

### **Defense Spending Cuts:** The Impact on Economic Activity and Jobs

# Inforum



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### Defense Spending Cuts: The Impact on Economic Activity and Jobs

#### **Executive Summary**

In this report, we use the Inforum Long-Term Interindustry Forecasting Tool (LIFT) model of the U.S. economy to determine the economic and employment impacts of specific alternative scenarios for federal defense spending from 2012 to 2022. The Budget Control Act of 2011 (BCA)<sup>1</sup> established two mechanisms that could result in large cuts to the federal defense budget, compared to previously projected defense spending. The cuts will include reductions in military and civilian personnel, the cancellation of planned procurement of weapons programs and other equipment, and declines in expenditures for operations and maintenance due to the withdrawal from the wars in Iraq and Afghanistan. Over the short term, these reductions will result in losses to domestic production and jobs, heightened because the U.S. economy is currently operating substantially below production potential and full employment.

The basic methodology compares the performance of the U.S. economy under three different federal defense expenditure scenarios specified by the Congressional Budget Office (CBO).<sup>2</sup> The status quo baseline projection assumes that the level of defense expenditures in nominal terms grows with inflation. The first alternative scenario (BCA-1) incorporates the lower expenditure levels stipulated by the hard budget caps of the BCA. The defense spending trajectory in this scenario is roughly equivalent to the Administration's current budget proposal. The second alternative (BCA-2) adds to the cuts under BCA-1 by including the automatic sequestration that was triggered by the failure of the Joint Congressional Committee created by the BCA.<sup>3</sup> The alternative budget trajectories are summarized in Table E-1.

<sup>&</sup>lt;sup>1</sup> <u>Pub.L. 112-25, S. 365</u>, 125 <u>Stat.</u> 239, enacted August 2, 2011.

<sup>&</sup>lt;sup>2</sup> Congressional Budget Office, January 2012 Budget Outlook.

<sup>&</sup>lt;sup>3</sup> BCA includes \$917 billion of cuts in discretionary spending over 10 years through spending caps beginning in fiscal 2012. The failure of the Joint Select Committee on Deficit Reduction set up by the BCA triggers automatic across-the-board cuts ("sequestration") of spending equally split between security and non-security programs from 2013 to 2021.

## Table E-1: U.S. Defense Outlays, Fiscal Year 2012-2022(Billions of dollars)

													Total
	В	udget	Pro	jectio	n								2012-
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
689	700	680	679	687	698	718	729	741	765	785	805	831	8118
			669	671	679	695	704	712	733	749	765	789	7166
			10	16	19	23	25	29	32	36	40	42	272
			10	10	10	25	23	25	52	50	10		_/ _
			636	625	627	642	649	658	679	695	711	734	6656
			33	46	52	53	55	54	54	54	54	55	510
			43	62	71	76	80	83	86	90	94	97	782
ource: Congressional Budget Office, Budget Outlook, January 2012, Table 3,5, pages 74-75													
	2010 689	B 2010 2011 689 700	Budget 2010 2011 2012 689 700 680	Budget Pro 2010 2011 2012 2013 689 700 680 679 669 10 636 33 43	Budget Projectio 2010 2011 2012 2013 2014 689 700 680 679 687 669 671 10 16 636 625 33 46 43 62	Budget Projection 2010 2011 2012 2013 2014 2015 689 700 680 679 687 698 669 671 679 10 16 19 636 625 627 33 46 52 43 62 71 look January 2012 Table 3.5 page	Budget Projection 2010 2011 2012 2013 2014 2015 2016 689 700 680 679 687 698 718 669 671 679 695 10 16 19 23 636 625 627 642 33 46 52 53 43 62 71 76	Budget Projection 2010 2011 2012 2013 2014 2015 2016 2017 689 700 680 679 687 698 718 729 669 671 679 695 704 10 16 19 23 25 636 625 627 642 649 33 46 52 53 55 43 62 71 76 80 look January 2012 Table 3 5 pages 74-75	Budget Projection 2010 2011 2012 2013 2014 2015 2016 2017 2018 689 700 680 679 687 698 718 729 741 669 671 679 695 704 712 10 16 19 23 25 29 636 625 627 642 649 658 33 46 52 53 55 54 43 62 71 76 80 83 Hook January 2012 Table 3 5 pages 74-75	Budget Projection 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 689 700 680 679 687 698 718 729 741 765 669 671 679 695 704 712 733 10 16 19 23 25 29 32 636 625 627 642 649 658 679 33 46 52 53 55 54 54 43 62 71 76 80 83 86 look January 2012 Table 3 5 pages 74-75	Budget Projection 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 689 700 680 679 687 698 718 729 741 765 785 669 671 679 695 704 712 733 749 10 16 19 23 25 29 32 36 636 625 627 642 649 658 679 695 33 46 52 53 55 54 54 54 43 62 71 76 80 83 86 90 look January 2012 Table 3 5 pages 74-75	Budget         Projection           2010         2011         2012         2013         2014         2015         2016         2017         2018         2019         2020         2021           689         700         680         679         687         698         718         729         741         765         785         805           669         671         679         695         704         712         733         749         765           10         16         19         23         25         29         32         36         40           636         625         627         642         649         658         679         695         711           33         46         52         53         55         54         54         54           43         62         71         76         80         83         86         90         94	Budget         Projection           2010         2011         2012         2013         2014         2015         2016         2017         2018         2019         2020         2021         2022           689         700         680         679         687         698         718         729         741         765         785         805         831           669         671         679         695         704         712         733         749         765         789           10         16         19         23         25         29         32         36         40         42           636         625         627         642         649         658         679         695         711         734           33         46         52         53         55         54         54         54         54         55           43         62         71         76         80         83         86         90         94         97

#### **Table E-2: Macroeconomic Summary of Simulation Results**

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

	2012	2013	2014	2015	2016	2018	2020	2022
Real federal defense expenditures	-0.3	-1.4	-2.1	-2.5	-2.9	-3.6	-4.2	-4.6
(percent)	-1.3	-5.9	-8.0	-9.0	-9.5	-10.1	-10.5	-10.6
Real Gross Domestic Product	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
(percent)	-0.1	-0.6	-0.8	-0.7	-0.6	-0.3	-0.2	-0.2
Employment								
Private Sector Employment	-43	-210	-261	-236	-188	-80	-59	-18
(thousands of jobs)	-142	-755	-1010	-878	-611	-148	-15	74
Manufacturing Employment	-4	-20	-34	-33	-28	-14	-12	-11
(thousands of jobs)	-14	-75	-130	-130	-99	-39	-24	-18
Govt Defense Employment	-8	-37	-53	-61	-70	-84	-98	-105
(thousands of jobs)	-35	-152	-201	-222	-229	-236	-241	-243
Total Employment (govt + private)	-51	-247	-314	-297	-258	-164	-157	-123
(thousands of jobs)	-177	-907	-1211	-1100	-841	-385	-257	-169
Unemployment Rate	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0
(percentage points)	0.1	0.5	0.7	0.6	0.4	0.1	0.1	0.0

Alternatives are shown in deviations from status quo baseline, units as noted.

LIFT modeling results were provided at both the industry and the macroeconomic levels. Table E-2 shows summary macroeconomic results for each of the two alternative scenarios from 2012 through 2022. For each concept, the line items indicate the deviation from the baseline in various metrics. In both alternatives, real defense expenditures are reduced progressively from 2012. Compared to the baseline, in the BCA-1 scenario, real defense spending is 2.5 percent lower in 2015, and the reduction is almost twice as large at 4.6 percent by 2022.

In 2014, the reduction in GDP from the baseline registers at 0.2 percent for BCA-1 and 0.8 percent for BCA-2. Differences in employment are also displayed in Table 8. In both scenarios, the peak job loss also occurs in 2014. For BCA-1, we see a loss of 261,000 private sector jobs and 34,000 manufacturing jobs in 2014, compared to the status quo baseline. The corresponding losses for BCA-2 are 1,010,000 total jobs and 130,000 manufacturing jobs in 2014. Adding the reduction of over 200,000 federal civilian and military jobs in 2014, the total job loss given both types of BCA expenditure reductions is over 1.2 million jobs by 2014. The unemployment rate is increased by 0.7 percent, compared to the baseline.

The impact on employment resulting from cuts in defense spending consists of several components:

- 1. Direct federal defense civilian and military jobs.
- 2. Direct job loss at contractor firms from cuts in defense purchases for equipment, supplies and services.
- 3. Indirect job loss at firms that supply defense contractors. Lower expenditures for defense aircraft mean that the material and electronics suppliers to the defense contractors will lose business and, therefore, will reduce employment.
- 4. Indirect job loss from "multiplier" or "induced" effects across the economy. Because reduced government expenditures imply a reduction in the employment of federal workers and workers in supplying sectors, disposable income falls, which, in turn, reduces demand in other industries, particularly consumer sectors.

From the peak job losses of 2014, employment gradually recovers back to the baseline by 2022. This recovery pattern is a typical response to aggregate demand shocks. Especially given current conditions, the initial multiplier effect on employment is particularly large because firms and workers haven't yet had time to adjust to lower demand. However, as the economy adjusts to the shock, the impact of lower spending dissipates over time because spending will be stimulated in other sectors of the economy. Workers laid off because of the initial spending shock will find jobs in other industries. Eventually, the unemployment rate will return to a rate signaling "full" employment.

The Inforum State Employment Modeling System (STEMS) allocates, in a top-down fashion, the industry employment in the LIFT model to each state for 65 industries. For the current project, we also used data supplied via information from the publication *Projected Defense Purchases*:

*Detail by Industry and State: Calendar Years 2010 Through 2016.*<sup>4</sup> Specifically, information on the direct and indirect defense output by industry and by state was used to modify the state-industry matrices of the STEMS model to better determine the location changes of direct and indirect (upstream) job losses resulting from lower defense purchases.

The results of running the alternative simulations of LIFT through the STEMS model are shown in Table E-3, which provides the total change in jobs, compared to the baseline, for the 10 top states ranked by the magnitude of the job change in 2014. California sustains the largest job loss. For the BCA-2 scenario, California loses 148,000 jobs at the peak, relative to the baseline. Following California are Virginia and Texas, which lose 115,000 and 109,000 jobs, respectively. Appendices to this report provide more detailed results including employment changes by state and industry.

Within the overall manufacturing sector, the largest job losses are in the large nondurables sector (food, textiles, chemicals and fuels) and the transport equipment sector. The biggest proportional reductions are within transportation equipment and instruments. In particular, aerospace losses 3.4 percent of its jobs in 2015, and these losses persist as employment is still down 2.3 percent by 2022. Ships and boats are affected similarly, losing 3.3 percent of jobs by 2014 and 1.7 percent of jobs by 2022. The search and navigation equipment industry takes the biggest proportional hit. It shows a maximum loss of 9.3 percent of its employment in 2016 and 8.6 percent in 2022.

<sup>&</sup>lt;sup>4</sup> Economic and Manpower Analysis Division (EMAD), Cost Assessment and Program Evaluation (CAPE) of the Office of the Secretary of Defense (OSD), *Projected Defense Purchases: Detail By Industry and State: Calendar Years 2010 Through 2016*, November 2011.

#### Table E-3: Employment Results by State, Ranked by 2014 Results

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

	٣	2012	2013	2014	2015	2016	2018	2020	2022
California		-6.3	-30.6	-38.6	-35.9	-31.0	-19.1	-17.3	-12.2
		-21.5	-111.5	-148.4	-132.3	-99.9	-43.9	-25.3	-7.3
Virginia		-4.9	-23.5	-29.8	-28.3	-24.8	-16.8	-16.8	-13.5
		-17.2	-86.8	-114.9	-104.3	-80.1	-39.3	-28.7	-22.1
Texas		-4.6	-22.2	-28.2	-26.8	-23.3	-14.9	-14.5	-11.5
		-16.2	-81.9	-109.0	-99.1	-76.1	-35.1	-24.3	-18.2
Florida		-2.4	-11.5	-14.6	-13.9	-12.0	-7.5	-7.3	-5.9
		-8.4	-42.7	-56.6	-51.5	-39.3	-17.2	-11.8	-9.3
New York		-1.8	-8.8	-10.9	-10.1	-8.6	-4.9	-4.3	-2.7
		-6.2	-32.0	-42.1	-37.5	-27.9	-11.1	-5.8	-2.8
Maryland		-1.7	-8.1	-10.4	-10.0	-8.9	-6.0	-6.0	-5.0
		-6.0	-30.1	-40.2	-36.9	-28.8	-14.3	-10.4	-7.4
Georgia		-1.6	-7.8	-10.0	-9.7	-8.7	-6.2	-6.3	-5.4
		-5.8	-29.1	-38.7	-36.0	-28.6	-15.2	-11.7	-10.0
Illinois		-1.5	-7.4	-9.1	-8.4	-7.0	-3.8	-3.4	-2.1
		-5.2	-27.0	-35.4	-31.3	-22.9	-8.1	-4.2	-2.4
Pennsylvania		-1.4	-7.0	-9.0	-8.4	-7.2	-4.3	-3.9	-2.8
		-5.0	-25.8	-34.7	-31.3	-23.5	-9.8	-5.8	-2.8
North Carolina		-1.4	-6.9	-8.8	-8.6	-7.8	-5.7	-5.8	-5.1
		-5.1	-25.9	-34.2	-31.6	-25.3	-14.0	-11.0	-9.3

Alternatives are shown in deviations from status quo baseline in thousands of jobs.

For further information concerning this report, please contact:

Jeffrey Werling Inforum / University of Maryland 4511 Knox Road, Suite 301 College Park, MD 20740 (301) 405-4607 werling@econ.umd.edu http://inforum.umd.edu

### Defense Spending Cuts: The Impact on Economic Activity and Jobs

#### 1. Background

In this report, we use the Inforum Long-Term Interindustry Forecasting Tool (LIFT) model to identify the economic and employment impacts of specific alternative scenarios for defense spending from 2012 to 2022. The analysis is conducted within the context of existing and expected economic conditions and current discussions concerning the reduction of federal budget deficits over the next decade. Specifically, the Budget Control Act of 2011 (BCA)<sup>5</sup> established two mechanisms that could result in large cuts to the baseline defense budget, compared to previously projected defense spending. Such cuts will include reductions in military and civilian personnel, the cancellation of planned procurement of weapons programs and other equipment, and declines in expenditures for operations and maintenance due to the withdrawal from the wars in Iraq and Afghanistan. Over the short term, such reductions will result in lost domestic production and jobs, especially given the fact that the U.S. economy is currently operating substantially below production potential and full employment.

The basic methodology is to establish a baseline projection of the U.S. economy from 2012 to 2025 with the LIFT model. This "status quo" baseline contains trajectories for federal spending in line with Congressional Budget Office (CBO) projections before adjustments are made for the BCA. Next, we use CBO estimates of BCA effects to develop two alternate simulations using LIFT that incorporate different trajectories for defense spending. Compared to the baseline simulation, these alternate scenarios illustrate the economic and employment impacts of lowered defense expenditures. The results are computed at both the industry and macroeconomic levels. Employment impacts by industry are also estimated across states using the Inforum State Employment Modeling System (STEMS).

#### 2. Defense Spending Assumptions

The first mechanism of the BCA, (BCA-1) imposes dollar-value caps on total discretionary federal spending, with some exceptions including the Overseas Contingency Operations (OCO) that cover the operations in Iraq and Afghanistan. The actual distribution of these cuts across different categories of discretionary spending (e.g., defense vs. nondefense) is not specified in the legislation.

In addition, the BCA created a Joint Committee of Congress (the "Super Committee") to identify at least \$1.2 trillion of additional deficit reduction by November 21, 2011. The Super Committee was unable to agree on a deficit reduction package. As a result, as required under the BCA, automatic reductions in discretionary spending (sequestration) will begin on January 1, 2013. Sequestration (BCA-2) will impose automatic across-the-board cuts of \$1.2 trillion over 10 years split equally between defense and nondefense (discretionary and mandatory) spending.

The CBO's January 2012 *Budget Outlook* provides the basis for framing the defense spending assumptions used in the report. In particular, the report uses figures taken from Table 3.5,

<sup>&</sup>lt;sup>5</sup> Pub.L. 112-25, S. 365, 125 Stat. 239, enacted August 2, 2011.

"CBO's Projection of Discretionary Spending Under Selected Policy Alternatives." These pertinent figures are summarized on an outlay basis by Table 1.

In Table 3.5, the CBO provides a hypothetical trajectory for defense outlays assuming that they grow from 2012 levels at the rate of GDP inflation. We assume that this is the status quo baseline projection that would have occurred without the imposition of the BCA-1 and BCA-2. As shown on the first line of Table 1, under "Status Quo," defense outlays would total \$8.1 trillion from fiscal year (FY) 2012 through FY2022.

The CBO also provides a projection for defense outlays assuming that the BCA-1 expenditure caps take effect but that the BCA-2 sequestrations do not occur. The second line of Table 1 contains this forecast of \$7.2 trillion in defense expenditures across FY2012 to FY2022. The third line tracks the difference between the BCA-1 trajectory and the status quo. It displays CBO estimates that these BCA-1 caps will reduce defense expenditures by \$272 billion over 11 years. The recently released Department of Defense (DoD) Future Years Defense Plan (FYDP), which provided spending proposals through FY2017, generally corresponds to this trajectory. In other words, the currently proposed budget of the Pentagon adheres closely to the spending caps established by the BCA-1.

Finally, the CBO's January 2012 "current law" budget projection assumes that both the BCA-1 expenditure caps and the BCA-2 sequestrations occur as specified. This projection is displayed in the fourth line of Table 1. It assumes defense spending totaling \$6.7 trillion from FY2012 to FY2022. By comparing this line to the budget with only BCA-1 caps, we see that automatic sequestration is slated to remove \$510 billion from the budget. Together, the BCA-1 and BCA-2 measures are assumed to cut \$782 billion from defense expenditures from FY2012 to FY2022, compared to the status quo baseline of defense expenditure growth with inflation. We will use this projection for the BCA-2, or "current-law" scenario. Figure 1 displays the three trajectories.

														Total
		В	udget	Pro	jectio	n								2012-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
Status Quo: Increase 2012 Outlays with Inflation	689	700	680	679	687	698	718	729	741	765	785	805	831	8118
CBO Baseline before Automatic Sequestration Effect of BCA1 caps compared to Status Quo				669 10	671 16	679 19	695 23	704 25	712 29	733 32	749 36	765 40	789 42	7166 272
Current Law: CBO Baseline Effect of BCA2 sequestration Effects of BCA1 & BCA2 compared to Status Quo				636 33 43	625 46 62	627 52 71	642 53 76	649 55 80	658 54 83	679 54 86	695 54 90	711 54 94	734 55 97	6656 510 782
Source: Congressional Budget Office, Budget Out	ource: Congressional Budget Office Budget Outlook January 2012 Table 3.5 nages 74-75													

### Table 1: U.S. Defense Outlays, Fiscal Year Basis (Billions of dollars)

## Table 2: U.S. Defense Outlays, Calendar Year Basis – Basic Input to LIFT Model (Billions of dollars)

														Total
	Actua	ıl	Projection											2012-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
Status Quo: Increase 2012 Outlays with Inflation	692	695	680	681	690	703	721	732	747	770	790	812	835	8160
CBO Baseline before Automatic Sequestration			677	670	673	683	697	706	717	737	753	771	793	7878
Effect of BCA1 caps compared to Status Quo			3	12	17	20	24	26	30	33	37	41	42	282
Current Law: CBO Baseline			669	633	626	631	644	651	663	683	699	717	738	7354
Effect of BCA2 sequestration			8	36	48	52	54	55	54	54	54	54	55	524
Effects of BCA1 & BCA2 compared to Status Quo			11	48	64	72	77	81	84	87	91	95	97	806

### Table 3: U.S. Real Defense Outlays, Calendar Year Basis (Billions of 2011 dollars)

														Total
	Actua	ıl	Projection											2012-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
Status Quo: Increase 2012 Outlays with Inflation	708	695	667	657	653	653	656	654	654	660	664	667	672	7258
CBO Baseline before Automatic Sequestration			665	646	637	634	635	631	628	632	633	634	639	7013
Effect of BCA1 caps compared to Status Quo			2	11	16	19	21	23	26	28	31	33	34	245
Current Law: CBO Baseline			657	611	592	586	586	582	581	586	587	589	594	6551
Effect of BCA2 sequestration			8	35	45	49	49	49	47	46	45	45	44	462
Effects of BCA1 & BCA2 compared to Status Quo			11	46	61	67	70	72	73	75	76	78	78	707
* Deflated using baseline GDP deflator.														



Since the LIFT model works on a calendar year basis, the spending assumptions of Table 1 were converted from a fiscal year to a calendar year basis using a simple formula that allocates threequarters of fiscal year spending to the same calendar year and one-quarter of fiscal year spending to the previous calendar year. The resulting calendar year nominal defense expenditures for each scenario are displayed in Table 2. On this basis, the expenditures and expenditure cuts are spread through 2022 and are therefore slightly larger than the comparable fiscal year figures.

In Table 3, we show defense spending converted to real terms, in 2011 dollars, using the baseline GDP price index. This perspective shows a steep initial fall in real expenditures from 2012 to 2014 because of reduced war spending in the status quo baseline. Compared to its level in 2011, baseline real spending is 6 percent lower by 2014. From that point through 2022, real growth in the baseline is negligible.

For each alternative, the BCA-1 and BCA-2 measures force even larger real cuts in 2013 and 2014, and, for the BCA-2 case, in 2015. For CBO's current law projection, real defense spending will be 16 percent lower in 2015 compared to 2011. Once these initial reductions are completed, however, real expenditures are more or less constant through 2022.

#### 3. LIFT Model

The Long-Term Interindustry Forecasting Tool (LIFT) is a unique, 97-sector dynamic general equilibrium representation of the U.S. national economy. It combines an interindustry inputoutput (I-O) formulation with extensive use of regression analysis to employ a "bottom-up" approach to modeling the economy. Thus, the model works like the actual economy, building the macroeconomic totals from details of industry activity, rather than distributing predetermined macroeconomic quantities among industries.

Despite its industry basis, LIFT is a full macroeconomic model, with more than 800 variables determined consistently with the underlying industry detail. This macroeconomic "superstructure" contains key functions for household savings, interest rates, exchange rates, unemployment, taxes, government spending and current account balances. Like dynamic macroeconometric models, this structure is configured to make LIFT exhibit "Keynesian" demand-driven properties over the short run but neoclassical growth characteristics over the longer term. Especially in an economy with substantial slack, monetary and fiscal policies significantly affect the level of output in the short to intermediate term. Over the long term, however, supply forces – available labor, capital and technology – will determine the level of aggregate output, and the I-O structure at the model's core, together with labor productivity and investment equations, tie industry output to the factors of production and technological development. A more detailed description of LIFT is included in Appendix B.

The LIFT model possesses a flexible structure for performing alternative scenarios. Exogenous assumptions can be modified easily, and endogenous variables or equation structures can be altered at the industry level. Particularly relevant to this project is that LIFT contains 25 specific expenditure categories for defense spending as defined by the National Income and Product Accounts (NIPA) Table 3.11. These categories are shown in Appendix A. The quantities for each of these variables are specified exogenously for any given simulation of the LIFT model. Thus, they are the levers we use to impose different assumptions for defense spending on the model.

These detailed defense expenditures are converted to final demand by sector using a "bridge matrix" constructed with data derived from the Bureau of Economic Analysis (BEA) benchmark and annual I-O tables. For instance, defense expenditures on aircraft and missiles are converted mostly to direct final demand of the aerospace industry, though some direct final demand is allocated to sectors such as metal products, search and navigation equipment, and wholesale trade. On the other end of the spectrum, expenditures for other durable equipment are spread across final demand for a number of producing industries.

#### 4. Status Quo Macroeconomic Projection

After imposing the defense expenditure assumptions, the status quo baseline LIFT scenario is otherwise calibrated to Inforum's most recent U.S. economic forecast. The resulting baseline projection, shown in Table 4, reflects an economy slowly recovering from the deep recession of 2008 to 2009. The tepid growth of 1.7 percent in 2011 accelerates only slightly to 2.4 percent in 2012. Recovery quickens from 2013 through 2018, with GDP growing over 3.0 percent in each year. However, the economy remains below potential output until 2018, when the unemployment rate registers 5.3 percent. After 2018, GDP growth is between 2.0 and 2.5 percent.

For the base projection, total nominal defense expenditures are assumed to be equal to the value specified in the first line of Table 2 (adjusted for the difference between the CBO budget accounting and the NIPA accounting; see below). Also for the baseline, the distribution of these expenditures across the NIPA defense categories is set to published history through 2011. Expenditures are then projected in both nominal and real terms through 2016 using figures for broad Department of Defense (DoD) budget categories such as compensation, operations and maintenance, procurement, and research and development, taken from the National Defense Budget Estimates (i.e., *The Green Book*).<sup>6</sup> Military and civilian defense employment is also taken from this source. After 2016, each category is projected according to historical trends.

Table 5 provides the levels of NIPA-based aggregate nominal defense spending for the status quo scenario. The top-line spending figure is slightly different than the corresponding CBO total from Table 2, because it corresponds to the NIPA total defense expenditures, which is used in the LIFT model. Table 5 also indicates the difference in nominal spending for each of the alternative scenarios. As a proportion of baseline spending, the nominal reductions in the BCA-1 scenario start at 1.6 percent in 2013 and reach a maximum of 4.8 percent in 2022. For the BCA-2 scenario, defense expenditures are reduced by 6.7 percent in 2013, reach 10.6 percent by 2016 and increase to 11.1 percent in 2022.

Below the aggregate figures in Table 5 is the breakdown of those expenditures by broad category of spending (compensation, equipment and durables, etc.) and employment (federal defense civilian and military). A more granular breakdown of these expenditures is provided in Appendix A and in the detailed Excel tables accompanying this report. Each item is reduced by the same proportion in nominal terms. For example, purchases of equipment and durables make up around 18 percent of spending and, therefore, experience 18 percent of the cuts. Personnel compensation, both military and civilian, makes up from 40 to 45 percent of expenditures

<sup>&</sup>lt;sup>6</sup> Office Of The Under Secretary Of Defense (Comptroller), *National Defense Budget Estimates For FY 2012*, Washington D.C.: March 2011.

throughout the horizon. Consequently, compensation takes 40 to 45 percent of the cuts. Military and civilian employment levels are cut by the corresponding percentage. In other words, savings are accomplished by cutting head count, not by cutting wages and benefits rates relative to the baseline.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Real GDP by Final Demand	l Category	(Billions o	of chaine	d 2005 do	llars)							
Gross Domestic Product	13312	13629	13985	14389	14844	15355	15843	16294	16698	17113	17493	17892
	1.7	2.4	2.6	2.9	3.2	3.4	3.2	2.8	2.5	2.5	2.2	2.3
Federal nondefense	354	349	350	352	354	356	358	361	363	364	366	368
	-1.2	-1.4	0.3	0.5	0.6	0.7	0.6	0.6	0.6	0.5	0.4	0.6
Federal defense	707	684	667	658	654	653	648	644	647	648	650	653
	-2.4	-3.4	-2.4	-1.3	-0.7	-0.1	-0.8	-0.5	0.4	0.2	0.2	0.5
State and local	1452	1446	1465	1481	1498	1518	1538	1556	1573	1589	1603	1620
	-2.3	-0.5	1.3	1.1	1.2	1.3	1.3	1.2	1.1	1.0	0.9	1.1
<b>GDP Deflator</b> (2005=100)	113.5	115.7	117.7	119.8	122.2	124.6	127.0	129.6	132.3	135.0	137.9	140.9
	2.1	1.9	1.8	1.8	2.0	1.9	2.0	2.1	2.1	2.0	2.2	2.1
Employment												
Total Employment	141970	143478	145220	147101	149493	152542	155262	157458	159098	160893	162425	163987
(thousand jobs)	0.6	1.1	1.2	1.3	1.6	2.0	1.8	1.4	1.0	1.1	1.0	1.0
Manufacturing Employ	12861	12850	12852	12841	12877	12999	13156	13256	13306	13352	13457	13484
(thousand jobs)	2.0	-0.1	0.0	-0.1	0.3	0.9	1.2	0.8	0.4	0.3	0.8	0.2
Govt Defense Employ	2349	2332	2313	2294	2282	2274	2258	2247	2247	2244	2242	2241
(thousand jobs)	-0.1	-0.7	-0.8	-0.8	-0.5	-0.3	-0.7	-0.5	0.0	-0.1	-0.1	-0.1
Unemployment Rate	9.0	8.5	8.2	8.1	7.6	6.6	5.8	5.3	5.1	4.9	4.9	4.9
Federal Net Borrowing	1396	1224	1050	985	884	856	832	826	834	824	820	840
as percent of GDP	9.2	7.8	6.4	5.7	4.9	4.5	4.1	3.9	3.8	3.6	3.4	3.3

## Table 4: LIFT Model -- Status Quo Baseline Summary (First line is magnitude, second line is percent change)

## Table 5: NIPA-Based Nominal Defense Expenditures by Category and FederalDefense Employment in Status Quo and Alternative Scenarios

	2012	2013	2014	2015	2016	2018	2020	2022
Billions of dollars								
Federal defense expenditures	714	715	724	738	757	785	830	878
-	-3	-12	-17	-20	-24	-30	-37	-42
	-11	-48	-64	-72	-77	-84	-91	-97
Compensation of personnel	289	298	306	315	327	348	371	395
	-1	-5	-7	-9	-10	-13	-17	-19
	-4	-20	-27	-31	-33	-37	-41	-44
Equipment & Durable goods	130	127	127	127	129	130	135	141
	0	-2	-3	-3	-4	-5	-6	-7
	-2	-8	-11	-12	-13	-14	-15	-15
Nondurable goods	32	32	33	33	35	36	39	41
	0	-1	-1	-1	-1	-1	-2	-2
	-1	-2	-3	-3	-4	-4	-4	-5
Services	245	241	242	244	249	253	266	281
	-1	-4	-6	-7	-8	-10	-12	-14
	-4	-16	-21	-24	-25	-27	-29	-31
Structures investment	17	17	17	17	18	18	19	20
	0	0	0	0	-1	-1	-1	-1
	0	-1	-1	-2	-2	-2	-2	-2
Thousands of jobs								
Total defense employment	2332	2313	2294	2282	2274	2247	2244	2241
	-8	-37	-53	-61	-70	-84	-98	-105
	-35	-152	-201	-222	-229	-236	-241	-243
Military	1561	1549	1537	1529	1524	1507	1506	1505
	-5	-25	-35	-41	-47	-56	-66	-71
	-23	-102	-135	-148	-154	-159	-162	-163
Civilian	771	764	757	753	750	740	738	736
	-3	-12	-17	-20	-23	-28	-32	-35
	-11	-50	-66	-73	-76	-78	-79	-80

Line 1: CBO Status Quo Baseline (Defense expenditures grow with inflation) Line 2: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 3: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

#### 5. Economic and Employment Impacts of Defense Budget Cuts

Table 6 shows the summary macroeconomic results for each of the two alternative scenarios from 2012 through 2022. For each concept, the line items indicate the deviation from the baseline in various metrics, usually percentage differences for real economic variables, billions of dollars for nominal variables and thousands of jobs for employment variables. Detailed results across expenditure categories and industrial sectors for demand, production and employment are provided in Appendix A.

In both alternatives, real defense expenditures are reduced progressively from 2012, though the configuration is a bit different between them. Compared to the baseline, in the BCA-1 scenario, real spending is 2.5 percent lower in 2015, and the reduction is almost twice as large at 4.6 percent by 2022. This pattern is evident because the spending caps of the BCA take an increasing bite out of the status quo budget, even in real terms. In the BCA-2 alternative, real federal defense expenditures are 9.0 percent lower in 2015, but they are only bit lower at 10.6 percent by 2022. More or less constant in nominal terms from 2015, the real impacts of sequestration fall over time.

In a dynamic model such as LIFT, the production, income and employment responses to any given expenditure shock will vary over time. Moreover, they will also be sensitive to the phase of the business cycle. The current economic environment is characterized by unemployment levels over 8 percent and historically low interest rates. Therefore, because product and employment demand elsewhere in the economy is weak, additional and sharp reductions in government spending will trigger relatively large and lingering reductions of GDP and employment. In 2014, the reduction in GDP from the baseline will be 0.2 percent for BCA-1 and 0.8 percent for BCA-2. Table 6 shows that the initial real and nominal GDP multipliers are around 2.0.

Differences in employment are also displayed on Table 6. In both scenarios, the peak job loss also occurs in 2014. For BCA-1, we see a loss of 261,000 private sector jobs, including 34,000 manufacturing jobs in 2014, compared to the status quo baseline. The corresponding job losses for BCA-2 are 1,010,000 total jobs, including 130,000 manufacturing jobs in 2014. Adding the reduction of over 200,000 federal civilian and military jobs in 2014, the total job loss given both sets of BCA expenditure reductions is over 1.2 million jobs by 2014.<sup>7</sup> The unemployment rate is increased by 0.7 percent compared to the baseline.

In the current scenarios, GDP and employment begin to snap back to baseline levels after 2014. This recovery pattern is a typical response to aggregate demand shocks, and it is shown clearly by Figure 2, which plots the total employment loss compared to the baseline for each of the two scenarios. From the peak losses of 2014, employment gradually recovers back to the baseline by 2022. Especially given current conditions, however, most of the loss of income and job years over the interim period will never be regained.

<sup>&</sup>lt;sup>7</sup> The model results of the two alternative scenarios are additive. That is, to isolate the effects of the BCA-2 alone, one can take the difference between the results of the two alternatives. For example, the total 2014 employment loss from BCA-2 sequestration is 897,000 (1211 - 314).

#### **Table 6: Macroeconomic Summary of Simulation Results**

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

Alternatives are shown in deviations from status quo baseline, units as noted.

	2012	2013	2014	2015	2016	2018	2020	2022
Real Gross Domestic Product	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
(percent)	-0.1	-0.6	-0.8	-0.7	-0.6	-0.3	-0.2	-0.2
Real federal defense expenditures	-0.3	-1.4	-2.1	-2.5	-2.9	-3.6	-4.2	-4.6
(percent)	-1.3	-5.9	-8.0	-9.0	-9.5	-10.1	-10.5	-10.6
Real GDP to Defense Multiplier	2.4	2.5	2.1	1.8	1.4	0.8	0.7	0.6
	1.9	2.2	2.2	1.8	1.4	0.7	0.6	0.4
Nominal Gross Domestic Product	-5	-24	-33	-36	-38	-41	-50	-53
(billion \$)	-18	-91	-127	-133	-129	-121	-131	-130
Defense outlays (NIPA)	-3	-12	-17	-20	-24	-30	-37	-42
(billion \$)	-11	-48	-64	-72	-77	-84	-91	-97
Nominal GDP to Defense Multiplier	2.0	2.1	1.9	1.8	1.6	1.4	1.3	1.3
	1.6	1.9	2.0	1.8	1.7	1.4	1.4	1.3
GDP Deflator	0.00	0.02	0.01	0.00	-0.03	-0.07	-0.10	-0.12
(percent)	0.0	0.1	0.1	0.0	-0.1	-0.3	-0.3	-0.4
Real Disp Income, bil 05\$	-0.04	-0.19	-0.27	-0.26	-0.23	-0.11	-0.04	0.02
(percent)	-0.1	-0.7	-1.0	-1.0	-0.8	-0.3	0.1	0.2
Employment								
Private Sector Employment	-43	-210	-261	-236	-188	-80	-59	-18
(thousands of jobs)	-142	-755	-1010	-878	-611	-148	-15	74
Manufacturing Employment	-4	-20	-34	-33	-28	-14	-12	-11
(thousands of jobs)	-14	-75	-130	-130	-99	-39	-24	-18
Govt Defense Employment	-8	-37	-53	-61	-70	-84	-98	-105
(thousands of jobs)	-35	-152	-201	-222	-229	-236	-241	-243
Total Employment (govt + private)	-51	-247	-314	-297	-258	-164	-157	-123
(thousands of jobs)	-177	-907	-1211	-1100	-841	-385	-257	-169
Unemployment Rate	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0
(percentage points)	0.1	0.5	0.7	0.6	0.4	0.1	0.1	0.0



The impact on employment resulting from cuts in defense spending consists of several components:

- 1. Direct federal defense civilian and military jobs.
- 2. Direct job loss at contractor firms from cuts in defense purchases for equipment, supplies and services.
- 3. Indirect job loss at firms that supply defense contractors. Lower expenditures for defense aircraft mean that the material and electronics suppliers to the defense contractors will lose business and, therefore, will reduce employment.
- 4. Indirect job loss from "multiplier" or "induced" effects across the economy. Because reduced government expenditures imply a reduction in the employment of federal workers and workers in supplying sectors, disposable income falls, which, in turn, reduces demand in other industries, particularly consumer sectors.

These employment components are shown by Table 7 for each scenario. For the BCA-2 case, total federal employment reductions (including military and civilian personnel) rise steadily from about 200,000 in 2014 to 243,000 by 2022. As illustrated in Table 5, these cuts are actually exogenous assumptions underlying the scenario. Direct employment losses at contractors' facilities reach 125,000 by 2015 and stay around that level for the rest of the projection horizon.

The indirect losses at upstream suppliers reach about 190,000 jobs. Finally, "induced" employment losses peak at over 500,000 in 2014. They then decline and even turn positive by 2017.

Initially, the decline in jobs from direct DoD employment and direct plus indirect spending leads to a decline in wages and salaries for the employees affected. This decline results in lower personal and disposable income, and thus a reduction in personal consumption. The multiplier effect also works through a chain of lower equipment investment, structures investment and residential building. Therefore, economic sectors across the economy, even sectors not related to the defense industry, will experience reductions in demand leading to job loss.

	2012	2013	2014	2015	2016	2018	2020	2022
BCA-1								
Federal employme	ent							
Civilian	-3	-12	-17	-20	-23	-28	-32	-35
Military	-5	-25	-35	-41	-47	-56	-66	-71
Total	-8	-37	-53	-61	-70	-84	-98	-105
Private sector emp	oloyment							
Direct	-5	-22	-30	-35	-39	-44	-50	-52
Indirect	-8	-33	-46	-52	-58	-66	-75	-78
Total	-13	-55	-77	-87	-97	-110	-125	-130
Induced	-30	-155	-185	-149	-91	30	66	113
Economy-Wide	-51	-247	-314	-297	-258	-164	-157	-123
	2012	2013	2014	2015	2016	2018	2020	2022
BCA-2								
Federal employme	ent							
Civilian	-11	-50	-66	-73	-76	-78	-79	-80
Military	-23	-102	-135	-148	-154	-159	-162	-163
Total	-35	-152	-201	-222	-229	-236	-241	-243
Private Sector								
Direct	-22	-91	-117	-125	-127	-124	-123	-120
Indirect	-33	-135	-176	-189	-191	-186	-183	-180
Total	-55	-227	-293	-314	-319	-310	-306	-300
Induced	-53	-376	-516	-342	-63	398	532	617
Economy-Wide	-177	-907	-1211	-1100	-841	-385	-257	-169

#### Table 7: Decomposition of Employment Results among Federal, Direct, Indirect and Induced Changes (Thousands of jobs)



Figure 3: Decomposition of Employment Results for BCA-2 among Federal, Direct, Indirect and Induced Changes

The initial multiplier effect on employment is particularly large because firms and workers are still adjusting to the lower demand of recent years. However, as the economy readjusts, the impact of lower spending dissipates over time as spending is stimulated in other sectors of the economy. Interest rates are lower, which stimulates interest-sensitive consumption and equipment and building investment. Prices are lower, which provides a boost to competitiveness, leading to an increase in net exports. Government stabilizers are also at work in the form of higher transfer payments and reduced tax revenues. Eventually, workers laid off because of the initial spending shock will find jobs in other industries. These factors combine over time to boost growth, and GDP and employment will tend to return to their baseline levels. Over time, the unemployment rate will return to a rate signaling "full" employment (between 5.0 and 6.0 percent).

Because lowered defense spending is permanent, the direct and indirect impact on federal employment and the particular jobs in supplier sectors is also permanent. Therefore, if employment is to return to the baseline level, the induced job impacts must turn positive. This pattern is shown in Figure 3, which depicts the employment breakdown for the BCA-2 scenario. Moreover, this new job creation could actually occur for some of the very industries hardest hit by losses of defense business. For example, while the motor vehicle industry initially loses direct business with the federal government, in the outer years, lower interest rates and enhanced consumer and investment expenditures spur a larger level of employment in the sectors compared to the status quo baseline.

#### 6. Employment Effects by Industry

Table 8 displays employment impacts for the BCA-2 alternative only. Impacts are reported both in the difference in thousands of jobs and in the percentage of jobs relative to baseline employment levels. By 2014, the peak year of total job losses, employment is down about 0.3 to 0.4 percent in agriculture and mining. Construction employment is reduced by 1.5 percent.

Under the BCA-2 scenario, manufacturing loses about 1.0 percent, or 130,000 jobs, in 2014 and 2015, relative to the baseline. Many of these jobs tend to be at the direct and indirect suppliers of defense equipment and supplies. Nevertheless, as the economy recovers and manufacturers swing to production for private consumption, investment and export, the losses subside to about 0.1 percent, or 18,000 jobs, by 2022.

This pattern varies across individual manufacturing sectors. Big direct suppliers such as those making aerospace vehicles, ships and specialized defense equipment will not be able to replace all of their lost defense sales and the associated jobs. Other sectors that might show losses initially will actually gain jobs through time, relative to the baseline. Given its consumer orientation, motor vehicles manufacturing is one such sector. Construction and agricultural equipment, since it is export oriented, is another such industry.

Within the overall manufacturing sector, the largest job losses are felt in the large nondurable sector (food, textiles, chemicals and fuels) and the transport equipment sector. The biggest proportional reductions are within transportation equipment and instruments. In particular, aerospace loses 3.4 percent of its jobs in 2015, and these losses persist as employment is still down 2.3 percent by 2022. Ships and boats are affected similarly, losing 3.3 percent of jobs by 2014 and 1.7 percent of jobs by 2022. The search and navigation equipment industry takes the biggest proportional hit. It shows a maximum loss of 9.3 percent of its employment in 2016 and 8.6 percent in 2022.

Across the various service sectors, the maximum percentage loss is 1.0 percent or less. However, since these tend to be large employment sectors, there are some large absolute numbers. The biggest losers in terms of the number of jobs are wholesale and retail trade (226,000 in 2014), business services (182,000) and other services (157,000). Business services, which include professional and computer programming services, and transportation services lose many jobs directly and indirectly through lower defense expenditures. But throughout services, and especially in trade and other services, most of the job loss compared to the baseline is attributable to the lower level of aggregate income generated in the BCA-2 scenario. Indeed, once the shock of lower government spending subsides, trade, financial services and other services all have modestly higher levels of employment, compared to the baseline.

Finally, job reduction for defense government employment, which is assumed, rises to a total of almost 80,000 on the civilian side and 163,000 for active duty military.

#### Table 8: Employment Results by Industry

#### Deviation from Baseline with both BCA Caps and Sequestration (BCA-2)

Line 1: Difference from baseline employment level in thousands of jobs Line 2: Difference from baseline employment level in percent

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Agric, Forestry, and Fisheries	0.2	-7.2	-9.5	-6.2	-2.5	2.5	5.0	7.1
	0.0	-0.2	-0.3	-0.2	-0.1	0.1	0.2	0.2
Mining	-0.4	-2.2	-3.0	-2.6	-1.8	-0.4	0.2	0.9
	-0.1	-0.3	-0.4	-0.4	-0.3	-0.1	0.0	0.1
Construction	-17.6	-89.8	-119.4	-103.1	-55.5	43.8	48.4	27.0
	-0.3	-1.2	-1.5	-1.2	-0.6	0.4	0.4	0.2
Manufacturing	-14.0	-75.5	-129.6	-129.7	-99.5	-38.8	-24.4	-18.1
	-0.1	-0.6	-1.0	-1.0	-0.8	-0.3	-0.2	-0.1
Nondurable Manufacturing	-4.1	-24.4	-37.8	-33.3	-23.1	-6.2	1.2	6.1
	-0.1	-0.5	-0.7	-0.7	-0.5	-0.1	0.0	0.1
Durable Materials & Products	-2.5	-15.4	-27.1	-26.3	-17.7	-1.4	1.6	1.2
	-0.1	-0.5	-0.9	-0.9	-0.6	0.0	0.0	0.0
Non-Electrical Machinery	0.0	-2.7	-12.3	-15.7	-11.1	0.4	0.7	0.0
	0.0	-0.2	-0.8	-1.0	-0.7	0.0	0.0	0.0
Electrical Machinery	-1.9	-9.0	-13.4	-14.0	-12.2	-7.1	-5.6	-4.6
	-0.2	-1.0	-1.6	-1.7	-1.5	-0.9	-0.7	-0.6
Transportation Equipment	-3.7	-15.0	-25.1	-25.9	-22.6	-15.3	-13.8	-12.9
	-0.3	-1.1	-1.8	-1.8	-1.6	-1.0	-0.9	-0.8
Aerospace	-2.4	-9.0	-13.7	-14.7	-14.3	-12.6	-11.2	-9.9
	-0.5	-2.0	-3.1	-3.4	-3.3	-3.0	-2.6	-2.3
Ships & Boats	-0.7	-2.1	-4.8	-4.7	-4.3	-3.5	-3.2	-2.9
	-0.5	-1.4	-3.3	-3.2	-2.8	-2.2	-1.9	-1.7
Instruments and Miscelleneous	-1.9	-9.1	-13.9	-14.4	-12.8	-9.2	-8.6	-8.1
	-0.2	-1.0	-1.5	-1.6	-1.4	-1.0	-0.9	-0.9
Search & Navigation Equip	-1.5	-6.3	-8.8	-9.5	-9.7	-8.9	-8.5	-8.1
	-1.3	-5.9	-8.4	-9.2	-9.3	-8.9	-8.8	-8.6

#### Table 8 (continued): Employment Results by Industry

#### Deviation from Baseline with both BCA Caps and Sequestration (BCA-2)

Line 1: Difference from baseline employment level in thousands of jobs Line 2: Difference from baseline employment level in percent

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Transportation Services	-6.3	-32.3	-42.5	-40.3	-32.1	-16.7	-11.8	-8.0
	-0.1	-0.7	-0.9	-0.8	-0.6	-0.31	-0.211	-0.139
Trucking, hwy pssngr transit	-3.8	-19.2	-24.9	-23.1	-18.1	-9.1	-6.6	-4.8
	-0.1	-0.7	-0.9	-0.8	-0.6	-0.3	-0.2	-0.1
Communications and Utilities	-1.7	-8.9	-12.9	-14.8	-14.0	-8.0	-4.0	-2.3
	-0.1	-0.4	-0.6	-0.7	-0.6	-0.4	-0.2	-0.1
Trade: Retail, Wholesale, Rest.	-36.3	-191.0	-226.4	-173.3	-105.3	-2.8	30.0	51.5
	-0.1	-0.6	-0.7	-0.5	-0.3	0.0	0.1	0.1
Finance, Insurance, Real Estate	-8.3	-43.8	-53.1	-42.5	-29.0	-6.0	4.4	12.7
	-0.1	-0.5	-0.6	-0.5	-0.3	-0.1	0.0	0.1
Business Services	-26.7	-132.8	-182.1	-174.5	-138.2	-73.734	-61.07	-50.121
	-0.2	-0.8	-1.0	-1.0	-0.8	-0.386	-0.31	-0.247
Health	-8.2	-49.1	-74.6	-64.8	-49.5	-25.3	-3.4	36.1
	-0.1	-0.3	-0.5	-0.4	-0.3	-0.2	0.0	0.2
Other Services	-23.2	-122.1	-157.0	-126.2	-84.1	-22.658	1.217	17.176
	-0.1	-0.6	-0.8	-0.6	-0.4	-0.11	0.006	0.081
Civilian Govt.	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7
	-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
Total Civilian Employment	-153.8	-805.0	-1076.6	-951.1	-687.1	-225.9	-94.7	-5.9
	-0.1	-0.6	-0.7	-0.6	-0.5	-0.1	-0.1	0.0
Military	-23.2	-102.1	-134.9	-148.5	-153.8	-158.6	-161.9	-163.0
	-1.5	-6.6	-8.8	-9.7	-10.1	-10.5	-10.7	-10.8

#### 7. Employment Effects by States

The Inforum STEMS model allows us to provide the state-level job impacts of the two alternative defense scenarios. This model allocates, in a top-down fashion, the industry employment in the LIFT model to each state for 65 industries. Employment figures for "national industries," such as aerospace, auto manufacturing, or coal mining are allocated to each state using a static state shift-share matrix. Employment for industries that are highly sensitive to local conditions, such as retailing and personal services, is allocated based on the state-level income levels. A brief description of the STEMS model is included in Appendix C.

For the current project, we also used data supplied by the publication *Projected Defense Purchases: Detail By Industry and State: Calendar Years 2010 Through 2016.*<sup>8</sup> This report is produced each year by DoD using the Defense Employment and Purchases Projection System (DEPPS), an economic model developed, maintained and operated by Inforum. The report contains tables showing the defense-related direct and indirect gross output by industry and by state. This information was used to modify the state-industry matrices of the STEMS model to better determine the location of direct and indirect (upstream) job losses resulting from lower defense purchases.

The results of running the baseline and alternative simulations of LIFT through the STEMS model are shown in Table 9. The total change in jobs for each state, compared to the baseline, is displayed, and states are ranked by the magnitude of the job change in 2014 (the peak year of job loss). Based on this information, California will sustain the greatest job loss. Under BCA-2, California loses 148,000 jobs at the peak, relative to the baseline. Next come Virginia and Texas, which lose 115,000 and 109,000 jobs, respectively. Appendix A contains comprehensive tables for each state that include results for federal civilian, military, private sector and manufacturing employment.

<sup>&</sup>lt;sup>8</sup> Economic and Manpower Analysis Division (EMAD), Cost Assessment and Program Evaluation (CAPE) of the Office of the Secretary of Defense (OSD), *Projected Defense Purchases: Detail By Industry and State: Calendar Years 2010 Through 2016*, November 2011.

## Table 9: Employment Results by State, Ranked by 2014 Results(Thousands of jobs)

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

Alternatives are shown in deviations from status quo baseline in thousands of jobs.

	2012	2013	2014	2015	2016	2018	2020	2022
California	-6.3	-30.6	-38.6	-35.9	-31.0	-19.1	-17.3	-12.2
	-21.5	-111.5	-148.4	-132.3	-99.9	-43.9	-25.3	-7.3
Virginia	-4.9	-23.5	-29.8	-28.3	-24.8	-16.8	-16.8	-13.5
	-17.2	-86.8	-114.9	-104.3	-80.1	-39.3	-28.7	-22.1
Texas	-4.6	-22.2	-28.2	-26.8	-23.3	-14.9	-14.5	-11.5
	-16.2	-81.9	-109.0	-99.1	-76.1	-35.1	-24.3	-18.2
Florida	-2.4	-11.5	-14.6	-13.9	-12.0	-7.5	-7.3	-5.9
	-8.4	-42.7	-56.6	-51.5	-39.3	-17.2	-11.8	-9.3
New York	-1.8	-8.8	-10.9	-10.1	-8.6	-4.9	-4.3	-2.7
	-6.2	-32.0	-42.1	-37.5	-27.9	-11.1	-5.8	-2.8
Maryland	-1.7	-8.1	-10.4	-10.0	-8.9	-6.0	-6.0	-5.0
	-6.0	-30.1	-40.2	-36.9	-28.8	-14.3	-10.4	-7.4
Georgia	-1.6	-7.8	-10.0	-9.7	-8.7	-6.2	-6.3	-5.4
	-5.8	-29.1	-38.7	-36.0	-28.6	-15.2	-11.7	-10.0
Illinois	-1.5	-7.4	-9.1	-8.4	-7.0	-3.8	-3.4	-2.1
	-5.2	-27.0	-35.4	-31.3	-22.9	-8.1	-4.2	-2.4
Pennsylvania	-1.4	-7.0	-9.0	-8.4	-7.2	-4.3	-3.9	-2.8
	-5.0	-25.8	-34.7	-31.3	-23.5	-9.8	-5.8	-2.8
North Carolina	-1.4	-6.9	-8.8	-8.6	-7.8	-5.7	-5.8	-5.1
	-5.1	-25.9	-34.2	-31.6	-25.3	-14.0	-11.0	-9.3
Kentucky	-1.3	-6.5	-8.6	-8.0	-7.1	-4.6	-3.8	-2.7
	-4.2	-23.1	-32.7	-29.5	-22.8	-11.4	-5.4	3.1
Arizona	-1.3	-6.5	-8.6	-8.0	-7.0	-4.4	-3.6	-2.6
	-4.4	-23.4	-32.7	-29.4	-22.5	-10.6	-5.3	1.1
Missouri	-1.3	-6.1	-7.2	-6.6	-5.5	-3.1	-2.8	-1.6
	-4.3	-22.1	-28.1	-24.3	-17.7	-6.7	-3.5	-1.7
Ohio	-1.1	-5.6	-7.2	-6.9	-5.9	-3.6	-6.4	-2.9
	-4.0	-20.6	-27.9	-25.8	-19.7	-8.7	-6.0	-4.7
Massachusetts	-1.2	-5.7	-7.2	-6.8	-5.8	-3.4	-3.2	-2.2
	-4.0	-20.7	-27.8	-25.1	-18.9	-8.0	-4.9	-2.9
Washington	-1.1	-5.4	-7.0	-6.8	-6.1	-4.6	-4.6	-4.1
	-4.0	-20.2	-26.8	-24.8	-20.0	-11.3	-8.8	-7.2
New Jersey	-1.1	-5.5	-6.9	-6.5	-5.5	-3.2	-3.0	-2.2
	-3.9	-20.2	-26.7	-24.1	-18.1	-7.3	-4.6	-3.2

## Table 9 (continued): Employment Results by State, Ranked by 2014 Results(Thousands of jobs)

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

Alternatives are shown in deviations from status quo baseline in thousands of jobs.

	2012	2013	2014	2015	2016	2018	2020	2022
Michigan	-1.0	-4.8	-6.0	-5.5	-4.5	-2.3	-2.0	-1.1
	-3.3	-17.5	-23.4	-20.5	-14.6	-4.7	-2.1	-0.8
South Carolina	-1.0	-4.8	-6.0	-5.6	-4.9	-3.3	-3.2	-2.4
	-3.4	-17.6	-23.2	-20.7	-15.9	-7.7	-5.2	-2.9
Colorado	-0.9	-4.2	-5.3	-5.2	-4.6	-3.1	-3.1	-2.6
	-3.1	-15.5	-20.6	-19.1	-14.9	-7.4	-5.5	-4.5
Dist. of Col.	-0.7	-3.5	-4.6	-4.4	-4.0	-7.2	-5.6	-2.5
	-2.6	-13.2	-17.5	-16.2	-12.8	-7.2	-5.6	-4.3
Wisconsin	-0.6	-3.2	-4.4	-4.2	-3.4	-1.3	-1.1	-0.7
	-2.1	-11.6	-17.1	-16.0	-11.6	-2.8	-0.9	-0.2
Indiana	-0.7	-3.3	-4.4	-4.2	-3.5	-1.9	-1.7	-1.3
	-2.3	-12.3	-17.0	-15.7	-11.6	-4.2	-2.6	-2.0
Louisiana	-0.7	-3.3	-4.3	-4.1	-3.5	-2.0	-2.0	-1.7
	-2.4	-12.4	-16.6	-15.2	-11.3	-4.3	-2.9	-2.7
Minnesota	-0.7	-3.4	-4.1	-3.7	-3.1	-1.6	-1.4	-0.7
	-2.3	-12.2	-15.9	-13.8	-9.9	-3.4	-1.5	-0.5
Hawaii	-0.6	-3.1	-4.0	-3.9	-3.6	-2.8	-3.0	-2.8
	-2.4	-11.6	-15.3	-14.4	-11.7	-6.9	-5.8	-5.3
Oklahoma	-0.6	-2.9	-3.7	-3.7	-3.3	-2.5	-2.6	-2.4
	-2.1	-10.7	-14.3	-13.5	-10.9	-6.1	-5.0	-4.5
Tennessee	-0.6	-2.8	-3.5	-3.3	-2.8	-1.6	-1.5	-1.1
	-2.0	-10.2	-13.7	-12.4	-9.3	-3.5	-2.2	-1.7
Connecticut	-0.5	-2.5	-3.3	-3.1	-2.7	-1.7	-1.5	-1.2
	-1.8	-9.2	-12.7	-11.8	-9.1	-4.1	-2.7	-1.9
Alaska	-0.5	-2.3	-2.9	-2.8	-2.5	-1.6	-1.6	-1.4
	-1.7	-8.5	-11.3	-10.5	-8.1	-3.7	-2.8	-2.5
Mississippi	-0.4	-2.0	-2.6	-2.6	-2.4	-1.8	-1.9	-1.7
	-1.5	-7.5	-10.2	-9.7	-7.8	-4.5	-3.7	-3.3
Kansas	-0.4	-2.0	-2.6	-2.6	-2.3	-1.7	-1.8	-1.7
	-1.5	-7.5	-10.1	-9.5	-7.7	-4.4	-3.6	-3.2
Utah	-0.4	-1.8	-2.3	-2.3	-2.1	-1.5	-1.5	-1.4
	-1.4	-6.7	-9.0	-8.4	-6.7	-3.6	-2.9	-2.7
Nevada	-0.4	-1.8	-2.3	-2.2	-1.8	-1.1	-1.0	-0.7
	-1.3	-6.7	-8.8	-8.0	-5.9	-2.3	-1.3	-0.9

## Table 9 (continued): Employment Results by State, Ranked by 2014 Results(Thousands of jobs)

Line 1: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration) Line 2: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)

Alternatives are shown in deviations from status quo baseline in thousands of jobs.

	2012	2013	2014	2015	2016	2018	2020	2022
Arkansas	-0.3	-1.7	-2.1	-2.0	-1.7	-1.0	-1.0	-0.7
	-1.2	-6.1	-8.1	-7.3	-5.5	-2.4	-1.5	-0.7
Oregon	-0.3	-1.5	-1.9	-1.8	-1.5	-0.9	-0.8	-0.6
	-1.0	-5.5	-7.4	-6.8	-5.1	-2.0	-1.3	-1.0
New Mexico	-0.3	-1.4	-1.9	-1.8	-1.6	-1.1	-1.2	-1.0
	-1.1	-5.4	-7.2	-6.7	-5.3	-2.9	-3.0	-1.9
lowa	-0.3	-1.3	-1.7	-1.6	-1.3	-0.7	-0.7	-0.5
	-0.9	-4.8	-6.6	-6.0	-4.5	-1.7	-1.0	-0.7
Maine	-0.2	-1.1	-1.6	-1.5	-1.3	-0.9	-0.8	-0.7
	-0.8	-4.1	-5.9	-5.5	-4.3	-2.3	-1.5	-0.7
Nebraska	-0.2	-1.2	-1.5	-1.5	-1.2	-0.8	-0.8	-0.6
	-0.8	-4.4	-5.9	-5.4	-4.1	-1.8	-1.3	-1.1
Rhode Island	-0.2	-0.8	-1.0	-0.9	-0.9	-0.6	-0.7	-0.6
	-0.6	-2.8	-3.7	-3.5	-2.8	-1.6	-1.3	-1.1
New Hampshire	-0.1	-0.7	-0.9	-0.9	-0.8	-0.5	-0.4	-0.3
·	-0.5	-2.6	-3.6	-3.3	-2.5	-1.1	-0.7	-0.5
Delaware	-0.1	-0.7	-0.9	-0.8	-0.7	-0.4	-0.4	-0.3
	-0.5	-2.6	-3.4	-3.0	-2.2	-0.9	-0.5	-0.3
South Dakota	-0.2	-0.7	-0.9	-0.8	-0.6	-0.3	-0.3	-0.1
	-0.5	-2.7	-3.3	-2.8	-2.0	-0.7	-0.3	-0.1
West Virginia	-0.1	-0.6	-0.8	-0.8	-0.7	-0.4	-0.4	-0.4
0	-0.5	-2.4	-3.2	-3.0	-2.3	-1.0	-0.7	-0.7
Idaho	-0.1	-0.6	-0.8	-0.7	-0.6	-0.4	-0.4	-0.4
	-0.4	-2.2	-2.9	-2.7	-2.1	-1.0	-0.8	-0.7
Montana	-0.1	-0.5	-0.7	-0.6	-0.6	-0.4	-0.4	-0.3
	-0.4	-2.0	-2.6	-2.4	-1.9	-0.9	-0.7	-0.6
North Dakota	-0.1	-0.5	-0.7	-0.7	-0.6	-0.4	-0.5	-0.4
	-0.4	-2.0	-2.6	-2.4	-1.9	-1.0	-0.9	-0.8
Wyoming	-0.1	-0.4	-0.5	-0.5	-0.4	-0.3	-0.3	-0.2
-	-0.3	-1.3	-1.8	-1.7	-1.3	-0.6	-0.5	-0.5
Vermont	-1.0	-0.3	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2
	-0.2	-1.2	-1.6	-1.5	-1.1	-0.5	-0.4	-0.3

### **Appendix A: Detailed Tables of Results**

### Table A-1: Macroeconomic Summary of Defense Expenditure Budget Alternatives

Line 1: CBO Status Quo Baseline	(Defense	e expend	litures g	row with	n inflatio	n)		
Line 2: BCA-1 Expenditure Caps	Only (BCA	۹-1 caps,	no BCA-	2 seque	stration)			
Line 3: BCA-2 Sequestration with	n BCA-1 C	aps (CBC	) current	t law pro	jection)			
Alternatives are shown in perce	ntage de	viations	from bas	se, unles	s otherw	vise note	d.	
	2012	2013	2014	2015	2016	2018	2020	2022
REAL GDP by FINAL DEMAND CA	TEGORY	(Billions	of chain	ed 2005	dollars)			
-								
Gross Domestic Product	13629	13985	14389	14844	15355	16294	17113	17892
	-0.04	-0.17	-0.20	-0.19	-0.17	-0.12	-0.12	-0.09
	-0.13	-0.62	-0.79	-0.72	-0.57	-0.30	-0.22	-0.16
Pers. Consump. Expenditures	9626	9822	10063	10338	10614	11168	11646	12138
· · ·	-0.03	-0.15	-0.15	-0.12	-0.09	-0.04	-0.01	0.04
	-0.10	-0.51	-0.56	-0.42	-0.28	-0.05	0.06	0.16
Nonresidential Structures	351	376	399	421	454	510	543	564
	-0.13	-0.56	-0.54	-0.48	-0.31	0.09	0.08	0.08
	-0.44	-2.05	-2.17	-1.77	-0.97	0.66	0.63	0.32
Equipment Investment	1269	1342	1378	1436	1543	1716	1856	2013
	0.02	0.01	-0.23	-0.26	-0.10	0.09	0.03	-0.06
	0.07	0.06	-0.85	-1.06	-0.42	0.36	0.14	-0.09
Residential Investment	342	368	396	450	536	623	657	657
	-0.07	-0.36	-0.52	-0.38	-0.16	0.16	0.19	0.19
	-0.26	-1.30	-1.95	-1.44	-0.49	0.68	0.81	0.62
Exports	1841	1932	2079	2215	2349	2620	2927	3218
	0.00	-0.01	0.01	0.02	0.05	0.11	0.16	0.17
	-0.01	-0.05	-0.06	-0.05	-0.01	0.14	0.25	0.37
Imports	2255	2325	2401	2499	2628	2835	3015	3202
•	-0.04	-0.22	-0.28	-0.26	-0.18	-0.07	-0.08	-0.07
	-0.14	-0.80	-1.10	-0.97	-0.61	-0.13	-0.12	-0.11
Government	2474	2479	2489	2504	2527	2563	2604	2644
	-0.08	-0.38	-0.54	-0.63	-0.71	-0.84	-0.98	-1.05
	-0.36	-1.56	-2.07	-2.27	-2.32	-2.36	-2.43	-2.44
							-	-
Federal nondefense	349	350	352	354	356	361	364	368
	0.00	-0.02	-0.02	-0.01	0.00	0.01	0.01	0.02
	-0.01	-0.06	-0.07	-0.03	0.01	0.06	0.05	0.06
							_	

# Table A-1 (continued): Macroeconomic Summary of Defense Expenditure Budget Alternatives

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Crease Derresstie Dresduct, bil suć	15705	10404	17242	10145	10122	21122	22100	25207
Gross Domestic Product, bil cuş	15765	16464	1/242	18145	19132	21122	23100	25207
Billion \$	-5	-24	-33	-30	-38	-41	-50	-53
Defense outlous (ning) bil sus	-18	-91	-12/	-133	-129	-121	-131	-130
Defense outrays (filpa), bil cuş	714	12	17	730	757	20/	050	0/0
ΒΙΠΟΠ Ş	-5	-12	-17	-20	-24	-50	-57	-42
	-11	-40	-04	-72	-//	-04	-91	-97
PRICE INDICATORS. 2005=100								
GDP Deflator	115.7	117.7	119.8	122.2	124.6	129.6	135.0	140.9
	0.00	0.02	0.01	0.00	-0.03	-0.07	-0.10	-0.12
	0.02	0.07	0.06	-0.01	-0.11	-0.28	-0.35	-0.36
PCE Deflator	117.2	119.6	122.5	125.3	127.8	133.6	140.2	147.3
	0.01	0.04	0.04	0.02	-0.01	-0.06	-0.08	-0.11
	0.03	0.15	0.15	0.07	-0.06	-0.25	-0.30	-0.34
Exports Deflator	119.2	120.4	121.9	123.8	125.6	129.6	133.7	138.4
	0.00	0.02	0.03	0.01	-0.01	-0.05	-0.06	-0.08
	0.01	0.07	0.10	0.06	-0.03	-0.18	-0.23	-0.24
Imports Deflator	124.2	128.6	133.4	137.9	142.0	150.4	158.3	166.6
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01
INTEREST RATES (percent)								
3-month Treasury Bill	0.26	1.47	2.82	2.81	3.04	3.31	3.49	3.65
	-0.02	-0.09	-0.11	-0.11	-0.10	-0.09	-0.07	-0.04
	-0.07	-0.34	-0.44	-0.41	-0.35	-0.21	-0.09	-0.01
10-year Treasury Bond	2.54	4.48	4.70	4.43	4.67	4.80	4.96	5.07
	-0.01	-0.06	-0.08	-0.08	-0.08	-0.06	-0.05	-0.03
	-0.04	-0.22	-0.29	-0.28	-0.26	-0.17	-0.07	-0.01
EMPLOYMENT, WAGES and PRO	DUCTIVI	ТҮ						
Private Sector Employment	121577	123341	125210	127568	130548	135275	138486	141374
(thousand jobs)	-43	-210	-261	-236	-188	-80	-59	-18
	-142	-755	-1010	-878	-611	-148	-15	74
Manufacturing Employment	12850	12852	12841	12877	12999	13256	13352	13484
(thousand jobs)	-4	-20	-34	-33	-28	-14	-12	-11
	-14	-75	-130	-130	-99	-39	-24	-18
Govt Defense Employment	2332	2313	2294	2282	2274	2247	2244	2241
(thousand jobs)	-8	-37	-53	-61	-70	-84	-98	-105
	-35	-152	-201	-222	-229	-236	-241	-243

# Table A-1 (continued): Macroeconomic Summary of Defense Expenditure Budget Alternatives

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Unemployment Rate	8.5	8.2	8.1	7.6	6.6	5.3	4.9	4.9
	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0
	0.1	0.5	0.7	0.6	0.4	0.1	0.1	0.0
Economywide:								
Average wage (\$/hr)	33.1	34.3	35.6	36.8	38.0	40.6	43.3	46.0
	-0.01	-0.04	-0.06	-0.07	-0.09	-0.14	-0.18	-0.20
	-0.04	-0.18	-0.22	-0.24	-0.28	-0.42	-0.52	-0.54
Average real wage (05\$/hr)	28.2	28.7	29.0	29.4	29.8	30.4	30.9	31.2
	-0.02	-0.08	-0.10	-0.08	-0.07	-0.07	-0.10	-0.09
	-0.07	-0.33	-0.38	-0.31	-0.23	-0.17	-0.22	-0.20
Total Lab Productivity (05\$/hr)	52.5	53.3	54.1	54.8	55.5	57.0	58.6	60.1
	0.00	-0.01	-0.01	-0.02	-0.03	-0.05	-0.06	-0.06
	-0.02	-0.05	-0.04	-0.06	-0.11	-0.16	-0.16	-0.15
PERSONAL INCOME								
Personal Income, bil\$	13563	14111	14887	15749	16758	18735	20684	22822
	-0.03	-0.16	-0.25	-0.28	-0.29	-0.29	-0.29	-0.29
	-0.11	-0.59	-0.95	-1.04	-1.01	-0.88	-0.72	-0.58
Disposable Income	12100	12501	13045	13649	14460	16046	17573	19219
	-0.03	-0.15	-0.23	-0.24	-0.24	-0.17	-0.12	-0.09
	-0.11	-0.56	-0.86	-0.89	-0.83	-0.50	-0.23	-0.12
Real Disp Income, bil 05\$	10326	10454	10650	10901	11318	12022	12543	13065
	-0.04	-0.19	-0.27	-0.26	-0.23	-0.11	-0.04	0.02
	-0.14	-0.71	-1.03	-0.97	-0.78	-0.25	0.08	0.22
FEDERAL NET BORROWING (-)	-1224	-1050	-985	-884	-856	-826	-824	-840
(\$ billions)	2	9	17	22	26	22	17	17
	9	40	64	78	87	65	31	35
as percent of GDP	-7.8	-6.4	-5.7	-4.9	-4.5	-3.9	-3.6	-3.3
	0.01	0.05	0.09	0.11	0.13	0.10	0.06	0.06
	0.05	0.21	0.33	0.39	0.43	0.29	0.12	0.12
CURRENT ACCOUNT DEFICIT (-)	-541	-592	-583	-598	-643	-756	-752	-769
	1	6	10	10	7	4	8	11
	4	23	35	34	18	4	18	38
as percent of GDP	-3.4	-3.6	-3.4	-3.3	-3.4	-3.6	-3.3	-3.1
	0.01	0.03	0.05	0.05	0.03	0.01	0.03	0.04
	0.02	0.12	0.18	0.16	0.07	0.00	0.06	0.13

Line 2: DCA 2 Segmentation with		r = cups, r	current		oction			
Line 3: BCA-2 Sequestration with	BCA-1Ca	арѕ (СвО	current	law proj	ection			
	ione from	, hasa in	million	د سامه			J	
Alternatives are snown in deviat	ions fron	n base in	million	ş, uniess	otherw	ise noted	J.	
	2012	2012	2014	2015	2010	2019	2020	2022
	714.0	715.2	724.2	720.2	2010	705.0	<u>2020</u>	2022
rederal defense expenditures	714.0	11 5.2	16.0	750.2	757.0 22 E	765.0	27.0	0/7.0
	-2.5	-11.5	-10.0	-20.0	-23.5	-29.7	-57.0	-42.0
	-10.8	-47.7	-04.2	-72.2	-77.0	-83.7	-91.0	-97.0
	200.0	207.0	206.0	215 4	226.9	247.0	271.0	204.0
compensation of personnel	289.0	297.8	306.0	315.4	320.8	347.9	3/1.0	394.0
	-1.0	-4.8	-7.1	-8.5	-10.1	-13.1	-10.5	-18.6
	-4.4	-20.0	-21.2	-30.8	-33.1	-30.9	-40.6	-43.5
Fauinment & Durable goods	120.4	127.0	126.7	107 F	120.0	120.0	125.2	1 1 1 (
Equipment & Durable goods	130.4	127.0	126.7	127.5	129.0	129.8	135.2	141.0
	-0.5	-2.0	-2.9	-3.5	-4.0	-4.9	-6.0	-6.7
A. C.	-2.0	-8.4	-11.2	-12.5	-13.1	-13.8	-14.7	-15.4
Aircraft	31.4	30.6	30.3	30.4	30.6	30.5	31.6	32.8
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.3	-1.5
	-0.4	-1.9	-2.6	-2.8	-3.0	-3.1	-3.3	-3.5
Missiles	9.9	9.6	9.6	9.6	9.7	9.6	10.0	10.3
	0.0	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5
	-0.1	-0.6	-0.8	-0.9	-0.9	-1.0	-1.1	-1.1
Ships	10.7	10.3	10.3	10.3	10.4	10.4	10.7	11.1
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.5
	-0.2	-0.7	-0.9	-1.0	-1.1	-1.1	-1.2	-1.2
Vehicles	12.4	12.2	12.5	12.7	13.0	13.4	14.2	15.0
	0.0	-0.2	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7
	-0.2	-0.8	-1.1	-1.3	-1.3	-1.4	-1.5	-1.6
Electronics and software	27.4	26.7	26.7	26.8	27.2	27.4	28.7	29.9
	-0.1	-0.4	-0.6	-0.7	-0.9	-1.1	-1.3	-1.4
	-0.4	-1.8	-2.4	-2.7	-2.8	-3.0	-3.2	-3.3
	27.4	26.4	26.3	26.4	26.6	26.7	27.6	28.6
Other equipment	-0.1	-0.4	-0.6	-0.7	-0.9	-1.0	-1.3	-1.4
	-0.4	-1.8	-2.4	-2.7	-2.8	-2.9	-3.1	-3.2
	11.2	11.2	11.2	11.3	11.6	11.8	12.5	13.2
Other durable goods	0.0	-0.2	-0.3	-0.3	-0.4	-0.5	-0.6	-0.6
		a –			4.2	1 2		1 Г

#### Table A-2: Federal Defense Expenditures by NIPA Category

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
No. d. webbe we ada	22.2	22.5	22.7	22.5	247	26.2	20.7	
Nondurable goods	32.3	32.5	32.7	33.5	34.7	36.2	38.7	41.4
	-0.1	-0.5	-0.8	-0.9	-1.1	-1.4	-1.7	-2.0
Petroleum products	-0.5	-2.2	-5.0	-5.4	-5.0	-5.9	-4.5	-4.0
Petioleum products	10.0	10.3	10.0	19.2	20.1	21.4	25.1	1.2
	-0.1	-0.5	-0.3	-0.0	-0.7	-0.8 2 2	-1.0	-1.2
Ammunition	-0.5	-1.5	-1.0	-2.0	-2.1	-2.5	-2.0	-2.0
Animalition	4.5	4.5	4.5	4.0	4.7	4.0	0.2	0.2
	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3
Other pondurable goods	-0.1	-0.3	-0.4	-0.5	0.5	10.0	10.5	11.0
Other hondulable goods	9.7	0.2	9.0	0.2	9.9	10.0	10.5	0.5
	0.0	-0.2	-0.2	-0.5	-0.5	-0.4	-0.3	-0.3
	-0.1	-0.0	-0.8	-0.9	-1.0	-1.1	-1.1	-1.2
Services	244.9	240.8	241.6	244.4	248.9	253.2	266.4	280.6
	-0.9	-3.8	-5.6	-6.6	-7.8	-9.6	-11.9	-13.5
	-3.7	-16.0	-21.3	-23.9	-25.4	-27.2	-29.4	-31.3
Research and development	56.7	55.1	54.6	54.7	55.1	55.0	57.0	59.1
	-0.2	-0.9	-1.2	-1.4	-1.7	-2.0	-2.5	-2.8
	-0.8	-3.5	-4.7	-5.2	-5.5	-5.8	-6.1	-6.4
Installation support	46.2	45.9	46.5	47.4	48.7	50.2	53.5	56.9
	-0.2	-0.7	-1.1	-1.3	-1.5	-1.9	-2.4	-2.7
	-0.7	-3.0	-4.1	-4.6	-4.9	-5.4	-5.9	-6.3
Weapons support	31.9	31.0	30.7	30.8	31.1	31.1	32.3	33.6
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.4	-1.6
	-0.5	-2.0	-2.6	-2.9	-3.1	-3.2	-3.4	-3.6
Personnel support	89.2	88.6	89.8	91.6	94.0	97.0	103.3	109.9
	-0.3	-1.4	-2.1	-2.5	-2.9	-3.7	-4.6	-5.3
	-1.3	-5.8	-7.9	-8.9	-9.5	-10.4	-11.3	-12.2
Transportation of material	14.7	14.3	14.1	14.1	14.2	14.2	14.7	15.3
	0.0	-0.2	-0.3	-0.4	-0.4	-0.5	-0.7	-0.7
	-0.2	-0.9	-1.2	-1.4	-1.4	-1.5	-1.6	-1.7
Travel of persons	9.9	9.6	9.4	9.4	9.4	9.3	9.6	9.8
	0.0	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5
	-0.1	-0.6	-0.8	-0.9	-0.9	-1.0	-1.0	-1.1
Other services	-3.6	-3.5	-3.6	-3.6	-3.7	-3.8	-3.9	-4.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Characterization in the state		47.4	47.0	47.0	47.0	47.0	40.0	40.0
Structures investment	1/.4	1/.1	17.2	1/.3	17.6	17.9	18.8	19.9
	-0.1	-0.3	-0.4	-0.5	-0.5	-0.7	-0.8	-0.9
	-0.2	-1.1	-1.4	-1.6	-1.8	-1.9	-2.1	-2.2

### Table A-2 (continued): Federal Defense Expenditures by NIPA Category

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Consumption of fixed capital	91.4	90.7	89.4	88.7	88.5	89.0	90.3	92.9
	0.0	-0.1	-0.5	-0.9	-1.3	-2.0	-2.7	-3.4
	0.0	-0.4	-2.0	-3.7	-5.0	-6.8	-7.9	-8.8
Federal defense consump.	805.5	805.9	813.6	826.8	845.5	874.0	920.4	970.5
and investment (NIPA)	-2.5	-11.6	-17.2	-20.9	-24.8	-31.8	-39.7	-45.4
	-10.8	-48.1	-66.3	-75.9	-82.0	-90.6	-99.0	-105.8
	-10.7	-48.3	-67.0	-77.3	-84.0	-93.2	-102.1	-109.8
Total defense employment	2332.1	2313.4	2294.2	2281.7	2274.1	2247.5	2244.0	2240.7
(thousands of persons)	-8.0	-36.8	-52.5	-61.4	-70.0	-84.0	-98.3	-105.4
	-34.6	-152.5	-201.3	-221.6	-229.5	-236.5	-241.2	-242.8
Military	1561.1	1549.1	1536.8	1528.9	1524.3	1507.5	1506.1	1504.7
(deviation in thousands)	-5.4	-24.6	-35.2	-41.1	-46.9	-56.3	-65.9	-70.7
	-23.2	-102.1	-134.9	-148.5	-153.8	-158.6	-161.9	-163.0
Civilian	771.0	764.3	757.4	752.8	749.8	740.0	737.9	736.0
(deviation in thousands)	-2.7	-12.1	-17.3	-20.3	-23.1	-27.7	-32.3	-34.6
	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7

 Table A-2 (continued): Federal Defense Expenditures by NIPA Category

# Table A-3: Direct Defense Purchases by Producing Sector(Millions of 2005 dollars)

Line 1: CBO Status Quo Baseline	(Defense	expend	itures gr	ow with	inflatior	ı)		
Line 2: BCA-1 Expenditure Caps (	Only (BCA	-1 caps,	no BCA-	2 seques	tration)			
Line 3: BCA-2 Sequestration with	n BCA-1 Ca	aps (CBO	current	law proj	ection)			
Alternetines and sharing in deniet					-f 05¢			
Alternatives are snown in devia	tions fron	n base va	alues in i	nillions	ot 05Ş.			
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
1 Agric, forestry, & fisheries	41	40	39	38	38	37	38	38
	0	-1	-1	-1	-1	-1	-2	-2
	-1	-3	-3	-4	-4	-4	-4	-4
7.0 Construction	17104	10507	10205	1(1))	10000	15077	15014	15052
7-8 Construction	1/194	10507	16285	10132	16082	15677	15814	15952
	-59	-204	-3/3	-434	-495	-580	-692	-750
	-255	-1093	-1430	-1307	-1025	-1049	-1099	-1720
Non-Durables	24165	23555	23134	22949	22917	22404	22716	23037
	-83	-374	-530	-618	-706	-838	-995	-1084
	-359	-1553	-2032	-2230	-2314	-2359	-2443	-2498
9 Meat products	300	294	289	287	287	281	286	290
	-1	-5	-7	-8	-9	-11	-13	-14
	-4	-19	-25	-28	-29	-30	-31	-31
10 Dairy products	53	52	51	51	51	49	50	51
	0	-1	-1	-1	-2	-2	-2	-2
	-1	-3	-4	-5	-5	-5	-5	-6
11 Canned & frozen foods	57	56	55	54	54	53	54	55
	0	-1	-1	-1	-2	-2	-2	-3
	-1	-4	-5	-5	-5	-6	-6	-6
12 Bakery & grain mill products	109	106	105	104	104	102	103	105
	0	-2	-2	-3	-3	-4	-5	-5
	-2	-/	-9	-10	-10	-11	-11	-11
13 Alcoholic beverages	/	/	0	6	0	6	6	6
	0	0	-1	1	-1	1	1	1
14 Other food products	168	165	162	161	161	158	160	163
	-1	-3	-4	-4	-5	-6	-7	-8
	-2	-11	-14	-16	-16	-17	-17	-18
16 Textiles and knitting	124	122	120	119	119	116	118	120
	0	-2	-3	-3	-4	-4	-5	-6
	-2	-8	-11	-12	-12	-12	-13	-13
17 Apparel	1435	1407	1382	1372	1372	1344	1366	1388
	-5	-22	-32	-37	-42	-50	-60	-65
	-21	-93	-121	-133	-138	-141	-147	-150
18 Paper	327	321	315	313	313	306	311	316
	-1	-5	-7	-8	-10	-11	-14	-15
	-5	-21	-28	-30	-32	-32	-33	-34

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
10 Drinting & nublishing	020	077	007	002	001	705	700	011
19 Printing & publishing	839	822	807	802	201	785	798	20
	-5	-13	-18	-22	-25	-29	-35	-38
20 A prio fontilizono 8, ekonsioale	-12	-54	-/1	-78	-81	-83	-86	-88
20 Agric fertilizers & chemicais	23	23	22	22	22	22	22	22
	0	0	-1	-1	-1	-1	-1	-1
21 Diastics 8 suistly stics	0	-1	-2	-2	-2	-2	-2	-2
21 Plastics & synthetics	33	32	32	32	32	31	31	32
	0	-1	-1	-1	-1	-1	-1	-2
22 Davida	021	-2	-3	-3	-3	-3	-3	-3
22 Drugs	921	904	20	166	200	205	8//	892
	-3	-14	-20	-24	-27	-32	-38	-42
22 Oth an ab anti-rala	-14	-00	-78	-80	-89	-91	-94	-97
23 Other chemicals	8865	8551	8398	8317	8290	8074	8153	8234
	-31	-136	-193	-224	-256	-302	-358	-388
	-132	-565	-738	-809	-838	-851	-8/8	-894
24 Petroleum refining	9668	9482	9312	9247	9243	9056	9204	9355
	-33	-151	-213	-249	-285	-338	-403	-440
	-143	-625	-817	-898	-933	-953	-989	-1014
25 Fuel OII	108	106	104	103	103	101	103	105
	0	-2	-2	-3	-3	-4	-5	-5
	-2	-/	-9	-10	-10	-11	-11	-11
26 Rubber products	950	932	915	909	908	890	904	919
	-3	-15	-21	-24	-28	-33	-40	-43
	-14	-61	-80	-88	-92	-94	-97	-100
27 Plastic products	86	84	83	82	82	80	82	83
	0	-1	-2	-2	-3	-3	-4	-4
	-1	-6	-/	-8	-8	-8	-9	-9
28 Shoes & leather	92	90	89	88	88	86	88	89
	0	-1	-2	-2	-3	-3	-4	-4
	-1	-6	-8	-9	-9	-9	-9	-10
Durables	0220	00.42	0700	0705	0000	0402	0504	074.0
Durables Materials & Products	9220	8943	8780	8705	8688	8482	8594	8/10
	-32	-145	-205	-239	-2/3	-324	-384	-418
20 humber	-139	-601	-786	-863	-895	-912	-943	-963
29 Lumber	37	36	36	36	36	35	35	36
	0	-1	-1	-1	-1	-1	-2	-2
20.5	-1	-2	-3	-3	-4	-4	-4	-4
30 Furniture	1/	16	16	16	16	15	16	16
	0	0	0	0	0	-1	-1	-1
	0	-1	-1	-2	-2	-2	-2	-2
31 Stone, clay & glass	117	115	113	112	112	110	112	114
	0	-2	-3	-3	-3	-4	-5	-5
	-2	-8	-10	-11	-11	-12	-12	-12

# Table A-3 (continued): Direct Defense Purchases by Producing Sector (Millions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
32 Primary ferrous metals	702	689	677	672	671	658	669	680
	-2	-11	-15	-18	-21	-25	-29	-32
	-10	-45	-59	-65	-68	-69	-72	-74
33 Primary nonferrous metals	195	189	185	184	183	179	182	184
	-1	-3	-4	-5	-6	-7	-8	-9
	-3	-12	-16	-18	-19	-19	-20	-20
34 Metal products	8152	7898	7753	7685	7670	7485	7581	7681
	-29	-128	-182	-212	-242	-287	-340	-370
	-124	-532	-696	-764	-792	-807	-834	-852
Non-Electrical Machinery	5403	5162	5069	5020	5004	4873	4920	4969
	-19	-82	-116	-135	-154	-182	-216	-234
	-80	-341	-445	-488	-506	-513	-529	-539
35 Engines and turbines	837	798	784	776	774	753	760	767
	-3	-13	-18	-21	-24	-28	-34	-36
	-13	-53	-69	-76	-79	-80	-82	-84
36 Agr. cst. mining & oilfield eq	980	930	913	904	901	876	884	892
	-3	-15	-21	-24	-28	-33	-39	-42
	-15	-61	-80	-88	-91	-92	-95	-97
37 Metalworking machinery	43	41	40	40	40	39	39	39
o, metalwonking machinery	0	-1	-1	-1	-1	-1	-2	-2
	-1	-3	-4	-4	-4	-4	-4	-4
38 Special industry machinery	- 38	36	36	35	35	34	34	35
	0	-1	-1	-1	-1	-1	-2	-2
	-1	-2	-3	-3	-4	-4	-4	-4
39 Gen. & misc. industrial mach.	1380	1322	1299	1287	1283	1250	1263	1276
	-5	-21	-30	-35	-40	-47	-55	-60
	-20	-87	-114	-125	-129	-132	-136	-138
40 Computers	1790	1709	1678	1662	1657	1613	1629	1645
	-6	-27	-38	-45	-51	-60	-71	-77
	-27	-113	-147	-161	-167	-170	-175	-178
41 Office equipment	136	131	128	127	127	123	124	125
	0	-2	-3	-3	-4	-5	-5	-6
	-2	-9	-11	-12	-13	-13	-13	-14
42 Service industry machinery	200	194	191	189	189	185	187	190
	-1	-3	-4	-5	-6	-7	-8	-9
	-3	-13	-17	-18	-19	-19	-20	-21
Electrical Machinery	22936	22167	21771	21583	21538	21025	21284	21550
	-79	-352	-499	-581	-663	-786	-932	-1013
	-340	-1461	-1911	-2096	-2174	-2212	-2288	-2335
43 Elec. indust. app. & dist. eq.	1033	1003	985	977	976	953	966	979
	-4	-16	-23	-26	-30	-36	-42	-46
	-15	-66	-86	-95	-98	-100	-104	-106

# Table A-3 (continued): Direct Defense Purchases by Producing Sector (Millions of 2005 dollars)
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
	50	<b>F</b> 4	50	50	50	40	40	10
44 Household appliances	53	51	50	50	50	48	49	49
	1	-1	-1	-1	-2	-2 E	-2	-2
AF Floc lighting & wiring oquin	1- 2210	-3	-4	-5 2020	5- ۲۵۵۸	-5	-5 2002	כ- כנחכ
45 Elec. lighting & wiring equip.	3210	3110	3054	3029 02	3024	2954	2993	3033
	-11	-49	-70	-02	-95	-110	-131	-145
16 TV VCB radio & phonograph	-40	-205	-200	-294	-303	-511	-322	-529
	0	-1	-1	-1	-2	-2	-2	-3
	-1	-4	-5	-5	-5	-6	-6	-6
47 Communication equipment	13319	12804	12575	12461	12428	12118	12251	12388
	-46	-203	-288	-335	-383	-453	-536	-583
	-198	-844	-1104	-1210	-1254	-1275	-1317	-1342
48 Electronic components	5263	5142	5050	5012	5007	4899	4971	5046
	-18	-82	-116	-135	-154	-183	-218	-237
	-78	-339	-443	-487	-505	-515	-534	-547
Transportation Equipment	80601	77443	76009	75265	75033	73040	73815	74610
	-287	-1271	-1799	-2094	-2390	-2826	-3345	-3630
	-1234	-5272	-6895	-7558	-7831	-7956	-8211	-8363
49 Motor vehicles	4986	4728	4641	4593	4575	4447	4485	4524
	-18	-77	-109	-127	-144	-170	-201	-218
	-76	-319	-417	-457	-473	-480	-494	-502
50 Motor vehicle parts	490	480	472	468	468	459	466	474
	-2	-8	-11	-13	-14	-17	-20	-22
	-7	-32	-41	-45	-47	-48	-50	-51
51 Aerospace	64224	61790	60642	60046	59860	58265	58886	59523
	-229	-1017	-1440	-1677	-1913	-2263	-2678	-2906
	-987	-4220	-5520	-6050	-6269	-6370	-6573	-6696
52 Ships & boats	5896	5613	5510	5454	5435	5287	5337	5389
	-21	-91	-129	-150	-172	-203	-240	-260
	-90	-379	-496	-543	-562	-571	-589	-599
53 Other transportation equip.	5005	4832	4745	4704	4694	4582	4641	4701
	-17	-78	-110	-128	-146	-173	-206	-223
	-75	-322	-421	-462	-479	-488	-504	-515
Instruments	39720	37943	37260	36897	36778	35809	36158	36516
	-138	-607	-860	-1000	-1141	-1349	-1595	-1730
	-593	-2519	-3294	-3610	-3739	-3797	-3916	-3986
54 Search & navigation equip.	32011	30540	29990	29694	29596	28809	29083	29364
	-111	-489	-692	-806	-919	-1086	-1284	-1392
	-479	-2029	-2654	-2908	-3012	-3058	-3153	-3209
55 Medical instruments & supp.	903	879	864	857	856	837	849	862
	-3	-14	-20	-23	-26	-31	-37	-41
	-13	-58	-76	-83	-86	-88	-91	-93

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
56 Ophthalmic goods	15	14	14	14	14	14	14	14
	0	0	0	0	0	-1	-1	-1
	0	-1	-1	-1	-1	-1	-1	-2
57 Other instruments	6792	6509	6392	6331	6312	6149	6211	6275
	-24	-104	-147	-171	-195	-231	-273	-296
	-101	-431	-563	-617	-640	-650	-670	-683
58 Misc. manufacturing	281	270	265	263	262	256	259	262
	-1	-4	-6	-7	-8	-10	-11	-12
	-4	-18	-23	-26	-26	-27	-28	-28
	100-0		100					
Transportation	16650	16016	15729	15572	15517	15099	15233	15370
	-57	-255	-361	-420	-478	-565	-668	-724
	-247	-1057	-1382	-1514	-1568	-1591	-1639	-1667
59 Railroads	1139	1095	1075	1065	1061	1032	1041	1050
	-4	-17	-25	-29	-33	-39	-46	-50
	-17	-72	-95	-104	-107	-109	-112	-114
60 Trucking, hwy pssngr transit	9336	8982	8821	8733	8703	8469	8544	8622
	-32	-143	-202	-235	-268	-317	-374	-406
	-139	-592	-775	-849	-879	-892	-919	-935
61 Water transport	2964	2851	2800	2772	2761	2686	2709	2733
	-10	-45	-64	-75	-85	-100	-119	-129
	-44	-188	-246	-269	-279	-283	-291	-296
62 Air transport	3160	3039	2984	2954	2944	2864	2890	2916
	-11	-48	-69	-80	-91	-107	-127	-138
	-47	-201	-263	-288	-298	-302	-312	-317
63 Pipeline	50	49	49	48	48	47	48	49
	0	-1	-1	-1	-1	-2	-2	-2
	-1	-3	-4	-5	-5	-5	-5	-5
Utilities	10396	9994	9815	9716	9679	9415	9494	9575
	-36	-159	-225	-261	-298	-352	-416	-450
	-154	-659	-861	-943	-977	-991	-1020	-1037
65 Communications services	2502	2405	2362	2338	2330	2266	2285	2305
	-9	-38	-54	-63	-72	-85	-100	-108
	-37	-159	-207	-227	-235	-238	-246	-250
66 Electric utilities	4477	4304	4227	4184	4168	4055	4089	4124
	-15	-68	-97	-113	-128	-152	-179	-194
	-66	-284	-371	-406	-421	-427	-439	-447
67 Gas utilities	1162	1117	1097	1085	1081	1052	1061	1070
	-4	-18	-25	-29	-33	-39	-46	-50
	-17	-74	-96	-105	-109	-111	-114	-116
68 Water and sanitary services	2255	2168	2129	2108	2100	2043	2060	2077
	-8	-34	-49	-57	-65	-76	-90	-98
	-33	-143	-187	-205	-212	-215	-221	-225

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Trade	6198	5981	5873	5822	5809	5669	5738	5809
	-22	-96	-135	-158	-180	-213	-253	-275
	-92	-396	-518	-569	-590	-600	-620	-633
69 Wholesale trade	5450	5261	5167	5122	5112	4991	5054	5120
	-19	-84	-119	-139	-159	-188	-223	-242
	-81	-349	-456	-501	-519	-529	-547	-558
71 Restaurants and bars	749	720	707	700	697	678	684	689
	-3	-11	-16	-19	-21	-25	-30	-32
	-11	-47	-62	-68	- /0	-/1	-73	-75
Finance, Insur, & Real Estate	945	908	892	883	879	855	863	870
	-3	-14	-20	-24	-27	-32	-38	-41
	-14	-60	-78	-86	-89	-90	-93	-94
72 Finance & insurance	51	49	48	48	47	46	47	47
	0	-1	-1	-1	-1	-2	-2	-2
	-1	-3	-4	-5	-5	-5	-5	-5
73 Real estate and royalties	894	859	844	835	832	809	816	823
· · · ·	-3	-14	-19	-22	-26	-30	-36	-39
	-13	-57	-74	-81	-84	-85	-88	-89
Services	111140	106858	104949	103886	103502	100686	101539	102412
	-383	-1698	-2403	-2795	-3188	-3763	-4446	-4815
	-1648	-7042	-9210	-10088	-10445	-10595	-10913	-11095
75 Hotels	1186	1140	1119	1108	1104	1074	1083	1092
	-4	-18	-26	-30	-34	-40	-47	-51
	-18	-75	-98	-108	-111	-113	-116	-118
76 Pers. & repair serv, exc. auto	687	661	649	642	640	623	628	633
	-2	-10	-15	-17	-20	-23	-27	-30
	-10	-44	-57	-62	-65	-66	-67	-69
77 Professional services	52605	50569	49666	49161	48977	47641	48041	48451
	-181	-803	-1137	-1323	-1508	-1781	-2104	-2278
	-780	-3333	-4358	-4774	-4943	-5013	-5163	-5249
78 Computer & data processing	39303	37803	37127	36753	36620	35628	35935	36249
	-136	-601	-850	-989	-1128	-1332	-1574	-1704
	-583	-2491	-3258	-3569	-3696	-3749	-3862	-3927
79 Advertising	183	176	173	171	170	165	167	168
	-1	-3	-4	-5	-5	-6	-7	-8
	-3	-12	-15	-17	-17	-17	-18	-18
80 Other business services	9881	9498	9329	9234	9200	8949	9024	9101
	-34	-151	-214	-248	-283	-334	-395	-428
	-147	-626	-819	-897	-928	-942	-970	-986
81 Automobile services	644	619	608	602	599	583	588	593
	-2	-10	-14	-16	-18	-22	-26	-28
	-10	-41	-53	-58	-60	-61	-63	-64

<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
5129	4931	4843	4793	4775	4645	4684	4724
-18	-78	-111	-129	-147	-174	-205	-222
-76	-325	-425	-465	-482	-489	-503	-512
87	83	82	81	81	78	79	80
0	-1	-2	-2	-2	-3	-3	-4
-1	-5	-7	-8	-8	-8	-9	-9
1435	1379	1355	1341	1336	1299	1310	1322
-5	-22	-31	-36	-41	-49	-57	-62
-21	-91	-119	-130	-135	-137	-141	-143
2815	2706	2657	2630	2620	2549	2570	2592
-10	-43	-61	-71	-81	-95	-113	-122
-42	-178	-233	-255	-264	-268	-276	-281
40440	38898	38203	37818	37681	36662	36978	37303
-139	-618	-875	-1018	-1161	-1370	-1619	-1754
-600	-2563	-3352	-3672	-3803	-3858	-3974	-4041
296738	292431	288378	285820	284830	282567	282133	282719
-664	-3142	-4876	-6082	-7238	-9179	-11075	-12300
-2840	-13006	-18865	-22303	-24402	-26927	-28442	-29271
	2012 5129 -18 -76 87 0 1435 -5 -21 2815 -10 -42 40440 -139 -600 296738 -664 -2840	2012         2013           2013         2013           2012         4931           -18         -78           76         -325           87         83           0         -11           -1         -5           1435         1379           -5         -22           -21         -91           2815         2706           -10         -43           -42         -178           40440         38898           -139         -618           -600         -2563           296738         292431           -664         -3142           -2840         -13006	2012         2013         2014           2013         2014           2012         4931         4843           -18         -78         -111           -76         -325         -425           87         83         82           0         -1         -22           13         1379         1355           -5         -22         -31           -21         -91         -119           2815         2706         2657           -10         -43         -61           -22         -31         -319           -23         2706         2657           -10         -43         -61           40440         38898         38203           -139         -618         -875           -600         -2563         -3352           296738         292431         288378           -664         -3142         -4876           -2840         -13006         -18865	2012         2013         2014         2015           2013         2014         2015           2012         4931         4843         4793           5129         4931         4843         4793           -18         -78         -111         -129           -76         -325         -425         -465           87         83         82         81           0         -1         -2         -2           -1         -5         -77         -88           1435         1379         1355         1341           -5         -22         -31         -36           -21         -91         119         -130           -22         -31         -36         -21           -21         -91         -119         -130           -22         -31         -36         -210           -10         -43         -61         -71           -42         -178         -233         -255           40440         38898         38203         37818           -139         -618         -875         -1018           -600         -2563         -3352	2012         2013         2014         2015         2016           1         1         1         1         1           5129         4931         4843         4793         4775           -18         -78         -111         -129         -147           -76         -325         -425         -465         -482           87         83         82         81         81           0         -1         -2         -2         -2           -1         -55         -77         8         88           1435         1379         1355         1341         1336           -5         -22         -31         -36         -41           201         -91         119         -130         -135           1435         1379         1355         1341         1336           -5         -22         -31         -36         -41           201         -91         -119         -130         -135           2815         2706         2657         2630         2620           -10         -43         -61         -71         -81           -42         -178 <td>2012         2013         2014         2015         2016         2018           5129         4931         4843         4793         4775         4645           -18         -78         -111         -129         -147         -174           -76         -325         -425         -465         -482         -489           87         83         82         81         81         78           0         -1         -2         -2         -3           -1         -55         -77         -8         83         129           -512         -22         -31         136         1299           -53         -22         -31         -36         -41         -49           -13         -57         -8         8         8         -8           1435         1379         1355         1341         1336         1299           -5         -22         -31         -36         -41         -49           -143         -179         -130         -135         -137           -101         -119         -130         -145         -268           40440         38898         38203</td> <td>2012         2013         2014         2015         2016         2018         2020           5129         4931         4843         4793         4775         4645         4684           -18         -78         -111         -129         -147         -174         -205           -76         -325         -425         -465         -482         -489         -503           87         83         82         81         81         78         79           0         -1         -2         -2         -3         -33           1         -55         -77         -8         88         -9           1435         1379         1355         1341         1336         1299         1310           -5         -22         -31         -36         -41         -49         -57           1435         1379         1355         1341         1336         1299         1310           -5         -222         -31         -36         -41         -49         -57           1435         1379         1135         1341         1336         1299         151           1435         2706         265</td>	2012         2013         2014         2015         2016         2018           5129         4931         4843         4793         4775         4645           -18         -78         -111         -129         -147         -174           -76         -325         -425         -465         -482         -489           87         83         82         81         81         78           0         -1         -2         -2         -3           -1         -55         -77         -8         83         129           -512         -22         -31         136         1299           -53         -22         -31         -36         -41         -49           -13         -57         -8         8         8         -8           1435         1379         1355         1341         1336         1299           -5         -22         -31         -36         -41         -49           -143         -179         -130         -135         -137           -101         -119         -130         -145         -268           40440         38898         38203	2012         2013         2014         2015         2016         2018         2020           5129         4931         4843         4793         4775         4645         4684           -18         -78         -111         -129         -147         -174         -205           -76         -325         -425         -465         -482         -489         -503           87         83         82         81         81         78         79           0         -1         -2         -2         -3         -33           1         -55         -77         -8         88         -9           1435         1379         1355         1341         1336         1299         1310           -5         -22         -31         -36         -41         -49         -57           1435         1379         1355         1341         1336         1299         1310           -5         -222         -31         -36         -41         -49         -57           1435         1379         1135         1341         1336         1299         151           1435         2706         265

Line 1: CBO Status Quo Baseline	(Defense	expend	itures gr	ow with	inflatio	n)		
Line 2: BCA-1 Expenditure Caps C	Only (BCA	-1 caps,	no BCA-	2 seques	stration)			
Line 3: BCA-2 Sequestration with	BCA-1C	aps (CBC	) current	law pro	jection)			
Alternatives are shown in percer	ntage dev	viations	from bas	e, unles	s otherw	<i>i</i> se note	d.	
· · · · · · · · · · · · · · · · · · ·				-				
	2012	2013	2014	2015	2016	2018	2020	2022
1 Agriculture, forestry, fisheries	349.8	370.2	386.7	403.4	413.4	436.5	455.5	473.2
	-0.01	-0.09	-0.06	-0.03	0.00	0.05	0.08	0.10
	-0.03	-0.30	-0.27	-0.15	-0.04	0.10	0.16	0.23
Mining	412.0	419.2	425.5	432.2	442.1	460.2	475.7	494.5
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1
	-0.1	-0.3	-0.4	-0.3	-0.2	-0.1	0.0	0.2
2 Metal mining	17.1	18.7	19.7	20.6	22.1	24.8	26.6	29.2
	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2
	0.1	0.0	-0.1	0.0	0.2	0.4	0.4	0.4
3 Coal mining	23.8	24.5	25.0	25.5	26.4	27.8	29.1	31.2
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0
	-0.1	-0.5	-0.6	-0.5	-0.4	-0.1	-0.1	0.0
4 Natural gas extraction	177.4	180.9	184.3	188.3	193.3	203.6	214.0	225.3
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2
	-0.1	-0.3	-0.4	-0.3	-0.2	0.0	0.2	0.4
5 Crude petroleum	177.1	177.8	178.4	178.7	180.1	182.1	182.9	184.8
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	-0.1	-0.3	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1
6 Non-metallic mining	16.5	17.3	18.0	19.0	20.1	21.7	23.0	24.0
	0.0	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.0
	-0.1	-0.6	-0.8	-0.7	-0.5	0.0	0.0	0.0
	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.1
Construction	763.0	795 6	825 4	868 7	930.0	1011 4	1058 5	1084 7
	-0.1	-0.3	-0.4	-0.3	-0.2	-0.1	0.0	0.0
	-0.2	-1 1	-1 4	-1.2	-0.8	0.0	0.0	0.0
7 New construction	334.0	353.4	374.2	403.4	447 9	497.6	520.4	528.4
	-0.1	-0.3	-0.4	-0.3	-0.2	0.1	0.1	0.1
	-0.3	-1.2	-1 5	-1.2	-0.6	0.1	0.1	0.2
8 Maint & repair construction	429.1	442.1	451.2	465.3	482.1	513.8	538.1	556.4
	-0.1	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.1
	-0.2	-1.0	-1 3	-1 3	-1.0	-0.4	-0.3	-0.2
	0.2	1.0	1.5	1.5	1.0	0.1	0.5	0.2
Non-Durables	2384.2	2451 2	2533 5	2621.0	2701 9	2859 5	3001 1	3141 0
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.5	-0.5	-0.4	-0.3	-0.1	0.0	0.0
9 Meat products	162.1	168.2	175 5	183 1	189.9	203.3	215 4	227 3
s meat products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.1
	0.0	0.2	0.2	0.1	0.0	0.0	0.1	0.1

# Table A-4: Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
10 Dairy products	77.0	78.6	80.4	82.3	83.8	87.0	89.5	92.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.1
11 Canned & frozen foods	67.4	69.5	/1.8	/4.0	/5.9	80.3	84.4	88.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 Delvers 9, ensite scill such sta	0.0	-0.1	-0.1	120.0	0.0	-0.1	0.0	10.0
12 Bakery & grain mill products	124.9	129.4	133.8	138.6	142.5	151.2	159.4	167.4
	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
12 Alcoholic hovoragos	44.2	-0.2	-0.2	-0.1	-0.1	E4 1	57.1	50.0
15 Alcoholic bevelages	44.2	43.8	47.0	49.5	0.0	0.0	0.0	0.1
	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
14 Other food products	108 1	204.0	210.1	217.6	222.2	235.0	2/17 0	250.0
	0.0	204.0	0.0	0.0	0.0	235.5	0.0	235.5
	0.0	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0
15 Tobacco products	40.2	39.4	38.6	37.9	36.9	35.3	33.4	32.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
16 Textiles and knitting	34.2	35.9	36.4	37.4	38.9	41.5	44.1	46.2
	-0.1	-0.4	-0.4	-0.3	-0.1	0.1	0.2	0.3
	-0.2	-1.5	-1.5	-1.0	-0.5	0.3	0.5	0.7
17 Apparel	23.8	25.3	25.8	27.0	27.5	29.0	28.8	28.6
1- 1	-0.2	-0.9	-0.8	-0.6	-0.4	-0.1	0.0	0.3
	-0.6	-3.2	-3.2	-2.1	-1.3	0.0	0.5	0.8
18 Paper	149.9	153.4	158.1	163.4	168.7	178.1	186.1	192.2
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.6	-0.7	-0.6	-0.4	0.0	0.1	0.1
19 Printing & publishing	186.8	190.1	194.4	200.3	207.1	219.3	227.8	235.8
	-0.1	-0.3	-0.4	-0.3	-0.3	-0.1	-0.1	0.0
	-0.2	-1.1	-1.4	-1.2	-0.9	-0.3	-0.1	0.1
20 Ag. fertilizers & chemicals	30.0	31.2	32.0	33.1	33.5	35.1	36.3	37.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
	0.0	-0.2	-0.2	-0.1	0.0	0.1	0.2	0.2
21 Plastics & synthetics	82.7	86.2	90.2	94.2	99.7	106.8	113.4	119.9
	0.0	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1
	-0.1	-0.4	-0.4	-0.3	-0.1	0.1	0.2	0.3
22 Drugs	146.7	151.1	161.6	168.4	173.7	186.2	197.6	205.8
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1
	-0.1	-0.4	-0.4	-0.2	-0.1	0.0	0.1	0.3
23 Other chemicals	287.9	298.6	311.6	326.1	336.8	360.7	384.7	409.8
	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0
	-0.1	-0.5	-0.6	-0.6	-0.4	-0.2	-0.1	0.0
24 Petroleum refining	437.0	444.3	454.4	465.4	476.4	495.2	512.7	532.1
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	-0.1	-0.4	-0.5	-0.5	-0.4	-0.3	-0.2	-0.2

# Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
25 Fuel oil	119.8	121 9	125 3	129 1	132.8	139 7	146.2	154.2
251 001 011	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.4	-0.4	-0.4	-0.3	-0.1	-0.1	0.0
26 Rubber products	36.9	38.5	40.3	42.3	44.9	49.4	53.8	57.6
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.7	-0.8	-0.6	-0.3	0.0	0.0	0.1
27 Misc. plastics products	130.0	134.8	139.9	145.9	153.0	164.7	175.2	185.7
	0.0	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.0
	-0.1	-0.7	-0.9	-0.7	-0.4	0.0	0.0	0.1
28 Shoes & leather	4.5	4.9	5.3	5.7	5.9	6.7	7.3	8.2
	-0.1	-0.4	-0.3	-0.2	-0.2	-0.1	0.0	0.1
	-0.3	-1.5	-1.3	-0.8	-0.5	0.0	0.2	0.4
Durable materials & products	789.5	825.6	857.8	893.4	942.7	1020.0	1087.3	1150.1
	0.0	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.0
	-0.1	-0.7	-0.9	-0.7	-0.4	0.0	0.0	0.0
29 Lumber	115.5	121.0	125.7	131.9	140.6	151.3	158.7	164.0
	-0.1	-0.3	-0.3	-0.2	-0.1	0.0	0.0	0.1
	-0.2	-1.0	-1.1	-0.7	-0.3	0.2	0.2	0.2
30 Furniture	54.9	58.9	61.5	65.8	71.9	81.4	89.1	96.8
	0.0	-0.2	-0.3	-0.2	-0.1	0.1	0.1	0.1
	-0.1	-0.7	-1.3	-1.0	-0.3	0.3	0.3	0.3
31 Stone, clay & glass	82.4	86.6	90.7	96.0	102.8	112.5	120.2	126.6
	0.0	-0.2	-0.3	-0.2	-0.1	0.0	0.0	0.1
	-0.2	-0.9	-1.1	-0.8	-0.4	0.2	0.2	0.2
32 Primary ferrous metals	172.4	181.5	187.6	193.0	200.5	213.5	225.9	238.0
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.4	-0.5	-0.5	-0.3	0.0	0.0	0.0
33 Primary nonferrous metals	98.0	99.4	104.2	106.4	110.9	119.1	127.7	136.8
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.0	0.1
34 Metal products	266.3	278.3	288.2	300.2	316.0	342.1	365.6	387.9
	0.0	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.2	-0.8	-1.1	-1.0	-0.7	-0.2	-0.2	-0.2
Non-Electrical Machinery	412.0	436.4	453.6	476.7	509.9	567.6	620.0	678.8
	0.0	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0
	0.0	-0.4	-0.9	-1.0	-0.6	0.1	0.0	0.0
35 Engines and turbines	24.8	25.9	27.3	28.9	30.6	34.7	39.4	44.7
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1
	-0.1	-0.4	-0.5	-0.5	-0.3	-0.1	0.0	0.1
36 Ag., CMO, Matl handling eq.	82.3	89.2	95.1	100.8	108.9	122.7	135.2	148.4
	0.0	0.0	-0.1	-0.1	0.0	0.1	0.1	0.1
	0.0	-0.2	-0.6	-0.6	-0.3	0.2	0.2	0.1

Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
37 Metalworking machinery	32.7	35.2	25 /	36.6	30 0	/13 7	17 1	51 8
37 Wetaworking machinery	0.0	-0.1	-0.4	-0.4	-0.3	43.7	47.4	-0.1
	0.0	-0.4	-1 4	-1 7	-1.1	0.0	-0.1	-0.2
38 Special industry machinery	36.4	40.0	41.7	44.3	47.5	53.3	58.6	64.5
,	0.0	-0.1	-0.2	-0.2	-0.1	0.1	0.1	0.1
	0.0	-0.2	-0.9	-1.1	-0.7	0.2	0.2	0.2
39 Gen. & misc. industrial eq.	105.7	109.6	112.7	116.1	120.4	128.4	136.6	145.7
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.1	0.0	0.0
40 Computers	87.8	92.4	96.2	102.4	112.1	128.4	142.1	158.9
	0.0	-0.1	-0.5	-0.5	-0.3	-0.1	-0.1	-0.2
	-0.1	-0.6	-1.7	-1.9	-1.0	0.0	-0.3	-0.4
41 Office equipment	3.8	3.9	3.8	4.0	4.2	4.5	4.7	5.0
	0.0	-0.1	-0.3	-0.2	-0.1	0.1	0.0	0.0
	0.0	-0.2	-1.1	-1.1	-0.4	0.2	0.1	0.0
42 Service industry machinery	38.5	40.3	41.3	43.5	47.1	52.0	55.9	59.9
	0.0	-0.1	-0.3	-0.2	-0.1	0.1	0.0	0.0
	-0.1	-0.5	-1.0	-0.9	-0.4	0.3	0.1	0.1
Electrical Machinery	284.2	300.1	311.9	324.5	339.6	367.3	396.8	428.3
	-0.1	-0.3	-0.5	-0.6	-0.5	-0.4	-0.5	-0.5
	-0.3	-1.4	-2.0	-2.1	-1.9	-1.3	-1.1	-1.0
43 Elec. indl. apparatus, dist. eq.	30.2	32.0	33.2	35.1	37.6	42.3	47.3	52.3
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.7	-1.1	-1.1	-0.7	-0.3	-0.3	-0.2
44 Household appliances	17.3	17.6	17.9	18.1	18.3	18.9	19.5	20.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1
45 Elec. lighting & wiring eqpt.	47.4	50.6	51.8	53.0	54.3	57.0	60.4	62.8
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.6	-0.8	-0.8	-0.7	-0.4	-0.3	-0.3
46 TV, VCR, radios, phono., etc.	5.3	5.3	5.3	5.4	5.6	6.5	7.3	8.2
	-0.2	-1.1	-1.2	-1.1	-0.8	-0.2	-0.1	0.1
	-0.7	-3.9	-4.9	-4.2	-2.7	-0.2	0.4	0.6
47 Communications equipment	50.5	53.2	55.1	56.3	58.2	61.5	65.1	69.1
	-0.2	-0.7	-1.1	-1.3	-1.4	-1.4	-1.5	-1.6
	-0.6	-2.8	-4.2	-5.1	-5.0	-4.2	-3.7	-3.3
48 Electronic components	133.5	141.4	148.6	156.5	165.5	181.2	197.3	215.9
	-0.1 -0 २	-0.3 -1 4	-0.5	-0.5	-0.4 -1 5	-0.3	-0.3	-0.3
	-0.3	-1.4	-2.0	-2.0	-1.3	-1.0	-0.9	-0.7
Transportation Equipment	669.9	695.7	721.2	752.3	787.2	852.6	916.3	988.2
	-0.1	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3
	-0.3	-1.2	-1.6	-1.5	-1.2	-0.8	-0.8	-0.7

# Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>202</u> 2
19 Motor vehicles	280.2	301 /	308 0	320.8	330 0	370.0	30/ 0	420 f
	205.2	-0.2	-0.3	-0.2	-0.1	0.0	0.0	420.0
	-0.1	-0.7	-1.0	-0.8	-0.4	0.0	0.0	0.0
50 Motor vehicle parts	123 5	127.9	130.8	133.5	137.7	146 5	154.3	161 8
	0.0	-0.1	-0.1	0.0	0.1	0.2	0.1	101.
	-0.1	-0.3	-0.4	-0.1	0.2	0.5	0.3	0.2
51 Aerospace	196.4	198.6	207.1	216.8	225.1	244.3	270.5	301.8
	-0.1	-0.6	-0.8	-0.9	-1.0	-1.0	-1.0	-1.0
	-0.6	-2.5	-3.2	-3.4	-3.3	-2.9	-2.6	-2.2
52 Ships & boats	23.8	23.8	24.1	24.8	25.8	27.4	28.7	30.2
•	-0.1	-0.6	-0.8	-0.9	-0.8	-0.8	-0.9	-0.8
	-0.5	-2.5	-3.2	-3.1	-2.7	-2.1	-1.9	-1.7
53 Other transportation equip.	37.1	44.0	50.1	56.4	59.6	64.5	68.8	73.9
	-0.1	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2
	-0.2	-1.1	-1.3	-1.2	-0.8	-0.5	-0.5	-0.4
Instruments & miscellaneous	282.8	288.2	293.6	302.4	313.5	330.7	349.6	368.2
	-0.1	-0.3	-0.4	-0.5	-0.4	-0.4	-0.5	-0.5
	-0.3	-1.2	-1.7	-1.7	-1.5	-1.2	-1.1	-1.3
54 Search & navigation equip.	39.8	38.7	38.5	38.9	39.5	40.0	41.8	43.6
	-0.3	-1.5	-2.2	-2.5	-2.8	-3.2	-3.6	-3.7
	-1.4	-6.3	-8.5	-9.2	-9.1	-8.9	-8.8	-8.6
55 Medical instruments & supp.	109.3	110.4	113.7	117.8	121.8	127.2	133.6	139.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	0.0	-0.1	-0.2	-0.2	-0.1	0.1	0.1	0.2
56 Ophthalmic goods	4.6	4.6	4.7	4.7	4.7	4.9	5.1	5.2
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.2
	0.0	-0.3	-0.3	-0.2	-0.1	0.0	0.2	0.3
57 Other instruments	76.0	76.9	77.2	79.2	82.8	88.1	92.9	97.9
	0.0	-0.2	-0.4	-0.4	-0.3	-0.2	-0.3	-0.3
	-0.2	-0.9	-1.7	-1.7	-1.2	-0.6	-0.7	-0.7
58 Misc. manufacturing	53.1	57.6	59.5	61.9	64.6	70.5	76.3	81.7
	0.0	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1
	0.0	-0.3	-0.4	-0.3	0.0	0.2	0.2	0.3
Transportation	732.6	756.3	785.7	817.9	852.8	916.3	976.0	1035.
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.7	-0.9	-0.8	-0.6	-0.3	-0.2	-0.1
59 Railroads	63.8	65.9	68.0	70.3	72.9	77.5	81.9	86.3
	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0.0
	-0.1	-0.5	-0.6	-0.6	-0.4	-0.2	-0.1	-0.1
60 Trucking, Hwy pass. transit	378.9	391.0	404.9	420.6	437.9	469.2	497.5	525.2
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
		07						-

Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
61 Water transport	55.2	57.5	60.5	63.9	67.9	74.6	81.2	87.6
	-0.1	-0.3	-0.4	-0.4	-0.3	-0.2	-0.3	-0.2
	-0.3	-1.3	-1.6	-1.5	-1.2	-0.7	-0.6	-0.5
62 Air transport	169.0	174.4	182.3	190.5	198.9	214.7	230.1	245.7
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0
	-0.1	-0.7	-0.8	-0.7	-0.6	-0.3	-0.1	0.0
63 Pipeline	5.7	5.7	5.8	5.8	5.9	5.9	5.9	5.9
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.7	-0.9	-0.8	-0.6	-0.4	-0.3	-0.2
64 Transportation services	59.9	61.8	64.2	66.8	69.4	74.4	79.4	84.3
	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.5	-0.7	-0.7	-0.6	-0.3	-0.2	-0.1
L Hilition	1220 1	1276.0	1417.2	1/150 1	1400 6	1501 7	16EE 1	1727 7
otinties	1526.1	1570.0	1417.5	1436.1	1499.0	1364.7	1055.1	1/3/./
	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
(F Communications convises	-0.1	-0.5	-0.0	-0.7	-0.0	-0.3	-0.1	-0.1
65 communications services	000.7	087.9	/13.4	/33.9	/53.0	/93./	824.7	800.1
	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.4	-0.6	-0.8	-0.8	-0.4	-0.2	-0.1
66 Electric utilities	341.5	354.8	362.9	3/4.2	387.6	413.9	438.4	463.9
	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
	-0.1	-0.6	-0.6	-0.6	-0.4	-0.2	-0.1	0.0
67 Gas utilities	229.5	233.8	238.2	243.2	248.2	257.8	264.9	272.3
	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0
	-0.1	-0.5	-0.6	-0.5	-0.3	-0.1	0.0	0.0
68 Water and sanitary services	96.4	99.5	102.8	106.8	110.9	119.3	127.1	135.3
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.6	-0.7	-0.6	-0.5	-0.3	-0.2	-0.2
Trade	2910.2	2993.1	3084.1	3196.4	3323.7	3560.0	3762.7	3967.9
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.5	-0.7	-0.5	-0.3	0.0	0.1	0.1
69 Wholesale trade	1228.2	1268.6	1311.6	1360 1	1417 9	1520.6	1614.8	1710.2
	0.0	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.4	-0.6	-0.6	-0.4	0.0	0.0	0.0
70 Retail trade	1125.8	1153.8	1186.8	1232 1	1283 5	1378 8	1454 A	1529.7
	0.0	2	2	2	1	1370.0	1 0 0	<u>1325.7</u> 0 1
	_0.0	-0.2	-0.2	-0.2 _0.6	-0.1	0.0	0.0	0.1
71 Postaurants and bars	556.2	570.7	-0.0 595 7	604.2	677.2	660 6	602 F	0.5
	.00.2	570.7	J05.7	004.2	022.3	0.000.0	0.0	728.0
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.4	-0.5	-0.4	-0.3	-0.1	0.0	0.1

# Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Finance Insur & Real Estate	10/11 /	1338 0	1162.3	<i>1</i> 610 6	1766 8	5071 8	5335 5	5583 1
Thance, mouried to the Lotate	4241.4	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.5	-0.6	-0.5	-0.3	-0.1	0.0	0.0
72 Finance & insurance	1940.6	1987.9	2049 7	2117.4	2184.8	2315.3	2433 5	2552.6
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	2352.0
	-0.1	-0.5	-0.6	-0.5	-0.3	-0.1	0.0	0.1
73 Real estate and royalties	1283.0	1311.3	1350.1	1397.6	1453.3	1556.4	1643.5	1727.2
	0.0	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.4	-0.6	-0.5	-0.4	-0.1	0.0	0.1
74 Owner-occupied housing	1017.8	1039.8	1062.4	1095.5	1128.8	1200.1	1258.5	1303.3
	0.0	-0.2	-0.2	-0.2	-0.1	0.0	0.0	0.1
	-0.1	-0.7	-0.7	-0.5	-0.3	-0.1	0.1	0.2
Services	5720.5	5851.2	6021.9	6206.5	6421.2	6807.2	7175.3	7558.7
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.6	-0.8	-0.7	-0.5	-0.2	-0.2	-0.1
75 Hotels	136.3	140.6	144.9	150.0	155.1	165.2	173.6	182.8
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0
	-0.1	-0.6	-0.8	-0.6	-0.5	-0.2	-0.1	0.0
76 Pers. & repair srv, exc. auto	242.1	247.5	255.0	264.1	273.3	291.6	307.4	324.7
	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0
	-0.1	-0.6	-0.7	-0.6	-0.4	-0.1	0.0	0.0
77 Professional services	1005.2	1028.5	1056.1	1087.0	1123.8	1187.8	1246.7	1305.9
	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
	-0.2	-0.8	-1.1	-1.0	-0.9	-0.5	-0.5	-0.4
78 Computer & data processing	883.6	904.7	926.2	956.0	998.3	1070.3	1134.0	1204.8
	0.0	-0.1	-0.3	-0.3	-0.2	-0.1	-0.2	-0.2
	-0.1	-0.5	-1.0	-1.1	-0.7	-0.3	-0.4	-0.4
79 Advertising	354.6	364.5	375.9	388.8	402.8	429.4	452.9	476.9
	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0
	-0.1	-0.5	-0.7	-0.6	-0.4	-0.1	0.0	0.0
80 Other business services	623.2	645.9	672.4	702.7	736.8	798.2	854.3	911.5
	0.0	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.2	-0.8	-1.0	-0.9	-0.7	-0.3	-0.2	-0.1
81 Automobile services	278.1	282.3	287.2	296.5	306.8	325.1	338.5	352.7
	-0.1	-0.3	-0.3	-0.3	-0.2	-0.1	-0.1	0.0
	-0.2	-0.9	-1.3	-1.0	-0.6	-0.2	-0.1	0.0
82 Movies and amusements	300.1	304.3	310.6	320.4	332.0	355.1	377.1	400.6
	0.0	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.6	-0.7	-0.4	-0.2	0.0	0.0	0.1
83 Private hospitals	506.3	516.0	532.6	546.1	561.5	581.7	615.9	654.5
	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
	0.0	-0.2	-0.2	-0.2	-0.1	0.0	0.1	0.3

Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
84 Physicians	476.7	485.7	506.5	514.8	523.7	544.1	563.0	575.6
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0
	0.0	-0.2	-0.3	-0.2	-0.2	-0.2	-0.1	0.1
85 Oth med. srv. & dentists	236.8	246.2	259.9	270.1	280.9	301.9	329.7	359.4
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0
	-0.1	-0.5	-0.9	-0.8	-0.6	-0.3	-0.1	0.2
86 Nursing homes	110.7	111.9	112.8	113.7	113.9	116.8	120.3	123.5
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	0.0	-0.3	-0.3	-0.3	-0.2	-0.1	0.0	0.2
87 Edu, social services, NPO	566.8	573.1	582.1	596.3	612.4	640.0	661.9	685.6
	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0
	-0.1	-0.7	-0.8	-0.6	-0.4	-0.1	0.0	0.1
Miscellaneous								
88 Government enterprises	218.7	223.9	229.2	235.0	240.8	251.9	260.3	269.2
·	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.6	-0.7	-0.7	-0.5	-0.3	-0.2	-0.1
93 Government industry	922.2	932.9	940.3	950.3	965.0	992.5	1016.6	1041.2
	-0.1	-0.4	-0.6	-0.7	-0.7	-0.9	-1.1	-1.1
	-0.3	-1.5	-2.2	-2.4	-2.5	-2.6	-2.7	-2.7
94 Domestic servants	15.6	15.3	15.2	15.3	15.5	15.7	15.6	15.7
	-0.1	-0.4	-0.4	-0.3	-0.3	-0.1	0.0	0.2
	-0.2	-1.3	-1.4	-1.1	-0.7	-0.2	0.2	0.5

Table A-4 (continued): Output by Producing Sector (Billions of 2005 dollars)

Line 1: CBO Status Quo Baseline	(Defense	e expend	litures gr	row with	inflatio	n)						
Line 2: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration)												
Line 3: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)												
Alternatives are shown in deviations from base values in thousands of jobs.												
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>				
1 Agric, forestry, & fisheries	3301.9	3380.8	3425.5	3413.9	3363.9	3273.0	3166.0	3100.8				
	0.1	-2.0	-2.2	-1.2	-0.3	1.4	2.4	3.1				
	0.2	-7.2	-9.5	-6.2	-2.5	2.5	5.0	7.1				
Mining	698.6	703.5	704.9	706.7	713.2	723.1	726.4	733.5				
	-0.1	-0.6	-0.7	-0.7	-0.5	-0.1	0.2	0.6				
	-0.4	-2.2	-3.0	-2.6	-1.8	-0.4	0.2	0.9				
2 Metal mining	38.0	40.6	42.1	43.0	45.1	48.7	50.3	52.8				
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1				
	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2				
3 Coal mining	88.1	87.6	86.1	84.8	84.4	82.8	80.8	80.7				
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0				
	-0.1	-0.4	-0.5	-0.4	-0.3	-0.1	0.0	0.0				
5 Crude petroleum & nat. gas	491.4	492.2	492.0	492.0	494.2	499.0	501.6	506.3				
	-0.1	-0.4	-0.5	-0.4	-0.3	-0.1	0.1	0.5				
	-0.3	-1.4	-1.8	-1.6	-1.2	-0.5	0.0	0.6				
6 Non-metallic mining	81.1	83.1	84.7	86.9	89.5	92.6	93.7	93.8				
	0.0	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0				
	-0.1	-0.4	-0.6	-0.6	-0.4	-0.1	0.0	0.1				
7-8 Construction	7004.9	7417.2	7834.6	8421.5	9315.0	10342.0	10790.3	10909.7				
	-5.2	-24.5	-30.7	-27.8	-17.6	6.9	7.5	6.5				
	-17.6	-89.8	-119.4	-103.1	-55.5	43.8	48.4	27.0				
Non-Durables	5199.5	5135.4	5105.2	5103.4	5106.4	5140.2	5127.4	5131.1				
	-1.2	-6.9	-9.8	-8.6	-6.5	-2.2	-0.4	1.4				
	-4.1	-24.4	-37.8	-33.3	-23.1	-6.2	1.2	6.1				
9 Meat products	514.6	529.5	546.3	564.0	578.0	606.1	628.8	649.8				
	-0.1	-0.2	-0.2	-0.1	0.0	0.1	0.3	0.4				
	-0.2	-0.9	-0.9	-0.6	-0.3	0.2	0.5	0.9				
10 Dairy products	138.4	132.8	129.1	126.1	123.3	118.2	113.3	109.9				
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0				
	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.1				
11 Canned & frozen foods	199.4	200.4	201.4	202.5	203.0	204.7	205.6	208.5				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0.0				
12 Bakery & grain mill prod.	296.9	297.7	299.8	302.2	303.7	307.0	309.2	313.3				
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2				
	0.0	-0.3	-0.6	-0.4	-0.3	0.0	0.2	0.4				

# Table A-5: Jobs by Producing Sector (Thousands)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
13 Alcoholic beverages	202.1	185.2	172.2	162.2	153.9	141.1	131.4	124.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	-0.1	-0.2	-0.1	-0.1	0.0	0.1	0.1
14 Other food products	296.5	299.7	302.5	305.9	308.2	312.6	315.9	320.0
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1
	0.0	-0.3	-0.4	-0.3	-0.1	-0.1	0.1	0.2
15 Tobacco products	15.3	14.9	14.4	14.0	13.5	12.7	11.7	11.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 Textiles and knitting	155.8	158.0	156.5	155.0	155.4	155.7	154.8	152.8
	-0.1	-0.5	-0.6	-0.4	-0.3	0.1	0.3	0.4
	-0.3	-1.9	-2.4	-1.8	-0.9	0.4	0.8	1.1
17 Apparel	173.9	163.8	152.6	141.9	133.8	120.5	101.6	90.9
	-0.1	-0.7	-1.3	-1.0	-0.7	-0.2	-0.1	0.2
	-0.3	-2.5	-4.9	-3.9	-2.4	-0.4	0.3	0.8
18 Paper	417.1	412.6	410.6	411.1	412.1	412.8	409.4	404.5
	-0.1	-0.4	-0.7	-0.7	-0.5	-0.1	0.0	0.1
	-0.2	-1.4	-2.7	-2.8	-2.0	-0.5	0.2	0.5
19 Printing & publishing	1135.4	1137.5	1142.7	1156.5	1174.0	1202.2	1208.9	1211.5
	-0.7	-3.4	-4.2	-3.8	-3.1	-1.6	-1.2	-0.3
	-2.2	-12.2	-16.2	-14.1	-10.2	-3.7	-1.0	1.0
20 Agric fertilizers & chem.	34.9	32.7	34.0	33.7	33.6	32.8	31.7	30.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.1
21 Plastics & synthetics	88.7	84.7	82.5	80.8	79.9	77.0	73.6	71.2
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1
	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.1	0.2
22 Drugs	326.5	327.1	333.9	342.5	345.2	354.5	363.0	368.8
	0.0	-0.2	-0.3	-0.2	-0.2	0.0	0.2	0.2
	-0.1	-0.7	-1.2	-1.0	-0.6	0.0	0.5	0.9
23 Other chemicals	396.2	399.5	405.7	413.6	419.1	430.6	440.4	452.4
	-0.1	-0.3	-0.6	-0.6	-0.5	-0.3	-0.2	-0.2
	-0.2	-1.2	-2.3	-2.5	-2.1	-1.1	-0.6	-0.3
24 Petroleum refining & fuel oil	108.5	103.4	99.1	95.7	92.7	87.2	82.1	78.2
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	0.0	-0.2	-0.5	-0.5	-0.4	-0.2	-0.2	-0.1
26 Rubber products	165.0	157.7	151.0	145.7	142.2	141.7	139.4	136.5
	0.0	-0.2	-0.3	-0.2	-0.2	0.0	0.0	0.0
	-0.1	-0.6	-1.1	-1.0	-0.7	-0.1	0.1	0.2
27 Plastic products	509.7	475.2	447.8	426.6	411.4	399.1	383.8	373.2
	-0.1	-0.4	-0.9	-0.9	-0.7	-0.2	0.0	0.0
	-0.2	-1.6	-3.4	-3.5	-2.5	-0.4	0.1	0.2
28 Shoes & leather	24.5	23.0	23.2	23.5	23.4	23.5	23.0	23.2
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.0	0.1

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
	7650 6	7746.0	7705 6		7000.4	0110.0	0004.0	0050.0
Durables	/650.6	//16.8	//35.6	///3.9	/892.4	8116.0	8224.3	8353.2
	-2.5	-13.4	-23.8	-24.7	-21.5	-11.8	-11.6	-12.3
	-10.0	-51.1	-91.8	-96.4	-76.4	-32.6	-25.6	-24.3
Durables Mats. and Products	2866.2	2915.5	2952.6	2993.5	3069.2	3214.8	3285.7	3344.4
	-0.7	-4.2	-7.0	-6.7	-4.9	-0.9	-0.4	-0.4
	-2.5	-15.4	-27.1	-26.3	-17.7	-1.4	1.6	1.2
29 Lumber	523.2	534.1	546.6	560.0	580.4	618.3	634.5	641.4
	-0.2	-0.9	-1.5	-1.3	-0.8	0.0	0.2	0.3
	-0.6	-3.4	-5.6	-4.9	-2.8	0.6	1.4	1.2
30 Furniture	341.9	353.6	355.8	364.5	381.5	403.1	411.1	425.3
	-0.1	-0.6	-1.1	-1.0	-0.5	0.2	0.3	0.3
	-0.2	-2.0	-4.2	-3.8	-1.7	1.2	1.2	1.1
31 Stone, clay & glass	394.9	396.1	400.1	405.6	416.3	438.7	447.1	450.8
	-0.1	-0.5	-1.0	-1.0	-0.7	0.0	0.2	0.2
	-0.2	-1.7	-3.8	-3.9	-2.7	0.2	1.1	0.9
32 Primary ferrous metals	258.8	266.2	270.4	270.6	272.0	276.9	276.2	273.3
	0.0	-0.1	-0.3	-0.4	-0.3	-0.1	0.0	0.0
	0.0	-0.2	-1.2	-1.6	-1.3	-0.3	0.0	0.0
33 Primary nonferrous metals	200.0	202.3	209.8	212.5	217.5	229.9	239.9	252.5
	0.0	0.0	-0.1	-0.2	-0.1	0.0	0.1	0.1
	0.0	0.1	-0.5	-0.7	-0.6	-0.2	0.1	0.2
34 Metal products	1147.5	1163.3	1169.8	1180.2	1201.5	1247.9	1276.9	1301.1
	-0.4	-2.1	-3.0	-3.0	-2.4	-1.1	-1.2	-1.2
	-1.5	-8.1	-11.8	-11.5	-8.6	-2.8	-2.1	-2.3
Non-Electrical Machinery	1593.1	1626.8	1629.1	1636.7	1673.2	1749.5	1792.5	1846.6
	0.0	-0.7	-3.2	-3.8	-2.6	0.2	0.3	-0.2
	0.0	-2.7	-12.3	-15.7	-11.1	0.4	0.7	0.0
35 Engines and turbines	63.7	60.1	57.9	56.0	54.5	53.6	53.6	54.5
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
	0.0	0.0	-0.2	-0.3	-0.3	-0.1	0.0	0.1
36 Ag., CMO, Matl handling eqpt	319.6	324.1	326.8	327.0	332.7	346.5	353.6	362.3
	0.1	0.1	-0.4	-0.5	-0.3	0.2	0.3	0.2
	0.2	0.3	-1.5	-2.2	-1.4	0.4	0.6	0.5
37 Metalworking machinery	240.8	247.5	239.7	234.9	237.1	251.3	257.8	266.6
	0.0	-0.1	-0.7	-1.0	-0.7	0.0	-0.1	-0.3
	0.0	-0.5	-2.9	-4.0	-3.0	0.1	0.0	-0.5
38 Special industry machinery	139.8	145.0	144.1	143.6	145.0	149.1	149.9	150.8
	0.0	0.0	-0.3	-0.4	-0.3	0.1	0.1	0.1
	0.1	0.1	-1.0	-1.5	-1.2	0.1	0.3	0.3
39 Gen. & misc. industrial mach.	441.6	461.6	477.7	492.5	508.6	540.0	566.7	596.4
	0.0	-0.3	-0.5	-0.6	-0.5	-0.1	0.0	0.0
	-0.2	-1.0	-2.1	-2.5	-2.1	-0.6	-0.2	0.1

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
10.0	405.0	400.0	101.0	477.0	470 5	474.0	465.5	450.7
40 Computers	195.9	189.3	181.0	1/7.0	1/8.5	1/4.2	165.5	159.7
	0.0	-0.3	-0.8	-0.8	-0.5	-0.1	-0.2	-0.3
	-0.1	-1.0	-3.1	-3.3	-1.8	-0.1	-0.4	-0.6
41 Office equipment	31.8	31.8	31.3	30.0	31.4	32.6	32.6	33.2
	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0
	0.0	0.0	-0.2	-0.2	-0.3	0.1	0.1	0.0
42 Service industry machinery	159.9	167.4	170.7	175.6	185.4	202.2	212.9	223.1
	0.0	-0.1	-0.4	-0.4	-0.3	0.1	0.1	0.0
	-0.1	-0.5	-1.3	-1./	-1.1	0.4	0.4	0.2
Electrical Machinery	901.4	879.7	850.0	825.2	809.0	779.9	755.4	738.1
	-0.5	-2.2	-3.4	-3.6	-3.7	-2.4	-2.3	-2.2
	-1.9	-9.0	-13.4	-14.0	-12.2	-7.1	-5.6	-4.6
43 Elec. indust. app. & dist. eq.	161.4	152.1	142.6	135.2	131.5	127.2	124.2	124.0
	0.0	-0.1	-0.3	-0.4	-0.3	-0.1	-0.1	-0.1
	-0.1	-0.6	-1.2	-1.5	-1.2	-0.5	-0.3	-0.3
44 Household appliances	60.9	60.2	59.1	57.9	56.5	54.2	51.9	50.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
45 Flec, light & wiring equip.	158.1	163.9	162.0	159.4	157.0	152.5	148.8	142.6
	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
	-0.2	-0.9	-1.2	-1.2	-1.1	-0.7	-0.5	-0.4
46 TV, VCR, radios & phono.	28.5	23.8	20.3	17.7	16.2	15.3	14.3	14.2
	0.0	-0.1	-0.1	-0.1	-0.6	-0.1	0.0	0.0
	0.0	-0.3	-0.3	-0.3	-0.7	-0.1	0.1	0.1
47 Communication equip.	100.5	87.8	77.5	68.5	61.6	50.8	42.8	36.9
	-0.1	-0.5	-0.8	-0.9	-0.9	-0.7	-0.7	-0.6
	-0.5	-2.1	-3.1	-3.4	-3.1	-2.2	-1.6	-1.2
48 Electronic components	392.0	391.9	388.6	386.5	386.2	379.9	373.4	370.5
	-0.2	-1.3	-1.9	-1.9	-1.7	-1.2	-1.3	-1.3
	-1.0	-5.1	-7.5	-7.6	-6.1	-3.7	-3.2	-2.7
Iransportation Equipment	13/7.5	1394.4	1405.6	1419.1	1433.1	1463.9	1484.6	1516.8
	-0.9	-3.9	-6.6	-6.8	-6.5	-5.4	-5.7	-5.8
	-3./	-15.0	-25.1	-25.9	-22.6	-15.3	-13.8	-12.9
49 Motor vehicles	387.6	415.7	428.1	440.9	460.2	498.7	522.6	548.2
	-0.1	-0.6	-1.0	-1.0	-0.7	0.1	0.2	0.1
	-0.3	-2.2	-3.9	-4.0	-2.5	0.8	0.9	0.4
50 Motor vehicle parts	254.1	247.1	233.4	218.8	207.7	193.8	179.5	166.7
	0.0	-0.1	-0.2	-0.1	0.0	0.3	0.2	0.2
	0.0	-0.3	-0.7	-0.4	0.1	0.9	0.7	0.4
51 Aerospace	472.2	447.2	441.7	437.8	431.9	423.8	425.6	433.9
	-0.6	-2.2	-3.5	-3.9	-4.1	-4.2	-4.3	-4.3
	-2.4	-9.0	-13.7	-14.7	-14.3	-12.6	-11.2	-9.9

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
52 Ships & boats	145.8	146.3	146.9	149.6	153.8	160.4	164.8	169.8
	-0.2	-0.7	-1.4	-1.3	-1.3	-1.3	-1.4	-1.4
	-0.7	-2.1	-4.8	-4.7	-4.3	-3.5	-3.2	-2.9
53 Other transport. equip.	117.7	138.0	155.5	171.9	179.5	187.2	192.1	198.0
	-0.1	-0.4	-0.5	-0.5	-0.4	-0.3	-0.4	-0.4
	-0.3	-1.4	-2.1	-2.1	-1.6	-1.0	-1.0	-0.9
Instruments	621.9	602.2	585.7	577.3	575.2	552.1	530.1	511.8
	-0.4	-2.1	-3.3	-3.6	-3.7	-3.5	-3.9	-4.0
	-1.9	-8.5	-12.6	-13.4	-12.4	-9.9	-9.5	-9.1
54 Search & navigation equip.	115.1	107.1	105.2	103.1	104.6	99.8	96.9	93.9
	-0.3	-1.5	-2.3	-2.6	-2.9	-3.2	-3.5	-3.5
	-1.5	-6.3	-8.8	-9.5	-9.7	-8.9	-8.5	-8.1
55 Medical instruments & supp.	273.7	268.6	264.1	262.1	259.8	249.7	239.2	229.7
	0.0	0.0	-0.1	-0.1	0.0	0.1	0.1	0.1
	0.0	-0.1	-0.4	-0.5	-0.3	0.2	0.2	0.3
56 Ophthalmic goods	15.2	14.4	12.8	12.4	11.4	10.0	8.6	7.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57 Other instruments	217.9	212.1	203.7	199.7	199.4	192.6	185.4	180.6
	-0.1	-0.5	-0.9	-0.9	-0.7	-0.4	-0.5	-0.6
	-0.4	-2.0	-3.4	-3.3	-2.4	-1.1	-1.2	-1.3
58 Misc. manufacturing	290.5	298.3	312.5	322.1	332.8	355.9	376.0	395.6
	0.0	-0.2	-0.3	-0.2	-0.1	0.2	0.3	0.4
	0.0	-0.7	-1.3	-1.0	-0.3	0.7	0.9	1.0
Transportation	4761.4	4836.4	4932.2	5044.4	5167.5	5383.0	5569.1	5741.4
	-1.8	-8.7	-10.8	-10.6	-9.4	-6.2	-5.8	-4.5
	-6.3	-32.3	-42.5	-40.3	-32.1	-16.7	-11.8	-8.0
59 Railroads	220.0	221.6	222.5	223.9	225.6	227.6	228.1	227.6
	-0.1	-0.3	-0.3	-0.3	-0.3	-0.1	-0.1	-0.1
	-0.2	-1.0	-1.4	-1.3	-0.9	-0.4	-0.3	-0.2
60 Trucking, hwy pssngr transit	2767.0	2806.0	2850.8	2907.4	2973.4	3088.0	3185.0	3273.3
	-1.1	-5.2	-6.4	-6.2	-5.4	-3.5	-3.4	-2.7
	-3.8	-19.2	-24.9	-23.1	-18.1	-9.1	-6.6	-4.8
61 Water transport	237.0	240.6	246.6	254.4	264.3	280.4	296.2	310.4
	-0.1	-0.7	-1.0	-1.0	-0.9	-0.7	-0.7	-0.7
	-0.5	-2.8	-3.9	-3.9	-3.2	-1.9	-1.7	-1.5
62 Air transport	1035.5	1057.8	1091.8	1126.6	1160.7	1222.6	1278.5	1332.0
	-0.4	-2.0	-2.3	-2.2	-1.9	-1.2	-1.0	-0.5
	-1.5	-7.5	-9.1	-8.3	-6.6	-3.2	-1.9	-0.6
63 Pipeline	11.4	11.1	10.9	10.8	10.6	10.2	9.7	9.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
64 Transportation services	490.4	499.3	509.5	521.2	532.9	554.2	571.5	588.9
	-0.1	-0.5	-0.8	-0.9	-0.9	-0.7	-0.5	-0.5
	-0.3	-1.7	-3.1	-3.6	-3.3	-2.1	-1.2	-0.8
Utilities	2094.4	2130.6	2152.6	2171.1	2187.4	2225.0	2241.9	2270.2
	-0.5	-2.4	-3.4	-4.0	-4.0	-2.8	-2.2	-1.6
	-1.7	-8.9	-12.9	-14.8	-14.0	-8.0	-4.0	-2.3
65 Communications services	1193.9	1218.3	1235.2	1243.1	1246.2	1256.0	1250.0	1254.7
	-0.2	-1.1	-1.8	-2.5	-2.7	-1.9	-1.3	-1.1
	-0.7	-3.9	-6.8	-9.4	-9.7	-5.6	-2.4	-1.5
66 Electric utilities	424.5	431.1	430.4	433.1	437.6	446.3	451.9	457.2
	-0.1	-0.7	-0.7	-0.7	-0.6	-0.4	-0.3	-0.1
	-0.5	-2.4	-2.8	-2.4	-1.9	-0.9	-0.5	-0.1
67 Gas utilities	147.9	146.4	145.1	143.6	141.9	138.5	133.7	129.2
	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0
	-0.1	-0.7	-0.9	-0.7	-0.5	-0.2	-0.1	0.0
68 Water and sanitary services	328.2	334.8	341.9	351.3	361.7	384.1	406.2	429.2
	-0.1	-0.5	-0.6	-0.6	-0.6	-0.5	-0.5	-0.4
	-0.4	-1.8	-2.4	-2.3	-1.9	-1.3	-1.0	-0.7
Trade	32222 9	32553 3	32870 4	33442.8	34120 3	35319 1	36045 5	36735 2
	-11.8	-54.6	-58.1	-47.5	-34.6	-9.5	-2.5	14.5
	-36.3	-191.0	-226.4	-173.3	-105.3	-2.8	30.0	51.5
69 Wholesale trade	6856.9	6959.6	7052.7	7168.6	7321.5	7551.9	7712.8	7859.4
	-1.5	-7.8	-11.0	-10.2	-7.2	-1.8	-1.7	-1.3
	-5.1	-28.5	-43.3	-40.1	-25.6	-3.3	-1.4	-0.2
70 Retail trade	15669.6	15773.3	15863.9	16102.2	16426.3	16954.4	17183.0	17384.2
	-7.7	-34.9	-34.4	-26.4	-18.2	-2.5	2.3	13.6
	-23.4	-121.1	-133.9	-94.2	-51.3	11.3	31.7	43.5
71 Restaurants and bars	9696.4	9820.3	9953.8	10171.9	10372.4	10812.8	11149.7	11491.6
	-2.6	-12.0	-12.8	-10.9	-9.3	-5.2	-3.1	2.2
	-7.8	-41.5	-49.2	-39.1	-28.3	-10.8	-0.3	8.1
	0.405.0	0000 0	0724 6	0056.6	0000 7	0267.2	0450.2	0000 5
Finance, Insur. & Real Estate	8495.9	8606.8	8/31.6	8856.6	9000.7	9267.3	9458.2	9636.5
	-2.6	-12.5	-13.5	-11.5	-9.0	-3.3	-0.9	3.2
72 5'	-8.3	-43.8	-53.1	-42.5	-29.0	-6.0	4.4	12.7
72 Finance & Insurance	6600.4	6692.3	6/88.4	68/3.8	6969.3	/151.5	/285.2	7415.8
	-2.2	-10.1	-10.5	-8.6	-6.8	-2.6	-0.7	2.8
	-6.7	-35.2	-41.1	-31.8	-21.6	-4.8	3.4	10.3
73 Real estate and royalties	1895.4	1914.5	1943.2	1982.8	2031.4	2115.8	21/3.0	2220.7
	-0.5	-2.4	-3.1	-2.8	-2.2	-0.7	-0.2	0.4
	-1.6	-8.6	-11.9	-10.7	-7.4	-1.2	1.0	2.4

Services         50098.7         5083.0         51708.3         5247.0         5553.6         5740.8         599.4           17.3         -84.3         -108.1         -99.3         -84.7         -52.4         -45.6         -28.4           17.8         -58.0         -30.89         -41.37         -365.5         -271.7         121.7         -63.2         3.1           75 Hotels         1892.5         1938.3         1975.2         -21.0         215.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2150.1         2160.1         2163.1         2160.1         2163.1         2160.1         2163.1         2160.1         2163.1         2160.1         2163.1         2161.1         2140.1         2170.2         217.5         16.5         37.4         4.4         250.9         253.0         213.1         2162.1         224.1         253.1         38.3         26.2         2109.1         213.0         214.5         213.2         214.2         245.1         240.8         210.9         213.0         213.0         213.0         213.0		<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Services         50987         5082.0         51708.3         52543.6         57208.5         5253.6         5270.1         5253.6         5270.1         5253.6         5270.1         528.4         -456.6         -28.4           -580.1         1933.9         -143.7         -365.5         -271.7         -1.21         -1.66         -3.1         -3.8         -3.1         -1.9         -1.6         -0.7           -21         -11.1         -1.47         -1.32         -3.0         2.21.2         2341.0         237.5         241.1           -0.8         -3.7         -4.1         -3.6         -3.0         -1.6         -1.2         0.0           -1.7         -1.60         -1.31         -1.60         -1.33         -9.6         -3.4         -1.0         1.11           7         Professional services         6020.8         607.0         610.7         642.7         645.7         -64.7         -54.6         -3.8         -4.4         -5.0           7         Professional services         620.8         240.8         241.9         245.1         245.4         250.9         253.6         -7.7         -2.4         -5.0         -3.4         -4.4         -5.0         -3.4         -4.1.0<									
-17.3         -94.3         -108.1         -99.3         -84.7         -52.4         -45.6         -28.4           -58.0         -303.9         413.7         -365.5         -27.1         -121.7         -63.2         3.1           75 Hotels         1892.5         193.8         1975.2         2015.0         2125.1         2156.0         2155.7           76 Pers. & repair serv, exc. auto         213.8         216.0         2191.7         223.6         6.3.4         -1.0         -1.3         -0.6         -3.4         -1.0         1.1.1         -1.3.7         -9.6         -3.4         -1.0         1.1           77 Professional services         6020.8         6057.0         610.19         6163.7         6252.3         637.8         6472.1         655.8           78 Computer & data processing         240.6         640.8         241.9         245.9         249.4         -50.6           79 Advertising         -2.3         -1.2         -7.2         -1.2         -7.3         -1.8         -8.2         -9.4         -10.3           79 Advertising         -2.6         50.6         -5.3         -3.4         -4.4         50.0           -0.3         -1.4         -1.8         -1.5	Services	50098.7	50832.0	51708.3	52644.2	53710.0	55553.6	57240.8	58904.2
-58.0         -303.9         -41.7         -365.5         -271.7         -121.7         -63.2         31.7           75 Hotels         1938.3         1975.2         2015.0         2125.1         2159.6         2185.1           -0.06         -3.1         -3.8         -3.6         -3.1         -1.09         -1.6         0.07           76 Pers. & repair serv, exc. auto         2138.9         2160.0         219.1         223.6         2272.1         241.0         235.0         241.1           77 Professional services         6020.8         607.0         610.9         613.3         -64.5         632.8         647.1         658.5           7107         -50.6         -66.7         -66.7         54.6         -34.8         -30.4         -26.8           720         -72.3         -72.2         -72.3         -76.6         -53.3         -3.4         -4.4         -50.0           -10.7         -50.6         -66.7         -66.7         -56.6         -53.3         -3.4         -4.4         -50.0           79 Advertising         268.5         269.8         271.2         275.4         276.0         279.8         280.8         281.3           79 Advertising         266.9		-17.3	-84.3	-108.1	-99.3	-84.7	-52.4	-45.6	-28.4
75 Hotels       1892.5       1983.3       1975.2       2017.5       2015.0       2125.1       215.6       215.1         -0.6       -3.1       -3.8       -3.6       -3.1       -1.9       -1.6       -7.2         76 Pers. & repair serv, exc. auto       2138.9       2160.0       2191.7       2233.6       2272.1       2341.0       2375.5       2414.1         -0.8       -3.7       -4.1       -3.6       -3.0       -1.6       -1.2       0.0         72.5       -13.1       -16.0       -13.3       -9.6       -3.4       -1.0       1.1         77 Professional services       6020.8       6057.0       610.9       615.7       625.3       637.8       6472.1       658.5         78 Computer & data processing       2408.9       2408.6       240.8       2412.9       2451.9       249.4       -5.0         79 Advertising       268.5       269.8       272.2       273.4       276.0       278.8       280.8       213.3         79 Advertising       268.5       269.8       272.2       273.4       1.0.3       -0.1       0.0         80 Other business services       8266.9       849.4       872.8       910.8       93.4       1.2.7		-58.0	-303.9	-413.7	-365.5	-271.7	-121.7	-63.2	3.1
-0.6       -3.1       -3.8       -3.6       -3.1       -1.9       -1.9       -1.6       -0.7         72 1       -11.7       -13.2       -10.2       -4.7       -2.3       0.5         76 Pers. & repair serv, exc. auto       2138.9       2160.0       2191.7       2236       227.1       2341.0       237.5       241.41         77 Professional services       6020.8       6057.0       610.9       613.7       625.3       637.8       647.21       6558.5         72.9       -13.2       -17.2       -17.5       -16.5       -3.4       -1.0       1.1       -3.4         70 rofessional services       6020.8       6057.0       667.7       -64.7       -54.6       -34.8       -3.0.4       -26.8         78 Computer & data processing       2408.9       2408.6       240.8       241.2       23.4       -23.6       -25.3       -18.3       -8.4       -4.4       -5.0         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         -0.1       -0.0       -0.1       -0.4       -0.5       -0.4       -0.3       -0.1       0.1         704 ertising       -26.8	75 Hotels	1892.5	1938.3	1975.2	2017.5	2056.0	2125.1	2159.6	2185.1
-2.1       -11.1       -14.7       -13.2       -10.2       -4.7       -3.3       -0.5         76 Pers. & repair serv, exc. aud       2138.9       2160.0       2191.7       2233.6       2272.1       234.0       2375.5       2414.1         7.08       -3.0       -1.6       -1.2       0.0         -2.5       -13.1       -16.0       -13.3       -9.6       -3.4       -1.0       11.1         77 Professional services       6020.8       6057.0       610.1       616.7       625.3       63.8       -3.0.4       -26.8         78 Computer & data processing       2408.9       2408.6       240.8       241.2       245.1.9       2495.4       250.9       253.6         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         70.0       74.4       -1.8       -1.1       -0.3       -0.1       4.0       -0.1       4.0       -0.1       4.0       -0.1       4.0       -0.1       4.0       -0.1       4.0       -0.1       4.0       -0.1       <		-0.6	-3.1	-3.8	-3.6	-3.1	-1.9	-1.6	-0.7
76 Pers. & repair serv, exc. auto       218.9       2160.0       2191.7       2231.6       2271.1       2341.0       2375.5       2414.1         -0.8       -3.7       -4.1       -3.6       -1.0       0.1       0.0         -2.5       -13.1       -16.0       -1.3       -9.6       -3.4       -1.0       1.1         77 Professional services       602.8       6057.0       6101.9       6163.7       625.3       637.8       6472.1       6558.5         -2.9       -13.2       -17.2       -17.5       -16.5       -13.3       -14.1       -13.4         78 Computer & data processing       2408.9       2408.8       2412.9       245.4       250.9       253.6         79 Advertising       -0.6       -3.2       6.2.3       -18.3       -8.4       -9.4       -10.0         79 Advertising       -0.3       -11.4       -1.8       -1.5       -1.1       -0.3       -0.1       -0.0         70.3       -11.4       -18.4       872.6       9345.0       9345.0       9342.5       1908.1         80 Other business services       1463.4       1475.5       1486.7       1516.5       154.0       158.9       157.5       157.8 <td< td=""><td></td><td>-2.1</td><td>-11.1</td><td>-14.7</td><td>-13.2</td><td>-10.2</td><td>-4.7</td><td>-2.3</td><td>-0.5</td></td<>		-2.1	-11.1	-14.7	-13.2	-10.2	-4.7	-2.3	-0.5
-0.8       -3.7       -4.1       -3.6       -3.0       -1.2       -1.2       0.0         -2.5       -13.1       -16.0       -13.3       -9.6       -3.4       -1.0       1.1         77 Professional services       602.8       605.0       610.9       615.7       -52.3       637.8       647.2       155.8       5         78 Computer & data processing       2408.9       2408.6       2408.8       241.9       245.19       245.9       245.9       250.6         70.6       -2.3       -1.2       -2.3       -1.2       27.3       27.4       276.0       279.8       280.8       281.3         79 Advertising       265.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         0.0       -0.1       -0.4       -0.5       -0.4       -0.3       -0.1       0.0       10.1         80 Other business services       826.9       844.4       872.8       901.0       934.50       993.8       1042.5       1093.1       151.5       157.5       157.8         81 Automobile services       1463.4       147.5       148.7       148.3       94.1       1.1       30.3       1.1       30.3       1.1	76 Pers. & repair serv, exc. auto	2138.9	2160.0	2191.7	2233.6	2272.1	2341.0	2375.5	2414.1
-2.5       -13.1       -16.0       -13.3       -9.6       -3.79.8       -1.0       1.1         77 Professional services       6020.8       6057.0       6101.9       6163.7       627.3       6379.8       6472.1       6558.5         7.29       -13.2       -17.2       -17.5       -16.6       -13.8       -3.44       -5.08         78 Computer & data processing       2408.9       2408.6       2400.8       2412.9       2451.9       2495.4       250.9       253.6         7.23       -12.4       -72.3       -12.4       -72.3       -13.3       -8.2       -9.4       -10.3         79 Advertising       268.5       259.8       271.2       273.4       276.0       279.8       280.8       281.3         70.0       -0.1       -0.4       -0.5       -0.4       -0.3       -0.1       0.0         10.3       -1.1       1.8       -1.5       -1.1       0.3       -0.1       0.0         10.4       -1.4       7.18       7.12       -1.2.4       -9.4       -1.1       0.1         80 Other business services       1463.4       1475.5       1486.7       151.5       154.6       158.9       157.5       157.8		-0.8	-3.7	-4.1	-3.6	-3.0	-1.6	-1.2	0.0
7/ Protessional services       602.0.8       605.0       610.1.9       616.3.7       625.2.3       637.8       647.1       658.5.         -10.7       -50.6       -66.7       -64.7       -54.6       -34.8       -30.4       -26.8         78 Computer & data processing       2408.9       2408.6       2400.8       2412.9       2451.9       2495.4       250.9       253.6         79 Advertising       -2.3       -12.4       -2.3       -2.6       -6.6       -5.3       -3.4       -4.4       -5.0         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         70 Advertising       -0.1       -0.4       -0.5       -1.1       -0.3       -0.1       -0.0       0.1       0.1       0.0         80 Other business services       8266.9       849.4       872.6       9018.0       9345.0       993.8       1042.5       1098.1         81 Automobile services       1463.4       475.5       1486.7       1516.5       1546.5       1548.5       1571.8       1.1       0.3       0.1       0.1       0.3       0.1       0.1       0.3       0.1       0.1       0.3       0.1       0.1		-2.5	-13.1	-16.0	-13.3	-9.6	-3.4	-1.0	1.1
1-2.9       -13.2       -17.2       -17.5       -16.5       -13.3       -11.1       -13.4         78 Computer & data processing       2408.9       2408.6       240.8       241.9       245.19       245.49       250.9       250.9       250.6       250.9       250.7       250.9       250.8       271.2       273.4       276.0       27.8       280.8       281.3         79 Advertising       268.5       269.8       271.2       273.4       276.0       27.9       280.8       281.3         70.0       -0.1       -0.4       -0.2       27.3       1.10       0.1       0.0	// Professional services	6020.8	6057.0	6101.9	6163.7	6252.3	6379.8	64/2.1	6558.5
1-10.         -50.6         -64.7         -54.8         -34.8         -34.8         -34.8         -34.8         -36.8           78 Computer & data processing         2408.9         2408.6         2402.9         2451.9         2495.4         2509.6           78.0         -2.3         -12.4         -23.6         -6.6         -5.3         -3.4         -4.4         -50.0           79 Advertising         268.5         269.8         271.2         273.4         276.0         279.8         280.8         281.3           79 Advertising         268.5         269.4         872.6         901.8         94.4         872.6         901.8         94.2         100.1         0.1           80 Other business services         826.9         849.4         872.6         901.8         930.8         1042.5         109.1           81 Automobile services         1463.4         147.5         148.6         151.6         154.0         158.9         157.8         157.8           81 Automobile services         1463.4         147.5         148.6         -14.6         -9.4         -3.3         -3.4         -1.5         1.1         0.4           82 Movies and amusements         277.8         277.8         277.8		-2.9	-13.2	-1/.2	-17.5	-16.5	-13.3	-14.1	-13.4
78 Computer & data processing       2408.9       2408.8       2408.8       2408.8       2408.8       2412.9       2451.9       2451.9       2454.9       250.9       253.6         -0.0       -2.3       -12.4       -2.36       -2.53       -1.83       -8.2       -9.4       -10.3         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         70 Advertising       268.5       266.9       849.4       872.6       910.0       934.0       934.0       934.0       944.2       10.0         80 Other business services       8266.9       849.4       872.6       910.0       934.0       934.0       12.7       -1.4       -9.4         -13.4       -68.4       -90.1       -83.0       -64.2       -30.4       -21.3       13.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1571.8       1571.8         82 Movies and amusements       277.8       2771.8       2752.3       2761.9       273.5       287.8       2946.8       303.6         -0.0       -1.10       -1.7       -1.47       -9.4       -1.0       3.0		-10.7	-50.6	-66.7	-64.7	-54.6	-34.8	-30.4	-26.8
-0.6       -3.2       -6.2       -6.6       -5.3       -3.4       -4.4       -5.0         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         79 Advertising       268.5       269.8       271.2       273.4       7.60       279.8       280.8       281.3         0.1       -0.3       -1.4       -1.8       -1.5       -1.1       -0.3       -0.1       0.01         80 Other business services       8266.9       8494.4       8726.8       9018.0       9345.0       9930.8       10425.2       1090.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       158.9       157.8       157.1       3       -0.3       -1.1       0.4         82 Movies and amusements       2779.8       2770.8       275.3       276.1       279.5       2877.8       2946.8       303.6         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       527.2       538.6       5621.6       583.5         64.0       -0.3       -1.4       -1.5       -1.3       -1.4       -1.9       1.1       0.0         83 Pr	78 Computer & data processing	2408.9	2408.6	2400.8	2412.9	2451.9	2495.4	2509.9	2530.6
1-2.3       1-2.4       -23.6       2-23.6       1-18.3       -8.2       1-9.4       -10.3         79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         0.1       0.4       -0.5       0.04       0.0       279.8       280.8       281.3         0.1       0.0       -0.3       -1.4       1.8       -1.5       -1.1       -0.3       -0.1       0.0         80 Other business services       8266.9       8494.4       876.8       9018.0       9345.0       9930.8       10425.2       1090.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       157.8       157.8         1-2.4       -13.4       -68.4       -90.1       -3.0       -3.1       -1.5       -1.3       -0.3         220       -10.4       -13.7       -14.8       -14.6       -9.6       -3.0       -1.1       0.4         82 Movies and amusements       2779.8       2770.8       275.2       2761.9       279.2       287.8       294.6       503.6         83 Private hospitals       4878.0       4952.6       507.0       5167.0		-0.6	-3.2	-6.2	-6.6	-5.3	-3.4	-4.4	-5.0
79 Advertising       268.5       269.8       271.2       273.4       276.0       279.8       280.8       281.3         -0.0       -0.4       -0.5       -0.4       -0.3       -0.1       -0.1       0.01         80 Other business services       8266.9       8494.4       872.8       9018.0       9345.0       993.8       10425.2       10908.1         80 Other business services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       1578.5         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       1578.5         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       279.3       2877.8       2946.8       303.6         91 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       158.9       1.1.1       0.4         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       279.5       2877.8       2946.8       303.6         91 Automobile services       0.07       -3.1       -4.7       7.9.1       1.1.9       1.0       3.0         82 Movies and amuseme		-2.3	-12.4	-23.6	-25.3	-18.3	-8.2	-9.4	-10.3
-0.1       -0.4       -0.5       -0.4       -0.3       -0.1       -0.1       0.01         80 Other business services       8266.9       8494.4       8726.8       9018.0       9345.0       930.8       10425.2       10908.1         80 Other business services       143.4       -68.4       -90.1       -83.0       -64.2       -3.0.4       -21.3       -13.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       158.9       157.8       157.8         82 Movies and amusements       2779.8       2770.8       275.3       2761.9       279.5.5       287.8       2946.8       303.6         9.0.6       -3.1       -4.7       7.9.9       -1.2       -0.7       0.3         82 Movies and amusements       2779.8       2770.8       276.9       279.5       287.8       2946.8       303.6         9.0.0       -0.11.0       -17.7       -14.7       9.1       2.0       0.0       0.1       1.6         9.10       -1.1.0       -17.7       -14.7       9.1       1.1       3.0       3.0       2.5       -2.0       0.7       0.1       1.6         9.10.7       -12.6       -8.8 <t< td=""><td>79 Advertising</td><td>268.5</td><td>269.8</td><td>2/1.2</td><td>2/3.4</td><td>2/6.0</td><td>2/9.8</td><td>280.8</td><td>281.3</td></t<>	79 Advertising	268.5	269.8	2/1.2	2/3.4	2/6.0	2/9.8	280.8	281.3
1-0.3       -1.4       -1.8       -1.5       -1.1       -0.3       -0.1       0.1         80 Other business services       8266.9       8494.4       8726.8       9018.0       9930.8       10425.2       10908.1         -13.4       -68.4       -9.01       -83.0       -64.2       -12.7       -12.4       -9.4         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       157.8         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       157.8         82 Movies and amusements       2779.8       2770.8       275.3       2761.9       279.5       2877.8       2946.8       303.6         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       527.2       538.46       5621.6       5832.5		-0.1	-0.4	-0.5	-0.4	-0.3	-0.1	-0.1	0.0
80 Other Business services       8296.9       8494.4       8726.8       9018.0       934.0       934.8       10425.2       10908.1         -13.4       -18.5       -23.2       -22.4       -19.5       -12.7       -12.4       -9.4         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       153.9       1578.5       1578.8         81 Automobile services       -0.8       -3.9       -3.1       -1.5       -1.3       -0.3         -2.4       -13.7       -18.6       1416.       -9.6       -3.0       -1.1       0.43         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       2793.5       2877.8       2946.8       303.6         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         -1.9       -0.7       -3.2       -3.3       -2.5       -2.0       -0.7       0.1       1.6         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         84 Physicians       2005.6       2042.5       211.4       2146.7		-0.3	-1.4	-1.8	-1.5	-1.1	-0.3	-0.1	0.1
1-3.9       -18.5       -22.2       -22.4       -19.5       -12.7       -12.4       -9.4         1-3.4       -68.4       -90.1       -83.0       -64.2       -30.4       -21.3       -13.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       1571.8         2.0       -2.4       -13.7       -18.6       -14.6       -9.6       -3.0       -1.1       0.4         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       279.5       2877.8       2946.8       3033.6         3.0       -2.0       -11.0       -17.7       -14.7       -9.1       -1.9       1.1       3.0         83 Private hospitals       4878.0       4952.6       507.0       5167.0       527.02       538.6       5621.6       532.5         1.1.9       -1.9       1.1.9       -11.0       -17.7       -14.7       -9.1       -1.9       1.1       3.0         8478.0       4952.6       507.0       5167.0       527.0       538.6       5621.6       532.5         1.1.9       -0.7       -3.2       212.4       2146.7       2172.8       239.5 <td>80 Other business services</td> <td>8266.9</td> <td>8494.4</td> <td>8/26.8</td> <td>9018.0</td> <td>9345.0</td> <td>9930.8</td> <td>10425.2</td> <td>10908.1</td>	80 Other business services	8266.9	8494.4	8/26.8	9018.0	9345.0	9930.8	10425.2	10908.1
1-13.4      68.4      90.1      83.0      64.2      30.4      21.3      13.1         81 Automobile services       1463.4       1475.5       1486.7       1516.5       1546.0       1583.9       1578.5       1578.5         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       2793.5       2877.8       2946.8       3033.6         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       2793.5       2877.8       2946.8       3033.6         6.0.6       -3.1       -4.7       7.3.9       -2.8       -1.2       -0.7       0.3         6.0.7       -11.7       -14.7       -9.1       -1.9       1.1       3.0         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         6.0.7       -0.8       -5.7       -2.0       -0.7       0.1       1.6         7.1.9       -10.7       -12.6       -8.8       -5.4       -0.2       3.6       16.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       217.8       2239.5       2298.9       2331.6		-3.9	-18.5	-23.2	-22.4	-19.5	-12.7	-12.4	-9.4
81 Automobile services       1463.4       147.5.5       1486.7       1516.5       1546.0       1583.9       1578.5       1578.8         -0.8       -3.9       -4.8       -3.9       -3.1       -1.5       -1.3       -0.3         2.2.4       -13.7       -18.6       -14.6       9.6       -3.0       -1.1       0.4         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       2793.5       2877.8       2946.8       3033.6         -0.6       -3.1       -4.7       -3.9       -2.8       -1.2       -0.7       0.3         82 Movies and amusements       2779.8       2770.8       2770.7       5167.0       5270.2       5384.6       5621.6       5832.5         38 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         -0.7       -1.7       -1.4       71.7       -1.47       212.8       223.5       2298.9       2331.6         -1.9       -1.07       -12.6       -8.8       -5.4       -0.2       3.6       16.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       2298.9		-13.4	-68.4	-90.1	-83.0	-64.2	-30.4	-21.3	-13.1
0.83.94.83.93.11.30.482 Movies and amusements2779.82770.82752.32761.92793.52877.82946.83033.6-0.0-0.10-11.0-17.7-14.7-9.1-1.91.030.083 Private hospitals4878.04952.65077.05167.05270.25384.65621.65832.5-0.1-1.9-10.7-12.6-8.8-5.4-0.23.616.784 Physicians2005.62042.52121.42146.72172.82239.52298.92331.6-0.3-1.4-1.5-1.3-1.4-1.3-1.1-0.9-0.8-4.7-5.7-4.6-4.2-3.7-2.62.085 Oth medical serv & dentists4952.75148.55396.85545.85697.65990.76400.36825.1-1.5-4.8-12.4-12.3-10.7-6.8-3.9-2.5-2.6-3.4-1.3-1.1-0.786 Nursing homes2259.92281.42280.02291.82278.82296.62326.22348.1 <t< td=""><td>81 Automobile services</td><td>1463.4</td><td>14/5.5</td><td>1486.7</td><td>1516.5</td><td>1546.0</td><td>1583.9</td><td>15/8.5</td><td>15/1.8</td></t<>	81 Automobile services	1463.4	14/5.5	1486.7	1516.5	1546.0	1583.9	15/8.5	15/1.8
1-2.4       1-13.7       1-18.6       1-14.6       1-9.6       1-3.0       1-1.1       10.4         82 Movies and amusements       2779.8       2770.8       2752.3       2761.9       2793.5       2877.8       2946.8       3033.6         1-0.0       -11.0       -17.7       1-14.7       9-9.1       1.19       1.11       3.0         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         1-0.7       -1.9       -10.7       -12.6       -8.8       -5.4       -0.2       3.6       16.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       2239.5       2298.9       2331.6         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       223.5       2298.9       2331.6         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         86 Nursing homes       2259.9       2281.4       2280.0       2291.8       2276.8       236.6       232.6       234.1         87 Education, social serv., NPO       1076.9		-0.8	-3.9	-4.8	-3.9	-3.1	-1.5	-1.3	-0.3
82 Movies and amusements       279.8       279.8       279.8       279.8       279.8       279.8       279.8       279.8       303.6         -0.6       -3.1       -4.7       -3.9       -2.8       -1.2       -0.7       0.3         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         -0.7       -3.2       -3.3       -2.5       -2.0       -0.7       0.1       1.6         -1.9       -10.7       -12.6       -8.8       -5.4       -0.2       3.6       16.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       2239.5       2298.9       2331.6         -0.3       -1.4       -1.5       -1.3       -1.4       -1.3       -1.1       -0.9         -0.8       -4.7       -5.7       -4.6       -4.2       -3.7       -2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         -1.5       -8.3       -1.44       -12.3       -10.7       -6.8       -3.9       -2.5         <		-2.4	-13.7	-18.6	-14.6	-9.6	-3.0	-1.1	0.4
1-0.63.14.73.92.8-1.2-0.70.3.8-2.0-11.0-17.7-14.7-9.1-1.91.13.083 Private hospitals4878.04952.65077.05167.05270.25384.65621.65832.5.0.7-3.2-3.3-2.5-2.0-0.70.11.6.1.9-1.07-12.6-8.8-5.4-0.23.616.784 Physicians2005.62042.52121.42146.72172.82239.52298.92331.6.0.8-0.3-1.4-1.5-1.3-1.4-1.3-1.1-0.9.0.8-4.7-5.7-4.6-4.2-3.7-2.62.085 Oth medical serv & dentists4952.75148.55396.85547.65990.76400.36825.1.1.5-8.8-13.4-12.3-10.7-6.8-3.9-2.5.66 Nursing homes2259.92281.4228.02291.82278.82296.62326.22348.1.60 Nursing homes2259.92281.42280.02271.82296.62326.22348.1.61 Nursing homes2259.92181.42109.51129.711628.61184.41208.7.61 Match-0.4-1.8-2.0-1.7-1.6-1.1-0.7-0.3.62 Mursing homes2259.910832.810918.411095.51129.711628.61184.41208.7.61 Match-1.4	82 Movies and amusements	2//9.8	2770.8	2/52.3	2761.9	2/93.5	28/7.8	2946.8	3033.6
1-1.0       -11.7       -14.7       -9.1       -1.9       1.1       3.0         83 Private hospitals       4878.0       4952.6       5077.0       5167.0       5270.2       5384.6       5621.6       5832.5         -0.7      0.7      2.2      3.3       -2.5       -2.0       -0.7       0.1       1.6         -1.9       -10.7       -12.6       -8.8       -5.4       -0.2       3.6       167.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       2239.5       2298.9       2331.6         -0.8       -1.4       -1.5       -1.3       -1.4       -1.3       -1.1       -0.9         -0.8       -4.7       -5.7       -4.6       -4.2       -3.7       -2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         -1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         -4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2		-0.6	-3.1	-4.7	-3.9	-2.8	-1.2	-0.7	0.3
83 Private nospitals       4878.0       4952.6       5077.0       5167.0       527.0.2       5384.6       5621.6       5832.5         -0.7       -3.2       -3.3       -2.5       -2.0       -0.7       0.1       1.6         -1.9       -10.7       -12.6       -8.8       -5.4       -0.2       3.6       16.7         84 Physicians       2005.6       2042.5       2121.4       2146.7       2172.8       2239.5       2298.9       2331.6         -0.3       -1.4       -1.5       -1.3       -1.4       -1.3       -1.1       -0.9         -0.8       -4.7       -5.7       -4.6       -4.2       -3.7       -2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         -1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         -4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         87 Educatio	22 Drivete heeritele	-2.0	-11.0	-17.7	-14.7	-9.1	-1.9	1.1	5.0
0.73.23.32.52.0-0.70.11.0-1.9-10.7-12.6-8.8-5.4-0.23.616.784 Physicians2005.62042.52121.42146.72172.82239.52298.92331.6-0.3-1.4-1.5-1.3-1.4-1.3-1.1-0.9-0.8-0.75148.55396.85545.85697.65990.76400.36825.185 Oth medical serv & dentists4952.75148.55396.85545.85697.65990.76400.36825.1-1.5-8.3-13.4-12.3-10.7-6.8-3.9-2.5-4.3-27.6-48.8-45.2-35.1-18.8-4.013.086 Nursing homes2259.92281.42288.02291.82278.82296.62326.22348.1-0.4-1.8-2.0-1.7-1.6-1.1-0.7-0.3-1.1-6.1-7.6-6.1-4.8-2.6-0.44.487 Education, social serv., NPO10762.910832.810918.411095.511297.71162.8611845.412083.7-4.4-20.6-23.4-19.4-15.2-6.6-4.32.2-14.1-73.2-90.0-70.4-45.7-9.64.513.2-15.4-111.1-73.2-90.0-70.4-45.7-9.64.513.2-15.1-114.1-73.2-90.0-70.4-4	83 Private nospitais	4878.0	4952.0	5077.0	2107.0	5270.2	5384.0	5021.0	5852.5
84 Physicians2005.62042.52121.42146.72172.82239.52298.92331.6-0.3-1.4-1.5-1.3-1.4-1.3-1.1-0.9-0.8-0.7-5.7-4.6-4.2-3.7-2.62.085 Oth medical serv & dentists4952.75148.55396.85545.85697.65990.76400.36825.1-1.5-8.3-13.4-12.3-10.7-6.8-3.9-2.5-1.5-8.3-13.4-12.3-10.7-6.8-3.9-2.5-1.5-8.3-13.4-12.3-10.7-6.8-3.9-2.5-1.6-4.3-27.6-48.8-45.2-35.1-18.8-4.013.086 Nursing homes2259.92281.42288.02291.82278.82296.62326.22348.1-0.4-1.8-2.0-1.7-1.6-1.1-0.7-0.3-1.1-0.4-1.8-2.0-1.71162.611845.412083.7-1.1-0.4-1.8-2.0-1.7-1.6-1.1-0.7-0.3-1.1-0.4-1.8-2.0-1.71162.611845.412083.7-1.1-0.4-20.6-23.4-19.4-15.2-6.6-4.32.2-1.1-1.1-7.3-90.0-7.0.4-45.7-9.64.513.2-1.1-1.1-7.3-90.0-7.0.4-45.7-9.64.513.2 <td></td> <td>-0.7</td> <td>-3.2</td> <td>-3.3</td> <td>-2.5</td> <td>-2.0</td> <td>-0.7</td> <td>0.1</td> <td>1.0</td>		-0.7	-3.2	-3.3	-2.5	-2.0	-0.7	0.1	1.0
64 Physicialis       2005.6       2042.3       2121.4       2146.7       2172.6       2235.3       2298.9       2531.6         -0.3       -1.4       -1.5       -1.3       -1.4       -1.3       -1.1       -0.9         -0.8       -0.7       -5.7       -4.6       -4.2       -3.7       -2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         -1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         -4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         47 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       -4.3       2.2         -14.1 <td>84 Dhysisians</td> <td>-1.9</td> <td>-10.7</td> <td>-12.0</td> <td>-0.0</td> <td>-5.4</td> <td>-0.2 2220 E</td> <td>2200 0</td> <td>2221 6</td>	84 Dhysisians	-1.9	-10.7	-12.0	-0.0	-5.4	-0.2 2220 E	2200 0	2221 6
1-0.3       1-1.4       1-1.5       1-1.4       1-1.5       1-1.4       1-1.5       1-1.6       1-1.1       1-0.9         1-0.8       -0.8       -4.7       -5.7       1-4.6       1-4.2       1-3.7       1-2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         1-1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         1-4.3       -27.6       -48.8       -45.2       -35.1       1-18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       -4.3		2005.0	2042.5	2121.4	2140.7	21/2.0	2259.5	2298.9	2551.0
1-0.8       -4.7       -3.7       -4.6       -4.2       -3.7       -2.6       2.0         85 Oth medical serv & dentists       4952.7       5148.5       5396.8       5545.8       5697.6       5990.7       6400.3       6825.1         -1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         -4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         -11       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants <t< td=""><td></td><td>-0.5</td><td>-1.4</td><td>-1.5</td><td>-1.5</td><td>-1.4</td><td>-1.5</td><td>-1.1</td><td>-0.9</td></t<>		-0.5	-1.4	-1.5	-1.5	-1.4	-1.5	-1.1	-0.9
335011 medical service definitions       4932.7       3148.3       3350.8       3543.8       3057.0       3550.7       0400.3       0623.1         -1.5       -8.3       -13.4       -12.3       -10.7       -6.8       -3.9       -2.5         -4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       11105       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4 <td>85 Oth medical serv &amp; dentists</td> <td>-0.0</td> <td>-4.7 51/19 5</td> <td>5206.8</td> <td>-4.0 55/15 Q</td> <td>-4.2 5607.6</td> <td>5000 7</td> <td>6400.3</td> <td>6825.1</td>	85 Oth medical serv & dentists	-0.0	-4.7 51/19 5	5206.8	-4.0 55/15 Q	-4.2 5607.6	5000 7	6400.3	6825.1
-4.3       -27.6       -48.8       -45.2       -35.1       -18.8       -4.0       13.0         86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9		-1 5	-9.2	_12 /	_12.2	-10.7	-6.8	-2 0	-2.5
86 Nursing homes       2259.9       2281.4       2288.0       2291.8       2278.8       2296.6       2326.2       2348.1         -0.4       -1.8       -2.0       -1.7       -1.6       -1.1       -0.7       -0.3         -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9		-1.3	-0.5	-13.4	-12.3	-10.7	-0.8	-3.9	12.0
00 Nurshightomes       2235.3       2231.4       2200.6       2231.8       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.6       2230.7       200.6       230.7       200.7       -0.3         -0.4       -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9	86 Nursing homes	2250 0	27.0	2288 0	2201 8	2278.8	2296.6	2326.2	23/18 1
-0.4       -1.8       -2.0       -1.7       -1.0       -1.1       -0.3         -1.1       -6.1       -7.6       -6.1       -4.8       -2.6       -0.4       4.4         87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9	so wursing nomes	-0.4	-1 9	-2.0	1 7	-1.6		-0.7	-0.2
87 Education, social serv., NPO       10762.9       10832.8       10918.4       11095.5       11297.7       11628.6       11845.4       12083.7         -4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9		-0.4	-1.0	-2.0	-1.7	-1.0	-1.1	-0.7	-0.3
-4.4       -20.6       -23.4       -19.4       -15.2       -6.6       -4.3       2.2         -14.1       -73.2       -90.0       -70.4       -45.7       -96.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9	87 Education social serv NPO	10762.0	10832.8	10018 /	11095 5	11207 7	11628 6	-0.4 118/15 /	4.4
4.4       -20.0       -20.4       -19.4       -19.2       -0.0       -4.3       22.2         -14.1       -73.2       -90.0       -70.4       -45.7       -9.6       4.5       13.2         Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9	o, Education, social serv., NPO		- 20 F		_10 /	_15 2	-6 6	_1 2	2003.7
Domestic servants       1119.1       1110.5       1102.1       1093.9       1086.0       1070.6       1056.1       1042.4         Rest-of-World       -1071.2       -1082.0       -1092.9       -1103.8       -1114.9       -1137.5       -1160.4       -1183.9		4.4	-72.2	_00.0	_70 /	_/5 7	-0.0 -0.6	_+.3 ∕\ ⊑	12.2
Domestic servants         1119.1         1110.5         1102.1         1093.9         1086.0         1070.6         1056.1         1042.4           Rest-of-World         -1071.2         -1082.0         -1092.9         -1103.8         -1114.9         -1137.5         -1160.4         -1183.9		- 14. T	-73.2	0.0	-70.4	- <del>4</del> J./	-9.0	4.5	13.2
Rest-of-World -1071 2 -1082 0 -1092 9 -1103 8 -1114 9 -1137 5 -1160 4 -1183 9	Domestic servants	1119.1	1110.5	1102.1	1093.9	1086.0	1070.6	1056.1	1042.4
	Rest-of-World	-1071.2	-1082.0	-1092.9	-1103.8	-1114.9	-1137.5	-1160.4	-1183.9

Table A-5 (continued): Jobs by Producing Sector (Thousands)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2018</u>	<u>2020</u>	<u>2022</u>
Privata coctor jobs	121577	1722/11	125210	127560	1205/19	125275	120/06	1/127/
	-//3 0	-209.8	-261.3	-235 0	-188 1	-80.0	-58 0	-17 5
	-142.3	-754.7	-1010.1	-878.0	-611.5	-148.0	-15.4	73.9
Civilian Government	21901.6	21878.8	21890.9	21924.4	21993.9	22182.2	22407.2	22612.4
	-2.7	-12.1	-17.3	-20.3	-23.1	-27.7	-32.3	-34.6
	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7
Federal	2077.1	2072.7	2070.6	2071.5	2072.4	2067.8	2070.8	2072.7
	-2.7	-12.1	-17.3	-20.3	-23.1	-27.7	-32.3	-34.6
	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7
Defense	771.0	764.3	757.4	752.8	749.8	740.0	737.9	736.0
	-2.7	-12.1	-17.3	-20.3	-23.1	-27.7	-32.3	-34.6
	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7
Non-defense	1306.2	1308.4	1313.1	1318.7	1322.6	1327.8	1332.9	1336.7
State and local	18091.9	18105.3	18149.1	18209.3	18285.9	18491.3	18720.8	18929.9
Government enterprises	1732.6	1700.8	1671.2	1643.6	1635.6	1623.2	1615.6	1609.8
Federal	675.2	648.7	623.3	598.9	592.9	581.5	570.8	560.8
State & local	1057.4	1052.1	1047.9	1044.8	1042.7	1041.6	1044.8	1049.0
Civilian jobs (millions)	143478	145220	147101	149493	152542	157458	160893	163987
	-45.7	-222.0	-278.6	-256.2	-211.2	-107.7	-91.2	-52.1
	-153.8	-805.0	-1076.6	-951.1	-687.1	-225.9	-94.7	-5.9
Private sector jobs	121577	123341	125210	127568	130548	135275	138486	141374
	-43.0	-209.8	-261.3	-235.9	-188.1	-80.0	-58.9	-17.5
	-142.3	-754.7	-1010.1	-878.0	-611.5	-148.0	-15.4	73.9
Multiple job holders	2400.0	2550.0	2700.0	2700.0	2700.0	2700.0	2700.0	3025.0
	2400.0	2000.0	2700.0	2700.0	2700.0	2700.0	2700.0	5025.0
Military	1561.1	1549.1	1536.8	1528.9	1524.3	1507.5	1506.1	1504.7
	-5.4	-24.6	-35.2	-41.1	-46.9	-56.3	-65.9	-70.7
	-23.2	-102.1	-134.9	-148.5	-153.8	-158.6	-161.9	-163.0
Civilian unemployment rate	8.5	8.2	8.1	7.6	6.6	5.3	4.9	4.9
	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0
	0.1	0.5	0.7	0.6	0.4	0.1	0.1	0.0
Civilian Labor Force (mil.)	154132	155479	157138	158912	160503	163408	166353	169172

Line 1: CBO Status Quo Baseline (Defense expenditures grow with inflation)											
Line 2: BCA-1 Expenditure Caps Only (BCA-1 caps, no BCA-2 sequestration)											
Line 3: BCA-2 Sequestration with BCA-1 Caps (CBO current law projection)											
Alternatives are shown in	deviations	s from sta	itus quo ba	aseline in	thousand	s of jobs.					
	2012	2013	2014	2015	2016	2018	2020	2022			
United States											
Total Employment	145040	146769	148638	151022	154066	158965	162399	165491			
	-51.1	-246.6	-313.8	-297.3	-258.2	-164.0	-157.1	-122.9			
	-177.0	-907.1	-1211.4	-1099.6	-840.9	-384.6	-256.6	-168.9			
Private Employment	121577	123341	125210	127568	130548	135275	138486	141374			
	-43.0	-209.8	-261.2	-235.9	-188.1	-80.0	-58.8	-17.5			
	-142.4	-754.7	-1010.1	-878.0	-611.5	-148.1	-15.4	73.9			
Manufacturing Employ.	12850	12852	12841	12877	12999	13256	13352	13484			
	-3.8	-20.2	-33.6	-33.3	-28.0	-14.0	-12.1	-10.9			
	-14.0	-75.5	-129.6	-129.7	-99.5	-38.8	-24.4	-18.1			
Federal Civilian Employ.	2752	2721	2694	2670	2665	2649	2642	2634			
	-2.7	-12.1	-17.3	-20.3	-23.1	-27.7	-32.3	-34.6			
	-11.4	-50.4	-66.5	-73.1	-75.7	-77.9	-79.3	-79.7			
Federal Military Employ.	1561	1549	1537	1529	1524	1507	1506	1505			
	-5.4	-24.6	-35.2	-41.1	-46.9	-56.3	-65.9	-70.7			
	-23.2	-102.1	-134.9	-148.5	-153.8	-158.6	-161.9	-163.0			
Alabama											
Total Employment	2125.1	2149.5	2178.4	2215.4	2261.1	2336.4	2388.9	2437.9			
. ,	-1.1	-5.5	-7.1	-6.8	-6.0	-4.1	-4.1	-3.6			
	-4.0	-20.4	-27.3	-25.3	-19.7	-9.6	-7.3	-6.3			
Private Employment	1728.6	1753.6	1782.7	1819.3	1864.0	1936.5	1985.3	2030.9			
	-0.9	-4.6	-5.8	-5.4	-4.4	-2.0	-1.8	-1.0			
	-3.2	-16.8	-22.5	-20.0	-14.2	-4.0	-1.6	-0.5			
Manufacturing Employ.	278.4	279.1	279.3	280.2	282.9	288.8	290.7	293.5			
	-0.1	-0.3	-0.6	-0.5	-0.4	-0.2	-0.1	-0.1			
	-0.2	-1.3	-2.1	-2.1	-1.5	-0.5	-0.2	-0.1			
Federal Civilian Employ.	51.4	50.8	50.3	49.9	49.8	49.5	49.3	49.2			
. ,	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.2	-1.3			
	-0.4	-1.8	-2.4	-2.7	-2.8	-2.8	-2.9	-2.9			
Federal Military Employ.	27.7	27.5	27.3	27.1	27.1	26.8	26.7	26.7			
	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.2	-1.3			
	-0.4	-1.8	-2.4	-2.6	-2.7	-2.8	-2.9	-2.9			

# Table A-6: Employment Results by State (Thousands)

Table A-6 (continued): I	Employment Results I	by State (Thousands)
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Line 1: CBO Status Quo Bas	eline (Def	fense expe	enditures	grow wit	h inflation	)					
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	ps, no BC	A-2 seque	stration)						
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	nt law pro	ojection)						
Alternatives are shown in	deviations	s from stat	tus quo ba	seline in	thousands	s of jobs.					
2012 2013 2014 2015 2016 2018 2020											
Alaska											
Total Employment	354.7	358.1	362.5	367.9	374.8	385.2	392.9	399.3			
	-0.5	-2.3	-2.9	-2.8	-2.5	-1.6	-1.6	-1.4			
	-1.7	-8.5	-11.3	-10.5	-8.1	-3.7	-2.8	-2.5			
Private Employment	257.0	260.7	265.3	270.8	277.5	287.6	294.5	300.4			
	-0.4	-1.9	-2.4	-2.2	-1.7	-0.7	-0.6	-0.3			
	-1.3	-6.8	-9.2	-8.1	-5.6	-1.1	-0.2	0.2			
Manufacturing Employ.	13.5	13.5	13.5	13.6	13.7	13.8	13.9	14.1			
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0			
	0.0	-0.3	-0.5	-0.4	-0.3	-0.1	0.0	0.0			
Federal Civilian Employ.	16.7	16.5	16.3	16.2	16.1	16.0	16.0	15.9			
	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2			
	-0.1	-0.3	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5			
Federal Military Employ.	20.3	20.1	20.0	19.9	19.8	19.6	19.6	19.5			
	-0.1	-0.3	-0.5	-0.5	-0.6	-0.7	-0.9	-0.9			
	-0.3	-1.3	-1.8	-1.9	-2.0	-2.1	-2.1	-2.1			
Arizona											
Total Employment	2804.3	2857.5	2908.3	2971.7	3050.6	3172.3	3256.6	3329.2			
	-1.3	-6.5	-8.6	-8.0	-7.0	-4.4	-3.6	-2.6			
	-4.4	-23.4	-32.7	-29.4	-22.5	-10.6	-5.3	1.1			
Private Employment	2368.3	2422.1	2472.9	2535.8	2613.5	2731.9	2812.1	2880.8			
	-1.2	-6.0	-7.8	-7.1	-5.9	-3.1	-2.2	-1.0			
	-3.9	-21.1	-29.6	-26.0	-19.0	-6.9	-1.6	4.8			
Manufacturing Employ.	176.1	175.2	175.1	175.8	177.6	180.1	181.1	182.9			
	-0.1	-0.5	-0.8	-0.9	-0.8	-0.5	-0.5	-0.5			
	-0.4	-2.0	-3.3	-3.3	-2.8	-1.5	-1.2	-1.1			
Federal Civilian Employ.	51.8	51.2	50.7	50.2	50.1	49.8	49.7	49.5			
	0.0	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4			
	-0.1	-0.6	-0.8	-0.9	-1.0	-1.0	-1.0	-1.0			
Federal Military Employ.	25.8	25.6	25.4	25.3	25.2	24.9	24.9	24.9			
-0.1 -0.4 -0.6 -0.7 -0.8 -0.9 -1.1											
	-0.4	-1.7	-2.2	-2.5	-2.5	-2.6	-2.7	-2.7			

Table $\Delta -6$	(continued)	• Emplo	vment Re	sulte hv	State (	Thousands)
	oon maca		yment ite	Juito Ny	Oluce	mousunas

Line 1: CBO Status Quo Bas	seline (De	fense exp	oenditures	s grow wit	h inflatio	า)		
Line 2: BCA-1 Expenditure	Caps Only	/ (BCA-1 c	aps, no BC	CA-2 seque	estration)			
Line 3: BCA-2 Sequestration	on with BC	A-1 Caps	(CBO curre	ent law pr	ojection)			
Alternatives are shown in	deviation	s from sta	itus quo b	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Arkansas								
Total Employment	1276.0	1290.7	1306.1	1326.2	1350.5	1392.3	1422.7	1452.5
	-0.3	-1.7	-2.1	-2.0	-1.7	-1.0	-1.0	-0.7
	-1.2	-6.1	-8.1	-7.3	-5.5	-2.4	-1.5	-0.7
Private Employment	1053.9	1069.0	1084.3	1104.1	1127.8	1167.9	1196.1	1223.9
	-0.3	-1.4	-1.7	-1.5	-1.1	-0.3	-0.1	0.2
	-0.9	-4.9	-6.4	-5.5	-3.6	-0.4	0.5	1.3
Manufacturing Employ.	181.2	181.3	181.4	182.1	183.6	187.3	188.9	190.9
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	0.0	0.0
	-0.1	-0.6	-1.0	-1.0	-0.7	-0.2	0.0	0.0
Federal Civilian Employ.	20.7	20.4	20.2	20.1	20.0	19.9	19.8	19.8
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Federal Military Employ.	15.8	15.6	15.5	15.4	15.4	15.2	15.2	15.2
	-0.1	-0.2	-0.4	-0.4	-0.5	-0.6	-0.7	-0.7
	-0.2	-1.0	-1.4	-1.5	-1.6	-1.6	-1.6	-1.6
California								
Total Employment	16414.6	16726.5	16927.1	17186.3	17526.5	18062.3	18425.8	18761.9
	-6.3	-30.6	-38.6	-35.9	-31.0	-19.1	-17.3	-12.2
	-21.5	-111.5	-148.4	-132.3	-99.9	-43.9	-25.3	-7.3
Private Employment	13784.9	14099.8	14299.6	14555.1	14887.6	15402.9	15740.3	16052.6
	-5.5	-26.9	-33.2	-29.6	-23.9	-10.5	-7.3	-1.5
	-18.0	-96.0	-127.9	-109.8	-76.6	-19.9	-0.8	17.4
Manufacturing Employ.	1381.7	1372.2	1365.0	1364.5	1372.6	1385.8	1385.6	1392.8
	-0.5	-2.3	-3.9	-3.9	-3.5	-2.3	-2.2	-2.1
	-1.8	-9.0	-14.9	-15.2	-12.3	-6.5	-4.9	-4.1
Federal Civilian Employ.	243.6	240.8	238.4	236.3	235.8	234.4	233.8	233.0
	-0.2	-1.1	-1.6	-1.9	-2.1	-2.5	-3.0	-3.2
	-1.1	-4.6	-6.1	-6.7	-7.0	-7.2	-7.3	-7.3
Federal Military Employ.	166.6	165.3	164.0	163.2	162.7	160.9	160.7	160.6
	-0.6	-2.6	-3.8	-4.4	-5.0	-6.0	-7.0	-7.6
	-2.5	-10.9	-14.4	-15.8	-16.4	-16.9	-17.3	-17.4

Table A-6 (continued)	: Employment Result	s by State (Thousands)
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Line 1: CBO Status Quo Bas	seline (De	fense exp	enditures	s grow wit	h inflatio	า)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	on with BC	A-1 Caps (	CBO curre	ent law pr	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo b	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Colorado								
Total Employment	2509.4	2517.2	2545.3	2585.6	2641.3	2724.5	2777.2	2818.9
	-0.9	-4.2	-5.3	-5.2	-4.6	-3.1	-3.1	-2.6
	-3.1	-15.5	-20.6	-19.1	-14.9	-7.4	-5.5	-4.5
Private Employment	2101.5	2109.9	2138.2	2178.1	2232.8	2313.2	2362.1	2400.4
	-0.7	-3.5	-4.3	-4.0	-3.2	-1.5	-1.2	-0.5
	-2.4	-12.5	-16.7	-14.8	-10.5	-2.8	-0.8	0.2
Manufacturing Employ.	139.9	139.2	139.0	139.5	140.9	143.3	144.1	145.4
	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
	-0.2	-0.8	-1.3	-1.3	-1.1	-0.5	-0.4	-0.3
Federal Civilian Employ.	51.6	51.0	50.5	50.1	50.0	49.7	49.5	49.4
	0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5
	-0.2	-0.8	-1.1	-1.2	-1.2	-1.2	-1.3	-1.3
Federal Military Employ.	33.2	32.9	32.7	32.5	32.4	32.0	32.0	32.0
	-0.1	-0.5	-0.7	-0.9	-1.0	-1.2	-1.4	-1.5
	-0.5	-2.2	-2.9	-3.2	-3.3	-3.4	-3.4	-3.5
Connecticut								
Total Employment	1714.7	1729.0	1750.6	1777.2	1810.9	1866.6	1908.3	1946.0
	-0.5	-2.5	-3.3	-3.1	-2.7	-1.7	-1.5	-1.2
	-1.8	-9.2	-12.7	-11.8	-9.1	-4.1	-2.7	-1.9
Private Employment	1453.3	1467.8	1489.2	1515.3	1548.2	1601.6	1640.6	1675.8
	-0.5	-2.3	-3.0	-2.8	-2.3	-1.2	-1.0	-0.6
	-1.6	-8.3	-11.5	-10.5	-7.7	-2.7	-1.3	-0.4
Manufacturing Employ.	139.0	139.2	139.1	139.5	140.9	144.0	145.5	147.2
	-0.1	-0.5	-0.9	-0.9	-0.8	-0.6	-0.6	-0.6
	-0.4	-1.9	-3.4	-3.6	-3.1	-1.8	-1.4	-1.2
Federal Civilian Employ.	19.4	19.2	19.0	18.8	18.8	18.7	18.6	18.6
	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	0.0	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Federal Military Employ.	10.9	10.8	10.7	10.7	10.7	10.5	10.5	10.5
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.5
	-0.2	-0.7	-0.9	-1.0	-1.1	-1.1	-1.1	-1.1

Table A-6 (continued): I	Employment Results I	by State (Thousands)
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Line 1: CBO Status Quo Bas	eline (Def	ense expe	enditures	grow with	n inflation)			
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	ps, no BCA	A-2 seque	stration)			
Line 3: BCA-2 Sequestratio	n with BCA	A-1 Caps (C	CBO curre	nt law pro	jection)			
Alternatives are shown in	deviations	from stat	us quo ba	seline in t	thousands	of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Delaware								
Total Employment	452.3	456.0	461.9	469.5	478.9	494.0	504.7	514.3
	-0.1	-0.7	-0.9	-0.8	-0.7	-0.4	-0.4	-0.3
	-0.5	-2.6	-3.4	-3.0	-2.2	-0.9	-0.5	-0.3
Private Employment	384.6	388.5	394.3	401.8	411.0	425.6	435.7	444.7
	-0.1	-0.6	-0.7	-0.6	-0.5	-0.1	0.0	0.1
	-0.4	-2.1	-2.7	-2.3	-1.5	-0.1	0.3	0.5
Manufacturing Employ.	28.3	28.1	28.1	28.1	28.3	28.6	28.7	28.8
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
	0.0	-0.1	-0.2	-0.2	-0.2	0.0	0.0	0.0
Federal Civilian Employ.	5.5	5.4	5.4	5.3	5.3	5.3	5.3	5.2
	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2
Federal Military Employ.	6.3	6.3	6.2	6.2	6.2	6.1	6.1	6.1
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3
	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.7	-0.7
Dist. of Col.								
Total Employment	780.8	792.6	798.5	807.0	818.6	836.2	849.6	862.3
	-0.7	-3.5	-4.6	-4.4	-4.0	-2.9	-3.0	-2.5
	-2.6	-13.2	-17.5	-16.2	-12.8	-7.2	-5.6	-4.3
Private Employment	538.0	552.1	559.9	570.0	581.8	600.3	613.7	626.6
	-0.6	-2.9	-3.7	-3.4	-2.8	-1.5	-1.3	-0.8
	-2.0	-10.6	-14.2	-12.5	-9.0	-3.3	-1.6	-0.3
Manufacturing Employ.	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.1	-0.1	0.0
Federal Civilian Employ.	188.5	186.4	184.5	182.9	182.6	181.5	180.9	180.4
	-0.1	-0.4	-0.5	-0.6	-0.7	-0.8	-1.0	-1.0
	-0.3	-1.5	-2.0	-2.2	-2.3	-2.4	-2.4	-2.4
Federal Military Employ.	15.4	15.3	15.2	15.1	15.1	14.9	14.9	14.9
,	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-0.7
	-0.2	-1.0	-1.3	-1.5	-1.5	-1.6	-1.6	-1.6

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflatior	ו)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pro	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo ba	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Florida								
Total Employment	8492.8	8621.5	8741.4	8905.5	9118.2	9457.3	9704.7	9930.3
	-2.4	-11.5	-14.6	-13.9	-12.0	-7.5	-7.3	-5.9
	-8.4	-42.7	-56.6	-51.5	-39.3	-17.2	-11.8	-9.3
Private Employment	7318.1	7448.4	7568.2	7730.8	7940.2	8270.5	8506.6	8721.8
	-2.0	-9.8	-12.2	-11.1	-8.8	-3.6	-2.8	-1.0
	-6.8	-35.6	-47.3	-41.3	-28.7	-6.3	-0.7	2.0
Manufacturing Employ.	379.6	378.7	378.8	380.6	384.5	391.8	394.9	399.1
	-0.1	-0.7	-1.2	-1.2	-1.1	-0.6	-0.5	-0.5
	-0.5	-2.7	-4.7	-4.8	-3.7	-1.6	-1.1	-0.9
Federal Civilian Employ.	126.7	125.3	124.0	122.9	122.7	122.0	121.6	121.2
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.3	-1.4
	-0.4	-2.0	-2.6	-2.9	-3.0	-3.0	-3.1	-3.1
Federal Military Employ.	77.6	77.0	76.4	76.0	75.8	75.0	74.9	74.8
	-0.3	-1.2	-1.8	-2.0	-2.3	-2.8	-3.3	-3.5
	-1.2	-5.1	-6.7	-7.4	-7.6	-7.9	-8.0	-8.1
Georgia								
Total Employment	4367.2	4439.8	4492.7	4558.7	4642.1	4775.4	4863.5	4940.7
	-1.6	-7.8	-10.0	-9.7	-8.7	-6.2	-6.3	-5.4
	-5.8	-29.1	-38.7	-36.0	-28.6	-15.2	-11.7	-10.0
Private Employment	3611.8	3685.7	3739.0	3804.4	3886.0	4014.3	4095.6	4166.7
	-1.2	-6.1	-7.5	-6.9	-5.5	-2.3	-1.7	-0.5
	-4.1	-21.9	-29.3	-25.6	-17.9	-4.1	-0.4	1.4
Manufacturing Employ.	402.2	401.9	401.2	401.9	404.8	411.4	413.0	415.5
	-0.1	-0.6	-1.0	-0.9	-0.7	-0.3	-0.2	-0.1
	-0.4	-2.3	-3.9	-3.7	-2.7	-0.8	-0.2	0.0
Federal Civilian Employ.	94.9	93.8	92.9	92.1	91.9	91.3	91.1	90.8
	-0.1	-0.6	-0.8	-0.9	-1.1	-1.3	-1.5	-1.6
	-0.5	-2.3	-3.1	-3.4	-3.5	-3.6	-3.6	-3.7
Federal Military Employ.	73.9	73.4	72.8	72.4	72.2	71.4	71.3	71.3
	-0.3	-1.2	-1.7	-1.9	-2.2	-2.7	-3.1	-3.4
	-1.1	-4.8	-6.4	-7.0	-7.3	-7.5	-7.7	-7.7

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditure	s grow wit	h inflatio	n)		
Line 2: BCA-1 Expenditure	Caps Only	/ (BCA-1 c	aps, no BC	CA-2 sequ	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps	(CBO curre	ent law pr	ojection)			
		- f			*h			
Alternatives are shown in	deviation	s from sta	itus quo b	aseline in	thousand	is of Jobs.		
	2012	2012	2014	2015	2016	2019	2020	2022
	2012	2013	2014	2015	2016	2018	2020	2022
Tatal Employment	70C F	710.2	ר דרד	720.0	752.7	776.6	702.1	907.4
Total Employment	706.5	718.2	121.2	739.0	/53./	770.0	793.1	807.4 2 0
	-0.0	-5.1	-4.0	-5.9	-5.0	-2.0	-5.0	-2.0
Drivete Employment	-2.4	-11.0	-15.3	-14.4	-11.7	-0.9	-5.8	-5.5
Private Employment	544.6	557.0	566.4	5/8.4	593.0	615.6	631.1	644.6
	-0.4	-2.1	-2.6	-2.4	-1.8	-0.7	-0.5	-0.1
	-1.5	-7.7	-10.1	-8.7	-5.9	-0.8	0.3	0.9
Manufacturing Employ.	15.0	15.0	15.0	15.1	15.2	15.4	15.5	15.6
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
	0.0	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0
Federal Civilian Employ.	31.4	31.1	30.7	30.5	30.4	30.2	30.2	30.1
	-0.1	-0.3	-0.4	-0.5	-0.5	-0.6	-0.8	-0.8
	-0.3	-1.2	-1.6	-1.7	-1.8	-1.8	-1.9	-1.9
Federal Military Employ.	41.7	41.4	41.0	40.8	40.7	40.2	40.2	40.2
	-0.1	-0.7	-0.9	-1.1	-1.3	-1.5	-1.8	-1.9
	-0.6	-2.7	-3.6	-4.0	-4.1	-4.2	-4.3	-4.4
Idaho								
Total Employment	712.7	716.3	724.9	737.0	753.1	776.8	791.5	803.8
	-0.1	-0.6	-0.8	-0.7	-0.6	-0.4	-0.4	-0.4
	-0.4	-2.2	-2.9	-2.7	-2.1	-1.0	-0.8	-0.7
Private Employment	589.7	593.5	602.1	614.0	629.7	652.5	666.0	677.2
	-0.1	-0.4	-0.5	-0.5	-0.4	-0.1	0.0	0.0
	-0.3	-1.6	-2.1	-1.8	-1.2	-0.1	0.2	0.3
Manufacturing Employ.	58.0	57.7	57.4	57.6	58.1	59.0	59.1	59.4
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	0.0	0.0
Federal Civilian Employ.	12.8	12.6	12.5	12.4	12.3	12.3	12.2	12.2
	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Federal Military Employ.	7.6	7.6	7.5	7.5	7.5	7.4	7.4	7.4
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
	-0.1	-0.5	-0.7	-0.7	-0.8	-0.8	-0.8	-0.8

Line 3: BCA-2 Sequestration	n with BC	A-1 Caps (	CBO curre	nt law pro	ojection)			
					*	f:-h-		
Alternatives are shown in (	deviations	s from stat	us quo ba	sellne in	thousands	s of Jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Illinois								
Total Employment	6279.7	6326.7	6395.8	6483.1	6602.2	6798.8	6937.9	7064.
	-1.5	-7.4	-9.1	-8.4	-7.0	-3.8	-3.4	-2.
	-5.2	-27.0	-35.4	-31.3	-22.9	-8.1	-4.2	-2.
Private Employment	5405.4	5453.3	5522.0	5608.0	5724.5	5913.9	6044.2	6163.
	-1.3	-6.6	-7.9	-7.0	-5.4	-1.8	-1.1	0.
	-4.4	-23.5	-30.8	-26.3	-17.7	-2.7	1.3	3.
Manufacturing Employ.	644.7	645.9	645.6	647.3	653.7	668.5	675.1	683.
	-0.1	-0.8	-1.3	-1.3	-1.0	-0.5	-0.4	-0.
	-0.5	-2.9	-4.9	-4.9	-3.7	-1.3	-0.7	-0.
Federal Civilian Employ.	86.4	85.4	84.5	83.8	83.6	83.1	82.9	82.
	-0.1	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7	-0.
	-0.2	-1.1	-1.4	-1.6	-1.6	-1.7	-1.7	-1.
Federal Military Employ.	36.7	36.5	36.2	36.0	35.9	35.5	35.4	35.
	-0.1	-0.6	-0.8	-1.0	-1.1	-1.3	-1.6	-1.
	-0.5	-2.4	-3.2	-3.5	-3.6	-3.7	-3.8	-3.
Indiana								
Total Employment	3102.9	3135.0	3173.6	3221.4	3283.2	3387.3	3457.5	3522.
. ,	-0.7	-3.3	-4.4	-4.2	-3.5	-1.9	-1.7	-1.
	-2.3	-12.3	-17.0	-15.7	-11.6	-4.2	-2.6	-2.
Private Employment	2662.8	2695.3	2733.6	2780.7	2841.1	2941.4	3007.0	3067.
. ,	-0.6	-2.9	-3.8	-3.5	-2.7	-0.9	-0.6	-0.
	-1.9	-10.5	-14.7	-13.1	-9.0	-1.5	0.2	0.
Manufacturing Employ.	523.5	528.3	529.8	532.1	538.5	553.4	560.0	567.
	-0.1	-0.7	-1.1	-1.1	-0.9	-0.2	-0.1	-0.
	-0.4	-2.4	-4.4	-4.4	-3.1	-0.5	-0.1	-0.
Federal Civilian Employ.	36.6	36.2	35.8	35.5	35.4	35.2	35.1	35.
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.
	-0.2	-0.7	-0.9	-1.0	-1.1	-1.1	-1.1	-1
Federal Military Employ	15.8	15.7	15.6	15.5	15.5	15.3	15.3	15
	-0.1	-0.2	-0.4	-0.4	-0.5	-0.6	-0.7	-0
	_0.2	_1 0	_1 /	_1 5	-1 F	-1.6	-1.6	_1

Line 1: CBO Status Quo Bas	seline (De	fense exp	enditures	s grow wit	h inflatior	ו)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 c	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	on with BC	A-1 Caps (	CBO curre	ent law pr	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo b	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Iowa								
Total Employment	1582.2	1601.3	1618.7	1640.9	1668.9	1714.8	1745.2	1773.5
	-0.3	-1.3	-1.7	-1.6	-1.3	-0.7	-0.7	-0.5
	-0.9	-4.8	-6.6	-6.0	-4.5	-1.7	-1.0	-0.7
Private Employment	1325.3	1344.6	1361.8	1383.5	1410.7	1454.3	1482.0	1507.8
	-0.2	-1.1	-1.4	-1.3	-1.0	-0.3	-0.2	0.0
	-0.7	-4.1	-5.6	-4.9	-3.4	-0.6	0.1	0.4
Manufacturing Employ.	200.6	201.1	201.1	201.9	204.1	209.1	211.3	214.0
	0.0	-0.2	-0.4	-0.4	-0.3	-0.1	-0.1	-0.1
	-0.2	-0.9	-1.5	-1.6	-1.2	-0.4	-0.2	-0.2
Federal Civilian Employ.	18.1	17.9	17.7	17.6	17.5	17.4	17.4	17.3
	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2
Federal Military Employ.	9.8	9.7	9.6	9.6	9.5	9.4	9.4	9.4
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4
	-0.1	-0.6	-0.8	-0.9	-1.0	-1.0	-1.0	-1.0
Kansas								
Total Employment	1494.0	1508.1	1526.4	1549.0	1575.9	1619.2	1650.5	1679.8
	-0.4	-2.0	-2.6	-2.6	-2.3	-1.7	-1.8	-1.7
	-1.5	-7.5	-10.1	-9.5	-7.7	-4.4	-3.6	-3.2
Private Employment	1211.1	1225.6	1243.9	1266.1	1292.2	1333.5	1362.1	1388.9
	-0.3	-1.5	-1.9	-1.7	-1.4	-0.6	-0.4	-0.2
	-1.0	-5.4	-7.3	-6.4	-4.5	-1.1	-0.2	0.2
Manufacturing Employ.	193.7	193.0	193.5	194.7	196.3	199.6	201.6	204.5
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1
	-0.1	-0.6	-1.1	-1.1	-0.9	-0.4	-0.3	-0.2
Federal Civilian Employ.	24.6	24.3	24.1	23.8	23.8	23.7	23.6	23.5
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
	-0.1	-0.5	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8
Federal Military Employ.	25.2	25.0	24.8	24.7	24.6	24.4	24.3	24.3
	-0.1	-0.4	-0.6	-0.7	-0.8	-0.9	-1.1	-1.1
	-0.4	-1.6	-2.2	-2.4	-2.5	-2.6	-2.6	-2.6

Line 3: BCA-2 Sequestration	n with BCA	A-1 Caps ((	CBO curre	nt law pro	jection)			
Alternatives are shown in o	deviations	from stat	us quo ba	seline in	thousands	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Kentucky				2020				
Total Employment	1984.6	1996.8	2020.4	2050.1	2086.5	2147.8	2191.1	2232
	-1.3	-6.5	-8.6	-8.0	-7.1	-4.6	-3.8	-2
	-4.2	-23.1	-32.7	-29.5	-22.8	-11.4	-5.4	3
Private Employment	1634.4	1647.2	1670.9	1700.4	1735.8	1794.9	1835.0	1873
	-1.1	-5.8	-7.6	-6.8	-5.7	-2.9	-1.8	-0
	-3.5	-20.1	-28.7	-25.0	-18.2	-6.6	-0.6	7
Manufacturing Employ.	241.5	243.0	243.1	243.9	246.4	252.4	254.8	257
	0.0	-0.3	-0.4	-0.4	-0.3	-0.1	0.0	0
	-0.1	-0.9	-1.7	-1.6	-1.1	-0.2	0.1	0
Federal Civilian Employ.	37.4	37.0	36.6	36.3	36.3	36.0	35.9	35
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0
	-0.1	-0.5	-0.7	-0.7	-0.8	-0.8	-0.8	-0
Federal Military Employ.	38.9	38.6	38.3	38.1	37.9	37.5	37.5	37
	-0.1	-0.6	-0.9	-1.0	-1.2	-1.4	-1.6	-1
	-0.6	-2.5	-3.4	-3.7	-3.8	-3.9	-4.0	-4
Louisiana								
Total Employment	2035.5	2061.9	2091.8	2132.2	2184.5	2267.6	2327.7	2381
	-0.7	-3.3	-4.3	-4.1	-3.5	-2.0	-2.0	-1
	-2.4	-12.4	-16.6	-15.2	-11.3	-4.3	-2.9	-2
Private Employment	1659.8	1686.7	1716.5	1756.3	1807.5	1887.7	1944.1	1994
	-0.6	-2.8	-3.5	-3.2	-2.4	-0.8	-0.5	-0
	-1.9	-10.1	-13.6	-11.9	-8.0	-0.8	0.6	0.
Manufacturing Employ.	127.4	127.3	127.4	128.1	129.3	132.2	133.5	134.
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	0
	-0.1	-0.7	-1.2	-1.1	-0.8	-0.2	-0.1	0.
Federal Civilian Employ.	31.2	30.8	30.5	30.3	30.2	30.0	29.9	29
. ,	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0
	-0.1	-0.4	-0.6	-0.6	-0.6	-0.6	-0.7	-0
Federal Military Employ.	27.7	27.5	27.3	27.1	27.1	26.8	26.7	26
, , - ,	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.2	-1
	-0.4	-1 8	-24	-26	-27	-28	-29	-7

Line 1: CBO Status Quo Bas	eline (Def	ense exp	enditures	grow wit	h inflatior	ו)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	nt law pro	ojection)			
Alternatives are shown in	deviations	from sta	tus quo ba	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Maine								
Total Employment	661.3	663.4	671.8	682.4	695.0	715.5	730.8	745.0
	-0.2	-1.1	-1.6	-1.5	-1.3	-0.9	-0.8	-0.7
	-0.8	-4.1	-5.9	-5.5	-4.3	-2.3	-1.5	-0.7
Private Employment	552.0	554.3	562.7	573.3	585.5	605.2	619.5	632.7
	-0.2	-0.9	-1.2	-1.1	-0.9	-0.4	-0.3	-0.1
	-0.6	-3.2	-4.7	-4.2	-2.9	-0.9	-0.1	0.7
Manufacturing Employ.	57.2	56.8	56.8	57.1	57.5	58.4	58.6	59.0
	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
	-0.1	-0.4	-0.8	-0.7	-0.5	-0.2	-0.1	0.0
Federal Civilian Employ.	14.0	13.8	13.7	13.6	13.5	13.5	13.4	13.4
	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
	-0.1	-0.4	-0.6	-0.6	-0.7	-0.7	-0.7	-0.7
Federal Military Employ.	6.9	6.9	6.8	6.8	6.8	6.7	6.7	6.7
	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
	-0.1	-0.5	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7
Maryland								
Total Employment	2789.7	2832.8	2870.5	2918.5	2982.1	3076.6	3142.0	3194.2
	-1.7	-8.1	-10.4	-10.0	-8.9	-6.0	-6.0	-5.0
	-6.0	-30.1	-40.2	-36.9	-28.8	-14.3	-10.4	-7.4

**Private Employment** 

Manufacturing Employ.

Federal Civilian Employ.

Federal Military Employ.

2265.1

-1.4

-4.7

-0.1

-0.3

154.8

-0.2

-0.7

35.5

-0.1

-0.5

115.1

2310.1

-6.8

-24.7

114.5

-0.4

-1.7

-0.7

-3.0

35.3

-0.6

-2.3

153.0

2348.9

-8.6

-33.1

114.0

-0.7

-2.8

-1.0

-4.0

35.0

-0.8

-3.1

151.5

2397.4

-7.9

-29.1

114.2

-0.7

-2.8

150.2

-1.2

-4.4

34.8

-0.9

-3.4

2460.1

-6.4

-20.7

115.1

-0.6

-2.2

149.9

-1.4

-4.6

34.7

-1.1

-3.5

2614.1

-2.5

-1.9

-0.4

-0.8

148.5

-1.9

-4.8

34.3

-1.5

-3.7

116.9

2552.3

-3.1

-6.0

-0.4

-1.1

149.0

-1.7

-4.7

34.3

-1.3

-3.6

116.6

2663.1

-1.3

1.1

117.4

-0.3

-0.7

-2.1

-4.8

34.3

-1.6

-3.7

148.1

Line 3: BCA-2 Sequestration	n with BCA	A-1 Caps (	CBO curre	nt law pro	jection)			
Alternetives are shown in	loviotiona	from stat	un auna ha		thousand	ofiche		
Alternatives are snown in (	leviations	s from stat	us quo ba	iseline in	thousands	s of Jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Massachusetts								
Total Employment	3476.7	3516.8	3556.5	3607.9	3674.7	3783.4	3865.6	3942.
	-1.2	-5.7	-7.2	-6.8	-5.8	-3.4	-3.2	-2.
	-4.0	-20.7	-27.8	-25.1	-18.9	-8.0	-4.9	-2.
Private Employment	3038.9	3079.5	3119.0	3169.7	3235.2	3340.4	3418.3	3490.
	-1.1	-5.3	-6.6	-6.1	-5.1	-2.6	-2.2	-1.
	-3.7	-19.2	-25.7	-22.8	-16.6	-5.6	-2.4	-0.
Manufacturing Employ.	278.8	276.6	274.9	274.5	276.1	278.6	278.8	280.
	-0.1	-0.6	-1.1	-1.1	-1.0	-0.7	-0.6	-0.
	-0.5	-2.5	-4.2	-4.3	-3.5	-1.9	-1.5	-1.
Federal Civilian Employ.	48.9	48.3	47.8	47.4	47.3	47.0	46.9	46.
	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.
	-0.1	-0.5	-0.7	-0.8	-0.8	-0.8	-0.9	-0.
Federal Military Employ.	15.2	15.1	15.0	14.9	14.9	14.7	14.7	14.
	-0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.6	-0.
	-0.2	-1.0	-1.3	-1.4	-1.5	-1.5	-1.6	-1.
Michigan								
Total Employment	4468.7	4514.8	4564.9	4627.4	4708.8	4853.0	4957.1	5057.
	-1.0	-4.8	-6.0	-5.5	-4.5	-2.3	-2.0	-1.
	-3.3	-17.5	-23.4	-20.5	-14.6	-4.7	-2.1	-0.
Private Employment	3808.8	3855.3	3904.8	3966.1	4045.3	4183.7	4280.9	4375.
	-0.9	-4.4	-5.4	-4.8	-3.7	-1.3	-0.8	0.
	-2.9	-15.8	-21.0	-17.9	-12.0	-2.0	0.7	2.
Manufacturing Employ.	596.5	605.1	606.3	608.8	616.7	635.4	643.7	653.
	-0.1	-0.6	-1.0	-1.0	-0.7	-0.2	-0.1	-0.
	-0.4	-2.3	-4.0	-3.9	-2.7	-0.4	0.0	0.
Federal Civilian Employ.	53.2	52.6	52.0	51.6	51.5	51.2	51.0	50.
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.5	-0.
	-0.2	-0.7	-0.9	-1.0	-1.1	-1.1	-1.1	-1.
Federal Military Employ.	16.0	15.9	15.8	15.7	15.6	15.5	15.4	15.
	-0.1	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7	-0.
	-0.2	-1.0	-1.4	-1.5	-1.6	-1.6	-1.7	-1.

Line 3: BCA-2 Sequestratio	n with BC/	A-1 Caps (	CBO curre	nt law pro	ojection)			
Alternatives are shown in	deviations	from stat	us quo ba	seline in	thousands	s of jobs.		
•	2012	2013	2014	2015	2016	2018	2020	202
Minnesota								
Total Employment	2884.1	2910.8	2945.2	2988.1	3042.9	3132.4	3196.9	3256
	-0.7	-3.4	-4.1	-3.7	-3.1	-1.6	-1.4	-0.
	-2.3	-12.2	-15.9	-13.8	-9.9	-3.4	-1.5	-0.
Private Employment	2476.0	2503.0	2537.1	2579.3	2632.9	2719.0	2779.2	2834.
	-0.6	-3.0	-3.6	-3.2	-2.4	-0.8	-0.5	0.
	-2.0	-10.8	-14.1	-11.8	-7.8	-1.3	0.7	1.
Manufacturing Employ.	321.7	321.2	320.6	321.6	324.9	331.0	333.4	336.
	-0.1	-0.4	-0.6	-0.6	-0.5	-0.2	-0.1	-0.
	-0.3	-1.4	-2.3	-2.3	-1.7	-0.5	-0.2	-0.
Federal Civilian Employ.	32.7	32.3	32.0	31.7	31.7	31.5	31.4	31.
	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
	0.0	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.
Federal Military Employ.	18.5	18.3	18.2	18.1	18.0	17.8	17.8	17.
	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.
	-0.3	-1.2	-1.6	-1.8	-1.8	-1.9	-1.9	-1.
	1211.1	4250.0	4075.0	1205 C	1000.0	4264 4	1200.4	4 4 4 0
Total Employment	1244.4	1259.8	12/5.2	1295.6	1320.2	1361.4	1390.4	1418.
	-0.4	-2.0	-2.6	-2.6	-2.4	-1.8	-1.9	-1.
	-1.5	-7.5	-10.2	-9.7	- 7.8	-4.5	-3.7	-3.
Private Employment	9/5.6	991.4	1006.7	1026.9	1050.7	1090.0	1116.4	1142.
	-0.3	-1.5	-1.9	-1.8	-1.4	-0.6	-0.5	-0.
	-1.0	-5.4	-7.4	-6.6	-4.6	-1.2	-0.3	0.
Manufacturing Employ.	162.1	162.6	162.9	164.0	166.0	1/0.0	1/1./	1/4.
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-0.
Factorial Chatting Factoria	-0.1	-0.7	-1.2	-1.1	-0.9	-0.4	-0.2	-0.
Federal Civilian Employ.	25.7	25.5	25.2	25.0	24.9	24.8	24.7	24.
	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.
Federal Military Fred	-0.1	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9	-0.
Federal Military Employ.	23.1	22.9	22.7	22.6	22.6	22.3	22.3	
	-0.1	-0.4	-0.5	-0.6	-0.7	-0.8	-1.0	-1.

Line 3: BCA-2 Sequestration	n with BCA	A-1 Caps (	CBO curre	nt law pro	jection)			
Alternetives are shown in	doviotiona	from stat	un auna ha		thoucond	ofiche		
Alternatives are shown in t		STIONISIA	us quo ba	senne m	liiousaiius	s or jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Missouri								
Total Employment	2940.2	2977.3	3014.9	3062.4	3121.0	3216.1	3282.9	3343.
	-1.3	-6.1	-7.2	-6.6	-5.5	-3.1	-2.8	-1.
	-4.3	-22.1	-28.1	-24.3	-17.7	-6.7	-3.5	-1.
Private Employment	2469.9	2507.8	2545.4	2592.4	2649.7	2741.5	2803.8	2860.
	-1.1	-5.4	-6.3	-5.5	-4.3	-1.7	-1.1	0.
	-3.7	-19.4	-24.6	-20.5	-13.8	-2.6	0.7	2.
Manufacturing Employ.	291.1	291.9	292.3	293.6	296.6	303.3	306.3	310.
	-0.1	-0.6	-0.9	-0.9	-0.8	-0.5	-0.5	-0.
	-0.4	-2.2	-3.6	-3.6	-2.9	-1.4	-1.0	-0.
Federal Civilian Employ.	57.4	56.7	56.2	55.7	55.6	55.2	55.1	54.
	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.
	-0.1	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9	-0.
Federal Military Employ.	30.9	30.7	30.4	30.3	30.2	29.8	29.8	29.
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.3	-1.
	-0.5	-2.0	-2.7	-2.9	-3.0	-3.1	-3.2	-3.
Montana								
Total Employment	486.8	485.9	492.5	501.5	513.0	530.5	542.2	551.
	-0.1	-0.5	-0.7	-0.6	-0.6	-0.4	-0.4	-0.
	-0.4	-2.0	-2.6	-2.4	-1.9	-0.9	-0.7	-0.
Private Employment	396.3	395.6	402.2	411.2	422.5	439.4	450.2	458.
	-0.1	-0.4	-0.5	-0.4	-0.3	-0.1	-0.1	0.
	-0.3	-1.5	-1.9	-1.7	-1.1	-0.1	0.1	0.
Manufacturing Employ.	18.7	18.8	18.9	19.0	19.3	19.9	20.1	20.
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.
Federal Civilian Employ.	13.3	13.1	13.0	12.9	12.8	12.8	12.7	12.
	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
Federal Military Employ.	6.3	6.2	6.2	6.1	6.1	6.0	6.0	6.
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.
	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflation	ו)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pr	ojection)			
		- <b>6</b>			41			
Alternatives are snown in	deviation	s from sta	tus quo ba	aseline in	thousand	s of Jobs.		
	2012	2012	2014	2015	2010	2010	2020	2022
Nahwaalaa	2012	2013	2014	2015	2016	2018	2020	2022
	002.0	4007.0	1010.0	1024.0	4052.0	4002 7	4405.0	1121 1
Total Employment	992.9	1007.8	1019.8	1034.9	1053.6	1083.7	1105.0	1124.4
	-0.2	-1.2	-1.5	-1.5	-1.2	-0.8	-0.8	-0.6
	-0.8	-4.4	-5.9	-5.4	-4.1	-1.8	-1.3	-1.1
Private Employment	826.6	841.7	853.7	868.5	886.7	915.6	935.2	953.1
	-0.2	-1.0	-1.2	-1.1	-0.8	-0.3	-0.2	0.0
	-0.6	-3.5	-4.7	-4.0	-2.7	-0.4	0.1	0.4
Manufacturing Employ.	90.1	90.1	90.2	90.6	91.5	93.3	94.2	95.3
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	0.0	0.0
Federal Civilian Employ.	15.8	15.6	15.5	15.3	15.3	15.2	15.2	15.1
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	-0.1	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
Federal Military Employ.	10.3	10.2	10.1	10.1	10.0	9.9	9.9	9.9
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5
	-0.2	-0.7	-0.9	-1.0	-1.0	-1.0	-1.1	-1.1
Nevada								
Total Employment	1340.6	1337.0	1358.6	1389.1	1430.0	1490.0	1525.9	1550.4
	-0.4	-1.8	-2.3	-2.2	-1.8	-1.1	-1.0	-0.7
	-1.3	-6.7	-8.8	-8.0	-5.9	-2.3	-1.3	-0.9
Private Employment	1177.3	1174.0	1195.5	1225.8	1266.3	1325.0	1359.3	1382.4
	-0.3	-1.6	-2.0	-1.8	-1.4	-0.6	-0.4	-0.1
	-1.1	-5.8	-7.7	-6.7	-4.6	-0.9	0.0	0.5
Manufacturing Employ.	45.2	45.0	45.1	45.4	46.0	47.2	47.7	48.3
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0
	-0.1	-0.3	-0.5	-0.5	-0.3	-0.1	-0.1	-0.1
Federal Civilian Employ.	16.9	16.7	16.5	16.4	16.4	16.3	16.2	16.2
	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Federal Military Employ	11.2	11.1	11.0	11.0	11.0	10.8	10.8	10.8
i eserai mintary Employi	0.0	-0.2	-0.3	-03	-03	-0.4	-0.5	-0.5
	-0.2	-0.7	-1 0	-1 1	-1 1	-1 1	-1 2	-1 2
	0.2	0.7	1.0	±.±	1.1	±.±	1.2	2.2

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflatio	n)		
Line 2: BCA-1 Expenditure	Caps Only	BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pro	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo ba	aseline in	thousand	s of jobs.		
					2016			
	2012	2013	2014	2015	2016	2018	2020	2022
New Hampshire			<b>67</b> 0 6	600 A				
Total Employment	659.4	667.0	673.6	682.4	694.4	713.5	726.1	736.9
	-0.1	-0.7	-0.9	-0.9	-0.8	-0.5	-0.4	-0.3
	-0.5	-2.6	-3.6	-3.3	-2.5	-1.1	-0.7	-0.5
Private Employment	566.9	574.6	581.1	589.8	601.4	619.7	631.4	641.3
	-0.1	-0.6	-0.8	-0.8	-0.6	-0.3	-0.3	-0.1
	-0.5	-2.4	-3.3	-2.9	-2.1	-0.7	-0.3	-0.1
Manufacturing Employ.	72.1	71.6	71.1	71.0	71.4	72.4	72.5	72.9
	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
	-0.1	-0.6	-1.1	-1.1	-0.9	-0.4	-0.4	-0.3
Federal Civilian Employ.	7.7	7.6	7.6	7.5	7.5	7.4	7.4	7.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Federal Military Employ.	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9
	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	0.0	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
New Jersey								
Total Employment	4147.7	4198.7	4255.5	4324.5	4411.0	4551.6	4653.2	4742.0
	-1.1	-5.5	-6.9	-6.5	-5.5	-3.2	-3.0	-2.2
	-3.9	-20.2	-26.7	-24.1	-18.1	-7.3	-4.6	-3.2
Private Employment	3505.5	3557.1	3613.4	3681.4	3765.9	3901.0	3995.9	4078.7
	-1.0	-4.9	-6.0	-5.5	-4.3	-1.8	-1.4	-0.5
	-3.4	-17.6	-23.3	-20.4	-14.2	-3.4	-0.6	0.8
Manufacturing Employ.	289.5	287.9	287.5	288.4	290.4	294.8	296.2	298.2
	-0.1	-0.4	-0.7	-0.6	-0.5	-0.2	-0.2	-0.1
	-0.3	-1.5	-2.5	-2.5	-1.9	-0.7	-0.3	-0.1
Federal Civilian Employ.	61.0	60.3	59.7	59.2	59.1	58.7	58.6	58.4
	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9
	-0.3	-1.3	-1.7	-1.9	-2.0	-2.0	-2.1	-2.1
Federal Military Employ	18.8	18.6	18.5	18.4	18.3	18.1	18.1	18.1
	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.8
	-0.3	-1 2	-1 6	-1 8	-1 8	-1 9	-1 9	-2 0
	0.5	1.2	1.0	1.0	1.0	1.5	1.5	2.0
Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflatior	ר)		
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Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pro	ojection)			
Alternatives are shown in a	deviation	s from sta	tus quo ba	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
New Mexico								
Total Employment	909.6	924.9	940.0	958.4	980.7	1015.5	1040.2	1062.3
	-0.3	-1.4	-1.9	-1.8	-1.6	-1.1	-1.2	-1.0
	-1.1	-5.4	-7.2	-6.7	-5.3	-2.7	-2.2	-1.9
Private Employment	706.0	721.6	736.8	755.1	776.8	810.2	833.0	853.3
	-0.2	-1.1	-1.4	-1.3	-1.1	-0.4	-0.4	-0.2
	-0.8	-4.2	-5.6	-4.9	-3.5	-0.8	-0.2	0.0
Manufacturing Employ.	31.6	31.4	31.3	31.3	31.6	31.9	32.0	32.1
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	0.0	-0.3	-0.4	-0.4	-0.3	-0.2	-0.1	-0.1
Federal Civilian Employ.	30.0	29.6	29.3	29.1	29.0	28.9	28.8	28.7
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
	-0.1	-0.5	-0.6	-0.7	-0.7	-0.8	-0.8	-0.8
Federal Military Employ.	11.6	11.5	11.4	11.3	11.3	11.2	11.2	11.1
	0.0	-0.2	-0.3	-0.3	-0.3	-0.4	-0.5	-0.5
	-0.2	-0.8	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2
New York								
Total Employment	8932.6	9026.6	9129.2	9261.6	9425.7	9700.2	9901.7	10090.9
	-1.8	-8.8	-10.9	-10.1	-8.6	-4.9	-4.3	-2.7
	-6.2	-32.0	-42.1	-37.5	-27.9	-11.1	-5.8	-2.8
Private Employment	7455.3	7550.5	7651.9	7781.7	7941.1	8202.8	8388.8	8563.9
	-1.6	-7.9	-9.6	-8.6	-6.9	-2.9	-1.9	-0.1
	-5.4	-28.4	-37.3	-32.2	-22.4	-5.4	-0.1	3.0
Manufacturing Employ.	518.1	516.5	515.0	515.5	519.4	527.5	529.3	533.3
	-0.2	-0.9	-1.4	-1.4	-1.3	-0.8	-0.7	-0.7
	-0.7	-3.4	-5.5	-5.5	-4.4	-2.2	-1.6	-1.2
Federal Civilian Employ.	125.5	124.1	122.9	121.8	121.6	120.8	120.5	120.1
	0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5
	-0.2	-0.8	-1.0	-1.2	-1.2	-1.2	-1.3	-1.3
Federal Military Employ.	43.6	43.3	43.0	42.7	42.6	42.1	42.1	42.1
, , ,	-0.2	-0.7	-1.0	-1.2	-1.3	-1.6	-1.8	-2.0
	-0.6	-2.9	-3.8	-4.2	-4.3	-4.4	-4.5	-4.6
	-	-			-		_	

Line 3: BCA-2 Sequestration	n with BCA	4-1 Caps ((	CBO curre	nt law pro	ojection)			
Alternatives are shown in (	hoviations	from stat	us quo ba	solino in 1	thousand	ofiobs		
Alternatives are shown in t		SHOITSLA	us quo ba	isenne m	tilousailu	s or jobs.		
P	2012	2013	2014	2015	2016	2018	2020	202
North Carolina								
Total Employment	4375.4	4439.4	4496.6	4572.6	4669.4	4825.6	4934.9	5035.
	-1.4	-6.9	-8.8	-8.6	-7.8	-5.7	-5.8	-5.
	-5.1	-25.9	-34.2	-31.6	-25.3	-14.0	-11.0	-9.
Private Employment	3591.6	3656.9	3714.2	3789.3	3884.1	4035.2	4137.2	4231.
	-1.0	-5.1	-6.2	-5.5	-4.2	-1.4	-0.8	0.
	-3.4	-18.2	-24.0	-20.4	-13.7	-2.0	1.3	3.
Manufacturing Employ.	496.3	495.9	493.9	494.4	498.6	507.3	508.8	512.
	-0.1	-0.5	-0.9	-0.8	-0.6	-0.1	0.0	0.
	-0.3	-2.0	-3.3	-3.1	-2.1	-0.3	0.1	0.
Federal Civilian Employ.	62.6	61.9	61.3	60.7	60.6	60.3	60.1	59.
	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.
	-0.3	-1.2	-1.6	-1.8	-1.8	-1.9	-1.9	-1.
Federal Military Employ.	99.5	98.7	97.9	97.4	97.1	96.0	95.9	95.
	-0.3	-1.6	-2.2	-2.6	-3.0	-3.6	-4.2	-4
	-1.5	-6.5	-8.6	-9.5	-9.8	-10.1	-10.3	-10
North Dakota								
Total Employment	390.9	389.7	394.5	400.2	407.1	417.8	425.1	431
	-0.1	-0.5	-0.7	-0.7	-0.6	-0.4	-0.5	-0.
	-0.4	-2.0	-2.6	-2.4	-1.9	-1.0	-0.9	-0.
Private Employment	313.4	312.3	317.2	322.8	329.5	339.8	346.4	351
	-0.1	-0.4	-0.4	-0.4	-0.3	-0.1	0.0	0.
	-0.2	-1.3	-1.7	-1.4	-0.9	0.0	0.2	0.
Manufacturing Employ.	24.5	24.7	24.8	24.9	25.3	26.0	26.4	26.
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.
Federal Civilian Employ.	9.6	9.5	9.4	9.3	9.3	9.3	9.2	9.
	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.
Federal Military Employ.	8.7	8.7	8.6	8.5	8.5	8.4	8.4	8.
/	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.
	-0.1	-0.6	-0.8	-0.8	-0.9	-0.9	-0.9	-0.

Line 3: BCA-2 Sequestration	n with BC	4-1 Caps ((	CBO curre	nt law pro	ojection)			
Alternatives are shown in (	leviation	from stat	us quo ha	seline in	thousand	s of iohs		
		, nom stat	.05 900 50	isenne m	circusuria	5 01 j005.		
	2012	2013	2014	2015	2016	2018	2020	202
Ohio								
Total Employment	5649.1	5655.7	5720.1	5799.6	5898.2	6066.4	6186.2	6295.
	-1.1	-5.6	-7.2	-6.9	-5.9	-3.6	-6.4	-2.
	-4.0	-20.6	-27.9	-25.8	-19.7	-8.7	-6.0	-4.
Private Employment	4824.2	4831.7	4895.5	4973.6	5069.6	5230.9	5342.1	5443.
	-1.0	-4.7	-6.0	-5.5	-4.3	-1.7	-4.1	-0.
	-3.2	-17.0	-23.2	-20.5	-14.3	-3.1	-0.3	1.
Manufacturing Employ.	736.1	739.9	740.6	743.0	750.8	770.0	778.6	788.
	-0.1	-0.8	-1.3	-1.2	-1.0	-0.4	-0.3	-0.
	-0.5	-2.8	-4.9	-4.9	-3.6	-1.1	-0.5	-0.
Federal Civilian Employ.	76.1	75.2	74.4	73.8	73.6	73.2	73.0	72.
	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.2	-1.
	-0.4	-1.8	-2.4	-2.7	-2.8	-2.9	-2.9	-2.
Federal Military Employ.	26.6	26.4	26.2	26.1	26.0	25.7	25.7	25.
	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.1	-1.
	-0.4	-1.7	-2.3	-2.5	-2.6	-2.7	-2.8	-2.
Oklahoma								
Total Employment	1703.6	1715.5	1739.8	1769.0	1804.2	1862.8	1905.4	1944.
	-0.6	-2.9	-3.7	-3.7	-3.3	-2.5	-2.6	-2.
	-2.1	-10.7	-14.3	-13.5	-10.9	-6.1	-5.0	-4.
Private Employment	1354.8	1367.3	1391.7	1420.6	1454.9	1511.2	1550.7	1587.
	-0.4	-2.1	-2.6	-2.3	-1.8	-0.7	-0.5	-0.
	-1.4	-7.5	-10.0	-8.7	-6.0	-1.0	0.2	0.
Manufacturing Employ.	145.5	146.0	146.1	146.6	148.3	152.2	154.1	156.
	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	0.0	0.
	-0.1	-0.4	-0.8	-0.8	-0.6	-0.2	-0.1	0.
Federal Civilian Employ.	44.9	44.4	44.0	43.6	43.5	43.2	43.1	43.
· r */·	-0.1	-0.3	-0.5	-0.5	-0.6	-0.7	-0.9	-0.
	-0.3	-1.4	-1.8	-2.0	-2.0	-2.1	-2.1	-2.
Federal Military Employ.	29.4	29.1	28.9	28.7	28.7	28.3	28.3	28.
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.2	-1.
	-0.4	-1 9	-25	-2.8	-2.9	-3.0	-3.0	-3

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflatior	ו)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pro	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo ba	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Oregon								
Total Employment	1868.3	1885.3	1909.5	1939.7	1977.9	2037.9	2077.8	2113.9
	-0.3	-1.5	-1.9	-1.8	-1.5	-0.9	-0.8	-0.6
	-1.0	-5.5	-7.4	-6.8	-5.1	-2.0	-1.3	-1.0
Private Employment	1585.8	1603.1	1627.1	1656.9	1694.2	1751.9	1788.9	1822.4
	-0.3	-1.3	-1.6	-1.5	-1.1	-0.4	-0.3	-0.1
	-0.8	-4.6	-6.3	-5.6	-3.8	-0.7	0.1	0.3
Manufacturing Employ.	188.2	188.1	188.1	188.8	191.0	194.9	196.1	197.6
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.2	-0.2	-0.2
	-0.2	-1.1	-1.8	-1.8	-1.3	-0.5	-0.3	-0.3
Federal Civilian Employ.	28.8	28.5	28.2	27.9	27.9	27.7	27.6	27.5
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Federal Military Employ.	9.5	9.4	9.3	9.3	9.2	9.1	9.1	9.1
	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4
	-0.1	-0.6	-0.8	-0.9	-0.9	-1.0	-1.0	-1.0
Pennsylvania								
Total Employment	6152.8	6200.6	6278.3	6373.3	6491.3	6684.3	6823.6	6951.0
	-1.4	-7.0	-9.0	-8.4	-7.2	-4.3	-3.9	-2.8
	-5.0	-25.8	-34.7	-31.3	-23.5	-9.8	-5.8	-2.8
Private Employment	5361.9	5410.8	5488.4	5582.5	5698.1	5885.1	6016.7	6137.0
	-1.3	-6.1	-7.7	-6.9	-5.5	-2.2	-1.5	-0.2
	-4.1	-22.0	-29.7	-25.8	-17.9	-4.0	0.1	3.2
Manufacturing Employ.	621.1	621.2	621.7	624.0	630.1	643.6	649.3	656.1
	-0.2	-0.9	-1.5	-1.4	-1.2	-0.6	-0.5	-0.4
	-0.6	-3.3	-5.6	-5.6	-4.3	-1.7	-1.0	-0.6
Federal Civilian Employ.	102.7	101.5	100.5	99.6	99.4	98.8	98.5	98.2
	-0.1	-0.4	-0.6	-0.7	-0.8	-1.0	-1.2	-1.2
	-0.4	-1.8	-2.4	-2.6	-2.7	-2.8	-2.9	-2.9
Federal Military Employ.	29.7	29.5	29.3	29.1	29.0	28.7	28.7	28.7
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.1	-1.3	-1.3
	-0.4	-1.9	-2.6	-2.8	-2.9	-3.0	-3.1	-3.1

Line 1: CBO Status Quo Bas	eline (De	fense exp	enditures	grow wit	h inflatio	n)		
Line 2: BCA-1 Expenditure	Caps Only	(BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	n with BC	A-1 Caps (	CBO curre	ent law pr	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo ba	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Rhode Island								
Total Employment	526.7	531.6	537.7	545.6	555.5	571.8	584.5	596.3
	-0.2	-0.8	-1.0	-0.9	-0.9	-0.6	-0.7	-0.6
	-0.6	-2.8	-3.7	-3.5	-2.8	-1.6	-1.3	-1.1
Private Employment	454.1	459.1	465.2	473.0	482.7	498.5	510.6	521.8
	-0.1	-0.6	-0.7	-0.6	-0.5	-0.2	-0.2	0.0
	-0.4	-2.1	-2.7	-2.3	-1.6	-0.4	0.0	0.1
Manufacturing Employ.	49.4	49.2	49.3	49.5	50.0	50.8	51.3	51.9
	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
	0.0	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	0.0
Federal Civilian Employ.	9.8	9.7	9.6	9.5	9.5	9.4	9.4	9.4
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3
	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6
Federal Military Employ.	5.8	5.8	5.7	5.7	5.7	5.6	5.6	5.6
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3
	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6
South Carolina								
Total Employment	2001.4	2032.4	2066.9	2111.4	2165.2	2254.2	2315.8	2371.1
	-1.0	-4.8	-6.0	-5.6	-4.9	-3.3	-3.2	-2.4
	-3.4	-17.6	-23.2	-20.7	-15.9	-7.7	-5.2	-2.9
Private Employment	1627.8	1659.3	1693.8	1737.9	1790.6	1877.0	1935.1	1987.1
	-0.8	-4.0	-4.9	-4.3	-3.4	-1.4	-1.0	-0.1
	-2.7	-14.3	-18.8	-15.9	-10.9	-2.5	0.1	2.4
Manufacturing Employ.	197.7	197.3	196.5	196.4	197.8	201.4	202.4	203.6
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.1	-0.1	-0.1
	-0.2	-1.2	-2.1	-2.0	-1.5	-0.4	-0.1	0.0
Federal Civilian Employ.	29.3	29.0	28.7	28.5	28.4	28.2	28.1	28.1
	0.0	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4
	-0.1	-0.6	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0
Federal Military Employ.	41.1	40.8	40.4	40.2	40.1	39.7	39.6	39.6
	-0.1	-0.6	-0.9	-1.1	-1.2	-1.5	-1.7	-1.9
	-0.6	-2.7	-3.5	-3.9	-4.0	-4.2	-4.3	-4.3

Line 3: BCA-2 Sequestration	n with BCA	4-1 Caps (	CBO curre	nt law pro	ojection)			
Alternatives are shown in o	deviations	from stat	us quo ba	seline in	thousands	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
South Dakota								
Total Employment	431.8	435.8	440.8	447.2	455.3	468.3	477.7	486.
	-0.2	-0.7	-0.9	-0.8	-0.6	-0.3	-0.3	-0.
	-0.5	-2.7	-3.3	-2.8	-2.0	-0.7	-0.3	-0.
Private Employment	354.2	358.3	363.4	369.7	377.7	390.1	398.8	406.
	-0.1	-0.6	-0.7	-0.6	-0.4	-0.1	0.0	0.
	-0.4	-2.2	-2.7	-2.1	-1.3	0.0	0.4	0.
Manufacturing Employ.	37.7	37.8	37.9	38.2	38.7	39.8	40.3	40.
	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.
	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.0	0.
Federal Civilian Employ.	11.0	10.9	10.7	10.7	10.6	10.6	10.5	10.
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
Federal Military Employ.	6.1	6.1	6.0	6.0	6.0	5.9	5.9	5.
	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.
	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.
Tennessee								
Total Employment	2936.3	2972.1	3007.9	3053.6	3110.7	3206.7	3274.5	3337.
	-0.6	-2.8	-3.5	-3.3	-2.8	-1.6	-1.5	-1.
	-2.0	-10.2	-13.7	-12.4	-9.3	-3.5	-2.2	-1.
Private Employment	2501.3	2537.6	2573.2	2618.4	2674.2	2766.7	2830.2	2889.
	-0.5	-2.4	-3.0	-2.7	-2.1	-0.7	-0.4	0.
	-1.6	-8.5	-11.5	-10.0	-6.8	-1.0	0.4	0.
Manufacturing Employ.	359.7	361.4	361.4	362.5	366.2	374.8	378.2	382.
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.1	-0.1	0.
	-0.2	-1.2	-2.1	-2.1	-1.5	-0.3	0.0	0.
Federal Civilian Employ.	48.3	47.7	47.2	46.8	46.7	46.5	46.3	46.
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.
	-0.1	-0.5	-0.6	-0.7	-0.7	-0.7	-0.8	-0.
Federal Military Employ	17 9	17.8	17 7	17.6	17 5	17 R	17 3	17
	-0.1	-0.3	-0.4	-0.5	-0.5	-0.6	-0.8	-0
	-0.3	_1 2	_1 5	-1 7	-1 Q	-1.9	-1 0	_1

Line 1: CBO Status Quo Bas	seline (De	fense exp	enditures	grow wit	h inflatio	n)		
Line 2: BCA-1 Expenditure	Caps Only	/ (BCA-1 ca	aps, no BC	A-2 seque	estration)			
Line 3: BCA-2 Sequestratio	on with BC	A-1 Caps (	CBO curre	ent law pr	ojection)			
Alternatives are shown in	deviation	s from sta	tus quo b	aseline in	thousand	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	2022
Texas								
Total Employment	11106.6	11273.9	11450.9	11663.7	11931.1	12355.2	12648.6	12902.0
	-4.6	-22.2	-28.2	-26.8	-23.3	-14.9	-14.5	-11.5
	-16.2	-81.9	-109.0	-99.1	-76.1	-35.1	-24.3	-18.2
Private Employment	9286.8	9456.6	9633.4	9844.0	10106.3	10517.0	10792.7	11030.1
	-4.0	-19.3	-24.1	-22.0	-17.9	-8.4	-6.9	-3.3
	-13.5	-70.0	-93.3	-81.9	-58.3	-16.7	-5.6	0.7
Manufacturing Employ.	897.5	896.0	895.1	898.1	906.6	923.7	930.7	940.4
	-0.4	-1.8	-3.0	-3.0	-2.6	-1.6	-1.5	-1.5
	-1.4	-6.7	-11.5	-11.7	-9.3	-4.5	-3.4	-2.9
Federal Civilian Employ.	184.6	182.6	180.7	179.1	178.8	177.7	177.2	176.7
	-0.2	-0.7	-1.0	-1.2	-1.4	-1.6	-1.9	-2.0
	-0.7	-3.0	-3.9	-4.3	-4.4	-4.6	-4.7	-4.7
Federal Military Employ.	135.7	134.7	133.6	132.9	132.5	131.1	130.9	130.8
	-0.5	-2.1	-3.1	-3.6	-4.1	-4.9	-5.7	-6.2
	-2.0	-8.9	-11.7	-12.9	-13.4	-13.8	-14.1	-14.2
Utah								
Total Employment	1306.8	1318.9	1337.2	1362.1	1395.6	1444.7	1475.2	1498.3
	-0.4	-1.8	-2.3	-2.3	-2.1	-1.5	-1.5	-1.4
	-1.4	-6.7	-9.0	-8.4	-6.7	-3.6	-2.9	-2.7
Private Employment	1088.3	1100.7	1119.1	1143.8	1176.8	1224.5	1253.0	1274.3
	-0.3	-1.4	-1.7	-1.6	-1.2	-0.5	-0.4	-0.2
	-0.9	-4.9	-6.6	-5.8	-4.0	-0.8	0.0	0.2
Manufacturing Employ.	105.7	105.7	106.0	106.6	108.0	110.4	111.5	112.8
	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
	-0.1	-0.4	-0.7	-0.7	-0.5	-0.2	-0.1	-0.1
Federal Civilian Employ.	35.2	34.8	34.4	34.1	34.1	33.9	33.8	33.7
	-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.6	-0.7
	-0.2	-1.0	-1.3	-1.4	-1.5	-1.5	-1.5	-1.5
Federal Military Employ.	12.8	12.7	12.6	12.6	12.5	12.4	12.4	12.4
	0.0	-0.2	-0.3	-0.3	-0.4	-0.5	-0.5	-0.6
	-0.2	-0.8	-1.1	-1.2	-1.3	-1.3	-1.3	-1.3

Line 3: BCA-2 Sequestration	n with BCA	4-1 Caps ((	CBO curre	nt law pro	ojection)			
Alternatives are shown in a	loviations	from stat	us quo ba	seline in t	thousands	ofiobs		
Alternatives are shown in t		STIONISIA	us quo ba	senne m	liiousailus	s or jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Vermont								
Total Employment	331.6	335.1	339.9	346.0	353.4	365.3	373.9	381
	-1.0	-0.3	-0.4	-0.4	-0.3	-0.2	-0.2	-0
	-0.2	-1.2	-1.6	-1.5	-1.1	-0.5	-0.4	-0
Private Employment	277.0	280.6	285.4	291.4	298.6	310.1	318.2	325
	-1.0	-0.3	-0.3	-0.3	-0.2	-0.1	-0.1	0.
	-0.2	-0.9	-1.3	-1.1	-0.8	-0.1	0.0	0.
Manufacturing Employ.	33.6	33.4	33.3	33.4	33.7	34.2	34.4	34
	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.
	0.0	-0.3	-0.4	-0.4	-0.3	-0.1	-0.1	0.
Federal Civilian Employ.	5.9	5.8	5.8	5.7	5.7	5.7	5.7	5
. ,	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
Federal Military Employ.	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3
, , ,	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
	0.0	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0
Virginia								
Total Employment	3991.6	4049.6	4096.2	4158.5	4243.1	4372.1	4460.7	4536
	-4.9	-23.5	-29.8	-28.3	-24.8	-16.8	-16.8	-13
	-17.2	-86.8	-114.9	-104.3	-80.1	-39.3	-28.7	-22
Private Employment	3180.4	3240.9	3289.2	3352.0	3435.3	3561.1	3644.0	3715
	-4.1	-19.7	-24.4	-22.0	-17.6	-8.2	-6.7	-2.
	-13.6	-71.2	-94.3	-81.6	-56.7	-15.2	-4.1	2.
Manufacturing Employ.	218.7	218.4	218.0	218.7	220.9	225.5	227.0	228
	-0.2	-1.1	-2.0	-1.9	-1.6	-0.8	-0.7	-0.
	-0.8	-4.2	-7.5	-7.2	-5.4	-2.3	-1.5	-1.
Federal Civilian Employ.	171.2	169.3	167.6	166.1	165.8	164.8	164.3	163
. ,	-0.4	-1.8	-2.6	-3.0	-3.5	-4.1	-4.8	-5
	-1.7	-7.5	-10.0	-10.9	-11.3	-11.7	-11.9	-11
Federal Military Employ.	123.0	122.0	121.0	120.4	120.1	118.7	118.6	118
· · · /	-0.4	-1.9	-2.8	-3.2	-3.7	-4.4	-5.2	-5
	-1.8	-8.0	-10.6	-11.7	-12.1	-12.5	-12.7	-12

Line 3: BCA-2 Sequestration	n with BCA	A-1 Caps (	CBO curre	nt law pro	ojection)			
Alternatives are shown in o	deviations	from stat	us quo ba	seline in	thousands	s of jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Washington								
Total Employment	3102.9	3126.1	3168.6	3223.4	3293.7	3401.6	3476.0	3540.
	-1.1	-5.4	-7.0	-6.8	-6.1	-4.6	-4.6	-4.
	-4.0	-20.2	-26.8	-24.8	-20.0	-11.3	-8.8	-7.
Private Employment	2518.6	2542.9	2585.6	2639.9	2708.7	2812.8	2881.8	2941.
	-0.8	-4.0	-5.0	-4.4	-3.5	-1.4	-0.9	-0.
	-2.7	-14.4	-19.2	-16.5	-11.3	-2.4	0.3	1.
Manufacturing Employ.	185.1	184.7	184.6	185.2	187.2	191.1	192.5	194.
	-0.1	-0.3	-0.5	-0.5	-0.4	-0.2	-0.2	-0.
	-0.2	-1.1	-1.8	-1.8	-1.4	-0.7	-0.4	-0.
Federal Civilian Employ.	68.0	67.2	66.5	66.0	65.8	65.4	65.2	65.
	-0.1	-0.5	-0.7	-0.8	-0.9	-1.0	-1.2	-1.
	-0.4	-1.9	-2.5	-2.8	-2.8	-2.9	-3.0	-3.
Federal Military Employ.	59.1	58.6	58.2	57.9	57.7	57.1	57.0	56.
	-0.2	-0.9	-1.3	-1.6	-1.8	-2.1	-2.5	-2.
	-0.9	-3.9	-5.1	-5.6	-5.8	-6.0	-6.1	-6.
Wost Virginia								
Total Employment	764.9	774 1	700 0	<u>804 6</u>	012 1	952.2	975.2	90E
Total Employment	704.0	774.1	700.5	004.0	025.2	0.4	0/3.5	095.
	-0.1	-0.0	-0.8	-0.8	-0.7	-0.4	-0.4	-0.
Drivete Employment	-0.5	-2.4	-3.2	-3.0	-2.3	-1.0	-0.7	-0.
Private Employment	014.4	025.9	056.1	054.5	072.5	701.5	722.1	740.
	-0.1	-0.5	-0.0	-0.0	-0.4	-0.1	0.0	0.
Manufacturing Employ	-0.5	-1.0	-2.4	-2.1	-1.4	-0.1	59 O	E0.
Manufacturing Employ.	0.0	0.0	0.1	0.1	0.0	0.0	0.0	
	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.
Endoral Civilian Employ	0.0	-0.2	-0.5	-0.3	-0.2	-U.1 21 E	21.4	0. ว1
reueral Civilian Employ.	22.3	22.1	21.9	21.7	21.0	21.5	21.4	21.
	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.
Federal Military Frankas	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.
Federal Willtary Employ.	7.4	7.4	/.3	/.3	1.2	1.2	/.1	7.
	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.

Line 3: BCA-2 Sequestration	n with BCA	A-1 Caps (	CBO curre	nt law pro	ojection)			
	1	<u> </u>				6		
Alternatives are snown in (	leviations	from stat	tus quo ba	senne in	thousands	s of Jobs.		
	2012	2013	2014	2015	2016	2018	2020	202
Wisconsin								
Total Employment	2969.4	2999.1	3031.5	3073.0	3127.8	3220.3	3284.3	3343.
	-0.6	-3.2	-4.4	-4.2	-3.4	-1.3	-1.1	-0.
	-2.1	-11.6	-17.1	-16.0	-11.6	-2.8	-0.9	-0.
Private Employment	2552.0	2581.9	2613.9	2654.7	2708.0	2796.9	2856.3	2911.
	-0.6	-3.0	-4.1	-3.8	-2.9	-0.8	-0.4	0.
	-1.9	-10.6	-15.8	-14.6	-10.0	-1.2	0.7	1.
Manufacturing Employ.	474.9	476.6	476.7	478.5	483.8	495.8	501.1	507.
	-0.1	-0.7	-1.4	-1.5	-1.1	-0.1	0.0	-0.
	-0.4	-2.7	-5.6	-6.1	-4.4	-0.3	0.2	0.
Federal Civilian Employ.	29.0	28.7	28.4	28.1	28.1	27.9	27.8	27.
	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.
	0.0	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.
Federal Military Employ.	13.1	13.0	12.9	12.8	12.8	12.6	12.6	12.
	0.0	-0.2	-0.3	-0.3	-0.4	-0.5	-0.6	-0.
	-0.2	-0.9	-1.1	-1.2	-1.3	-1.3	-1.4	-1.
Wyoming								
Total Employment	204 5	202.1	212 1	210.0	278 0	2/12 1	250.1	256
iotal Employment	0 1	0.4	0.5	0.5	0.4	0.2	0.2	330.
	-0.1	-0.4	-0.3	-0.3	-0.4	-0.5	-0.5	-0.
Private Employment	226.6	240.4	245.4	-1.7	260.0	-0.0	280 0	286
	-0.1	-0.3	-0.3	-0.3	-0.2	-0.1	200.5	200.
	-0.2	-1.0	-1.3	-1 1	-0.8	-0.1	0.0	0.
Manufacturing Employ	-0.2 Q 5	- 1.0 Q 5	-1.5 0 5	0.5	-0.0 9.6	0.1	0.1	10
Manaractaring Employ.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.
	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.
Federal Civilian Employ	7.2	7 1	7.0	7.0	7.0	6.9	6.9	6
reactar civinan Employ.	0.0	0.0	0.0	,.0 0 0	0.0	0.0	0.0	0. 0
	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0
Federal Military Employ	4 7	4 7	4.6	4.6	4.6	4 5	4 5	۵. ۵
. eachar minitary Employ.	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0
	_0 1	-0.5	-0.4	_0 /	-0.5	_0 5	-0.5	_0

#### Appendix B: LIFT Model of the U.S. Economy

Inforum has over 40 years of experience in the building and use of detailed industry and regional models. The Long-Term Interindustry Forecasting Tool (LIFT) is a unique, 97-sector dynamic general equilibrium representation of the U.S. national economy. It combines an interindustry input-output (I-O) formulation with extensive use of regression analysis to employ a "bottom-up" approach to macroeconomic modeling. That is, the model works like the actual economy, building the macroeconomic totals from details of industry activity, rather than distributing predetermined macroeconomic quantities among industries. For example, aggregate investment, total exports and employment are not determined directly, but are computed by the sum of their parts: investment by industry, exports by commodity and employment by industry. LIFT contains full demand and supply accounting for 97 productive sectors. (See Table B-1 for LIFT sector titles.)

This bottom-up technique possesses several desirable properties for analyzing the economy. First, the model describes how changes in one industry, such as increasing productivity or changing international trade patterns, affect related sectors and the aggregate quantities. Second, parameters in the behavioral equations differ among products, reflecting differences in, for instance, consumer preferences, price elasticities in foreign trade and industrial structure. Third, the detailed level of disaggregation permits the modeling of prices by industry, allowing one to explore the causes and effects of relative price changes.

Another important feature of the model is the dynamic determination of endogenous variables. LIFT is an annual model, solving year by year, and incorporates key dynamics that include investment and capital stock formation. For example, investment depends on a distributed lag in the growth of investing industries, and international trade depends on a distributed lag of foreign price changes. Moreover, parameter estimates for structural equations largely are based on timeseries regressions, thereby reflecting the dynamic behavior of the economic data underlying the model. Therefore, model solutions are not static, but instead project a time path for the endogenous quantities. In other words, the LIFT model simulates the economy year by year, allowing analysts to examine both the ultimate economic impacts of projected energy or environmental policies and the dynamics of the economy's adjustment process over time.

Despite its industry basis, LIFT is a general equilibrium model, using bottom-up accounting to determine macroeconomic quantities consistent with the underlying industry detail. It includes more than 800 macroeconomic variables consistent with the National Income and Product Accounts (NIPA) and other published data. Within the model, these variables are determined consistently with the underlying industry detail. This macroeconomic "superstructure" contains key functions for household savings behavior, interest rates, exchange rates, unemployment, taxes, government spending and current account balances. Like many aggregate macroeconomic models, this structure is configured to make LIFT exhibit "Keynesian" demand-driven behavior over the short run, but neoclassical growth characteristics over the longer term. For example, while monetary and fiscal policies and changes in exchange rates can affect the level of output in the short to intermediate term, in the long term, supply forces -- available labor, capital and technology – will determine the level of output.

Finally, the LIFT model is linked to other similar models with the Inforum Bilateral Trade Model (BTM). Countries included in this system include the U.S., Japan, China and the major European economies. Through this system, sectoral exports and imports of the U.S. economy respond to sectoral level demand and price variables projected by models of U.S. trading partners. In summary, the LIFT model is particularly suited for examining and assessing the macroeconomic and industry impacts of the changing composition of consumption, production, foreign trade and employment as the economy grows through time.

A schematic diagram of LIFT is shown in Figure B-1. The interindustry framework underlying the model is composed of five blocks: final demand, supply, factor income, prices and the accountant. The first block of LIFT uses econometric equations to predict the behavior of real final demand (consumption, investment, imports, exports, government). The components are modeled at various levels of detail. For example, aggregate consumption is the sum of 92 consumption products. Demand by product, with product sectors consistent with the A matrix, is determined using bridge matrices to convert final demand to the commodity level. Following Wilson (2001), this equation is specified as:

$$f_{97\times 1} = H_{97\times 92}^c c_{92\times 1} + H_{97\times 55}^{eq} eq_{55\times 1} + H_{97\times 19}^s s_{19\times 1} + i_{97\times 1} + x_{97\times 1} - m_{97\times 1} + g_{97\times 1}$$

where *H* represents a bridge matrix for the various components: consumption, equipment investment by purchasing industry, expenditures by type of structures, inventory change, exports and imports, and government spending.

In the supply block, these detailed demand predictions then are used in an input-output production identity to generate real gross output demanded:

$$q = Aq + f$$

where q and f are vectors of output and final demand, respectively, each having 97 elements, and where A is a 97x97 matrix of input-output coefficients. Input-output coefficients and the bridge matrix coefficients vary over time according to historical trends evident in available data, and, in some cases, using assumptions about how technology and tastes might develop in the future (Almon 2008).

Commodity prices are determined in a similar fashion. In the factor income block, econometric behavioral equations predict each value-added component (including compensation, profits, interest, rent and indirect taxes) by industry. Labor compensation depends on industry-specific wages, which are determined by industry-specific factors as well as overall labor conditions. Profit margins are dependent on measures of industry slack (excess supply or demand) and, for tradable sectors, international prices. Depreciation depends on capital stock. Indirect taxes and subsidies are imposed, in most cases, through exogenous ad-valorum rates on overall nominal output.

The industry value added determined above is allocated to production commodities using a make matrix. Then the fundamental input-output price identity combines value added per unit of output with unit costs of intermediate goods and services to form an indicator of commodity prices:

$$p' = p'A + v'$$

where p and v have 97 elements to represent production prices and unit value added, respectively. This identity ensures that income, prices, and output by sector are directly related and are consistent. In turn, relative prices and income flows are included as independent variables in the regression equations for final demand, creating simultaneity between final demand and value added.



Figure B-1: LIFT Schematic Diagram

As noted above, LIFT also calculates all of the major nominal economic balances for an economy: personal income and expenditure, the government fiscal balance (at both the federal and state and local government levels) and the current account balance. It also contains a full accounting for population, the labor force and employment. This content is important for scenario-building because it indicates the consistency between economic growth determined on the product side with the inflation and income components computed as it allows the model to examine how alternative microeconomic conditions or policies will affect other aspects of the economy.

As a result of this dynamic and bottom-up framework, LIFT is uniquely suited to explore many important economic relationships among industries, and their implications for the economy as a whole. The rich detail of the model supports a wide array of simulations that can be used for impact analysis and to address policy questions, including analysis of shocks to particular industries. Because the input-output structure allows a bottom-up approach to modeling the macro economy, macroeconomic results fully are consistent with simulated industry disruptions.

The current model is the fourth discrete version of a modeling framework that has been in continuing existence since 1967. Since its inception, LIFT has continued to develop and change. We have learned more about the properties of the model through working with clients and in doing our own simulation tests. We have learned about the behavior of the general Inforum type of model from work with our partners in other countries. Finally, through many experiments, we have learned that many principles of economics, while attractive theoretically, are difficult to implement practically. We will continue to experiment and share ideas and bring the models closer to our vision of what they should be.

#### References

- Almon, Clopper. (2008), *The Craft of Economic Modeling*, Available from: <u>www.inforum.umd.edu/papers/publishedwork.html</u>.
- Almon, Clopper. (1991), The INFORUM Approach to Interindustry Modeling, *Economic Systems Research*, vol. 3, no. 1, pp. 1-7.
- Almon, Clopper. (1998), A Perhaps Adequate Demand System with Application to France, Italy, Spain, and the USA, presented at the 1998 Conference of the International Input-Output Association.
- Meade, Douglas (2002), The LIFT Model, Inforum Working Paper wp01002, http://www.inforum.umd.edu/papers/wp/wp/2001/wp01002.pdf.
- Wilson, Daniel. (2001), *Capital-Embodied Technological Change: Measurement and Productivity Effects*, Ph.D Thesis, University of Maryland.

#### Table B-1: Producing Sectors of the LIFT Model of the U.S. Economy

1 Agriculture, forestry, & fish

#### Mining 2 Metal mining 3 Coal mining 4 Natural gas extraction 5 Crude petroleum 6 Non-metallic mining

Construction 7 New construction 8 M & R construction

- Non-Durables 9 Meat products 10 Dairy products 11 Canned & frozen foods 12 Bakery & grain mill product 13 Alcoholic beverages 14 Other food products 15 Tobacco products 16 Textiles and knitting 17 Apparel 18 Paper 19 Printing & publishing 20 Agric fertilizers & chemicals 21 Plastics & synthetics 22 Drugs 23 Other chemicals 24 Petroleum refining 25 Fuel oil 26 Rubber products 27 Plastic products 28 Shoes & leather **Durable Material & Products** 29 Lumber 30 Furniture 31 Stone, clay & glass
- 32 Primary ferrous metals
- 33 Primary nonferrous metals
- 34 Metal products

Non-Electrical Machinery 35 Engines and turbines 36 Agr., constr., min & oil equip 37 Metalworking machinery 38 Special industry machinery 39 General & misc. industrial 40 Computers 41 Office equipment 42 Service industry machinery

Electrical Machinery 43 Elect. industry equipment 44 Household appliances 45 Elect. lighting & wiring eq 46 TV's, VCR's, radios 47 Communication equipment 48 Electronic components

Transportation Equipment 49 Motor vehicles 50 Motor vehicle parts 51 Aerospace 52 Ships & boats 53 Other transportation equip

Instruments, Misc. Manufacturing 54 Search & navigation equip 55 Medical instr & supplies 56 Opthalmic goods 57 Other instruments 58 Miscellaneous manufacturing

Transportation 59 Railroads 60 Truck, highway pass transit 61 Water transport 62 Air transport 63 Pipeline 64 Transportation services

Utilities 65 Communications services 66 Electric utilities 67 Gas utilities68 Water and sanitary services

Trade 69 Wholesale trade 70 Retail trade 71 Restaurants and bars

Finance & Real Estate 72 Finance & insurance 73 Real estate and royalties 74 Owner-occupied housing

Services 75 Hotels 76 Personal & repair services 77 Professional services 78 Computer & data processing 79 Advertising 80 Other business services 81 Automobile services 82 Movies & amusements 83 Private hospitals 84 Physicians 85 Other medical serv & dentists 86 Nursing homes 87 Education, social serv, NPO

Miscellaneous 88 Government enterprises 89 Non-competitive imports 90 Miscellaneous tiny flows 91 Scrap & used goods 92 Rest of the world industry 93 Government industry 94 Domestic servants 95 Inforum statistic discrepancy 96 NIPA statistical discrepancy 97 Chain weighting residual

# Table B-2: NIPA Table 3.11.5.National Defense Consumption Expenditures and Gross Investment by TypeSource: Bureau of Economic Analysis

National defense consumption expenditures and gross investment Consumption expenditures  $\langle 1 \rangle$ Compensation of general government employees Military Civilian Consumption of general government fixed capital  $\langle 2 \rangle$ Intermediate goods purchased  $|3\rangle$ Aircraft Missiles Ships Vehicles Electronics Other durable goods Nondurable goods Petroleum products Ammunition Other nondurable goods Services Research and development Installation support Weapons support Personnel support Transportation of material Travel of persons Other Services Gross investment (5)Structures Aircraft Missiles Ships Vehicles Electronics and software Other equipment

#### Appendix C: The State Employment Modeling System (STEMS)

The Inforum STEMS model provides projections of employment, output and earnings for 65 industries, for 50 states and the District of Columbia. STEMS uses exogenous variables at the national level from the Inforum LIFT model of the U.S. Projections are currently available out to 2035. Although STEMS is driven by the national model, much of the forecast of state activity is endogenous to that state.

STEMS starts with the national projection of the level of employment and output by industry. It relates the employment by industry in each state partly to national employment of that industry and partly to the level of personal income in that state. Industries that are assumed to mainly serve national markets are called national or "basic" industries, and industries that mainly serve local markets are "non-basic" industries. The degree to which an industry is basic (national in scope) is defined by a coefficient between 0 and 1.

State shares of employment in an industry that is basic are determined by a number of factors. An industry may locate in a state due to natural resource availability, infrastructure, availability of skilled labor, etc. For these reasons, the state shares are likely to change slowly, since the relative strength of these factors in each state changes slowly. However, other factors are also at play, such as relative wage rates in different areas, or agglomeration effects due to growth of clusters of industries in a particular location. Once employment has been calculated, real output is derived using national ratios of output to employment by industry. This assumes that labor productivity for a given industry is the same in each state. Although this assumption is probably not true, there are no data available to identify different output to labor ratios for a given industry by state.

STEMS also calculates earnings by industry based on employment. The STEMS historical data include earnings and employment for each industry by state. STEMS moves the state earnings to employment ratios forward in time by the movement of the ratio of (proprietors' income plus labor compensation) to employment in the forecast of the national model, LIFT.

The next step in the calculations is to calculate total personal income in each state. Personal income is formed as a function of the following six components:

- 1. Total earnings (wages and salaries and proprietors' income) This is formed as the sum of earnings by industry.
- 2. Transfer payments A regression for each state relates state transfers per capita to national transfers per capita, and this is transformed back to levels by multiplying by state population.
- 3. Dividends, interest and rental income This equation is also estimated in per capita form and is related to the national per capita earnings of dividends, interest and rent.
- 4. Contributions for social insurance The ratio of contributions to total earnings is related to the national ratio. Note that this item is subtracted in arriving at personal income.
- 5. Residence adjustment This item represents the net income that is earned in another state by residents of a given state. It is related to total state earnings but can easily be made exogenous. Note that this number can be either positive or negative. The two "states" that have the biggest

negative value for this item are New York and the District of Columbia, which both have many commuters from out of state.

Personal income, in turn, is an important influence on the employment and output in a given state, in the industries that have a basic coefficient less than 1. In other words, these are industries whose market is at least partly local.

STEMS iterates until convergence each year, and personal income is the variable on which convergence is tested. For the model to be considered solved in any given year, the difference of personal income in every state for this iteration minus the value in the previous iteration must be very small. After the model has converged, disposable income by state is calculated, based on the ratio of disposable income to personal income in the national model. The difference between personal income and disposable income consists of personal current taxes.

From disposable income, total personal consumption is calculated, based on the ratio of personal consumption to disposable income. The difference between disposable income and personal consumption consists of personal savings, personal interest payments to business and personal transfer payments to government, business and rest of world. Next, total personal consumption is divided up into personal consumption by industry, based on shares from the national model.

#### The STEMS Database

STEMS is based largely on the regional databases of the Bureau of Economic Analysis (BEA), although population projections are also based on Census mid-range projections. The following datasets currently serve as source data for STEMS:

Databank name	Title	Variables used	Time interval
SA1-3	Summary personal income and disposable personal income	state population personal income, disposable income	1929 to 2009
SA05	Personal income and detailed earnings by industry	state level earnings by industry, aggregate earnings, transfers, dividends interest and rent, social insurance contributions, residence adjustment.	1990 to 2009
SA25	Employment by industry	state level wage and salary plus "proprietors" employment	1990 to 2009
SA27	Wage and salary employment by industry	state level wage and salary employment	2001 to 2009
GDP	Gross domestic product by state	GDP by state and its components: labor compensation, taxes on production and imports, and gross operating surplus	1997 to 2009

### Table C-1: Data Sources for the STEMS Model

These datasets all follow the North American Industry Classification System (NAICS). Since the NAICS was only introduced in 1997, some of the NAICS time series are not long. In fact, industry data before the late 1990s had to be reconstructed by the BEA from the older Standard Industrial Classification (SIC) data. The SA05, SA25, SA27 and GDP by state data also suffer from disclosure restrictions. A considerable part of the effort invested in developing the STEMS database involved using sensible techniques to fill holes in the data.

# Table C-2: Employment Sectors for the STEMS Model

Sec #	Title	NAICS
1	Farms	111, 112
2	Forestry, fishing, and related activities	113, 114, 115
3	Oil and gas extraction	211
4	Mining, except oil and gas	212
5	Support activities for mining	213
6	Utilities	22
7	Construction	23
8	Food and beverage and tobacco products	311, 312
9	Textile mills and textile product mills	313, 314
10	Apparel and leather and allied products	315, 316
11	Wood products	321
12	Paper products	322
13	Printing and related support activities	323
14	Petroleum and coal products	324
15	Chemical products	325
16	Plastics and rubber products	326
17	Nonmetallic mineral products	327
18	Primary metals	331
19	Fabricated metal products	332
20	Machinery	333
21	Computer and electronic products	334
22	Electrical equipment appliances and components	335
23	Motor vehicles, bodies and trailers, and parts	3361, 3362, 3363
24	Other transportation equipment	3364 3365 3366 3369
25	Eurniture and related products	337
26	Miscellaneous manufacturing	339
27	Wholesale trade	42
28	Retail trade	44 45
29	Air transportation	481
30	Bail transportation	482
31	Water transportation	483
32	Truck transportation	484
33	Transit and ground passenger transportation	485
34	Dipeline transportation	486
35	Other transportation and support activities	487 488 492
36	Warehousing and storage	407, 400, 452
37	Publiching industries (includes software)	511
38	Motion nicture and sound recording industries	512
30	Broadcasting and telecommunications	512
40	Information and data processing services	513
40	Federal Deserve banks, credit intermediation, and related activities	521 522
41	Securities commodity contracts and investments	521, 522
42	Incurance carriers and related activities	525
43	Funde truste, and other financial vehicles	524
44	Peal estate	525
40	Dental and leasing services and lessors of intangible assets	537 533
40		552, 555
47	Miscellaneous professional scientific and technical services	5417
40	Computer systems design and related services	5415
50	Management of companies and enterprises	5415
51	Administrative and support services	55
52	Waste management and remediation services	562
52	Educational centices	61
50	Ambulatory health care services	621
55	Hospitals and pursing and residential care facilities	622 623
55	Social accistance	624
57	Derforming arts spectator sports museums and related activities	711 712
58	Amusements, campling, and recreation industries	713
50	Accommodation	721
60	Food services and drinking places	722
61	Other services excent government	81
62	Federal government enterprises	na
62	Federal government	na
64	State and local government enterprises	na
66	State and local government enterprises	na
00	orare and local general government	TT.M



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