
PERFORMANCE AND MANAGEMENT

5. SOCIAL INDICATORS

The social indicators presented in this chapter illustrate in broad terms how the Nation is faring in selected areas in which the Federal Government has significant responsibilities. Indicators are drawn from six selected domains: economic, demographic and civic, socioeconomic, health, security and safety, and environment and energy. The indicators shown in the tables in this chapter were chosen in consultation with statistical and data experts from across the Federal Government. These indicators are only a subset of the vast array of available data on conditions in the United States. In choosing indicators for these tables, priority was given to measures that are broadly relevant to Americans and consistently available over an extended period. Such indicators provide a current snapshot while also making it easier to draw comparisons and establish trends.

The measures in these tables are influenced to varying degrees by many Government policies and programs, as well as by external factors beyond the Government's control. They do not measure the outcomes of Government policies because they do not show the direct results of Government activities. However, they do provide a quantitative picture of the progress (or lack of progress) toward some of the ultimate ends that Government policy is intended to promote, and the baseline on which future policies are set. Subsequent chapters in the Performance and Management section of this volume discuss approaches toward assessing the impacts of Government programs and improving their quality.

The President has made it clear that policy decisions should be based upon evidence—evidence that identifies the Nation's greatest needs and challenges and evidence about which strategies are working to overcome those challenges. The social indicators in this chapter provide useful information both for prioritizing budgetary and policymaking resources and for evaluating how well existing approaches are working.

Economic: The 2008-2009 economic downturn produced the worst labor market in more than a generation. The employment-population ratio dropped sharply from its pre-recession level, and real GDP per person also declined. The economy is steadily recovering, with the unemployment rate declining to 6.6 percent in January 2014 from a high of 10 percent in October 2009, and real GDP per person roughly regaining its level prior to the recession. However, the employment-population ratio remains low by historical standards, while the continuing effects of the recession are reflected in high rates of marginally attached and underemployed workers.

Over the entire period from 1960 to 2013, the primary pattern has been one of economic growth and rising living standards. Real GDP per person has approximately tripled as technological progress and the accumulation of

human and physical capital have increased the Nation's productive capacity. The stock of physical capital including consumer durable goods like cars and appliances amounted to over \$53 trillion in 2012, more than four times the size of the capital stock in 1960, after accounting for inflation.

But national saving, a key determinant of future prosperity because it supports capital accumulation, fell from 5.7 percent in 2000 to 2.7 percent in 2005 as Federal budget surpluses turned to deficits, and fell even further in the recession that followed, turning negative in 2010. Meanwhile, the labor force participation rate, also critical for growth, has declined for more than a decade, reflecting the beginning of a trend in which the baby boom generation retires.

The United States continues to be a leader in innovation. Patents by U.S. inventors have increased three-fold since 1960. National Research and Development (R&D) spending has hovered between 2.3 percent and 2.9 percent of GDP for the past 50 years, trending upward in recent years.

Demographic and Civic: The U.S. population has steadily increased from 1970, where it numbered 204 million, to 316 million in 2013. The foreign born population has increased rapidly since 1970, quadrupling from about 10 million in 1970 to over 40 million in 2012. The U.S. population is getting older, due in part to the aging of the baby boomers and to improvements in medical technology. From 1970 to 2012, the percent of the population over age 65 increased from 9.8 to 13.7, and the percent over age 85 increased from 0.7 to 1.9.

The composition of American households and families has evolved considerably over time. The percent of Americans who have ever married continues to decline as it has over the last five decades. Average family sizes have also fallen over this period, a pattern that is typical among developed countries. After increasing for over three decades, births to unmarried women age 15-17 and the fraction of single parent households reached a turning point in 1995. From 1995 to 2011, the number of births per 1,000 unmarried women age 15-17 fell from 30.1 to 14.9, a level below that of 1970. Meanwhile, the fraction of single parent households stopped increasing in 1995, stabilizing at slightly over 9 percent.

Charitable giving among Americans, measured by the average charitable contribution per itemized tax return, has generally increased over the past 50 years.¹ However, the effects of the 2008-2009 recession are evident in

¹ This measure includes charitable giving only among those who claim itemized deductions. It is therefore influenced by changes in tax laws and in the characteristics of those who itemize.

the sharp drop in charitable giving from 2005 to 2010. More Americans are volunteering. In 1990, 20 percent of Americans volunteered at least once; in 2012, 27 percent volunteered. The political participation of Americans, measured by the voting rate in Presidential elections, declined from about 63 percent in 1964 to 57 percent in 1972. It fell further in the 1996 and 2000 elections, reaching a low of only 50 percent in 1996. However, the Presidential election voting rate rebounded in the past three elections, averaging close to 57 percent. The cultural engagement of Americans has changed over time. The percentage of adults attending visual or performing arts activities, including movie going, decreased from 72 percent in 1980 to 64 percent in 2012. The percentage of Americans engaging in leisure reading decreased from 66 percent in 1990 to 58 percent in 2012. However, new modes of cultural engagement have emerged, such as consumption of art via the internet and handheld devices.

Socioeconomic:

Education is a critical component of the Nation's economic growth and competitiveness, while also benefiting society in areas such as health, crime, and civic engagement. Between 1960 and 1980, the percentage of 25-34 year olds who have graduated from high school increased from 58 percent to 84 percent, a gain of 13 percentage points per decade. Progress has slowed since then with only a four percentage point gain over the past 30 years. But the percentage of 25-34 year olds who have graduated from college continues to rise, from only 11 percent in 1960 to over 32 percent in 2012. Measures of reading and mathematics achievement show little if any improvement for American 17-year olds over the period from 1970 to 2012. However, these measures have improved among 9- and 13-year olds, especially for mathematics and especially since the 2004 assessment. While the percentage of the population with a graduate degree has risen over time, the percentage of graduate degrees in science and engineering fell by half in the period between 1960 to 1980, from 22 percent to 11 percent, and was 13 percent in 2012.

While national prosperity has grown considerably over the past 50 years, these gains have not been shared equally. Real disposable income per capita roughly tripled since 1960, and more than doubled since 1970. But real income for the median household increased only 21 percent from 1970 to 2000, and has declined by 9 percent since 2000. The income share of the top 1 percent of taxpayers, approximately 9 percent in 1980, rose to 21 percent in 2005 before dipping slightly in 2011. In contrast, the income share of the bottom 50 percent of taxpayers declined from 18 percent in 1980 to 12 percent in 2011. From 2000 to 2012, the poverty rate, the percentage of food-insecure households, and the percentage of Americans receiving benefits from the Supplemental Nutrition Assistance Program (formerly known as the Food Stamp Program), increased as Americans struggled with the economic downturn.

After slowly increasing from 1960 to 2005, homeownership rates dropped somewhat following the 2008 hous-

ing crisis, but remain close to the historical average. The share of families with children and severe housing cost burdens, however, more than doubled from 8 percent in 1980 to 18 percent in 2011.

Health:

America has by far the most expensive health care system in the world, yet much higher rates of uninsured than other countries with comparable wealth. National health expenditures as a share of GDP have increased from about 5 percent in 1960 to over 17 percent in 2012. This increase in health care spending has coincided with improvements in medical technology that have improved health, but the level of per capita spending in the United States is far greater than that in other Organization for Economic Cooperation and Development (OECD) countries which have experienced comparable health improvements. In recent years, growth in health care spending has slowed slightly, reflecting some combination of structural changes and economic conditions. Despite high health care costs, 21 percent of adults and 9 percent of children were without health insurance in 2012. In 2010 the President signed the Affordable Care Act into law. The Affordable Care Act is expected to reduce the number of uninsured by about 25 million by 2016.²

Some key indicators of national health have improved since 1960. Life expectancy at birth increased by nine years over the last five decades, from 69.7 in 1960 to 78.7 in 2011. Infant mortality fell from 26 to approximately 6 per 1,000 live births, with a precipitous decline occurring in the 1970s.

Improvement in health behaviors among Americans has been mixed. While the percent of adults who smoke cigarettes in 2012 was less than half of that in 1970, rates of obesity have soared. In 1980, 15 percent of adults and 6 percent of children were obese; in 2011, 35 percent of adults and 17 percent of children were obese. Adult obesity continued to rise even as the share of adults engaging in regular physical activity increased from 15 percent in 2000 to 21 percent in 2012.

Security and Safety:

The last three decades have witnessed a remarkable decline in crime. From 1980 to 2012, the property crime rate dropped by roughly 70 percent while the murder rate was cut in half. Road transportation has also become safer. Safety belt use increased by 15 percentage points from 2000 to 2012, and the annual number of highway fatalities fell by 38 percent from 1970 to 2011 despite the increase in the population.

The number of military personnel on active duty has declined for several years, reflecting the withdrawal of U.S. troops from Iraq and Afghanistan. In 2013 the active duty count fell to the same 1.38 million level of 2000, prior to the wars in Iraq and Afghanistan. The highest count of active duty military personnel in the table is 3.07 million in 1970, reached during the Vietnam War. The number of

² Congressional Budget Office. 2013. "Effects on Health Insurance and the Federal Budget for the Insurance Coverage Provisions in the Affordable Care Act - May 2013 Baseline." Washington, DC: Congressional Budget Office.

veterans has declined from 28 million in 1980 to 22 million in 2013.

Environment and Energy:

The Nation's future well-being and prosperity depend on stewardship of our natural resources, the environment, and on our ability to bring about a clean energy economy. Substantial progress has been made on air quality in the United States, with the concentration of particulate matter falling 33 percent from 2000 to 2012. Moving forward, the greatest environmental challenge is reducing greenhouse gas emissions. The President announced a target reduction in the range of 17 percent of 2005 emissions by 2020. From 2005 to 2011, gross greenhouse gas emissions fell by 6.9 percent. Gross greenhouse gas emissions per capita and per unit of GDP fell by 11.7 and 11.6 percent, respectively. However, annual mean atmospheric carbon

dioxide(CO₂) concentration, a global measure of climate change, continues to rise. In 1960 the level of CO₂ concentration was 13 percent above its pre-industrial level of 280 ppm; in 2013 it was 42 percent above the pre-industrial level.

While technological advances and a shift in production patterns mean that Americans now use less than half as much energy per real dollar of GDP as they did 50 years ago, rising income levels mean that the level of per capita consumption has remained relatively constant over the last 40 years. The percent of U.S. electricity production that is from renewable sources has grown since 2005, but remains only 12.2 percent.

Table 5-1. SOCIAL INDICATORS

Calendar Years		1960	1970	1980	1990	1995	2000	2005	2010	2011	2012	2013
Economic												
General Economic Conditions												
1	Real GDP per person (chained 2009 dollars) ¹	17,182	23,003	28,295	35,756	38,125	44,495	48,094	47,710	48,239	49,226	49,599
2	Real GDP per person change, 5-year annual average	0.8	2.4	2.6	2.4	1.3	3.1	1.6	-0.1	-0.3	0.0	N/A
3	Consumer Price Index ²	12.7	16.7	35.4	56.1	65.4	73.9	83.8	93.6	96.6	98.6	100.0
4	Private goods producing (%)	N/A	N/A	N/A	39.7	37.2	33.7	32.1	29.5	30.8	N/A	N/A
5	Private services producing (%)	N/A	N/A	N/A	60.3	62.8	66.3	67.9	70.5	69.2	N/A	N/A
Jobs and Unemployment												
6	Labor force participation rate (%)	59.4	60.4	63.8	66.5	66.6	67.1	66.0	64.7	64.1	63.7	63.2
7	Employment (millions)	65.8	78.7	99.3	118.8	124.9	136.9	141.7	139.1	139.9	142.5	143.9
8	Employment-population ratio (%)	56.1	57.4	59.2	62.8	62.9	64.4	62.7	58.5	58.4	58.6	58.6
9	Payroll employment change - December to December, SA (millions) ³	-0.4	-0.5	0.3	0.3	2.2	1.9	2.5	1.1	2.1	2.2	2.3
10	Payroll employment change - 5-year annual average, NSA (millions) ⁴	0.7	2.0	2.7	2.4	1.6	2.9	0.4	-0.7	-0.9	-0.8	-0.2
11	Civilian unemployment rate (%)	5.5	4.9	7.1	5.6	5.6	4.0	5.1	9.6	8.9	8.1	7.4
12	Unemployment plus marginally attached and underemployed (%)	N/A	N/A	N/A	N/A	10.1	7.0	8.9	16.7	15.9	14.7	13.8
13	Receiving Social Security disabled-worker benefits (% of population) ⁵	0.9	2.0	2.8	2.5	3.3	3.7	4.5	5.5	5.7	5.9	5.9
Infrastructure, Innovation, and Capital Investment												
14	Nonfarm business output per hour (average 5 year % change) ⁶	1.8	2.1	1.2	1.6	1.6	2.8	3.2	1.9	1.9	1.8	N/A
15	Corn for grain production (billion bushels)	3,907	4,152	6,639	7,934	7,400	9,915	11,112	12,447	12,358	10,780	14,000
16	Real net stock of fixed assets and consumer durable goods (billions of 2012\$) ⁷	13,242	19,784	29,219	33,148	35,420	41,197	51,026	53,117	53,172	53,572	N/A
17	Population served by secondary wastewater treatment or better (%) ⁸	N/A	41.6	56.4	63.7	61.1	71.4	74.3	72.0	N/A	N/A	N/A
18	Electricity net generation (kWh per capita)	4,202	7,486	10,076	12,170	12,594	13,475	13,723	13,336	13,159	12,896	N/A
19	Patents issued to U.S. residents (per 1,000 population)	42.3	50.6	41.7	56.1	68.2	103.6	88.5	132.5	131.9	N/A	N/A
20	Net national saving rate (% of GDP) ¹	10.8	8.5	7.2	3.9	4.0	5.7	2.7	-0.8	0.1	0.8	1.8
21	R&D spending (% of GDP)	2.60	2.53	2.27	2.62	2.48	2.70	2.57	2.81	2.84	2.89	N/A
Demographic and Civic												
Population												
22	Total population (millions) ⁹	N/A	204.0	227.2	249.6	266.3	282.2	295.5	309.3	311.6	313.9	316.1
23	Foreign born population (millions) ¹⁰	9.7	9.6	14.1	19.8	N/A	31.1	37.5	40.0	40.4	40.8	N/A
24	17 years and younger (%) ⁹	N/A	N/A	28.0	25.7	26.1	25.7	24.9	24.0	23.7	23.5	23.3
25	65 years and older (%) ⁹	N/A	9.8	11.3	12.5	12.7	12.4	12.4	13.1	13.3	13.7	N/A
26	85 years and older (%) ⁹	N/A	0.7	1.0	1.2	1.4	1.5	1.6	1.8	1.8	1.9	N/A
Household Composition												
27	Ever married (% of age 15 and older) ¹¹	78.0	75.1	74.1	73.8	72.9	71.9	70.9	69.3	69.2	68.8	68.6
28	Average family size ¹²	3.7	3.6	3.3	3.2	3.2	3.2	3.1	3.2	3.1	3.1	3.1
29	Births to unmarried women age 15-17 (per 1,000 unmarried women age 15-17)	N/A	17.1	20.6	29.6	30.1	23.9	19.4	16.8	14.9	N/A	N/A
30	Single parent households (%)	4.4	5.2	7.5	8.3	9.1	8.9	8.9	9.1	9.1	9.3	9.1

Table 5-1. SOCIAL INDICATORS—Continued

Calendar Years		1960	1970	1980	1990	1995	2000	2005	2010	2011	2012	2013
Civic and Cultural Engagement												
31	Average charitable contribution per itemized tax return (2011 dollars) ¹³	2,128	2,111	2,436	3,062	3,255	4,320	4,422	3,765	3,769	N/A	N/A
32	Voting for President (% of voting age population) ¹⁴	63.4	57.0	55.1	56.4	49.8	52.1	56.7	58.3	N/A	54.9	N/A
33	Persons volunteering (% age 16 and older) ¹⁵	N/A	N/A	N/A	20.4	N/A	N/A	28.8	26.3	26.8	26.5	N/A
34	Attendance at visual or performing arts activity, including movie going (% age 18 and older) ¹⁶	N/A	N/A	71.7	72.1	N/A	70.1	N/A	N/A	63.9	63.5	N/A
35	Leisure reading (books not required for work or school) ¹⁶	N/A	N/A	N/A	66.0	N/A	58.9	N/A	N/A	58.9	58.1	N/A
Socioeconomic												
Education												
36	High school graduates (% of age 25–34) ¹⁷	58.1	71.5	84.2	84.1	N/A	83.9	86.4	87.2	87.9	88.4	N/A
37	College graduates (% of age 25–34) ¹⁸	11.0	15.5	23.3	22.7	N/A	27.5	29.9	31.1	31.5	32.2	N/A
38	Reading achievement score (age 17) ¹⁹	N/A	285	285	290	288	288	283	286	N/A	287	N/A
39	Math achievement score (age 17) ²⁰	N/A	304	298	305	306	308	305	306	N/A	306	N/A
40	Science and engineering graduate degrees (% of total graduate degrees)	22.0	17.2	11.2	14.7	14.2	12.6	12.7	12.1	12.4	12.7	N/A
41	Receiving special education services (% of age 3–21 public school students)	N/A	N/A	10.1	11.4	12.4	13.3	13.7	13.0	12.9	N/A	N/A
Income, Savings, and Inequality												
42	Real median income: all households (2012 dollars)	N/A	46,089	46,985	50,994	50,978	55,987	54,486	51,892	51,100	51,017	N/A
43	Real disposable income per capita (chained 2009 dollars) ¹	11,877	16,643	20,159	25,556	27,180	31,525	34,428	35,706	36,293	36,756	36,661
44	Adjusted gross income share of top 1% of all taxpayers	N/A	N/A	8.5	14.0	14.6	20.8	21.2	18.9	18.7	N/A	N/A
45	Adjusted gross income share of lower 50% of all taxpayers	N/A	N/A	17.7	15.0	14.5	13.0	12.9	11.7	11.6	N/A	N/A
46	Personal saving rate (% of disposable personal income) ¹	10.0	12.6	10.6	7.8	6.4	4.0	2.6	5.6	5.7	5.6	4.4
47	Poverty rate (%) ²¹	22.2	12.6	13.0	13.5	13.8	11.3	12.6	15.1	15.0	15.0	N/A
48	Food-insecure households (% of all households) ²²	N/A	N/A	N/A	N/A	11.9	10.5	11.0	14.5	14.9	14.5	N/A
49	Supplemental Nutrition Assistance Program (formerly Food Stamps) ²³	N/A	3.3	9.5	8.2	9.9	6.1	8.9	13.5	14.6	15.0	15.1
50	Median wealth of households, age 55–64 (in thousands of 2011 dollars) ²⁴	75	N/A	148	170	169	234	299	185	N/A	N/A	N/A
Housing												
51	Homeownership among families with children (%)	61.9	62.9	64.4	64.2	65	66.2	66.9	65.1	64.6	N/A	N/A
52	Families with children and severe housing cost burden (%) ²⁵	N/A	N/A	8	10	12	11	14.5	17.9	18.3	N/A	N/A
53	Families with children and inadequate housing (%) ²⁶	N/A	N/A	9	9	7	7	5.4	5.3	5.5	N/A	N/A
Health												
Health Status												
54	Life expectancy at birth (years) ²⁷	69.7	70.8	73.7	75.4	75.8	76.8	77.6	78.7	78.7	N/A	N/A
55	Infant mortality (per 1,000 live births) ²⁷	26.0	20.0	12.6	9.2	7.6	6.9	6.9	6.1	6.1	N/A	N/A
56	Low birthweight (<2,500 gms) (% of babies) ²⁸	7.7	7.9	6.8	7.0	7.3	7.6	8.2	8.1	8.1	8.0	N/A
57	Activity limitation (% of age 5–17) ²⁹	N/A	N/A	N/A	N/A	N/A	7.0	8.0	9.2	9.3	9.4	N/A
58	Activity limitation (% of age 18 and over) ³⁰	N/A	N/A	N/A	N/A	N/A	27.9	29.1	29.9	29.8	28.4	N/A
59	Difficulties with activities of daily living (% of age 65 and over) ³¹	N/A	N/A	N/A	N/A	N/A	6.3	6.2	6.8	7.3	6.5	N/A
Health Behavior												
60	Engaged in regular physical activity (% of age 18 and older) ³²	N/A	N/A	N/A	N/A	N/A	15.0	16.6	20.7	21.0	20.8	N/A
61	Obesity (% of age 20–74 with BMI 30 or greater) ³³	13.3	14.6	15.1	23.3	N/A	31.1	34.1	N/A	35.3	N/A	N/A
62	Obesity (% of age 2–19) ³⁴	N/A	5.1	5.5	10.0	N/A	13.9	15.4	16.9	16.9	N/A	N/A
63	Cigarette smokers (% of age 18 and older)	N/A	39.2	32.7	25.3	24.6	23.1	20.8	19.3	19.0	18.2	N/A
64	Excessive alcohol use (% of age 18 and older) ³⁵	N/A	N/A	N/A	N/A	N/A	8.7	8.9	10.1	9.4	9.6	N/A
Access to Health Care												
65	Total national health expenditures (% of GDP)	5.0	7.0	8.9	12.1	13.4	13.4	15.5	17.4	17.3	17.2	N/A
66	Persons without health insurance (% of age 18–64)	N/A	N/A	N/A	N/A	N/A	16.4	19.0	21.8	21.2	21.0	N/A
67	Persons without health insurance (% of age 17 and younger)	N/A	N/A	N/A	N/A	N/A	10.7	10.3	9.8	9.4	8.9	N/A
68	Children age 19–35 months with recommended vaccinations (%) ³⁶	N/A	N/A	N/A	N/A	55.1	72.8	76.1	56.6	68.5	68.4	N/A
Security and Safety												
Crime												
69	Property crimes (per 100,000 households) ³⁷	N/A	N/A	49,610	34,890	31,547	19,043	15,947	12,541	13,868	15,584	N/A
70	Violent crime victimizations (per 100,000 population age 12 or older) ³⁸	N/A	N/A	4,940	4,410	7,068	3,749	2,842	1,928	2,257	2,612	N/A
71	Murder rate (per 100,000 persons)	5.1	7.9	10.2	9.4	8.2	5.5	5.6	4.8	4.7	4.7	N/A

Table 5-1. SOCIAL INDICATORS—Continued

Calendar Years		1960	1970	1980	1990	1995	2000	2005	2010	2011	2012	2013
National Security												
72	Military personnel on active duty (thousands) ³⁹	2,475	3,065	2,051	2,044	1,518	1,384	1,389	1,431	1,425	1,400	1,382
73	Veterans (thousands)	22,534	26,976	28,640	27,320	26,198	26,551	24,521	23,032	22,676	22,328	21,973
Transportation Safety												
74	Safety belt use (%)	N/A	N/A	N/A	N/A	N/A	71	82	85	84	86	N/A
75	Highway fatalities	36,399	52,627	51,091	44,599	41,817	41,945	43,510	32,999	32,367	N/A	N/A
Environment and Energy												
Air Quality and Greenhouse Gases												
76	Ground level ozone (ppm) based on 230 monitoring sites	N/A	N/A	0.101	0.089	0.090	0.082	0.080	0.073	0.074	0.076	N/A
77	Particulate matter 2.5 (ug/m3) based on 570 monitoring sites	N/A	N/A	N/A	N/A	N/A	13.8	13.1	10.0	9.8	9.3	N/A
78	Annual mean atmospheric CO ₂ concentration (Mauna Loa, Hawaii; ppm) ⁴⁰	316.9	325.7	338.7	354.4	360.8	369.5	379.8	389.9	391.6	393.8	396.5
79	Gross greenhouse gas emissions (teragrams CO ₂ equivalent) ⁴¹	N/A	N/A	N/A	6,183	6,557	7,076	7,195	6,810	6,702	N/A	N/A
80	Net greenhouse gas emissions, including sinks (teragrams CO ₂ equivalent)	N/A	N/A	N/A	5,389	5,759	6,395	6,197	5,922	5,797	N/A	N/A
81	Gross greenhouse gas emissions per capita (metric tons CO ₂ equivalent)	N/A	N/A	N/A	24.4	24.3	24.7	24.0	21.7	21.2	N/A	N/A
82	Gross greenhouse gas emissions per 2005\$ of GDP (kilograms CO ₂ equivalent)	N/A	N/A	N/A	0.770	0.722	0.631	0.570	0.521	0.504	N/A	N/A
Energy												
83	Energy consumption per capita (million Btu)	250	331	344	338	342	350	339	317	312	302	N/A
84	Energy consumption per 2009\$ GDP (thousand Btu per 2009\$)	14.5	14.4	12.1	9.4	9.0	7.9	7.0	6.6	6.5	6.1	N/A
85	Electricity net generation from renewable sources, all sectors (% of total)	19.7	16.4	12.4	11.8	11.5	9.4	8.8	10.4	12.5	12.2	N/A

#NA=Number is not available.

¹ Data for 2013 are averages of the first 3 quarters.

² Adjusted CPI-U, 2013=100. Values for prior years have been revised from the prior version of this publication.

³ Values for 2000, 2010, 2011, and 2012 have been revised from the prior version of this publication.

⁴ Values for 2010 and 2012 have been revised from the prior version of this publication.

⁵ Gross prevalence rate for persons receiving Social Security disabled-worker benefits among the estimated population insured in the event of disability at end of year. Gross rates do not account for changes in the age and gender composition of the insured population over time.

⁶ Values for prior years have been revised from the prior version of this publication.

⁷ Data adjusted by OMB to real 2012 dollars.

⁸ Data correspond to years 1972, 1982, 1992, 1996, 2000, 2004, 2008.

⁹ Data source and values for 2010 to 2012 have been updated relative to the prior version of this publication.

¹⁰ Data source for 1960 to 2000 is the decennial census; data source for 2006, 2010, 2011, and 2012 is the American Community Survey.

¹¹ For 1960, age 14 and older.

¹² Average size of family households. Family households are those in which there is someone present who is related to the householder by birth, marriage, or adoption.

¹³ Charitable giving reported as itemized deductions on Schedule A.

¹⁴ Data correspond to years 1964, 1972, 1980, 1992, 1996, 2000, 2004, 2008, and 2012. The voting statistics in this table are presented as ratios of official voting tallies, as reported by the U.S. Clerk of the House, to population estimates from the "Current Population Survey."

¹⁵ Refers to those who volunteered at least once during a one-year period, from September of the previous year to September of the year specified. For 1990, refers to 1989 estimate from the CPS Supplement on volunteers.

¹⁶ The 1980, 1990, 2000, and 2011 data come from the 1982, 1992, 2002, and 2008 waves of the survey, respectively.

¹⁷ For 1960, includes those who have completed 4 years of high school or beyond. For 1970 and 1980, includes those who have completed 12 years of school or beyond. For 1990 onward, includes those who have completed a high school diploma or the equivalent.

¹⁸ For 1960 to 1980, includes those who have completed 4 or more years of college. From 1990 onward, includes those who have a bachelor's degree or higher.

¹⁹ Data correspond to years 1971, 1980, 1990, 1994, 1999, 2004, 2008, and 2012.

²⁰ Data correspond to years 1973, 1982, 1990, 1994, 1999, 2004, 2008, and 2012.

²¹ The poverty rate does not reflect noncash government transfers.

²² Food-insecure classification is based on reports of three or more conditions that characterize households when they are having difficulty obtaining adequate food, out of a total of 10 such conditions.

²³ 2013 reflects average monthly participation from January through September 2013.

²⁴ Data values shown are 1962, 1983, 1989, 1995, 2001, 2004, and 2010. For 1962, the data source is the SFCC; for subsequent years, the data source is the SCF.

²⁵ Expenditures for housing and utilities exceed 50 percent of reported income. Some data interpolated.

²⁶ Inadequate housing has moderate to severe problems, usually poor plumbing, or heating or upkeep problems. Some data interpolated.

²⁷ Data for 2011 are preliminary.

²⁸ Data for 2012 are preliminary.

²⁹ Total activity limitation includes receipt of special education services; assistance with personal care needs; limitations related to the child's ability to walk; difficulty remembering or periods of confusion; limitations in any activities because of physical, mental, or emotional problems.

³⁰ Activity limitation among adults aged 18 and over is defined as having a basic action difficulty in one or more of the following: movement, emotional, sensory (seeing or hearing), or cognitive.

Table 5-1. SOCIAL INDICATORS—Continued

- ³¹ Activities of daily living include personal care activities: bathing or showering, dressing, getting on or out of bed or a chair, using the toilet, and eating. Persons are considered to have an ADL limitation if any condition(s) causing the respondent to need help with the specific activities was chronic.
- ³² Participation in leisure-time aerobic and muscle-strengthening activities that meet 2008 Federal physical activity guidelines.
- ³³ BMI refers to body mass index.
- ³⁴ Percentage at or above the sex-and age-specific 95th percentile BMI cutoff points from the 2000 CDC growth charts.
- ³⁵ Percent of age 18 and over who had five or more drinks in a day on at least 12 days in the past year.
- ³⁶ Recommended vaccine series changed over time. 1995 and 2000 data correspond with the 4:3:1:3*3:1:4 series; 2005 data correspond with the 4:3:1:3:3:1 series; 2010, 2011 and 2012 data correspond with the 4:3:1:3*3:1:4 series.
- ³⁷ Property crimes, including burglary, motor vehicle theft, and property theft, reported by a sample of households. Includes property crimes both reported and not reported to law enforcement.
- ³⁸ Violent crimes include rape, robbery, aggravated assault, and simple assault. Includes crimes both reported and not reported to law enforcement. Due to methodological changes in the enumeration method for NCVS estimates from 1993 to present, use caution when comparing 1980 and 1990 criminal victimization estimates to future years. Estimates from 1995 and beyond include a small number of victimizations, referred to as series victimizations, using a new counting strategy. High-frequency repeat victimizations, or series victimizations, are six or more similar but separate victimizations that occur with such frequency that the victim is unable to recall each individual event or describe each event in detail. Including series victimizations in national estimates can substantially increase the number and rate of violent victimization; however, trends in violence are generally similar regardless of whether series victimizations are included. See Methods for Counting High-Frequency Repeat Victimizations in the National Crime Victimization Survey, NCJ 237308, BJS web, April 2012 for further discussion of the new counting strategy and supporting research.
- ³⁹ For all years, the actuals reflect Active Component only excluding full-time Reserve Component members and RC mobilized to active duty. End Strength for 2013 is preliminary.
- ⁴⁰ Data for 2013 are preliminary.
- ⁴¹ The gross emissions indicator does not include sinks, which are processes (typically naturally occurring) that remove greenhouse gases from the atmosphere. Gross emissions are therefore more indicative of trends in energy consumption and efficiency than are net emissions.

Table 5-2. SOURCES FOR SOCIAL INDICATORS

Indicator	Source
Economic	
General Economic Conditions	
1 Real GDP per person (chained 2009 dollars)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
2 Real GDP per person change, 5-year annual average	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
3 Consumer Price Index	Bureau of Labor Statistics, BLS Consumer Price Index Program. http://www.bls.gov/cpi
4 Private goods producing (%)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
5 Private services producing (%)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
Jobs and Unemployment	
6 Labor force participation rate (%)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
7 Employment (millions)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
8 Employment-population ratio (%)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
9 Payroll employment change - December to December, SA (millions)	Bureau of Labor Statistics, Current Employment Statistics program. http://www.bls.gov/ces/
10 Payroll employment change - 5-year annual average, NSA (millions)	Bureau of Labor Statistics, Current Employment Statistics program. http://www.bls.gov/ces/
11 Civilian unemployment rate (%)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
12 Unemployment plus marginally attached and underemployed (%)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
13 Receiving Social Security disabled-worker benefits (% of population)	Social Security Administration, Office of Research, Evaluation, and Statistics, Annual Statistical Supplement to the Social Security Bulletin, tables 4.C1 5.A4. http://www.ssa.gov/policy/docs/statcomps/supplement/
Infrastructure, Innovation, and Capital Investment	
14 Nonfarm business output per hour (average 5 year % change)	Bureau of Labor Statistics, Major Sector Productivity Program. http://www.bls.gov/lpc/
15 Corn for grain production (billion bushels)	National Agricultural Statistics Service, Agricultural Estimates Program. http://www.nass.usda.gov
16 Real net stock of fixed assets and consumer durable goods (billions of 2012\$)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
17 Population served by secondary wastewater treatment or better (%)	U.S. Environmental Protection Agency, Clean Watersheds Needs Survey. http://www.epa.gov/cwns
18 Electricity net generation (kWh per capita)	U.S. Energy Information Administration, Monthly Energy Review, December 2013, Table 7.2a http://www.eia.gov/totalenergy/data/monthly/index.cfm ; EIA, Annual Energy Review 2011, Table D1 (1960-2005) http://www.eia.gov/totalenergy/data/annual/index.cfm ; and, U.S. Census Bureau, Population Division, Vintage 2013 Population Estimates (2010-2012) http://www.census.gov/popest/data/national/totals/2013/index.html .
19 Patents issued to U.S. residents (per 1,000 population)	U.S. Patent and Trademark Office, Electronic Information Products Division, Patent Technology Monitoring Team. http://www.uspto.gov/products/catalog/ptmd/patent_statistics.jsp
20 Net national saving rate (% of GDP)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
21 R&D spending (% of GDP)	National Science Foundation, National Patterns of R&D Resources. http://www.nsf.gov/statistics/natpatterns/
Demographic and Civic	

Table 5–2. SOURCES FOR SOCIAL INDICATORS—Continued

	Indicator	Source
Population		
22	Total population (millions)	U.S. Census Bureau, Population Division, Vintage 2013 Population Estimates (2013), Vintage 2012 Population Estimates (2010-2012), 2000-2010 Intercensal Estimates (2000-2005), 1990-1999 Intercensal Estimates (1990-1995), 1980-1990 Intercensal Estimates (1980), 1970-1980 Intercensal Estimates (1970).
23	Foreign born population (millions)	U.S. Census Bureau, Population Division, Decennial Census and American Community Survey. http://www.census.gov/prod/www/abs/decennial/ and http://www.census.gov/acs
24	17 years and younger (%)	U.S. Census Bureau, Population Division, Vintage 2013 Population Estimates (2013), Vintage 2012 Population Estimates (2010-2012), 2000-2010 Intercensal Estimates (2000-2005), 1990-1999 Intercensal Estimates (1990-1995), 1980-1990 Intercensal Estimates (1980), 1970-1980 Intercensal Estimates (1970)
25	65 years and older (%)	U.S. Census Bureau, Population Division, Vintage 2012 Population Estimates (2010-2012), 2000-2010 Intercensal Estimates (2000-2005), 1990-1999 Intercensal Estimates (1990-1995), 1980-1990 Intercensal Estimates (1980), 1970-1980 Intercensal Estimates (1970)
26	85 years and older (%)	U.S. Census Bureau, Population Division, Vintage 2012 Population Estimates (2010-2012), 2000-2010 Intercensal Estimates (2000-2005), 1990-1999 Intercensal Estimates (1990-1995), 1980-1990 Intercensal Estimates (1980), 1970-1980 Intercensal Estimates (1970)
Household Composition		
27	Ever married (% of age 15 and older)	U.S. Census Bureau, Current Population Survey. http://www.census.gov/hhes/families/
28	Average family size	U.S. Census Bureau, Current Population Survey. http://www.census.gov/hhes/families/
29	Births to unmarried women age 15-17 (per 1,000 unmarried women age 15-17)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (natality); Births: Final data for 2011: http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_01.pdf .
30	Single parent households (%)	U.S. Census Bureau, Current Population Survey. http://www.census.gov/hhes/families/
Civic and Cultural Engagement		
31	Average charitable contribution per itemized tax return (2011 dollars)	U.S. Internal Revenue Service, Statistics of Income - Individual Income Tax Returns (IRS Publication 1304). Returns-Publication-1304-(Complete-Report)">http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax>Returns-Publication-1304-(Complete-Report)
32	Voting for President (% of voting age population)	The Office of the Clerk of the U.S. House of Representatives and the U.S. Census Bureau, Current Population Survey. http://www.census.gov/cps/
33	Persons volunteering (% age 16 and older)	Bureau of Labor Statistics, Current Population Survey. http://www.bls.gov/cps
34	Attendance at visual or performing arts activity, including movie going (% age 18 and older)	The National Endowment for the Arts, Survey of Public Participation in the Arts.
35	Leisure reading (books not required for work or school)	The National Endowment for the Arts, Survey of Public Participation in the Arts.
Socioeconomic		
Education		
36	High school graduates (% of age 25-34)	U.S. Census Bureau, Decennial Census and American Community Survey. http://www.census.gov/prod/www/abs/decennial/ and http://www.census.gov/acs
37	College graduates (% of age 25-34)	U.S. Census Bureau, American Community Survey. http://www.census.gov/acs
38	Reading achievement score (age 17)	National Center for Education Statistics, National Assessment of Educational Progress. http://nces.ed.gov/nationsreportcard/
39	Math achievement score (age 17)	National Center for Education Statistics, National Assessment of Educational Progress. http://nces.ed.gov/nationsreportcard/
40	Science and engineering graduate degrees (% of total graduate degrees)	National Center for Education Statistics, Integrated Postsecondary Education Data System. http://nces.ed.gov/ipeds/
41	Receiving special education services (% of age 3-21 public school students)	National Center for Education Statistics, Digest of Education Statistics, 2012. http://nces.ed.gov/programs/digest/d12/tables/dt12_046.asp
Income, Savings, and Inequality		
42	Real median income: all households (2012 dollars)	U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements. http://www.census.gov/hhes/www/income/data/historical/household/
43	Real disposable income per capita (chained 2009 dollars)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
44	Adjusted gross income share of top 1% of all taxpayers	U.S. Internal Revenue Service, Statistics of Income. http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Statistical-Tables-by-Tax-Rate-and-Income-Percentile
45	Adjusted gross income share of lower 50% of all taxpayers	U.S. Internal Revenue Service, Statistics of Income. http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Statistical-Tables-by-Tax-Rate-and-Income-Percentile
46	Personal saving rate (% of disposable personal income)	Bureau of Economic Analysis, National Economic Accounts Data. http://www.bea.gov/national
47	Poverty rate (%)	U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements. http://www.census.gov/hhes/www/poverty/publications/pubs-cps.html
48	Food-insecure households (% of all households)	Economic Research Service, Household Food Security in the United States report series. http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/readings.aspx
49	Supplemental Nutrition Assistance Program (formerly Food Stamps)	Food and Nutrition Service, USDA
50	Median wealth of households, age 55-64 (in thousands of 2011 dollars) ..	Board of Governors of the Federal Reserve System, Survey of Consumer Finances Chartbook. http://www.federalreserve.gov/econresdata/scf/scfindex.htm
Housing		

Table 5–2. SOURCES FOR SOCIAL INDICATORS—Continued

	Indicator	Source
51	Homeownership among families with children (%)	U.S. Census Bureau, American Housing Survey. http://www.census.gov/housing/ahs
52	Families with children and severe housing cost burden (%)	U.S. Census Bureau, American Housing Survey as tabulated by the Housing and Urban Development's Office of Policy Development and Research. http://www.census.gov/housing/ahs
53	Families with children and inadequate housing (%)	U.S. Census Bureau, American Housing Survey as tabulated by the Housing and Urban Development's Office of Policy Development and Research. http://www.census.gov/housing/ahs
Health		
Health Status		
54	Life expectancy at birth (years)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (mortality); Deaths: Preliminary data for 2011: http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf , Health, United States, 2013 forthcoming, Table 18.
55	Infant mortality (per 1,000 live births)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (mortality and natality); Deaths: Preliminary data for 2011: http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf , Health, United States, 2013 forthcoming, Table 13.
56	Low birthweight [<2,500 gms] (% of babies)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (natality); Births: Preliminary data for 2012: http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_03.pdf , Health, United States, 2013 forthcoming, Table 6.
57	Activity limitation (% of age 5-17)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey; America's Children in Brief: Key National Indicators of Well-Being, 2013, Table HEALTH5, crude percentages: http://www.childstats.gov/americaschildren/tables/health5.asp?popup=true .
58	Activity limitation (% of age 18 and over)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm , Health, United States, 2013 forthcoming, Table 49, age-adjusted.
59	Difficulties with activities of daily living (% of age 65 and over)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm .
Health Behavior		
60	Engaged in regular physical activity (% of age 18 and older)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm , Health, United States, 2013 forthcoming, Table 68, age adjusted.
61	Obesity (% of age 20-74 with BMI 30 or greater)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey, http://www.cdc.gov/nchs/nhanes.htm , Health, United States, 2013 forthcoming, Table 69, age adjusted.
62	Obesity (% of age 2-19)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey, http://www.cdc.gov/nchs/nhanes.htm . Health E-stat: http://www.cdc.gov/nchs/data/hestat/obesity_child_09_10/obesity_child_09_10.htm and unpublished data (for 2011).
63	Cigarette smokers (% of age 18 and older)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm , Health, United States, 2013 forthcoming, Table 56, age adjusted.
64	Excessive alcohol use (% of age 18 and older)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm , Health, United States, 2013 forthcoming, Table 63, age adjusted.
Access to Health Care		
65	Total national health expenditures (% of GDP)	Centers for Medicare and Medicaid Services, National Health Expenditures Data. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html
66	Persons without health insurance (% of age 18-64)	U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplement. http://www.census.gov/hhes/www/poverty/publications/pubs-cps.html
67	Persons without health insurance (% of age 17 and younger)	U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplement. http://www.census.gov/hhes/www/poverty/publications/pubs-cps.html
68	Children age 19-35 months with recommended vaccinations (%)	Centers for Disease Control and Prevention, National Center for Health Statistics, National Immunization Survey (for 1995-2005): http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis ; (for 2010, 2011 and 2012): Table 1 in http://www.cdc.gov/mmwr/pdf/wk/mm6236.pdf .
Security and Safety		
Crime		
69	Property crimes (per 100,000 households)	Bureau of Justice Statistics, National Crime Victimization Survey. http://www.bjs.gov/index.cfm?ty=dcdetail&iid=245
70	Violent crime victimizations (per 100,000 population age 12 or older)	Bureau of Justice Statistics, National Crime Victimization Survey. http://www.bjs.gov/index.cfm?ty=dcdetail&iid=245
71	Murder rate (per 100,000 persons)	Federal Bureau of Investigation, Uniform Crime Reports, Crime in the United States. http://www.fbi.gov/about-us/cjis/ucr/ucr
National Security		
72	Military personnel on active duty (thousands)	ES actuals for 1960 and 1970 as reported in Table 2-11 of the DoD Selected Manpower Statistics for FY 1997 (DoD WHS, Directorate for Information Operations and Reports). The source for the remaining fiscal year actuals are the Service budget justification books.
73	Veterans (thousands)	U.S. Department of Veterans Affairs. 1960-1999: Annual Report of the Secretary of Veterans Affairs; 2000-2009: VetPop07, Office of Actuary; 2010-2013: VetPop11, Office of Actuary.

Table 5–2. SOURCES FOR SOCIAL INDICATORS—Continued

Indicator		Source
74	Transportation Safety Safety belt use (%)	Bureau of Transportation Statistics, National Transportation Statistics (as compiled from Safety Belt and Helmet Use in 2002 and Traffic Safety Facts). http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/index.html
75	Highway fatalities	Bureau of Transportation Statistics, National Transportation Statistics. http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/index.html
Environment and Energy		
Air Quality and Greenhouse Gases		
76	Ground level ozone (ppm) based on 230 monitoring sites	U.S. Environmental Protection Agency, AirTrends Website. http://www.epa.gov/airtrends/ozone.html
77	Particulate matter 2.5 (ug/m3) based on 570 monitoring sites	U.S. Environmental Protection Agency, AirTrends Website. http://www.epa.gov/airtrends/pm.html
78	Annual mean atmospheric CO ₂ concentration (Mauna Lao, Hawaii; ppm) .	National Oceanic and Atmospheric Administration. http://www.esrl.noaa.gov/gmd/ccgg/trends/
79	Gross greenhouse gas emissions (teragrams CO ₂ equivalent)	U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. http://epa.gov/climatechange/ghgemissions/usinventoryreport.html
80	Net greenhouse gas emissions, including sinks (teragrams CO ₂ equivalent)	U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. http://epa.gov/climatechange/ghgemissions/usinventoryreport.html
81	Gross greenhouse gas emissions per capita (metric tons CO ₂ equivalent)	U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. http://epa.gov/climatechange/ghgemissions/usinventoryreport.html
82	Gross greenhouse gas emissions per 2005\$ of GDP (kilograms CO ₂ equivalent)	U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. http://epa.gov/climatechange/ghgemissions/usinventoryreport.html
Energy		
83	Energy consumption per capita (million Btu)	U.S. Energy Information Administration (EIA), Monthly Energy Review, December 2013, Table 1.3 http://www.eia.gov/totalenergy/data/monthly/index.cfm ; EIA, Annual Energy Review 2011, Table D1 (1960-2005) http://www.eia.gov/totalenergy/data/annual/index.cfm ; and, U.S. Census Bureau, Population Division, Vintage 2013 Population Estimates (2010-2012) http://www.census.gov/popest/data/national/totals/2013/index.html .
84	Energy consumption per 2009\$ GDP (thousand Btu per 2009\$)	U.S. Energy Information Administration, Monthly Energy Review (December 2013), Table 1.7 http://www.eia.gov/totalenergy/data/monthly/index.cfm .
85	Electricity net generation from renewable sources, all sectors (% of total)	U.S. Energy Information Administration, Monthly Energy Review (December 2013), Table 7.2a. http://www.eia.gov/totalenergy/data/monthly/index.cfm .

6. DELIVERING A HIGH-PERFORMANCE GOVERNMENT

Since taking office, the President has challenged Federal leaders and managers to deliver a Government that is leaner, smarter, and more effective, while delivering the best results for the American taxpayer. In designing the Administration's performance management approach we reviewed successful practices from public and private organizations. Based on that review, it was clear that the critical success factor of any performance management system is that it is used by senior leadership to drive results.

Beginning in 2009, OMB asked each agency head to identify a limited number of near-term, implementation-focused priority goals. To ensure leadership remained engaged through implementation, agency Deputy Secretaries, in their role as Chief Operating Officers (COOs), were tasked to conduct at least quarterly data-driven reviews of progress against these goals. Several agencies are now doing these reviews monthly. Furthermore, the Administration reinvigorated the role of the Performance Improvement Officer (PIO), who reports directly to the COO, and brought agencies together through the Performance Improvement Council (PIC) to build capacity and spread the adoption of effective practices in performance improvement across agencies.

These new operating practices shifted the emphasis away from the publication of performance plans and reports to a model that is focused on the use of performance information to inform decision-making and deliver greater impact. Since then, the Administration also established a limited number of Cross-Agency Priority Goals where coordination across agencies is critical to the end result. Importantly, in 2010 the Administration worked with the Congress to enact the GRPA Modernization Act, which incorporated lessons learned and ensured these reforms continue into future administrations.

Overall, the Administration's approach to delivering more effective and efficient Government rests on the following proven management practices:

- Engaging Leaders
- Focusing on Clear Goals and Data-Driven Reviews
- Expanding Impact through Strategic Plans and Strategic Reviews
- Strengthening Agency Capabilities, Collaboration, and Learning
- Communicating Performance Results Effectively

The remainder of this chapter reviews the progress to date for each of these practices and outlines priorities going forward in implementing the Administration's performance management approach.

Engaging Leaders

As previously discussed, frequent and sustained leadership engagement is foundational to any successful performance management effort. The Administration has taken steps to clearly define the roles and responsibilities of key leaders.

To lead the performance management efforts at each agency, the Secretary or equivalent is required to name a COO, often the Deputy Secretary. OMB has outlined several roles and responsibilities for each COO including conducting data-driven performance reviews at least once per quarter. COOs are critical to bringing a broader set of actors together to solve problems across the organization. For example, senior leaders at the Department of Housing and Urban Development and Veterans Affairs come together regularly to review progress on the goal to end veterans homelessness.

Each COO also names a PIO who reports directly to the COO and is responsible for coordinating performance improvement efforts across the agency with program managers, management support, and other agencies. For each strategic objective and Agency Priority Goal, specific Goal Leaders are also held accountable for leading implementation efforts such as determining strategies, managing execution toward goals, and engaging others to make course corrections. These responsibilities often go beyond their traditional organizational scope to engage all components who are needed to deliver against the specified goals.

Focusing on Clear Goals and Data-Driven Reviews

Where implementation-focused two-year priorities set out in Agency Priority Goals are likely to accelerate progress, agency heads have set ambitious targets that have potential to advance the well-being of the American people, to stimulate economic growth and job creation, and to cut the costs of delivery. For instance, agencies have set targets for improving access to capital to enhance job creation, reducing foodborne illness through targeted inspections, coordinating multiple agency services to reduce veteran's homelessness, and reducing hospital acquired infections. Through the GRPA Modernization Act framework, agencies establish Priority Goals every two years with responsible Goal Leaders, quarterly metrics, milestones, and clearly identified contributing programs with at least quarterly data-driven reviews led by agency COOs to remove barriers and accelerate progress. In many cases, significant results have been demonstrated.

Several recent Government Accountability Office (GAO) reports have reviewed the Administration's progress in implementation of the GRPA Modernization Act, and provided recommendations. GAO found in their sur-

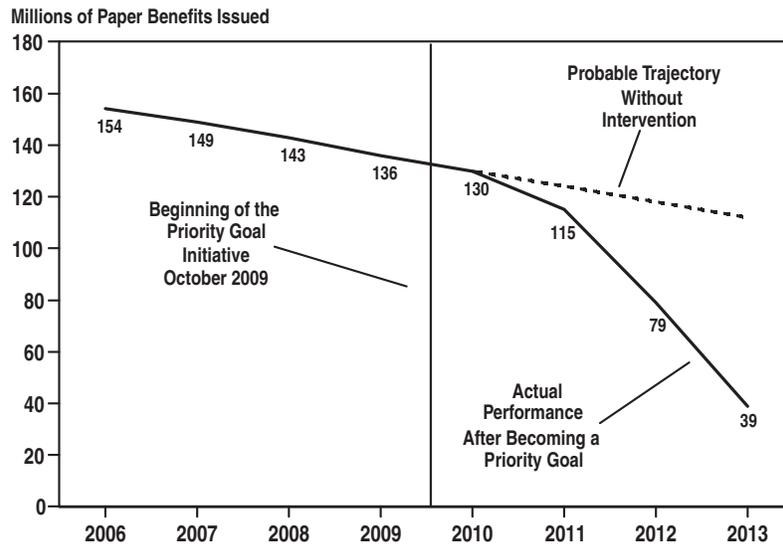
vey of PIOs that agency leadership actively participated in these quarterly data-driven reviews and that leaders are using the reviews to drive performance improvements. For example, GAO's report concluded that "agency officials said their reviews allowed different functional management groups and program areas within their agencies to collaborate and identify strategies which led to performance improvements."¹ GAO also recommended agencies build upon this success, and do more to coordinate with other agencies that have programs contributing to the outcome.

Some examples of the improvements we have seen from our Priority Goal approach include the following:

- The Department of the Treasury has worked across its bureaus through its 'Treasury Stat' effort to advance its Priority Goal to increase electronic transactions with the public. The Department estimates that it has saved the American people hundreds of millions of dollars by creating an Agency Priority Goal around increasing electronic transactions with the public to improve service, prevent fraud, and reduce costs. Included in this goal was an effort to modernize the Federal Government's payment and

year and costs the United States \$96 billion in medical costs and \$97 billion in lost productivity each year. Despite progress in reducing tobacco use, the decline in adult smoking rates had stalled, coincident with reductions in state investments in tobacco control programs. In response, an Agency Priority Goal at HHS expanded from initially tracking the percentage of communities that adopted smoke-free policies to a goal to reduce nation-wide cigarette consumption per capita. Shifting the agency's focus from policy adoption to reducing cigarette use has helped to accelerate progress and included a broader set of contributing programs to execute the comprehensive tobacco control strategy. The strategy was designed to mobilize the agency's expertise and resources in support of proven, pragmatic, achievable actions that can be aggressively implemented at the Federal, State, and community levels. In 2012, annual per capita adult cigarette consumption decreased to 1,196 per capita from a level of 2,076, representing a 42 percent-decrease over 12 years. Setting and analyzing progress on the right goal makes a difference in the innovations and results the Government can achieve.

Chart 6-1. Decrease in the Number of Paper Transactions with the Public



collection systems, which resulted in paper benefit payments dropping from 131 million in 2010 to 39 million in 2013, allowing Treasury to get money to beneficiaries and back into the economy faster than ever. At the same time, electronic collections jumped from 85 percent of total collections in 2010 to 97 percent in 2013, reducing costs to the Federal Government.

- The Department of Health and Human Services (HHS) set a goal to reduce tobacco use which kills an estimated 443,000 people in the United States each

- After designating the improvement of business loan efficiency as an Agency Priority Goal, the Small Business Administration (SBA) has made considerable progress in making it more efficient for small businesses to get loans, while also reducing cost. The SBA increased the use of paperless processing in their 7(a) loan program (which provides financing for various business uses, such as working capital and real estate) from 72 percent in 2011 to 90 percent in 2013, and from 55 percent to 76 percent in their 504 loan program (which provides financing for real estate and major equipment). The adoption of electronic loan processing also contributed to a 5.6

¹ GAO-13-228, GAO Report: *Managing for Results: Data-Driven Performance Reviews Show Promise But Agencies Should Explore How to Involve Other Relevant Agencies*. February 2013

percent increase in loan volume from 2012 to 2013, growing the number of small businesses assisted.

- After establishing an Agency Priority Goal focused on preventing Americans at-risk of foreclosure from losing their homes, the Department of Housing and Urban Development (HUD) initiated a number of measures to improve agency operations and help borrowers at the very early stages of delinquency when interventions can prevent serious delinquency. HUD increased the number of households assisted with early intervention by 31 percent between 2010 and 2013. HUD also reduced six month re-default rates from 17 percent in 2011 to 8 percent in 2013 among those who were helped by the agency's mitigation programs.

To ensure the COO-led data-driven reviews continue improving and produce an even broader record of impact, the PIC Reviews Working Group has met monthly over the past two years to share promising practices related to engaging leaders in data-driven reviews and to identify promising implementation strategies. Today, based on a survey by the Performance Improvement Council, agencies report that securing adequate leadership sponsorship is not among their major challenges to conducting data-driven reviews. This completes a positive three-year trend in PIC survey results that consistently shows agency leaders are not just setting Agency Priority Goals but are consistently engaged in taking action to drive toward goal achievement.

The impact of these efforts extends beyond agency top leadership. In their 2013 Federal Managers Survey², GAO surveyed more than 4,000 mid-level and upper-level civilian managers and supervisors working in the major 24 Federal agencies. GAO's survey found approximately 82 percent of Federal managers' knew about their agency's Priority Goals. Their analysis also suggests that COO-led reviews are positively related to managers' perceptions of their leadership's demonstrated commitment to using performance information. Of those who reported familiarity with the reviews, 76 percent agreed that their top leadership demonstrates a strong commitment to using performance information to guide decision making to a great or very great extent. In contrast, of those not familiar with the reviews, only 36 percent agreed to a great or very great extent with the same statement. The analysis demonstrates that the fundamental approaches the Administration has used to engage leadership are having an impact but need to be expanded.

In addition to the Agency Priority Goals, OMB and the PIC have also worked to support progress on Cross-Agency Priority Goals (CAP). Agencies have used these goals to help them break down organizational barriers and achieve better results than one agency can achieve on its own. We are seeing promising results on some of these cross-agency goals. For example:

- Since the President launched the National Export Initiative in 2010, an ambitious plan to sell more

American goods and services into foreign markets, U.S. exports hit record levels for four consecutive years, reaching \$2.3 trillion in 2013. As a result, American jobs supported by exports increased by 1.3 million.

- The President set a priority to expand broadband capabilities and ensure 4G wireless broadband coverage for 98 percent of Americans by 2016. Access to broadband capabilities continues to grow at a rapid rate despite tougher economic conditions. The most recently available data indicates that 90 percent of Americans now have access to advanced wireless broadband, up from 36 percent in mid-2010, assuming that users of advanced wireless service should be able to enjoy minimum "real-world" download speeds (as opposed to advertised or "up to" speeds) of at least 6 megabytes per second. When wired connections are included, the availability figure jumps to almost 96 percent. By any measure, the availability of high-speed access has grown steadily since the President announced the 98 percent goal in his 2011 State of the Union address.

With this Budget, the Administration has set new Cross-Agency and Agency Priority Goals to further stimulate innovation, efficiency, and progress on key outcomes. These goals will be available on *Performance.gov* with progress updated quarterly.

Expanding Impact through Strategic Plans and Strategic Reviews

In addition to the focus on Priority Goals, with this Budget the Administration is releasing updates to Executive Branch agency strategic plans on *Performance.gov* and agency websites. These plans include strategic goals, objectives, and metrics that cover the breadth of the agency's mission.

To make sure agencies drive progress on all of the objectives outlined in the strategic plans, and expand effective practices beyond a limited set of priorities, the Administration is also taking the unprecedented step of establishing annual strategic reviews at each agency. The strategic reviews will ensure there is a comprehensive framework in place at each agency to make strategic and budget decisions across the entire agency. The annual assessment will incorporate a variety of analytical, research, and evaluation methods to support outcome-oriented assessments, the results of which will inform the decision-making processes at the agency, as well as with OMB and the Congress.

The assessment will also consider evaluation results, performance goals, and other indicators related to each strategic objective, as well as other challenges, risks, and external factors that may affect outcomes. The strategic reviews will build agency capacity to improve results over time by using the best evidence available to drive strategic decisions. They will also increase understanding of the external influences and complexities of achieving outcomes across many organizational units and delivery partners. The first progress updates at the strategic

² GAO-13-518, *Managing for Results: Executive Branch Should More Fully Implement the GPRA Modernization Act to Address Pressing Governance Challenges*. June 2013

objective level will be published in agency 2014 Annual Performance Reports.

As part of this comprehensive effort, the Administration also remains committed to leveraging these performance reviews to inform budget and other decisions including reducing duplication, overlap and fragmentation. For example, this year, as in the past, the President's Budget includes a significant number of proposals that are inefficient, duplicative, or simply no longer needed.

Strengthening Agency Capabilities, Collaboration, and Learning

A critical next step is to build upon lessons learned from the performance reviews at agency headquarters, and expand the establishment of effective performance management practices at all levels of Federal agencies. In the 2013 Federal Managers Survey, GAO found that 82 percent of agency managers said there are performance measures defined for their programs, operations, or projects, yet only 64 percent of agency managers' report having sufficient analytical tools to collect, analyze, and use performance data. The Employee Viewpoint Survey also shows that 83 percent of all employees report knowing how their work relates to the agency goals and priorities; however, only 61 percent say managers review and evaluate organizations progress toward meeting their goals and objectives.

The PIC has taken a leadership role in facilitating the exchange of useful practices to strengthen agency performance management capabilities and is fostering inter-agency dialogue around solutions to key performance challenges. GAO recently surveyed agency PIOs, who reported that, in general, "they found the PIC helpful and that there was strong agency participation in the council and its working groups." The PIC's own survey of its PIO and staff community identified significant participation in sharing best practices, with 67 percent of PIOs reporting partnering with other offices (components, support functions, local agencies etc.).

For example, the PIC's Internal Agency Reviews Working Group facilitated sharing of best practices for quarterly data-driven reviews led by the COO since 2011, and is now shifting its focus to effective strategic reviews. The working group, which continues to meet on a monthly basis, has grown to nearly 100 members from over 30 agencies, both large and small.

Additionally, the PIC has also established the Performance Ambassador Program for employees to learn about specific performance topics and transfer that knowl-

edge back to their agency. The pilot program provides a part-time, four-month detail with a mentoring component that delivers both contextual and focused learning. The PIC also provides professional development opportunities using an intensive six-month cross-agency experience. Since 2011, the PIC has supported the President's Management Council (PMC) Interagency Rotation Fellows Program, where selected applicants are assigned to different agencies to carry out highly scoped projects. Now in its 5th cohort, PMC Fellows' projects range from supporting cross-agency goals supporting veterans' career readiness to developing tools that build the project management capabilities of Government employees.

Communicating Performance Results Effectively

Finally, in support of the President's commitment to transparency, we continue to develop *Performance.gov* to inform stakeholders on our performance improvement efforts. Compared to reports posted to individual agency web sites, *Performance.gov* has helped to improve accountability and provide one place for the public to find information on agency programs, goals, and regular progress updates.

The full list of Agency Priority Goals, including progress on each, can be found at *www.Goals.Performance.gov*, where they are presented in the context of agency strategic goals and objectives to show how the priorities fit within the agencies' longer term efforts. In May 2013, OMB also worked with agencies to publish an initial Federal Program Inventory with summary information on nearly 1,600 programs. The central program list has the potential to facilitate coordination by making it easier to find programs that may contribute to a shared goal, as well as improve public understanding about what agencies do. We plan to learn from this initial effort and work with agencies to ensure it is useful to both managers and stakeholders.

Looking Ahead

Moving forward, the Administration will continue to deliver more value for the taxpayer's dollar by building on its strong track record of increasing the usage and effectiveness of performance management practices across Government. While significant progress has been made since the President took office, the Administration will continue to enhance its efforts to engage leadership, present clear goals, measure and analyze progress, and conduct reviews to further improve our Government, help the American people in their daily lives, and deliver the greatest impact for every dollar spent.

7. PROGRAM EVALUATION AND DATA ANALYTICS

The Administration is committed to using taxpayer dollars effectively and efficiently. Central to that commitment is a culture where agencies constantly (1) ask and answer questions that help them find, implement, spread, and sustain effective programs and practices, (2) identify and fix or eliminate ineffective programs and practices, (3) test promising programs and practices to see if they are effective and can be replicated, and (4) find lower cost ways to achieve positive impacts.

Both the “Evaluation” chapter in the Council of Economic Advisers 2014 Economic Report of the President and the *July 2013 “Next Steps in the Evidence and Innovation” memo*, jointly signed by the Office of Management and Budget, the Domestic Policy Council, the Office of Science and Technology Policy, and the Council of Economic Advisers, are strong signals of this Administration’s widespread commitment to an evidence culture. The July 2013 memo encouraged a broad-based set of activities to better integrate evidence and rigorous evaluation in budget, management, and policy decisions, such as (1) making better use of already-collected data within government agencies; (2) promoting the use of high-quality, low-cost evaluations and rapid, iterative experimentation; (3) adopting more evidence-based structures for grant programs; and (4) building agency evaluation capacity and developing tools to better communicate what works. The memo built upon OMB’s *May 2012 “Use of Evidence and Evaluation in the 2014 Budget”* memo, which stated that: “Where evidence is strong, we should act on it. Where evidence is suggestive, we should consider it. Where evidence is weak, we should build the knowledge to support better decisions in the future.”

The best government programs use a broad range of analytical and management tools, which collectively comprise an “evidence infrastructure,” to learn what works (and what doesn’t) and improve results. In doing so, they support a culture of continuous feedback and improvement.

- It is a culture that keeps asking, “How can we do things better?” and approaches public policy and management challenges with humility about what we know or don’t know about what works.
- It is a culture that values rapid, operationally-focused experiments that can quickly boost program efficiency, effectiveness and customer service, while at the same time equally valuing longer-term evaluations focused on more fundamental questions about program strategy.
- It is a culture that believes in using data to drive decision-making and is not satisfied with anecdotal evidence, since intuition about what works is often wrong.

- It is a culture where people are open to changing their minds and practices based upon evidence.
- It is a culture that is committed to publicly disseminating results from evaluations in an open and transparent manner, never suppressing evidence because it is politically inconvenient.
- It is a culture that sees improved program performance not as a destination that can be reached with the right tool or strategy, but as a process of ongoing program refinement, since new challenges will always arise and new knowledge and innovations can always bring better outcomes and efficiencies.
- It is a culture that sees program evaluation, statistical series, data analytics, and performance measurement as valuable, complementary tools, since each has different strengths.

Role of Program Evaluation

Among the most important analytical tools is program evaluation, which can produce direct evidence about program effectiveness and about the comparative effectiveness of different interventions. Rigorous impact evaluations, for example those with random assignment to treatment and control groups or those that use other strategies to isolate the causal effect of an intervention, can provide strong evidence about whether a program or intervention works and whether alternative practices might work better. For example, if a job training program has a high job placement rate, is it because it is effective or because it attracts those easiest to place in jobs? To answer this question, an evaluation could compare the employment of participants (i.e. those in the “treatment” group) to comparable individuals who did not participate in the program (i.e. the “control” group) to isolate the effects of the training from other factors.

Evaluations can answer a wide range of important policy questions such as whether workers are safer in facilities that are inspected more frequently, whether one approach to turning around low-performing schools is more effective than another, whether outcomes for families are substantially improved in neighborhoods that receive intensive services, whether real-time pricing increases energy efficiency, and whether re-employment services are cost-effective.

This Administration strongly encourages appropriately rigorous evaluations to determine the impact of programs and practices on outcomes. In many policy debates, stakeholders come to the table with deep disagreements about the effectiveness or ineffectiveness of particular interventions. Evaluations that are sufficiently rigorous, relatively straightforward, free from political interference, and

produce actionable results are especially valuable in such circumstances. Historically, evaluations have generally not been built into program designs, and, once a program is up and running, identifying capacity and resources for evaluation can become more difficult. As described below, the Administration has made progress in embedding evaluation and evidence-based decision making directly into the design of new programs and will seek continued help from Congress and other stakeholders in doing so.

Other types of evaluation and data analytics can complement the evidence obtained from rigorous impact evaluations. For example, qualitative evidence can provide insight into how programs and practices can be implemented successfully, as well as insight into the underlying mechanisms driving evaluation results. Likewise, descriptive (rather than causal) analyses of administrative and survey data can reveal important patterns, which may directly inform decisions (such as how to better match recipients with appropriate services) or call attention to problems or promising practices that are worthy of additional scrutiny. Agencies also often use statistical time series data, such as those presented in Chapter 5, “Social Indicators,” of this volume, to take a broad look at societal and economic trends over time. They also use this information to prioritize among policy interests and budgetary resources, to inform the design of policies, and to provide the benchmarks that are used to assess the effects of policy changes.

Role of Performance Measurement

Performance measurement is another critical analytical and management tool. By tracking inputs, outputs, outcomes, and measures of efficiency, programs can generate data that managers can then use to improve program performance. However, simply collecting performance data is unlikely to change anything by itself. Performance data become more useful when programs identify measurable goals and objectives, collect high-quality data and actively use them to ask and answer questions about what is being achieved, identify the most pressing program challenges, set goals, monitor results, celebrate progress, and adjust actions based on data-driven insights. This is the process of moving from performance measurement to performance management.

Performance measurement and program evaluation can be complementary tools, with each enhancing the value of the other. Performance measures are an essential resource for agencies to understand ongoing, real-time program performance so they can use that information to build a culture of continuous improvement, but they often do not tell us a lot about some key questions, such as how a program is affecting participants’ long-term outcomes. Program evaluations provide context for the performance measures and help us better understand what can be learned from them. Too often, though, performance measurement and program evaluation are applied in isolation, with agency experts housed in separate units that work independently of each other. Bridging that divide

will be important to take advantage of the synergy between the two tools.

An example of successful synergy comes from the Mentoring Children of Prisoners (MCP) program. The MCP program awards grants to faith-based and community organizations, along with tribes and state and local government entities, which provide children and youth of incarcerated parents with caring adult mentors. Although there were no rigorous impact evaluations of MCP, evidence from rigorous evaluations of other mentoring programs had shown that high-quality mentoring relationships lasting for at least 12 months can have positive impacts on youth, while relationships that last three months or less can be disruptive and potentially harmful. Meanwhile, the MCP program performance data suggested that fewer than half of program participants each year were in matches that lasted at least 12 months and a significant number of matches lasted less than three months. The evaluation evidence from other mentoring programs alone would not have helped policymakers make decisions about MCP, since what it showed was that mentoring programs could be either effective or ineffective depending on the length of the matches. Similarly, the performance measurement evidence alone might have led policymakers to conclude that matches were not lasting that long, but a short match is better than nothing. But, together, the evaluation and performance measurement evidence implied that the MCP program was unlikely to be effective unless it was able to produce longer matches. Largely on the basis of this evidence, The Department of Health and Human Services re-allocated funding for MCP to programs that were likely to be more effective.

Operationalizing an Evidence Infrastructure

Developing and supporting the use of evidence and evaluation in decision-making requires a coordinated effort between those charged with managing the operations of a program and those responsible for using data and evaluation to understand a program’s effectiveness. It requires consistent messages from leaders at different levels of an agency—e.g., policy officials, program and performance managers, strategic planning and budget staff, evaluators, and statistical staff—to ensure that evidence is collected or built, analyzed, understood, and appropriately acted upon. No one individual in an agency has the knowledge and skills necessary to develop research designs that address actionable questions, understand different types of evidence, interpret evidence, and develop and implement effective, evidence-based practices. Rather, it takes an agency leadership team to oversee these efforts and to build and sustain a commitment to learning. It also takes a team of “implementers” at the program level to encourage the use of evidence and data so that it reaches program management.

Who is on these teams and how their work is divided depends upon the specific needs, personnel, and structure of a given agency. Success of these teams depends on including leadership at the agency and bureau level capable of supporting and requiring programs’ use of data and evaluation in program operations. This leadership team

can make sure that the right questions are being asked about the program's effectiveness and its operations. Program managers are responsible for creating a culture where all operational decisions and internal and external communications of progress are based on evidence and data. To do so, the program managers need a team that includes data analysis and evaluation capabilities to provide the data and analysis to help inform the program's operational and policy decisions. These can include understanding the different types of evidence available and their implications for decisions, as well as identifying the need for new descriptive data and evaluation studies.

The Administration and the Congress have made progress in basing Federal decision-making on data and evidence, but more progress is needed. Chapter 6, "Delivering A High-Performance Government," in this volume discusses how Administration efforts are helping focus agencies on setting high-priority goals and measuring their progress on those goals.

Tiered-Evidence Grant Programs and Innovation Funds

Because many Federal dollars flow to States, localities, and other entities through competitive and formula grants, grant reforms are an important component of strengthening the use of evidence in government. By encouraging a greater share of grant funding to be spent on approaches with strong evidence of effectiveness and building more evaluation into grant-making, we keep learning more about what works.

Among the most exciting advancements in this area are so-called "tiered-evidence" or "innovation fund" grant designs. The Administration has adopted multi-tiered grant programs in the areas of K-12 education interventions, teenage pregnancy prevention, social innovations, voluntary home visitations for parents, workforce interventions, and international assistance efforts. In 2014, the Department of Education will also launch a new tiered evidence program, First in the World, focused on using and building evidence of effectiveness in postsecondary education. These initiatives are designed to focus money on practices with strong evidence but still allow for new innovation. For example, in a three-tiered grant model, grantees that implement practices with strong evidence qualify for the top, "scale up" tier and receive the most funding including for a large scale rigorous evaluation. Grantees that use approaches with more limited evidence qualify for the middle, "validation" tier and receive more limited funding along with support for a rigorous evaluation. Grantees using innovative but untested approaches may qualify for the third tier "proof of concept" and receive the least funding, but also support for evaluation.

A good example of this approach is the Department of Education's Investing in Innovation Fund (i3). The i3 fund invests in high-impact, potentially transformative education interventions, ranging from new ideas with significant potential to those with strong evidence of effectiveness that are ready to be scaled up. Applicants to i3 can apply for funding to develop, validate, or scale up their program. The Department issued regulations in 2013 that

would allow any of its other competitive grant programs to adopt this tiered-evidence model.

With a multi-tiered grant structure, organizations understand that to be considered for funding they must provide credible evaluation results that show promise and/or be ready to subject their models to analysis. Equally important, tiered evidence models provide a built-in mechanism for scaling up interventions with proven high returns.

Pay for Success

The Administration is continuing to invest in Pay for Success to support evidence-based innovation at the State and local levels. In the Pay for Success model, philanthropic and other private investors provide up-front funding for preventive services and the government does not pay unless and until there are results. The Pay for Success model is particularly well-suited to the subset of cost-effective interventions that produce government savings, since those savings can be used to pay for results. For example the Department of Labor awarded nearly \$24 million to the States of New York and Massachusetts for Pay for Success projects to increase employment and reduce recidivism among formerly incarcerated individuals. Funds will be paid out only after outcomes are achieved. In addition, the Department of Justice launched Pay for Success projects in which more effective prisoner re-entry interventions can reduce not just recidivism, but also the cost of the interventions, and a portion of those savings can be used to pay back the investors. The Administration is promoting the Pay for Success model in several other Federal programs, including housing, workforce, and education, and is re-proposing a \$300 million fund in the Treasury to create incentives for States, localities and not-for-profits to invest in programs that will produce Federal savings alongside better outcomes in communities.

Examples of Evaluations and Innovative Pilots

The Administration supports evaluations with rigorous research designs that address questions critical to program design, and supports strengthening agency capacity to support such evaluations. The Budget supports new evaluations across the Federal Government to analyze program impacts, including how to structure student aid to increase college access for low-income students; how to strengthen the impact of Federal technical assistance to small businesses; and how to use increased local flexibility in housing assistance to increase employment and self-sufficiency.

For example, the Departments of Education, Labor, and Health and Human Services and the Social Security Administration have launched a joint initiative, PROMISE, to test interventions that improve outcomes for children with disabilities and their families, which may yield substantial savings through reduced long-term reliance on the Supplemental Security Income program and other public services. In addition, the Administration is proposing to restore demonstration authority for the Social Security Disability Insurance program, while also providing new authority for the Social Security

Administration and partner agencies to test early-intervention strategies that would help people with disabilities remain in the workforce.

The Department of Energy, in partnership with States and local utilities, has invested in evaluating the impact of time-varying pricing on consumer behavior. Experts have long suggested time-varying pricing as a way of increasing the efficiency of electricity use and reducing electricity demand, thereby allowing utilities to defer investments in expensive new power plants and reduce pollution. However, most electricity delivery systems have not invested in the in-home technologies necessary to allow residential consumers to respond to time-varying prices. In addition, regulators have been hesitant to approve varying rates, and private companies have been reluctant to invest in modernizing their systems without knowing whether time-varying pricing will significantly impact consumer behavior. While the Energy Department studies, which randomized residential consumers into a variety of time-varying pricing structures, are still ongoing, two utilities and their regulators have already decided to implement time-varying rates across their service territories based on the results observed to date.

In another example, the Partnership Fund for Program Integrity Innovation launched 11 pilots to test promising solutions developed collaboratively by Federal agencies, States, and other stakeholders to improve payment accuracy, improve administrative efficiency, and enhance service delivery in benefit programs that serve overlapping populations. For example, a pilot administered by the Department of Justice is helping state and local juvenile justice agencies generate cost-effectiveness scorecards for service providers, promoting research-informed tools to improve outcomes for all the youth in their care. Evaluation of these pilots will help determine which strategies lead to better results at lower cost, allowing Federal and State governments to identify those that warrant expansion.

Rigorous evaluation will also be a central component of the Administration's Performance Partnership pilots, which will enable leading edge States and localities to experiment with new approaches to assisting disconnected youth, by giving them flexibility to pool discretionary funds across several Federal programs serving similar populations and communities in exchange for greater accountability for results. The Consolidated Appropriations Act, 2014 authorizes up to 10 State and local performance partnership pilots to improve outcomes for disconnected youth. Pilot projects will support innovative, efficient, outcome-focused strategies using blended funding from separate youth-serving programs in the Departments of Education, Labor, Health and Human Services, and the Corporation for National and Community Service. Authorization for up to 10 new pilots is proposed in the 2015 Budget.

Evaluation Capacity, Sharing Best Practices, and Administrative Data

Research, statistics and evaluation are part of any comprehensive effort to use data and evidence to serve

the American people in more cost-effective ways. Funding for these areas should never be viewed as a luxury but rather as an essential element of running effective government programs. However, new funding is only part of the Administration's efforts to support evidence activities across the Federal Government. The Administration is also working to: (1) build agency capacity for a robust evaluation and data analytics infrastructure by supporting agencies in standing up central evaluation offices that lead to strong and coordinated evaluation efforts; (2) empower existing evaluation offices; (3) institutionalize forward-looking policies, such as annual strategic reviews of agency priority goals; and (4) hire evaluation and data analytics experts into key administrative positions.

The July 2013 memo described earlier inaugurated a series of OMB-hosted workshops to support evidence efforts in agencies. Those workshops began in the fall of 2013 and will continue into 2014. Topics include helping agencies (1) focus evaluation resources on the most important program and policy questions; (2) use administrative data sets from multiple programs and levels of government to answer important questions while protecting privacy; (3) conduct rigorous program evaluations and data analytics on a tight budget; (4) use existing authorities to turn traditional competitive grant programs into innovative, evidence-based grant programs; and (5) apply research findings from the social and behavioral sciences to test and implement low-cost approaches to improving program results. In addition, an inter-agency working group of evaluators across the Federal Government is sharing best practices, such as helping to spread effective procurement practices, developing common evidence standards, and better integrating evaluation and performance measurement efforts. The Performance Improvement Council also is playing an important role with the latter effort.

Another part of the evaluation and data analytics infrastructure is helping agencies make better use of "administrative data," i.e., data collected for the administration of a program. Administrative data, especially when linked across programs or to survey data, can sometimes make both performance measurement and rigorous program evaluations more informative and less costly, while also providing strong privacy protections. For example, data from an early childhood program linked to the data from juvenile justice systems or K-16 educational systems shed light on the long-term effects of interventions in ways that would be cost-prohibitive in a long-term survey follow-up. Linking records across programs also enables policymakers to better understand how families access combinations of government assistance programs, such as food assistance and unemployment insurance, during times of economic challenges. The Departments of Health and Human Services and Housing and Urban Development, for instance, are sharing data to analyze how housing interventions, including efforts to reduce homelessness, affect health care use and costs of residents. Also, the Departments of Veterans Affairs and Housing and Urban Development are streamlining reporting by homelessness programs to create a more comprehensive picture of homelessness trends and interventions.

Data linkage can be a powerful tool for improving agency management of programs —looking at available information to find patterns, relationships, anomalies, and other features to inform priority-setting, program design, and hypothesis formulation. Administrative data also can be used in conducting low-cost rigorous evaluations. This approach is discussed in the Coalition for Evidence-Based Policy’s 2012 brief, *“Rigorous Program Evaluations on a Budget: How Low-Cost Randomized Controlled Trials Are Possible in Many Areas of Social Policy.”* A number of States and localities, such as those participating in the *Actionable Intelligence for Social Policy Initiative*, are creating capacity to link data across multiple systems so that researchers and government decision-makers can work together to analyze problems. Their pioneering work, which provides strong safeguards to protect privacy, can help other States, localities, and Federal agencies harness data for learning and better decision-making.

Nonetheless, accessing administrative data for these statistical uses is challenging. For example, while some agencies have an established history of using administrative data for statistical and evaluation purposes, in many cases access to such data is not readily available due to real or perceived legal, policy, or operational barriers. In some cases, extensive negotiations with the agency responsible for the data are needed to gain access to the data for use in evaluation studies; sometimes the efforts are not successful even after months or years of negotiations.

To help address these barriers, OMB in February 2014 issued *“Guidance for Providing and Using Administrative Data for Statistical Purposes”* to assist both program and statistical agencies (and statistical components within agencies) in increasing the opportunities to use administrative data for statistical purposes, which includes evaluation. In part, this guidance requires government departments to engage both program and statistical agencies in identifying administrative datasets of potential value for statistical purposes; communicating the importance to staff of promoting the use of administrative data for statistical purposes; and identifying several datasets with the most value for statistical purposes but which are not currently being provided, along with descriptions of critical barriers that appear to preclude providing access for statistical purposes. The guidance also offers tools, developed under the auspices of the Federal Committee on Statistical Methodology, to help agencies understand relevant legal requirements, facilitate more efficient interagency agreements, and assess administrative data quality. Departments must also report to OMB on their efforts to encourage collaboration and increase access to administrative data for statistical purposes. In this way, OMB can continue to learn from and foster progress among agencies in their evidence-building efforts.

Social and Behavioral Sciences Team

Increasingly, agencies are using insights from behavioral science to implement low-cost evaluations that can be used to improve program design. Using randomized

experiments or other rigorous evaluation designs, these studies examine aspects of program operations that can be re-designed to help people take better advantage of available programs and services. These studies have tested the impact of simplifying outreach and collection letters or highlighting the availability of student financial aid. Recently, the White House Office of Science and Technology Policy assembled a cross-agency team of behavioral science and evaluation experts, the U.S. Social and Behavioral Sciences Team, to help agencies identify promising opportunities for embedding behavioral insights into program designs and to provide the necessary technical tools to rigorously evaluate impact. Such low-cost, real-time experiments can help Federal programs operate more effectively and efficiently.

Common Evidence Standards and “What Works” Repositories

OMB and Federal agencies are working together to develop common standards and guidelines for research and evaluation, i.e. “common evidence standards.” These common evidence standards should facilitate both production and use of reliable, rigorous evidence. Policymakers, program managers, and practitioners could use these common evidence standards to identify effective programs, improve programs, and encourage innovation in the development of new approaches. For example, the Department of Education and National Science Foundation issued *Common Guidelines for Education Research and Development* in 2013. These guidelines clarify how different types of studies contribute to the evidence base, including basic research and impact evaluations, and set expectations for the evidence that different types of studies should seek to generate. Other agencies such as the Department of Labor and components of the Department of Health and Human Services are using the same guidelines for their evaluation activities. Research experts from Federal agencies, States, and academia are working with the National Academy of Sciences on ways to build consensus on standards for benefit-cost analysis of preventive interventions for children, youth, and families. Those standards would help government compare the benefits and costs of multiple strategies focused on similar target populations and outcomes. Common research standards and evidence frameworks across agencies can facilitate evaluation contracting, information collection clearance, and the strengthening or creation of research clearinghouses and repositories about “what works.” The repositories synthesize evaluation findings in ways that make research useful to decision-makers, researchers, and practitioners in the field. Furthermore, as Federal innovation funds and other programs provide financial incentives for using evidence, these repositories will continue to evolve. They can provide useful tools for understanding what interventions are ready for replication, expansion, and greater investment. Information in the repositories also indicates the implementation contexts of programs and strategies evaluated, and areas where more innovation or more evaluation is needed.

Acting on Evidence

The Administration is committed to producing more and better empirical evidence. The ultimate goal, however, is to use evidence to drive better outcomes. In a number of cases, the Administration has taken or is proposing to take evidence-driven approaches to scale, making programs more effective in achieving their goals. For example, based upon a strong body of evidence showing positive long-term effects on children and families, the 2015 Budget proposes to continue the Maternal, Infant, and Early Childhood Home Visiting Program in the Department of Health and Human Services and expand the availability of voluntary home visiting programs to reach additional families in need. The Administration is also investing in the Jobs-Plus program in the Department of Housing and Urban Development, because its combination of job training and financial incentives has been shown to boost annual incomes by \$1,300, on average. And the Administration is proposing to provide those Unemployment Insurance beneficiaries most at risk of exhausting their benefits, as well as all recently separated service members, with reemployment and eligibility assessments and reemployment services, based on evidence that these services are effective in getting UI recipients back to work faster and in jobs with higher wages.

A particularly successful example of evidence-based policymaking is in the area of reducing homelessness. Although chronic homelessness was long considered an intractable problem, a broad body of research (including rigorous evaluations) has demonstrated that permanent supportive housing is effective at reducing chronic homelessness and is more effective than traditional approaches, such as transitional housing. By investing heavily in evidence-based approaches, the Administration has made significant progress toward the goal of ending homelessness among veterans, reducing the total number of homeless veterans by almost 18,000 since 2009. The Budget proposes to continue investments in supportive housing, keeping the Nation on track to meet the President's goal of changing veterans' homelessness by 2015.

Creating more of these success stories will require building more evidence of what works, but also more consistently acting on the evidence available. Part of doing both is to increase demand for data and evidence in Federal decision-making processes. One piece of this is the process of setting strategic objectives and high-priority performance goals then measuring progress towards meeting them, as described in Chapter 6, "Delivering A High-Performance Government," in this volume. The Administration's goal-setting and performance measurement process is enhancing the demand for reliable data, its analysis, and complementary evaluations, as leaders running frequent data-driven reviews to achieve progress on ambitious goals search for increasingly effective and efficient practices to speed progress toward the goals they have set. But more can be done.

Often the focus is on producing better evidence, but not on making that evidence useful for busy, non-technical decision-makers. Some policy areas lack rich evidence, but in areas with rich evidence decision-makers are not able to sort through the myriad of evaluation reports and analyses, especially when results point in different directions. There is a tremendous need for credible, systematic, and user-friendly analyses of which interventions have a high return and which ones do not. At the Federal level, work described above on common evidence standards and improving "what works" repositories, such as the Department of Education's *What Works Clearinghouse*, the Department of Justice's *CrimeSolutions.gov*, Substance Abuse and Mental Health Services Administration's *National Registry of Evidenced-based Programs and Practices* (NREPP), and the Department of Labor's new Clearinghouse of Labor Evaluation and Research (CLEAR) are helpful steps towards making evidence more useful for decision-makers.

State, local, and tribal governments face a similar need to prioritize programs that achieve the best results. One particularly interesting model (that has played a role in shaping state legislative decisions) is the Washington State Institute for Public Policy (WSIPP). The Institute provides a good example of how a centralized evaluation and research entity can conduct systematic reviews of existing evaluation research to identify policies, practices, and strategies that are most likely to give taxpayers a return on their investment. It was created by the Washington State legislature to carry out practical, non-partisan research—at legislative direction—of importance to Washington State. The Institute has its own policy analysts and economists, specialists from universities, and consultants with whom it engages to conduct policy analysis. It conducts a systematic review of evidence and has a methodology for comparing the relative return-on-investment of alternative interventions. The Institute presents the results of its analysis in a straightforward, user-friendly manner that is accessible to politicians, policy-makers, and the public. Examples of the Institute's assessment of the evidence of options to improve statewide outcomes in a variety of areas, including child maltreatment, crime, and education can be found [at the Institute's website](#). The Pew-MacArthur Results First initiative has partnered with over a dozen states to implement a benefit-cost model using the WSIPP methodology that helps States invest in evidence-based policies and programs, demonstrating a growing demand for this type of analysis among State governments.

The President has made it clear that policy decisions should be driven by evidence—evidence about what works and what does not, and evidence that identifies the greatest needs and opportunities to solve great challenges. By instilling a culture of learning into Federal programs, the Administration will build knowledge so that spending decisions more often yield the highest social returns on carefully targeted investments.

8. IMPROVING THE FEDERAL WORKFORCE

A high-performing government depends on an engaged, well-prepared, and well-trained workforce with the right set of skills for the missions of the Government. Today's Federal public servants come from all walks of life and from every corner of America to carry forward that proud American tradition.

The Federal Government is America's largest employer, with more than 2 million civilian workers and 1.4 million active duty military who serve in all 50 States and around the world. Eighty-five percent of Federal employees live and work outside of the Washington, D.C. metropolitan area.

As the President said in a message to Federal employees during the government shutdown in October, "Public service is noble. Public service is important. And by choosing public service, you carry on a proud tradition at the heart of some of this country's greatest and most lasting achievements. In fact, more than 50 current or former Federal employees have received the Nobel Prize for their efforts. It was grants from the Department of Energy that helped businesses unlock new sources of renewable energy, and from the National Science Foundation that helped entrepreneurs like the founders of Google change the world. It is your efforts that will help this country meet the great challenge of our time—rebuilding an economy where all who work hard can get ahead."

The last few years have been challenging for the Federal workforce. Three years of a Federal pay freeze, harmful sequester cuts, a 16-day shutdown of Government, and a challenging political climate have made it increasingly difficult to deliver on agency missions. Yet, Federal employees continue to persevere, continuing to serve the American people with passion, professionalism, and skill.

Whether defending our homeland, restoring confidence in our financial system and supporting a historic economic recovery effort, providing health care to our veterans, conducting diplomacy abroad, providing relief to Hurricane Sandy victims, or searching for cures to the most vexing diseases, we are fortunate to be able to rely upon a skilled workforce committed to public service.

This chapter discusses four broad areas related to the Federal workforce. First it describes trends in Federal employment levels over the past several decades and includes estimates for the FY 2015 Budget. Second, it outlines the shifts in the composition of Federal workers, relative to their private sector counterparts, that have led to a Federal workforce that is now more highly educated, more concentrated in higher paying professions and based in higher cost metropolitan areas. Third, the chapter lays out some of the challenges the Federal workforce has faced such as recent pay freezes, sequester, and furloughs. Finally, it discusses the Administration's recent

accomplishments and future actions for fully capitalizing on the talents in the workforce today and recruiting and developing the capabilities we need to serve the American people most effectively and efficiently.

Trends in Federal Workforce Size

Long-Term Trends

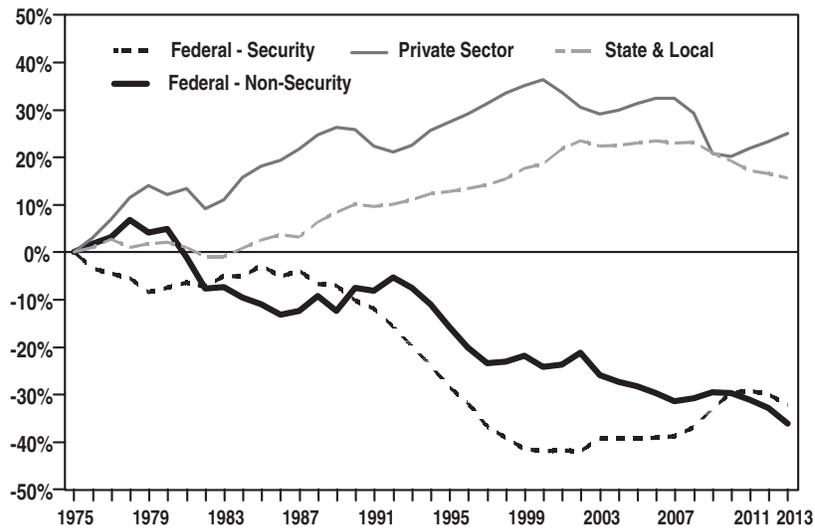
The size of the Federal civilian workforce relative to the country's population has declined dramatically over the last several decades, notwithstanding occasional upticks due, for example, to military conflicts and the administration of the Census. Since the 1960s, the U.S. population increased by 65 percent, the private sector workforce increased 125 percent, and State and local government workforces (excluding education workers) increased 173 percent, while the size of the Federal workforce rose just 9 percent.¹

Chart 8-1 highlights the sharp drops, relative to population, in both the security and non-security parts of the Federal workforce since 1975 (the end of the Vietnam War), comparing it to increases in the private sector and State and local governments (again excluding education). Since 1975, both the security and non-security parts of the Federal workforce have declined more than 30 percent relative to the population, but the patterns in the declines are different. The security part of the Federal workforce (62 percent of the current Federal civilian workforce) fell at the end of the Vietnam War, increased in the early 1980s, and dropped significantly by 40 percent as the Cold War ended. That decline reversed itself after 9/11 and with the onset of the wars in Iraq and Afghanistan. The non-security part of the Federal workforce (currently about 800,000 workers) increased at a rate between that of the private sector and State and local governments for the first five years after the Vietnam War ended. Then it declined by almost 20 percentage points between 1980 and 1986. A little over a third of that decline was reversed between 1986 and 1992. Since 1992 the non-security part of the Federal workforce has declined by about 30 percentage points.

The divergent trends in Chart 8-1 are striking. The evolution of the Federal security workforce largely tracks major foreign policy developments: the end of the Vietnam and Cold Wars could potentially explain the declines in the Federal Security workforce between 1975 and 2000, while 9/11 along with new conflicts in Iraq and Afghanistan help explain the relative rise in the Federal security workforce since the early 2000s.

¹ Teachers, professors, and workers in schools, colleges, and universities make up almost half of the State and local workforce. To make the State and local workforce more comparable to the Federal workforce, those educational workers are excluded from these comparisons.

Chart 8-1. Changes Since 1975 in Employment/Population by Sector



Source: Office of Personnel Management and Bureau of Labor Statistics.

Notes: Security includes the Department of Defense, the Department of Homeland Security, the Department of State, and the Department of Veteran Affairs. Non-Security includes the remainder of the Executive Branch. State & Local excludes education workers.

But the reasons for the decline in the non-security Federal workforce are less clear, especially in light of mission changes, such as significant growth in Social Security, Medicare, and Medicaid, the enactment of the Medicare prescription drug benefit and the Affordable Care Act, dramatic increases in the Federal prison population, and growing Federal roles in financial regulation and education.

Possible explanations for the relative decline of the non-security Federal workforce include: (1) relative increases in efficiency in the Federal sector (compared to the private sector and State and local governments); (2) an increase in the contract workforce (which likely also played a role on the security side); and (3) shifting of some duties of the Federal government to State and local governments. While all of these factors, particularly the increase in the contract workforce, probably contributed to the long-term trends, there is not enough evidence to quantify their contributions or evaluate whether they fully explain the relative decline. Also noteworthy, both an increased reliance on a contract workforce and shifting responsibilities to State and local governments would imply that the Federal workforce has taken on greater management roles over time. This may help explain why – as discussed below – the skill level of the Federal workforce, as measured by educational level, has increased faster than that of the private sector workforce. It is unclear if these increases have been fast enough to keep up with the increased demands on the Federal workforce.

Short-Term Trends

Table 8-2 shows actual Federal civilian full-time equivalent (FTE) levels in the Executive Branch by agency

for 2012 and 2013, with estimates for 2014 and 2015. Estimated employment levels for 2015 result in an estimated 0.7 percent increase compared to prior year estimates. The Budget proposes continued growth in VA for strengthening medical care for veterans. Additional increases are expected at the Department of Justice for enhancements to ensure protection of civil rights as well as to continue efforts to combat cyber threats, at Customs and Border Protection in the Department of Homeland Security to facilitate increased travel and trade at U.S. air, land, and sea ports, and at the Social Security Administration for increasing program integrity and preventing service deterioration.

A few other agencies have staff increases that are narrowly focused and frequently supported by congressionally authorized fees, rather than taxpayer dollars. Increased fee collections support timely commercialization of innovative technologies through faster and higher-quality patent reviews at the Patent and Trade Office of the Department of Commerce, and stronger food safety measures at the Food and Drug Administration of the Department of Health and Human Services. Commitments to continue bringing newly completed and acquired prisons on-line result in maintaining necessary personnel increases at the Department of Justice. Additionally, targeted increases at the Internal Revenue Service for program integrity and taxpayer service efforts will help ensure companies and individuals are paying their fair share of taxes owed.

In contrast, agencies such as the Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), and the General Services Administration (GSA) are reevaluating and restructuring

their workforces to better align with their current mission and to meet continued budget constraints. Decreases at the EPA reflect strong efforts to realign skill sets within the workforce to meet modern day environmental challenges in partnering with the states; NASA will reduce its workforce as the agency seeks to become more efficient in the wake of major changes to the agency's programs, including an increased focus on technology development and cooperation with the space industry; and GSA is working to better match employee skills with job requirements while controlling personnel costs. Additionally, the Transportation Security Administration (TSA) at the Department of Homeland Security is expanding risk based security initiatives and enhancing its use of technology to improve the efficiency of airline passenger screening that will result in fewer TSA officers while sustaining improvements in the passenger service experience.

In recent years, the Executive Branch has had made considerable progress hiring veterans. In November 2009,

President Obama signed Executive Order 13518, establishing the Veterans Employment Initiative. Through this initiative and the strategies used by the Council on Veterans Employment, the Executive Branch continues to benefit from retaining the dedication, leadership, and skills veterans have honed in the fast-paced, dynamic environments of the Army, Marines, Navy, Air Force, and Coast Guard.

In FY 2011, veterans made up 29 percent of the total *new hires* in the Federal Government. By the end of FY 2013, veterans made up approximately 31 percent of new hires, and 54% of new hires at DOD. The total number of *veterans employed* by the Government also increased. In FY 2011, there were 602,775 veterans in the Federal Government, which was 29 percent of the workforce. By the end of FY 2013, the number of veterans had grown to over 607,000, or 30 percent of the Federal workforce, and represented 47% of the workforce at DoD.

Table 8–1. OCCUPATIONS OF FEDERAL AND PRIVATE SECTOR WORKFORCES
(Grouped by Average Private Sector Salary)

Occupational Groups	Percent	
	Federal Workers	Private Sector Workers
Highest Paid Occupations Ranked by Private Sector Salary		
Lawyers and judges	1.8%	0.6%
Engineers	3.9%	1.9%
Scientists and social scientists	4.7%	0.7%
Managers	11.7%	13.6%
Pilots, conductors, and related mechanics	2.1%	0.5%
Doctors, nurses, psychologists, etc.	8.1%	6.1%
Miscellaneous professionals	15.2%	8.5%
Administrators, accountants, HR personnel	6.7%	2.7%
Inspectors	1.4%	0.3%
Total Percentage	55.7%	34.9%
Medium Paid Occupations Ranked by Private Sector Salary		
Sales including real estate, insurance agents	1.2%	6.2%
Other miscellaneous occupations	3.0%	4.3%
Automobile and other mechanics	2.0%	3.1%
Law enforcement and related occupations	9.1%	0.8%
Social workers	1.4%	0.5%
Office workers	2.3%	6.2%
Drivers of trucks and taxis	0.7%	3.2%
Laborers and construction workers	4.0%	9.6%
Clerks and administrative assistants	13.5%	11.4%
Manufacturing	2.6%	7.5%
Total Percentage	39.7%	52.8%
Lowest Paid Occupations Ranked by Private Sector Salary		
Other miscellaneous service workers	2.2%	5.8%
Janitors and housekeepers	1.6%	2.4%
Cooks, bartenders, bakers, and wait staff	0.8%	4.1%
Total Percentage	4.6%	12.3%

Source: 2009–2013 Current Population Survey, Integrated Public Use Microdata Series.

Notes: Federal workers exclude the military and Postal Service, but include all other Federal workers in the Executive, Legislative, and Judicial Branches. However, the vast majority of these employees are civil servants in the Executive Branch. Private sector workers exclude the self-employed. Neither category includes state and local government workers. This analysis is limited to full-time, full-year workers, i.e. those with at least 1,500 annual hours of work.

Attributes of the Federal Workforce

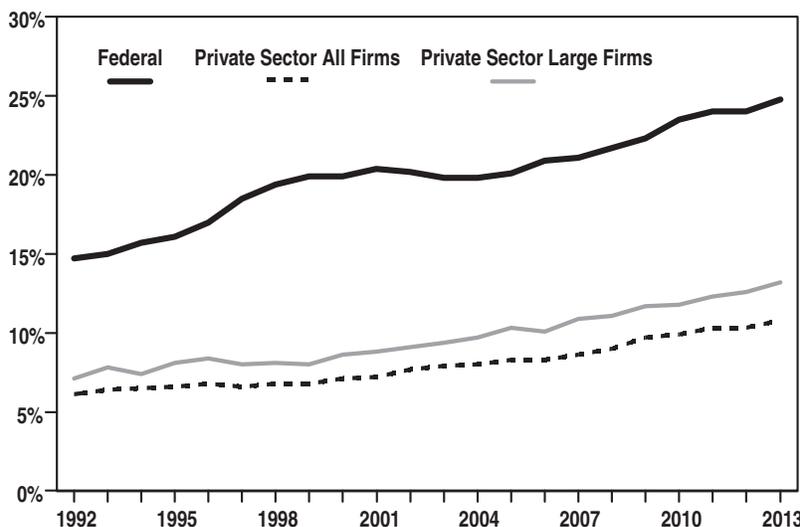
The “Trends in Workforce Size” section described the long-term decline in the size of the Federal workforce relative to the population, the private sector workforce, and State and local government workforces. That relative reduction in size in the face of a Federal mission that has only grown more complex, along with an historical trend of greater reliance on contractors and State and local partners in many areas, implies that Federal jobs are becoming increasingly complex and thus are requiring greater levels of skill. It is equally important to consider how the Federal workforce differs from the private sector and how it has changed over time. As discussed in more detail below, in comparison to private sector jobs, Federal jobs are concentrated in higher paying professions and are based in higher cost metropolitan areas. Also, Federal workers hold more high-level degrees, and the share that has such degrees is growing.

Type of occupation. The last half century has seen significant shifts in the composition of the Federal workforce. Fifty years ago, most white-collar Federal employees performed clerical tasks, such as posting Census figures in ledgers and retrieving taxpayer records from file rooms. Today their jobs are vastly different, requiring advanced skills to serve a knowledge-based economy. Federal employees must manage highly sensitive tasks that require great skill, experience, and judgment. Many need sophisticated management and negotiation skills to effect change, not just across the Federal Government, but also with other levels of government, not-for-profit providers, and for-profit contractors. Using data from the Current Population Survey 2009-2013 of full-time, full-year workers, Table 8-1 breaks all Federal and private

sector jobs into 22 occupation groups and shows that the composition of the Federal and private workforce are very different. Professionals such as doctors, engineers, scientists, statisticians, and lawyers now make up a large and growing portion of the Federal workforce. For example, the Federal STEM workforce has increased by 12 percent from FY2008 to FY2012. More than half (56 percent) of Federal workers work in the nine highest-paying private sector occupation groups such as judges and lawyers, engineers, and scientists, compared to about a third (35 percent) of private sector workers in those same nine highest paying occupation groups. In contrast, 12 percent of private sector workers work in the three lowest-paying occupation groups as cooks, janitors, service workers, etc. Only about 5 percent of Federal workers work in those three lowest-paying occupation groups.

Education level. The size and complexity of much Federal work – whether that work is analyzing security and financial risks, forecasting weather, planning bridges to withstand extreme weather events, conducting research to advance human health and energy efficiency, or advancing science to fuel further economic growth – necessitates a highly educated workforce. Charts 8-2 and 8-3 present trends in educational levels for the Federal and private sector workforces over the past two decades. In 1992 there were only about half as many highly educated Federal workers (masters degrees or above) compared to less educated workers (high school degrees or less); by 2013 there were 50 percent more highly educated Federal workers than less educated workers. The private sector has also experienced increases in educational level, but the increases in highly educated workers have been slower than in the Federal sector. Even in large firms the percentage of highly educated workers is only about half that of the Federal sec-

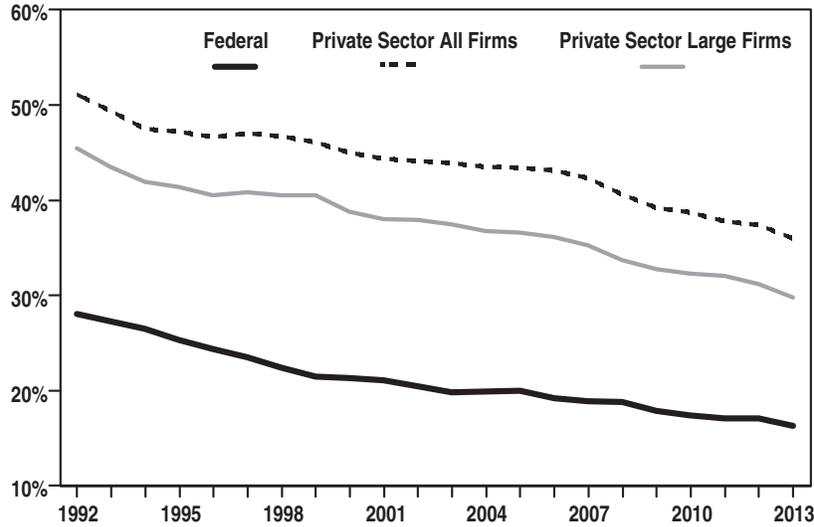
**Chart 8-2. Masters Degree or Above
by Year for Federal and Private Sectors**



Source: 1992-2013 Current Population Survey, Integrated Public Use Microdata Series.

Notes: Federal excludes the military and Postal Service, but includes all other Federal workers. Private Sector excludes the self-employed. Neither category includes State and local government workers. Large firms have at least 1,000 workers. This analysis is limited to full-time, full-year, i.e. those with at least 1,500 annual hours of work.

Chart 8-3. High School Graduate or Less by Year for Federal and Private Sectors



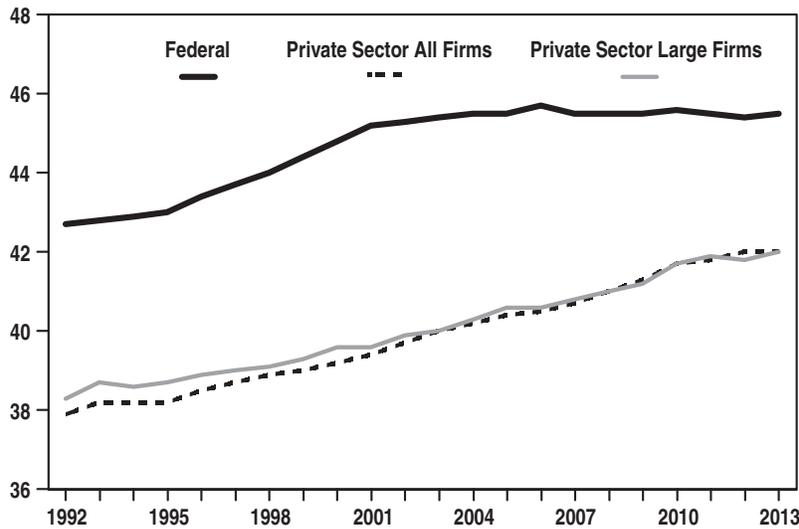
Source: 1992-2013 Current Population Survey, Integrated Public Use Microdata Series.

Notes: Federal excludes the military and Postal Service, but includes all other Federal workers. Private Sector excludes the self-employed. Neither category includes State and local government workers. Large firms have at least 1,000 workers. This analysis is limited to full-time, full-year, i.e. those with at least 1,500 annual hours of work.

tor and the rate of growth over the last decade is only about two thirds as fast. These relative increases in educational level in the Federal workforce may have generated some increases in efficiency for the Federal workforce; it also would suggest that pay should have increased faster in the Federal workforce than in the private sector.

Size of organization and responsibilities. Another important difference between Federal workers and private sector workers is the average size of the organization in which they work. Federal agencies are large and often face challenges of enormous scale, such as distributing benefit payments to over 66 million Social Security and Supplemental Security Income beneficiaries each year,

Chart 8-4. Average Age by Year for Federal and Private Sectors



Source: 1992-2013 Current Population Survey, Integrated Public Use Microdata Series.

Notes: Federal excludes the military and Postal Service, but includes all other Federal workers. Private Sector excludes the self-employed. Neither category includes State and local government workers. Large firms have at least 1,000 workers. This analysis is limited to full-time, full-year, i.e. those with at least 1,500 annual hours of work.

providing medical care to 8.9 million of the Nation's veterans, and managing defense contracts costing billions of dollars. Workers from large firms (those with 1,000 or more employees) are paid about 17 percent more than workers from small firms (those with fewer than 100 employees), even after accounting for occupational type, level of education, and other characteristics. It is reasonable to assume that the size of these organizations and the larger salaries associated with their size is also associated with greater complexity of their work. However, even large private sector firms may not be ideal comparisons to the Federal sector, because the Federal sector is larger and more highly educated (see Charts 10-3 and 10-4).

Demographic characteristics. Federal workers tend to have demographic characteristics associated with higher pay in the private sector. They are more experienced, older, and live in higher cost metropolitan areas. For example, Federal workers, on average, are 45.5 years old – up from 2.7 years from 20 years ago and higher than the average age of 42 years old in the private sector (even in large firms). Chart 10-4 shows the trends in average age in both the Federal and private sectors over the past two decades.

Federal Compensation Trends

Chart 8-5 shows how the Federal pay scale has compared to the private sector wages since 1978. After more than a decade when the percentage increases in annual Federal pay raises did not keep pace with the percentage increase in private sector pay raises, Congress passed the Federal Employees Pay Comparability Act of 1990 (FEPCA) pegging Federal pay raises, as a default, to changes in the Employment Cost Index (ECI). The law gives the President the authority to propose alternative pay adjustments for both base and locality pay. Presidents have regularly supported alternative pay plans

While increases in public and private sector pay remained fairly even during the early 1990s, private sector pay incrementally rose in comparison to the public sector in the mid-1990s. That trend reversed itself in the 2000s when the Federal pay scale rose quite a bit relative to private sector wages. Over the last few years, public sector wages have fallen consistently and significantly relative to the private sector. This reflects a combination of pay freezes, discussed further below, and increases in employee retirement contributions. During 2012, the Middle Class Tax Relief and Job Creation Act increased employee contributions to Federal defined benefit retirement plans, including the Federal Employees' Retirement System, by 2.3 percentage points, effective for individuals joining the Federal workforce after December 31, 2012 who have less than five years of creditable civilian service. The Bipartisan Budget Act of 2013 increased employee contributions for those joining the Federal workforce after December 31, 2013 by an additional 1.3 percentage points. (Neither of these increases in retirement contributions would change the amount of each employee's benefit.) Taking into account both the recent pay freezes and the changes in retirement contributions, earnings for new

Federal employees have fallen 10 percentage points relative to the private sector between 2009 and 2014.

However, in January, the President ended the three-year pay freeze with a one percent pay increase for General Schedule employees in 2014. The 2015 Budget assumes a one percent pay increase in 2015 to help the Government remain competitive in attracting and retaining our Federal workforce. While the Administration recognizes that this proposal is lower than private sector increases and the statutory formula, it strikes a balance between the tight budget constraints we continue to face, while also recognizing the critical role our employees play in our country, from providing relief to those affected by natural disasters, to reducing pollution of the nation's water, air, and lands, to providing care to our nation's veterans. It also recognizes the sacrifices they have already made through prior pay freezes, reductions in awards, and furloughs due to sequestration last year. In addition, the Bipartisan Budget Act of 2013 will bring more stability and predictability to the Federal Government. In particular, the budget deal significantly reduces the negative impact that continued sequestration cuts would have had on the Federal workforce as well as avoiding furloughs and shutdowns

Comparisons of Federal and Private Sector Compensation

Federal worker compensation receives a great deal of attention, in particular, in how it compares to that of private sector workers. Comparisons of the pay and benefits of Federal employees and private sector employees, for example, should account for factors affecting pay, such as differences in skill levels, complexity of work, scope of responsibility, size of the organization, location, experience level, and exposure to personal danger. It also should account for all types of compensation in both the Federal and private sector, including pay and bonuses, health benefits, retirement benefits, flexibility of work schedules, job security, training opportunities, and profit sharing/preferred stock/stock options.

A series of reports done in January 2012 by the Congressional Budget Office (CBO) accounted for some, but not all, of the factors described above. CBO found that prior to the three-year Federal pay freeze, Federal pay, on average, was slightly higher (2.0 percent) than comparable private sector pay. CBO reported that overall Federal sector compensation (including benefits) was, on average, substantially higher, but CBO noted that its findings about comparative compensation relied on far more assumptions and were less definitive than its pay findings. The CBO study also excluded forms of compensation, such as job security, that favor the Federal sector and training opportunities and profit sharing/preferred stock/stock options that favor the private sector. These forms of compensation are substantial and thus could alter the CBO findings.

Perhaps more importantly, the CBO reports emphasized that focusing on averages is misleading, because the Federal/private sector differentials vary dramatically by education and complexity of job. Compensation for highly

educated Federal workers (or those in more complex jobs) is lower than for comparable workers in the private sector, whereas CBO found the opposite for less educated workers. These findings suggest that across-the-board compensation increases or cuts are unlikely to efficiently target Federal resources.

The CBO reports focus on *workers* and ask what employees with the educational backgrounds and other characteristics of Federal workers earn in the private sector. An alternative approach, used by the Federal Salary Council, focuses on *jobs* and asks what the private sector would pay people with the same roles and responsibilities as Federal workers. Unlike CBO, which finds that Federal pay is (on average) roughly in line with private sector pay, the Federal Salary Council finds that in 2013 Federal jobs paid 35 percent less than comparable non-Federal jobs.

There are a number of possible explanations for the discrepancy in the CBO versus the Federal Salary Council findings. First, methodological issues around the classification of Federal and private sector jobs introduce considerable uncertainty into the Federal Salary Council approach. It is significantly easier to compare college graduates in Federal versus private sector jobs than it is to determine what private sector job is most comparable to a given Federal job. Second, the Federal Salary Council findings may suggest that, at least in some jobs, the Federal government has difficulty hiring and retaining workers with the same skills or managerial experience as their counterparts in equivalent private sector jobs. This could be a reason for concern, given the decline in the size of the Federal workforce relative to the population and the increasingly supervisory role it plays (e.g., supervising contractors and State and local governments).

Workforce Challenges

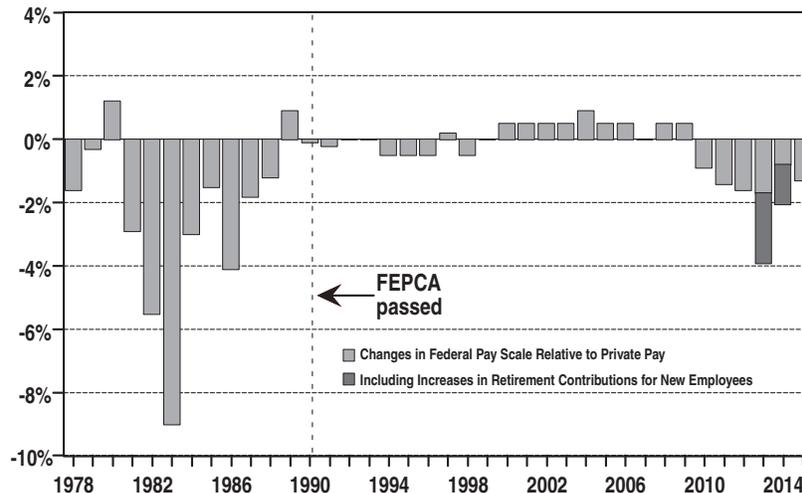
The Federal Government faces unique human capital challenges, including a personnel system that requires further modernization and an aging and retiring workforce. If the Government loses top talent, experience, and institutional memory through retirements, but cannot recruit, retain, and train highly qualified workers, performance suffers. The age distribution and potential for a large number of retiring workers poses a challenge, but it also creates an opportunity to reshape the workforce and to infuse it with new – and in some cases lower-cost – workers excited about Government service and equipped with strong management skills, problem-solving ability, technology skills, and fresh perspectives to tackle problems that Government must address.

Outdated Personnel System

In the past sixty years, the private sector has innovated towards more flexible personnel management systems, but the Federal personnel system has not kept up and remains inflexible and outdated. While recent hiring reform efforts are showing some progress in simplifying hiring, additional reforms are needed to update the hiring, pay, classification, and benefits systems. The General Schedule (GS) pay system has been in effect since 1949. Enacted in 1951, aspects of the current benefit and leave laws are out of date and do not always provide adequate flexibility. An alternative, cost-effective system needs to be developed that will allow the Government to compete for and reward top talent, while rewarding performance, and increase responsibilities of and encourage adequate flexibility to family caregivers, among other factors.

To address issues in the long-term, Federal managers and employees need a modernized personnel system. To

Chart 8-5. Pay Raises for Federal vs. Private Workforce, 1978-2015



Source: Public Laws, Executive Orders, and the Bureau of Labor Statistics

Notes: Federal pay is for civilians and includes base and locality pay. Private pay is measured by the Employee Cost Index wages and salaries, private industry workers series, lagged 15 months.

that end, the Administration proposed to the Joint Select Committee on Deficit Reduction that the Congress establish a Commission on Federal Public Service Reform comprised of Members of Congress, representatives from the President's National Council on Federal Labor-Management Relations, members of the private sector, and academic experts. The purpose of a Congressionally chartered Commission would be to develop recommendations on reforms to modernize Federal personnel policies and practices within fiscal constraints, including – but not limited to – compensation, staff development and mobility, and personnel performance and motivation.

Aging Workforce

The Federal workforce of 2013 is older than Federal workforces of past decades and older than the private sector workforce. The number of Federal retirements is on a steady increase, rising from 95,425 in 2009 to 96,133 in 2010 to 98,731 in 2011, 112,817 in 2012, and 114,697 in 2013. Increases in retirement are expected to continue. Nearly twenty-five percent of the over 376,577 respondents to the 2013 Employee Viewpoint Survey (EVS) expressed an intent to retire during the next five years. Given these demographics, the Federal Government faces a few immediate challenges: preparing for retirements by maximizing knowledge transfer from one generation to the next, succession planning to assure needed leadership and hiring and developing the next generation of the Government workforce to accomplish the varied and challenging missions the Federal Government must deliver.

Developing and Engaging Personnel to Improve Performance

OPM administers the Government-wide Federal Employee Viewpoint Survey (EVS) to gather employee perceptions about whether, and to what extent, conditions characterizing successful organizations are present in their agencies. The 2013 EVS results demonstrated that federal employees continue to be as engaged in their work as prior years. Despite this dedication, however, the EVS responses revealed a significant drop in employee satisfaction and continued declines across the majority of questions. One of the biggest drops was whether employees had sufficient resources needed to get their jobs done. This drop contributed to fewer employees recommending their organizations as good places to work. Any employer seeing this meaningful level of decline would be very concerned. The EVS results serve as an important warning about the long-term consequences of pay freezes, sequestration, and budget uncertainty.

One well-documented challenge in any organization is managing a workforce so it is engaged, innovative, and committed to continuous improvement, while at the same time dealing with poor performers who fail to improve as needed or are ill suited to their current positions. Federal employees are generally positive about the importance of their work and express a high readiness to put in extra effort to accomplish the goals of their agencies. Results from the 2013 EVS indicate that nearly 96 percent of respondents answer positively to the statement “When

needed I am willing to put in the extra effort to get the job done.” However in contrast, the percent of employees government-wide who “feel encouraged to come up with new and better ways of doing things” was only 56 percent. The EVS Employee Engagement Index is an important tool OPM has developed to measure the conditions likely to lead to employee engagement. The 2013 EVS results reflected a slight government-wide decline in each of the three subfactors (Leaders Lead, Supervisor/Employee Relationships, and Intrinsic Work Experiences) that comprise the index. Engaging agency leaders and managers to make improvements in these areas will be a top priority of the President's Second Term Management Agenda.

Budgetary Constraints

The last several years have been challenging for the Federal workforce. In late 2010, as one of several steps the Administration took to put the Nation on a sustainable fiscal path, the President proposed and Congress enacted a two-year freeze on across-the-board pay adjustments for civilian Federal employees, saving \$60 billion over 10 years, and the pay freeze was extended an additional year in 2013 by Congress. The President also issued a memorandum directing agencies to freeze pay schedules and forgo general pay increases for civilian Federal employees in administratively determined pay systems. Additionally, on his first day in office, the President froze salaries for all senior political appointees at the White House, and in 2010, the President eliminated bonuses for all political appointees across the Administration. The Office of Personnel Management (OPM) and the Office of Management and Budget (OMB) directed agencies to limit individual performance awards for almost all employees starting in fiscal years 2011 and 2012, and have continued to place limits through 2014.

In 2013, the Federal workforce endured the third year of a pay freeze; sequestration which in many agencies resulted in hiring freezes, cuts in training funds, unpaid furloughs; and a 16-day government shutdown. Due to sequestration cuts in FY 2013, roughly three-quarters of a million Federal employees were furloughed, and these furloughs resulted in over \$1 billion in lost salary. Agencies reduced their investments in training, including in technical, soft skills, and leadership topic areas to stave off deeper reductions in force and/or furloughs. In fact, seven percent fewer of federal employees reported that their training needs were assessed in 2013 than in 2011, although that rate had held steady since 2006. These decisions generated the short-term savings needed to meet sequestration levels, but could have a long-term impact on the Federal government's ability to meet its mission objectives and to deliver services to the American people.

In addition, the 16-day shutdown significantly impacted the Federal government's role as an employer. Job stability and a sense of mission have typically been advantages of working in the Federal sector, but increases in political acrimony may be leading to a deterioration of those advantages. During the shutdown, hundreds of thousands of Federal employees did not receive their full paychecks, including many employees that were legally

required to work during the lapse. While all Federal employees ultimately have been compensated for the period of the shutdown, the burden of delayed paychecks on Federal workers and their families was significant and harmful. The President noted in an open letter to federal employees shortly after the end of the shutdown, “You should never have been treated this way... ..The public service you perform – the role you play in the life of our country – it is important. It matters.” We are hopeful that the recent budget deal will remove the uncertainty that the American people, including Federal employees, have endured in the form of shutdowns and furloughs.

Looking forward, tight discretionary caps for 2015 and the resumption of sequestration funding levels in 2016 will make it increasingly challenging for the Federal government to keep pace with private sector, especially in hard to recruit fields, both in terms of pay and in areas like training. This is one of many reasons that the Budget proposes to increase discretionary funding levels while fully offsetting the cost with other spending and tax reforms.

Addressing the Challenges

The Administration is committed to further accelerating its employee performance and human capital management and these initiatives are a core component of the President’s Management Agenda, as discussed in the Creating a 21st Century Government Chapter of the main *Budget* volume. Multiple efforts are underway, including: building a workforce with the skills necessary to meet agency missions, developing and using personnel analytics to drive decision making, new programs to infuse talent into agencies, heightened attention to a diverse and inclusive workforce, continued focus on the Senior Executive Service (SES) performance appraisal system, and strengthened labor-management partnerships.

Mission Focused and Data Driven Personnel Management

The Administration is committed to strengthening Federal agencies’ capacity to analyze human resources data to address workplace problems, improve productivity, and cut costs. OPM, in conjunction with OMB, is implementing several key initiatives that will lead to better evaluation and management of Federal employees. These efforts include using the EVS as a diagnostic tool to guide management of our federal workers, expanding implementation of our successful data-driven HRStat review sessions, greater alignment between human capital and mission performance, and quarterly updates of key HR performance indicators on Performance.gov.

As discussed earlier, OPM’s EVS is a valuable management tool that helps agencies identify areas of strength and weakness and informs the implementation of targeted action plans to help improve employee engagement and agency performance. Notably, OPM has worked with agencies in recent years to increase the number of office-level components within agencies for which office-specific results are available. Whereas only 1,687 components received results in 2011, 12,550 offices received results in

2013. The increased response and reporting granularity enables agencies to identify areas of strength, offering possible models for others, and areas of weakness needing attention. Agencies across Government are using EVS data to develop and implement targeted, mission-driven action plans to address identified challenges.

In 2012, CHCO level agencies began piloting HRstat (Human Resources Statistics) reviews. These quarterly data-driven reviews, which are led by the agency CHCOs in collaboration with the Performance Improvement Officer (PIO), focus on agency specific human capital performance and key human resources management metrics that drive agency performance and align with mission accomplishment. Agencies have the flexibility to focus on areas critical to their mission and use metrics to understand issues such as performance management, succession planning, recruitment timeliness, and strategic workforce planning. The HRstat reviews are intended to enable quick course correction, if needed, to help ensure progress is being made on key human resources issues. For example, through HRstat, the Treasury Department matched up different bureaus as partners to collaborate on veterans hiring and in one year more than doubled the rate of new veteran hires. In 2014, the final eight CHCO agencies will complete the HRstat pilot with government-wide implementation occurring in 2015.

In addition, *Performance.gov* provides agencies and the public a window on key human resources data – including Government-wide and agency specific hiring times, applicant and manager satisfaction, employee engagement and retention, and hiring rates from diverse candidate pools.

The Administration also continues to centralize existing personnel data and explore opportunities to use them to improve management. Government-wide centralization helps eliminate redundant information collections, work processes, and generation of reports. In response to Executive Order 13583, OPM developed a Human Capital Report consolidation strategy in 2012. A key component was exploration of which annual reports could be replaced by a centralized and automated mechanism for continuous monitoring. By the end of 2013, more than ten administrative reports that agencies were previously required to produce were eliminated. The Budget supports continued exploration of which personnel data can be leveraged centrally to assist agencies in the management of their workforces.

Creating a Culture of Excellence and Engagement to Enable Higher Performance

Leadership, organizational culture, and employee engagement are critical factors in the success of private and public institutions. While employee engagement is linked to everything from higher earnings per share, to lower workplace accidents and turnover, and overall high performance in the private sector², the Administration’s focus on employee engagement and mission performance are crucial ingredients to supporting a Culture

² Heskett, J. L., T. O. Jones, G. W. Loveman, W. Earl Sasser, and L. A. Schlesinger. “Putting the Service-Profit Chain to Work.” *Harvard Business Review* 72, no. 2 (March-April 1994): 164-174; Heskett, J., W. E. Sasser Jr., and L. Schlesinger. *The Service Profit Chain*. N.Y.: Free Press, 1997

Table 8–2. FEDERAL CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH
(Civilian employment as measured by full-time equivalents (FTE) in thousands, excluding the Postal Service)

Agency	Actual		Estimate		Change: 2014 to 2015	
	2012	2013	2014	2015	FTE	Percent
Cabinet agencies:						
Agriculture	91.7	88.0	90.2	90.8	0.6	0.7%
Commerce	39.9	39.9	42.6	45.1	2.5	5.9%
Defense	765.2	738.3	755.4	749.1	-6.3	-0.8%
Education	4.3	4.1	4.1	4.1	0.0	0.0%
Energy	15.7	15.3	15.7	15.9	0.2	1.3%
Health and Human Services	69.3	70.1	72.5	74.6	2.1	2.9%
Homeland Security	184.0	183.7	190.1	189.8	-0.3	-0.2%
Housing and Urban Development	9.3	8.7	8.7	8.9	0.2	2.3%
Interior	70.0	67.3	69.2	69.9	0.7	1.0%
Justice	115.1	114.8	116.8	117.4	0.6	0.5%
Labor	17.2	17.2	17.2	17.8	0.6	3.5%
State	33.0	33.2	33.3	33.3	0.0	0.0%
Transportation	56.9	55.9	55.9	56.8	0.9	1.6%
Treasury	106.3	102.3	101.4	108.8	7.4	7.3%
Veterans Affairs	301.4	312.8	319.2	321.4	2.2	0.7%
Other agencies—excluding Postal Service:						
Broadcasting Board of Governors	1.9	1.8	1.8	1.8	0.0	0.0%
Corps of Engineers—Civil Works	23.1	22.4	22.7	22.5	-0.2	-0.9%
Environmental Protection Agency	17.0	15.8	15.6	15.4	-0.2	-1.3%
Equal Employment Opportunity Commission	2.3	2.1	2.3	2.3	0.0	0.0%
Federal Deposit Insurance Corporation	8.1	7.7	7.3	7.2	-0.1	-1.4%
General Services Administration	12.5	11.9	12.5	12.1	-0.4	-3.2%
International Assistance Programs	5.6	5.4	5.5	5.6	0.1	1.8%
National Aeronautics and Space Admin	18.1	17.9	17.9	17.6	-0.3	-1.7%
National Archives and Records Administration	3.2	3.0	3.0	3.0	0.0	0.0%
National Labor Relations Board	1.6	1.6	1.6	1.6	0.0	0.0%
National Science Foundation	1.4	1.4	1.4	1.4	0.0	0.0%
Nuclear Regulatory Commission	3.8	3.7	3.8	3.9	0.1	2.6%
Office of Personnel Management	5.3	5.3	5.4	5.4	0.0	0.0%
Railroad Retirement Board	0.9	0.9	0.9	0.9	0.0	0.0%
Securities and Exchange Commission	3.8	4.0	4.2	4.7	0.5	11.9%
Small Business Administration	3.4	3.9	3.3	3.3	0.0	0.0%
Smithsonian Institution	5.0	5.1	5.3	5.5	0.2	3.8%
Social Security Administration	64.7	62.5	62.2	64.1	1.9	3.1%
Tennessee Valley Authority	12.8	12.6	12.7	12.9	0.2	1.6%
All other small agencies	16.9	17.4	18.3	19.1	0.8	4.4%
Total, Executive Branch civilian employment* ...	2,090.7	2,058.0	2,100.0	2,114.0	14.0	0.7%

* Totals may not add due to rounding.

of Excellence that can improve all federal services to the people of our nation, and is an important component of the Management Agenda.

In 2014, the Administration will use EVS data to create an engagement dashboard for use by agency Chief Operating Officers and supervisor alike. When coupled with agency mission performance data, this information will provide actionable insights to target areas where improvement is needed the most. OPM will also support these areas of focus with increased cross-government attention on employee leadership and skill development. In 2014, it will begin a review of training and development resources, with a multi-year goal of ensuring they are consistently ex-

cellent and easily accessible government-wide. It will also accelerate the testing and scaling of tools that allow managers to tap into skills from a wider range of people within and across agencies and allow virtual teams to surge onto new projects, discrete initiatives, and crises. There are also effective tools available for managers and supervisors to address employee performance challenges. OPM offers periodic classroom training sessions; on-line training on HR University; and an OPM desk guide for supervisors to assist them in addressing and resolving poor performance of employees they supervise. As capabilities are enhanced and credibility is built, these efforts will incorporate continuous

Table 8–3. TOTAL FEDERAL EMPLOYMENT
(As measured by Full-Time Equivalents)

Description	2013 Actual	2014		2015		Change: 2014 to 2015	
		Estimate	Estimate	Estimate	FTE	Percent	
Executive Branch Civilian:							
All Agencies, Excluding Postal Service	2,057,992	2,100,023	2,114,037	14,014	0.7%		
Postal Service ¹	575,876	561,665	559,265	-2,400	-0.4%		
Subtotal, Executive Branch Civilian	2,633,868	2,661,688	2,673,302	11,614	0.4%		
Executive Branch Uniformed Military:							
Department of Defense ²	1,451,059	1,408,942	³ 1,316,710	-92,232	-6.5%		
Department of Homeland Security (USCG)	41,992	42,334	41,973	-361	-0.9%		
Commissioned Corps (DOC, EPA, HHS)	7,058	7,124	7,124	0	0.0%		
Subtotal, Uniformed Military	1,500,109	1,458,400	1,365,807	-92,593	-6.3%		
Subtotal, Executive Branch	4,133,977	4,120,088	4,039,109	-80,979	-2.0%		
Legislative Branch ⁴	29,375	33,698	33,714	16	0.0%		
Judicial Branch	33,480	32,740	33,013	273	0.8%		
Grand total	4,196,832	4,186,526	4,105,836	-80,690	-1.9%		

¹ Includes Postal Rate Commission.

² Includes activated Guard and Reserve members on active duty. Does not include Full-Time Support (Active Guard & Reserve (AGRs)) paid from Reserve Component Appropriations.

³ FY 2015 excludes Overseas Contingency Operations (OCO) funded activated Guard and Reserve members on active duty and OCO funded non-enduring strength of 12,285 for Army and 3,469 for the Marine Corps.

⁴ FTE data not available for the Senate (positions filled were used).

improvement in learning and development opportunities and tools available to Federal managers and employees.

Also, as part of the Government Performance and Results Act implementation, agencies are aligning strategic human capital planning, with mission planning – specifically strategic and performance plans.

Building a World-Class Federal Management Team Starting with Enhancements to the Senior Executive Service

Drawing from leading practices, the Administration is committed to investing in our civil service leadership by expanding on the strong experience and skills base across the Federal Executive Corps. The SES hiring process relies extensively on lengthy written qualifications statements and a centralized qualifications certification process which can impact our ability to successfully attract a broad sector of top talent. In 2014, we will examine the SES hiring process to identify efficiencies and to ensure we have effective processes for hiring the best executive talent. We will also build a stronger SES onboarding program so our leaders can more effectively transition into organizations, hit the ground running, and understand the high standards that are expected of them from the beginning. The Management Agenda continues the Administration's commitment to expanding management development opportunities for SES and SES candidates by linking and coordinating existing cross-agency and cross-sector leadership initiatives. Also in 2014, and continuing in 2015, OPM will strengthen the SES-wide leadership and engagement training curriculum – including an emphasis on diversity and the changing needs of the 21st century workforce.

Enabling Agencies to Hire the Best Talent from All Segments of Society

The Administration is committed to working with labor groups to improve hiring outcomes by exploring flexible approaches to recruit and retain individuals with high-demand talents and skills. As part of the Management Agenda, the Administration will launch demonstration projects in 2015 to identify promising practices in recruiting, hiring, onboarding, and deploying talent across agencies. The goal of these projects will be reducing skills gaps, increasing diversity, and improving organizational outcomes.

Family Friendly Workplace Policies

A growing number of working Americans – both men and women – struggle to balance the needs of their families with the responsibilities of their jobs. Leading companies in the private sector are working to develop new tools to redesign their workplaces to provide greater flexibility to workers. The Federal government should be a model employer and has already aggressively increased the use of telework and other policies to promote family-friendly policies.

The 2012 EVS indicated that teleworkers (81 percent) are more likely than non-teleworkers (79 percent) to know what is expected of them on the job, more likely to feel empowered (50 percent versus 41 percent), and more likely (73 percent compared to 65 percent of non-teleworkers) to be satisfied with their jobs. Finally, employees who telework are more likely to want to stay with their agencies (71 percent compared to 66 percent of non-teleworkers) and to recommend their agencies to others (72 percent compared to 63 percent of non-teleworkers). As documented by OPM's 2013 report on the

Table 8–4. PERSONNEL COMPENSATION AND BENEFITS
(In millions of dollars)

Description	2013 Actual	2014 Estimate	2015 Estimate	Change: 2014 to 2015	
				Dollars	Percent
Civilian Personnel Costs:					
Executive Branch (excluding Postal Service):					
Direct compensation	171,008	179,654	183,523	3,869	2.2%
Personnel Benefits	68,234	73,893	75,925	2,032	2.7%
Subtotal	239,242	253,547	259,448	5,901	2.3%
Postal Service:					
Direct compensation	35,711	34,631	34,261	–370	–1.1%
Personnel benefits	17,691	24,994	27,896	2,902	11.6%
Subtotal	53,402	59,625	62,157	2,532	4.2%
Legislative Branch: ¹					
Direct compensation	2,017	2,045	2,105	60	2.9%
Personnel benefits	627	643	658	15	2.3%
Subtotal	2,644	2,688	2,763	75	2.8%
Judicial Branch:					
Direct compensation	3,070	3,257	3,367	110	3.4%
Personnel benefits	1,080	1,096	1,135	39	3.6%
Subtotal	4,150	4,353	4,502	149	3.4%
Total, Civilian Personnel Costs	299,438	320,213	328,870	8,657	2.7%
Military personnel costs:					
Department of Defense					
Direct compensation	98,927	98,283	93,250	–5,033	–5.1%
Personnel benefits	48,155	46,566	43,698	–2,868	–6.2%
Subtotal	147,082	144,849	136,948	–7,901	–5.5%
All other executive branch, uniformed personnel:					
Direct compensation	3,266	3,231	3,197	–34	–1.1%
Personnel benefits	729	676	640	–36	–5.3%
Subtotal	3,995	3,907	3,837	–70	–1.8%
Total, Military Personnel Costs ²	151,077	148,756	140,785	–7,971	–5.4%
Grand total, personnel costs	450,515	468,969	469,655	686	0.1%
ADDENDUM					
Former Civilian Personnel:					
Retired pay for former personnel					
Government payment for Annuity:	79,234	81,788	84,546	2,758	3.4%
Employee health benefits	10,964	11,071	11,459	388	3.5%
Employee life insurance	46	49	50	1	2.0%
Former Military personnel:					
Retired pay for former personnel	54,668	55,682	57,011	1,329	2.4%
Military annuitants health benefits	8,654	9,263	9,821	558	6.0%

¹ Excludes members and officers of the Senate.

² Amounts in this table for military compensation reflect direct pay and benefits for all service members, including active duty, guard, and reserve members.

status of telework, the percentage of eligible Federal employees who participated in routine telework grew to 21 percent as of September 2012, compared to 10 percent during calendar year 2009. The number of employees teleworking also continued to increase, from 168,558 in 2011 to 209,192 in 2012. Equally important, the number of employees deemed eligible to telework increased by nearly 50 percent from 2011 to 2012, from 684,589 employees to 1,020,034 employees. However, there is still more work to be done in breaking down barriers to the effective use of telework.

The Federal Government has also made progress towards pay equality. Pay differentials by gender, after accounting for education and occupation, tend to be about half as small in the Federal sector as in the private sector.

Closing Skills Gaps in the Workforce

The demands of the workplace necessitate new and agile skill sets in the Federal workforce. OPM's mission is to ensure that the Federal Government recruits, retains, and honors the talent agencies require to serve the American people. In 2011, OPM partnered with the Chief

Human Capital Officers (CHCO) Council to take on the challenge of closing skills gaps across the Government. This initiative responds to the President's Cross-Agency Priority Goal to close skills gaps, as well as GAO's designation of human capital as a Government-wide high risk. The Department of Defense joined OPM in chairing an inter-agency workgroup that designed a sustainable strategic workforce planning method to identify and close skills gaps in mission-critical occupations. Based on rigorous data analysis, the workgroup identified the following mission-critical occupations for gap closure: IT-Cybersecurity Specialists, Acquisition Specialists, Economists, Human Resources Specialists, and Auditors. In addition, the workgroup identified STEM (science, technology, engineering, and mathematics) as a sixth functional area covering multiple occupations, which requires sustained strategic attention across Government.

To close skills gaps in these areas, OPM designated sub-goal leaders from agencies whose missions critically depend on these occupations. Together with these sub-goal leaders, OPM is developing and executing strategies to close skills gaps in these occupations. The sub-goal leaders meet quarterly with the OPM Director to apprise her of their progress, including by providing updated metrics that will be reported on Performance.gov.

OPM will continue to work with the 2012-2013 Cross Agency Priority Goal sub-goal leaders in this area to close skill gaps and implement strategies in other mission-critical occupations. In Cybersecurity, awareness has been expanded about Federal Cybersecurity work and job opportunities. During 2013, the community conducted outreach for Cybersecurity talent through a new venue that reached over 1,600 participants involved in U.S. Cyber Challenges and Competitions. In the STEM functional area, a specific Pathways Program was developed for attracting STEM applicants for the Presidential Management Fellows opportunity. The new PMF-STEM Pathways track is being piloted during FY14. The Acquisition area has begun to increase efficiencies in training, development, and management of the workforce by requiring civilian agency use of an integrated acquisition career management system. Interagency workgroups are exploring possible pilots to test special hiring and compensation authorities for several occupations, including Economist, STEM, and Cybersecurity. OPM is assisting the Auditor occupational area in studying what changes are needed to the classification and qualification requirements for the talent brought into that workforce.

Individual agencies are also identifying and targeting critical skills gaps as a priority, and are piloting innovative approaches to competency gap closure. OPM is helping agencies share promising practices and lessons learned from these pilot projects, and will drive replication of best practices upon completion of the pilots.

Successful skills gaps closure is particularly dependent on a strong HR workforce who can provide strategies, programs and tools that help occupational leaders design and implement skills gaps closure efforts. For this reason, OPM has been focusing heavily on this workforce and designated HR Skills Gaps as an Agency Priority Goal.

One of the ways OPM is addressing skills gaps among human resources professionals is through HR University. Developed in 2011 by the CHCO Council, HR University provides an excellent foundation for human resources professionals to receive training to help them become more effective. HR University is a source of centralized training that takes courses and resources Federal agencies have already developed and provides a platform for cross-agency sharing. HR University realizes savings through the sharing of resources (agencies no longer need to independently develop courses that already exist) and economies of scale. In addition, HR University ensures that courses meet OPM's high standards by vetting each course through a very rigorous quality review.

In partnership with the CHCO Council, OPM will continue to expand HR University's offerings. This effort may include more partnerships with colleges and universities, development of HR certifications, accreditation of courses, greater use of social media, website enhancements, and more courses on key topics that will close identified skill and competency gaps in the human resources field. OPM set a Priority Goal to have 80% of the human resources workforce (GS-201s/203s) enrolled on HR University by September 30, 2014.

Developing an Agile Workforce

To maximize effectiveness and potential, the Federal Government must continue to prepare its talent for challenges on the horizon. New cost-effective programs are being implemented to develop current employees, foster collaboration with innovators from the private sector, and enhance institutional knowledge transfer. For example, OPM is developing a phased retirement program that provides employees who once had a financial incentive to retire fully, to work part time while mentoring and training new employees. These efforts are essential for developing a nimble, efficient 21st Century workforce that can help ensure agencies achieve their important missions under a tightening fiscal climate.

Informing Our Work with a Diversity of Experiences

A rich diversity of experiences and talents inform the abilities of federal applicants and everyday work of federal employees. Opportunities exist both in employee hiring and throughout employment experiences to leverage this diversity.

In recent years, OPM has been focusing on improving the way agencies use federal applicant and applicant flow data to improve the hiring process. In 2014, OPM will increase the accessibility and use of this data by hiring managers, so they can determine whether outreach, recruitment, and hiring strategies have been successful in attracting and retaining a workforce that reflects the diversity of our country and the many talents of its people.

Leveraging the diversity of our workforce also requires that we measure and improve the extent to which diversity and inclusion are supported in work units. To that end, and mirroring the aforementioned efforts to measure and target improvements in employee engagement, OPM

developed a 20-question index of the EVS that represents each work unit's support of diversity and inclusion and is providing feedback to executive leadership, program managers, and supervisors on how well work units are leveraging the unique experiences, perspectives, and viewpoints of their employees to improve program delivery.

Importantly, the Budget does not just support increased availability of this data. Fostering inclusive work environments and realizing the full potential of our workforce's diversity requires agencies to employ effective management practices. To that end, OPM recently developed a set of change management tools to supplement the inclusion index. The index and tools, referred to jointly as the New Inclusion Quotient Plus, arm agencies with instruments and practices necessary to support diversity and inclusion more fully. In addition, OPM will continue to promote proven practices in using all workforce data to inform everyday support diversity and inclusion in the workplace.

Strengthening Labor-Management Relations

The Administration continues to fulfill the robust vision laid out in Executive Order 13522, Creating Labor-Management Forums to Improve Delivery of Government Services. This Executive Order created a national Council, which meets regularly to coordinate Government-wide efforts, and nearly 1000 forums around government where agency management and union representatives work collaboratively to improve service delivery to the public. In 2015, Labor-Management Forums will continue to use metrics to track progress.

In recent Council meetings, representatives from both management and labor have presented on their successful efforts to improve employee engagement and satisfaction while at the same time improving performance and productivity at the U.S. Patent and Trademark Office (PTO). Labor representatives from the Patent Office Professional Association and the National Treasury Employees Union joined PTO management representatives in briefing the Council on their enormous successes using pre-decisional

involvement. PTO reorganized around line workers by involving labor representatives in the decision making process before management has determined how to proceed. As a result, PTO reduced the patent application backlog by 31% and the trademark application processing time from 13.4 months to 10 months (while applications continue to increase in number every year).

Through constant engagement with labor representatives, PTO's Global Satisfaction Index score increased from 56% to 82%, from 2006 to 2013. It also has improved in the Partnership for Public Service's Best Places to Work in the Federal Government rankings from #172 to #1 out of 300 agency subcomponents in that same time period. Since the EVS began to include an Engagement Index in 2010, that PTO's score in that area increased from 71% to 82%.

In another case, labor and management representatives at the Federal Aviation Administration (FAA) collaborated to successfully implement a new computer system (ERAM) that replaced a 40-year-old system used at air route traffic control centers nationwide. The representatives attributed the recent success of the project to the governance structure of the work groups which are co-chaired by labor and management. The work groups agree on recommendations and speak with "one voice" to the field. This structure improved overall buy-in of the new system and general workforce engagement which allowed for smoother transitions. The lessons learned with the ERAM project are now being leveraged on other FAA programs to seek similar successes.

The Council will continue to seek ways to spread these labor-management successes to other agencies in 2014 and 2015. By developing training and guidance using these best practices as examples, the Council will continue working to ensure that additional labor-management forums transition into effective partnerships with a focus on improving the productivity and effectiveness of the Federal Government.