

An Overview of Medicaid Spending, Personal Income and Federal Medical Assistance Percentages over a Half Century

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The presentation and opinions expressed in this paper are entirely those of the author, and should not be construed as representing the policies or positions of the author's former or current employers or clients. Mr. Miller has served in a variety of federal fiscal agencies, and was the founder and first director of Federal Funds Information for States.

Summary

The Medicaid program has changed significantly since it began in the 1960s, growing substantially, changing in composition and placing increasing fiscal stress on the state governments that help finance it. This paper briefly summarizes the changes, and then describes ongoing changes in states' federal medical assistance percentages (FMAPs)—the share of the basic Medicaid program provided by the federal government—including the continued decline in FMAPs among the poorer states as their Medicaid programs grow. This compression of FMAPs has been caused by shifts among states and regions in the population and personal income data upon which they are based.

The paper then looks to the future. It projects possible changes in FMAPs for federal fiscal year (FY) 2015 based on currently available data, and discusses the impact on both future FMAPs and program costs if the historical shifts continue. It concludes with a warning about potential future difficulties as uncertainties surrounding the per capita income data affect state Medicaid program costs just as health care reform is implemented, and as the possibilities of disruptions in the economy become larger.

I. Historical Shifts in Grant-in-Aid Spending

Medicaid is a joint federal-state program of health insurance, primarily for those of low income. Costs of health benefits are shared between the federal government and each state depending on a state's FMAP.¹² The almost half century since the inception of Medicaid in 1965 has seen it grow from an important part of a multifaceted grant-in-aid system to its overwhelmingly dominant component. Table 1 illustrates the growth.

Table 1. Shifts in Federal Grant-in-Aid Composition, 1965-2012
(Outlays; federal fiscal years)

| | 1965 | 1975 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2011 | 2012 |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Grants to States for Medicaid | 2.5% | 13.7% | 21.4% | 30.4% | 39.6% | 41.2% | 42.5% | 44.8% | 45.3% | 46.0% |
| Children's Health Insurance Fund | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.4% | 1.2% | 1.3% | 1.4% | 1.7% |
| Federal-aid highways | 36.8% | 9.3% | 12.0% | 10.3% | 8.6% | 8.7% | 7.4% | 7.1% | 7.3% | 8.1% |
| Family Assistance/TANF | 25.5% | 10.3% | 8.1% | 9.0% | 7.6% | 6.4% | 5.0% | 3.6% | 3.5% | 3.7% |
| Food Stamps State Administration | 0.3% | 0.3% | 1.6% | 1.6% | 1.2% | 1.2% | 1.0% | 0.9% | 1.0% | 1.3% |
| Unemployment insurance state admin | 2.0% | 1.9% | 1.7% | 1.3% | 1.3% | 1.1% | 1.4% | 1.2% | 1.1% | 1.1% |
| Labor Dept Employment and Training | 0.8% | 5.8% | 2.7% | 2.3% | 1.6% | 1.3% | 0.8% | 0.8% | 0.7% | 0.6% |
| HUD housing programs. | 1.9% | 2.7% | 6.1% | 7.0% | 8.2% | 7.0% | 7.1% | 5.8% | 5.4% | 5.4% |
| Elementary and Secondary Education | 3.9% | 6.6% | 6.1% | 5.9% | 5.4% | 6.2% | 8.0% | 11.4% | 10.3% | 8.0% |
| Supplemental feeding (WIC and CSFP) | 0.0% | 0.0% | 1.4% | 1.6% | 1.5% | 1.4% | 1.2% | 1.1% | 1.1% | 1.3% |
| Child nutrition | 2.4% | 3.1% | 3.3% | 3.6% | 3.3% | 3.2% | 2.7% | 2.7% | 2.8% | 3.4% |
| Community and regional development | 5.9% | 5.7% | 4.9% | 3.7% | 3.2% | 3.0% | 4.7% | 3.1% | 3.3% | 3.7% |
| EPA wastewater treatment | 0.6% | 0.6% | 0.6% | 0.7% | 0.7% | 0.7% | 1.7% | 1.2% | 1.6% | 3.6% |
| General revenue sharing trust fund | 0.0% | 12.3% | 4.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Other | 19.3% | 26.4% | 25.4% | 22.9% | 18.7% | 18.7% | 17.6% | 16.3% | 16.9% | 16.1% |
| Total grants-in-aid | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Memo: Grants as share of budget | 9.2% | 15.0% | 11.2% | 10.8% | 14.8% | 16.0% | 17.3% | 17.6% | 16.8% | 15.4% |

Source: Office of Management and Budget, *Historical Tables*, FY 2014 Budget.

¹ Administrative cost sharing is done under a different structure.

² The District of Columbia has a statutory 70.00 FMAP. Five federal insular areas also have Medicaid programs, but they are reimbursed under a different structure. In addition, economic stimulus legislation twice provided for increased FMAPs during recessions in the 2000s; those increases are not reflected in this paper.

In FY 1965, spending for grants was dominated by construction of the still new Interstate Highway System, followed by spending on family assistance, primarily Aid to Families with Dependent Children (AFDC). Medicaid spending was only 2.5 percent of the total. Grants were 9.2 percent of the budget; major programs requiring a state financial match totaled about 67 percent of total grants-in-aid.

By FY 1975, the situation had changed dramatically. Medicaid spending had grown exponentially to 13.7 percent of an expanded grant-in-aid 15 percent of the budget. Countercyclical spending under the Carter Administration for CETA public sector employment and EDA local public works pushed up the shares of Labor Department programs and community development spending. In addition, the establishment of General Revenue Sharing in 1972 was a major presence, with spending levels second only to Medicaid. Family assistance spending fell from one-fourth of the total in FY 1965 to 10 percent in 1975.

Major programs requiring a state match fell to 35 percent of total grants despite the Medicaid growth; grants rose to 15 percent of the budget.

Medicaid spending again grew substantially over the next decade, especially before FY 1982. Reductions in the FMAP in FYs 1982-1984 from the 1981 Omnibus Budget Reconciliation Act slowed the increase, which began again in FY 1985. Highway spending again accelerated, as the Reagan Administration more than doubled the tax on motor fuel to 9 cents per gallon, and HUD Section 8 housing programs also grew. General Revenue Sharing shrank, as the state one-third share was eliminated, and the Carter Administration countercyclical programs were terminated.

Overall, grant-in-aid spending as a share of the budget dropped dramatically, to 11 percent in both FY 1985 and FY 1990.

Medicaid spending almost doubled its share of grants between FY 1985-1995 to 40 percent, reflecting expansions of Medicaid eligibility beyond AFDC and SSI categorical eligibility, a series of new mandates—especially the increased coverage of poor children—and the discovery by increasing numbers of states of Medicaid financial devices that increased their effective FMAPs. The General Revenue Sharing local government two-thirds share was terminated and all other grant-in-aid programs shrank in relative importance other than HUD housing programs.

Grants continued to grow as a share of the budget almost to FY 1975 levels, albeit with a different composition.

Medicaid's share of total grants to state and local governments has continued to grow since FY 1995, though more slowly. This slowdown partially reflects Medicare Part D's 1996 assumption of prescription drug costs for those dually eligible for Medicaid and Medicare.³ The Medicaid share did expand as the result of stimulus funding during the recession—as did the share of education grants—but has leveled off temporarily at about 45-46 percent. This Medicaid share will grow in the future as states enroll in the expansions provided for in the Affordable Care Act.

Grants in FY 2010 increased to a high of 18 percent of the budget, largely as a result of the stimulus grants, and declined to 15 percent for 2012. The major-program share of the grants requiring a state match increased to almost 62 percent.

Grants-in-aid are defined in the federal budget as support for state and local government programs of service to the public. That said, the posture of support has shifted over time. In the 1970s and 1980s, a great share of grants spending did support basic state and local government functions, and was provided with no required state or local financial match. Today, Medicaid, CHIP, federal-aid

³ These shares do not reflect the cost to states of the “clawback,” the share of Part D costs paid for by the states, now about \$8.4 billion per year. Subtracting these amounts as a negative grant from Medicaid would reduce the program's share by about one percentage point.

highways, Food Stamps administration, unemployment insurance administration and TANF do require a substantial state financial contribution.⁴ This is almost double the one-third share of 1975, but not yet up to the levels of the 1960s. In these cases, as with the clawback, one can argue that these are federally designed programs being supported by state and local resources.

II. Historical Shifts in Medicaid Spending

As Medicaid has grown, the distribution of spending on different types of services has shifted substantially (Table 2). A very substantial shift beginning in the late 1990s was created by the Balanced Budget Act of 1997, permitting states to enroll individuals in managed care organizations (MCOs) without obtaining a waiver. By FY 2011, managed care organizations received 23 percent of state Medicaid spending.

Direct spending on institutional care has experienced a secular decline for many years. Before the late 1990s, spending on inpatient care in hospitals had declined only slightly, though an increasing share began to flow through disproportionate share (DSH) payments. After 2000, the reported share devoted to inpatient hospital spending dropped dramatically. By comparison, already begun declines in spending on mental hospitals, nursing homes and intermediate care facilities were accelerated after the 1990s. At least part of this decline in payments to institutions was offset by increases in spending for home and community based services, growing from less than 1 percent in FY 1965 to 6.2 percent in FY 1990, and 9.0 percent in FY 2011.

Spending on prescription drugs grew substantially from a low base, 6 percent in FY 1965 growing to over 10 percent in FY 1995. However, the passage of Part D resulted in a rapid drop, and in FY 2011 (excluding clawback costs) it is now only 4 percent. Another smaller area that continues to grow rapidly is Medicare premium payments for persons dually eligible for Medicare and Medicaid—1.2 percent in FY 1965 to 2.7 percent in FY 2011.

Table 2. Historical Shifts in Medicaid Spending by Service
(federal fiscal years; excludes M-CHIP)

| | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2011 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Medicaid managed care orgs | 0.0% | 0.0% | 0.0% | 11.2% | 13.9% | 21.2% | 22.7% |
| Hospital inpatient general svcs | 24.9% | 25.0% | 17.7% | 12.8% | 13.7% | 13.5% | 14.1% |
| Hospital Inpatient DSH | 0.0% | 0.0% | 10.0% | 5.8% | 4.4% | 3.4% | 3.1% |
| Prepaid inpatient health plans | 0.0% | 0.0% | 0.0% | 0.0% | 2.3% | 2.5% | 2.3% |
| Hospital outpatient services | 4.4% | 4.8% | 4.5% | 3.7% | 4.1% | 3.9% | 4.2% |
| Mental hospital services | 3.3% | 2.6% | 1.8% | 1.3% | 1.0% | 0.9% | 0.8% |
| Mental hospital DSH | 0.0% | 0.0% | 2.6% | 1.6% | 0.9% | 0.6% | 0.5% |
| Nursing Facilities | 30.0% | 25.8% | 20.0% | 20.3% | 15.8% | 13.3% | 12.7% |
| ICF/IID services | 12.1% | 11.0% | 6.3% | 5.1% | 4.0% | 3.3% | 3.4% |
| Home/Community Based Svcs | 0.7% | 1.8% | 3.1% | 6.2% | 7.5% | 9.3% | 9.0% |
| Prescription Drugs | 5.9% | 6.6% | 5.5% | 8.5% | 10.3% | 4.3% | 4.0% |
| Physician services | 6.3% | 6.1% | 5.0% | 3.0% | 3.4% | 3.2% | 3.2% |
| Personal care | 2.1% | 2.7% | 1.9% | 2.0% | 2.5% | 3.0% | 2.7% |
| Medicare premiums | 1.2% | 1.6% | 1.6% | 1.5% | 1.9% | 2.4% | 2.7% |
| Other premium payments excluding Medicare | 1.8% | 3.0% | 4.8% | 2.7% | 0.6% | 0.1% | 0.1% |
| Clinic services | 1.6% | 2.1% | 2.1% | 2.5% | 2.3% | 1.7% | 1.6% |
| Dental services | 1.2% | 1.0% | 1.0% | 0.9% | 1.2% | 1.5% | 1.4% |
| Home health services | 0.7% | 1.2% | 1.3% | 1.2% | 1.2% | 1.3% | 1.2% |
| Other | 4.0% | 5.0% | 10.9% | 9.6% | 9.2% | 10.6% | 10.4% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: CMS-64 data.

⁴ Education programs also require substantial state and local contributions, though not a formal match.

A different perspective on the growth of Medicaid spending is the differential shares of spending among states and regions, and how that has changed (Table 3).

In FY 1985, states in the country's northeast quadrant dominated Medicaid spending. New York alone spent 20 percent; California, a larger state, spent under 11 percent. Many of the wealthiest states with higher required state matching requirements had the largest program shares. These were states with a larger state government role overall that could afford their larger state matches. Less wealthy states, especially in the Southeast, Rocky Mountains and Southwest, spent relatively little on Medicaid. A central reason for these differentials was lower eligibility levels for AFDC, which made a smaller share of these states' poverty populations categorically eligible for Medicaid.

The expansion of Medicaid beyond categorical welfare eligibility and mandates for expanded coverage of children and pregnant women were major contributors to the overall growth of the program during FY 1985-1995, which averaged a 14.5 percent annual growth. It also resulted in shifting Medicaid spending shares among states and regions. Between FY 1985-1995, the Southwest region's Medicaid spending increased by 18.7 percent *annually*, led by a major increase in Arizona, the last state to establish and institutionalize a Medicaid program. Other regions with major annual increases include the Southeast (+17.6%) and the Rocky Mountains (+16.0%). Regions whose Medicaid programs grew the slowest were the Far West (+5.5%), Great Lakes (+12.2%) and Mideast (+13.0%) regions, as states in other regions approached national norms in eligibility and benefit levels.

State-specific reasons for the differential growth rates are various. Some states such as Oregon and Tennessee experimented with expanded state-wide coverage through waivers. States such as West Virginia and New Hampshire discovered financing mechanisms such as voluntary contributions and provider taxes to artificially expand the size of their federal reimbursements. Most states with small initial programs grew more substantially; those with the largest lost shares. It is interesting to note that during the FY 1985-1995 period the regions with the fastest growing Medicaid programs were those with the lowest per capita incomes.

During the FY 1995-2005 period, the three northeast regions continued to lose relative shares, while the Southeast region reversed its earlier growth. States in the Southwest region—still with relatively small programs in FY 1995—again grew the fastest. The Southwest region continued to grow the fastest during FY 2005-2011, joined by renewed growth in the Rocky Mountains. One major change in FY 2011 is the growth in the Far West. California, which has spent between 10-11 percent of the national program in most years, jumped to 13 percent, as its institutions began to receive substantial supplementary payments. States such as Minnesota that entered the ACA Medicaid expansion early also grew.

The Medicaid actuaries estimate FY 2012 growth to have slowed in FY 2012, with faster growth to resume later—especially in 2014 with the expansion of ACA eligibility. They project FY 2012-2021 annual growth to be 6.4 percent, as compared to nominal GDP projected growth of 5.0 percent. In essence, then, Medicaid is projected to continue to grow as part of both national health care expenditures and of the overall economy.

**Table 3. Historical Shifts in State and Regional Medicaid Expenditures
(federal fiscal years; dollars in billion)**

| | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2011 | Annualized Percent Change | | | |
|----------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|---------------------------|-------------|-------------|-------------|
| | | | | | | | | 1985-1995 | 1995-2000 | 2000-2005 | 2005-2011 |
| Alaska | \$64 | \$152 | \$302 | \$481 | \$983 | \$1,208 | \$1,290 | 16.7% | 9.8% | 15.4% | 4.6% |
| Alabama | 479 | 797 | 1,943 | 2,696 | 3,837 | 4,836 | 4,683 | 15.0% | 6.8% | 7.3% | 3.4% |
| Arizona | 96 | 571 | 1,595 | 2,225 | 5,726 | 9,380 | 8,988 | 32.4% | 6.9% | 20.8% | 7.8% |
| Arkansas | 372 | 611 | 1,184 | 1,580 | 2,810 | 3,881 | 3,952 | 12.3% | 5.9% | 12.2% | 5.8% |
| California | 4,277 | 7,192 | 16,023 | 21,153 | 33,663 | 41,643 | 54,065 | 14.1% | 5.7% | 9.7% | 8.2% |
| Colorado | 322 | 537 | 1,519 | 1,944 | 2,797 | 4,028 | 4,349 | 16.8% | 5.1% | 7.5% | 7.6% |
| Connecticut | 580 | 1,183 | 2,517 | 3,142 | 4,028 | 5,528 | 5,883 | 15.8% | 4.5% | 5.1% | 6.5% |
| Delaware | 69 | 123 | 333 | 524 | 869 | 1,287 | 1,392 | 17.0% | 9.5% | 10.6% | 8.2% |
| Dist of Columbia | 306 | 423 | 796 | 833 | 1,254 | 1,772 | 2,129 | 10.0% | 0.9% | 8.5% | 9.2% |
| Florida | 956 | 2,477 | 6,068 | 7,525 | 13,218 | 17,262 | 18,139 | 20.3% | 4.4% | 11.9% | 5.4% |
| Georgia | 767 | 1,513 | 3,473 | 4,321 | 7,333 | 7,711 | 8,065 | 16.3% | 4.5% | 11.2% | 1.6% |
| Hawaii | 141 | 207 | 724 | 642 | 1,033 | 1,361 | 1,524 | 17.7% | -2.4% | 10.0% | 6.7% |
| Idaho | 75 | 157 | 334 | 577 | 1,009 | 1,345 | 1,515 | 16.1% | 11.6% | 11.8% | 7.0% |
| Illinois | 1,720 | 2,407 | 5,973 | 7,491 | 10,786 | 15,196 | 12,836 | 13.3% | 4.6% | 7.6% | 2.9% |
| Indiana | 736 | 1,453 | 2,060 | 3,470 | 5,234 | 5,879 | 6,566 | 10.8% | 11.0% | 8.6% | 3.9% |
| Iowa | 361 | 638 | 1,135 | 1,637 | 2,377 | 3,047 | 3,317 | 12.1% | 7.6% | 7.7% | 5.7% |
| Kansas | 261 | 526 | 930 | 1,411 | 1,968 | 2,408 | 2,669 | 13.5% | 8.7% | 6.9% | 5.2% |
| Kentucky | 554 | 1,001 | 2,122 | 3,035 | 4,253 | 5,522 | 5,652 | 14.4% | 7.4% | 7.0% | 4.9% |
| Louisiana | 739 | 1,411 | 4,125 | 3,443 | 5,313 | 6,720 | 6,298 | 18.8% | -3.5% | 9.1% | 2.9% |
| Maine | 247 | 432 | 921 | 1,185 | 2,242 | 2,266 | 2,356 | 14.1% | 5.2% | 13.6% | 0.8% |
| Maryland | 613 | 1,193 | 2,414 | 3,102 | 5,136 | 7,012 | 7,320 | 14.7% | 5.1% | 10.6% | 6.1% |
| Massachusetts | 1,598 | 3,071 | 5,088 | 6,336 | 9,557 | 11,595 | 13,007 | 12.3% | 4.5% | 8.6% | 5.3% |
| Michigan | 1,686 | 2,605 | 5,142 | 6,741 | 8,656 | 11,556 | 12,063 | 11.8% | 5.6% | 5.1% | 5.7% |
| Minnesota | 1,012 | 1,432 | 2,760 | 3,322 | 5,526 | 7,496 | 8,271 | 10.6% | 3.8% | 10.7% | 7.0% |
| Mississippi | 297 | 621 | 1,542 | 1,978 | 3,343 | 4,106 | 4,411 | 17.9% | 5.1% | 11.1% | 4.7% |
| Missouri | 556 | 938 | 2,747 | 3,940 | 6,529 | 7,994 | 8,011 | 17.3% | 7.5% | 10.6% | 3.5% |
| Montana | 98 | 180 | 355 | 450 | 696 | 928 | 954 | 13.8% | 4.9% | 9.1% | 5.4% |
| Nebraska | 168 | 318 | 642 | 1,047 | 1,377 | 1,595 | 1,637 | 14.3% | 10.3% | 5.6% | 2.9% |
| Nevada | 67 | 149 | 450 | 598 | 1,184 | 1,505 | 1,563 | 21.0% | 5.8% | 14.6% | 4.7% |
| New Hampshire | 118 | 228 | 835 | 792 | 1,245 | 1,319 | 1,348 | 21.6% | -1.1% | 9.5% | 1.3% |
| New Jersey | 1,166 | 2,342 | 5,350 | 6,070 | 7,509 | 10,163 | 10,501 | 16.5% | 2.6% | 4.3% | 5.7% |
| New Mexico | 153 | 290 | 772 | 1,221 | 2,364 | 3,457 | 3,318 | 17.5% | 9.6% | 14.1% | 5.8% |
| New York | 7,864 | 12,185 | 24,167 | 30,186 | 42,752 | 50,453 | 51,712 | 11.9% | 4.5% | 7.2% | 3.2% |
| North Carolina | 647 | 1,463 | 3,871 | 5,465 | 8,845 | 10,418 | 10,297 | 19.6% | 7.1% | 10.1% | 2.6% |
| North Dakota | 115 | 192 | 296 | 429 | 508 | 682 | 702 | 9.9% | 7.7% | 3.5% | 5.5% |
| Ohio | 1,754 | 2,772 | 6,194 | 7,480 | 11,572 | 15,122 | 15,533 | 13.4% | 3.8% | 9.1% | 5.0% |
| Oklahoma | 468 | 719 | 1,113 | 1,639 | 2,713 | 3,862 | 4,008 | 9.1% | 8.0% | 10.6% | 6.7% |
| Oregon | 253 | 541 | 1,435 | 2,111 | 2,811 | 3,973 | 4,386 | 19.0% | 8.0% | 5.9% | 7.7% |
| Pennsylvania | 1,908 | 3,018 | 7,370 | 10,388 | 15,787 | 18,634 | 20,395 | 14.5% | 7.1% | 8.7% | 4.4% |
| Rhode Island | 259 | 443 | 986 | 1,167 | 1,671 | 1,912 | 2,099 | 14.3% | 3.4% | 7.5% | 3.9% |
| South Carolina | 356 | 835 | 1,974 | 2,665 | 4,069 | 4,992 | 4,931 | 18.7% | 6.2% | 8.8% | 3.3% |
| South Dakota | 95 | 169 | 313 | 396 | 608 | 775 | 750 | 12.7% | 4.8% | 9.0% | 3.6% |
| Tennessee | 614 | 1,374 | 3,308 | 4,974 | 7,557 | 8,441 | 7,985 | 18.3% | 8.5% | 8.7% | 0.9% |
| Texas | 1,475 | 3,068 | 8,670 | 10,617 | 17,264 | 26,331 | 27,847 | 19.4% | 4.1% | 10.2% | 8.3% |
| Utah | 143 | 269 | 548 | 810 | 1,341 | 1,687 | 1,733 | 14.4% | 8.1% | 10.6% | 4.4% |
| Vermont | 89 | 156 | 335 | 517 | 859 | 1,247 | 1,318 | 14.2% | 9.0% | 10.7% | 7.4% |
| Virginia | 558 | 1,034 | 2,045 | 2,729 | 4,425 | 6,408 | 6,894 | 13.9% | 5.9% | 10.2% | 7.7% |
| Washington | 620 | 1,213 | 2,837 | 3,963 | 5,701 | 6,989 | 7,335 | 16.4% | 6.9% | 7.5% | 4.3% |
| West Virginia | 180 | 400 | 1,274 | 1,378 | 2,161 | 2,539 | 2,740 | 21.7% | 1.6% | 9.4% | 4.0% |
| Wisconsin | 1,028 | 1,472 | 2,486 | 3,267 | 4,752 | 6,432 | 6,874 | 9.2% | 5.6% | 7.8% | 6.3% |
| Wyoming | 28 | 67 | 166 | 219 | 405 | 530 | 527 | 19.4% | 5.7% | 13.1% | 4.5% |
| Puerto Rico & Others | 151 | 158 | 258 | 351 | 1,067 | 1,147 | 1,759 | 5.5% | 6.3% | 24.9% | 8.7% |
| Total | \$39,258 | \$68,725 | \$151,818 | \$195,659 | \$300,724 | \$383,581 | \$407,898 | 14.5% | 5.2% | 9.0% | 5.2% |
| New England | 2891 | 5514 | 10683 | 13138 | 19602 | 23868 | 26011 | 14.0% | 4.2% | 8.3% | 4.8% |
| Mideast | 11926 | 19284 | 40430 | 51103 | 73307 | 89320 | 93449 | 13.0% | 4.8% | 7.5% | 4.1% |
| Great Lakes | 6923 | 10708 | 21855 | 28448 | 41000 | 54185 | 53873 | 12.2% | 5.4% | 7.6% | 4.7% |
| Southeast | 6518 | 13537 | 32928 | 41790 | 67165 | 82836 | 84046 | 17.6% | 4.9% | 10.0% | 3.8% |
| Plains | 2568 | 4212 | 8822 | 12180 | 18893 | 23997 | 25358 | 13.1% | 6.7% | 9.2% | 5.0% |
| Southwest | 2193 | 4648 | 12150 | 15702 | 28066 | 43030 | 44162 | 18.7% | 5.3% | 12.3% | 7.8% |
| Rocky Mountains | 665 | 1209 | 2922 | 4001 | 6248 | 8518 | 9079 | 16.0% | 6.5% | 9.3% | 6.4% |
| Far West | 5423 | 9455 | 21770 | 28947 | 45375 | 56679 | 70163 | 14.9% | 5.9% | 9.4% | 7.5% |
| Puerto Rico & Others | 151 | 158 | 258 | 351 | 1067 | 1147 | 1759 | 5.5% | 6.3% | 24.9% | 8.7% |

Source: Form CMS-64 data.

III. Definition of the Federal Medical Assistance Percentage (FMAP)

The federal share of paying for Medicaid benefits—the FMAP—is recalculated each year. It is based on each state’s per capita personal income over the most recent three calendar years compared to the national average for those years.⁵

$$\text{FMAP} = 1 - .45 \times [(\text{State PCI})^2 / (\text{U.S. PCI})^2]$$

A state with average per capita income receives an FMAP of 55.00 percent, and itself pays 45.00 percent of the cost. No state may receive an FMAP less than 50.00⁶ (where the federal government provides one dollar for each state dollar) or higher than 83.00 (where the federal government provides \$4.88 for each state dollar). On average, this formula has resulted in the federal government paying for about 57 percent of spending on Medicaid benefits nationally and states 43 percent.

While this formula might seem like a zero-sum calculation directing the flow of federal Medicaid funds, it is not, for three primary reasons. First, wealthier states can afford larger Medicaid programs even with a lower match rate, often resulting in larger overall federal subsidies to them. Second, FMAP changes in larger states obviously have more significant fiscal implications for federal grants than those of smaller states. Finally, the 50.00 minimum FMAP means that data changes among the wealthier states do not affect their FMAPs, but change the national averages against which the poorer states are compared.

The per capita personal income data used to develop the FMAPs are based on a three-year average of data published by the Department of Commerce’s Bureau of Economic Analysis (BEA). FMAPs are published annually between October 1 and November 30 in the *Federal Register* for the federal fiscal year that begins the following October. For example, the FMAPs that apply in FY 2013, which began October 1, 2012, were published in November 2011, and were calculated using the latest per capita personal income available at that time, for calendar years 2008, 2009 and 2010.

This average four-year lag often produces out-of-cycle results, such as a state’s FMAP falling as its economy is declining.

The following discussions will first describe an historic shift in FMAPs over four decades. It will then evaluate the personal income and population data on which the formula is based. Finally, it will make projections about the directions that future changes in FMAPs might take, and the possible financial implications for the federal government.

IV. Shifts in Federal Medical Assistance Percentages (FMAPs) over Four Decades

Over time, the slower growth of incomes in a number of large wealthier states has produced a narrowing of FMAP values, as incomes in most of the poorer states have grown more rapidly than the national average to which they are compared. As can be seen in Table 4, 11 states had FMAPs above 71.00 in FY 1969; by FY 2009, this had fallen to four. Mississippi had an FMAP of 83.00 in FY 1969; it still had the highest FMAP in FY 2009, but that had fallen to 75.84. This meant a reduction from \$4.88 in federal funds for each Mississippi state dollar to \$3.14, a reduction of over one-third.

⁵ All FMAP references in this paper are to the base FMAPs established in the Social Security Act, not the increased FMAPs provided for in the American Recovery and Reinvestment Act of 2009.

⁶ A state receives a 50.00 level when its per capita income exceeds 5.5 percent of the national average.

These less wealthy states also had the fastest growing Medicaid programs for much of this period, and their own-source revenues therefore were burdened twice.

During these four decades, the average FMAP for the 50 states fell from 61.98 to 59.77. Twenty-five states experienced a decline while 18 received an increase, and the declines were generally greater than the increases. Twelve states experienced the very substantial reduction of eight percentage points or more, led by Virginia (-15.85), Tennessee (-11.86), South Dakota (-10.71), North Carolina (-10.70), Alabama (-10.62) and South Carolina (-10.43). The largest increases were in the Great Lakes states of Indiana (+10.87), Michigan (+10.27) and Ohio (+9.54). Some states, especially those with economies based on farming and mineral resources (North Dakota, Wyoming), experienced widely swinging shares, as both their economies and the federal subsidies supporting them moved and removed substantial funds. One net, these changes over time shifted over half a billion dollars a year in Medicaid program costs onto the poorer states from the federal government.

Per capita income shifts. In reality, the per capita personal income data driving the FMAP calculation reflect two separate data streams—income and population—produced by separate Department of Commerce entities, BEA and the Bureau of the Census. The two streams are combined by BEA to produce the per capita income estimates. Personal income—used as a surrogate for tax capacity—turns out to be a poor surrogate for that concept, especially for states that can export their tax incidence to residents of other states. Examples of these are mineral rich states that tax mined minerals through “severance taxes”—the incidence of which falls on consumers in other states—and small states that attract large corporations through advantageous tax provisions.

Population as the denominator of the fraction has suffered from major discontinuities between annual estimates and the decennial censuses that then require retroactive adjustments to the intercensal data. Both New York and California have experienced short-term increases over 50.00 as the result of intercensal population estimates that later were revised. At the other end of the scale, Nevada has experienced net inward domestic migration more than triple the annual rate. Census Bureau intercensal estimates have twice substantially underestimated the state’s population growth, thereby overstating its per capita income and substantially cutting its FMAP.

Table 6 shows how per capita income estimates have changed since the late 1960s. In 1969, the three northeastern regions and the Far West were all substantially above the national averages. By 1989, New England and Mideast states had maintained or increased their advantage, but both the Great Lakes and Far West regions had slipped substantially. The most substantial change was in the Southeast, where incomes increased from 80 percent of the national average to 90 percent. The largest decline was in the Great Lakes, which slipped from 105 percent to 100 percent.

Between 1989 and 2009, the fastest growing region was the Plains, growing from 93 percent of the national average to 99 percent. The Southwest and Rock Mountain regions also grew substantially in this period, while the Southeast continued its relative growth. The Far West and Great Lakes continued their declines, the latter substantially. Michigan, once 108 percent of the national average, by 2009 was only 86 percent.

Between 2009 and 2012, some of the previous shifts were reversed. While the minerals and farming intensive states of the Plains and Southwest continued to gain substantial shares, the Great Lakes region began a small rebound, starting to grow somewhat faster than the nation as whole. The most substantial declines were in the Far West, Southeast, and Rocky Mountains.

**Table 4. Shifts of Federal Medical Assistance Percentages (FMAPs) Over Four Decades
(federal fiscal years; dollars in thousands)**

| | 1969 | 1979 | 1989 | 1999 | 2009 | Percentage Point Change | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|-------------------------|-----------|-----------|
| | | | | | | 1969-1999 | 1999-2009 | 1969-2009 |
| Alabama | 78.60 | 72.58 | 73.10 | 69.27 | 67.98 | -9.33 | -1.29 | -10.62 |
| Alaska | 50.00 | 50.00 | 50.00 | 59.80 | 50.53 | 9.80 | -9.27 | 0.53 |
| Arizona | 64.99 | 60.81 | 62.04 | 65.50 | 65.77 | 0.51 | 0.27 | 0.78 |
| Arkansas | 79.81 | 72.06 | 74.14 | 72.96 | 72.81 | -6.85 | -0.15 | -7.00 |
| California | 50.00 | 50.00 | 50.00 | 51.55 | 50.00 | 1.55 | -1.55 | 0.00 |
| Colorado | 55.31 | 53.71 | 50.00 | 50.59 | 50.00 | -4.72 | -0.59 | -5.31 |
| Connecticut | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| Delaware | 50.00 | 50.00 | 52.60 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| District of Columbia | 50.00 | 50.00 | 70.00 | 70.00 | 70.00 | 20.00 | 0.00 | 20.00 |
| Florida | 65.09 | 56.55 | 55.18 | 55.82 | 55.40 | -9.27 | -0.42 | -9.69 |
| Georgia | 72.85 | 65.82 | 62.78 | 60.47 | 64.49 | -12.38 | 4.02 | -8.36 |
| Hawaii | 50.00 | 50.00 | 53.99 | 50.00 | 55.11 | 0.00 | 5.11 | 5.11 |
| Idaho | 67.87 | 63.58 | 72.71 | 69.85 | 69.77 | 1.98 | -0.08 | 1.90 |
| Illinois | 50.00 | 50.00 | 50.00 | 50.00 | 50.32 | 0.00 | 0.32 | 0.32 |
| Indiana | 53.39 | 57.86 | 63.71 | 61.01 | 64.26 | 7.62 | 3.25 | 10.87 |
| Iowa | 59.60 | 51.96 | 62.95 | 63.32 | 62.62 | 3.72 | -0.70 | 3.02 |
| Kansas | 57.90 | 52.35 | 54.93 | 60.05 | 60.08 | 2.15 | 0.03 | 2.18 |
| Kentucky | 75.25 | 69.71 | 72.89 | 70.53 | 70.13 | -4.72 | -0.40 | -5.12 |
| Louisiana | 74.58 | 70.45 | 71.07 | 70.37 | 71.31 | -4.21 | 0.94 | -3.27 |
| Maine | 69.92 | 69.74 | 66.68 | 66.40 | 64.41 | -3.52 | -1.99 | -5.51 |
| Maryland | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| Massachusetts | 50.00 | 51.62 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| Michigan | 50.00 | 50.00 | 54.75 | 52.72 | 60.27 | 2.72 | 7.55 | 10.27 |
| Minnesota | 58.40 | 55.26 | 53.07 | 51.50 | 50.00 | -6.90 | -1.50 | -8.40 |
| Mississippi | 83.00 | 78.09 | 79.80 | 76.78 | 75.84 | -6.22 | -0.94 | -7.16 |
| Missouri | 58.40 | 60.66 | 59.96 | 60.24 | 63.19 | 1.84 | 2.95 | 4.79 |
| Montana | 64.01 | 61.10 | 70.62 | 71.73 | 68.04 | 7.72 | -3.69 | 4.03 |
| Nebraska | 60.48 | 53.46 | 60.37 | 61.46 | 59.54 | 0.98 | -1.92 | -0.94 |
| Nevada | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| New Hampshire | 60.12 | 62.85 | 50.00 | 50.00 | 50.00 | -10.12 | 0.00 | -10.12 |
| New Jersey | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| New Mexico | 70.15 | 71.84 | 71.54 | 72.98 | 70.88 | 2.83 | -2.10 | 0.73 |
| New York | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 |
| North Carolina | 75.30 | 67.81 | 68.01 | 63.07 | 64.60 | -12.23 | 1.53 | -10.70 |
| North Dakota | 70.74 | 50.71 | 66.53 | 69.94 | 63.15 | -0.80 | -6.79 | -7.59 |
| Ohio | 52.60 | 55.46 | 58.98 | 58.26 | 62.14 | 5.66 | 3.88 | 9.54 |
| Oklahoma | 69.61 | 65.42 | 66.06 | 70.84 | 65.90 | 1.23 | -4.94 | -3.71 |
| Oregon | 54.37 | 57.29 | 62.44 | 60.55 | 62.45 | 6.18 | 1.90 | 8.08 |
| Pennsylvania | 55.03 | 55.11 | 57.42 | 53.77 | 54.52 | -1.26 | 0.75 | -0.51 |
| Rhode Island | 52.61 | 57.00 | 55.88 | 54.05 | 52.59 | 1.44 | -1.46 | -0.02 |
| South Carolina | 80.50 | 71.93 | 73.08 | 69.85 | 70.07 | -10.65 | 0.22 | -10.43 |
| South Dakota | 73.26 | 63.80 | 71.02 | 68.16 | 62.55 | -5.10 | -5.61 | -10.71 |
| Tennessee | 76.14 | 68.88 | 70.17 | 63.09 | 64.28 | -13.05 | 1.19 | -11.86 |
| Texas | 67.10 | 60.66 | 59.04 | 62.45 | 59.44 | -4.65 | -3.01 | -7.66 |
| Utah | 65.24 | 68.98 | 73.86 | 71.78 | 70.71 | 6.54 | -1.07 | 5.47 |
| Vermont | 69.00 | 68.02 | 63.92 | 61.97 | 59.45 | -7.03 | -2.52 | -9.55 |
| Virginia | 65.85 | 57.01 | 51.20 | 51.60 | 50.00 | -14.25 | -1.60 | -15.85 |
| Washington | 50.00 | 51.64 | 53.06 | 52.50 | 50.94 | 2.50 | -1.56 | 0.94 |
| West Virginia | 75.84 | 70.16 | 76.14 | 74.47 | 73.73 | -1.37 | -0.74 | -2.11 |
| Wisconsin | 56.68 | 58.53 | 59.31 | 58.85 | 59.38 | 2.17 | 0.53 | 2.70 |
| Wyoming | 59.20 | 53.44 | 62.61 | 64.08 | 50.00 | 4.88 | -14.08 | -9.20 |
| Total | | | | | | | | |
| Number > 71.00 | 11 | 5 | 11 | 6 | 4 | | | |
| Average FMAP 1/ | 61.98 | 59.28 | 60.95 | 60.48 | 59.77 | | | |
| Highest FMAP | 83.00 | 78.09 | 79.80 | 76.78 | 75.84 | | | |

1/ Excludes the District of Columbia. The Balanced Budget Act of 1997 provided a permanent 70.00 FMAP for the District of Columbia as part of an overall financial settlement.

**Table 5. State and Regional Per Capita Incomes Compared to the National Averages Over Time
(calendar years)**

| | 1969 | 1989 | 1999 | 2009 | 2011 | (prov) | Percent Change | | |
|----------------------|--------|--------|--------|--------|--------|--------|----------------|-----------|-----------|
| | | | | | | 2012 | 1969-1999 | 1999-2009 | 2009-2012 |
| Alabama | 71.3% | 80.3% | 81.0% | 83.9% | 83.9% | 83.4% | 13.7% | 3.5% | -0.5% |
| Alaska | 124.3% | 117.0% | 100.7% | 110.5% | 109.9% | 109.6% | -19.0% | 9.8% | -0.9% |
| Arizona | 91.1% | 88.5% | 86.8% | 86.9% | 84.4% | 84.3% | -4.8% | 0.1% | -3.0% |
| Arkansas | 68.2% | 74.6% | 76.1% | 82.0% | 81.2% | 81.3% | 11.6% | 7.8% | -0.8% |
| California | 118.1% | 111.1% | 108.3% | 106.2% | 105.0% | 105.4% | -8.3% | -1.9% | -0.8% |
| Colorado | 96.1% | 100.0% | 109.1% | 106.5% | 106.0% | 105.7% | 13.5% | -2.4% | -0.7% |
| Connecticut | 125.7% | 138.0% | 136.7% | 136.9% | 139.3% | 138.0% | 8.7% | 0.2% | 0.8% |
| Delaware | 114.9% | 111.7% | 102.6% | 100.2% | 99.7% | 98.2% | -10.7% | -2.4% | -1.9% |
| District of Columbia | 116.9% | 129.6% | 130.9% | 176.2% | 177.5% | 175.0% | 12.0% | 34.6% | -0.7% |
| Florida | 95.4% | 101.8% | 96.5% | 95.4% | 95.4% | 94.5% | 1.2% | -1.1% | -0.9% |
| Georgia | 82.1% | 90.5% | 94.5% | 87.7% | 86.6% | 86.4% | 15.1% | -7.2% | -1.5% |
| Hawaii | 118.1% | 110.2% | 96.9% | 104.2% | 103.3% | 103.1% | -17.9% | 7.4% | -1.0% |
| Idaho | 85.1% | 79.5% | 82.1% | 79.7% | 79.1% | 79.1% | -3.5% | -2.9% | -0.9% |
| Illinois | 113.0% | 106.9% | 108.1% | 105.8% | 105.2% | 105.0% | -4.3% | -2.1% | -0.8% |
| Indiana | 96.2% | 90.6% | 91.4% | 85.8% | 85.9% | 86.4% | -5.0% | -6.1% | 0.7% |
| Iowa | 95.5% | 89.6% | 90.1% | 95.7% | 99.0% | 98.7% | -5.7% | 6.2% | 3.1% |
| Kansas | 92.7% | 92.4% | 94.7% | 98.3% | 98.4% | 98.0% | 2.2% | 3.8% | -0.3% |
| Kentucky | 77.3% | 79.0% | 81.3% | 82.2% | 81.8% | 82.1% | 5.2% | 1.1% | -0.1% |
| Louisiana | 75.2% | 75.9% | 79.3% | 93.3% | 92.8% | 92.3% | 5.4% | 17.8% | -1.1% |
| Maine | 81.8% | 90.7% | 88.8% | 93.1% | 92.2% | 92.5% | 8.5% | 4.9% | -0.7% |
| Maryland | 109.5% | 118.1% | 113.7% | 122.7% | 121.9% | 121.7% | 3.9% | 7.9% | -0.8% |
| Massachusetts | 109.1% | 120.1% | 122.4% | 128.3% | 128.7% | 128.1% | 12.2% | 4.9% | -0.2% |
| Michigan | 108.1% | 98.2% | 98.3% | 86.0% | 87.3% | 87.8% | -9.1% | -12.6% | 2.1% |
| Minnesota | 98.4% | 101.9% | 107.9% | 106.0% | 107.2% | 108.3% | 9.6% | -1.7% | 2.2% |
| Mississippi | 62.6% | 67.9% | 72.5% | 77.7% | 77.0% | 77.5% | 15.8% | 7.1% | -0.3% |
| Missouri | 93.0% | 92.0% | 92.5% | 92.8% | 91.4% | 91.5% | -0.5% | 0.2% | -1.4% |
| Montana | 85.9% | 79.2% | 77.8% | 86.4% | 86.7% | 87.5% | -9.4% | 11.0% | 1.4% |
| Nebraska | 93.1% | 91.2% | 95.4% | 99.5% | 102.1% | 101.1% | 2.4% | 4.3% | 1.6% |
| Nevada | 118.1% | 104.1% | 104.6% | 93.0% | 88.9% | 87.5% | -11.4% | -11.2% | -5.9% |
| New Hampshire | 97.6% | 110.0% | 109.5% | 109.8% | 110.4% | 110.2% | 12.2% | 0.2% | 0.4% |
| New Jersey | 117.3% | 126.3% | 124.8% | 127.4% | 126.2% | 125.6% | 6.4% | 2.1% | -1.4% |
| New Mexico | 76.1% | 76.1% | 75.7% | 83.3% | 82.1% | 82.2% | -0.5% | 10.0% | -1.4% |
| New York | 119.2% | 120.6% | 115.1% | 121.0% | 123.0% | 122.0% | -3.4% | 5.1% | 0.9% |
| North Carolina | 79.4% | 89.4% | 92.9% | 88.0% | 86.7% | 86.8% | 17.0% | -5.3% | -1.4% |
| North Dakota | 80.8% | 78.1% | 82.9% | 101.9% | 113.7% | 121.5% | 2.7% | 22.8% | 19.3% |
| Ohio | 102.0% | 96.0% | 96.3% | 90.6% | 91.0% | 92.0% | -5.5% | -6.0% | 1.6% |
| Oklahoma | 83.5% | 82.6% | 80.3% | 88.2% | 90.7% | 91.4% | -3.8% | 9.8% | 3.6% |
| Oregon | 95.8% | 92.1% | 95.4% | 91.0% | 90.3% | 90.8% | -0.5% | -4.6% | -0.2% |
| Pennsylvania | 99.2% | 100.1% | 100.1% | 101.5% | 101.8% | 102.2% | 0.9% | 1.4% | 0.7% |
| Rhode Island | 100.3% | 105.4% | 97.9% | 104.7% | 105.6% | 105.4% | -2.4% | 7.0% | 0.6% |
| South Carolina | 73.5% | 81.1% | 83.1% | 81.4% | 80.3% | 80.3% | 13.0% | -2.1% | -1.4% |
| South Dakota | 79.0% | 79.6% | 87.6% | 98.7% | 106.4% | 102.3% | 10.9% | 12.7% | 3.6% |
| Tennessee | 77.1% | 85.4% | 89.5% | 87.3% | 88.0% | 88.3% | 16.2% | -2.6% | 1.1% |
| Texas | 87.7% | 87.8% | 93.2% | 94.7% | 96.6% | 97.1% | 6.2% | 1.7% | 2.6% |
| Utah | 80.9% | 75.8% | 81.0% | 82.2% | 80.6% | 81.0% | 0.0% | 1.6% | -1.5% |
| Vermont | 88.1% | 93.4% | 92.7% | 99.7% | 100.0% | 100.7% | 5.2% | 7.6% | 1.0% |
| Virginia | 92.8% | 106.6% | 104.5% | 111.1% | 110.9% | 110.3% | 12.6% | 6.3% | -0.7% |
| Washington | 106.5% | 100.0% | 107.7% | 107.4% | 105.6% | 106.4% | 1.2% | -0.3% | -1.0% |
| West Virginia | 72.8% | 72.8% | 74.3% | 80.2% | 80.4% | 80.8% | 2.1% | 7.9% | 0.8% |
| Wisconsin | 97.7% | 93.4% | 97.6% | 95.4% | 95.2% | 94.9% | -0.1% | -2.3% | -0.5% |
| Wyoming | 93.5% | 89.0% | 96.0% | 110.8% | 115.3% | 114.0% | 2.6% | 15.5% | 2.8% |
| New England | 108.8% | 118.7% | 118.5% | 122.5% | 123.4% | 122.8% | 8.9% | 3.4% | 0.3% |
| Mideast | 112.3% | 115.8% | 112.7% | 117.5% | 118.1% | 117.7% | 0.4% | 4.3% | 0.1% |
| Great Lakes | 105.2% | 98.5% | 99.5% | 93.7% | 93.9% | 94.3% | -5.4% | -5.8% | 0.6% |
| Plains | 93.6% | 93.0% | 96.1% | 98.5% | 99.9% | 100.1% | 2.6% | 2.5% | 1.6% |
| Southeast | 80.2% | 88.9% | 89.9% | 90.6% | 90.2% | 89.9% | 12.1% | 0.7% | -0.7% |
| Southwest | 86.7% | 86.6% | 89.7% | 92.1% | 93.1% | 93.6% | 3.5% | 2.7% | 1.6% |
| Rocky Mountain | 89.7% | 88.5% | 94.7% | 94.9% | 94.4% | 94.4% | 5.6% | 0.2% | -0.5% |
| Far West | 115.0% | 108.3% | 106.7% | 104.6% | 103.2% | 103.5% | -7.2% | -2.0% | -1.0% |

Source: Bureau of Economic Analysis, March 2013.

V. Current and Future FMAPs

Fiscal years 2009-2014. The current decade has seen a continuation of the FMAP compression described above, and a number of unique events. Only five states had FY 2011 FMAPs above 71.00, declining to 2-3 in FY 2012-2014. (Table 6) The average FMAP also continued to decline, reaching 59.77 for FY 2011 and 59.05 for FY 2014. And the highest FMAP—still Mississippi’s—declined to 73.05 for FY 2014—\$2.71 for each state dollar, 55% of the FY 1965 level.

The Great Recession is estimated to have ended in June 2009, but the lag in FMAP calculations means that FY 2011 FMAPs were the first substantially affected by those income data and FY 2012 FMAPs were the first to fully reflect the downturn. There have been discussions to change the formula to use more timely data, but these efforts have not borne fruit.⁷

The recession data has resulted again in significant shifts. Between FY 2009-2012, 26 of the 36 states whose FMAPs changed (*i.e.*, excluding those that remained at 50.00) experienced the substantial change of one percentage point or more. The 10 substantial gainers included Nevada (+6.20), Michigan (+5.87), Delaware (+4.17), Indiana (+2.70), Tennessee (+2.08) and Ohio (+2.01). The largest of the 16 substantial losers were North Dakota (-7.75), Hawaii (-4.63), South Dakota (-3.42), Kansas (-3.17), Nebraska (-2.90), Arkansas (-2.10), Oklahoma (-2.02) and Iowa (-1.91).

The FY 2013 FMAPs, published in November 2011, are also the first to incorporate population data from the 2010 decennial population census, using per capita income from 2009-2011. Between FY 2012-2014, two states had increases over 2.00, led by Nevada again (+6.90), including the impact of new population data) and Florida (+2.75). Six states had losses of more than 2.00—Louisiana (-7.67, including the phase-out of special Katrina-based increases), South Dakota again (-5.59), North Dakota again (-5.40), Iowa again (-2.78), Vermont (-2.47) and Rhode Island (-2.01). While many more states lost FMAP than increased, the increases in large states such as Florida and Michigan approximately offset these losses, and the net transfers among the two levels of government are minimal.

Fiscal year 2015 and beyond. FY 2015 FMAPs are expected to be published in November 2013 based on per capita personal income data published by BEA two months earlier. One method pioneered by Federal Funds Information for States (FFIS) is to use provisional BEA data published in March—knowing they will change by September—to make judgments as to potential FMAP levels. These projections are now regularly published by FFIS, this author and others. For most states, this calculation provides a rough measure of the final FMAP levels to be published in the fall.

The projections calculated using this procedure are displayed in Table 6. In addition, states with the most substantial personal income changes in 2011 and 2012 are footnoted to indicate the possible direction of their FMAPs in FY 2016. One intriguing perspective is the possibility of large, generally wealthier states such as California and Illinois entering a period of FMAPs in excess of 50.00. If they do, this has real implications for federal budget costs—a 1.00 percentage point increase for both states would cost the federal government almost \$700 million annually.

Unfortunately, an additional level of uncertainty has been added for FY 2016—the Bureau of Economic Analysis is rebenchmarking the National Accounts to align the U.S. more closely with new international standards. The changes are expected to add about 3% to the measured U.S. gross domestic product (GDP). The major adjustments appear to be the following:⁸

⁷ See Miller, Vic and Schneider, Andy; *The Medicaid Matching Formula, Policy Considerations and Options for Modification*; AARP Public Policy Institute; 2004.

⁸ For more detail on the rebenchmarking see Miller, Vic; *Memorandum to States and State Organizations: Benchmarking of National Income and Product Accounts will affect FY 2015 FMAPs*; May 2013.

**Table 6. Possible Changes in FMAPs for FY 2015 and Beyond
(federal fiscal years; dollars in millions)**

| | 2009 FMAP | 2011 FMAP | 2012 FMAP | 2013 FMAP | 2014 FMAP | 2015 (est.) FMAP | Percentage Point Change | | | Possible Financial Impact | |
|----------------------|--------------|--------------|--------------|--------------|--------------|------------------------|-------------------------|--------------|--------------|------------------------------|---------------|
| | | | | | | | 2009-2012 | 2012-2014 | 2014-2015 | 2009-14 | 2014-15 |
| | | | | | | | | | | | |
| Alabama 1/ | 67.98 | 68.54 | 68.62 | 68.53 | 68.12 | 68.24 | 0.64 | -0.50 | 0.12 | \$8 | \$7 |
| Alaska | 50.53 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | -0.53 | 0.00 | 0.00 | -8 | 0 |
| Arizona | 65.77 | 65.85 | 67.30 | 65.68 | 67.23 | 67.87 | 1.53 | -0.07 | 0.64 | 126 | 55 |
| Arkansas | 72.81 | 71.37 | 70.71 | 70.17 | 70.10 | 70.26 | -2.10 | -0.61 | 0.16 | -124 | 7 |
| California | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.18 | 0.00 | 0.00 | 0.18 | 0 | 95 |
| Colorado | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Connecticut | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Delaware 1/ | 50.00 | 53.15 | 54.17 | 55.67 | 55.31 | 55.89 | 4.17 | 1.14 | 0.58 | 81 | 9 |
| Dist. Of Col. | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Florida 1/ | 55.40 | 55.45 | 56.04 | 58.08 | 58.79 | 59.05 | 0.64 | 2.75 | 0.26 | 701 | 54 |
| Georgia | 64.49 | 65.33 | 66.16 | 65.56 | 65.93 | 66.28 | 1.67 | -0.23 | 0.35 | 123 | 30 |
| Hawaii | 55.11 | 51.79 | 50.48 | 51.86 | 51.85 | 52.16 | -4.63 | 1.37 | 0.31 | -53 | 5 |
| Idaho | 69.77 | 68.85 | 70.23 | 71.00 | 71.64 | 71.81 | 0.46 | 1.41 | 0.17 | 34 | 3 |
| Illinois | 50.32 | 50.20 | 50.00 | 50.00 | 50.00 | 50.15 | -0.32 | 0.00 | 0.15 | -44 | 21 |
| Indiana 2/ | 64.26 | 66.52 | 66.96 | 67.16 | 66.92 | 66.75 | 2.70 | -0.04 | -0.17 | 211 | -14 |
| Iowa 2/ | 62.62 | 62.63 | 60.71 | 59.59 | 57.93 | 57.07 | -1.91 | -2.78 | -0.86 | -181 | -33 |
| Kansas | 60.08 | 59.05 | 56.91 | 56.51 | 56.91 | 57.00 | -3.17 | 0.00 | 0.09 | -88 | 2 |
| Kentucky | 70.13 | 71.49 | 71.18 | 70.55 | 69.83 | 69.85 | 1.05 | -1.35 | 0.02 | -19 | 1 |
| Louisiana 1/ | 71.31 | 68.04 | 69.78 | 65.51 | 62.11 | 61.27 | -1.53 | -7.67 | -0.84 | -663 | -61 |
| Maine | 64.41 | 63.80 | 63.27 | 62.57 | 61.55 | 61.72 | -1.14 | -1.72 | 0.17 | -68 | 4 |
| Maryland | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Massachusetts | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Michigan 2/ | 60.27 | 65.79 | 66.14 | 66.39 | 66.32 | 65.83 | 5.87 | 0.18 | -0.49 | 809 | -65 |
| Minnesota | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Mississippi | 75.84 | 74.73 | 74.18 | 73.43 | 73.05 | 73.10 | -1.66 | -1.13 | 0.05 | -123 | 2 |
| Missouri | 63.19 | 63.29 | 63.45 | 61.37 | 62.03 | 62.38 | 0.26 | -1.42 | 0.35 | -108 | 33 |
| Montana 2/ | 68.04 | 66.81 | 66.11 | 66.00 | 66.33 | 66.02 | -1.93 | 0.22 | -0.31 | -18 | -3 |
| Nebraska | 59.54 | 58.44 | 56.64 | 55.76 | 54.74 | 54.28 | -2.90 | -1.90 | -0.46 | -91 | -9 |
| Nevada 1/ | 50.00 | 51.61 | 56.20 | 59.74 | 63.10 | 64.55 | 6.20 | 6.90 | 1.45 | 236 | 26 |
| New Hampshire | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| New Jersey | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| New Mexico | 70.88 | 69.78 | 69.36 | 69.07 | 69.20 | 69.48 | -1.52 | -0.16 | 0.28 | -67 | 11 |
| New York | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| North Carolina | 64.60 | 64.71 | 65.28 | 65.51 | 65.78 | 66.09 | 0.68 | 0.50 | 0.31 | 157 | 41 |
| North Dakota | 63.15 | 60.35 | 55.40 | 52.27 | 50.00 | 50.00 | -7.75 | -5.40 | 0.00 | -107 | 0 |
| Ohio 2/ | 62.14 | 63.69 | 64.15 | 63.58 | 63.02 | 62.62 | 2.01 | -1.13 | -0.40 | 169 | -77 |
| Oklahoma 2/ | 65.90 | 64.94 | 63.88 | 64.00 | 64.02 | 63.17 | -2.02 | 0.14 | -0.85 | -96 | -43 |
| Oregon 2/ | 62.45 | 62.85 | 62.91 | 62.44 | 63.14 | 63.17 | 0.46 | 0.23 | 0.03 | 43 | 2 |
| Pennsylvania | 54.52 | 55.64 | 55.07 | 54.28 | 53.52 | 53.31 | 0.55 | -1.55 | -0.21 | -219 | -46 |
| Rhode Island | 52.59 | 52.97 | 52.12 | 51.26 | 50.11 | 50.00 | -0.47 | -2.01 | -0.11 | -53 | -2 |
| South Carolina | 70.07 | 70.04 | 70.24 | 70.43 | 70.57 | 70.84 | 0.17 | 0.33 | 0.27 | 24 | 13 |
| South Dakota 1/ | 62.55 | 61.25 | 59.13 | 56.19 | 53.54 | 52.51 | -3.42 | -5.59 | -1.03 | -77 | -9 |
| Tennessee | 64.28 | 65.85 | 66.36 | 66.13 | 65.29 | 65.03 | 2.08 | -1.07 | -0.26 | 110 | -28 |
| Texas 2/ | 59.44 | 60.56 | 58.22 | 59.30 | 58.69 | 58.00 | -1.22 | 0.47 | -0.69 | -257 | -236 |
| Utah | 70.71 | 71.13 | 70.99 | 69.61 | 70.34 | 70.62 | 0.28 | -0.65 | 0.28 | -7 | 6 |
| Vermont 2/ | 59.45 | 58.71 | 57.58 | 56.04 | 55.11 | 54.81 | -1.87 | -2.47 | -0.30 | -65 | -5 |
| Virginia | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Washington | 50.94 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | -0.94 | 0.00 | 0.00 | -84 | 0 |
| West Virginia 2/ | 73.73 | 73.24 | 72.62 | 72.04 | 71.09 | 70.94 | -1.11 | -1.53 | -0.15 | -80 | -5 |
| Wisconsin | 59.38 | 60.16 | 60.53 | 59.74 | 59.06 | 59.19 | 1.15 | -1.47 | 0.13 | -24 | 10 |
| Wyoming | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| Totals | | | | | | | | | | \$108 | -\$198 |
| Number >71 | 4 | 5 | 3 | 2 | 3 | 2 | | | | | |
| Average FMAP | 59.77 | 59.77 | 59.58 | 59.26 | 59.05 | 59.03 | -0.73 | -0.54 | -0.02 | | |
| Highest FMAP | 75.84 | 74.73 | 74.18 | 73.43 | 73.05 | 73.10 | -1.68 | -1.13 | -0.33 | | |

1/ Current data indicate an FMAP increase for FY 2016

2/ Current data indicate an FMAP decline for FY 2016.

Notes: All FMAPs are statutory FMAPs, with no adjustments for stimulus program increases. Average FMAP calculation excludes the District of Columbia. Adjustments to the basic FMAP formula include (1) the District of Columbia's FMAP is statutorily fixed at 70.00 and (2) Louisiana's FY 2011-2014 FMAPs have been increased by the Affordable Care Act and subsequent legislation. FY 2015 estimates assume that currently available personal income data for 2010-2012 remain constant. FY 2016 projections are based on available data for 2011 and 2012.

1. Research and development (R&D). The most significant change will be to count R&D as a capital investment rather than a cost of producing goods. This production of intangible R&D assets is expected to add roughly 1% to GDP, with two-thirds from the private sector and one-third from the public sector. Corporate profits will look larger, as R&D spending will no longer be a cost of producing tangible goods but rather produce goods of its own.
2. Investment in artistic originals. The new measurement will count as production the investment value of artistic originals, such as movies, TV shows and books. Such originals continue to generate income substantially beyond the first year of production, and this change will attempt to capture in the year of production the estimated capital value of future income.
3. Pensions. Payments by employers into pension funds, both public and private, have been counted as income when the cash deposits are made into the funds. The change being made will count accrued benefits as income even if cash payments to support future benefits are not made.

Some past rebenchmarkings have had substantial impacts on state FMAPs; others have had less. It will not be possible to know the net impact of the above shifts until the state data are published in September.

VI. **Concluding Observations**

Medicaid has grown substantially since its origins in the 1960s. It is now more than a health finance program—it is the dominant fiscal interaction between the federal government and the states. It will continue to grow. Though the overwhelming share of increased Medicaid costs from health reform will be borne by the federal government, growth in the base program whose finances are governed by the FMAP will continue.

The growth of the program has created fiscal stress in most states. The compression of higher FMAPs over time has intensified this stress especially in the less wealthy states, in many of which programs are growing the fastest. And the lag times between the data used in the FMAPs and the fiscal periods to which they are applied often intensify the stress. A recent example is farm states, whose FMAPs are declining substantially just as they have now become among the slowest growing states in the country.

Per capita personal income, used for calculating the FMAPs, is universally recognized to be a bad measure of state tax capacity—yet it continues to be used. Uncertainties in both the income and population data used by BEA to make the income estimates create additional inequities and discontinuities. And the lack of basic law to react intelligently to financing the program during economic downturns results in formulas and structures that are far from ideal.

The ongoing compression of FMAPs in poorer states as the Affordable Care Act is implemented is certain to cause fiscal stress in those states regardless of the level of national economic growth. An economic downturn will only add to existing stress. In addition, the possibility of some large-state FMAPs moving above the 50.00 minimum has implications for the overall federal cost of the program in future years. It may be useful for Congress to investigate and rethink the construction of the FMAP—unchanged since the beginning of the program—to promote stability, better interstate equity and better program performance.

