California, where poverty is not inversely proportional to income.

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25One alternative fiscal capacity factor proposed for use in some formulas would measure a version of a state’s taxable resources. A 1990 GAO report determined that California’s per capita TTR was about 10 percent above the national average, and thus use of TTR as a fiscal capacity factor would produce results roughly similar to the use of per capita income as a measure of potential fiscal effort. GAO argues that TTR is a more comprehensive measure of fiscal capacity than per capita income, and the agency suggests that the use of per capita income squared be replaced by a mixture of poverty data and TTR. See U.S. General Accounting Office (testimony), Medicaid Formula: Fairness Could Be Improved, GAO/T-HRD-91-5, Washington, D.C., December 7, 1990, p. 11.

26See Deborah Reed, California’s Rising Income Inequality: Causes and Concerns, Public Policy Institute of California, San Francisco, California, 1999.
The Medicaid formula squares per capita income, in effect using it once to approximate poverty and a second time to approximate fiscal capacity. In a 2003 report requested by Senator Dianne Feinstein, GAO suggests that the formula should instead use the Census Bureau’s poverty data to address poverty and TTR to address fiscal capacity. The report notes that, “With the addition of federal matching aid, Wisconsin is enabled to spend more than twice what California is able to spend per person in poverty ($7,532 versus $3,731.”

**Fiscal Effort and Cost Factors**

Some programs incorporate in their formulas a factor to represent the sacrifice or effort made by a state or locality to support the program’s goals. For example, a factor might reward a state on the basis of its level of payments to eligible persons, thereby creating an incentive for a state to raise taxes to pay for the federal goal in question. A typical factor might be a ratio of the state’s revenue in a certain category to that state’s per capita income.

An alternative to income factors (which tend to help lower-income states) is to recognize that one state might face higher costs than another when providing services. A problem with this approach is that some purported cost factors may not accurately reflect differentials in costs.

One such example can be found in the Title I education program. Although technically neither an effort factor nor a cost factor, an adjustment for state per pupil expenditure was included in the Title I formula as a rough proxy for both. Use of this factor significantly reduced California’s receipts from the Title I program for many years. California has one of the highest average class sizes among states and thus has relatively low per pupil expenditure, which thereby suppresses Title I funding. In 2000, California’s public elementary and secondary school spending per pupil was $6,401, in comparison to the national level of $7,392. (Figure 6.) The state’s expenditure rate was thus 86.6 percent of the U.S. average spending level. This spending level left California’s ranking among the 50 states and Washington, D.C., at 37th for 2000 (the same rank as in 1999), down from 32nd in 1990 and 22nd in 1980.

However, California made a deliberate effort to increase education spending in the late 1990s, and the state’s education expenditure ranking among states rebounded considerably for the 2000–2001 school year. California’s spending

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increased to $6,987 per pupil, whereas the nation’s expenditures declined slightly to $7,376 per pupil. As a result, California’s spending rate was 94.7 percent of the national rate, a reduction by more than half of California’s discrepancy with the national rate.\textsuperscript{30} As a result, California ranking among states for per pupil spending increased to 25th in 2001. The formula for the Title I program includes a factor measuring state per pupil expenditures (as well as child poverty), and the relative increase in this statistic is in part responsible for recent growth in California’s share of funding.\textsuperscript{31}

During revision of Title I authorizing laws in the 103rd Congress, California advocates proposed the use of an alternative proxy for the cost of providing education services—average state teacher salaries. (The alternative proxy was not adopted.) In 2001, California ranked 3rd (up from 4th in 2000 and 9th in 1999) among states in average salaries for teachers in public primary and secondary schools. During that year, California teachers earned an average annual salary of $52,500, whereas the national average was $43,300 (see Figure 7).\textsuperscript{32}


\textsuperscript{31}After remaining nearly constant for three years, California’s share of Title I expenditures increased from 12.4 percent in fiscal year 2001 to 14 percent in fiscal year 2002.

**Employment and Unemployment**

The Department of Labor calculates unemployment rates monthly, and California’s unemployment rate has typically exceeded the national rate. During the early and mid-1990s, when the state experienced a deeper and more prolonged recession than the rest of the nation, California’s unemployment rate exceeded the nation’s by more than two percentage points. That discrepancy has moderated recently. In August 2003, California’s seasonally adjusted rate of unemployment was 6.7 percent, whereas the national rate was 6.1 percent.33 (As such, California’s unemployment rate was 11th highest among the states.)

As shown in Figure 8, the gap between California’s and the nation’s unemployment rate was large in the 1990s, and it has lessened recently. In 2000, California’s unemployment rate was 4.9 percent and the national rate was 4.0 percent—a considerably wider disparity than in 2003. The state-federal differential was greatest in May 1994, when California unemployment was 8.9 percent of the labor force and the national unemployment rate was 6.1 percent.34

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California’s 1.2 million unemployed workers in August 2003 represented 13.3 percent of the nation’s 8.9 million unemployed. This share is considerably smaller than the state experienced a decade earlier. As shown in Figure 9, California’s share of the nation’s unemployed has exceeded its share of population for more than a decade, and the state accounted for as much as 17.3 percent of the nation’s unemployed workers in May 1994. Since that peak month, California’s share has slowly declined to nearly the state’s share of the nation’s population.

The unemployment rate is used to calculate grants under the Workforce Investment Act of 1998 (WIA, formerly the Job Training Partnership Act), two-thirds of which is determined by the number of unemployed individuals in a state and one-third by the number of poor residents.35 The formula includes a one-third bonus for states that experience excessive unemployment, a factor that further raised California’s already large share of WIA funds. The state has received between 16 and 24 percent of U.S. funds under WIA programs during the past decade. Declining rates of unemployment and poverty relative to the nation may reduce the state’s future share of WIA funds.

35Poverty data for WIA are collected decennially, so formula funds from 1993 through 2002 were allocated on the basis of information collected in the 1990 census; unemployment statistics are more current—no more than 12 months out of date.
Some federal dollars are allocated according to urban versus rural populations and metropolitan versus nonmetropolitan area populations. California’s population is much more concentrated in urban areas than the national average. In 2000, 96.7 percent of California residents lived in what the Census Bureau defines as a metropolitan area, compared to 80.3 percent nationwide. (Figure 10.) Only New Jersey and the District of Columbia, all of whose residents are

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36The federal government employs various definitions in an attempt to classify geographic areas as metropolitan/nonmetropolitan and urban/rural. Generally, an urban/rural classification involves more detailed stratification than a metropolitan/nonmetropolitan classification. Three definitions frequently employed are the U.S. Office of Management and Budget’s general definition of metropolitan and nonmetropolitan areas (which is the basis for the other two definitions), urban influence codes (also known as Parker-Ghelfi Codes, based on city size and adjacency to metropolitan areas), and urban/rural continuum codes (which stratify nonmetropolitan areas as urbanized, less urbanized, and thinly populated). Metropolitan area definitions are largely parallel in all three definitions (although the second and third offer detailed stratification); nonmetropolitan area definitions are widely variable. For further details, see U.S. Census Bureau, Selected Historical Decennial Census Urban and Rural Definitions and Data, Washington, D.C., January 25, 2002, available at http://www.census.gov/population/www/censusdata/ur-def.html.

Before the 2000 decennial census, a population of 50,000 was required to qualify as a metropolitan area. In conjunction with the 2000 count, the Census Bureau adopted additional relevant definitions, adding “urban clusters” to the definition of urban area and placing greater importance on population density. The new term allows a small but densely populated area that is somewhat geographically isolated (an urban cluster) to be deemed urban if it is logically connected to a larger, more densely populated area but is separated from it by a sparsely populated area such as a lake, park, or other such barrier. The process also seeks to introduce the term micropolitan area into the urban/rural vernacular. For details, see U.S. Census Bureau, Census 2000 Urban and Rural Classification, Washington, D.C., April 30, 2002, available at http://www.census.gov/geo/www/ua/ua_2k.html.
Urban and rural population data are used extensively in federal transportation formula grant programs administered by the Federal Highway Administration and Federal Transit Administration. The data are also used to allocate some grants administered by the Department of Agriculture.

**Age-Range Populations**

Some programs allocate funding according to counts of populations within certain age ranges (such as school-age population or residents age 65 or older). In 2000, California had the 9th highest percentage of residents ages 5 to 17 (20 percent, compared to 18.9 percent nationwide). In contrast, 10.6 percent of Californians in 2000 were age 65 or older, compared to 12.4 percent nationally. In this age group, California ranked 46th among states, including the District of Columbia.

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38For example, the Individuals with Disabilities Education Act is based in part on the number of persons ages 3 through 21 in each state.

Number of Immigrants

Any formula that includes immigrants as a significant factor is likely to allocate a substantial funding share to California. But because immigrants tend to be concentrated in relatively few states, it is typically difficult to build a broad base of support in Congress for the inclusion of immigrant-focused factors in formulas.

In 2000, California was home to 8.9 million foreign-born individuals, which was 28.4 percent of the 31.1 million foreign-born in the United States. California has the distinction of having the highest proportion of foreign-born as a share of total population—26.2 percent—an increase from 21.7 percent in 1990. (See Figure 11, which also shows the California percentage of those speaking a language other than English in the home and the California percentage of undocumented immigrants, both discussed below.) New York
ranked 2nd with 20.4 percent and Florida 3rd with 16.7 percent. In the nation as a whole, 11.1 percent of the population was foreign-born.40

In 2002, California was the destination for 27.4 percent (291,216) of the nation’s 1.1 million immigrants admitted into the country. New York was the destination for the 2nd largest number (114,827) of admitted immigrants.41

An alternative, approximate proxy for immigrants in some proposed formulas—used in K–12 education programs particularly—is the Census Bureau’s decennial calculations of households in which a language other than English is the primary language spoken. In 2000, California was the residence for 12.4 million persons—or 26.4 percent of the nation’s total—who spoke a language other than English in the home.42 The Census Bureau’s American Community Survey estimated that 40.6 percent of 2002 California residents spoke a language other than English in the home, more than twice the 18.3 percent share nationwide. The 2002 percentage was a small increase from 39.5 percent of Californians in 2000 and a large increase from 29 percent in 1990.43

Undocumented Immigrants

The Immigration and Naturalization Service (INS) estimates that 7 million undocumented immigrants reside in the United States and that nearly one-third of them live in California.44 Thus, approximately 6.5 percent of California’s total population of 33.9 million in 2000 were estimated to be undocumented immigrants.

Although large, the state’s percentage of U.S. undocumented immigrants has declined. In 1990, the INS estimated that California was home to 1.5 million undocumented immigrants, or 42.2 percent of the nation’s 3.5 million total.45

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44Public and private documents interchangeably use various terms, including undocumented immigrant, undocumented migrant, illegal alien, undocumented alien, and illegal migrant. This report uses the term undocumented immigrant.

In a 2003 report, the INS estimated that 31.6 percent of the nation’s undocumented immigrants in 2000, or 2.2 million of the nation’s 7 million total. Data on undocumented immigration are notoriously speculative and of questionable accuracy; the persons counted generally do not wish to be identified and thus may not respond to inquiries.

In December 2003, Congress approved and President Bush signed a Medicare prescription drug benefits bill that appropriated $1 billion over four years (fiscal years 2005–2008) to reimburse states for the cost of providing emergency health care services to undocumented immigrants. The bill required that funds be allocated two-thirds according to the 2000 INS count of undocumented immigrants by state and one-third to the six states with the most undocumented immigrant apprehensions. California ranked 3rd in apprehensions in 2002, with a total of 237,000, meaning that the state will be eligible for funds under both factors.

The State Criminal Alien Assistance Program (SCAAP) reimburses states for the costs of incarcerating undocumented felons, on the theory that their presence in the United States is a federal responsibility. Although California received nearly half of the $565 million appropriated nationwide in 2002, less than half of the state’s actual costs were reimbursed. Moreover, Congress sharply reduced SCAAP appropriations to $248 million for fiscal year 2003, including $95.3 million for

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49Analysis by the California Institute estimates that California would receive $72 million (29 percent of the U.S. total funding per year) if funds were allocated based on these data. (Newer data may be available to make the initial allocation in fiscal year 2005.) See California Institute for Federal Policy Research, State Reimbursement for Emergency Health Services to Undocumented Immigrants (Based on Unauthorized Resident Population and Apprehensions by State), Washington, D.C., December 2003, available at http://www.calinst.org/datapages/undocumented_medicare.htm.

50The Department of Justice makes grants in proportion to state-reported counts of undocumented felons incarcerated within each state’s penitentiaries.
California, a development some attribute in part to the political limitations caused by the small number of states that benefit from the program’s funds.  

**Immigrants Admitted as U.S. Residents, and Legalized Immigrants**

Not surprisingly, California is the primary destination state for immigrants admitted to the United States as legal permanent residents. In recent years, California has been the declared destination of between 22 percent (in 1996) and 27.4 percent (in 2002) of admitted U.S. immigrants. As shown in Figure 12, the INS reported that 291,216 of the nation’s 1.1 million admitted immigrants in 2002 intended to settle in California.  

However, California’s typical one-quarter share of the nation’s admitted immigrants was exceeded considerably between 1989 and 1992, when large numbers of undocumented immigrants were legalized. With its approval of IRCA, Congress allowed certain illegal aliens to become permanent residents of the United States. The law gave legal status to undocumented immigrants who

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Figure 12—State of Intended Residence of Immigrants Admitted to the United States, California and Other States, 1988–2002

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51As this report goes to print, the House has passed and the Senate will soon consider the conference report to accompany H.R. 2673 (the Consolidated Appropriations Act, 2004), an omnibus spending bill that would fund various federal agencies, including the Department of Justice. The bill would appropriate $297 million for SCAAP for fiscal year 2004. See H. Rept. 108-401, November 25, 2003.

Undocumented immigrants submitted applications between May 1987 and May 1988, and approved applicants became eligible for permanent residence one year after approval, beginning in 1989.54

More than half of the nation’s nearly 3 million undocumented immigrants legalized pursuant to IRCA chose California as their state of residence. As a result, California’s share of the nation’s admitted immigrants (including those legalized by IRCA and those admitted under other rules) rose to 41.9 percent in 1989 and 44.5 percent in 1990. At the legalization program’s highest point, California received 732,735 admitted immigrants in 1991, 40.1 percent of the nation’s 1.8 million total.

HHS used immigrant legalization data to calculate state allocations under the State Legalization Impact Assistance Grants (SLIAG) program, which sought to reimburse states for some of the costs incurred in providing services to immigrants legalized under IRCA. The program provided states an aggregate total of $3.5 billion until its termination in 1994, and California received between half and two-thirds of SLIAG funds distributed.

In late 2003 and early 2004, President Bush and congressional leaders expanded discussions about a program to legalize undocumented immigrants who currently reside in the United States, as well as to admit foreign citizens to work for U.S. employers. If such a plan becomes law, Congress may wish to consider an accompanying grant program similar to SLIAG.

**Percentage of Population Receiving Benefits**

On occasion, one program’s benefit levels are tied to the number of individuals receiving or eligible for benefits in another program. For example, for many years, the Title I education program included a factor for children receiving welfare services who would not otherwise be eligible for Title I. Likewise, participation in Medicaid is used to assess an individual’s eligibility for a number of other health services and indigent-related programs.

In 1999, California housed 6.2 million, or 15 percent, of the nation’s 41 million Medicaid recipients (despite the fact that California’s total Medicaid

53 The law also allowed immigrants who had been employed as seasonal agricultural workers (SAWs) for a sufficient period of time to apply for permanent residence.

payments were just 10 percent of the nation’s total federal payments). On the other hand, Figure 13 shows that although just 1.9 percent of the nation’s 2001 population received welfare benefits, almost twice that percentage of Californians—3.5 percent, or 1.2 million people—received benefit payments that year. (California accounted for more than 23 percent of the nation’s welfare recipients in 2001.) For Supplemental Security Income (SSI), California’s 1.08 million recipients represented 16.5 percent of the national total in 2000. On the other hand, only 12.3 percent of Californians received Social Security payments in 2001, compared to 15.7 percent nationwide. See Figure 14.

**Crime Rates**

Crime rate statistics are sometimes used to distribute formula grants from the Department of Justice. Although California’s violent crime rates still tend to exceed the national average, crime rates have fallen nationwide, a trend

![Figure 13—Percentage of Population Receiving Welfare Payments, California and the United States, 1995 and 2001](image-url)

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particularly apparent in the Golden State. In 2002, California had the 10th highest violent crime rate among the states and the District of Columbia. California experienced 594 violent crimes and 3,944 total crimes per 100,000 population in 2002, compared to 495 violent crimes and 4,119 total crimes per 100,000 nationwide. The state’s ranking was down from 9th highest in 1998 and 1997. In 1995, when California also ranked 7th highest in the nation, the violent crime rate was 966 and 685 per 100,000 in California and the United States, respectively. See Figure 15.

**Transportation Statistics**

Highway Planning and Construction programs and other surface transportation grants reauthorized in 1998 as the Transportation Equity Act for the 21st Century employ an array of transportation-related factors for allocating funds. Highway funds are allocated according to states’ road and highway length and usage, as well as diesel fuel usage (in an attempt to account for freight traffic), with a small factor also included to help states with small populations relative to usage. California receives approximately 9.1 percent of highway funds based on these factors, whereas mass transit, based in part on urbanization of population, has returned as much as 20 percent to the state during TEA-21’s six-year term.

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National Highway System funding is based on three weighted factors: 25 percent on a state’s share of total lane miles of principal arterial routes (not including interstates), 35 percent on the share of total vehicle miles traveled, 30 percent on the share of diesel fuel consumed, and 10 percent on sparseness of population versus road mileage. For the Surface Transportation Program, the Department of Transportation weights federal-aid highway lane mileage at 25 percent, lane mileage actually traveled at 40 percent, and the state’s relative contributions to the highway trust fund (other than for transit) for the most recent fiscal year at 35 percent. The Interstate Maintenance program is based equally on three factors—interstate lane miles (33 percent), miles traveled (33 percent), and highway trust fund contributions (33 percent).

In 2001, California accounted for 11.1 percent of the nation’s 75,212 urban interstate lane miles and 8.6 percent of the nation’s 187,228 lane miles of total urban lane mileage. The state has fewer rural roads—in 2001, California accounted for 4.6 percent of the nation’s 135,051 lane miles of rural interstates and 4.5 percent of the nation’s 360,750 lane miles of other major rural routes.60 The vehicle-lane-miles-traveled factor in urban highway formulas rewards California for its large urban population and very large proportion of drivers. California accounted for 15.7 percent of the nation’s 403 billion urban interstate

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highway miles traveled in 2001 and 6.3 percent of the nation’s 275 billion rural interstate highway miles traveled.61

The Congestion Mitigation and Air Quality (CMAQ) program distributes funds to states on the basis of the share of population living in air pollution “nonattainment and maintenance” areas as determined by the U.S. Environmental Protection Agency (EPA). California’s longstanding air quality challenges have ensured that the state receive a large share of CMAQ funding—more than 20 percent of U.S. grants from 1998 through 2003. For example, of the nation’s 12 metropolitan areas with “severe” ozone pollution problems in 2003, four were in California, and the nation’s only “extreme” nonattainment area for ozone was the Los Angeles South Coast Air Basin.62

In addition to formulas based on these factors, the Highway Planning and Construction account includes an overall minimum guarantee, which seeks to prevent any state from receiving less than a certain minimum return (90.5 cents for every dollar paid in) on its contributions to the highway trust fund. California’s minimum guarantee level designated by the TEA-21 law was estimated at 9.2 percent of total national disbursements. In 2001, California contributed 10.3 percent of the nation’s total fuel tax revenues to the federal highway trust fund.63

**Educational Attainment**

Federal funding for the adult education program is based in large part on decennial census statistics identifying the percentage of a state’s population without a high school diploma. In 1990, California’s 23.8 percent rate was slightly below the 24.8 percent national rate. Both the state and the nation bettered high school graduation rates during the 1990s, but California’s improvement was considerably slower than that in the rest of the nation. As shown in Figure 16, the percentage of Californians without a high school diploma fell from 23.8 percent in 1990 to 23.2 percent in 2000, whereas the rate

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62EPA identified the Southeast Desert Air Quality Management District, the Sacramento metropolitan area, the San Joaquin Valley, and Ventura County as severe nonattainment areas in 2003. Whereas the CMAQ formula’s ozone factor weights pollution severity at seven different levels, the weight for the carbon monoxide factor varies depending on whether a metropolitan area is in maintenance or nonattainment. For additional information, see U.S. Environmental Protection Agency, *Green Book: Nonattainment Areas for Criteria Pollutants*, Washington, D.C., updated September 10, 2003, available at http://www.epa.gov/airprogm/oar/oasqs/greenbk/index.html.

in the nation as a whole plummeted from 24.8 percent in 1990 to 19.6 percent in 2000.64

Adult education funding shifts between states are delayed for many years because the Census Bureau does not update educational attainment data between censuses, but it is likely that these new statistics will increase California’s share of program funds in the near future.

**Historical Funding Levels**

A number of federal formula programs, particularly block grants, distribute funds according to historical allocation levels. For example, HHS distributes TANF grants according to each state’s share of federal welfare funds received from the Aid to Families with Dependent Children (AFDC) program and two other grant programs during 1994 and 1995.

Some formulas incorporate historical funding levels as one factor within a more complex distributional scheme. For example, the Special Education—Grants to States program and Head Start distribute a portion of funding according to state allocations in a set base year, with additional dollars above the base-year amount distributed using formula criteria. This method is sometimes used to win political support for legislation to change a formula, because it can ensure that recipients never receive a grant that is smaller than at the time the legislation is enacted.

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Prospective Factors and Other Considerations

Although the technique has not been used to date, relative income figures could be employed in a formula to compensate for some states’ higher cost of living. During the 106th Congress, the late Senator Daniel Patrick Moynihan (NY) introduced S. 165, which sought to require that funding allocations using substate poverty data be adjusted “to account for differences in the cost of living in the areas.” California’s share of funding would likely increase had the bill been enacted and implemented.

However, cost of living/consumer price index figures are not presently collected state by state by the Bureau of Labor Statistics. BLS produces a CPI figure for the United States and for 29 major metropolitan areas, but it does not do so for states because of insufficient sample sizes for small states. Some have suggested that the problem could be resolved by grouping small states together or by averaging data from multiple years.

Largely as a result of California’s high housing prices, the 2001 CPI for the three California metropolitan areas listed (Los Angeles at 177.3, San Diego at 191.2, and San Francisco at 189.9) is above the national city average of 177.1.65 Thus, a state-level CPI, should one ever be produced, would likely show an above-average CPI for the state.

In October 1999, during the House Committee on Education and the Workforce’s markup of a bill to reauthorize the Elementary and Secondary Education Act, Representative Lynn Woolsey (Petaluma) offered an amendment to develop a formula factor to compensate school districts in states forced to spend more to educate children because of high costs of living. She argued that because of variances in costs of living among states, some disadvantaged students receive inadequate Title I funds compared to children in low-cost areas. The amendment proposed to develop and use a state-level Cost of Living Adjustment (COLA) factor for allocating Title I dollars. Representative Woolsey later withdrew the amendment upon leadership commitment to support further examination of the issue.

Availability of and Quality of Data

Data availability is sometimes an issue for federal formula funding allocation. Many formulas rely on widely available and published data, such as those from

the Census Bureau or the Bureau of Economic Analysis. Yet other formulas rely in whole or in part on unpublished data collected by the administering agency or on data collected too recently to become widely available. An agency will often collect the latter data from the jurisdictions to which the formula allocates funds, and there have been allegations of jurisdictions over- and undercounting populations to improve allocation prospects. Although jurisdictions are aboveboard on the whole, some do face charges of system abuse.

Members of Congress from California and other states that may fare better under objective standards have on occasion rallied to alter formulas. For example, when Congress reauthorized IDEA in 1996, Californians worked to replace a subjective formula for distributing Special Education—Grants to States funding with an objective alternative. Before the change, states reported the number of disabled children they served and received funds according to that count; after the change, new funding depended—with some exceptions—on state-level census population figures for persons ages 3 to 21 and for children in poverty.66

Issues of reliability also apply to some data collected by federal agencies. As discussed above, the INS occasionally publishes estimates of undocumented immigrants, a population known to be difficult to count.

For some programs, agencies may allocate funds without making public the data on which allocations were based. HHS bases funding for a number of welfare bonus grants on internal data.67 For national security reasons, the Department of Homeland Security does not publish the data it uses to assess relative differences in terrorism threats facing different metropolitan areas as it determines allocations for the high-threat urban area grants under the Urban Area Security Initiative (UASI).68

66Although California was near the national norm in identifying approximately 10 percent of its school children as eligible for IDEA funding, Massachusetts’s percentage at the time was reportedly nearer 20 percent. A reporter’s review of state records found systematic overcounting of students as disabled; one often-repeated example involved a school that counted a child as disabled because he was having “difficulty with the quadratic equation and the Pythagorean theorem.” Kate Zernike, “Testing the Limits: A Pioneering Law Feels the Strain of Wide Demands,” Boston Globe, March 30, 1997.

For additional information regarding the Special Education—Grants to States formula, see Tim Ransdell, Federal Formula Grants and California: Education Programs for Disabled Children, Public Policy Institute of California, San Francisco, California, September 2003.

67For additional information, see Tim Ransdell and Shervin Boloorian, Federal Formula Grants and California: TANF and Welfare Programs, Public Policy Institute of California, San Francisco, California, December 2002.

Formula Components

A number of specific components are commonly contained in or added to federal formulas to alter the distribution. Many, although not all, work to the detriment of California. Examples are discussed below.

Data Years and Phase-In Periods

State grant receipts may vary considerably depending on what year’s population data the administering agency uses to allocate funds. Whereas many formula statutes require use of “the most current satisfactory data available,” statutory language for some programs specifies that a particular year’s data be used. By constraining changes in funding allocations that result from demographic shifts, an explicit mandate to use a specific year sometimes reflects a political compromise to accommodate the needs of influential legislators or to win a majority of votes for passage.

For many programs, the choice of year is influenced by the convenience of the regulating agency or the mandated or customary timing of grant allocations. California’s grant shares typically increase as agencies use newer data that reflect the state’s more rapid population growth.

Phase-in periods are sometimes used to delay the effects of new data and formula changes. Such phase-ins may appear as an averaging of data over several years (for example, using a three-year average of per capita income rather than the most current income data to distribute Medicaid funding) or as a specified delay (for example, implementing a formula change by one-half in one year and one-half in the next).

Hold Harmless Provisions

Hold harmless provisions tend to work for the status quo by ensuring that a state’s (or other jurisdiction’s) allocation will not decline at all or by more than a specified percentage in any given year. Historically, hold harmless provisions have been used to retain funds for slow-growth states and to temporarily inhibit increases in funding for fast-growth states such as California. A hold harmless provision might state, for example, that all funding up to the current year’s level will be distributed under the old formula, and only money above that level will be distributed under the new formula.\(^6^9\)

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\(^6^9\)If increases in program funding do not materialize, the new formula or new data will be unused, thereby exacerbating funding inequities. See U.S. General Accounting Office (testimony), Substance Abuse and Mental Health: Hold-Harmless Provisions Prevent More Equitable Distribution of Federal Assistance Among States, GAO/T-HRD-90-3, Washington, D.C., October 30, 1989.
Although the rate of growth of California’s population relative to that of other states has slowed considerably since 1989,\(^{70}\) hold harmless provisions are still likely to result in less funding for the state.

**Trigger Levels**

Congress sometimes makes formula changes effective only once a certain condition is met. A common formula-change trigger is a specified amount of total funding for the program.

For example, in 1997 Congress amended the IDEA formula for Special Education–Grants to States, but it provided that the change would not become effective until appropriations exceeded $4.9 billion. The IDEA trigger was met in 1999, so grants for fiscal year 2000 were the first to be distributed according to the new formula.

In other instances, a trigger level may function as a hold harmless, preventing implementation of a formula change. It has been more than 15 years since Congress altered the formula for LIHEAP, but appropriations for the program have never exceeded the nearly $2 billion level that would trigger the changes Congress approved. Until funding exceeds that total, states’ LIHEAP grants continue to depend on their 1984 percentage shares, which were based on a convoluted mixture of now-outdated factors, including heating degree days squared (without any factor for cooling needs), poverty in 1980, residential energy expenditures in 1979, average annual heating needs between 1931 and 1980, and other factors. As a result, each state continues to receive the same share of funds it received in fiscal year 1984.\(^{71}\)

**Small-State Minimums**

Many formulas include minimum floor levels of allocations to states, counties, territories, or other jurisdictions. These minimum allocations naturally and rather blatantly work to shift funding away from larger states and toward smaller ones. In 1998, California received $600 per poor child from the Title I formula, whereas small-state minimums pushed receipts for Wyoming, Vermont, and Delaware above $1,000 per child in poverty. Small-state minimums are sometimes ratcheted upward: When Title I was reauthorized in 2001, it increased the small-state minimum for all Title I programs by providing that any

\(^{70}\)See *Population* section above.

\(^{71}\)The formula that would be used for any appropriations that exceed $1.975 billion nationwide measures fuel consumption, fuel costs, current poverty, and heating and cooling degree days (without squaring these factors). In part, Congress designed the formula change to respond to critics from warmer states such as California who point out that extreme heat poses as serious a threat as extreme cold, and that the formula should measure cooling needs as well as heating needs. Heating degree days are the sum of the number of degrees difference between the actual temperature and a specified base temperature for all days during which the state’s temperature falls below the base temperature.
new money above the fiscal year 2001 level be subject to a 0.35 percent minimum per state, but funds below that level continue to be subject to the previous 0.25 percent minimum.

Formula grant programs emanating from the Department of Homeland Security (DHS) have been subject to sharp criticism recently because of an unusually large minimum guarantee for small states. In 2003, DHS allocated more than $2 billion according to a formula whose primary feature is a 0.75 percent small-state minimum. The net result is that 40 percent of funds are allocated equally among states—regardless of size—before any other formula factors are used. California received less than 8 percent of funds, despite housing 12 percent of the nation’s population and possibly a larger percentage than most other states of “critical assets” that might be attractive targets for attacks by terrorists.

**Growth Minimums (Floors) and Growth Maximums (Caps and Ceilings)**

Limiting the amount by which benefit payments, eligible populations, or other factors may grow in any given period often works against fast-growing regions of the nation and in favor of slow-growing and declining regions. However, regions may experience growth in some factors at the same time that other factors are stable or declining. For example, the number of unemployed persons may decline as population growth accelerates, or the school-age population can be inversely proportional to the population over age 65. Growth maximums produce results similar to phase-in periods, and growth minimums often exhibit characteristics shared by small-state minimums.

IDEA’s Special Education–Grants to States program makes extensive use of both growth minimums and growth maximums as a restraint on funding shifts from year to year. First, every state must receive at least one-third of 1 percent of the increase in total program funding since 1999—a provision that increased funding for nine small states in 2002 (a small-state minimum, as discussed above). Second, every state’s allocation must increase by at least the rate of increase in the nation’s total grant level from the prior year, less 1.5 percent—a provision that increased funding to 22 states, both large and small. A third and very similar provision requires that every state’s allocation must increase by at least 90 percent of the nation’s total percentage increase from the prior year—language that in some years takes the place of language of the preceding one. Finally, a growth cap limits any state’s percentage increase from one year to the next to the percentage growth in the program nationwide, plus 1.5 percent—a provision that reduced funds for 25 states (including eight of the nine states that had initially received increases under the small-state growth minimum, mentioned above).
Sometimes, a minimum and a maximum will work against one another. For example, the 2002 funding amounts for most states that received increases from the small-state growth minimum in the Special Education–Grants to States formula were later reduced by the program’s countervailing growth maximum.

**Pro Rata Redistribution**

The operation of special formula provisions such as minimums and maximums will many times yield increased state funding amounts that sum to more or less money than is available for the program. When this happens, a pro rata funding redistribution is in order.

After raising funding to some states pursuant to small-state minimums or growth minimums, shortfalls are typically recovered by reducing funding on a pro rata basis for those states that did not receive a funding increase. (Likewise, in the event of an overage caused by a growth maximum, excess amounts above the funding limit are often redistributed among states on a pro rata basis.) Following the first reallocation, all states’ totals are again run through the formula tests to ensure that the pro rata redistribution did not push a state’s funding below the minimums (or above the maximums). For some programs, this process must be repeated numerous times to reach a final total where all states’ amounts fall within the limits of the formula language.

**Sliding Scales**

In some formulas, the value or counting of one factor may depend on a state’s value for an entirely different factor. For example, California guarantees education services for disabled children through age 18, whereas other states provide services through ages 19, 20, or 21. Because of a provision in the IDEA law designed to provide a financial incentive for states to revise that age level upward, California’s federal funding growth for disabled education programs will soon begin to slow relative to that of other states. The IDEA Special Education–Grants to States formula allocates funds based on population and poverty counts, but it counts children only in age ranges for which a state provides a “free and appropriate public education” (FAPE). In 2002, all states covered children from ages 3 through 18, but there was considerable variation at the top of the age range, with 21 states guaranteeing FAPE through age 21, 27 states guaranteeing through age 20, two states guaranteeing through age 19, and two states (California and Montana) guaranteeing FAPE only to children ages 3 through 18.72 As a result, California housed only 11 percent of counted children

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72For additional information regarding the FAPE sliding scale and the Special Education–Grants to States formula, see Tim Ransdell, *Federal Formula Grants and California: Education Programs for Disabled Children*, Public Policy Institute of California, San Francisco, California, September 2003.
in 2002; if the state had extended coverage through age 21 that year, its count would have increased to 12.8 percent.

**Factor Weighting and Exponentials**

Formulas that include more than a single factor must weight the value of each. In some cases, weighting is relatively simple. The formula for the Interstate Maintenance program (a component of Highway Planning and Construction) places equal weight on three factors—interstate highway lane miles, vehicle miles traveled on those interstates, and commercial vehicle contributions to the highway trust fund—and each factor thus receives one-third weighting. Part of the Special Education—Grants to States formula weights a population factor at 85 percent and a poverty factor at 15 percent. A factor-weighting variation in the CMAQ program formula uses a sliding scale based on air pollution severity to determine a metropolitan area’s weighting for funds distribution.73

Various methods may be used to apply weights to formula factors, sometimes with varying results. Although this report does not examine these variations, techniques include the multiplicative approach, the weighted average of shares, and the share of weighted averages.74

Some formulas employ exponential factors, which increases the factor’s relative importance (in formulas employing multiple factors) and exaggerates the skewing of funding based on that factor. For example, the Medicaid formula determines a state’s FMAP by squaring the ratio of a state’s per capita income to the nation’s per capita income.75 Before the formula squares the income factor, the preliminary FMAP for California is 52 and that of Mississippi (the state with the lowest per capita income and thus the highest FMAP) is 67. Once the income factor is squared, California’s FMAP decreases to 50 and Mississippi’s increases above 76.76

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73 Population counts for the CMAQ program for areas with extreme ozone problems (as determined by the EPA) are weighted at 1.4, meaning that their value is raised 40 percent for formula calculation. Severe areas are weighted at 1.3, serious areas 1.2, moderate areas 1.1, and marginal areas at 1.0 (or no factor-weight change).


75 The FMAP formula counts income once to approximate a state’s ability to pay for services itself and a second time to estimate poverty. GAO’s report on Medicaid criticizes the formula’s squaring of the income factor: “If PCI were a good proxy for people in poverty, squaring would be appropriate since squaring would reflect the effect on states’ funding ability of both resources and people in poverty. However, to the extent that PCI does not accurately reflect state resources and people in poverty, squaring magnifies this inaccuracy.” U.S. General Accounting Office, *Medicaid Formula: Differences in Funding Ability Among States Often Are Widened*, GAO-03-620, Washington, D.C., July 2003.

76 After the income factor’s squaring, California’s FMAP initially falls below 49, but it is raised to 50 by the formula’s FMAP floor, which ensures that no state’s matching rate is below 50.
LIHEAP funding continues to be distributed according to a formula that includes several factors, one of which is the number of heating degree days squared. Squaring the factor increases its value relative to the formula's other factors. Doing so also exaggerates differences between states’ heating needs. Take the example of two hypothetical states, State A with 100 heating degree days and State B with 50 heating degree days. By squaring the factor, the formula values State A’s needs four times as much as State B’s needs (10,000 versus 2,500), instead of twice as much (as would be derived using simple arithmetic).

**Minimum Thresholds**

Congress or an administering agency will sometimes require that a state, local government, or other jurisdiction meet a minimum threshold of eligibility before it qualifies for funding. Because California jurisdictions are often larger than those in other regions of the country,77 minimum counts sometimes improve the state’s share of funding.

For example, school districts are eligible for concentration grant funding under Title I if their number of eligible children is 6,500 or higher, or if that number constitutes 15 percent or more of all school-age children in the school district. California benefits because it has somewhat higher concentrations of poverty and a smaller than average number of school districts, although a small-state minimum on the program does blunt this advantage somewhat.

**Matching Funds and Matching Requirements**

Some grant programs encourage or require recipients to supplement federal funds with state or local dollars. In the case of matching programs, federal funding is provided only to the extent that a state or local recipient expends its own funding.

Some programs allow nonfederal matching funds to come from private sector or other sources, whereas other programs require that the recipient entity expend the funds directly.78 In addition, there may be considerable variation in what qualifies as a nonfederal match. Some programs allow in-kind services provided by the recipient to satisfy the matching requirement, whereas many programs limit the match to cash outlays only. For example, the 1997 passage of the

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77California has 58 counties, whereas other states may have many more. At 254, Texas contains the largest number of counties; Delaware contains three counties.

78On rare occasions, a program will allow federal funds from other sources to satisfy a matching requirement. For example, whereas TEA-21 set the federal share of most highway project funds at 80 percent (the matching rate for the Interstate Maintenance program is 90 percent), the Recreational Trails Program allows recipients to count additional funds from other federal agencies as long as the total combined federal share does not exceed 95 percent of the total. For additional information, see Tim Ransdell and Shervin Boloorian, *Federal Formula Grants and California: Federal Highway Programs*, Public Policy Institute of California, San Francisco, California, February 2003.
TEA-21 law changed the rules governing federal highway funding to allow state or local governments to apply the fair market value of land obtained to satisfy the nonfederal share of transportation project costs.

Some programs require that a recipient commit a fixed percentage of the total amount spent. For example, unless granted a waiver, recipients of federal Head Start funds must provide a 20 percent cash or in-kind match.\(^7\) Other programs employ a sliding scale for matching percentages, based on specified factors. As discussed above, Medicaid reimburses state and local health care expenditures for eligible patients at differing percentage rates depending on a state’s per capita income. The current FMAP for California is 50, meaning that the federal government reimburses the state one dollar for every two it spends. On the other hand, Mississippi’s 2003 FMAP of nearly 77 means that the federal government reimburses it more than three dollars for every four spent. (Moreover, unlike most federal formula programs that match nonfederal spending up to a fixed amount, Medicaid reimburses as many eligible state and local dollars as are spent.)

The scope and timing of matching requirements also vary. Before 1998, federal transportation law required nonfederal matching of every payment to a state, regardless of how many payments were made for the same project. TEA-21 eliminated this requirement and allowed tapered matching, whereby the federal and state governments could agree to adjust matching requirements for individual payments up or down as long as a 20 percent nonfederal match was achieved over the life of the project.

**Maintenance of Effort Requirements**

In some cases, Congress makes federal funding contingent on state or local recipients’ continuing to expend their own funds at the amount (or a set percentage of the amount) spent in a previous year, known as a base year. Maintenance of Effort (MoE) requirements encourage state and local participation in and commitment to federal priority activities, and they prevent the supplanting of state and local resources with federal funds. For example, when Congress converted the open-ended AFDC entitlement program to the fixed-amount TANF block grant, it conditioned eligibility for future federal grant funds on each state’s maintaining at least 75 percent or 80 percent of the total it spent in fiscal year 1994.\(^8\)

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\(^7\)Because funds are granted directly to Head Start program operators, the matching requirement is generally imposed on nongovernmental grantees, although in some instances state or local government funds may be used to satisfy the match. For additional information, see Tim Ransdell, *Federal Formula Grants and California: Head Start*, Public Policy Institute of California, San Francisco, California, October 2003.

\(^8\)If a state meets congressional targets for the percentage of former welfare recipients who participate in work activities, it must expend only 75 percent of its 1994 spending on AFDC and AFDC-related programs. If the state does not meet
Similarly, to access the Child Care Development Fund’s (CCDF’s) pool of matching grant funds, a state must first spend at least as many state child care dollars as it did in fiscal year 1994 or 1995 (whichever was higher). Once state expenditures for child care in a given year reach the MOE level, it may then begin to draw down its share of CCDF matching funds for the year, with reimbursements matched at the state’s FMAP rate.

Congress sometimes employs regulatory oversight rather than financial incentives to encourage grant recipients to maintain spending levels and avoid supplantation. Since its inception in 1965, the Elementary and Secondary Education Act and its successor, the No Child Left Behind Act, have included language requiring that states and school districts use federal funds to “supplement, not supplant” monies that the recipient would have spent anyway. Federal auditors monitor state and local spending behavior to ensure that federal funds are not used to supplant nonfederal funds.

**States, Territories, Tribes, and Set-Asides**

The geographic location of recipient jurisdictions may vary by program. Some programs that provide funding to states provide grants to the 50 states only, whereas other programs include the District of Columbia, and still others also treat Puerto Rico as a state for allotment purposes.

The Census Bureau and other federal statistics collectors employ different procedures for collecting and publishing data for Puerto Rico than for the 50 states and the District of Columbia. Data for Puerto Rico are often published late, and they may be incomplete or absent entirely. For some federal grant programs, Congress addressed this data inconsistency by specifying a unique allocation method within the formula statute. In some cases, the law delineates a specific amount for Puerto Rico. For other programs, Congress leaves it to the administering agency to develop a solution, sometimes by using older statistics.

When programs make U.S. territories (other than Puerto Rico) eligible for funding, most provide grants to four territories—U.S. Virgin Islands, Guam, American Samoa, and Northern Mariana Islands—whereas some also provide funds to the outlying areas of the Marshall Islands, the Federated States of Micronesia, and Palau. Some formulas require that grants to territories be apportioned based on relevant data, whereas others suspend formula operations and require that territories compete for the funds set aside.

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work participation targets, it must spend at least 80 percent of its 1994 amount to receive a TANF grant. In addition, before a state can tap TANF’s Contingency Fund, it must have expended 100 percent of its 1994 amount.
In addition, some programs require that a particular amount or a percentage of funds be set aside for Indian tribes or tribal organizations. The amount allocated to a tribe or tribal organization typically is independent of the amount allocated to the state within which it is located.

As an illustration, the Special Education–Grants to States formula requires that the U.S. Department of Education set aside up to 1 percent of appropriations for competitive grants to four territories, and 1.226 percent for grants to Indian tribes and tribal organizations, with remaining funds allocated to the 50 states, the District of Columbia, and Puerto Rico according to population and poverty data. The department prepares special calculations to produce poverty figures for Puerto Rico that are not produced by the Census Bureau.\footnote{The formula also specifies that a portion of appropriated funds be set aside for the department to use for program administration. For additional information regarding the Special Education–Grants to States formula, see Tim Ransdell, \textit{Federal Formula Grants and California: Education Programs for Disabled Children}, Public Policy Institute of California, San Francisco, California, September 2003.}

\section*{Conclusion}

Although California’s 12 percent share of the nation’s population is nearly reflected in its share of formula grant disbursements, the natural variability of grant allocations invites focused review of both formulas and the factors that comprise them. After all, a state’s success or failure at garnering federal dollars has much to do with the types of factors selected for each formula program.

California is simultaneously poor, wealthy, young, urban, and immigrant. Unfortunately for the state, the largest formula grant program of any kind uses income to measure poverty and thus misidentifies the state as needing little assistance when conventional poverty definitions would argue the opposite. California and its local governments would benefit fiscally if the Medicaid formula were altered to reflect federal poverty data instead of per capita income, but the federal policymakers would confront political challenges and myriad policy issues if the Medicaid formula were opened to revision.

What percentage of formula grant funding is fair or appropriate remains open to interpretation. California houses 12 percent of the nation’s population, which is a useful benchmark. On the other hand, many formula grant programs, including a substantial majority of the largest, are focused in whole or in part on ameliorating the negative effects of poverty. Because California houses 13 percent of the nation’s poor—and it has housed a considerably larger proportion
of persons in poverty in the recent past—some would argue that this larger share would be a more appropriate benchmark.

By virtue of their mathematical nature, funding formulas can in theory serve as neutral arbiters of who deserves funding and how much. However, formulas are written in a political environment, where drafters must remain mindful of winning sufficient support from committee members, party leadership, and the rank and file of both the House of Representatives and the Senate. On occasion, if no mathematical formula yields a politically viable result, legislation may specify a particular funding level for one, several, or even all states. At the most extreme, percentage allocations or even specified dollar levels for all jurisdictions may be specifically prescribed in legislation before approval, resulting in an allocation scheme that as a practical matter functions less as a formula than as a list of political earmarks.

Whether policy goals are better served or whether California’s target populations fare better under one approach than under another remain questions that need to be answered on a case-by-case, ongoing basis. This project will continue to present objective information to better inform the public debate in this critical area of California policy.
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