

2015

PROJECTED DEFENSE PURCHASES: DETAIL BY INDUSTRY AND STATE

Calendar Years 2014 Through 2020



Office of the Secretary of Defense
Cost Assessment and Program Evaluation

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PROJECTED DEFENSE PURCHASES: DETAIL BY INDUSTRY AND STATE

Since the 1996 edition of *Projected Defense Purchases: Detail by Industry and State*, the Defense Employment and Purchases Projection System (*DEPPS*) has consisted of three defense-spending models:

- *IDEPPS* is a detailed interindustry model that forecasts defense spending from 360 industries and by major appropriation and procurement category for the top ten industries.
- *RDEPPS* is a state-level (regional) model that determines the effect of defense expenditures by major procurement category on each state, at an aggregate level of 110 industries (unlike the more detailed *IDEPPS*).
- *LDEPPS* is a skilled-labor model that determines the requirements for various occupational classifications of employment in each industry. The occupational matrix used in *LDEPPS* comprises 101 occupational categories, with greater detail provided on categories that are heavily employed either directly or indirectly by Department of Defense.

Two input-output models feed *DEPPS*:

- *LIFT*, the Long-term Interindustry Forecasting Tool, is a 110-sector input-output model embedded in a macroeconomic model. *LIFT* establishes the macroeconomic environment as well as industry controls.
- *ILIAD*, the Interindustry Long-run Integrated and Dynamic model, uses the macroeconomic forecasts and the industry controls from *LIFT* to further divide the economy into 360 industries.

The Office of Cost Assessment and Program Evaluation and Interindustry Forecasting at the University of Maryland (Inforum) developed *DEPPS*. *LIFT* and *ILIAD* were developed by Inforum. *DEPPS*, *LIFT*, and *ILIAD* are maintained by Inforum. More information on Inforum is available at www.inforum.umd.edu.

The last and most critical element in developing the projections is the *Defense Translator*. The *Defense Translator* disaggregates the total defense budget by budget category into source industries.

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**SECTION I
INTRODUCTION AND
HIGHLIGHTS:
Expenditures by Industry and
Region and Employment**

Introduction

The *Projected Defense Purchases: Detail by Industry and State* is produced by the Defense Employment and Purchases Projection System (DEPPS). DEPPS estimates industrial and regional patterns of defense expenditures for calendar years 2014 through 2020. Specifically, this report estimates direct and indirect purchases from 360 industries and projections of defense-related spending for each of the 50 states and the District of Columbia. Moreover, the report illustrates the occupational requirements of employment directly and indirectly related to defense expenditures.

Projection Highlights

Defense-related expenditures have a major impact on the U.S. and changes in Defense spending can have major implications. Table 1 shows that direct Defense expenditures are projected to be \$557B in 2016.¹ In 2016, direct Defense expenditures are expected to comprise 14 percent of all federal expenditures and 3 percent of total U.S. Gross Domestic Product (GDP). When compared to the GDP of world economies, U.S. Defense expenditures would be the 22nd largest economy in the world.² For example, U.S. direct defense expenditures is expected to exceed Poland's entire GDP in 2016. Additionally, defense-related spending (indirects from purchases and induced spending from pay) accounts for another \$430B of the U.S. economy. Indirect purchases are those that are made across the supply chain for final goods. For example, expenditures on

¹ Funding for overseas contingency operations are included in FY14 and FY15 estimates, but not FY16–20.

² Source: IHS, Comparative World Overview Tables, December 2015

aircraft stimulate indirect purchases of electronic components, aircraft parts, tires, aluminum, etc. Induced expenditures are derived from the wages and salaries of DoD personnel and from military retirement pay. More specifically, induced expenditures are the household purchases from defense personnel that occur in each state. Obviously, states with large and numerous military installations tend to have large induced expenditures. Less obviously, states that produce consumer goods sold in a national market (such as automobiles and appliances) will also have significant induced expenditures.

Another way to look at the impact of Defense-related expenditures on the economy is to look at the number of workers directly or indirectly employed from Defense-related expenditures. Defense-related employment is projected to be 3 percent of the total labor force in the U.S. in 2016.³ Table 2 shows defense-related employment by type of worker. In 2016, 2.9 million civilians will be directly employed by defense expenditures. More than three hundred thousand additional workers will be employed indirectly from defense-related expenditures. DoD will also employ 1.3 million active duty military personnel and another three hundred thousand reservists.⁴

State Projections

While the impact of defense spending on the United States' economy is significant, the distribution is varied by state and industry. See Table 3 for spending by region. The geographic distribution of defense expenditures reflects the distribution of military personnel and DoD civilian employees, as well as the

location of the industries that produce defense goods and services. The dispersion within regions is larger than the dispersion across them. For example: 1) Seven of the nine regions contain one or more states in which total projected defense expenditures (direct and indirect) exceed the national average; 2) Every region contains at least one state in which total projected defense expenditures are less than 75 percent of the national average; and 3) Intraregional variation (the difference between the lowest and highest state estimate within a region) is greater than the variation among regional averages (the difference between the lowest and highest regional estimate) in five of the nine regions.

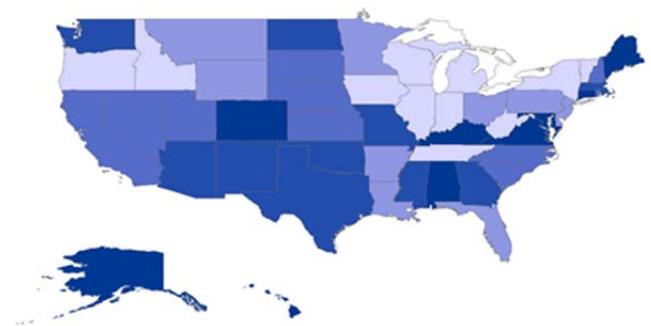


Figure 1: Direct Defense Spending, Per Capita (Darker higher per capita and lighter lower per capita)

Looking at spending by state, Figure 1 illustrates that the per capita rate of spending varies across the map.⁵ The District of Columbia has the highest level of direct defense spending per capita at almost \$14,000 in direct defense expenditures per person. This is well above the per capita rate for the entire United States at \$1,800 and the lowest per capita rate of West Virginia at only \$546.

Table 3 details additional information on per capita spending by state for pay, purchases, total direct expenditures,

³ This number excludes part-time reservists.

⁴ This number includes only traditional, part-time reservists.

⁵ Expenditures by state are produced by the RDEPPS model.

indirect defense purchases, and induced purchases from pay.

Perhaps a more meaningful way of looking at the effect of defense spending is to analyze the percent of defense spending to a state’s economy, or GDP. While the District of Columbia has the highest per capita direct defense spending, it has the fourth highest rate of direct defense spending as a percent of GDP. Virginia has the highest rate of defense spending as a percent of the state’s GDP at 12.5 percent, significantly larger than the rate of defense spending to GDP for the entire U.S. at 3.1 percent. In contrast, New York state has the lowest rate of defense spending to GDP at just above one percent. This measure is a good indicator of the effect of defense spending and changes in defense spending on a state’s overall economy. While Virginia and Hawaii might be significantly affected by changes in defense spending, New York and Oregon would have a much smaller impact, in general.

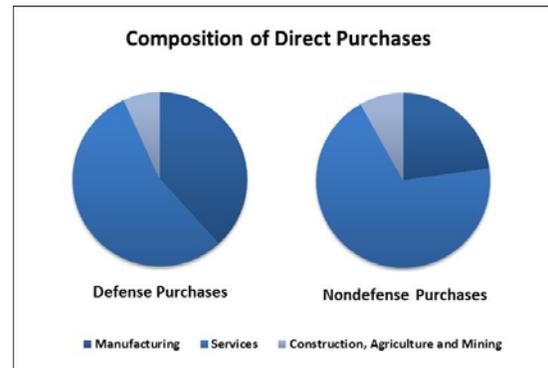
Direct Defense Spending as a Percent of State GDP		
Rank	State	Percent of GDP
Highest		
1	Virginia	12.5
2	Hawaii	10.4
3	Alabama	7.8
4	District of Columbia	6.9
5	Mississippi	6.9
Lowest		
1	New York	1.0
2	Oregon	1.2
3	West Virginia	1.3
4	Iowa	1.4
5	Michigan	1.4

Full details on defense spending’s share of state GDP are provided in Table 4. Additionally, the type of spending in a state is important. Table 5 shows the level of spending by state on total direct expenditures, expenditures on

Procurement and Research, Development, Testing, and Evaluation (RDT&E), direct expenditures on pay, indirect expenditures from purchases, and induced expenditures from pay. Note that California has the highest level of direct purchases from Procurement and RDT&E, while Virginia has the highest level of direct spending on pay.

More detailed tabulations of defense-related spending by state are provided in Section IV.

Industry Projections



Another important distribution of defense spending is spending by industry. Although the majority of both defense and nondefense spending is in service industries, manufacturing accounts for a greater percentage of defense spending than of nondefense spending. More than one third of defense purchases—38 percent—are from manufacturing industries, whereas one quarter of nondefense purchases—23 percent—are from the manufacturing industries. Conversely, services account for about 55 percent of direct defense purchases but about 69 percent of direct nondefense purchases. The distribution of indirect purchases is similar across both defense and nondefense purchases.

Table 7 presents the 75 non-food industries that receive the largest share of direct defense expenditures. While some

of these industries are defense-specific (e.g., shipbuilding, tanks and tank components, aircraft, and guided missiles), a significant share of defense purchases are made directly to industries not typically associated with defense activities (e.g., employment services, printing, legal services, and insurance carriers). Note that the top two industries for direct purchases are in highly skilled labor. The top 10 industries, shown below, make up a third of all direct defense purchases. Moreover, approximately one half of all direct defense spending are in the top 20 industries.

Total Direct Purchases in the Top 10 Industries		
Rank	Industry	2016 \$Millions
1	Scientific research and development services	39,115
2	Architectural, engineering, and related services	31,449
3	Aircraft	25,225
4	Petroleum refineries	19,472
5	Offices of physicians, dentists, and other health practitio	19,007
6	Ship building and repairing	18,584
7	Guided missiles and space vehicles	12,566
8	Maintenance and repair of nonresidential buildings	12,270
9	Air transportation	11,641
10	Telecommunications	11,494

More detailed tabulations of defense-related spending by industry are provided in Section III.

Employment Projections

DEPPS also estimates the impact of defense-related expenditures on U.S. employment. Defense-related civilian employment (including civilian

employees of the Department of Defense) represents about 2.4 percent of projected total U.S. civilian employment in 2016. The composition of defense-related civilian employment reflects the higher manufacturing intensity of defense purchases, as well as specific employment patterns of the individual industries from which defense purchases are made. Jobs related to defense spending are far less concentrated in sales and service occupations than jobs in the U.S. as a whole.

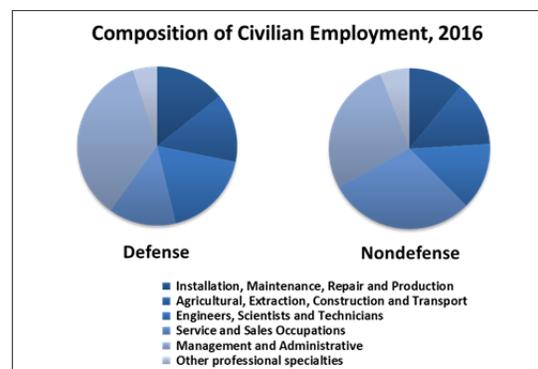


Table 9 details defense-related employment by major occupational category for years 2014–2020. Because of the interest in defense-related employment of engineers and scientists, additional details on employment of these labor categories are provided in Table 10.

Table 1
Defense Expenditures
Rounded to Billions of 2016 dollars

	<i>Includes OCO</i>		2016	2017	2018	2019	2020
	2014	2015					
Direct Defense Expenditures							
Total Direct Defense Expenditures	\$589	\$572	\$557	\$547	\$535	\$529	\$527
Total Federal Outlays	\$3,669	\$3,873	\$4,054	\$4,198	\$4,325	\$4,460	\$4,535
% of Federal Spending	16.1%	14.8%	13.7%	13.0%	12.4%	11.9%	11.6%
Projected US GDP	\$17,917	\$18,452	\$19,041	\$19,602	\$20,121	\$20,615	\$20,860
% of Defense Expenditures to GDP	3.3%	3.1%	2.9%	2.8%	2.7%	2.6%	2.5%
Direct Expenditures per capita (in dollars)	\$1,872	\$1,822	\$1,783	\$1,756	\$1,720	\$1,705	\$1,699
Indirect and Induced Defense Expenditures							
Total Indirect Expenditures from Purchases	\$322	\$300	\$291	\$286	\$276	\$272	\$269
Total Induced Expenditures from Pay	\$132	\$142	\$139	\$136	\$135	\$135	\$135

Sources: IDEPPS calculation, FY16 OSD Comptroller Green Book

Note: Numbers are in calendar year, constant dollars and may not add due to rounding.

Table 2							
Projected Defense and Defense-Related Employment							
(Thousands of Workers)							
Employment Category	2014	2015	2016	2017	2018	2019	2020
DoD Active Duty Military Personnel	1,370	1,342	1,337	1,314	1,304	1,304	1,304
DoD Reserve Personnel	330	327	329	324	325	325	325
DoD US Direct Civilian Hires	728	747	743	740	732	725	725
Direct Private Sector Employment	2,459	2,340	2,249	2,202	2,126	2,070	2,036
Indirect Private Sector Employment	564	447	386	346	299	269	245
Civilian Defense-Related Employment	3,751	3,534	3,378	3,289	3,157	3,065	3,006
Civilian and Military Defense Related Employment	5,121	4,876	4,715	4,603	4,461	4,369	4,310
All Defense-Related Employment, including Reserves	5,451	5,202	5,044	4,927	4,786	4,694	4,635

Notes:

Sources: FY2016 DEPPS, PB16 FYDP Book

Defense-related employment includes jobs associated with spending on Overseas Contingency Operations (OCO) in 2014 and 2015

DoD Active Duty Military personnel include Active Duty Army, Navy, Air Force, and Marines as well as active duty full-time reservists

DoD Direct Civilian Hires exclude foreign national hires and includes Reserve civilian technicians

Direct Private Sector Employment is an estimate of private sector jobs created by direct defense expenditures

Indirect Private Sector Employment is an estimate of private sector jobs created by indirect defense expenditures

DoD Reserve Personnel include only traditional, part-time personnel.

The Army National Guard and Air Guard are not included because personnel expenses are not included in DoD's budget

Table 3
Estimated Defense Expenditures Per Capita, 2016
 (By State and Region, in 2016 dollars)

State/Region	Total Direct Expenditures (Million \$)	Population (Thousands)	Per Capita (\$)				
			Direct			Indirect from	
			Pay	Purchases	Total	Purchases	Induced from Direct Pay
New England	41,134	14,782	312	2,471	2,783	1,021	317
Connecticut	16,250	3,624	196	4,288	4,484	1,226	315
Maine	3,938	1,355	763	2,143	2,906	509	442
Massachusetts	16,390	6,728	217	2,219	2,436	1,156	285
New Hampshire	2,266	1,369	319	1,335	1,655	767	288
Rhode Island	1,704	1,063	728	876	1,604	781	430
Vermont	586	643	300	612	912	470	268
Mid-Atlantic	43,440	41,594	258	787	1,044	868	330
New Jersey	11,386	9,004	302	962	1,265	915	323
New York	16,161	19,718	202	618	820	840	360
Pennsylvania	15,893	12,872	312	922	1,235	879	288
South Atlantic	168,242	63,976	1,087	1,542	2,630	930	583
Delaware	1,113	947	669	506	1,176	911	470
District of Columbia	8,650	630	5,740	8,001	13,741	4,385	2,440
Florida	26,616	20,284	577	735	1,312	534	344
Georgia	19,443	10,385	1,072	800	1,872	808	607
Maryland	24,102	6,124	1,195	2,741	3,936	1,398	610
North Carolina	15,368	10,210	964	541	1,505	704	594
South Carolina	7,980	4,913	796	828	1,624	648	453
Virginia	63,954	8,624	2,425	4,991	7,416	1,930	1,112
West Virginia	1,015	1,861	266	279	546	578	210
East North Central	41,200	47,110	247	628	875	811	304
Illinois	11,769	13,080	243	656	900	851	308
Indiana	5,859	6,648	261	620	881	907	338
Michigan	6,635	9,933	173	495	668	613	285
Ohio	12,202	11,593	359	693	1,053	894	330
Wisconsin	4,735	5,857	141	668	808	784	238
West North Central	30,028	21,221	462	953	1,415	796	383
Iowa	2,524	3,109	162	649	812	765	280
Kansas	4,975	2,952	1,069	617	1,686	838	622
Minnesota	5,707	5,554	140	888	1,028	829	257
Missouri	11,650	6,154	456	1,437	1,893	736	361
Nebraska	2,760	1,890	699	761	1,460	829	494
North Dakota	1,235	708	1,025	719	1,744	1,070	642
South Dakota	1,177	854	616	762	1,378	681	463
East South Central	45,386	19,158	731	1,638	2,369	965	462
Alabama	16,899	4,949	1,013	2,401	3,415	1,522	551
Kentucky	13,607	4,457	1,044	2,008	3,053	1,008	610
Mississippi	8,296	3,056	702	2,013	2,715	651	416
Tennessee	6,585	6,696	328	655	983	668	319
West South Central	66,287	39,227	703	987	1,690	1,109	462
Arkansas	3,027	3,036	489	508	997	711	352
Louisiana	5,617	4,718	532	658	1,190	1,232	430
Oklahoma	6,679	3,900	1,108	605	1,713	864	567
Texas	50,965	27,573	698	1,150	1,848	1,166	464
Mountain	47,738	23,920	712	1,284	1,996	768	416
Arizona	16,189	6,954	550	1,778	2,328	663	337
Colorado	15,127	5,467	970	1,797	2,767	1,000	552
Idaho	1,258	1,694	477	266	743	445	328
Montana	1,117	1,046	569	500	1,068	558	345
Nevada	4,451	2,929	602	918	1,520	668	354
New Mexico	4,099	2,195	941	926	1,867	753	467
Utah	4,739	3,044	724	833	1,557	840	443
Wyoming	756	593	769	507	1,276	1,361	453
Pacific	93,714	52,768	656	1,120	1,776	851	458
Alaska	4,358	757	3,597	2,161	5,758	2,664	1,572
California	62,497	39,309	421	1,169	1,590	813	371
Hawaii	8,812	1,438	4,290	1,839	6,129	945	1,838
Oregon	2,744	4,041	243	436	679	788	300
Washington	15,304	7,223	1,138	981	2,119	882	629
United States	577,169	323,755	616	1,166	1,783	925	433

Source: RDEPPS Calculations

Table 4
Projections of Total Direct Expenditures by State
(Millions of 2016 dollars)

State	Includes OCO		2016	2017	2018	2019	2020	% of GDP in 2016	GDP 2016 ^a
	2014	2015							
Alabama	17,357	17,132	16,899	16,380	16,007	15,771	15,722	7.83	215,854
Alaska	4,667	4,496	4,358	4,249	4,149	4,101	4,090	6.41	67,973
Arizona	17,344	16,586	16,189	16,426	16,255	16,235	16,109	5.23	309,662
Arkansas	3,182	3,110	3,027	2,987	2,918	2,899	2,899	2.28	132,591
California	65,505	63,466	62,497	61,856	60,595	59,931	59,500	2.52	2,478,999
Colorado	16,199	15,334	15,127	14,951	14,510	14,352	14,229	4.69	322,582
Connecticut	16,610	16,491	16,250	15,433	15,333	15,079	15,288	5.78	281,154
Delaware	1,160	1,139	1,113	1,090	1,064	1,055	1,054	1.60	69,674
District of Columbia	9,037	8,916	8,650	8,439	8,222	8,122	8,087	6.92	125,016
Florida	27,994	27,208	26,616	26,280	25,761	25,615	25,564	2.97	896,453
Georgia	20,165	19,889	19,443	19,149	18,762	18,645	18,600	3.81	509,833
Hawaii	9,073	9,030	8,812	8,589	8,443	8,377	8,374	10.44	84,383
Idaho	1,307	1,283	1,258	1,238	1,215	1,208	1,208	1.86	67,554
Illinois	12,520	12,076	11,769	11,592	11,273	11,169	11,126	1.42	830,283
Indiana	6,247	6,051	5,859	5,792	5,636	5,598	5,576	1.68	348,255
Iowa	2,714	2,591	2,524	2,497	2,435	2,413	2,400	1.36	185,438
Kansas	5,224	5,125	4,975	4,911	4,828	4,797	4,784	3.06	162,352
Kentucky	14,794	13,895	13,607	13,579	13,285	13,165	13,155	6.60	206,279
Louisiana	5,967	5,810	5,617	5,466	5,353	5,302	5,301	1.90	295,083
Maine	3,867	3,975	3,938	3,689	3,666	3,606	3,689	6.34	62,153
Maryland	25,045	24,497	24,102	23,582	23,044	22,792	22,709	6.30	382,750
Massachusetts	17,387	16,640	16,390	16,377	16,097	15,998	15,812	3.28	500,210
Michigan	7,383	6,983	6,635	6,593	6,509	6,568	6,606	1.37	483,053
Minnesota	6,203	5,842	5,707	5,703	5,540	5,493	5,481	1.66	344,432
Mississippi	8,308	8,402	8,296	7,722	7,643	7,499	7,672	6.89	120,391
Missouri	12,585	12,100	11,650	11,808	11,701	11,720	11,646	3.76	310,165
Montana	1,171	1,142	1,117	1,105	1,087	1,087	1,087	2.29	48,813
Nebraska	2,904	2,826	2,760	2,717	2,660	2,640	2,635	2.32	118,969
Nevada	4,778	4,541	4,451	4,410	4,275	4,226	4,201	3.07	144,990
New Hampshire	2,399	2,284	2,266	2,250	2,177	2,159	2,147	2.93	77,440
New Jersey	11,920	11,566	11,386	11,214	10,886	10,797	10,731	1.86	612,919
New Mexico	4,205	4,156	4,099	4,025	3,946	3,916	3,895	4.02	101,942
New York	17,318	16,473	16,161	15,933	15,451	15,195	15,031	1.05	1,545,420
North Carolina	16,072	15,713	15,368	15,086	14,747	14,639	14,631	2.97	516,874
North Dakota	1,308	1,276	1,235	1,207	1,183	1,173	1,171	2.12	58,318
Ohio	12,550	12,409	12,202	12,022	11,711	11,618	11,561	1.93	631,085
Oklahoma	6,753	6,831	6,679	6,567	6,458	6,425	6,412	3.37	198,291
Oregon	2,923	2,807	2,744	2,670	2,598	2,563	2,563	1.20	229,275
Pennsylvania	16,865	16,482	15,893	15,664	15,232	15,103	15,041	2.20	722,933
Rhode Island	1,718	1,742	1,704	1,667	1,628	1,614	1,611	2.84	60,091
South Carolina	8,375	8,158	7,980	7,819	7,612	7,544	7,545	3.91	204,323
South Dakota	1,239	1,190	1,177	1,178	1,148	1,141	1,140	2.32	50,730
Tennessee	6,778	6,651	6,585	6,438	6,157	6,075	6,051	2.02	326,553
Texas	54,302	52,493	50,965	50,998	50,187	49,784	49,342	3.00	1,699,905
Utah	4,769	4,814	4,739	4,700	4,657	4,692	4,678	3.18	149,222
Vermont	626	610	586	577	563	560	559	1.78	32,878
Virginia	66,312	65,115	63,954	62,254	60,988	60,321	60,355	12.48	512,628
Washington	15,807	15,708	15,304	15,181	14,984	14,879	14,816	3.41	448,888
West Virginia	1,048	1,041	1,015	996	976	971	969	1.29	78,896
Wisconsin	5,394	4,963	4,735	4,723	4,535	4,548	4,577	1.50	316,639
Wyoming	794	777	756	741	727	721	720	1.60	47,152
United States	606,169	589,837	577,169	568,521	556,817	551,899	550,153	3.08	18,727,890

Source: RDEPPS Calculations

^a GDP by state is from the Inforum STEMS (State Employment Modeling System), a component of RDEPPS.

Table 5
State Projections for 2016

(Millions of 2016 dollars)

	Total Direct Expenditures	Direct Purchases from Procurement and RDT&E	Direct Expenditures on Pay	Total Indirect Purchases	Total Induced Expenditures
Alabama	16,899	6,485	5,015	7,531	2,727
Alaska	4,358	132	2,723	2,016	1,190
Arizona	16,189	6,864	3,825	4,608	2,346
Arkansas	3,027	235	1,484	2,159	1,068
California	62,497	23,745	16,538	31,960	14,576
Colorado	15,127	3,685	5,303	5,465	3,020
Connecticut	16,250	13,159	710	4,441	1,141
Delaware	1,113	43	634	863	445
District of Columbia	8,650	1,425	3,613	2,760	1,536
Florida	26,616	5,062	11,710	10,840	6,985
Georgia	19,443	2,491	11,132	8,393	6,309
Hawaii	8,812	698	6,167	1,359	2,642
Idaho	1,258	49	807	754	555
Illinois	11,769	2,505	3,182	11,128	4,030
Indiana	5,859	1,870	1,736	6,031	2,250
Iowa	2,524	879	505	2,378	871
Kansas	4,975	600	3,155	2,473	1,835
Kentucky	13,607	434	4,655	4,493	2,719
Louisiana	5,617	459	2,512	5,812	2,027
Maine	3,938	2,039	1,034	690	599
Maryland	24,102	7,485	7,318	8,563	3,737
Massachusetts	16,390	10,949	1,460	7,778	1,919
Michigan	6,635	1,700	1,723	6,087	2,829
Minnesota	5,707	834	776	4,606	1,428
Mississippi	8,296	4,500	2,145	1,990	1,270
Missouri	11,650	4,923	2,806	4,530	2,221
Montana	1,117	193	595	584	360
Nebraska	2,760	203	1,321	1,565	933
Nevada	4,451	676	1,764	1,955	1,037
New Hampshire	2,266	895	437	1,050	395
New Jersey	11,386	3,539	2,722	8,237	2,910
New Mexico	4,099	951	2,066	1,654	1,025
New York	16,161	5,309	3,982	16,561	7,106
North Carolina	15,368	663	9,842	7,183	6,061
North Dakota	1,235	35	726	758	454
Ohio	12,202	3,151	4,165	10,359	3,827
Oklahoma	6,679	704	4,319	3,370	2,213
Oregon	2,744	384	981	3,185	1,213
Pennsylvania	15,893	4,938	4,021	11,317	3,713
Rhode Island	1,704	338	774	830	456
South Carolina	7,980	812	3,911	3,183	2,224
South Dakota	1,177	56	526	582	396
Tennessee	6,585	1,236	2,199	4,475	2,135
Texas	50,965	17,673	19,259	32,150	12,803
Utah	4,739	1,308	2,204	2,556	1,350
Vermont	586	138	193	302	172
Virginia	63,954	18,712	20,911	16,641	9,591
Washington	15,304	3,851	8,220	6,373	4,545
West Virginia	1,015	139	496	1,075	391
Wisconsin	4,735	930	823	4,592	1,396
Wyoming	756	25	456	807	269
U.S. Total	577,169	170,110	199,583	291,052	139,245

Source: RDEPPS Calculations

Table 6		
Composition of Defense and Nondefense Purchases for 2016		
	Defense Purchases	Nondefense Purchases
Direct		
Manufacturing	38.3%	22.8%
Services	54.9%	69.0%
Construction, Agriculture and Mining	6.8%	8.1%
Indirect		
Manufacturing	29.2%	26.9%
Services	60.6%	64.5%
Construction, Agriculture and Mining	10.2%	8.5%

Table 7
Total Direct Purchases
(Millions of 2016 Dollars, ranked in 2016)

Rank	Industry	Includes OCO						
		2014	2015	2016	2017	2018	2019	2020
1	310 Scientific research and development services	40,062	38,806	39,115	38,726	37,925	37,271	36,545
2	303 Architectural, engineering, and related services	33,944	32,099	31,449	31,456	31,459	32,168	31,914
3	235 Aircraft	27,890	26,937	25,225	24,780	23,253	21,937	21,001
4	94 Petroleum refineries	21,033	19,885	19,472	18,759	17,131	16,617	16,575
5	328 Offices of physicians, dentists, and other health practitioners	21,034	19,023	19,007	19,728	19,468	19,377	19,395
6	241 Ship building and repairing	16,264	17,946	18,584	15,479	15,935	15,260	16,532
7	238 Guided missiles and space vehicle	12,542	11,725	12,566	15,496	17,297	18,158	18,222
8	35 Maintenance and repair of nonresidential buildings	14,492	13,021	12,270	11,656	11,119	10,740	10,573
9	267 Air transportation	13,354	12,156	11,641	11,401	11,056	10,874	10,776
10	285 Telecommunications	13,554	11,830	11,494	11,367	10,954	10,748	10,661
11	32 New non-residential building construction	12,759	11,868	11,311	10,939	10,626	10,391	10,164
12	270 Truck transportation	11,016	10,399	9,736	9,390	9,158	9,025	9,018
13	242 Boat building	9,803	9,168	8,446	8,207	7,828	7,727	7,642
14	203 Search, detection, and navigation instruments	8,460	7,847	7,920	7,974	7,864	7,917	7,917
15	237 Other aircraft parts and auxiliary equipment	8,928	8,289	7,528	7,028	6,291	6,024	5,785
16	312 All other miscellaneous professional, scientific, and technical services	7,466	7,044	6,952	6,806	6,716	6,608	6,521
17	307 Other computer related services, facilities management	7,442	6,872	6,759	6,767	6,541	6,443	6,437
18	317 Facilities support services	6,755	5,877	5,471	5,077	4,737	4,488	4,408
19	269 Water transportation	5,850	5,744	5,466	5,335	5,213	5,147	5,145
20	306 Computer systems design services	5,477	5,005	4,929	4,870	4,690	4,588	4,516
21	308 Management, scientific, and technical consulting services	5,859	5,185	4,911	4,627	4,343	4,200	4,183
22	197 Broadcast and wireless communications equipment	4,626	4,287	4,326	4,422	4,367	4,324	4,265
23	236 Aircraft engines and engine parts	4,764	4,479	3,994	3,836	3,442	3,297	3,144
24	28 Electric power	4,738	4,081	3,918	3,845	3,675	3,590	3,562
25	294 Real estate	4,560	4,091	3,895	3,808	3,711	3,649	3,623
26	339 Hotels and other accommodations	4,305	3,997	3,773	3,660	3,563	3,510	3,495
27	305 Custom computer programming services	4,204	3,802	3,640	3,512	3,330	3,236	3,204
28	273 Scenic and sightseeing transportation and support	3,702	3,432	3,325	3,296	3,129	3,031	2,994
29	326 Junior colleges, colleges, universities, and professional schools	2,965	2,674	2,608	2,493	2,332	2,206	2,153
30	275 Warehousing and storage	2,921	2,758	2,606	2,511	2,416	2,372	2,368
31	152 Ammunition	2,982	3,327	2,511	2,474	2,429	2,470	2,503
32	324 Waste management and remediation services	3,175	2,631	2,397	2,141	1,951	1,806	1,776
33	291 Insurance carriers	2,395	2,491	2,337	2,260	2,244	2,236	2,240
34	327 Other educational services	2,429	2,227	2,181	2,137	2,077	2,030	2,000
35	201 All other electronic components	1,893	1,871	2,001	2,058	2,013	2,011	1,978
36	280 Software publishers	2,182	2,013	1,968	1,960	1,906	1,889	1,889
37	244 Military armored vehicles, tanks, and tank components	2,941	2,358	1,955	2,090	2,277	2,498	2,623
38	351 Postal service	2,319	2,010	1,937	1,921	1,854	1,823	1,810
39	340 Food services and drinking places	2,172	2,019	1,907	1,853	1,806	1,781	1,773
40	92 Printing	2,298	1,922	1,844	1,831	1,771	1,741	1,729
41	239 Propulsion units and parts for space vehicles and guided missiles	1,870	1,778	1,660	1,917	2,072	2,132	2,077
42	296 Automotive equipment rental and leasing	1,882	1,748	1,651	1,604	1,564	1,542	1,536
43	321 Other support services	1,772	1,556	1,529	1,538	1,491	1,465	1,458
44	193 Computers	1,710	1,449	1,370	1,318	1,254	1,216	1,212
45	198 Other communications equipment	1,484	1,375	1,368	1,383	1,370	1,372	1,373
46	268 Rail transportation	1,438	1,356	1,269	1,224	1,195	1,178	1,177
47	309 Environmental and other technical consulting services	1,383	1,203	1,145	1,093	1,034	991	975
48	173 Other commercial and service industry machinery	1,299	1,194	1,111	1,026	959	911	908
49	266 Retail trade	1,189	1,082	1,101	1,145	1,105	1,096	1,097
50	320 Services to buildings and dwellings	1,313	1,150	1,097	1,039	974	930	916
51	33 Highway, street, bridge, tunnel, water, sewer, pipeline construction	1,081	1,041	1,092	944	731	616	569
52	74 Cut and sew apparel	1,066	1,096	1,081	1,033	929	902	902
53	107 Pharmaceuticals and medicines	785	743	1,011	982	545	444	434
54	113 All other chemical products and preparations	936	943	963	864	741	742	737
55	153 Arms, ordnance, and accessories	1,277	988	941	893	863	865	856
56	234 Motor vehicle parts	1,099	992	926	916	849	848	848
57	75 Apparel accessories and other apparel	952	956	910	867	814	796	795
58	30 Water, sewage and other systems	1,000	864	846	826	765	740	733
59	196 Telephone apparatus	867	711	704	710	684	676	672
60	29 Natural gas distribution	829	716	688	678	652	638	633
61	311 Advertising and related services	820	723	673	623	584	554	549
62	110 Soaps and cleaning compounds	700	638	641	670	663	662	664
63	331 Hospitals	671	625	615	614	594	583	579
64	52 Meat products, except poultry	619	563	570	594	581	578	579
65	228 Carbon and graphite and miscellaneous electrical equipment	644	556	538	539	522	516	517
66	171 Optical instruments and lenses	624	512	484	460	436	423	417
67	232 Truck trailer manufacturing	802	632	480	533	566	629	664
68	263 All other miscellaneous manufacturing	516	469	475	477	436	424	424
69	55 Bread and bakery products	497	453	457	478	469	467	468
70	319 Investigation and security services	519	470	453	441	420	408	405
71	252 Surgical appliances and supplies	445	409	441	405	293	258	255
72	265 Wholesale trade	456	414	420	433	416	411	411
73	271 Transit and ground passenger transportation	452	415	394	384	374	368	366
74	72 Other textile products	511	428	384	376	345	334	331
75	316 Office administrative services	460	395	376	357	335	319	314

Note: See Appendix A for a mapping between industry sectoring and NAICS codes.

Table 8
Composition of Civilian Employment, 2016
(this version was done with the 2012-2022 occupational matrix)

	Defense-Related Employment	Nondefense- Related Employment
Installation, Maintenance, Repair and Production	14.3%	10.9%
Installation, maintenance, and repair occupations	5.2%	4.2%
Production occupations	9.1%	6.7%
Agricultural, Extraction, Construction and Transport	13.9%	13.1%
Farming, fishing, and forestry occupations	0.4%	1.0%
Construction and extraction occupations	5.3%	4.9%
Transportation and material moving occupations	8.3%	7.2%
Engineers, Scientists and Technicians	18.1%	13.5%
Computer and mathematical science occupations	4.1%	2.7%
Architectural and engineering occupations	7.3%	1.6%
Life, physical and social science occupations	2.1%	0.6%
Healthcare practitioners and technical occupations	4.7%	8.6%
Service and Sales Occupations	13.7%	29.5%
Service occupations	9.6%	17.5%
Sales and related occupations	4.1%	12.0%
Management and Administrative	35.1%	27.0%
Management, financial, and business operations	18.0%	9.7%
Office and administrative support occupations	17.1%	17.3%
Other professional specialties	5.0%	6.0%

Table 9
Projected Defense and Defense-Related Employment by Occupational Category
(Thousands of Workers)
Fiscal Year 2016 LDEPPS, with 2012-2022 Occupational Projections matrices

Occupational Category	2014	2015	2016	2017	2018	2019	2020
Management, financial, and business operations	655	630	608	596	578	565	557
Computer and mathematical science occupations	157	145	137	133	126	122	118
Architectural and engineering occupations	265	255	246	242	235	231	227
Life, physical and social science occupations	74	72	70	69	67	66	65
Healthcare practitioners and technical occupations	173	160	157	158	154	151	150
Other professional specialties	183	174	168	164	158	154	152
Service occupations	367	342	325	313	300	291	286
Sales and related occupations	159	146	138	133	125	120	117
Office and administrative support occupations	646	603	576	561	537	522	511
Farming, fishing, and forestry occupations	13	12	12	12	11	11	10
Construction and extraction occupations	200	188	179	172	163	156	152
Installation, maintenance, and repair occupations	192	183	176	171	165	160	158
Production occupations	352	329	307	297	282	271	265
Transportation and material moving occupations	315	296	279	268	254	244	238
Total All Categories	3,751	3,533	3,378	3,289	3,157	3,065	3,006

Source: LDEPPS calculations

Note: Numbers may not add to totals due to rounding

Table 10
Defense Related Employment of Engineers and Scientists
(Thousands of Workers)

	2014	2015	2016	2017	2018	2019	2020
Computer and mathematical science occupations							
Computer specialists	147.4	135.1	127.5	123.7	117.3	113.0	109.7
Mathematical science occupations	9.9	9.7	9.4	9.3	9.1	8.9	8.8
Total	157.3	144.8	136.9	133.0	126.4	121.9	118.5
Architectural and engineering occupations							
Architects, surveyors, and cartographers	15.6	14.8	14.3	14.0	13.6	13.4	13.2
Aerospace engineers	19.0	18.2	17.4	17.3	16.9	16.5	16.2
Chemical engineers	1.6	1.5	1.5	1.4	1.4	1.3	1.3
Civil engineers	26.2	25.3	24.6	24.1	23.5	23.2	22.9
Electrical and electronics engineers	39.5	38.3	36.9	36.5	35.5	34.8	34.3
Industrial engineers, incl health and safety	18.6	17.4	16.3	16.0	15.4	14.9	14.5
Mechanical engineers	30.1	29.1	28.0	27.6	26.9	26.3	25.9
Materials engineers	3.3	3.1	3.0	2.9	2.9	2.8	2.8
All other engineers	43.4	42.5	41.3	40.9	39.8	39.1	38.7
Drafters, engineering, and mapping technicians	67.8	65.0	62.3	61.4	59.5	58.3	57.4
Total	265.2	255.2	245.5	242.2	235.5	230.5	227.2
Life, physical and social science occupations							
Life scientists	16.0	15.5	15.1	14.8	14.4	14.2	14.0
Chemists and materials scientists	6.2	5.9	5.7	5.6	5.4	5.3	5.2
Environmental scientists and geoscientists	7.8	7.4	7.1	7.0	6.8	6.7	6.6
Astronomers, physicists, atmospheric & space scientists	3.5	3.5	3.4	3.4	3.3	3.3	3.2
All other physical scientists	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Social scientists and related occupations	19.6	19.5	19.3	19.1	18.8	18.6	18.5
Life, physical, and social science technicians	17.7	16.8	16.4	16.0	15.5	15.2	15.0
Total	73.8	71.7	70.1	68.9	67.2	66.1	65.5
Total Computer, Engineers, and Scientists	496.3	471.6	452.5	444.1	429.0	418.5	411.1

Source: LDEPPS calculations

Note: Numbers may not add to totals due to rounding

SECTION II: METHODOLOGY, DEFINITIONS, AND COVERAGE

Methodology

All estimates are based on the FY 2016 President's Budget submission in February 2015 and on the geographic distribution of the major components of defense spending. Calendar years 2014 and 2015 have overseas contingency operations (OCO) funding included in the estimates, while 2016–2020 do not include OCO funding. Thus, there is a noticeable decline between years 2015 and 2016.

The figures reported here are *projections*. Purchases from particular industries will depend upon the size and composition of the defense outlays actually spent. The location of purchases will be determined not only by the level of defense spending, but also by the location of industries and by competition among firms within industries, both for prime contracts and for subcontracts. The model holds the spending distribution by state constant across all years for each industry and major category, based on the most recent three years average of prime contract award data.⁶ The projections therefore serve as reference points; they describe the future pattern of defense and defense-related expenditures, *assuming current spending plans and existing states' participation in the various components of defense activity*.

Two interindustry (or input-output) models support *DEPPS*. The first model, called the Long-term Interindustry Forecasting Tool (*LIFT*), is a 110-sector input-output model embedded in a macroeconomic model. *LIFT* establishes the macroeconomic environment as well as industry controls. The second input-output model is called Interindustry Long-run Integrated and Dynamic model (*ILIAD*). It uses the macroeconomic

⁶ Data available at <http://www.usaspending.gov/>.

forecasts and the industry controls from *LIFT* to further divide the economy into 360 industries.⁷

The computational framework for the projections is called the Defense Employment and Purchases Projection System (*DEPPS*). *DEPPS* consists of three defense-spending models:

- *IDEPPS*, a detailed interindustry model, forecasts defense demands of 360 industries, by major appropriation and procurement category.
- *RDEPPS*, a state-level (regional) model, determines the effect of defense expenditures by major procurement category on each state, at an aggregate level of 110 industries (unlike the more detailed *IDEPPS*).
- *LDEPPS*, a skilled labor model, determines the requirements for various occupational classifications of employment in each industry generated by defense expenditures.

The estimates projected from the *IDEPPS* model are of both direct and indirect defense expenditures. Direct defense expenditures are purchases made directly by the Department of Defense (DoD). These include purchases of goods and services, as well as military and civilian pay. Defense-related indirect expenditures, by contrast, represent purchases—generated throughout the economy—of items used to produce goods purchased by DoD. That is, indirect (sometimes called intermediate) expenditures reflect the costs of

materials, tools, and parts that prime contractors buy from suppliers in order to perform work for which DoD has contracted. For example, a direct expenditure for aircraft stimulates indirect purchases for the electronic components, tires, aluminum, engineering, and logistic services used to manufacture the aircraft. The term “indirect defense purchases” applies to this sequence of purchases—goods and services from subcontractors and lower-tier suppliers. When discussing both direct and indirect defense expenditures, we use the term defense-related expenditures.

Direct and indirect expenditures are computed for 360 industries, with the top 75 industries reported in detail. A summary of all 360 industries sorted by industry number is presented in the appendix. All expenditure quantities are in constant (inflation-adjusted) 2016 dollars, by calendar year, for 2014 through 2020.

The estimates projected from the *RDEPPS* model include “direct”, “indirect”, and “induced” defense expenditures. The state-level projections display the expenditures on goods and services by DoD’s civilian employees, military members, and retirees. Estimates for these expenditures are included in the statewide tables because the concept has been of interest to planning agencies and others concerned with local economic development. Induced defense purchases are purchases resulting from defense-related employment, i.e. spending by DoD employees on housing, food, other purchases in a state.

⁷ The Office of Cost Assessment and Program Evaluation and Interindustry Forecasting at the University of Maryland (Inforum) developed *DEPPS*. *LIFT* and *ILIAD* were developed by Inforum. *DEPPS*, *LIFT*, and *ILIAD* are maintained by Inforum (www.inforum.umd.edu).

Relationship of the *RDEPPS* State Level Projections to the *IDEPPS* Industry Projections

IDEPPS' treatment of defense expenditures differs from that of *RDEPPS* in several important ways, due to differences in the conceptual rationale for each module. *IDEPPS* is designed to investigate economy-wide effects of the defense budget, by simultaneously determining domestic production, imports, and indirect purchases by industry. *RDEPPS* is designed to investigate domestic effects of expenditures by state, including military retirement disbursements. Therefore, *RDEPPS* includes *only* that part of active duty and retirement pay spent domestically, making an explicit adjustment for pay that is sent abroad. Retirement pay is treated on a disbursement basis in *RDEPPS*, whereas it is treated on an accrual basis in *IDEPPS*. The *RDEPPS* measure of total direct defense expenditures is made smaller by the removal of pay sent abroad, but is made larger by the fact that retirement disbursements currently exceed accruals. The net effect is that *RDEPPS* projections of total direct spending are *larger* than the comparable *IDEPPS* projections.

Budget Concept Employed

The *DEPPS* projections are expressed in terms of outlays. Outlays represent disbursements of funds made during the course of a year. In contrast, budget authority is the amount of money that DoD is authorized to obligate in any given year. Budget authority differs from outlays in that contractual obligations (which must be within the limits set by budget authority) often call for payments to be spread over a period of years, as the work is completed. Budget authority for research, development, and procurement

projects, in particular, tends to be disbursed during a period of several years.⁸ Because *DEPPS* projects the impact on the economy, it is more appropriate to use the amount of money disbursed, i.e. outlays.

Coverage

The federal budget comprises a number of sections called "functional categories," each containing programs serving a common purpose. National security-related programs are grouped into Functional Category 050 (National Defense). This category includes the entire Defense Department's military programs and the national security programs administered by other federal departments, such as the Department of Energy. It *excludes* DoD programs serving civil functions (principally public works projects of the U.S. Army Corps of Engineers).

The *DEPPS* industry projections (*IDEPPS*) are based on a narrower budget grouping, Functional Category 051 (Department of Defense, Military). This subset of 050 funds *includes* all of the Defense Department's military programs, but *excludes* DoD civil functions.

The defense budget (defined here to include only those programs falling within Functional Category 051) is partitioned into five major accounts: military personnel; operations and maintenance (O&M); procurement; research, development, test, and evaluation (RDT&E); and military construction. The titles of these accounts are reasonably descriptive of the types of expenses they cover:

⁸ One metaphor is that of a checking account: budget authority represents the amount of money placed in a given account. Outlays represent "checks" that draw on those funds, which may be written over a number of years.

- The *Military Personnel* account includes the pay of active-duty service members and reservists, as well as some other personnel-related expenses such as permanent change-of-station (PCS) travel and purchases of military uniforms. Also included in this account are DoD's contributions to the Military Retirement Fund.
- The *Operations and Maintenance (O&M)* account funds the day-to-day operations of the defense establishment. Funding from this account is used to purchase fuel and other consumable items and to pay all but a small share of DoD's civilian work force.
- The *Procurement* account funds purchases of weapon systems, equipment, and other military capital goods.
- The *Research, Development, Test, & Evaluation (RDT&E)* account pays for the development and testing of new military systems and other research activities, including the associated civilian pay.
- The *Military Construction* account funds construction of military facilities and housing for military personnel and their dependents.

Supporting documentation, including a more complete description of the model and the underlying data is available on the DEPPS website.⁹

⁹ Available at <http://www.economics.osd.mil/>

**SECTION III: PROJECTIONS FOR
SELECTED INDUSTRIES
(IDEPPS)**

Industry Projections

The tables in this section show projected direct and indirect defense purchases from the 75 industries most affected by defense spending.¹⁰ A separate table is provided for each industry.

The upper portion of each table provides projections of direct and indirect defense purchases for calendar years 2014 to 2020. The lower portion of each table displays the purchasing sectors for the indirect sales of the subject industry in those years.

As indicated in the introduction, indirect (sometimes called intermediate) demand reflects the costs of materials, parts, and services that prime contractors buy from suppliers to perform work for which DoD has contracted. Those sales, in turn, trigger subsequent rounds of transactions as subcontractors purchase goods and services from their major suppliers and those firms place orders with companies at lower tiers of the production chain. For example, a direct expenditure for aircraft stimulates indirect purchases for the electronic components, tires, aluminum, engineering, and logistic services used to manufacture the aircraft. The term “indirect defense purchases” applies to this sequence of purchases—goods and services from subcontractors and lower-tier suppliers.

In addition, for the top 10 defense industries, tables are provided that display the origins of defense-related demand (both direct and indirect) by DoD purchasing function. That is, these tables trace the source of industrial

¹⁰ Although IDEPPS, the detailed interindustry model, forecasts defense demands by 360 industries, only the top 75 are presented in this section. A summary of all 360 industries sorted by the industry number is presented in the appendix.

demand by DoD appropriation such as operations and maintenance or aircraft procurement.

**Table 1a: Projected Defense Purchases of
310 Scientific research and development services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	40,062	38,806	39,115	38,726	37,925	37,271	36,545
Indirect Purchases	3,556	3,326	3,272	3,199	3,092	3,049	3,046
Total :	43,618	42,132	42,386	41,925	41,017	40,320	39,591
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	56	52	46	44	39	38	36
Aircraft Parts	133	124	118	117	110	108	105
Ammunition	18	20	15	14	14	14	15
Communication Equipment	642	592	601	614	610	611	609
Missiles	246	223	196	202	202	203	200
Motor Vehicles	26	22	19	20	20	20	21
Shipbuilding	304	335	346	288	296	283	307
Tanks	28	22	17	18	20	22	23
Other Electronic Equipment	82	81	87	89	86	85	84
Other Ordinances	8	6	6	5	5	5	5
Other	2,012	1,849	1,821	1,787	1,690	1,658	1,641
Total :	3,556	3,326	3,272	3,199	3,092	3,049	3,045

Note: numbers may not add due to rounding

Table 1b: Sources of Projected Defense Purchases
310 Scientific research and development services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	157	164	154	149	149	149	150
Operations & Maintenance *	8,230	7,431	7,250	7,082	6,695	6,486	6,439
Aircraft	409	386	334	317	295	285	272
Missiles	354	335	453	765	974	1,060	1,076
Weapons and Tracked Vehicles	67	51	37	41	43	47	50
Shipbuilding	334	368	391	334	364	317	341
Ammunition	160	171	116	121	123	126	128
Other	1,425	1,275	1,121	1,120	1,067	1,076	1,072
Total Procurement	2,749	2,587	2,452	2,699	2,866	2,910	2,940
RDT&E	32,443	31,912	32,494	31,961	31,275	30,744	30,033
Military Construction	35	34	32	29	28	27	25
Family Housing	4	5	4	4	4	4	4
Total :	43,618	42,132	42,386	41,925	41,017	40,320	39,591

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 2a: Projected Defense Purchases of
303 Architectural, engineering, and related services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	33,944	32,099	31,449	31,456	31,459	32,168	31,914
Indirect Purchases	7,310	6,805	6,612	6,459	6,273	6,187	6,129
Total :	41,254	38,903	38,062	37,914	37,733	38,354	38,043
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	38	36	31	30	27	26	24
Aircraft Parts	115	107	101	100	95	93	90
Ammunition	15	16	12	12	12	12	12
Communication Equipment	170	157	160	163	162	163	162
Missiles	296	269	236	242	242	243	239
Motor Vehicles	14	12	11	11	11	11	11
Shipbuilding	269	296	306	254	262	250	271
Tanks	15	11	9	9	10	11	12
Other Electronic Equipment	16	15	16	17	16	16	16
Other Ordinances	9	7	6	6	6	6	6
Other	6,353	5,878	5,724	5,614	5,431	5,355	5,286
Total :	7,310	6,805	6,612	6,459	6,273	6,187	6,129

Note: numbers may not add due to rounding

**Table 2b: Sources of Projected Defense Purchases
303 Architectural, engineering, and related services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	236	248	234	229	231	232	232
Operations & Maintenance *	20,684	19,666	18,912	18,229	17,391	16,856	16,769
Aircraft	1,791	1,704	1,456	1,483	1,395	1,365	1,318
Missiles	1,691	1,632	2,177	3,675	4,683	5,105	5,208
Weapons and Tracked Vehicles	329	266	206	235	246	269	283
Shipbuilding	5,035	4,486	4,171	3,591	3,908	4,930	4,976
Ammunition	98	84	61	65	67	71	76
Other	3,321	3,131	3,063	2,975	2,874	2,988	2,951
Total Procurement	12,267	11,302	11,134	12,025	13,172	14,727	14,811
RDT&E	6,796	6,453	6,624	6,369	5,936	5,579	5,314
Military Construction	1,221	1,183	1,107	1,014	954	910	867
Family Housing	50	52	51	49	50	50	51
Total :	41,254	38,903	38,062	37,914	37,733	38,354	38,043

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 3a: Projected Defense Purchases of
94 Petroleum refineries**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21,033	19,885	19,472	18,759	17,131	16,617	16,575
Indirect Purchases	11,188	10,386	10,029	9,741	9,269	9,068	9,002
Total :	32,221	30,270	29,500	28,500	26,399	25,685	25,577
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	27	25	22	21	19	18	17
Aircraft Parts	103	96	91	90	85	83	81
Ammunition	27	30	22	22	21	22	22
Communication Equipment	122	111	113	115	114	114	114
Missiles	88	79	69	71	71	72	70
Motor Vehicles	25	21	19	19	19	19	20
Shipbuilding	134	146	151	124	127	121	130
Tanks	22	17	13	14	15	17	17
Other Electronic Equipment	24	24	25	26	25	24	24
Other Ordinances	9	6	6	6	6	6	5
Other	10,607	9,830	9,497	9,233	8,767	8,571	8,501
Total :	11,187	10,385	10,028	9,741	9,268	9,067	9,002

Note: numbers may not add due to rounding

Table 3b: Sources of Projected Defense Purchases**94 Petroleum refineries**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	11,602	12,116	11,318	10,886	10,851	10,851	10,881
Operations & Maintenance *	17,614	15,442	15,774	15,213	13,172	12,441	12,296
Aircraft	407	395	348	337	316	300	288
Missiles	78	80	99	129	142	151	151
Weapons and Tracked Vehicles	54	41	30	34	35	39	41
Shipbuilding	168	179	184	151	159	162	172
Ammunition	77	84	56	59	59	60	61
Other	1,230	971	732	772	779	821	855
Total Procurement	2,014	1,749	1,450	1,481	1,490	1,532	1,567
RDT&E	716	696	709	691	668	650	631
Military Construction	247	239	222	202	191	184	175
Family Housing	27	29	28	27	27	27	27
Total :	32,221	30,270	29,500	28,500	26,399	25,685	25,577

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 4a: Projected Defense Purchases of
235 Aircraft**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	27,890	26,937	25,225	24,780	23,253	21,937	21,001
Indirect Purchases	163	149	144	141	134	131	128
Total :	28,053	27,085	25,368	24,921	23,388	22,068	21,129
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	4	4	3	3	3	3	3
Ammunition	0	0	0	0	0	0	0
Communication Equipment	1	0	0	0	0	0	0
Missiles	2	2	2	2	2	2	2
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	1	0	0	0	0
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	155	142	137	134	128	125	122
Total :	163	149	144	141	134	131	128

Note: numbers may not add due to rounding

**Table 4b: Sources of Projected Defense Purchases
235 Aircraft**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	27	28	26	25	25	25	25
Operations & Maintenance *	1,257	1,074	1,078	1,014	865	803	786
Aircraft	20,008	19,639	17,496	17,349	16,503	15,776	15,217
Missiles	42	41	53	90	115	125	127
Weapons and Tracked Vehicles	0	0	0	0	0	0	0
Shipbuilding	3	5	3	2	2	2	2
Ammunition	4	2	2	2	2	2	3
Other	361	402	450	395	391	393	388
Total Procurement	20,418	20,090	18,004	17,839	17,012	16,298	15,737
RDT&E	6,350	5,893	6,259	6,042	5,485	4,940	4,580
Military Construction	1	1	1	1	1	1	1
Family Housing	0	0	0	0	0	0	0
Total :	28,053	27,085	25,368	24,921	23,388	22,068	21,129

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 5a: Projected Defense Purchases of
16 Crude oil extraction**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	43	36	38	35	24	21	20
Indirect Purchases	25,446	23,833	23,231	22,467	20,848	20,291	20,194
Total :	25,489	23,869	23,269	22,502	20,873	20,312	20,214
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	33	30	27	25	23	22	21
Aircraft Parts	120	111	106	104	98	96	93
Ammunition	40	44	33	33	32	32	33
Communication Equipment	142	130	132	134	133	133	132
Missiles	103	93	81	84	84	84	82
Motor Vehicles	33	28	24	25	24	25	26
Shipbuilding	161	175	181	149	152	145	156
Tanks	29	22	17	18	20	22	23
Other Electronic Equipment	30	29	31	32	31	30	30
Other Ordinances	12	9	8	8	8	8	8
Other	24,742	23,162	22,590	21,855	20,244	19,693	19,591
Total :	25,445	23,832	23,230	22,467	20,848	20,290	20,193

Note: numbers may not add due to rounding

Table 5b: Sources of Projected Defense Purchases**16 Crude oil extraction**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	8,548	8,924	8,341	8,026	8,000	8,001	8,021
Operations & Maintenance *	14,070	12,323	12,565	12,133	10,558	9,987	9,866
Aircraft	423	408	359	346	324	308	295
Missiles	85	86	105	135	150	158	158
Weapons and Tracked Vehicles	66	50	37	41	43	47	49
Shipbuilding	190	204	210	173	180	181	193
Ammunition	86	93	62	65	65	66	67
Other	1,116	901	711	738	740	774	801
Total Procurement	1,965	1,741	1,485	1,498	1,502	1,535	1,564
RDT&E	673	652	665	648	625	607	588
Military Construction	201	194	180	164	155	148	141
Family Housing	34	36	34	33	34	33	34
Total :	25,489	23,869	23,269	22,502	20,873	20,312	20,214

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 6a: Projected Defense Purchases of
315 Management of companies and enterprises**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	23,953	22,301	21,598	21,235	20,424	20,114	19,950
Total :	23,953	22,301	21,598	21,235	20,424	20,114	19,950
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	549	512	453	432	385	369	353
Aircraft Parts	1,375	1,281	1,217	1,206	1,139	1,118	1,087
Ammunition	169	188	142	139	136	139	140
Communication Equipment	2,829	2,609	2,645	2,704	2,685	2,691	2,682
Missiles	1,918	1,742	1,527	1,572	1,572	1,583	1,553
Motor Vehicles	260	220	192	199	195	204	209
Shipbuilding	1,007	1,102	1,138	942	968	925	999
Tanks	279	213	166	176	195	215	225
Other Electronic Equipment	357	351	377	385	372	370	364
Other Ordinances	79	61	58	55	53	53	52
Other	15,130	14,022	13,683	13,423	12,724	12,448	12,286
Total :	23,952	22,300	21,597	21,234	20,424	20,114	19,950

Note: numbers may not add due to rounding

**Table 6b: Sources of Projected Defense Purchases
315 Management of companies and enterprises**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	1,681	1,763	1,657	1,612	1,616	1,624	1,626
Operations & Maintenance *	8,691	7,731	7,743	7,569	6,891	6,618	6,548
Aircraft	2,754	2,586	2,208	2,098	1,957	1,895	1,823
Missiles	1,057	979	933	1,213	1,387	1,460	1,463
Weapons and Tracked Vehicles	444	337	234	258	269	295	314
Shipbuilding	1,106	1,219	1,270	1,040	1,081	1,074	1,151
Ammunition	342	333	231	242	246	252	260
Other	3,971	3,570	3,457	3,429	3,343	3,389	3,380
Total Procurement	9,674	9,024	8,333	8,280	8,283	8,365	8,391
RDT&E	3,574	3,459	3,562	3,493	3,369	3,254	3,143
Military Construction	300	289	270	248	232	221	209
Family Housing	33	35	34	32	33	33	33
Total :	23,953	22,301	21,598	21,235	20,424	20,114	19,950

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 7a: Projected Defense Purchases of
285 Telecommunications**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13,554	11,830	11,494	11,367	10,954	10,748	10,661
Indirect Purchases	8,544	7,794	7,585	7,481	7,251	7,136	7,083
Total :	22,098	19,625	19,079	18,847	18,206	17,884	17,744
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	44	41	36	35	31	30	28
Aircraft Parts	98	92	87	86	81	80	77
Ammunition	20	23	17	17	16	17	17
Communication Equipment	271	250	254	261	260	260	259
Missiles	162	147	129	133	133	134	131
Motor Vehicles	23	19	17	17	17	18	18
Shipbuilding	185	203	210	174	179	171	185
Tanks	25	19	15	16	18	19	20
Other Electronic Equipment	28	27	29	30	29	29	28
Other Ordinances	11	9	8	8	7	7	7
Other	7,675	6,964	6,783	6,704	6,480	6,372	6,312
Total :	8,544	7,794	7,585	7,480	7,251	7,135	7,083

Note: numbers may not add due to rounding

**Table 7b: Sources of Projected Defense Purchases
285 Telecommunications**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	416	435	407	393	393	393	394
Operations & Maintenance *	17,523	15,250	14,853	14,638	13,993	13,622	13,482
Aircraft	409	396	347	338	316	302	290
Missiles	169	163	202	306	375	407	413
Weapons and Tracked Vehicles	51	39	29	32	33	36	39
Shipbuilding	245	260	265	220	230	238	253
Ammunition	43	41	29	30	31	32	33
Other	1,820	1,651	1,551	1,537	1,523	1,578	1,601
Total Procurement	2,738	2,550	2,423	2,462	2,508	2,594	2,629
RDT&E	1,134	1,102	1,125	1,098	1,058	1,027	996
Military Construction	140	136	126	115	109	105	100
Family Housing	146	152	145	142	144	142	142
Total :	22,098	19,625	19,079	18,847	18,206	17,884	17,744

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 8a: Projected Defense Purchases of
328 Offices of physicians, dentists, and other health practitioners**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21,034	19,023	19,007	19,728	19,468	19,377	19,395
Indirect Purchases	22	9	9	11	12	14	18
Total :	21,057	19,033	19,016	19,739	19,480	19,391	19,413
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Communication Equipment	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	0	0	0	0	0
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	22	9	9	11	12	14	18
Total :	22	9	9	11	12	14	18

Note: numbers may not add due to rounding

Table 8b: Sources of Projected Defense Purchases
328 Offices of physicians, dentists, and other health practitioners

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	0	0	0	0	0	0	0
Operations & Maintenance *	21,048	19,025	19,008	19,732	19,474	19,385	19,407
Aircraft	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Weapons and Tracked Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total Procurement	0	0	0	0	0	0	0
RDT&E	8	8	7	7	6	6	6
Military Construction	0	0	0	0	0	0	0
Family Housing	0	0	0	0	0	0	0
Total :	21,057	19,033	19,016	19,739	19,480	19,391	19,413

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 9a: Projected Defense Purchases of
241 Ship building and repairing**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	16,264	17,946	18,584	15,479	15,935	15,260	16,532
Indirect Purchases	195	186	180	172	171	169	175
Total :	16,459	18,132	18,764	15,651	16,106	15,430	16,707
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Communication Equipment	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	38	31	32	28	30	31	36
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	157	154	147	144	140	138	138
Total :	195	186	180	172	171	169	175

Note: numbers may not add due to rounding

Table 9b: Sources of Projected Defense Purchases
241 Ship building and repairing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	50	52	49	47	46	46	47
Operations & Maintenance *	896	947	936	927	894	879	879
Aircraft	11	11	10	9	8	8	7
Missiles	1	1	1	1	1	1	1
Weapons and Tracked Vehicles	0	0	0	0	0	0	0
Shipbuilding	14,299	16,169	17,026	13,899	14,448	13,807	15,098
Ammunition	0	0	0	0	0	0	0
Other	1,079	835	623	653	603	588	578
Total Procurement	15,392	17,016	17,660	14,562	15,060	14,404	15,685
RDT&E	122	116	120	115	106	99	95
Military Construction	0	0	0	0	0	0	0
Family Housing	0	0	0	0	0	0	0
Total :	16,459	18,132	18,764	15,651	16,106	15,430	16,707

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 10a: Projected Defense Purchases of
294 Real estate**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,560	4,091	3,895	3,808	3,711	3,649	3,623
Indirect Purchases	14,570	13,551	13,223	13,059	12,696	12,517	12,421
Total :	19,130	17,642	17,118	16,867	16,407	16,165	16,044
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	75	69	61	59	52	50	48
Aircraft Parts	206	192	182	180	170	167	162
Ammunition	46	51	39	38	37	38	38
Communication Equipment	466	429	435	446	443	444	442
Missiles	336	305	267	275	275	277	272
Motor Vehicles	49	41	36	37	36	38	39
Shipbuilding	331	362	374	310	319	305	329
Tanks	59	45	35	37	41	45	47
Other Electronic Equipment	67	66	70	72	70	69	68
Other Ordinances	24	18	17	16	16	16	16
Other	12,911	11,972	11,705	11,588	11,237	11,068	10,960
Total :	14,569	13,551	13,223	13,058	12,696	12,516	12,421

Note: numbers may not add due to rounding

Table 10b: Sources of Projected Defense Purchases
294 Real estate

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES BY BUDGET CATEGORY							
Military Personnel	1,050	1,098	1,028	993	991	992	995
Operations & Maintenance *	11,310	9,983	9,738	9,595	9,139	8,896	8,836
Aircraft	734	707	617	598	560	535	513
Missiles	256	248	303	460	564	608	616
Weapons and Tracked Vehicles	111	85	61	67	70	77	82
Shipbuilding	484	505	512	425	447	470	497
Ammunition	106	108	74	78	79	81	83
Other	1,181	1,057	996	991	964	978	976
Total Procurement	2,871	2,710	2,563	2,619	2,684	2,749	2,767
RDT&E	2,634	2,572	2,624	2,571	2,495	2,434	2,368
Military Construction	640	621	553	512	514	509	491
Family Housing	623	658	612	577	584	585	588
Total :	19,130	17,642	17,118	16,867	16,407	16,165	16,044

Direct plus indirect purchases.

* Includes net funds appropriated to Defense-Wide Contingencies; Revolving and Management Funds; Trust Receipts; Deductions, Intragovernment Receipts.

Note: Numbers may not add due to rounding

**Table 11: Projected Defense Purchases of
35 Maintenance and repair of nonresidential buildings, infrastructure and other**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14,492	13,021	12,270	11,656	11,119	10,740	10,573
Indirect Purchases	4,888	4,593	4,524	4,481	4,334	4,269	4,232
Total :	19,380	17,614	16,794	16,137	15,453	15,009	14,805
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	24	23	20	19	17	16	16
Aircraft Parts	60	56	53	52	50	49	47
Ammunition	20	22	17	17	16	17	17
Communication Equipment	118	109	111	114	113	113	113
Missiles	66	60	53	55	55	55	54
Motor Vehicles	20	17	15	15	15	15	16
Shipbuilding	128	140	145	120	124	118	128
Tanks	17	13	10	10	12	13	13
Other Electronic Equipment	21	21	22	23	22	22	21
Other Ordinances	7	5	5	5	5	5	5
Other	4,407	4,128	4,074	4,051	3,906	3,846	3,803
Total :	4,888	4,592	4,524	4,481	4,333	4,269	4,232

Note: numbers may not add due to rounding

**Table 12: Projected Defense Purchases of
265 Wholesale trade**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	456	414	420	433	416	411	411
Indirect Purchases	15,461	14,436	14,028	13,727	13,223	12,976	12,901
Total :	15,917	14,850	14,448	14,160	13,639	13,387	13,312
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	142	132	117	111	99	95	90
Aircraft Parts	444	412	392	387	365	358	348
Ammunition	125	138	104	102	100	102	103
Communication Equipment	1,547	1,423	1,446	1,488	1,481	1,482	1,475
Missiles	550	498	436	446	445	448	439
Motor Vehicles	210	178	154	160	157	164	168
Shipbuilding	944	1,030	1,063	880	902	861	929
Tanks	193	147	115	121	134	147	154
Other Electronic Equipment	311	305	327	335	324	323	318
Other Ordinances	63	48	46	43	42	42	41
Other	10,932	10,124	9,828	9,653	9,172	8,954	8,835
Total :	15,460	14,435	14,028	13,727	13,222	12,975	12,901

Note: numbers may not add due to rounding

**Table 13: Projected Defense Purchases of
270 Truck transportation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	11,016	10,399	9,736	9,390	9,158	9,025	9,018
Indirect Purchases	4,465	4,148	3,990	3,885	3,731	3,658	3,629
Total :	15,480	14,547	13,727	13,275	12,889	12,682	12,648
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	54	50	44	42	38	36	34
Aircraft Parts	288	268	255	253	239	234	228
Ammunition	28	31	23	23	22	23	23
Communication Equipment	157	143	145	149	148	148	147
Missiles	131	119	104	108	108	109	106
Motor Vehicles	46	39	34	35	34	35	36
Shipbuilding	170	185	191	157	161	154	166
Tanks	34	26	20	21	23	26	27
Other Electronic Equipment	29	28	30	31	29	29	29
Other Ordinances	15	11	11	10	10	10	10
Other	3,513	3,247	3,132	3,057	2,919	2,855	2,824
Total :	4,464	4,148	3,990	3,885	3,731	3,657	3,629

Note: numbers may not add due to rounding

**Table 14: Projected Defense Purchases of
267 Air transportation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13,354	12,156	11,641	11,401	11,056	10,874	10,776
Indirect Purchases	1,926	1,826	1,739	1,708	1,649	1,607	1,586
Total :	15,281	13,981	13,380	13,109	12,705	12,481	12,362
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	14	13	12	11	10	10	9
Aircraft Parts	30	28	26	26	25	24	23
Ammunition	5	5	4	4	4	4	4
Communication Equipment	58	53	54	55	55	55	55
Missiles	54	49	43	44	44	44	44
Motor Vehicles	6	5	5	5	5	5	5
Shipbuilding	69	76	78	65	67	64	69
Tanks	6	4	3	4	4	4	5
Other Electronic Equipment	7	7	7	7	7	7	7
Other Ordinances	2	2	2	2	1	1	1
Other	1,676	1,584	1,506	1,485	1,428	1,389	1,365
Total :	1,926	1,826	1,739	1,708	1,649	1,607	1,586

Note: numbers may not add due to rounding

**Table 15: Projected Defense Purchases of
238 Guided missiles and space vehicles**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12,542	11,725	12,566	15,496	17,297	18,158	18,222
Indirect Purchases	323	296	266	271	269	270	265
Total :	12,864	12,021	12,832	15,767	17,566	18,428	18,487
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Communication Equipment	5	4	5	5	5	5	5
Missiles	268	244	213	219	218	220	216
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	0	0	0	0	0
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	1	0	0	0	0	0	0
Other	48	46	47	46	45	44	43
Total :	323	296	266	271	269	270	265

Note: numbers may not add due to rounding

**Table 16: Projected Defense Purchases of
308 Management, scientific, and technical consulting services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,859	5,185	4,911	4,627	4,343	4,200	4,183
Indirect Purchases	7,994	7,496	7,331	7,157	6,967	6,864	6,828
Total :	13,853	12,681	12,242	11,784	11,310	11,064	11,011
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	125	116	103	98	88	84	80
Aircraft Parts	117	108	103	102	96	94	91
Ammunition	23	25	19	19	18	19	19
Communication Equipment	318	293	298	305	304	304	303
Missiles	253	229	201	207	207	208	204
Motor Vehicles	24	20	18	18	18	18	19
Shipbuilding	498	548	567	472	485	464	503
Tanks	40	31	24	25	28	31	32
Other Electronic Equipment	35	34	37	37	36	36	35
Other Ordinances	14	11	10	10	9	9	9
Other	6,547	6,078	5,951	5,863	5,677	5,596	5,532
Total :	7,993	7,495	7,330	7,157	6,966	6,864	6,828

Note: numbers may not add due to rounding

**Table 17: Projected Defense Purchases of
32 New non-residential building construction**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12,759	11,868	11,311	10,939	10,626	10,391	10,164
Indirect Purchases	13	5	5	6	6	7	9
Total :	12,772	11,874	11,316	10,944	10,633	10,399	10,173
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Other	13	5	5	6	6	7	9
Total :	13	5	5	6	6	7	9

**Table 18: Projected Defense Purchases of
237 Other aircraft parts and auxiliary equipment**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8,928	8,289	7,528	7,028	6,291	6,024	5,785
Indirect Purchases	3,063	2,863	3,130	3,524	3,654	3,688	3,637
Total :	11,991	11,152	10,658	10,552	9,945	9,712	9,422
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	100	94	83	79	71	68	65
Aircraft Parts	630	638	966	1,404	1,679	1,803	1,828
Ammunition	3	4	3	3	3	3	3
Communication Equipment	7	6	6	6	6	6	6
Missiles	72	65	57	58	57	57	56
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	1	1	1	1	1	1	1
Tanks	3	2	2	2	2	2	2
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	3	2	2	2	2	2	2
Other	2,243	2,050	2,009	1,969	1,832	1,746	1,674
Total :	3,063	2,863	3,130	3,524	3,654	3,688	3,637

Note: numbers may not add due to rounding

**Table 19: Projected Defense Purchases of
312 All other miscellaneous professional, scientific, and technical services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7,466	7,044	6,952	6,806	6,716	6,608	6,521
Indirect Purchases	3,965	3,729	3,652	3,581	3,490	3,449	3,425
Total :	11,431	10,773	10,604	10,387	10,206	10,057	9,946
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	33	31	27	26	23	22	21
Aircraft Parts	79	74	70	69	65	64	62
Ammunition	12	13	10	10	10	10	10
Communication Equipment	107	99	100	102	101	102	101
Missiles	131	119	104	107	107	108	106
Motor Vehicles	16	14	12	12	12	13	13
Shipbuilding	210	230	238	198	203	194	210
Tanks	24	18	14	15	16	18	19
Other Electronic Equipment	14	14	15	15	15	14	14
Other Ordinances	7	5	5	5	5	5	5
Other	3,332	3,112	3,057	3,021	2,933	2,900	2,864
Total :	3,965	3,729	3,652	3,580	3,490	3,449	3,425

Note: numbers may not add due to rounding

**Table 20: Projected Defense Purchases of
307 Other computer related services, including facilities management**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7,442	6,872	6,759	6,767	6,541	6,443	6,437
Indirect Purchases	2,711	2,527	2,469	2,425	2,359	2,330	2,312
Total :	10,153	9,399	9,227	9,192	8,900	8,773	8,749
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	22	20	18	17	15	15	14
Aircraft Parts	45	42	40	39	37	37	36
Ammunition	7	8	6	6	6	6	6
Communication Equipment	158	146	148	151	150	150	150
Missiles	80	73	64	65	65	66	65
Motor Vehicles	8	7	6	6	6	7	7
Shipbuilding	93	102	105	87	90	86	93
Tanks	10	8	6	6	7	8	8
Other Electronic Equipment	13	13	14	14	14	14	13
Other Ordinances	5	4	3	3	3	3	3
Other	2,269	2,104	2,058	2,029	1,965	1,940	1,918
Total :	2,711	2,527	2,469	2,425	2,359	2,330	2,312

Note: numbers may not add due to rounding

**Table 21: Projected Defense Purchases of
28 Electric power generation, transmission, and distribution**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,738	4,081	3,918	3,845	3,675	3,590	3,562
Indirect Purchases	5,140	4,804	4,664	4,575	4,415	4,337	4,307
Total :	9,878	8,884	8,582	8,420	8,090	7,928	7,869
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	57	53	47	44	40	38	36
Aircraft Parts	186	172	164	162	153	150	146
Ammunition	60	66	50	49	48	49	49
Communication Equipment	225	207	210	215	213	214	213
Missiles	176	159	140	145	146	147	144
Motor Vehicles	46	39	34	35	34	35	36
Shipbuilding	238	259	268	222	227	217	234
Tanks	43	33	26	27	30	33	34
Other Electronic Equipment	49	48	51	52	50	50	49
Other Ordinances	22	16	16	15	14	14	14
Other	4,040	3,750	3,659	3,609	3,459	3,390	3,350
Total :	5,140	4,803	4,663	4,575	4,414	4,337	4,307

Note: numbers may not add due to rounding

**Table 22: Projected Defense Purchases of
203 Search, detection, and navigation instruments**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8,460	7,847	7,920	7,974	7,864	7,917	7,917
Indirect Purchases	724	672	653	631	597	575	563
Total :	9,184	8,519	8,573	8,604	8,461	8,492	8,480
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	31	29	25	24	22	21	20
Aircraft Parts	58	54	51	51	48	47	46
Ammunition	0	0	0	0	0	0	0
Communication Equipment	24	18	18	19	19	20	21
Missiles	49	45	39	40	40	40	39
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	69	76	79	65	67	65	70
Tanks	1	1	1	1	1	1	1
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	491	450	440	430	400	381	365
Total :	724	672	653	631	597	575	563

Note: numbers may not add due to rounding

**Table 23: Projected Defense Purchases of
242 Boat building**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9,803	9,168	8,446	8,207	7,828	7,727	7,642
Indirect Purchases	88	81	78	73	72	71	74
Total :	9,891	9,249	8,524	8,280	7,900	7,798	7,716
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Communication Equipment	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	24	27	28	23	24	23	25
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	63	54	50	49	48	48	49
Total :	88	81	78	73	72	71	74

Note: numbers may not add due to rounding

**Table 24: Projected Defense Purchases of
311 Advertising and related services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	820	723	673	623	584	554	549
Indirect Purchases	8,304	7,764	7,545	7,471	7,251	7,131	7,070
Total :	9,125	8,487	8,218	8,094	7,835	7,685	7,618
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	76	71	63	60	53	51	49
Aircraft Parts	195	181	172	170	161	158	153
Ammunition	39	44	33	32	32	32	33
Communication Equipment	542	500	507	520	516	517	515
Missiles	308	280	245	252	253	254	250
Motor Vehicles	43	36	32	33	32	34	34
Shipbuilding	265	290	299	248	255	244	263
Tanks	48	36	29	30	33	37	38
Other Electronic Equipment	63	62	66	68	65	65	64
Other Ordinances	25	19	18	17	17	17	17
Other	6,701	6,244	6,080	6,040	5,834	5,723	5,654
Total :	8,304	7,763	7,544	7,471	7,251	7,131	7,069

Note: numbers may not add due to rounding

**Table 25: Projected Defense Purchases of
288 Monetary authorities and depository credit intermediation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	8,777	8,213	7,979	7,820	7,584	7,458	7,396
Total :	8,777	8,213	7,979	7,820	7,584	7,458	7,396
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	56	52	47	44	39	38	36
Aircraft Parts	135	126	119	118	111	109	106
Ammunition	22	24	18	18	18	18	18
Communication Equipment	232	214	216	221	219	220	219
Missiles	223	203	177	183	182	184	180
Motor Vehicles	29	25	21	22	22	22	23
Shipbuilding	332	364	377	313	321	307	332
Tanks	37	28	22	23	26	28	29
Other Electronic Equipment	28	27	29	30	29	29	28
Other Ordinances	12	9	9	8	8	8	8
Other	7,670	7,141	6,943	6,840	6,608	6,495	6,416
Total :	8,776	8,213	7,978	7,820	7,583	7,458	7,396

Note: numbers may not add due to rounding

**Table 26: Projected Defense Purchases of
236 Aircraft engines and engine parts**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,764	4,479	3,994	3,836	3,442	3,297	3,144
Indirect Purchases	4,036	3,703	3,475	3,372	3,096	2,969	2,855
Total :	8,800	8,182	7,469	7,208	6,538	6,266	5,998
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	1,383	1,289	1,143	1,091	974	933	892
Aircraft Parts	369	343	324	320	300	295	287
Ammunition	1	1	1	1	1	1	1
Communication Equipment	5	5	5	5	5	5	5
Missiles	92	83	73	74	74	74	73
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	3	3	2	1	2	2	2
Tanks	41	31	24	26	28	31	33
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	2	1	1	1	1	1	1
Other	2,139	1,946	1,902	1,853	1,712	1,627	1,560
Total :	4,036	3,703	3,475	3,372	3,096	2,968	2,854

Note: numbers may not add due to rounding

Table 27: Projected Defense Purchases of**291 Insurance carriers**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,395	2,491	2,337	2,260	2,244	2,236	2,240
Indirect Purchases	5,459	5,096	4,936	4,863	4,744	4,694	4,664
Total :	7,854	7,587	7,273	7,124	6,988	6,930	6,904
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	17	16	14	13	12	11	11
Aircraft Parts	48	44	42	42	39	39	38
Ammunition	8	9	7	7	7	7	7
Communication Equipment	93	86	87	89	88	89	88
Missiles	73	66	58	60	60	60	59
Motor Vehicles	11	9	8	8	8	8	9
Shipbuilding	81	89	92	76	78	75	81
Tanks	10	8	6	6	7	8	8
Other Electronic Equipment	12	12	13	13	13	13	12
Other Ordinances	4	3	3	3	3	3	3
Other	5,101	4,753	4,606	4,546	4,429	4,382	4,349
Total :	5,459	5,095	4,936	4,863	4,744	4,694	4,664

Note: numbers may not add due to rounding

**Table 28: Projected Defense Purchases of
340 Food services and drinking places**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,172	2,019	1,907	1,853	1,806	1,781	1,773
Indirect Purchases	5,577	5,185	5,049	4,965	4,834	4,776	4,742
Total :	7,749	7,204	6,956	6,818	6,639	6,556	6,516
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	34	32	28	27	24	23	22
Aircraft Parts	78	72	69	68	64	63	61
Ammunition	12	13	10	10	10	10	10
Communication Equipment	152	140	142	145	144	144	144
Missiles	153	139	122	125	125	126	124
Motor Vehicles	16	14	12	12	12	13	13
Shipbuilding	185	202	209	174	179	171	185
Tanks	17	13	10	11	12	13	14
Other Electronic Equipment	17	17	18	18	17	17	17
Other Ordinances	7	5	5	5	4	4	4
Other	4,906	4,537	4,424	4,370	4,242	4,191	4,149
Total :	5,577	5,184	5,048	4,965	4,834	4,776	4,742

Note: numbers may not add due to rounding

**Table 29: Projected Defense Purchases of
322 Employment services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	247	243	238	234	225	220	218
Indirect Purchases	7,373	6,866	6,650	6,532	6,359	6,277	6,229
Total :	7,620	7,109	6,888	6,766	6,583	6,497	6,447
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	54	50	45	43	38	36	35
Aircraft Parts	120	112	106	105	99	97	95
Ammunition	21	23	17	17	17	17	17
Communication Equipment	273	253	257	263	262	262	261
Missiles	440	400	350	360	359	362	355
Motor Vehicles	17	14	12	13	12	13	13
Shipbuilding	208	228	236	195	201	192	208
Tanks	19	14	11	12	13	14	15
Other Electronic Equipment	21	20	22	22	21	21	21
Other Ordinances	12	9	9	8	8	8	8
Other	6,188	5,742	5,586	5,494	5,328	5,254	5,201
Total :	7,372	6,865	6,650	6,532	6,358	6,277	6,229

Note: numbers may not add due to rounding

**Table 30: Projected Defense Purchases of
273 Scenic and sightseeing transportation and support activities for transportation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3,702	3,432	3,325	3,296	3,129	3,031	2,994
Indirect Purchases	3,797	3,552	3,407	3,331	3,229	3,174	3,154
Total :	7,499	6,984	6,731	6,627	6,358	6,205	6,147
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	7	6	6	5	5	5	4
Aircraft Parts	22	20	19	19	18	17	17
Ammunition	4	4	3	3	3	3	3
Communication Equipment	34	32	32	33	33	33	33
Missiles	25	22	20	20	20	20	20
Motor Vehicles	5	4	4	4	4	4	4
Shipbuilding	31	34	35	29	30	28	31
Tanks	4	3	3	3	3	3	4
Other Electronic Equipment	5	5	5	6	5	5	5
Other Ordinances	2	1	1	1	1	1	1
Other	3,658	3,419	3,279	3,208	3,108	3,054	3,032
Total :	3,797	3,552	3,406	3,331	3,229	3,174	3,153

Note: numbers may not add due to rounding

**Table 31: Projected Defense Purchases of
290 Securities, commodity contracts, investments, and related activities**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	184	188	169	159	155	154	153
Indirect Purchases	7,005	6,605	6,399	6,211	6,029	5,926	5,905
Total :	7,190	6,793	6,568	6,370	6,184	6,080	6,058
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	88	81	72	69	61	59	56
Aircraft Parts	205	190	181	179	169	166	161
Ammunition	39	43	32	32	31	32	32
Communication Equipment	273	251	255	260	258	258	257
Missiles	376	341	299	308	308	310	304
Motor Vehicles	50	42	36	38	37	39	40
Shipbuilding	557	612	633	526	541	517	559
Tanks	59	45	35	37	41	45	47
Other Electronic Equipment	38	38	40	41	40	39	39
Other Ordinances	21	16	15	15	14	14	14
Other	5,300	4,945	4,800	4,708	4,529	4,447	4,395
Total :	7,005	6,605	6,398	6,211	6,029	5,925	5,905

Note: numbers may not add due to rounding

**Table 32: Projected Defense Purchases of
197 Broadcast and wireless communications equipment**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,626	4,287	4,326	4,422	4,367	4,324	4,265
Indirect Purchases	1,992	1,891	1,946	2,131	2,197	2,206	2,184
Total :	6,618	6,178	6,272	6,553	6,564	6,530	6,449
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	14	14	12	11	10	10	9
Aircraft Parts	23	21	20	20	19	18	18
Ammunition	0	0	0	0	0	0	0
Communication Equipment	1,427	1,376	1,468	1,654	1,738	1,756	1,746
Missiles	260	236	206	210	208	210	206
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	2	2	2	2	2	2	2
Tanks	1	0	0	0	0	0	1
Other Electronic Equipment	6	6	6	6	6	6	6
Other Ordinances	0	0	0	0	0	0	0
Other	258	235	231	227	212	203	196
Total :	1,992	1,891	1,946	2,131	2,197	2,206	2,184

Note: numbers may not add due to rounding

**Table 33: Projected Defense Purchases of
317 Facilities support services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6,755	5,877	5,471	5,077	4,737	4,488	4,408
Indirect Purchases	460	426	409	403	393	389	387
Total :	7,216	6,303	5,880	5,480	5,131	4,877	4,794
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	7	7	6	6	5	5	5
Aircraft Parts	16	15	14	14	13	13	13
Ammunition	2	2	2	2	2	2	2
Communication Equipment	30	28	29	29	29	29	29
Missiles	75	68	59	61	61	61	60
Motor Vehicles	1	1	1	1	1	1	1
Shipbuilding	22	24	25	20	21	20	22
Tanks	2	1	1	1	1	1	1
Other Electronic Equipment	2	2	2	2	2	2	2
Other Ordinances	1	1	1	1	1	1	1
Other	302	277	270	266	257	254	252
Total :	460	426	409	403	393	389	387

Note: numbers may not add due to rounding

**Table 34: Projected Defense Purchases of
339 Hotels and other accommodations**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,305	3,997	3,773	3,660	3,563	3,510	3,495
Indirect Purchases	2,279	2,136	2,066	2,024	1,964	1,930	1,914
Total :	6,584	6,133	5,840	5,684	5,527	5,440	5,409
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	16	15	13	12	11	11	10
Aircraft Parts	36	34	32	32	30	29	28
Ammunition	5	6	4	4	4	4	4
Communication Equipment	75	69	70	72	71	71	71
Missiles	71	64	56	58	58	58	57
Motor Vehicles	7	6	5	5	5	5	6
Shipbuilding	101	111	115	95	98	94	101
Tanks	8	6	5	5	5	6	6
Other Electronic Equipment	7	7	8	8	8	7	7
Other Ordinances	3	2	2	2	2	2	2
Other	1,949	1,816	1,756	1,731	1,671	1,642	1,620
Total :	2,278	2,136	2,066	2,024	1,963	1,930	1,914

Note: numbers may not add due to rounding

**Table 35: Projected Defense Purchases of
269 Water transportation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,850	5,744	5,466	5,335	5,213	5,147	5,145
Indirect Purchases	375	356	356	351	343	337	332
Total :	6,225	6,100	5,821	5,686	5,555	5,484	5,478
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	1	1	1	1	1	1	1
Aircraft Parts	3	3	3	3	2	2	2
Ammunition	1	1	0	0	0	0	0
Communication Equipment	6	5	5	5	5	5	5
Missiles	3	3	2	2	2	2	2
Motor Vehicles	1	1	1	1	1	1	1
Shipbuilding	4	4	4	4	4	3	4
Tanks	1	0	0	0	0	0	0
Other Electronic Equipment	1	1	1	1	1	1	1
Other Ordinances	0	0	0	0	0	0	0
Other	356	338	338	334	326	320	315
Total :	375	356	356	351	343	337	332

Note: numbers may not add due to rounding

**Table 36: Projected Defense Purchases of
135 Primary ferrous metal products**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	37	30	31	29	23	22	22
Indirect Purchases	6,220	5,843	5,628	5,342	5,111	4,976	4,964
Total :	6,257	5,873	5,659	5,371	5,135	4,998	4,986
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	109	100	88	84	74	71	67
Aircraft Parts	333	307	290	285	268	261	253
Ammunition	87	96	72	70	69	69	70
Communication Equipment	231	210	212	215	212	211	210
Missiles	231	207	181	185	184	184	179
Motor Vehicles	261	222	194	199	194	202	206
Shipbuilding	908	989	1,019	841	862	822	886
Tanks	200	151	118	123	136	149	156
Other Electronic Equipment	59	58	61	62	60	59	58
Other Ordinances	63	48	46	43	41	41	41
Other	3,739	3,456	3,347	3,234	3,011	2,906	2,839
Total :	6,219	5,842	5,627	5,342	5,111	4,975	4,963

Note: numbers may not add due to rounding

**Table 37: Projected Defense Purchases of
306 Computer systems design services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,477	5,005	4,929	4,870	4,690	4,588	4,516
Indirect Purchases	771	717	699	685	664	654	651
Total :	6,248	5,722	5,629	5,555	5,354	5,243	5,167
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	9	9	8	7	7	6	6
Aircraft Parts	19	18	17	17	16	16	15
Ammunition	3	3	3	2	2	2	2
Communication Equipment	69	64	64	66	65	65	65
Missiles	33	30	26	27	27	27	27
Motor Vehicles	4	3	3	3	3	3	3
Shipbuilding	39	43	44	37	38	36	39
Tanks	4	3	3	3	3	3	3
Other Electronic Equipment	5	5	6	6	6	6	6
Other Ordinances	2	2	1	1	1	1	1
Other	583	538	525	516	497	488	483
Total :	771	717	699	685	664	654	651

Note: numbers may not add due to rounding

**Table 38: Projected Defense Purchases of
301 Legal services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21	20	19	18	17	17	17
Indirect Purchases	5,827	5,453	5,346	5,308	5,188	5,124	5,087
Total :	5,849	5,473	5,365	5,326	5,205	5,141	5,104
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	94	88	78	74	66	63	61
Aircraft Parts	143	133	127	125	118	116	113
Ammunition	24	27	20	20	20	20	20
Communication Equipment	308	284	288	295	294	294	293
Missiles	323	294	257	265	265	266	261
Motor Vehicles	24	20	18	18	18	19	19
Shipbuilding	225	247	255	211	217	208	224
Tanks	26	20	16	17	18	20	21
Other Electronic Equipment	33	33	35	36	34	34	34
Other Ordinances	13	10	10	9	9	9	9
Other	4,613	4,297	4,243	4,238	4,129	4,075	4,032
Total :	5,827	5,453	5,346	5,308	5,188	5,124	5,087

Note: numbers may not add due to rounding

**Table 39: Projected Defense Purchases of
300 Lessors of nonfinancial intangible assets**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	5,369	5,090	5,007	4,914	4,741	4,674	4,659
Total :	5,370	5,090	5,007	4,915	4,741	4,674	4,660
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	49	45	40	38	34	33	31
Aircraft Parts	118	109	104	103	98	96	93
Ammunition	19	21	16	16	16	16	16
Communication Equipment	343	317	321	328	325	327	326
Missiles	218	198	173	179	179	180	176
Motor Vehicles	27	23	20	21	20	21	22
Shipbuilding	399	439	455	378	389	373	403
Tanks	34	26	20	22	24	26	28
Other Electronic Equipment	42	41	44	45	44	43	43
Other Ordinances	9	7	6	6	6	6	6
Other	4,111	3,862	3,805	3,778	3,606	3,553	3,515
Total :	5,369	5,089	5,006	4,914	4,741	4,674	4,659

Note: numbers may not add due to rounding

**Table 40: Projected Defense Purchases of
201 All other electronic components**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,893	1,871	2,001	2,058	2,013	2,011	1,978
Indirect Purchases	2,672	2,474	2,455	2,457	2,399	2,377	2,361
Total :	4,565	4,345	4,456	4,515	4,412	4,388	4,340
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	13	12	10	10	9	8	8
Aircraft Parts	65	60	57	57	54	53	51
Ammunition	14	16	12	12	12	12	12
Communication Equipment	1,046	961	977	1,005	1,001	1,002	997
Missiles	175	158	138	141	141	142	139
Motor Vehicles	23	20	18	18	17	18	18
Shipbuilding	89	97	100	83	85	81	88
Tanks	10	8	6	6	7	8	8
Other Electronic Equipment	255	250	268	275	268	268	264
Other Ordinances	6	4	4	4	4	4	4
Other	977	888	864	845	801	782	772
Total :	2,672	2,474	2,455	2,457	2,399	2,377	2,361

Note: numbers may not add due to rounding

**Table 41: Projected Defense Purchases of
320 Services to buildings and dwellings**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,313	1,150	1,097	1,039	974	930	916
Indirect Purchases	3,569	3,352	3,281	3,221	3,127	3,076	3,047
Total :	4,882	4,502	4,379	4,260	4,101	4,006	3,963
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	20	19	17	16	14	14	13
Aircraft Parts	48	45	43	42	40	39	38
Ammunition	14	15	11	11	11	11	11
Communication Equipment	108	100	101	104	103	103	103
Missiles	66	60	53	54	54	55	54
Motor Vehicles	14	12	11	11	11	11	11
Shipbuilding	109	120	124	102	105	100	109
Tanks	13	10	8	8	9	10	10
Other Electronic Equipment	16	16	17	17	17	17	16
Other Ordinances	5	4	4	4	4	4	4
Other	3,154	2,951	2,894	2,851	2,760	2,712	2,678
Total :	3,569	3,351	3,281	3,221	3,127	3,076	3,046

Note: numbers may not add due to rounding

**Table 42: Projected Defense Purchases of
305 Custom computer programming services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,204	3,802	3,640	3,512	3,330	3,236	3,204
Indirect Purchases	542	504	489	487	466	461	455
Total :	4,746	4,306	4,129	3,999	3,796	3,697	3,659
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	15	14	12	11	10	10	9
Aircraft Parts	33	30	29	29	27	27	26
Ammunition	26	29	22	22	21	22	22
Communication Equipment	115	106	107	109	108	108	108
Missiles	20	18	16	17	16	17	16
Motor Vehicles	1	1	1	1	1	1	1
Shipbuilding	5	5	5	5	5	4	5
Tanks	2	1	1	1	1	1	1
Other Electronic Equipment	9	9	9	9	9	9	8
Other Ordinances	19	15	14	14	13	13	13
Other	296	275	271	270	254	249	245
Total :	542	504	489	487	466	461	455

Note: numbers may not add due to rounding

**Table 43: Projected Defense Purchases of
275 Warehousing and storage**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,921	2,758	2,606	2,511	2,416	2,372	2,368
Indirect Purchases	1,552	1,453	1,399	1,362	1,317	1,294	1,290
Total :	4,473	4,212	4,005	3,873	3,733	3,666	3,658
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	18	17	15	14	13	12	12
Aircraft Parts	52	48	46	46	43	42	41
Ammunition	12	13	10	10	9	10	10
Communication Equipment	108	100	101	104	103	103	103
Missiles	78	71	63	65	65	65	64
Motor Vehicles	9	8	7	7	7	7	7
Shipbuilding	83	91	94	78	80	76	83
Tanks	13	10	7	8	9	10	10
Other Electronic Equipment	15	15	16	16	16	16	15
Other Ordinances	5	4	4	4	4	4	4
Other	1,158	1,077	1,036	1,012	970	950	942
Total :	1,552	1,453	1,399	1,362	1,317	1,294	1,289

Note: numbers may not add due to rounding

**Table 44: Projected Defense Purchases of
324 Waste management and remediation services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3,175	2,631	2,397	2,141	1,951	1,806	1,776
Indirect Purchases	1,823	1,667	1,601	1,541	1,478	1,440	1,429
Total :	4,998	4,298	3,998	3,682	3,429	3,245	3,206
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	9	8	7	7	6	6	5
Aircraft Parts	23	21	20	20	19	18	18
Ammunition	8	9	7	7	7	7	7
Communication Equipment	35	32	33	33	33	33	33
Missiles	25	23	20	21	21	21	21
Motor Vehicles	7	6	5	5	5	5	6
Shipbuilding	62	68	70	58	60	57	62
Tanks	6	5	4	4	4	5	5
Other Electronic Equipment	6	6	7	7	7	7	7
Other Ordinances	3	2	2	2	2	2	2
Other	1,639	1,486	1,425	1,377	1,315	1,278	1,264
Total :	1,823	1,667	1,601	1,541	1,478	1,440	1,429

Note: numbers may not add due to rounding

**Table 45: Projected Defense Purchases of
351 Postal service**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,319	2,010	1,937	1,921	1,854	1,823	1,810
Indirect Purchases	2,293	2,143	2,061	2,017	1,954	1,922	1,910
Total :	4,612	4,153	3,998	3,938	3,808	3,745	3,720
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	8	8	7	7	6	6	5
Aircraft Parts	26	24	23	23	21	21	20
Ammunition	4	5	3	3	3	3	3
Communication Equipment	49	45	46	47	47	47	46
Missiles	33	30	26	27	27	27	27
Motor Vehicles	6	5	4	4	4	5	5
Shipbuilding	38	41	43	35	36	35	37
Tanks	6	4	3	4	4	4	5
Other Electronic Equipment	6	6	7	7	7	7	7
Other Ordinances	2	2	2	1	1	1	1
Other	2,115	1,973	1,897	1,859	1,797	1,767	1,754
Total :	2,293	2,143	2,061	2,017	1,954	1,922	1,910

Note: numbers may not add due to rounding

**Table 46: Projected Defense Purchases of
234 Motor vehicle parts**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,099	992	926	916	849	848	848
Indirect Purchases	3,449	3,175	3,003	2,936	2,838	2,807	2,791
Total :	4,548	4,167	3,928	3,853	3,687	3,655	3,639
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	16	15	13	12	11	11	10
Aircraft Parts	42	39	37	36	34	34	33
Ammunition	5	6	4	4	4	4	4
Communication Equipment	89	82	84	86	86	86	85
Missiles	38	35	30	31	31	31	31
Motor Vehicles	228	193	167	174	171	179	184
Shipbuilding	108	117	120	98	100	95	101
Tanks	6	5	4	4	4	5	5
Other Electronic Equipment	16	16	17	17	16	16	16
Other Ordinances	4	3	3	2	2	2	2
Other	2,896	2,665	2,525	2,471	2,378	2,345	2,320
Total :	3,448	3,175	3,003	2,936	2,838	2,807	2,791

Note: numbers may not add due to rounding

**Table 47: Projected Defense Purchases of
280 Software publishers**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,182	2,013	1,968	1,960	1,906	1,889	1,889
Indirect Purchases	2,119	1,965	1,927	1,920	1,884	1,869	1,864
Total :	4,301	3,979	3,896	3,880	3,790	3,757	3,753
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	2	2	1	1	1	1	1
Aircraft Parts	12	11	11	11	10	10	10
Ammunition	6	7	5	5	5	5	5
Communication Equipment	996	923	934	960	956	957	952
Missiles	192	175	155	162	163	165	162
Motor Vehicles	8	7	5	6	6	7	7
Shipbuilding	122	134	139	115	119	114	123
Tanks	2	1	1	1	1	1	1
Other Electronic Equipment	21	21	23	23	21	21	20
Other Ordinances	1	1	1	1	1	1	1
Other	757	684	652	635	601	587	581
Total :	2,119	1,965	1,927	1,920	1,884	1,869	1,864

Note: numbers may not add due to rounding

**Table 48: Projected Defense Purchases of
296 Automotive equipment rental and leasing**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,882	1,748	1,651	1,604	1,564	1,542	1,536
Indirect Purchases	2,369	2,203	2,142	2,099	2,031	1,998	1,983
Total :	4,251	3,951	3,793	3,704	3,594	3,540	3,519
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	22	20	18	17	15	15	14
Aircraft Parts	66	61	58	58	54	53	52
Ammunition	13	15	11	11	11	11	11
Communication Equipment	142	130	132	135	134	135	134
Missiles	87	79	69	71	71	72	71
Motor Vehicles	15	13	11	12	11	12	12
Shipbuilding	102	112	116	96	98	94	101
Tanks	15	11	9	9	10	11	12
Other Electronic Equipment	22	21	23	23	22	22	22
Other Ordinances	6	5	5	4	4	4	4
Other	1,878	1,734	1,690	1,662	1,597	1,568	1,550
Total :	2,369	2,203	2,142	2,099	2,030	1,998	1,983

Note: numbers may not add due to rounding

**Table 49: Projected Defense Purchases of
302 Accounting, tax preparation, bookkeeping, and payroll services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	335	313	318	312	282	272	270
Indirect Purchases	3,567	3,314	3,223	3,158	3,060	3,013	2,993
Total :	3,902	3,627	3,541	3,470	3,342	3,285	3,263
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	31	29	26	24	22	21	20
Aircraft Parts	68	63	60	59	56	55	53
Ammunition	12	14	10	10	10	10	10
Communication Equipment	158	146	148	151	150	150	150
Missiles	109	99	86	89	89	90	88
Motor Vehicles	15	13	11	12	11	12	12
Shipbuilding	143	157	162	134	138	132	143
Tanks	20	15	12	13	14	15	16
Other Electronic Equipment	19	19	20	21	20	20	20
Other Ordinances	7	5	5	5	4	4	4
Other	2,984	2,755	2,683	2,640	2,545	2,504	2,478
Total :	3,566	3,314	3,223	3,158	3,060	3,013	2,993

Note: numbers may not add due to rounding

**Table 50: Projected Defense Purchases of
321 Other support services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,772	1,556	1,529	1,538	1,491	1,465	1,458
Indirect Purchases	1,752	1,634	1,576	1,551	1,512	1,497	1,486
Total :	3,524	3,190	3,105	3,088	3,003	2,961	2,944
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	22	20	18	17	15	15	14
Aircraft Parts	50	46	44	44	41	40	39
Ammunition	7	8	6	6	6	6	6
Communication Equipment	107	99	100	103	103	103	102
Missiles	212	193	169	174	173	174	171
Motor Vehicles	6	5	4	4	4	4	5
Shipbuilding	77	85	88	73	75	71	77
Tanks	7	6	4	5	5	6	6
Other Electronic Equipment	7	7	7	7	7	7	7
Other Ordinances	5	4	3	3	3	3	3
Other	1,253	1,163	1,133	1,116	1,080	1,068	1,056
Total :	1,752	1,634	1,576	1,551	1,512	1,497	1,486

Note: numbers may not add due to rounding

**Table 51: Projected Defense Purchases of
239 Propulsion units and parts for space vehicles and guided missiles**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,870	1,778	1,660	1,917	2,072	2,132	2,077
Indirect Purchases	1,708	1,558	1,377	1,425	1,431	1,442	1,416
Total :	3,578	3,336	3,038	3,342	3,503	3,573	3,493
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	11	10	9	9	9	9	8
Ammunition	4	5	4	4	4	4	4
Communication Equipment	28	26	27	27	27	27	27
Missiles	1,614	1,471	1,294	1,342	1,350	1,362	1,337
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	1	1	1	1	1	1	1
Tanks	3	2	2	2	2	3	3
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	6	5	5	5	4	4	4
Other	39	37	36	35	34	33	32
Total :	1,708	1,558	1,377	1,425	1,431	1,442	1,416

Note: numbers may not add due to rounding

**Table 52: Projected Defense Purchases of
92 Printing**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,298	1,922	1,844	1,831	1,771	1,741	1,729
Indirect Purchases	1,269	1,179	1,147	1,131	1,099	1,083	1,075
Total :	3,566	3,102	2,991	2,961	2,870	2,824	2,804
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	8	7	6	6	5	5	5
Aircraft Parts	18	17	16	16	15	15	14
Ammunition	3	4	3	3	3	3	3
Communication Equipment	46	43	43	44	44	44	44
Missiles	39	35	31	32	32	32	31
Motor Vehicles	4	3	3	3	3	3	3
Shipbuilding	30	33	34	28	29	28	30
Tanks	4	3	2	3	3	3	3
Other Electronic Equipment	5	5	6	6	6	6	5
Other Ordinances	2	1	1	1	1	1	1
Other	1,109	1,028	1,001	989	958	944	934
Total :	1,268	1,179	1,147	1,131	1,099	1,083	1,075

Note: numbers may not add due to rounding

**Table 53: Projected Defense Purchases of
266 Retail trade**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,189	1,082	1,101	1,145	1,105	1,096	1,097
Indirect Purchases	1,941	1,796	1,710	1,659	1,585	1,551	1,535
Total :	3,129	2,878	2,811	2,804	2,690	2,647	2,633
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	3	3	3	3	2	2	2
Aircraft Parts	12	11	10	10	10	9	9
Ammunition	6	7	5	5	5	5	5
Communication Equipment	27	25	25	26	25	25	25
Missiles	12	11	10	10	10	10	10
Motor Vehicles	26	22	19	19	19	20	21
Shipbuilding	22	24	25	21	21	20	22
Tanks	3	2	1	2	2	2	2
Other Electronic Equipment	5	5	6	6	5	5	5
Other Ordinances	1	1	1	1	1	1	1
Other	1,824	1,686	1,606	1,558	1,484	1,451	1,434
Total :	1,941	1,796	1,710	1,659	1,585	1,551	1,535

Note: numbers may not add due to rounding

**Table 54: Projected Defense Purchases of
200 Semiconductors and electron tubes**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	97	97	99	91	79	75	73
Indirect Purchases	2,899	2,682	2,636	2,643	2,583	2,555	2,532
Total :	2,996	2,779	2,735	2,735	2,662	2,630	2,605
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	23	21	19	18	16	15	15
Aircraft Parts	78	72	69	68	64	63	62
Ammunition	17	19	14	14	14	14	14
Communication Equipment	961	883	899	930	927	927	921
Missiles	339	307	269	275	274	276	271
Motor Vehicles	21	18	16	16	16	16	17
Shipbuilding	105	115	119	98	101	96	104
Tanks	13	10	8	8	9	10	10
Other Electronic Equipment	263	260	277	289	286	285	281
Other Ordinances	8	6	6	5	5	5	5
Other	1,072	970	941	921	871	847	832
Total :	2,899	2,681	2,636	2,643	2,583	2,555	2,532

Note: numbers may not add due to rounding

**Table 55: Projected Defense Purchases of
326 Junior colleges, colleges, universities, and professional schools**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,965	2,674	2,608	2,493	2,332	2,206	2,153
Indirect Purchases	115	104	101	99	96	94	93
Total :	3,079	2,778	2,709	2,593	2,428	2,300	2,246
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	1	1	1	1	1	1	1
Ammunition	0	0	0	0	0	0	0
Communication Equipment	2	1	1	2	1	1	1
Missiles	1	1	1	1	1	1	1
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	1	1	1	1	1	1	1
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	109	99	95	94	91	89	88
Total :	115	104	101	99	96	94	93

Note: numbers may not add due to rounding

**Table 56: Projected Defense Purchases of
286 Data processing, hosting and internet service providers**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	256	228	221	216	206	200	199
Indirect Purchases	2,693	2,521	2,459	2,396	2,325	2,287	2,275
Total :	2,949	2,749	2,680	2,611	2,530	2,486	2,474
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	31	29	25	24	21	21	20
Aircraft Parts	68	64	60	60	56	55	54
Ammunition	12	13	10	10	9	9	10
Communication Equipment	189	175	177	181	179	180	179
Missiles	101	92	80	83	83	84	82
Motor Vehicles	13	11	9	10	9	10	10
Shipbuilding	184	202	209	173	178	170	184
Tanks	17	13	10	10	11	13	13
Other Electronic Equipment	18	17	19	19	18	18	18
Other Ordinances	7	5	5	5	5	5	5
Other	2,054	1,901	1,854	1,821	1,753	1,722	1,700
Total :	2,693	2,521	2,459	2,395	2,325	2,287	2,275

Note: numbers may not add due to rounding

**Table 57: Projected Defense Purchases of
29 Natural gas distribution**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	829	716	688	678	652	638	633
Indirect Purchases	2,105	1,964	1,903	1,851	1,757	1,719	1,706
Total :	2,934	2,680	2,591	2,530	2,409	2,358	2,339
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	19	18	16	15	13	13	12
Aircraft Parts	60	55	53	52	49	48	47
Ammunition	24	27	20	20	20	20	20
Communication Equipment	62	56	57	58	57	57	57
Missiles	47	42	37	38	38	39	38
Motor Vehicles	18	15	13	13	13	14	14
Shipbuilding	69	75	78	64	65	62	67
Tanks	14	11	9	9	10	11	11
Other Electronic Equipment	12	12	13	13	12	12	12
Other Ordinances	7	6	5	5	5	5	5
Other	1,773	1,647	1,603	1,564	1,474	1,438	1,423
Total :	2,105	1,964	1,903	1,851	1,757	1,719	1,706

Note: numbers may not add due to rounding

**Table 58: Projected Defense Purchases of
268 Rail transportation**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,438	1,356	1,269	1,224	1,195	1,178	1,177
Indirect Purchases	1,462	1,349	1,300	1,265	1,212	1,187	1,179
Total :	2,899	2,704	2,569	2,489	2,407	2,365	2,355
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	11	11	9	9	8	8	7
Aircraft Parts	60	55	53	52	49	48	47
Ammunition	11	12	9	9	9	9	9
Communication Equipment	37	34	34	35	34	34	34
Missiles	28	26	23	23	23	23	23
Motor Vehicles	19	16	14	14	14	15	15
Shipbuilding	62	67	70	57	59	56	60
Tanks	14	10	8	9	9	10	11
Other Electronic Equipment	9	9	10	10	10	9	9
Other Ordinances	5	4	4	4	3	3	3
Other	1,204	1,104	1,067	1,043	993	971	960
Total :	1,461	1,348	1,300	1,264	1,212	1,187	1,178

Note: numbers may not add due to rounding

**Table 59: Projected Defense Purchases of
152 Ammunition**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,982	3,327	2,511	2,474	2,429	2,470	2,503
Indirect Purchases	17	17	13	13	13	14	14
Total :	3,000	3,344	2,524	2,487	2,442	2,483	2,518
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	16	16	12	12	12	13	13
Communication Equipment	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	0	0	0	0	0
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total :	17	17	13	13	13	14	14

Note: numbers may not add due to rounding

**Table 60: Projected Defense Purchases of
289 Nondepository credit intermediation and related activities**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	7	8	8	7	7
Indirect Purchases	2,759	2,575	2,494	2,434	2,358	2,319	2,307
Total :	2,767	2,582	2,502	2,442	2,366	2,327	2,315
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	24	22	19	18	16	16	15
Aircraft Parts	62	57	54	54	51	50	48
Ammunition	10	11	9	8	8	8	9
Communication Equipment	108	99	101	103	102	102	102
Missiles	91	83	73	75	75	75	74
Motor Vehicles	15	12	11	11	11	11	12
Shipbuilding	140	154	159	132	136	130	141
Tanks	16	12	9	10	11	12	12
Other Electronic Equipment	15	15	16	16	16	15	15
Other Ordinances	5	4	4	4	4	4	4
Other	2,273	2,104	2,039	2,002	1,929	1,895	1,876
Total :	2,759	2,574	2,494	2,434	2,358	2,319	2,307

Note: numbers may not add due to rounding

**Table 61: Projected Defense Purchases of
292 Insurance agencies, brokerages, and related activities**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	17	16	14	13	12	11	11
Indirect Purchases	2,676	2,568	2,467	2,414	2,362	2,337	2,324
Total :	2,694	2,584	2,481	2,427	2,374	2,348	2,336
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	8	7	7	6	6	5	5
Aircraft Parts	21	20	19	19	18	17	17
Ammunition	4	4	3	3	3	3	3
Communication Equipment	42	38	39	40	39	39	39
Missiles	33	30	26	27	27	27	26
Motor Vehicles	5	4	4	4	4	4	4
Shipbuilding	39	42	44	36	37	36	38
Tanks	5	4	3	3	3	4	4
Other Electronic Equipment	6	5	6	6	6	6	6
Other Ordinances	2	1	1	1	1	1	1
Other	2,513	2,412	2,316	2,269	2,219	2,195	2,181
Total :	2,676	2,568	2,467	2,414	2,362	2,337	2,324

Note: numbers may not add due to rounding

**Table 62: Projected Defense Purchases of
318 Business support services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	191	171	157	154	147	142	139
Indirect Purchases	2,557	2,388	2,309	2,262	2,201	2,170	2,157
Total :	2,748	2,559	2,466	2,416	2,348	2,312	2,297
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	43	40	35	34	30	29	28
Aircraft Parts	80	74	71	70	66	65	63
Ammunition	11	13	10	9	9	9	9
Communication Equipment	155	143	146	149	149	149	148
Missiles	307	279	244	251	251	252	248
Motor Vehicles	10	9	7	8	8	8	8
Shipbuilding	162	178	184	153	157	150	163
Tanks	13	10	8	8	9	10	11
Other Electronic Equipment	12	12	13	13	13	13	12
Other Ordinances	7	6	5	5	5	5	5
Other	1,755	1,624	1,586	1,562	1,505	1,480	1,463
Total :	2,557	2,388	2,309	2,262	2,201	2,170	2,157

Note: numbers may not add due to rounding

**Table 63: Projected Defense Purchases of
299 Commercial and industrial machinery and equipment rental and leasing**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	211	195	189	182	169	162	161
Indirect Purchases	2,489	2,309	2,230	2,186	2,111	2,071	2,050
Total :	2,700	2,504	2,419	2,368	2,280	2,233	2,211
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	11	10	9	9	8	7	7
Aircraft Parts	36	34	32	32	30	29	28
Ammunition	7	8	6	6	6	6	6
Communication Equipment	66	61	62	63	63	63	63
Missiles	41	38	33	34	34	34	34
Motor Vehicles	8	7	6	6	6	7	7
Shipbuilding	53	57	59	49	51	48	52
Tanks	8	6	5	5	5	6	6
Other Electronic Equipment	10	10	11	11	11	11	10
Other Ordinances	3	3	2	2	2	2	2
Other	2,244	2,076	2,004	1,969	1,895	1,857	1,834
Total :	2,488	2,309	2,230	2,186	2,111	2,071	2,050

Note: numbers may not add due to rounding

**Table 64: Projected Defense Purchases of
102 Plastics materials and resins**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	31	28	28	28	27	27	27
Indirect Purchases	2,633	2,470	2,375	2,285	2,171	2,123	2,108
Total :	2,665	2,498	2,403	2,314	2,199	2,150	2,135
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	9	8	7	7	6	6	6
Aircraft Parts	79	73	69	68	64	63	61
Ammunition	48	53	40	39	39	39	40
Communication Equipment	112	101	102	104	103	103	102
Missiles	44	40	35	36	35	36	35
Motor Vehicles	34	29	26	27	25	26	26
Shipbuilding	192	209	215	177	181	172	185
Tanks	37	28	22	23	26	28	30
Other Electronic Equipment	38	37	39	40	39	38	38
Other Ordinances	7	5	5	4	4	4	4
Other	2,033	1,886	1,813	1,760	1,650	1,609	1,583
Total :	2,633	2,470	2,374	2,285	2,171	2,123	2,108

Note: numbers may not add due to rounding

**Table 65: Projected Defense Purchases of
119 Other plastics products**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	52	49	48	48	45	44	44
Indirect Purchases	2,539	2,384	2,307	2,252	2,168	2,121	2,101
Total :	2,592	2,432	2,354	2,300	2,213	2,165	2,145
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	15	14	13	12	11	10	10
Aircraft Parts	281	262	249	247	233	229	223
Ammunition	22	24	18	18	18	18	18
Communication Equipment	151	138	139	141	140	140	140
Missiles	71	64	56	58	58	58	57
Motor Vehicles	27	24	21	21	20	21	21
Shipbuilding	156	171	177	147	151	144	156
Tanks	23	17	14	14	16	18	19
Other Electronic Equipment	19	19	20	20	20	20	19
Other Ordinances	10	7	7	7	6	6	6
Other	1,765	1,643	1,593	1,566	1,495	1,456	1,432
Total :	2,539	2,384	2,307	2,252	2,168	2,121	2,101

Note: numbers may not add due to rounding

**Table 66: Projected Defense Purchases of
107 Pharmaceuticals and medicines**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	785	743	1,011	982	545	444	434
Indirect Purchases	1,427	1,300	1,341	1,367	1,272	1,245	1,240
Total :	2,213	2,043	2,352	2,349	1,817	1,690	1,674
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	1	1	1	1	1	1	1
Ammunition	0	0	0	0	0	0	0
Communication Equipment	2	2	2	2	2	2	2
Missiles	1	1	1	1	1	1	1
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	1	2	2	1	1	1	1
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	7	5	5	5	4	4	4
Other	1,414	1,288	1,330	1,356	1,261	1,235	1,230
Total :	1,427	1,300	1,341	1,367	1,272	1,245	1,240

Note: numbers may not add due to rounding

**Table 67: Projected Defense Purchases of
274 Couriers and messengers**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	8	8	8	7	7	7
Indirect Purchases	2,580	2,420	2,321	2,265	2,194	2,157	2,145
Total :	2,590	2,428	2,329	2,273	2,202	2,164	2,152
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	10	9	8	8	7	6	6
Aircraft Parts	32	30	29	28	27	26	26
Ammunition	5	6	4	4	4	4	4
Communication Equipment	54	50	50	52	51	52	51
Missiles	37	33	29	30	30	30	30
Motor Vehicles	8	6	6	6	6	6	6
Shipbuilding	44	48	49	41	42	40	43
Tanks	7	5	4	4	5	5	5
Other Electronic Equipment	8	8	9	9	9	9	9
Other Ordinances	3	2	2	2	2	2	2
Other	2,373	2,222	2,130	2,082	2,012	1,977	1,963
Total :	2,580	2,420	2,321	2,265	2,194	2,157	2,145

Note: numbers may not add due to rounding

**Table 68: Projected Defense Purchases of
304 Specialized design services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	54	47	43	39	36	34	33
Indirect Purchases	2,543	2,374	2,271	2,237	2,187	2,169	2,153
Total :	2,597	2,420	2,314	2,276	2,223	2,203	2,186
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	53	49	44	42	37	35	34
Aircraft Parts	116	108	103	102	96	94	92
Ammunition	14	16	12	12	12	12	12
Communication Equipment	207	192	196	201	200	201	200
Missiles	569	517	452	465	464	467	458
Motor Vehicles	10	8	7	8	7	8	8
Shipbuilding	155	170	175	145	150	143	155
Tanks	11	8	7	7	8	8	9
Other Electronic Equipment	11	11	11	12	11	11	11
Other Ordinances	11	8	8	7	7	7	7
Other	1,387	1,285	1,256	1,238	1,195	1,183	1,168
Total :	2,543	2,373	2,271	2,237	2,187	2,169	2,153

Note: numbers may not add due to rounding

**Table 69: Projected Defense Purchases of
327 Other educational services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,429	2,227	2,181	2,137	2,077	2,030	2,000
Indirect Purchases	71	64	62	61	59	57	57
Total :	2,500	2,291	2,243	2,197	2,136	2,088	2,057
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	1	1	1	1	1	1	1
Ammunition	0	0	0	0	0	0	0
Communication Equipment	2	1	1	1	1	1	1
Missiles	1	1	1	1	1	1	1
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	1	1	1	1	1	1	1
Tanks	0	0	0	0	0	0	0
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	65	59	57	56	54	52	52
Total :	71	64	62	61	59	57	57

Note: numbers may not add due to rounding

**Table 70: Projected Defense Purchases of
309 Environmental and other technical consulting services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,383	1,203	1,145	1,093	1,034	991	975
Indirect Purchases	1,155	1,082	1,058	1,035	1,009	997	991
Total :	2,538	2,285	2,203	2,128	2,043	1,988	1,967
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	16	15	13	12	11	11	10
Aircraft Parts	15	14	13	13	12	12	12
Ammunition	3	3	3	3	3	3	3
Communication Equipment	40	37	37	38	38	38	38
Missiles	33	30	26	27	27	27	26
Motor Vehicles	3	3	2	2	2	2	2
Shipbuilding	62	69	71	59	61	58	63
Tanks	5	4	3	3	4	4	4
Other Electronic Equipment	4	4	5	5	4	4	4
Other Ordinances	2	1	1	1	1	1	1
Other	972	903	884	872	846	837	827
Total :	1,155	1,082	1,058	1,035	1,009	997	991

Note: numbers may not add due to rounding

**Table 71: Projected Defense Purchases of
147 Plate work and fabricated structural products**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	184	169	192	178	122	104	99
Indirect Purchases	2,175	2,063	1,977	1,899	1,832	1,791	1,781
Total :	2,359	2,232	2,169	2,077	1,953	1,895	1,880
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	12	11	10	9	8	8	8
Aircraft Parts	247	230	219	217	205	201	195
Ammunition	13	15	11	11	11	11	11
Communication Equipment	23	21	21	21	21	21	21
Missiles	120	109	95	98	97	98	96
Motor Vehicles	32	29	26	26	25	25	25
Shipbuilding	186	204	211	175	180	172	186
Tanks	12	9	7	8	8	9	10
Other Electronic Equipment	5	5	5	6	5	5	5
Other Ordinances	7	5	5	5	5	5	5
Other	1,518	1,425	1,366	1,323	1,266	1,236	1,219
Total :	2,174	2,063	1,977	1,899	1,832	1,791	1,781

Note: numbers may not add due to rounding

**Table 72: Projected Defense Purchases of
316 Office administrative services**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	460	395	376	357	335	319	314
Indirect Purchases	1,956	1,826	1,780	1,747	1,702	1,679	1,668
Total :	2,416	2,221	2,157	2,105	2,037	1,999	1,982
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	16	15	13	12	11	10	10
Aircraft Parts	21	19	19	18	17	17	16
Ammunition	4	4	3	3	3	3	3
Communication Equipment	57	53	53	55	54	54	54
Missiles	43	39	34	35	35	35	35
Motor Vehicles	4	4	3	3	3	3	3
Shipbuilding	68	75	78	64	66	63	69
Tanks	6	4	3	4	4	4	5
Other Electronic Equipment	6	6	6	6	6	6	6
Other Ordinances	2	2	2	2	1	1	1
Other	1,730	1,606	1,567	1,545	1,500	1,480	1,465
Total :	1,956	1,826	1,780	1,747	1,702	1,679	1,668

Note: numbers may not add due to rounding

**Table 73: Projected Defense Purchases of
244 Military armored vehicles, tanks, and tank components**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,941	2,358	1,955	2,090	2,277	2,498	2,623
Indirect Purchases	112	86	68	72	79	87	92
Total :	3,053	2,444	2,023	2,162	2,357	2,585	2,715
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	0	0	0	0	0	0	0
Aircraft Parts	0	0	0	0	0	0	0
Ammunition	0	0	0	0	0	0	0
Communication Equipment	0	0	0	0	0	0	0
Missiles	0	0	0	0	0	0	0
Motor Vehicles	0	0	0	0	0	0	0
Shipbuilding	0	0	0	0	0	0	0
Tanks	111	85	66	70	78	86	90
Other Electronic Equipment	0	0	0	0	0	0	0
Other Ordinances	0	0	0	0	0	0	0
Other	1	1	1	1	1	1	1
Total :	112	86	68	72	79	87	92

Note: numbers may not add due to rounding

**Table 74: Projected Defense Purchases of
101 Other basic organic chemicals**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13	12	11	11	10	9	9
Indirect Purchases	2,212	2,062	2,008	1,945	1,832	1,792	1,776
Total :	2,225	2,073	2,019	1,955	1,842	1,801	1,786
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	8	7	7	6	5	5	5
Aircraft Parts	42	39	37	36	34	33	32
Ammunition	27	30	23	22	22	22	22
Communication Equipment	67	61	62	63	62	62	61
Missiles	90	82	72	74	74	75	73
Motor Vehicles	24	20	18	18	18	18	18
Shipbuilding	104	112	116	95	97	92	99
Tanks	24	18	14	15	16	18	19
Other Electronic Equipment	19	19	20	20	19	19	18
Other Ordinances	6	5	4	4	4	4	4
Other	1,800	1,668	1,635	1,590	1,481	1,444	1,424
Total :	2,212	2,061	2,008	1,944	1,832	1,792	1,776

Note: numbers may not add due to rounding

**Table 75: Projected Defense Purchases of
184 Other engine equipment**

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	91	78	77	75	63	60	59
Indirect Purchases	1,899	1,935	1,925	1,699	1,698	1,645	1,721
Total :	1,990	2,013	2,002	1,775	1,761	1,705	1,779
INDIRECT DEFENSE PURCHASES BY PURCHASING SECTOR							
Aircraft Engines	1	1	1	1	1	0	0
Aircraft Parts	2	2	2	2	2	2	2
Ammunition	1	1	0	0	0	0	0
Communication Equipment	6	5	5	5	5	5	5
Missiles	3	2	2	2	2	2	2
Motor Vehicles	9	8	7	8	8	8	8
Shipbuilding	1,095	1,203	1,243	1,032	1,061	1,013	1,096
Tanks	4	3	2	2	2	3	3
Other Electronic Equipment	1	1	1	1	1	1	1
Other Ordinances	3	2	2	2	2	2	2
Other	776	708	659	644	615	609	602
Total :	1,899	1,935	1,925	1,699	1,698	1,645	1,721

Note: numbers may not add due to rounding

SECTION IV: PROJECTIONS FOR INDIVIDUAL STATES (RDEPPS)

State Projections

The tables in this section give state-level estimates of defense and defense-related expenditures in calendar years 2014 through 2020. A separate table is provided for each of the 50 states and the District of Columbia; an additional table is provided for the United States as a whole. The tables are divided into two sections. The first section of each table presents estimates of direct defense purchases and pay and of indirect defense purchases for each year of the projection period (for purposes of comparison, projections of nondefense expenditures and of total output—total economic activity—also are provided). The second section provides estimates of the dollar value of direct and indirect purchases from the five industrial sectors projected to lead in defense sales in the state, and the five projected to lead in indirect sales stemming from DoD purchases, during the forecast period.

The industrial *sectors* represented in the tables are aggregates of the *industries* covered in Section II. Industrial projections are made for 360 industries. For purposes of the state-level reports, these are grouped into 110 industrial sectors. For example, industrial sector 54, “Aerospace products and parts,” used in the state tables, includes five industries: industry 235, “Aircraft”; industry 236, “Aircraft engines and engine parts”; industry 237, “Other aircraft parts and auxiliary equipment”; industry 238, “Guided Missiles and Space Vehicles”; and industry 239, “Propulsion units and parts for space vehicles and guided missiles.”

TABLE III - 1 Alabama Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	17,357	17,132	16,899	16,380	16,007	15,771	15,722
Indirect Defense Purchases Resulting from Direct Purchases	8,243	7,735	7,531	7,344	7,080	6,939	6,865
Induced Defense Purchases Resulting from Direct Pay	2,612	2,788	2,727	2,659	2,637	2,634	2,635
Total Nondefense Expenditures	449,450	459,064	472,561	483,644	495,540	508,388	520,513
Total Output	478,403	487,460	500,442	510,735	521,955	534,416	546,416
General government industry	4,595	5,043	5,015	4,944	4,929	4,950	4,968
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Professional, scientific and technical services	6,072	5,773	5,712	5,590	5,434	5,340	5,258
General government industry	4,595	5,043	5,015	4,944	4,929	4,950	4,968
Ship and boat building	1,563	1,625	1,620	1,413	1,421	1,374	1,447
Administrative and support services	988	897	867	822	775	743	725
Aerospace products and parts	596	554	554	560	528	508	492
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	2,560	2,392	2,325	2,255	2,162	2,101	2,082
Administrative and support services	1,741	1,684	1,671	1,638	1,596	1,577	1,548
Nonferrous metals	386	360	341	333	320	315	312
Iron and steel	384	356	342	323	308	299	298
Fabricated metal products	195	181	171	164	157	153	151

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Note: Numbers may not add to totals due to roundings.

TABLE III - 2 Alaska Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	4,667	4,496	4,358	4,249	4,149	4,101	4,090
Indirect Defense Purchases Resulting from Direct Purchases	2,194	2,057	2,016	2,001	1,924	1,898	1,885
Induced Defense Purchases Resulting from Direct Pay	1,147	1,218	1,190	1,160	1,150	1,148	1,149
Total Nondefense Expenditures	131,662	135,214	139,914	144,267	148,332	152,591	156,312
Total Output	140,314	143,635	148,114	152,296	156,162	160,340	164,035
General government industry	2,759	2,786	2,723	2,678	2,661	2,664	2,669

LARGEST PURCHASES BY INDUSTRIAL SECTORS**Total Direct Expenditures (Purchases and Pay)**

General government industry	2,759	2,786	2,723	2,678	2,661	2,664	2,669
Administrative and support services	343	298	281	266	251	240	237
Maintenance and repair construction	319	283	269	256	242	233	230
Professional, scientific and technical services	152	142	137	132	127	123	122
Waste management and remediation	149	123	112	100	91	84	83
Indirect Defense Purchases Resulting from Direct Purchases							
Crude oil extraction	703	677	679	692	663	660	655
Administrative and support services	605	560	541	531	517	509	507
Pipeline transportation	129	119	116	113	106	104	103
Waste management and remediation	85	78	75	72	69	67	66
Professional, scientific and technical services	64	59	56	53	50	49	48

Note: Numbers may not add to totals due to roundings.

TABLE III - 3 Arizona Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	17,344	16,586	16,189	16,427	16,256	16,235	16,109
Indirect Defense Purchases Resulting from Direct Purchases	5,083	4,730	4,608	4,562	4,448	4,406	4,373
Induced Defense Purchases Resulting from Direct Pay	2,228	2,390	2,346	2,293	2,277	2,278	2,281
Total Nondefense Expenditures	442,157	454,234	470,083	483,521	497,077	511,814	526,065
Total Output	467,101	478,233	493,513	507,055	520,305	534,971	549,074
General government industry	3,725	3,854	3,825	3,799	3,794	3,814	3,833
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Aerospace products and parts	4,439	4,227	3,986	4,197	4,184	4,154	4,065
General government industry	3,724	3,854	3,825	3,799	3,794	3,814	3,832
Professional, scientific and technical services	3,004	2,871	2,874	2,897	2,911	2,961	2,923
Offices of physicians, dentists, and other health practioners	2,859	2,586	2,584	2,682	2,647	2,634	2,637
Air transportation	312	289	276	270	263	259	257
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	1,266	1,190	1,170	1,169	1,158	1,165	1,157
Aerospace products and parts	287	260	255	268	266	266	263
Wholesale trade	258	241	234	229	221	217	215
Real estate	252	235	229	226	220	217	215
Management of companies and enterprices	242	226	219	215	207	204	202

Note: Numbers may not add to totals due to roundings.

TABLE III - 4 Arkansas Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	3,182	3,110	3,027	2,987	2,918	2,899	2,899
Indirect Defense Purchases Resulting from Direct Purchases	2,402	2,231	2,159	2,112	2,033	1,996	1,980
Induced Defense Purchases Resulting from Direct Pay	1,018	1,089	1,068	1,043	1,035	1,034	1,035
Total Nondefense Expenditures	219,356	224,527	232,250	238,759	245,269	252,382	259,078
Total Output	226,046	231,041	238,584	244,976	251,327	258,383	265,064
General government industry	1,442	1,494	1,484	1,475	1,474	1,482	1,490
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,442	1,494	1,484	1,475	1,474	1,482	1,490
Petroleum and coal products	241	228	223	215	197	191	190
Truck transportation	222	210	197	190	185	182	182
Maintenance and repair construction	188	168	159	151	143	138	136
Fabricated metal products	177	181	149	146	146	149	150
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	318	296	286	282	271	267	265
Nonferrous metals	154	143	136	133	127	125	124
Iron and steel	153	142	136	129	123	119	118
Telecommunications	143	130	127	125	121	119	118
Fabricated metal products	136	126	119	114	110	107	106

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Note: Numbers may not add to totals due to roundings.

TABLE III - 5 California Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	65,506	63,466	62,497	61,856	60,595	59,931	59,501
Indirect Defense Purchases Resulting from Direct Purchases	35,187	32,779	31,960	31,452	30,424	29,935	29,689
Induced Defense Purchases Resulting from Direct Pay	13,745	14,819	14,576	14,241	14,133	14,127	14,132
Total Nondefense Expenditures	3,652,631	3,750,099	3,877,235	3,987,516	4,096,347	4,215,544	4,329,501
Total Output	3,766,559	3,860,530	3,985,661	4,094,715	4,201,169	4,319,276	4,432,495
General government industry	15,650	16,685	16,538	16,329	16,279	16,344	16,404
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	15,649	16,684	16,538	16,329	16,279	16,344	16,404
Professional, scientific and technical services	11,357	10,914	10,934	10,820	10,650	10,583	10,398
Aerospace products and parts	8,699	8,270	7,959	8,256	8,130	7,984	7,768
Offices of physicians, dentists, and other health practioners	4,947	4,474	4,471	4,640	4,579	4,558	4,562
Communications and audio-video equipment	2,392	2,323	2,393	2,406	2,384	2,344	2,287
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	4,788	4,522	4,451	4,365	4,238	4,164	4,116
Real estate	2,415	2,247	2,193	2,165	2,105	2,075	2,060
Management of companies and enterprices	2,379	2,215	2,146	2,109	2,029	1,998	1,982
Wholesale trade	1,972	1,841	1,789	1,751	1,686	1,655	1,645
Administrative and support services	1,690	1,581	1,542	1,511	1,470	1,449	1,436

Note: Numbers may not add to totals due to roundings.

TABLE III - 6 Colorado Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	16,199	15,334	15,127	14,951	14,511	14,352	14,229
Indirect Defense Purchases Resulting from Direct Purchases	5,973	5,590	5,465	5,385	5,216	5,142	5,098
Induced Defense Purchases Resulting from Direct Pay	2,881	3,081	3,020	2,950	2,928	2,929	2,933
Total Nondefense Expenditures	478,465	492,177	509,891	525,589	541,002	557,594	573,323
Total Output	503,719	516,371	533,687	549,051	563,819	580,176	595,744
General government industry	5,245	5,374	5,303	5,249	5,233	5,253	5,273
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	5,245	5,374	5,303	5,249	5,233	5,253	5,273
Air transportation	2,808	2,421	2,346	2,315	2,222	2,170	2,141
Professional, scientific and technical services	2,750	2,649	2,662	2,648	2,622	2,622	2,575
Aerospace products and parts	1,694	1,503	1,531	1,540	1,381	1,325	1,290
Computer systems design and related services	684	661	656	647	631	624	614
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	1,159	1,097	1,084	1,068	1,043	1,031	1,020
Management of companies and enterprises	509	474	459	452	434	428	424
Administrative and support services	459	424	412	404	392	386	384
Crude oil extraction	432	415	417	425	407	405	402
Telecommunications	306	279	272	268	260	255	254

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Note: Numbers may not add to totals due to roundings.

TABLE III - 7 Connecticut Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	16,610	16,491	16,250	15,433	15,333	15,079	15,288
Indirect Defense Purchases Resulting from Direct Purchases	4,905	4,568	4,441	4,396	4,291	4,256	4,224
Induced Defense Purchases Resulting from Direct Pay	1,064	1,158	1,141	1,120	1,115	1,119	1,123
Total Nondefense Expenditures	429,616	442,200	457,360	470,828	483,981	498,656	512,725
Total Output	452,310	464,525	479,298	491,880	504,821	519,211	533,459
General government industry	672	714	710	703	702	705	708
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Ship and boat building	7,171	7,456	7,434	6,483	6,517	6,301	6,640
Aerospace products and parts	3,882	3,714	3,547	3,697	3,676	3,622	3,526
Professional, scientific and technical services	2,155	2,063	2,074	2,117	2,156	2,223	2,197
Petroleum and coal products	812	768	752	724	662	642	640
General government industry	672	714	710	703	702	705	708
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	908	855	844	854	858	875	870
Management of companies and enterprises	508	473	458	451	434	427	423
Aerospace products and parts	413	374	366	386	383	383	379
Insurance	326	307	296	290	283	280	278
Fabricated metal products	320	297	280	268	257	251	248

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Note: Numbers may not add to totals due to roundings.

TABLE III - 8 Delaware Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,160	1,139	1,113	1,090	1,064	1,055	1,054
Indirect Defense Purchases Resulting from Direct Purchases	953	889	863	846	817	804	798
Induced Defense Purchases Resulting from Direct Pay	424	455	445	434	430	429	429
Total Nondefense Expenditures	109,425	112,525	116,199	119,543	122,718	126,244	129,573
Total Output	111,989	115,034	118,644	121,937	125,053	128,554	131,876
General government industry	623	641	634	628	626	629	632
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	623	641	634	628	626	629	632
Maintenance and repair construction	126	112	106	101	96	92	91
Apparel	42	44	41	40	39	39	39
Petroleum and coal products	40	38	37	36	33	32	31
Insurance	36	37	35	34	34	34	34
Indirect Defense Purchases Resulting from Direct Purchases							
Banks, credit cards and finance	213	199	193	189	183	180	179
Insurance	111	105	101	99	97	95	95
Management of companies and enterprises	111	103	100	98	94	93	92
Real estate	50	46	45	45	44	43	43
Rental and leasing of goods	38	36	35	34	33	32	32

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Note: Numbers may not add to totals due to roundings.

TABLE III - 9 District of Columbia Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	9,037	8,916	8,650	8,439	8,222	8,122	8,087
Indirect Defense Purchases Resulting from Direct Purchases	3,096	2,859	2,760	2,688	2,588	2,530	2,516
Induced Defense Purchases Resulting from Direct Pay	1,478	1,571	1,536	1,498	1,485	1,484	1,486
Total Nondefense Expenditures	185,592	190,110	195,140	199,475	204,162	208,923	213,559
Total Output	199,372	203,613	208,239	212,249	216,601	221,200	225,788
General government industry	3,364	3,675	3,613	3,527	3,502	3,503	3,506
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,364	3,675	3,613	3,527	3,502	3,503	3,506
Professional, scientific and technical services	2,989	2,792	2,710	2,634	2,543	2,491	2,468
Computer systems design and related services	784	707	691	681	652	636	631
Administrative and support services	368	320	303	287	270	258	254
Fabricated metal products	310	318	260	256	256	262	264
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	1,260	1,157	1,103	1,062	1,012	980	977
Administrative and support services	649	601	584	573	556	547	543
Computer systems design and related services	181	166	162	158	153	150	149
Information and data processing	170	159	155	151	146	144	143
Legal services	142	133	130	129	126	125	124

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Note: Numbers may not add to totals due to roundings.

TABLE III - 10 Florida Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	27,994	27,208	26,616	26,280	25,761	25,615	25,565
Indirect Defense Purchases Resulting from Direct Purchases	12,025	11,171	10,840	10,647	10,317	10,163	10,093
Induced Defense Purchases Resulting from Direct Pay	6,653	7,123	6,985	6,823	6,775	6,779	6,790
Total Nondefense Expenditures	1,318,705	1,355,353	1,401,413	1,441,825	1,481,478	1,524,247	1,565,202
Total Output	1,365,754	1,401,197	1,446,185	1,485,917	1,524,665	1,567,134	1,607,972
General government industry	11,314	11,762	11,710	11,655	11,651	11,725	11,789
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	11,314	11,762	11,710	11,655	11,651	11,725	11,789
Professional, scientific and technical services	3,194	3,006	2,954	2,936	2,908	2,924	2,896
Aerospace products and parts	1,427	1,362	1,290	1,353	1,347	1,334	1,303
Water transportation	913	902	854	833	816	807	807
Maintenance and repair construction	894	803	758	720	687	663	653
Indirect Defense Purchases Resulting from Direct Purchases							
Administrative and support services	1,490	1,375	1,338	1,310	1,272	1,252	1,245
Professional, scientific and technical services	1,346	1,246	1,203	1,184	1,157	1,151	1,147
Management of companies and enterprises	953	888	860	845	813	801	794
Real estate	876	815	795	785	763	753	747
Wholesale trade	875	817	794	777	749	735	730

Note: Numbers may not add to totals due to roundings.

TABLE III - 11 Georgia Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	20,165	19,889	19,443	19,149	18,762	18,645	18,600
Indirect Defense Purchases Resulting from Direct Purchases	9,303	8,650	8,393	8,242	7,973	7,842	7,780
Induced Defense Purchases Resulting from Direct Pay	6,039	6,445	6,309	6,154	6,103	6,099	6,103
Total Nondefense Expenditures	848,927	869,600	896,998	920,594	944,427	970,168	994,757
Total Output	884,804	904,939	931,484	954,460	977,577	1,003,055	1,027,542
General government industry	10,865	11,297	11,132	10,978	10,932	10,962	10,995
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	10,865	11,297	11,132	10,978	10,932	10,962	10,995
Professional, scientific and technical services	1,271	1,208	1,199	1,195	1,187	1,194	1,178
Aerospace products and parts	1,136	1,074	1,016	1,068	1,056	1,048	1,026
Petroleum and coal products	1,135	1,073	1,051	1,013	925	897	895
Air transportation	891	827	789	771	750	740	734
Indirect Defense Purchases Resulting from Direct Purchases							
Administrative and support services	868	804	777	763	742	732	728
Legal services	846	792	776	771	753	744	738
Management of companies and enterprises	625	582	564	554	533	525	521
Wholesale trade	564	527	512	501	483	474	471
Professional, scientific and technical services	536	501	488	482	472	470	466

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Note: Numbers may not add to totals due to roundings.

TABLE III - 12 Hawaii Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	9,073	9,030	8,812	8,589	8,443	8,377	8,374
Indirect Defense Purchases Resulting from Direct Purchases	1,508	1,399	1,359	1,331	1,287	1,263	1,254
Induced Defense Purchases Resulting from Direct Pay	2,546	2,703	2,642	2,575	2,553	2,551	2,553
Total Nondefense Expenditures	154,066	157,446	161,701	165,374	169,273	173,186	177,072
Total Output	167,283	170,663	174,596	177,950	181,634	185,453	189,329
General government industry	6,086	6,297	6,167	6,053	6,015	6,020	6,030
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	6,086	6,297	6,167	6,053	6,015	6,020	6,030
Maintenance and repair construction	588	522	496	471	447	428	423
Professional, scientific and technical services	348	331	327	318	307	300	295
Administrative and support services	257	223	211	200	188	180	177
Air transportation	248	228	218	213	207	204	203
Indirect Defense Purchases Resulting from Direct Purchases							
Administrative and support services	453	418	407	398	387	381	379
Professional, scientific and technical services	147	137	133	128	122	118	117
Real estate	102	94	92	91	89	87	87
Management of companies and enterprises	71	66	64	63	61	60	59
Accommodation	69	65	63	62	60	59	58

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Note: Numbers may not add to totals due to roundings.

TABLE III - 13 Idaho Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,307	1,283	1,258	1,238	1,215	1,208	1,208
Indirect Defense Purchases Resulting from Direct Purchases	837	776	754	741	716	703	698
Induced Defense Purchases Resulting from Direct Pay	527	566	555	542	538	538	538
Total Nondefense Expenditures	104,901	107,338	110,895	113,963	117,002	120,325	123,501
Total Output	107,606	109,994	113,493	116,513	119,498	122,801	125,972
General government industry	797	815	807	803	802	806	810
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	797	815	807	803	802	806	810
Truck transportation	69	65	61	59	57	56	56
New construction	54	50	49	47	44	43	42
Maintenance and repair construction	51	46	43	41	39	38	37
Petroleum and coal products	46	44	43	41	38	37	37
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	57	53	51	51	49	48	48
Real estate	55	51	50	49	48	47	47
Wholesale trade	54	51	49	48	46	45	45
Semiconductors and other electronic components	37	34	34	35	34	34	34
Nonferrous metals	35	33	31	30	29	29	28

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Note: Numbers may not add to totals due to roundings.

TABLE III - 14 Illinois Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	12,520	12,076	11,769	11,592	11,273	11,169	11,126
Indirect Defense Purchases Resulting from Direct Purchases	12,357	11,504	11,128	10,842	10,450	10,248	10,166
Induced Defense Purchases Resulting from Direct Pay	3,809	4,106	4,030	3,938	3,909	3,910	3,912
Total Nondefense Expenditures	1,359,712	1,393,668	1,439,776	1,479,139	1,518,268	1,561,954	1,603,350
Total Output	1,388,782	1,421,715	1,467,047	1,505,843	1,544,219	1,587,592	1,628,869
General government industry	2,957	3,206	3,182	3,138	3,127	3,140	3,151
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	2,957	3,206	3,182	3,138	3,127	3,140	3,151
Petroleum and coal products	1,280	1,210	1,185	1,142	1,042	1,011	1,008
Professional, scientific and technical services	790	753	748	737	724	718	707
Educational services	779	743	760	741	707	676	652
Air transportation	711	661	630	616	600	591	587
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	1,348	1,255	1,216	1,195	1,150	1,132	1,123
Wholesale trade	841	785	763	747	719	706	702
Fabricated metal products	840	779	735	705	675	658	650
Petroleum and coal products	728	674	651	631	600	586	581
Real estate	609	566	553	546	531	523	519

Note: Numbers may not add to totals due to roundings.

TABLE III - 15 Indiana Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	6,247	6,051	5,859	5,792	5,636	5,598	5,576
Indirect Defense Purchases Resulting from Direct Purchases	6,751	6,260	6,031	5,862	5,628	5,515	5,470
Induced Defense Purchases Resulting from Direct Pay	2,135	2,299	2,250	2,195	2,177	2,175	2,173
Total Nondefense Expenditures	653,174	665,530	686,232	702,621	719,985	739,893	758,513
Total Output	668,510	680,335	700,562	716,647	733,597	753,347	771,899
General government industry	1,568	1,743	1,736	1,711	1,706	1,714	1,720
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,568	1,743	1,736	1,711	1,706	1,714	1,720
Professional, scientific and technical services	628	591	580	568	554	547	541
Motor vehicle parts	616	554	498	496	485	492	493
Aerospace products and parts	607	568	548	569	553	544	531
Truck transportation	390	369	345	333	325	320	320
Indirect Defense Purchases Resulting from Direct Purchases							
Nonferrous metals	680	634	600	587	564	554	550
Iron and steel	677	627	603	570	543	527	524
Fabricated metal products	506	469	443	424	407	396	391
Other chemicals	486	451	437	421	396	387	382
Petroleum and coal products	371	343	332	322	306	299	296

Note: Numbers may not add to totals due to roundings.

TABLE III - 16 Iowa Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	2,714	2,591	2,524	2,497	2,435	2,413	2,400
Indirect Defense Purchases Resulting from Direct Purchases	2,641	2,460	2,378	2,318	2,238	2,196	2,178
Induced Defense Purchases Resulting from Direct Pay	826	888	871	849	842	840	839
Total Nondefense Expenditures	308,835	315,547	325,565	334,035	342,571	352,087	361,128
Total Output	315,089	321,555	331,404	339,764	348,148	357,597	366,606
General government industry	483	506	505	503	503	507	509
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	483	506	505	503	503	507	509
Petroleum and coal products	296	280	275	265	242	234	234
Search, detection and navigation equipment	255	245	249	248	244	243	240
Communications and audio-video equipment	239	207	203	215	218	221	221
Truck transportation	216	204	191	184	180	177	177
Indirect Defense Purchases Resulting from Direct Purchases							
Insurance	207	195	188	184	180	178	176
Wholesale trade	150	140	136	133	128	126	125
Fabricated metal products	147	136	129	123	118	115	114
Management of companies and enterprices	139	129	125	123	118	116	116
Real estate	119	111	108	107	104	102	102

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Note: Numbers may not add to totals due to roundings.

TABLE III - 17 Kansas Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	5,224	5,125	4,975	4,911	4,828	4,797	4,784
Indirect Defense Purchases Resulting from Direct Purchases	2,757	2,563	2,473	2,442	2,364	2,328	2,311
Induced Defense Purchases Resulting from Direct Pay	1,759	1,875	1,835	1,789	1,774	1,772	1,773
Total Nondefense Expenditures	264,660	270,390	278,744	286,097	293,420	301,479	309,132
Total Output	274,680	280,226	288,289	295,476	302,612	310,591	318,217
General government industry	3,161	3,214	3,155	3,111	3,096	3,103	3,111
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,161	3,214	3,155	3,111	3,096	3,103	3,111
Aerospace products and parts	470	450	423	446	449	446	436
Professional, scientific and technical services	155	145	139	134	128	124	123
New construction	141	132	127	120	114	111	107
Truck transportation	132	125	117	113	110	108	108
Indirect Defense Purchases Resulting from Direct Purchases							
Aerospace products and parts	275	250	244	257	256	256	253
Petroleum and coal products	257	238	230	223	211	207	205
Administrative and support services	163	160	142	144	143	144	144
Wholesale trade	148	138	134	131	126	124	123
Management of companies and enterprises	139	130	126	124	119	117	116

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Note: Numbers may not add to totals due to roundings.

TABLE III - 18 Kentucky Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	14,794	13,895	13,607	13,579	13,285	13,165	13,155
Indirect Defense Purchases Resulting from Direct Purchases	5,019	4,642	4,493	4,386	4,232	4,154	4,124
Induced Defense Purchases Resulting from Direct Pay	2,608	2,781	2,719	2,650	2,627	2,623	2,622
Total Nondefense Expenditures	341,173	349,351	360,886	370,221	380,018	390,687	400,620
Total Output	363,720	370,788	381,819	390,948	400,269	410,736	420,627
General government industry	4,732	4,757	4,655	4,588	4,563	4,570	4,581
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Offices of physicians, dentists, and other health practioners	5,691	5,146	5,142	5,338	5,267	5,243	5,248
General government industry	4,731	4,756	4,655	4,587	4,563	4,570	4,581
Administrative and support services	790	688	653	618	581	556	548
Petroleum and coal products	659	623	610	588	537	521	520
Waste management and remediation	439	363	331	295	269	248	245
Indirect Defense Purchases Resulting from Direct Purchases							
Administrative and support services	1,393	1,292	1,258	1,232	1,197	1,180	1,171
Waste management and remediation	252	230	221	212	203	198	196
Management of companies and enterprices	213	198	192	189	182	179	177
Transportation support, sightseeing, couriers	191	179	172	168	163	160	159
Wholesale trade	189	176	171	168	162	159	158

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Note: Numbers may not add to totals due to roundings.

TABLE III - 19 Louisiana Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	5,967	5,810	5,617	5,466	5,353	5,302	5,301
Indirect Defense Purchases Resulting from Direct Purchases	6,383	5,962	5,812	5,712	5,477	5,385	5,342
Induced Defense Purchases Resulting from Direct Pay	1,949	2,075	2,027	1,973	1,952	1,945	1,942
Total Nondefense Expenditures	482,717	492,976	509,573	523,849	537,243	552,585	566,628
Total Output	497,009	506,802	523,008	537,000	550,024	565,220	579,209
General government industry	2,477	2,548	2,512	2,483	2,474	2,482	2,491
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	2,477	2,548	2,512	2,483	2,474	2,482	2,491
Water transportation	793	782	742	723	708	701	701
New construction	502	477	453	423	401	386	373
Maintenance and repair construction	251	227	213	203	194	188	185
Ship and boat building	204	213	212	188	188	182	191
Indirect Defense Purchases Resulting from Direct Purchases							
Petroleum and coal products	1,487	1,377	1,330	1,290	1,225	1,197	1,187
Crude oil extraction	1,007	969	973	991	949	945	938
Other chemicals	424	393	381	367	346	337	333
Administrative and support services	347	320	311	305	296	291	290
Management of companies and enterprises	202	188	182	179	172	169	168

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Note: Numbers may not add to totals due to roundings.

TABLE III - 20 Maine Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	3,867	3,975	3,938	3,689	3,666	3,606	3,689
Indirect Defense Purchases Resulting from Direct Purchases	773	715	691	679	658	648	643
Induced Defense Purchases Resulting from Direct Pay	573	612	599	584	579	579	579
Total Nondefense Expenditures	110,959	113,420	116,593	119,337	122,200	125,260	128,261
Total Output	116,204	118,752	121,849	124,319	127,130	130,119	133,198
General government industry	915	1,037	1,034	1,017	1,014	1,018	1,021
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Ship and boat building	1,914	1,990	1,984	1,747	1,748	1,691	1,774
General government industry	915	1,037	1,034	1,017	1,014	1,018	1,021
Offices of physicians, dentists, and other health practioners	495	448	447	464	458	456	456
Maintenance and repair construction	101	90	85	81	77	74	73
Professional, scientific and technical services	62	58	56	58	61	64	64
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprices	64	60	58	57	55	54	54
Real estate	61	56	53	53	52	51	50
Paper	51	47	45	44	43	42	41
Fabricated metal products	50	46	44	42	40	39	39
Wholesale trade	45	42	41	40	39	38	38

Note: Numbers may not add to totals due to roundings.

TABLE III - 21 Maryland Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	25,045	24,497	24,102	23,582	23,044	22,792	22,709
Indirect Defense Purchases Resulting from Direct Purchases	9,464	8,806	8,563	8,389	8,121	7,981	7,924
Induced Defense Purchases Resulting from Direct Pay	3,574	3,815	3,737	3,647	3,620	3,619	3,625
Total Nondefense Expenditures	601,527	617,389	636,432	653,009	670,333	688,507	706,292
Total Output	639,846	654,729	673,051	688,839	705,324	723,103	740,753
General government industry	6,699	7,381	7,318	7,190	7,159	7,181	7,200
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Professional, scientific and technical services	7,532	7,136	7,045	6,935	6,790	6,731	6,642
General government industry	6,699	7,380	7,318	7,190	7,159	7,181	7,200
Computer systems design and related services	1,478	1,351	1,324	1,305	1,254	1,227	1,216
Ship and boat building	1,278	1,328	1,324	1,156	1,161	1,123	1,183
Telecommunications	1,159	1,012	982	973	939	924	918
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	3,175	2,957	2,868	2,797	2,702	2,648	2,629
Administrative and support services	1,109	1,025	997	976	948	934	928
Legal services	678	634	621	617	603	596	591
Information and data processing	671	629	613	597	579	569	566
Real estate	391	363	354	350	340	335	333

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Note: Numbers may not add to totals due to roundings.

TABLE III - 22 Massachusetts Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	17,387	16,640	16,390	16,377	16,097	15,998	15,812
Indirect Defense Purchases Resulting from Direct Purchases	8,487	7,975	7,778	7,644	7,411	7,285	7,213
Induced Defense Purchases Resulting from Direct Pay	1,787	1,944	1,919	1,882	1,873	1,878	1,883
Total Nondefense Expenditures	748,935	770,323	797,123	820,571	843,865	869,555	894,368
Total Output	776,823	797,103	823,424	846,676	869,444	894,911	919,472
General government industry	1,342	1,469	1,460	1,440	1,436	1,442	1,447
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Professional, scientific and technical services	6,318	6,133	6,203	6,138	6,038	5,982	5,856
Aerospace products and parts	2,085	1,997	1,868	1,977	1,990	1,982	1,941
Search, detection and navigation equipment	1,637	1,539	1,559	1,556	1,521	1,518	1,509
General government industry	1,342	1,469	1,460	1,440	1,436	1,442	1,447
Communications and audio-video equipment	682	614	611	633	632	633	631
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	2,664	2,541	2,525	2,476	2,402	2,354	2,318
Management of companies and enterprises	795	741	717	705	678	668	663
Real estate	455	423	413	408	396	391	388
Fabricated metal products	437	405	382	366	351	342	338
Securities, investments, funds and trusts	391	369	357	347	337	331	330

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Note: Numbers may not add to totals due to roundings.

TABLE III - 23 Michigan Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	7,383	6,983	6,635	6,593	6,509	6,568	6,607
Indirect Defense Purchases Resulting from Direct Purchases	6,819	6,324	6,087	5,936	5,728	5,631	5,588
Induced Defense Purchases Resulting from Direct Pay	2,672	2,891	2,829	2,761	2,738	2,737	2,731
Total Nondefense Expenditures	862,868	881,325	908,906	931,496	954,976	981,421	1,005,826
Total Output	879,956	897,724	924,653	946,975	970,133	996,535	1,020,928
General government industry	1,549	1,726	1,723	1,700	1,696	1,704	1,711
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,549	1,726	1,723	1,700	1,696	1,704	1,711
Other transportation equipment	1,253	1,006	828	892	983	1,083	1,137
Petroleum and coal products	837	792	775	747	682	662	660
Professional, scientific and technical services	565	533	527	536	545	562	557
Air transportation	325	301	288	281	273	270	268
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	653	608	589	579	557	549	544
Fabricated metal products	619	574	542	519	498	485	479
Motor vehicle parts	591	530	499	484	466	461	458
Wholesale trade	439	409	398	389	375	368	366
Nonferrous metals	345	321	304	297	286	281	279

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Note: Numbers may not add to totals due to roundings.

TABLE III - 24 Minnesota Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	6,203	5,842	5,707	5,703	5,540	5,493	5,481
Indirect Defense Purchases Resulting from Direct Purchases	5,113	4,751	4,606	4,516	4,360	4,285	4,251
Induced Defense Purchases Resulting from Direct Pay	1,343	1,452	1,428	1,396	1,387	1,387	1,388
Total Nondefense Expenditures	547,285	560,909	579,798	596,111	612,337	630,343	647,498
Total Output	560,102	573,102	591,682	607,864	623,756	641,638	658,746
General government industry	737	777	776	772	771	777	781
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Offices of physicians, dentists, and other health practioners	2,016	1,823	1,822	1,891	1,866	1,857	1,859
General government industry	737	777	776	772	771	777	781
Petroleum and coal products	527	499	488	470	430	417	416
Fabricated metal products	397	401	340	332	319	322	323
Air transportation	274	254	242	237	230	227	225
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprices	894	832	806	792	762	750	744
Fabricated metal products	361	334	316	302	290	282	279
Petroleum and coal products	334	310	299	290	276	269	267
Wholesale trade	328	307	298	291	281	276	274
Real estate	250	233	228	225	218	215	214

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Note: Numbers may not add to totals due to roundings.

TABLE III - 25 Mississippi Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	8,308	8,403	8,296	7,722	7,643	7,500	7,672
Indirect Defense Purchases Resulting from Direct Purchases	2,215	2,053	1,991	1,952	1,886	1,857	1,843
Induced Defense Purchases Resulting from Direct Pay	1,215	1,298	1,270	1,238	1,227	1,226	1,226
Total Nondefense Expenditures	204,039	208,520	214,859	220,176	225,567	231,495	237,075
Total Output	215,851	220,341	226,480	231,153	236,385	242,139	247,876
General government industry	2,034	2,164	2,145	2,118	2,112	2,120	2,128
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Ship and boat building	3,878	4,034	4,021	3,514	3,530	3,414	3,595
General government industry	2,034	2,164	2,145	2,118	2,112	2,120	2,128
Transportation support, sightseeing, couriers	396	370	356	353	335	324	321
Professional, scientific and technical services	274	257	254	262	270	283	282
Computer systems design and related services	270	242	236	233	222	217	215
Indirect Defense Purchases Resulting from Direct Purchases							
Petroleum and coal products	231	213	206	200	190	186	184
Administrative and support services	215	198	192	188	183	180	179
Professional, scientific and technical services	115	107	104	106	107	111	111
Management of companies and enterprises	94	88	85	83	80	79	78
Wholesale trade	79	74	72	70	68	67	66

Note: Numbers may not add to totals due to roundings.

TABLE III - 26 Missouri Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	12,585	12,100	11,650	11,808	11,701	11,720	11,646
Indirect Defense Purchases Resulting from Direct Purchases	5,039	4,676	4,530	4,462	4,336	4,293	4,264
Induced Defense Purchases Resulting from Direct Pay	2,116	2,267	2,221	2,167	2,149	2,148	2,148
Total Nondefense Expenditures	500,655	513,356	530,465	544,962	559,522	575,418	590,631
Total Output	520,601	532,598	549,058	563,579	577,882	593,748	608,861
General government industry	2,713	2,834	2,806	2,776	2,769	2,780	2,791
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Aerospace products and parts	3,421	3,281	3,059	3,245	3,273	3,265	3,199
General government industry	2,713	2,834	2,806	2,776	2,769	2,780	2,791
Professional, scientific and technical services	1,135	1,064	1,053	1,106	1,161	1,239	1,236
Offices of physicians, dentists, and other health practioners	955	864	863	896	884	880	881
Petroleum and coal products	674	637	624	601	549	532	531
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprices	634	590	572	562	541	532	528
Professional, scientific and technical services	478	441	429	446	462	487	489
Wholesale trade	275	256	249	244	235	230	229
Fabricated metal products	259	240	227	217	208	203	200
Banks, credit cards and finance	228	214	207	203	197	194	192

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Note: Numbers may not add to totals due to roundings.

TABLE III - 27 Montana Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,172	1,142	1,117	1,105	1,087	1,087	1,087
Indirect Defense Purchases Resulting from Direct Purchases	649	605	584	573	553	544	540
Induced Defense Purchases Resulting from Direct Pay	345	368	360	351	348	348	348
Total Nondefense Expenditures	73,182	74,921	77,434	79,608	81,700	83,989	86,165
Total Output	75,372	77,058	79,517	81,658	83,708	85,987	88,159
General government industry	585	601	595	590	589	592	594
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	585	601	595	590	589	592	594
Publishing, except software	158	148	147	152	152	157	158
Maintenance and repair construction	64	58	55	52	49	48	47
New construction	58	54	52	49	47	46	44
Truck transportation	50	47	44	43	42	41	41
Indirect Defense Purchases Resulting from Direct Purchases							
Petroleum and coal products	107	99	96	93	88	86	85
Real estate	39	36	36	35	34	34	33
Wholesale trade	36	33	32	32	30	30	30
Rail transportation	33	30	29	29	27	27	27
Banks, credit cards and finance	25	23	22	22	21	21	21

Note: Numbers may not add to totals due to roundings.

TABLE III - 28 Nebraska Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	2,904	2,826	2,760	2,717	2,660	2,640	2,635
Indirect Defense Purchases Resulting from Direct Purchases	1,741	1,615	1,566	1,532	1,476	1,449	1,438
Induced Defense Purchases Resulting from Direct Pay	892	953	933	909	902	901	901
Total Nondefense Expenditures	199,213	203,685	210,102	215,654	221,268	227,413	233,301
Total Output	204,808	209,135	215,413	220,863	226,355	232,451	238,324
General government industry	1,290	1,337	1,321	1,307	1,303	1,308	1,313
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,290	1,337	1,321	1,307	1,303	1,308	1,313
Computer systems design and related services	294	270	264	261	251	246	244
Truck transportation	174	164	154	148	145	143	143
Professional, scientific and technical services	166	155	150	147	144	142	141
Rail transportation	137	129	121	117	114	112	112
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	166	155	150	147	142	140	138
Rail transportation	150	138	133	130	124	122	121
Insurance	102	96	93	91	89	88	87
Wholesale trade	89	83	81	79	76	75	74
Real estate	71	66	65	64	62	61	61

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Note: Numbers may not add to totals due to roundings.

TABLE III - 29 Nevada Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	4,778	4,541	4,452	4,410	4,275	4,226	4,201
Indirect Defense Purchases Resulting from Direct Purchases	2,171	2,017	1,955	1,916	1,851	1,818	1,804
Induced Defense Purchases Resulting from Direct Pay	989	1,059	1,037	1,013	1,006	1,006	1,008
Total Nondefense Expenditures	202,913	208,339	215,708	222,095	228,208	234,783	241,025
Total Output	210,916	216,017	223,211	229,491	235,394	241,888	248,092
General government industry	1,760	1,780	1,764	1,756	1,755	1,765	1,774
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,760	1,780	1,764	1,756	1,755	1,765	1,774
Aerospace products and parts	925	836	835	850	784	759	740
Accommodation	425	396	374	362	353	348	347
Professional, scientific and technical services	248	236	234	230	225	224	220
Air transportation	218	203	193	189	184	181	180
Indirect Defense Purchases Resulting from Direct Purchases							
Administrative and support services	285	263	256	250	243	239	238
Management of companies and enterprises	245	228	221	217	209	205	204
Accommodation	225	212	205	200	195	191	190
Real estate	108	101	98	97	94	93	92
Professional, scientific and technical services	105	98	95	93	90	88	87

Note: Numbers may not add to totals due to roundings.

TABLE III - 30 New Hampshire Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	2,399	2,284	2,266	2,250	2,177	2,159	2,147
Indirect Defense Purchases Resulting from Direct Purchases	1,159	1,082	1,050	1,028	996	979	971
Induced Defense Purchases Resulting from Direct Pay	370	401	395	387	385	385	386
Total Nondefense Expenditures	113,574	116,655	120,707	124,213	127,695	131,515	135,158
Total Output	117,540	120,457	124,451	127,911	131,284	135,070	138,694
General government industry	418	437	437	437	438	442	444
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Professional, scientific and technical services	446	428	429	426	421	421	414
General government industry	418	437	437	437	438	441	444
Search, detection and navigation equipment	261	238	239	244	244	250	252
Aerospace products and parts	209	194	189	195	187	184	179
Petroleum and coal products	199	188	185	178	162	158	157
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	188	178	175	172	168	166	164
Fabricated metal products	106	99	93	89	85	83	82
Management of companies and enterprises	88	82	79	78	75	74	73
Real estate	71	66	64	63	62	61	60
Wholesale trade	68	64	62	61	58	57	57

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Note: Numbers may not add to totals due to roundings.

TABLE III - 31 New Jersey Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	11,920	11,566	11,386	11,214	10,886	10,797	10,731
Indirect Defense Purchases Resulting from Direct Purchases	9,115	8,489	8,237	8,075	7,808	7,690	7,633
Induced Defense Purchases Resulting from Direct Pay	2,744	2,960	2,910	2,848	2,832	2,838	2,845
Total Nondefense Expenditures	949,228	975,040	1,007,957	1,036,863	1,065,480	1,096,880	1,127,013
Total Output	973,205	998,237	1,030,667	1,059,175	1,087,177	1,118,375	1,148,391
General government industry	2,432	2,743	2,722	2,667	2,654	2,661	2,667
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Professional, scientific and technical services	2,820	2,658	2,619	2,615	2,602	2,629	2,604
General government industry	2,432	2,743	2,722	2,667	2,654	2,661	2,667
Search, detection and navigation equipment	1,196	1,146	1,166	1,166	1,151	1,149	1,139
Air transportation	414	385	368	359	350	345	342
New construction	389	362	349	336	321	311	304
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	1,252	1,166	1,129	1,110	1,068	1,051	1,043
Professional, scientific and technical services	1,189	1,102	1,066	1,055	1,035	1,034	1,031
Wholesale trade	689	643	625	612	589	578	575
Real estate	615	572	558	551	536	528	524
Other chemicals	399	370	359	345	325	318	314

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Note: Numbers may not add to totals due to roundings.

TABLE III - 32 New Mexico Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	4,205	4,156	4,099	4,025	3,946	3,916	3,895
Indirect Defense Purchases Resulting from Direct Purchases	1,800	1,686	1,654	1,633	1,578	1,554	1,541
Induced Defense Purchases Resulting from Direct Pay	980	1,046	1,025	1,000	992	991	992
Total Nondefense Expenditures	142,568	146,056	150,968	155,335	159,617	164,173	168,497
Total Output	149,636	153,021	157,820	162,065	166,203	170,703	174,993
General government industry	1,979	2,086	2,066	2,042	2,036	2,045	2,052
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,979	2,086	2,066	2,042	2,036	2,045	2,052
Professional, scientific and technical services	1,018	982	986	975	958	949	931
Maintenance and repair construction	183	163	154	147	139	134	132
New construction	128	121	115	108	103	99	96
Administrative and support services	114	99	94	89	84	80	79
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	429	407	402	393	381	373	369
Crude oil extraction	232	223	224	228	218	217	216
Administrative and support services	201	186	181	177	172	169	168
Real estate	78	73	71	70	68	67	67
Petroleum and coal products	66	61	59	57	54	53	53

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Note: Numbers may not add to totals due to roundings.

TABLE III - 33 New York Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	17,318	16,474	16,161	15,933	15,451	15,195	15,031
Indirect Defense Purchases Resulting from Direct Purchases	18,314	17,070	16,561	16,216	15,687	15,423	15,313
Induced Defense Purchases Resulting from Direct Pay	6,628	7,219	7,106	6,964	6,922	6,939	6,950
Total Nondefense Expenditures	2,341,072	2,418,201	2,503,462	2,580,431	2,653,127	2,733,245	2,808,498
Total Output	2,383,927	2,459,506	2,543,836	2,620,049	2,691,680	2,771,285	2,846,276
General government industry	3,909	4,047	3,982	3,925	3,907	3,917	3,928
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,909	4,047	3,982	3,925	3,907	3,917	3,928
Aerospace products and parts	2,821	2,685	2,706	2,713	2,607	2,491	2,387
Professional, scientific and technical services	1,306	1,246	1,236	1,216	1,191	1,178	1,160
Telecommunications	952	831	810	799	767	748	740
New construction	833	775	747	718	686	665	649
Indirect Defense Purchases Resulting from Direct Purchases							
Banks, credit cards and finance	2,547	2,382	2,313	2,265	2,196	2,159	2,143
Securities, investments, funds and trusts	2,495	2,354	2,280	2,214	2,150	2,113	2,105
Management of companies and enterprises	2,066	1,923	1,863	1,831	1,762	1,735	1,721
Real estate	1,280	1,191	1,162	1,147	1,116	1,100	1,092
Telecommunications	1,186	1,082	1,053	1,039	1,007	991	984

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Note: Numbers may not add to totals due to roundings.

TABLE III - 34 North Carolina Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	16,072	15,713	15,368	15,086	14,747	14,639	14,631
Indirect Defense Purchases Resulting from Direct Purchases	7,975	7,408	7,183	7,020	6,760	6,632	6,576
Induced Defense Purchases Resulting from Direct Pay	5,803	6,195	6,061	5,907	5,853	5,844	5,843
Total Nondefense Expenditures	855,283	874,926	902,696	926,275	949,951	976,131	1,000,998
Total Output	885,493	904,582	931,635	954,603	977,615	1,003,542	1,028,343
General government industry	9,861	10,007	9,842	9,728	9,690	9,718	9,751
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	9,861	10,007	9,842	9,728	9,690	9,718	9,751
Petroleum and coal products	1,414	1,337	1,309	1,262	1,152	1,118	1,115
Maintenance and repair construction	561	502	475	451	430	414	408
Professional, scientific and technical services	541	512	504	490	475	465	458
New construction	357	332	320	307	294	285	278
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	884	823	797	784	754	743	737
Banks, credit cards and finance	646	604	586	574	557	547	543
Administrative and support services	609	562	547	536	520	512	509
Other chemicals	516	479	465	447	421	411	406
Wholesale trade	404	378	367	359	346	339	337

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Note: Numbers may not add to totals due to roundings.

TABLE III - 35 North Dakota Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,308	1,276	1,235	1,207	1,183	1,173	1,171
Indirect Defense Purchases Resulting from Direct Purchases	829	776	758	748	721	710	704
Induced Defense Purchases Resulting from Direct Pay	435	464	454	443	440	439	440
Total Nondefense Expenditures	95,658	98,185	102,150	105,609	108,864	112,363	115,669
Total Output	98,258	100,727	104,622	108,030	111,230	114,708	118,006
General government industry	727	741	726	715	712	713	715
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	727	741	726	715	712	713	715
Truck transportation	148	140	131	126	123	122	122
Maintenance and repair construction	87	78	74	70	67	65	64
New construction	81	75	72	69	66	64	62
Apparel	37	38	36	34	34	34	34
Indirect Defense Purchases Resulting from Direct Purchases							
Crude oil extraction	127	123	123	125	120	120	119
Wholesale trade	65	60	59	57	55	54	54
Truck transportation	58	54	52	51	49	48	47
Royalties	41	39	38	38	36	36	36
Animal production	40	36	37	37	36	36	36

Note: Numbers may not add to totals due to roundings.

TABLE III - 36 Ohio Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	12,550	12,409	12,202	12,022	11,711	11,618	11,561
Indirect Defense Purchases Resulting from Direct Purchases	11,515	10,710	10,359	10,118	9,758	9,584	9,504
Induced Defense Purchases Resulting from Direct Pay	3,641	3,909	3,827	3,733	3,701	3,697	3,694
Total Nondefense Expenditures	1,098,844	1,123,022	1,158,069	1,187,615	1,217,899	1,251,572	1,283,488
Total Output	1,126,966	1,150,450	1,184,843	1,213,847	1,243,414	1,276,805	1,308,581
General government industry	3,743	4,186	4,165	4,096	4,081	4,096	4,109
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,743	4,186	4,165	4,096	4,081	4,096	4,109
Professional, scientific and technical services	1,818	1,750	1,757	1,750	1,736	1,739	1,710
Petroleum and coal products	1,451	1,372	1,344	1,294	1,182	1,147	1,144
Truck transportation	512	483	453	436	426	420	419
Other chemicals	461	417	416	425	412	406	406
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	1,505	1,401	1,357	1,334	1,283	1,264	1,253
Fabricated metal products	954	884	835	800	767	747	738
Professional, scientific and technical services	767	725	715	706	691	684	677
Banks, credit cards and finance	568	531	515	505	489	481	478
Wholesale trade	544	508	493	483	465	456	454

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Note: Numbers may not add to totals due to roundings.

TABLE III - 37 Oklahoma Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	6,753	6,831	6,679	6,567	6,458	6,425	6,412
Indirect Defense Purchases Resulting from Direct Purchases	3,693	3,458	3,370	3,325	3,202	3,156	3,133
Induced Defense Purchases Resulting from Direct Pay	2,123	2,262	2,213	2,158	2,140	2,138	2,139
Total Nondefense Expenditures	337,111	344,657	355,820	365,655	375,437	385,908	395,699
Total Output	349,789	357,311	368,182	377,801	387,329	397,717	407,473
General government industry	4,058	4,369	4,319	4,248	4,228	4,240	4,252
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	4,058	4,369	4,319	4,247	4,228	4,240	4,252
Maintenance and repair construction	365	326	309	293	279	268	265
Aerospace products and parts	354	337	317	335	334	333	326
Professional, scientific and technical services	295	276	269	270	270	275	273
Administrative and support services	172	150	140	134	126	121	119
Indirect Defense Purchases Resulting from Direct Purchases							
Crude oil extraction	781	751	754	769	736	733	727
Administrative and support services	303	282	270	266	260	256	255
Petroleum and coal products	225	208	201	195	185	181	179
Fabricated metal products	218	202	191	183	175	170	168
Management of companies and enterprises	157	146	141	139	134	132	130

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Note: Numbers may not add to totals due to roundings.

TABLE III - 38 Oregon Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	2,923	2,807	2,744	2,670	2,598	2,563	2,563
Indirect Defense Purchases Resulting from Direct Purchases	3,509	3,250	3,185	3,164	3,084	3,042	3,021
Induced Defense Purchases Resulting from Direct Pay	1,101	1,214	1,214	1,192	1,188	1,190	1,192
Total Nondefense Expenditures	340,224	347,077	359,287	369,429	379,840	391,638	403,067
Total Output	347,868	354,448	366,525	376,548	386,798	398,518	409,927
General government industry	919	980	981	978	978	986	992
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	919	980	981	978	978	986	992
Printing	336	281	270	268	259	255	253
Waste management and remediation	175	145	132	118	107	99	98
Ship and boat building	170	177	177	157	157	152	159
Truck transportation	137	130	122	117	114	113	113
Indirect Defense Purchases Resulting from Direct Purchases							
Semiconductors and other electronic components	621	570	573	582	575	573	573
Management of companies and enterprises	288	268	260	256	246	242	240
Wholesale trade	196	183	178	174	168	165	164
Real estate	184	171	167	165	160	158	157
Communications and audio-video equipment	155	154	170	199	214	218	219

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Note: Numbers may not add to totals due to roundings.

TABLE III - 39 Pennsylvania Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	16,865	16,483	15,893	15,664	15,232	15,103	15,041
Indirect Defense Purchases Resulting from Direct Purchases	12,590	11,700	11,317	11,054	10,645	10,441	10,360
Induced Defense Purchases Resulting from Direct Pay	3,515	3,781	3,713	3,630	3,605	3,608	3,614
Total Nondefense Expenditures	1,193,632	1,222,911	1,264,042	1,298,947	1,334,079	1,372,569	1,409,389
Total Output	1,226,935	1,255,193	1,295,277	1,329,591	1,363,848	1,402,000	1,438,683
General government industry	3,565	4,032	4,021	3,957	3,944	3,961	3,975
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,565	4,031	4,021	3,957	3,944	3,961	3,975
Professional, scientific and technical services	3,260	3,081	3,028	2,951	2,857	2,799	2,761
Aerospace products and parts	1,531	1,468	1,377	1,454	1,462	1,455	1,423
Fabricated metal products	1,339	1,351	1,147	1,119	1,070	1,077	1,082
Petroleum and coal products	1,185	1,120	1,096	1,056	965	937	934
Indirect Defense Purchases Resulting from Direct Purchases							
Management of companies and enterprises	1,639	1,526	1,478	1,453	1,398	1,377	1,365
Professional, scientific and technical services	1,374	1,277	1,233	1,191	1,137	1,101	1,093
Fabricated metal products	645	598	564	541	518	505	499
Nonferrous metals	617	575	544	532	511	502	499
Wholesale trade	615	574	558	546	526	516	513

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Note: Numbers may not add to totals due to roundings.

TABLE III - 40 Rhode Island Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,719	1,742	1,704	1,667	1,628	1,615	1,611
Indirect Defense Purchases Resulting from Direct Purchases	926	859	830	810	780	764	758
Induced Defense Purchases Resulting from Direct Pay	435	466	456	446	443	443	444
Total Nondefense Expenditures	103,722	106,273	109,538	112,382	115,294	118,425	121,476
Total Output	106,844	109,380	112,568	115,343	118,182	121,282	124,325
General government industry	680	778	774	758	755	757	759
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	680	778	774	758	755	757	759
Professional, scientific and technical services	329	307	297	287	275	267	265
Search, detection and navigation equipment	157	144	145	146	144	145	145
Petroleum and coal products	88	83	82	79	72	70	70
Maintenance and repair construction	56	51	48	45	43	42	41
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	139	127	121	116	109	105	105
Management of companies and enterprises	131	122	118	116	111	110	109
Real estate	54	51	49	49	47	47	46
Wholesale trade	43	41	39	39	37	36	36
Telecommunications	40	37	36	35	34	34	33

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Note: Numbers may not add to totals due to roundings.

TABLE III - 41 South Carolina Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	8,375	8,158	7,980	7,820	7,612	7,544	7,545
Indirect Defense Purchases Resulting from Direct Purchases	3,563	3,302	3,183	3,096	2,976	2,913	2,891
Induced Defense Purchases Resulting from Direct Pay	2,125	2,272	2,224	2,171	2,154	2,153	2,155
Total Nondefense Expenditures	329,660	337,110	347,899	356,776	365,823	375,828	385,215
Total Output	343,768	350,874	361,319	369,907	378,608	388,483	397,845
General government industry	3,818	3,946	3,911	3,881	3,874	3,893	3,911
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	3,818	3,946	3,911	3,881	3,874	3,893	3,911
Professional, scientific and technical services	1,084	1,007	971	941	905	884	877
Petroleum and coal products	904	855	837	807	737	715	713
Telecommunications	393	348	341	335	321	312	308
Maintenance and repair construction	271	242	229	217	207	199	197
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	457	417	395	379	360	348	347
Fabricated metal products	228	212	200	192	184	179	177
Administrative and support services	224	208	203	198	193	190	189
Wholesale trade	164	153	149	146	140	138	137
Real estate	151	141	137	136	132	130	129

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Note: Numbers may not add to totals due to roundings.

TABLE III - 42 South Dakota Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,239	1,190	1,178	1,178	1,149	1,141	1,140
Indirect Defense Purchases Resulting from Direct Purchases	645	599	582	571	551	541	537
Induced Defense Purchases Resulting from Direct Pay	378	405	396	386	382	382	382
Total Nondefense Expenditures	82,063	84,166	86,817	89,173	91,540	94,114	96,567
Total Output	84,347	86,381	88,992	91,326	93,641	96,196	98,645
General government industry	520	532	526	522	520	523	525
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	520	532	526	522	520	523	525
Dairy products, meat and seafood	228	207	211	220	213	211	212
Retail trade	98	90	91	95	92	91	91
Maintenance and repair construction	49	44	42	40	38	36	36
Truck transportation	45	42	40	38	37	37	37
Indirect Defense Purchases Resulting from Direct Purchases							
Banks, credit cards and finance	141	132	128	125	121	119	118
Wholesale trade	43	40	39	38	37	36	36
Management of companies and enterprises	40	37	36	35	34	33	33
Animal production	38	35	35	36	34	34	34
Crop production	33	30	30	30	29	29	28

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Note: Numbers may not add to totals due to roundings.

TABLE III - 43 Tennessee Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	6,778	6,651	6,585	6,439	6,157	6,075	6,051
Indirect Defense Purchases Resulting from Direct Purchases	4,976	4,643	4,475	4,372	4,217	4,137	4,101
Induced Defense Purchases Resulting from Direct Pay	2,026	2,178	2,135	2,084	2,067	2,066	2,065
Total Nondefense Expenditures	536,361	549,034	567,027	582,137	597,511	614,436	630,391
Total Output	550,303	562,660	580,370	595,175	610,091	626,851	642,745
General government industry	2,068	2,194	2,199	2,196	2,199	2,217	2,231
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	2,068	2,194	2,199	2,196	2,199	2,216	2,231
Petroleum and coal products	1,269	1,200	1,175	1,132	1,034	1,003	1,001
Professional, scientific and technical services	862	841	853	837	814	797	777
Truck transportation	392	370	346	334	326	321	321
Air transportation	249	217	210	207	199	194	192
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	363	349	347	338	324	313	308
Management of companies and enterprises	350	326	315	310	298	294	291
Fabricated metal products	320	297	280	269	257	251	248
Transportation support, sightseeing, couriers	310	291	279	272	264	259	258
Wholesale trade	306	285	277	271	261	256	255

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Note: Numbers may not add to totals due to roundings.

TABLE III - 44 Texas Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	54,302	52,493	50,965	50,998	50,187	49,784	49,342
Indirect Defense Purchases Resulting from Direct Purchases	35,120	32,887	32,150	31,797	30,654	30,242	30,014
Induced Defense Purchases Resulting from Direct Pay	12,215	13,067	12,803	12,493	12,391	12,381	12,387
Total Nondefense Expenditures	2,578,392	2,642,206	2,737,942	2,821,939	2,902,484	2,991,817	3,073,615
Total Output	2,680,993	2,741,617	2,834,804	2,918,087	2,996,557	3,085,046	3,166,201
General government industry	19,042	19,524	19,260	19,055	18,993	19,062	19,133
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	19,042	19,524	19,259	19,054	18,993	19,062	19,133
Aerospace products and parts	15,895	15,143	14,517	15,099	14,928	14,687	14,299
Professional, scientific and technical services	3,385	3,190	3,147	3,169	3,185	3,251	3,223
New construction	1,498	1,392	1,343	1,291	1,234	1,196	1,168
Truck transportation	1,176	1,111	1,040	1,003	978	964	963
Indirect Defense Purchases Resulting from Direct Purchases							
Crude oil extraction	7,463	7,181	7,208	7,345	7,032	7,003	6,949
Petroleum and coal products	3,244	3,003	2,902	2,815	2,673	2,611	2,589
Legal services	2,282	2,134	2,092	2,077	2,030	2,005	1,990
Administrative and support services	1,935	1,796	1,752	1,716	1,667	1,642	1,630
Wholesale trade	1,624	1,517	1,474	1,442	1,389	1,363	1,355

Note: Numbers may not add to totals due to roundings.

TABLE III - 45 Utah Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	4,769	4,814	4,739	4,700	4,657	4,692	4,678
Indirect Defense Purchases Resulting from Direct Purchases	2,840	2,637	2,556	2,526	2,464	2,451	2,437
Induced Defense Purchases Resulting from Direct Pay	1,287	1,378	1,350	1,317	1,306	1,306	1,306
Total Nondefense Expenditures	267,170	273,324	281,918	289,140	296,559	304,596	312,396
Total Output	276,183	282,265	290,671	297,785	305,084	313,139	320,912
General government industry	1,970	2,220	2,204	2,160	2,149	2,155	2,160
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	1,970	2,220	2,204	2,160	2,149	2,155	2,160
Professional, scientific and technical services	974	915	907	953	1,000	1,067	1,063
Communications and audio-video equipment	218	205	204	205	198	196	194
New construction	190	178	170	161	154	148	144
Maintenance and repair construction	149	135	128	123	116	112	110
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	411	379	369	384	398	420	421
Banks, credit cards and finance	174	163	158	155	150	148	147
Nonferrous metals	172	160	152	148	142	140	139
Iron and steel	171	158	152	144	137	133	132
Management of companies and enterprises	161	150	145	143	137	135	134

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Note: Numbers may not add to totals due to roundings.

TABLE III - 46 Vermont Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	626	610	586	577	563	560	559
Indirect Defense Purchases Resulting from Direct Purchases	334	311	302	297	288	283	281
Induced Defense Purchases Resulting from Direct Pay	162	175	172	168	167	167	167
Total Nondefense Expenditures	47,611	48,783	50,399	51,791	53,161	54,661	56,100
Total Output	48,752	49,896	51,476	52,850	54,195	55,686	57,122
General government industry	185	194	193	192	192	193	194
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	185	194	193	192	192	193	194
Petroleum and coal products	63	60	59	57	52	50	50
Fabricated metal products	58	60	49	49	48	49	49
Leather products	36	38	35	34	33	33	33
Computers and peripheral equipment	31	25	25	25	24	24	24
Indirect Defense Purchases Resulting from Direct Purchases							
Real estate	29	27	26	26	25	25	25
Wholesale trade	21	19	19	18	18	17	17
Fabricated metal products	18	17	16	15	15	14	14
Management of companies and enterprices	17	16	16	15	15	15	15
Semiconductors and other electronic components	16	15	15	15	15	15	15

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Note: Numbers may not add to totals due to roundings.

TABLE III - 47 Virginia Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	66,312	65,115	63,954	62,254	60,988	60,321	60,355
Indirect Defense Purchases Resulting from Direct Purchases	18,558	17,203	16,641	16,277	15,721	15,432	15,334
Induced Defense Purchases Resulting from Direct Pay	9,228	9,810	9,591	9,348	9,267	9,255	9,261
Total Nondefense Expenditures	985,735	1,009,629	1,038,273	1,062,823	1,089,936	1,117,549	1,144,844
Total Output	1,080,270	1,102,158	1,128,845	1,151,084	1,176,277	1,202,920	1,230,153
General government industry	19,449	21,088	20,911	20,598	20,521	20,596	20,662
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	19,449	21,088	20,911	20,598	20,521	20,596	20,662
Professional, scientific and technical services	18,762	17,654	17,293	16,958	16,540	16,353	16,173
Computer systems design and related services	7,629	6,980	6,815	6,741	6,479	6,351	6,304
Ship and boat building	6,130	6,383	6,361	5,592	5,605	5,426	5,699
Telecommunications	2,768	2,411	2,341	2,316	2,232	2,190	2,173
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	7,909	7,315	7,040	6,841	6,581	6,434	6,402
Administrative and support services	1,807	1,679	1,619	1,591	1,548	1,527	1,519
Computer systems design and related services	1,762	1,638	1,594	1,568	1,519	1,499	1,487
Management of companies and enterprises	917	854	827	813	782	770	764
Information and data processing	696	653	637	620	601	591	588

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Note: Numbers may not add to totals due to roundings.

TABLE III - 48 Washington Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	15,807	15,708	15,304	15,181	14,984	14,879	14,816
Indirect Defense Purchases Resulting from Direct Purchases	7,110	6,559	6,373	6,351	6,182	6,104	6,055
Induced Defense Purchases Resulting from Direct Pay	4,347	4,640	4,545	4,436	4,401	4,400	4,405
Total Nondefense Expenditures	695,231	710,022	731,190	750,655	770,314	791,686	812,357
Total Output	723,463	737,867	758,304	777,422	796,645	817,789	838,358
General government industry	7,965	8,327	8,220	8,111	8,080	8,106	8,132
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	7,965	8,327	8,220	8,111	8,080	8,106	8,132
Aerospace products and parts	3,160	3,029	2,869	3,008	3,009	2,977	2,904
Professional, scientific and technical services	514	488	481	467	450	439	432
Ship and boat building	425	443	442	395	393	381	397
Maintenance and repair construction	419	376	355	337	322	310	306
Indirect Defense Purchases Resulting from Direct Purchases							
Aerospace products and parts	1,659	1,503	1,473	1,550	1,540	1,541	1,523
Administrative and support services	517	477	464	454	441	434	432
Management of companies and enterprises	419	390	378	371	357	352	349
Real estate	369	344	335	331	322	317	315
Publishing, except software	355	330	323	321	315	312	311

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Note: Numbers may not add to totals due to roundings.

TABLE III - 49 West Virginia Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	1,048	1,041	1,015	996	976	971	969
Indirect Defense Purchases Resulting from Direct Purchases	1,198	1,111	1,075	1,050	1,009	990	982
Induced Defense Purchases Resulting from Direct Pay	371	399	391	382	379	379	380
Total Nondefense Expenditures	115,383	117,942	122,089	125,568	128,979	132,750	136,335
Total Output	118,047	120,537	124,612	128,037	131,381	135,127	138,702
General government industry	466	496	496	493	493	496	499
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	466	496	496	493	493	496	499
New construction	75	70	67	64	61	59	57
Professional, scientific and technical services	65	62	61	60	59	59	58
Truck transportation	62	59	55	53	52	51	51
Fabricated metal products	47	47	40	39	37	38	38
Indirect Defense Purchases Resulting from Direct Purchases							
Nonferrous metals	75	70	66	65	62	61	61
Iron and steel	75	69	67	63	60	58	58
Coal mining	68	62	60	60	57	56	56
Nonmetallic mineral mining	63	58	55	53	51	49	48
Metal ore mining	58	53	51	50	47	46	46

Note: Numbers may not add to totals due to roundings.

TABLE III - 50 Wisconsin Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	5,394	4,963	4,735	4,723	4,535	4,548	4,577
Indirect Defense Purchases Resulting from Direct Purchases	5,122	4,753	4,592	4,478	4,318	4,235	4,199
Induced Defense Purchases Resulting from Direct Pay	1,318	1,422	1,396	1,363	1,352	1,352	1,351
Total Nondefense Expenditures	512,651	524,278	541,357	555,521	569,863	585,819	600,939
Total Output	524,668	535,590	552,249	566,244	580,220	596,100	611,213
General government industry	788	825	823	820	821	826	831
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
Petroleum and coal products	1,411	1,334	1,307	1,259	1,150	1,116	1,113
Motor vehicles	840	639	504	587	649	728	761
General government industry	787	825	823	820	820	826	831
Truck transportation	328	310	290	280	273	269	269
Other transportation equipment	184	151	131	133	135	143	148
Indirect Defense Purchases Resulting from Direct Purchases							
Fabricated metal products	564	523	494	473	453	442	436
Management of companies and enterprises	527	490	475	467	449	442	439
Real estate	309	285	279	276	268	264	262
Wholesale trade	258	241	234	229	221	216	215
Paper	252	232	224	219	211	207	205

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Note: Numbers may not add to totals due to roundings.

TABLE III - 51 Wyoming Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	794	777	756	741	727	721	720
Indirect Defense Purchases Resulting from Direct Purchases	878	823	807	800	766	755	749
Induced Defense Purchases Resulting from Direct Pay	257	274	269	262	260	260	260
Total Nondefense Expenditures	64,333	65,883	68,542	70,959	73,122	75,467	77,570
Total Output	66,280	67,773	70,390	72,778	74,890	77,217	79,314
General government industry	452	462	456	451	450	451	453
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	452	462	456	451	449	451	453
Rail transportation	47	44	41	40	39	38	38
Maintenance and repair construction	44	40	38	36	34	33	32
New construction	43	40	38	37	35	34	34
Truck transportation	41	39	37	35	34	34	34
Indirect Defense Purchases Resulting from Direct Purchases							
Crude oil extraction	277	267	268	273	261	260	258
Petroleum and coal products	62	57	55	54	51	50	49
Coal mining	55	50	49	49	47	46	45
Rail transportation	53	49	47	46	44	43	43
Nonmetallic mineral mining	51	47	45	43	41	40	39

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Note: Numbers may not add to totals due to roundings.

TABLE III - 52 Entire United States Summary

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
AGGREGATE MEASURES							
Total Direct Expenditures (Purchases and Pay)	606,169	589,837	577,169	568,521	556,817	551,899	550,153
Indirect Defense Purchases Resulting from Direct Purchases	331,327	308,501	299,610	294,068	284,124	279,491	277,326
Induced Defense Purchases Resulting from Direct Pay	133,258	142,893	140,097	136,777	135,710	135,670	135,753
Total Nondefense Expenditures	29,772,305	30,524,913	31,537,986	32,413,115	33,284,659	34,240,070	35,146,268
Total Output	30,843,060	31,566,143	32,554,862	33,412,481	34,261,310	35,207,130	36,109,500
General government industry	191,150	201,727	199,583	197,048	196,381	197,111	197,801
LARGEST PURCHASES BY INDUSTRIAL SECTORS							
Total Direct Expenditures (Purchases and Pay)							
General government industry	191,150	201,727	199,583	197,048	196,381	197,111	197,801
Professional, scientific and technical services	89,942	85,437	84,623	83,698	82,395	82,112	81,005
Aerospace products and parts	55,994	53,208	50,973	53,058	52,355	51,548	50,228
Ship and boat building	26,067	27,114	27,030	23,686	23,763	22,987	24,174
Petroleum and coal products	21,069	19,923	19,509	18,796	17,166	16,652	16,610
Indirect Defense Purchases Resulting from Direct Purchases							
Professional, scientific and technical services	37,916	35,403	34,449	33,763	32,786	32,308	32,067
Management of companies and enterprises	23,953	22,301	21,598	21,235	20,424	20,114	19,950
Administrative and support services	19,847	18,522	17,966	17,636	17,161	16,926	16,799
Wholesale trade	15,461	14,436	14,028	13,727	13,223	12,976	12,901
Real estate	14,570	13,551	13,223	13,059	12,696	12,517	12,421

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Note: Numbers may not add to totals due to roundings.

APPENDIX A

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Mapping from IDEPPS to RDEPPS, With NAICS Codes

IDEPPS		NAICS Classification	RDEPPS		
Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title	
1	Oilseed farming	111111-2	1	Crop Production	
2	Grain farming	11113-6, 11119	1		
3	Vegetable and melon farming	1112	1		
4	Fruit and nut farming	11131-2,111331-6, 111339	1		
5	Greenhouse, nursery, and floriculture production	1114	1		
6	Tobacco farming	11191	1		
7	Cotton farming	11192	1		
8	Sugarcane and sugar beet farming	11193, 111991	1		
9	All other crop farming	11194, 111992, 111998	1		
10	Cattle ranching and dairy farming	11211, 11212, 11213	2	Animal Production	
11	Poultry and egg production	1123	2		
12	Animal production, except cattle and poultry and eggs	1122, 1124-5, 1129	2	Forestry, fishing and agriculture support activities	
13	Forestry and logging	1131-3	3		
14	Fishing, hunting and trapping	1141-2	3		
15	Support activities for agriculture and forestry	115	3		
16	Crude oil extraction	211pt	4		Crude oil extraction
17	Natural gas extraction	211pt	5	Natural gas extraction	
18	Coal mining	2121	6	Coal Mining	
19	Iron ore mining	21221	7	Metal Ore Mining	
20	Copper, nickel, lead, and zinc mining	21223	7	Nonmetallic mineral mining	
21	Gold, silver, and other metal ore mining	21222, 21229	7		
22	Stone mining and quarrying	21231	8		
23	Sand, gravel, clay, and ceramic and refractory minerals mining and quarrying	21232	8		
24	Other nonmetallic mineral mining and quarrying	21239	8		
25	Drilling oil and gas wells	213111	9		Support activities for mining
26	Support activities for oil and gas operations	213112	9		
27	Support activities for other mining	213113-5	9		
28	Electric power generation, transmission, and distribution	2211	10	Electric utilities	
29	Natural gas distribution	2212	11	Natural gas distribution	
30	Water, sewage and other systems	2213	12	Water, sewage and other systems	
31	New residential construction	23*	13	New construction	
32	New non-residential building construction	23*	13		
33	Highway, street, bridge, tunnel, water, sewer, pipeline and other construction	23*	13	Maintenance and repair construction	
34	Maintenance and repair of residential structures	23*	14		
35	Maintenance and repair of nonresidential buildings, infrastructure and other	23*	14		
36	Dog and cat food	311111	16	Other foods	
37	Other animal food	311119	16		
38	Flour milling and malt	31121	16		
39	Wet corn milling	311221	16		
40	Soybean and other oilseed processing	311222-3	16		
41	Fats and oils refining and blending	311225	16		
42	Breakfast cereals	311230	16		
43	Sugar manufacturing	311311-3	16		
44	Chocolate	31132, 31133	16		
45	Nonchocolate confectionery	31134	16		
46	Frozen food manufacturing	31141	16		
47	Fruit and vegetable canning, pickling, and drying	31142	16		
48	Fluid milk and butter	311511-2	15		Dairy products, meat and seafood
49	Cheese	311513	15		
50	Dry, condensed, and evaporated dairy product manufacturing	311514	15		
51	Ice cream and frozen desserts	311520	15		

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
52	Animal (except poultry) slaughtering, rendering, and processing	311611-3	15	
53	Poultry processing	311615	15	
54	Seafood product preparation and packaging	3117	15	
55	Bread and bakery products	31181	16	Other foods
56	Cookies, crackers and tortillas	31182, 31183	16	
57	Snack foods	31191	16	
58	Coffee and tea	31192	16	
59	Flavoring syrup and concentrate	31193	16	
60	Seasonings and dressings	31194	16	
61	All other food	31199	16	
62	Soft drinks and ice	31211	17	Beverages
63	Breweries	31212	17	
64	Wineries	31213	17	
65	Distilleries	31214	17	
66	Tobacco product manufacturing	3122	18	Tobacco
67	Fiber, yarn, and thread mills	3131	19	Textiles and textile products
68	Fabric mills	3132	19	
69	Textile and fabric finishing mills	3133	19	
70	Carpet and rug mills	31411	19	
71	Curtain and linen mills	31412	19	
72	Other textile products	31491, 31499	19	
73	Apparel knitting mills	31511, 31519	20	Apparel
74	Cut and sew apparel	3152	20	
75	Apparel accessories and other apparel	3159	20	
76	Footwear and other leather products	3161	21	Leather products
77	Sawmills and wood preservation	3211	22	Wood products
78	Veneer, plywood, particleboard, and engineered wood products	3212	22	
79	Wood windows and doors and millwork	32191	22	
80	Wood containers and pallets	32192	22	
81	Manufactured homes (mobile homes)	321991	22	
82	Prefabricated wood buildings	321992	22	
83	All other miscellaneous wood products	321999	22	
84	Pulp mills	32211	23	Paper
85	Paper and paperboard mills	32212, 32213	23	
86	Paperboard container manufacturing	32221	23	
87	Coated and laminated paper, packaging paper and plastics film	322221-2	23	
88	All other paper bag and coated and treated paper manufacturing	322223-6	23	
89	Stationery product manufacturing	32223	23	
90	Sanitary paper product manufacturing	322291	23	
91	All other converted paper products	322299	23	
92	Printing	32311	24	Printing
93	Support activities for printing	32312	24	
94	Petroleum refineries	32411	25	Petroleum and coal products
95	Asphalt products	324121, 324122	25	
96	Lubricating and other petroleum products	324191, 324199	25	
97	Petrochemicals	32511	28	Other chemicals
98	Industrial gases	32512	28	
99	Synthetic dyes and pigments	32513	28	
100	Other basic inorganic chemicals	32518	28	
101	Other basic organic chemicals	32519	28	
102	Plastics materials and resins	325211	26	Resin, synthetic rubber and fibers
103	Synthetic rubber	325212	26	

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
104	Artificial and synthetic fibers and filaments	32522	26	
105	Fertilizers	325311-4	28	Other chemicals
106	Pesticides and other agricultural chemicals	325320	28	
107	Pharmaceuticals and medicines	325411-4	27	Pharmaceuticals
108	Paints and coatings	32551	28	Other chemicals
109	Adhesives	32552	28	
110	Soaps and cleaning compounds	32561	28	
111	Toilet preparations	32562	28	
112	Printing ink	32591	28	
113	All other chemical products and preparations	32592, 32599	28	
114	Plastics packaging materials and unlaminated film and sheet	32611	29	Plastic products
115	Plastics pipe, fittings, and profile shapes	32612	29	
116	Laminated plastics plate, sheet (except packaging), and shapes	32613	29	
117	Plastic foam products	32614, 32615	29	
118	Plastic bottles	32616	29	
119	Other plastics products	32619	29	
120	Tires	32621	30	Rubber products
121	Rubber and plastics hoses and beltings	32622	30	
122	Other rubber products	32629	30	
123	Pottery, ceramics, and plumbing fixtures	32711	31	Nonmetallic mineral products
124	Clay building materials and refractories	327122,4,5	31	
125	Glass and glass products, exc containers	327211-2, 327215	31	
126	Glass containers	327213	31	
127	Cement	32731	31	
128	Ready-mix concrete	32732	31	
129	Concrete pipe, brick, and blocks	32733	31	
130	Other concrete products	32739	31	
131	Lime and gypsum products	3274	31	
132	Abrasive products	32791	31	
133	Cut stone and stone products	327991	31	
134	Other non-metallic mineral products	327992,3,9	31	
135	Primary ferrous metal products	3311, 3312	32	Iron and steel
136	Primary aluminum production	331311,2,4	33	Nonferrous metals
137	Aluminum product manufacturing from purchased aluminum	331315, 331316, 331319	33	
138	Primary smelting and refining of copper	331411	33	
139	Primary smelting and refining of nonferrous metal (except copper and aluminum)	331419	33	
140	Copper rolling, drawing, extruding and alloying	33142	33	
141	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding and alloying	33149	33	
142	Ferrous metal foundries	33151	32	Iron and steel
143	Nonferrous metal foundries	33152	33	Nonferrous metals
144	Forging and stamping	33211	34	Fabricated metal products
145	Cutlery, utensils, pots, and pans	332211, 332214	34	
146	Handtools	332212-3	34	
147	Plate work and fabricated structural products	33231	34	
148	Ornamental and architectural metal products	33232	34	
149	Power boilers and heat exchangers	33241	34	
150	Metal tanks (heavy gauge)	33242	34	
151	Metal cans, boxes, and other metal containers (light gauge)	33243	34	
152	Ammunition	332992-3	34	
153	Arms, ordnance, and accessories	332994-5	34	
154	Hardware manufacturing	3325	34	
155	Springs and wire products	3326	34	

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
156	Machine shops	33271	34	
157	Turned products and screws, nuts, and bolts	33272	34	
158	Coating, engraving, heat treating and allied activities	3328	34	
159	Metal valves	33291-3, 332919	34	
160	Ball and roller bearings	332991	34	
161	Fabricated pipe and pipe fittings	332996	34	
162	Other fabricated metal products	332997-9	34	
163	Farm machinery and equipment	333111	35	Agriculture, construction and mining machinery
164	Lawn and garden equipment	333112	35	
165	Construction machinery	33312	35	
166	Mining and oil and gas field machinery	33313	35	
167	Other industrial machinery	33321, 333291-4, 333298	36	Industrial machinery
168	Plastics and rubber industry machinery	33322	36	
169	Semiconductor machinery manufacturing	333295	36	
170	Vending, commercial, industrial, and office machinery	333311-3	37	Commercial and service industry machinery
171	Optical instruments and lenses	333314	37	
172	Photographic and photocopying equipment	333315	37	
173	Other commercial and service industry machinery	333319	38	Ventilation, heating, air-conditioning and ventilation equipment
174	Air purification and ventilation equipment	333411-2	38	
175	Heating equipment (except warm air furnaces)	333414	38	
176	Air conditioning, refrigeration, and warm air heating equipment	333415	38	
177	Industrial molds	333511	39	Metalworking machinery
178	Metal cutting and forming machine tools	333512-3	39	
179	Special tools, dies, jigs, and fixtures	333514	39	
180	Cutting tool and machine tool accessories	333515	39	
181	Rolling mill and other metalworking machinery	333516, 333518	39	
182	Turbine and turbine generator set units	333611	40	Engine, turbine and power transmission equipment
183	Speed changers and mechanical power transmission equipment	333612, 333613	40	
184	Other engine equipment	333618	40	
185	Pump and pumping equipment	333911, 333913	41	Other general purpose machinery
186	Air and gas compressors	333912	41	
187	Material handling equipment	333921-4	41	
188	Power-driven handtool manufacturing	333991	41	
189	Other general purpose machinery	333992, 333997, 333999	41	
190	Packaging machinery	333993	41	
191	Industrial process furnaces and ovens	333994	41	
192	Fluid power process machinery	333995-6	41	
193	Computers	334111	42	Computers and peripheral equipment
194	Computer storage devices	334112	42	
195	Computer terminals and other computer peripherals	334113, 334119	42	
196	Telephone apparatus	33421	43	Communications and audio-video equipment
197	Broadcast and wireless communications equipment	33422	43	
198	Other communications equipment	33429	43	
199	Audio and video equipment	3343	43	
200	Semiconductors and electron tubes	334411, 334413	44	Semiconductors and other electronic components
201	All other electronic components	334414,2,4-6,7-9	44	
202	Electromedical and electrotherapeutic apparatus	334510	45	Electromedical and electrotherapeutic apparatusw
203	Search, detection, and navigation instruments	334511	46	Search, detection and navigation equipment
204	Automatic environmental controls	334512	47	Measuring and control instruments
205	Industrial process variable instruments	334513	47	
206	Totalizing fluid meters and counting devices	334514	47	
207	Electricity and signal testing instruments	334515	47	

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
208	Analytical laboratory instruments	334516	47	
209	Irradiation apparatus manufacturing	334517	45	Electromedical and electrotherapeutic apparatusw
210	Watch, clock, and other measuring and controlling devices	334518-9	47	Measuring and control instruments
211	Software, audio, and video media reproducing	334611-2	48	Magnetic and optical media
212	Magnetic and optical recording media	334613	48	
213	Electric lamp bulbs and parts	33511	51	Other electrical equipment and components
214	Lighting fixtures	33512	51	
215	Small electrical appliances	33521	49	Household appliances
216	Household cooking appliances	335221	49	
217	Household refrigerators and home freezers	335222	49	
218	Household laundry equipment	335224	49	
219	Other major household appliances	335228	49	
220	Power, distribution, and specialty transformers	335311	50	Electrical equipment
221	Motors and generators	335312	50	
222	Switchgear and switchboard apparatus	335313	50	
223	Relays and industrial controls	335314	50	
224	Storage batteries	335911	51	Other electrical equipment and components
225	Primary battery manufacturing	335912	51	
226	Communication and energy wires and cables	33592	51	
227	Wiring devices	33593	51	
228	Carbon and graphite and miscellaneous electrical equipment	335991, 335999	51	
229	Automobiles	336111-2	52	Motor vehicles
230	Heavy duty trucks	336120	52	
231	Motor vehicle bodies	336211	52	
232	Truck trailer manufacturing	336212	52	
233	Motor homes, trailers and campers	336213, 336214	52	
234	Motor vehicle parts	3363	53	Motor vehicle parts
235	Aircraft	336411	54	Aerospace products and parts
236	Aircraft engines and engine parts	336412	54	
237	Other aircraft parts and auxiliary equipment	336413	54	
238	Guided missiles and space vehicles	336414	54	
239	Propulsion units and parts for space vehicles and guided missiles	336415, 336419	54	
240	Railroad rolling stock	3365	56	Other transportation equipment
241	Ship building and repairing	336611	55	Ship and boat building
242	Boat building	336612	55	
243	Motorcycles, bicycles, and parts	336991	56	Other transportation equipment
244	Military armored vehicles, tanks, and tank components	336992	56	
245	All other transportation equipment	336999	56	
246	Wood kitchen cabinet and countertops	33711	57	Furniture
247	Household and institutional furniture	33712	57	
248	Office furniture (including fixtures)	33721	57	
249	Mattresses, blinds and shades	33791, 33792	57	
250	Laboratory apparatus and furniture	339111	58	Medical equipment and supplies, dental labs
251	Surgical and medical instruments	339112	58	
252	Surgical appliances and supplies	339113	58	
253	Dental equipment and supplies	339114	58	
254	Ophthalmic goods	339115	59	Ophthalmic goods
255	Dental laboratories	339116	58	Medical equipment and supplies, dental labs
256	Jewelry and silverware	33991	60	Miscellaneous manufacturing
257	Sporting and athletic goods	33992	60	
258	Dolls, toys, and games	33993	60	
259	Office supplies (except paper)	33994	60	

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
260	Sign manufacturing	33995	60	
261	Gasket, packing, and sealing devices	339991	60	
262	Musical instruments	339992	60	
263	All other miscellaneous manufacturing	339993, 339995, 339999	60	
264	Broom, brush, and mop manufacturing	339994	60	
265	Wholesale trade	42	61	Wholesale trade
266	Retail trade	44, 45	62	Retail trade
267	Air transportation	481	63	Air transportation
268	Rail transportation	482	64	Rail transportation
269	Water transportation	483	65	Water transportation
270	Truck transportation	484	66	Truck transportation
271	Transit and ground passenger transportation	485	67	Transit and ground passenger transportation
272	Pipeline transportation	486	68	Pipeline transportation
273	Scenic and sightseeing transportation and support activities for transportation	487, 488	69	Transportation support, sightseeing, couriers
274	Couriers and messengers	492	69	
275	Warehousing and storage	493	70	Warehousing and storage
276	Newspaper publishers	51111	71	Publishing, except software
277	Periodical publishers	51112	72	Software
278	Book publishers	51113	71	Publishing, except software
279	Directory, mailing list, and other publishers	51114, 51119	71	
280	Software publishers	51121	71	
281	Motion picture and video industries	5121	73	Motion picture and sound recording
282	Sound recording industries	5122	73	
283	Radio and television broadcasting	5151	74	
284	Cable and internet	5152, 516	74	
285	Telecommunications	517	75	
286	Data processing, hosting and internet service providers	5181, 5182	76	
287	Other information services	519	76	
288	Monetary authorities and depository credit intermediation	521, 5221	77	Banks, credit cards and finance
289	Nondepository credit intermediation and related activities	5222-3	77	
290	Securities, commodity contracts, investments, and related activities	523	78	Securities, investments, funds and trusts
291	Insurance carriers	5241	79	Insurance
292	Insurance agencies, brokerages, and related activities	5242	79	
293	Funds, trusts, and other financial vehicles	525	78	Securities, investments, funds and trusts
294	Real estate	531	80	Real estate
295	Owner-occupied dwellings	S00800	81	Owner-occupied dwellings
296	Automotive equipment rental and leasing	5321	82	Rental and leasing of goods
297	General and consumer goods rental except video tapes and discs	53221-2, 53229, 5323	82	
298	Video tape and disc rental	53223	82	
299	Commercial and industrial machinery and equipment rental and leasing	5324	82	
300	Lessors of nonfinancial intangible assets	533	83	Royalties
301	Legal services	5411	84	Legal services
302	Accounting, tax preparation, bookkeeping, and payroll services	5412	85	Professional, scientific and technical services
303	Architectural, engineering, and related services	5413	85	
304	Specialized design services	5414	85	
305	Custom computer programming services	541511	86	Computer systems design and related services
306	Computer systems design services	541512	86	
307	Other computer related services, including facilities management	541513, 541519	86	
308	Management, scientific, and technical consulting services	54161	85	Professional, scientific and technical services
309	Environmental and other technical consulting services	54162, 54169	85	
310	Scientific research and development services	5417	85	
311	Advertising and related services	5418	85	

Mapping from IDEPPS to RDEPPS, With NAICS Codes

Ind #	IDEPPS Title	Classification Code(s)	Sec #	RDEPPS Title
312	All other miscellaneous professional, scientific, and technical services	54191, 54193, 54199	85	
313	Photographic services	54192	85	
314	Veterinary services	54194	85	
315	Management of companies and enterprises	55	87	Management of companies and enterprises
316	Office administrative services	5611	88	Administrative and support services
317	Facilities support services	5612	88	
318	Business support services	5614	88	
319	Investigation and security services	5616	88	
320	Services to buildings and dwellings	5617	88	
321	Other support services	5619	88	
322	Employment services	5613	88	
323	Travel arrangement and reservation services	5615	88	
324	Waste management and remediation services	562	89	Waste management and remediation
325	Elementary and secondary schools	6111	90	Educational services
326	Junior colleges, colleges, universities, and professional schools	6112-3	90	
327	Other educational services	6114-7	90	
328	Offices of physicians, dentists, and other health practitioners	6211-3	92	Offices of physicians, dentists, and other health practitioners
329	Medical and diagnostic labs and outpatient and other ambulatory care services	6214-5, 6219	93	Other ambulatory health care services
330	Home health care services	6216	91	Home health care services
331	Hospitals	622	94	Hospitals
332	Nursing and residential care facilities	623	95	Nursing and residential care facilities
333	Social assistance, except child day care services	6241-3	96	Child care and social assistance
334	Child day care services	6244	96	
335	Performing arts	7111,7113,7114,7115,	97	Performing arts, spectator sports and museums
336	Museums, historical sites, zoos, and parks	712	97	
337	Spectator sports	7112	97	
338	Amusements, gambling, & recreation activities	7131-2, 71391-3, 71394, 71395, 71399	98	Amusements, gambling and recreation
339	Hotels and other accommodations	72111-2, 72119, 7212-3	99	Accommodation
340	Food services and drinking places	722	100	Food services and drinking places
341	Automotive repair, maintenance and car washes	8111	101	Automotive repair and maintenance
342	Electronic and precision equipment repair and maintenance	8112	102	Other repair and maintenance, personal services
343	Commercial and industrial machinery and equipment repair and maintenance	8113	102	
344	Personal and household goods repair and maintenance	8114	102	
345	Personal care services	8121	102	
346	Death care services	8122	102	
347	Dry-cleaning and laundry services	8123	102	
348	Other personal services	8129	102	
349	Religious, grantmaking, civic & professional organizations	813	103	Religious, grantmaking and other organizations
350	Private households	814	104	Private households
351	Postal service	491	105	Postal service and federal government enterprises
352	Other federal government enterprises	S00102	105	
353	Other state and local government enterprises	S00203	106	State and local government enterprises
354	General Federal defense government services	S00500	107	General government industry
355	General Federal nondefense government services	S00600	107	
356	General state and local government services	S00700	107	
357	Noncomparable imports	S00300	108	Noncomparable imports
358	Scrap	S00401	109	Scrap, used and secondhand
359	Used and secondhand goods	S00402	109	
360	Rest of the world adjustment	S00900	110	Rest of the world adjustment to final uses

APPENDIX B
PROJECTIONS FOR 360 INDUSTRIES

1: Oilseed farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	133	121	119	119	114	111	110
Total:	133	121	119	119	114	111	110

2: Grain farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	2
Indirect Purchases	572	527	525	529	512	504	500
Total:	574	529	526	531	513	506	502

3: Vegetable and melon farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	351	320	325	339	330	328	328
Indirect Purchases	55	50	50	51	50	49	49
Total:	406	370	375	390	379	377	377

Note: Numbers may not add due to rounding

4: Fruit and nut farming

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	72	66	66	68	66	66	66
Total:	72	66	66	68	66	66	66

5: Greenhouse, nursery, and floriculture production

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	1	1	1	1	1	1
Indirect Purchases	29	27	26	26	25	24	24
Total:	31	28	27	27	26	25	25

6: Tobacco farming

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	3	3	3	3	3	3	3
Total:	3	3	3	3	3	3	3

Note: Numbers may not add due to rounding

7: Cotton farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	23	22	21	21	19	19	18
Total:	23	22	21	21	19	19	18

8: Sugarcane and sugar beet farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	41	38	38	39	38	38	38
Total:	41	38	38	39	39	38	38

9: All other crop farming(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	352	325	322	322	311	306	304
Total:	353	326	322	322	311	307	304

Note: Numbers may not add due to rounding

10: Cattle ranching and dairy farming

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	44	40	40	42	41	41	41
Indirect Purchases	857	786	792	810	781	773	772
Total:	901	826	832	853	823	814	813

11: Poultry and egg production

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	58	53	55	57	54	54	54
Indirect Purchases	273	250	251	258	252	250	250
Total:	332	303	305	315	306	304	304

12: Animal production, except cattle and poultry and eggs

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	9	8	7	7	6	6
Indirect Purchases	298	275	274	277	269	266	264
Total:	307	284	282	285	276	272	271

Note: Numbers may not add due to rounding

13: Forestry and logging(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	2	2	2	2	1	1
Indirect Purchases	1,058	965	917	888	844	822	811
Total:	1,061	968	919	890	845	823	812

14: Fishing, hunting and trapping(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	60	54	55	57	56	55	55
Indirect Purchases	111	102	100	100	97	96	96
Total:	171	157	155	157	153	151	151

15: Support activities for agriculture and forestry(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	52	44	42	41	39	38	38
Indirect Purchases	261	240	235	234	226	222	219
Total:	313	284	278	276	265	260	258

Note: Numbers may not add due to rounding

16: Crude oil extraction(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	43	36	38	35	24	21	20
Indirect Purchases	25,446	23,833	23,231	22,467	20,848	20,291	20,194
Total:	25,489	23,869	23,269	22,502	20,873	20,312	20,214

18: Coal mining(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	21	21	21	20	19	19
Indirect Purchases	846	768	743	727	697	682	678
Total:	868	789	764	747	717	702	697

19: Iron ore mining(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	258	240	232	219	209	203	202
Total:	258	240	232	219	209	203	202

Note: Numbers may not add due to rounding

20: Copper, nickel, lead, and zinc mining

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	311	286	278	271	261	257	256
Total:	311	286	278	272	261	257	256

21: Gold, silver, and other metal ore mining

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12	13	13	13	13	12	13
Indirect Purchases	176	162	157	154	147	145	144
Total:	188	175	170	166	160	157	157

22: Stone mining and quarrying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	8	8	7	5	5	4
Indirect Purchases	397	362	348	335	319	310	306
Total:	405	370	356	342	325	315	310

Note: Numbers may not add due to rounding

23: Sand, gravel, clay, and ceramic and refractory minerals mining and quarrying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7	5	4	4	4	3	3
Indirect Purchases	314	292	279	274	259	253	247
Total:	321	297	283	278	263	256	250

24: Other nonmetallic mineral mining and quarrying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	1	1	1	1	1	1
Indirect Purchases	89	81	78	76	72	70	69
Total:	91	82	80	77	73	71	70

25: Drilling oil and gas wells

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0

Note: Numbers may not add due to rounding

26: Support activities for oil and gas operations

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	0	0	0	0	0
Indirect Purchases	186	179	178	180	172	171	169
Total:	187	179	179	181	172	171	170

27: Support activities for other mining

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	4	4	4	3	3	3
Indirect Purchases	72	66	64	63	60	59	58
Total:	77	71	68	67	63	62	61

28: Electric power generation, transmission, and distribution

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,738	4,081	3,918	3,845	3,675	3,590	3,562
Indirect Purchases	5,140	4,804	4,664	4,575	4,415	4,337	4,307
Total:	9,879	8,884	8,582	8,420	8,090	7,928	7,869

Note: Numbers may not add due to rounding

29: Natural gas distribution

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	829	716	688	678	652	638	633
Indirect Purchases	2,105	1,964	1,903	1,851	1,757	1,719	1,706
Total:	2,934	2,680	2,591	2,530	2,409	2,358	2,339

30: Water, sewage and other systems

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,000	864	846	826	765	740	733
Indirect Purchases	507	467	452	441	424	415	412
Total:	1,508	1,331	1,298	1,267	1,189	1,155	1,145

31: New residential construction

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	113	110	119	100	72	58	52
Indirect Purchases	30	28	27	26	25	25	24
Total:	143	137	146	127	98	82	76

Note: Numbers may not add due to rounding

32: New non-residential building construction

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12,759	11,868	11,311	10,939	10,626	10,391	10,164
Indirect Purchases	13	5	5	6	6	7	9
Total:	12,772	11,874	11,316	10,944	10,633	10,399	10,173

33: Highway, street, bridge, tunnel, water, sewer, pipeline and other construction

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,081	1,041	1,092	944	731	616	569
Indirect Purchases	1	0	0	0	0	0	0
Total:	1,082	1,041	1,092	944	731	617	569

34: Maintenance and repair of residential structures

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	320	312	302	294	282	274	272
Indirect Purchases	154	141	137	135	131	128	127
Total:	473	453	439	428	412	403	400

Note: Numbers may not add due to rounding

35: Maintenance and repair of nonresidential buildings, infrastructure and other

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14,492	13,021	12,270	11,656	11,119	10,740	10,573
Indirect Purchases	4,888	4,593	4,524	4,481	4,334	4,269	4,232
Total:	19,380	17,614	16,794	16,137	15,453	15,009	14,805

36: Dog and cat food

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	44	40	40	42	42	42	42
Indirect Purchases	1	1	1	1	1	1	1
Total:	45	41	41	43	42	42	42

37: Other animal food

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	38	34	34	36	35	35	35
Indirect Purchases	264	243	244	248	241	238	237
Total:	302	277	278	284	276	273	272

Note: Numbers may not add due to rounding

38: Flour milling and malt

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	4	4	5	4	4	4
Indirect Purchases	78	71	71	73	72	71	71
Total:	83	75	76	78	76	76	76

39: Wet corn milling

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	109	100	99	100	97	96	95
Total:	109	100	99	100	97	96	95

40: Soybean and other oilseed processing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	187	172	171	172	167	164	164
Total:	188	172	171	172	167	165	164

Note: Numbers may not add due to rounding

41: Fats and oils refining and blending

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	8	8	8	8	8	8
Indirect Purchases	90	83	82	82	79	78	78
Total:	99	91	90	91	87	86	86

42: Breakfast cereals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	95	86	87	91	90	89	89
Indirect Purchases	3	3	3	3	3	2	2
Total:	98	89	90	94	92	92	92

43: Sugar manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	34	31	32	33	33	32	32
Indirect Purchases	87	79	79	82	80	80	80
Total:	121	110	111	115	113	112	112

Note: Numbers may not add due to rounding

44: Chocolate(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	209	190	192	200	197	197	197
Indirect Purchases	41	37	37	38	37	37	37
Total:	250	227	229	238	235	234	235

45: Nonchocolate confectionery(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	127	115	116	122	120	120	120
Indirect Purchases	11	10	10	10	9	9	9
Total:	138	126	126	131	129	129	129

46: Frozen food manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	53	48	49	51	49	49	49
Indirect Purchases	47	43	42	42	41	40	40
Total:	100	92	92	93	90	89	89

Note: Numbers may not add due to rounding

47: Fruit and vegetable canning, pickling, and drying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	282	257	261	272	265	264	264
Indirect Purchases	99	91	89	89	86	85	85
Total:	380	347	350	361	351	349	349

48: Fluid milk and butter

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	183	167	174	181	170	167	168
Indirect Purchases	81	74	74	74	71	70	70
Total:	264	241	248	255	241	237	237

49: Cheese

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	99	90	94	98	92	91	91
Indirect Purchases	132	122	120	120	116	114	114
Total:	231	213	214	217	207	205	204

Note: Numbers may not add due to rounding

50: Dry, condensed, and evaporated dairy product manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	40	37	38	40	38	37	37
Indirect Purchases	44	40	40	40	38	38	38
Total:	84	77	78	80	76	75	75

51: Ice cream and frozen desserts

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	28	25	26	27	26	25	25
Indirect Purchases	51	48	46	45	44	43	43
Total:	79	73	73	73	70	69	69

52: Animal (except poultry) slaughtering, rendering, and processing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	619	563	570	594	581	578	579
Indirect Purchases	465	430	425	425	410	404	403
Total:	1,084	993	995	1,019	991	982	981

Note: Numbers may not add due to rounding

53: Poultry processing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	311	283	286	298	292	290	291
Indirect Purchases	137	126	124	124	121	120	119
Total:	448	409	410	423	413	410	410

54: Seafood product preparation and packaging(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	52	47	48	50	48	48	48
Indirect Purchases	81	76	73	72	70	69	68
Total:	133	123	121	122	118	117	117

55: Bread and bakery products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	497	453	457	478	469	467	468
Indirect Purchases	61	57	55	53	52	51	50
Total:	559	509	512	531	521	518	518

Note: Numbers may not add due to rounding

56: Cookies, crackers and tortillas

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	219	200	202	211	207	206	206
Indirect Purchases	25	23	23	23	22	22	22
Total:	245	223	225	234	229	228	228

57: Snack foods

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	48	43	44	46	44	44	44
Indirect Purchases	37	35	34	33	33	32	32
Total:	85	78	78	79	77	76	76

58: Coffee and tea

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	72	65	66	69	68	67	68
Indirect Purchases	26	24	23	23	23	22	22
Total:	98	89	89	92	90	90	90

Note: Numbers may not add due to rounding

59: Flavoring syrup and concentrate

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	269	248	247	251	244	242	241
Total:	269	248	247	252	245	242	241

60: Seasonings and dressings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	193	175	176	184	182	181	182
Indirect Purchases	59	55	53	53	52	51	51
Total:	252	230	230	238	234	233	233

61: All other food

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	34	31	31	32	31	31	31
Indirect Purchases	66	62	61	61	59	59	58
Total:	100	93	92	93	90	89	89

Note: Numbers may not add due to rounding

62: Soft drinks and ice

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	369	335	340	353	342	340	340
Indirect Purchases	57	53	51	50	49	48	48
Total:	426	388	391	403	391	388	388

63: Breweries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	14	13	13	13	12	12	12
Total:	15	13	13	13	12	12	12

64: Wineries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	1	1	1	1	0	0
Indirect Purchases	24	22	21	21	20	20	20
Total:	24	22	22	21	21	21	20

Note: Numbers may not add due to rounding

65: Distilleries(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	51	48	46	45	44	43	43
Total:	51	48	46	45	44	44	43

66: Tobacco product manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	138	125	126	132	131	131	131
Indirect Purchases	4	4	4	4	4	4	4
Total:	142	129	130	136	135	135	135

67: Fiber, yarn, and thread mills(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	160	154	147	141	131	127	125
Total:	160	154	147	141	131	127	125

Note: Numbers may not add due to rounding

68: Fabric mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	8	10	9	6	5	5
Indirect Purchases	436	421	407	392	363	351	348
Total:	444	429	417	401	369	356	353

69: Textile and fabric finishing mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	19	21	19	13	11	11
Indirect Purchases	375	361	350	337	309	300	298
Total:	397	381	371	356	323	312	310

70: Carpet and rug mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4	3	3	4	3	3	3
Indirect Purchases	157	149	139	136	129	124	120
Total:	160	153	142	139	132	127	124

Note: Numbers may not add due to rounding

71: Curtain and linen mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	20	19	19	19	19	19	19
Indirect Purchases	16	15	14	14	13	13	13
Total:	36	33	33	33	32	32	32

72: Other textile products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	511	428	384	376	345	334	331
Indirect Purchases	568	545	515	498	476	464	459
Total:	1,079	973	900	874	821	798	790

73: Apparel knitting mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	42	44	42	40	38	38	38
Indirect Purchases	17	17	16	16	14	14	14
Total:	59	61	58	56	52	52	52

Note: Numbers may not add due to rounding

74: Cut and sew apparel

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,066	1,096	1,081	1,033	929	902	902
Indirect Purchases	227	213	207	201	190	186	185
Total:	1,293	1,310	1,288	1,233	1,119	1,088	1,087

75: Apparel accessories and other apparel

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	952	956	910	867	814	796	795
Indirect Purchases	74	74	71	68	63	62	62
Total:	1,027	1,030	981	935	878	858	858

76: Footwear and other leather products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	189	196	190	183	168	163	163
Indirect Purchases	102	94	90	88	82	80	80
Total:	291	290	281	271	250	243	243

Note: Numbers may not add due to rounding

77: Sawmills and wood preservation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	1
Indirect Purchases	828	761	726	702	674	659	654
Total:	830	763	727	704	675	661	655

78: Veneer, plywood, particleboard, and engineered wood products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	357	339	305	316	297	289	287
Indirect Purchases	478	443	421	407	389	379	374
Total:	836	782	725	724	686	668	661

79: Wood windows and doors and millwork

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	1	2	2	1	1	1
Indirect Purchases	387	358	344	332	320	313	309
Total:	389	360	346	334	321	314	310

Note: Numbers may not add due to rounding

80: Wood containers and pallets

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	57	49	47	47	43	41	40
Indirect Purchases	131	118	113	108	103	100	99
Total:	188	167	160	155	146	141	139

81: Manufactured homes (mobile homes)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	3	2	2	2	2
Indirect Purchases	6	5	5	5	5	5	5
Total:	9	8	8	7	7	6	6

82: Prefabricated wood buildings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	2	2	2	2	2	2
Indirect Purchases	51	47	45	44	42	40	40
Total:	54	50	48	46	44	42	41

Note: Numbers may not add due to rounding

83: All other miscellaneous wood products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	1	1	1
Indirect Purchases	130	121	118	115	110	108	106
Total:	132	123	120	116	111	109	108

84: Pulp mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	138	126	122	120	115	113	112
Total:	138	126	122	120	115	113	112

85: Paper and paperboard mills

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	102	93	93	96	95	95	95
Indirect Purchases	1,872	1,711	1,658	1,626	1,566	1,537	1,526
Total:	1,974	1,803	1,751	1,723	1,661	1,632	1,620

Note: Numbers may not add due to rounding

86: Paperboard container manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	7	7	4	4	3
Indirect Purchases	1,079	1,006	977	955	915	897	893
Total:	1,086	1,014	984	962	919	901	897

87: Coated and laminated paper, packaging paper and plastics film

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	16	15	14	16	16	16	15
Indirect Purchases	294	268	260	256	247	243	241
Total:	311	284	275	272	264	259	256

88: All other paper bag and coated and treated paper manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	33	30	30	32	31	31	31
Indirect Purchases	77	72	72	73	72	71	71
Total:	110	102	102	105	103	102	102

Note: Numbers may not add due to rounding

89: Stationery product manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	2	2	2	2	2	2
Indirect Purchases	63	58	56	54	53	52	51
Total:	66	60	58	57	55	53	53

90: Sanitary paper product manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	2
Indirect Purchases	4	4	4	4	4	4	4
Total:	6	6	6	6	5	5	5

91: All other converted paper products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	51	47	48	49	48	48	48
Indirect Purchases	39	36	36	36	35	34	34
Total:	91	83	83	85	83	82	82

Note: Numbers may not add due to rounding

92: Printing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,298	1,922	1,844	1,831	1,771	1,741	1,729
Indirect Purchases	1,269	1,179	1,147	1,131	1,099	1,083	1,075
Total:	3,566	3,102	2,991	2,961	2,870	2,824	2,804

93: Support activities for printing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	7	7	7	7	6	6
Indirect Purchases	185	169	163	161	156	154	153
Total:	194	176	170	168	163	161	159

94: Petroleum refineries(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21,033	19,885	19,472	18,759	17,131	16,617	16,575
Indirect Purchases	11,188	10,386	10,029	9,741	9,269	9,068	9,002
Total:	32,221	30,270	29,500	28,500	26,399	25,685	25,577

Note: Numbers may not add due to rounding

95: Asphalt products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	5	4	4	4	4	4
Indirect Purchases	314	288	277	266	254	247	243
Total:	319	293	281	270	258	251	247

96: Lubricating and other petroleum products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	31	34	34	33	31	30	30
Indirect Purchases	344	320	311	303	288	282	280
Total:	375	354	345	337	319	312	310

97: Petrochemicals(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	1,509	1,411	1,375	1,328	1,248	1,220	1,210
Total:	1,510	1,412	1,375	1,329	1,248	1,221	1,211

Note: Numbers may not add due to rounding

98: Industrial gases

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	20	22	20	15	13	13
Indirect Purchases	266	249	243	238	227	223	221
Total:	287	269	265	258	242	237	234

99: Synthetic dyes and pigments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	2	2	2	2	2
Indirect Purchases	214	199	192	185	175	170	168
Total:	217	202	195	187	177	172	171

100: Other basic inorganic chemicals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	19	18	16	14	13	13
Indirect Purchases	996	929	911	888	841	826	820
Total:	1,019	949	929	903	855	839	833

Note: Numbers may not add due to rounding

101: Other basic organic chemicals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13	12	11	11	10	9	9
Indirect Purchases	2,212	2,062	2,008	1,945	1,832	1,792	1,776
Total:	2,225	2,073	2,019	1,955	1,842	1,801	1,786

102: Plastics materials and resins

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	31	28	28	28	27	27	27
Indirect Purchases	2,633	2,470	2,375	2,285	2,171	2,123	2,108
Total:	2,665	2,498	2,403	2,314	2,199	2,150	2,135

103: Synthetic rubber

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	200	186	184	179	164	159	157
Total:	201	187	185	180	164	160	158

Note: Numbers may not add due to rounding

104: Artificial and synthetic fibers and filaments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	279	259	245	237	221	214	211
Total:	280	260	246	238	222	215	211

105: Fertilizers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	314	289	282	275	262	256	253
Total:	315	290	283	276	262	257	253

106: Pesticides and other agricultural chemicals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	1	1	1	1
Indirect Purchases	95	87	86	87	84	82	82
Total:	97	89	88	88	85	84	83

Note: Numbers may not add due to rounding

107: Pharmaceuticals and medicines

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	785	743	1,011	982	545	444	434
Indirect Purchases	1,427	1,300	1,341	1,367	1,272	1,245	1,240
Total:	2,213	2,043	2,352	2,349	1,817	1,690	1,674

108: Paints and coatings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	37	35	34	33	30	29	29
Indirect Purchases	776	737	708	675	652	635	635
Total:	813	772	742	708	682	664	664

109: Adhesives

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7	6	6	6	5	5	5
Indirect Purchases	189	174	169	163	154	150	149
Total:	196	180	175	169	159	155	154

Note: Numbers may not add due to rounding

110: Soaps and cleaning compounds

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	700	638	641	670	663	662	664
Indirect Purchases	407	378	372	368	355	349	346
Total:	1,107	1,016	1,013	1,038	1,018	1,011	1,010

111: Toilet preparations

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	43	39	39	41	40	40	40
Indirect Purchases	31	29	29	29	28	27	27
Total:	74	68	68	69	68	68	67

112: Printing ink

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	0	0
Indirect Purchases	225	202	195	192	186	182	181
Total:	226	203	196	193	186	183	181

Note: Numbers may not add due to rounding

113: All other chemical products and preparations

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	936	943	963	864	741	742	737
Indirect Purchases	988	929	890	871	837	825	818
Total:	1,923	1,872	1,853	1,735	1,578	1,567	1,556

114: Plastics packaging materials and unlaminated film and sheet

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	49	44	45	47	45	45	45
Indirect Purchases	1,001	946	920	885	848	827	825
Total:	1,049	991	965	932	893	872	870

115: Plastics pipe, fittings, and profile shapes

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	17	14	13	12	11	10	10
Indirect Purchases	643	631	625	578	568	551	562
Total:	660	645	638	590	579	562	572

Note: Numbers may not add due to rounding

116: Laminated plastics plate, sheet (except packaging), and shapes

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	8	7	6	5	5	5
Indirect Purchases	92	88	86	82	80	78	78
Total:	102	96	93	88	85	82	82

117: Plastic foam products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	8	9	10	11	11
Indirect Purchases	357	333	322	317	306	300	297
Total:	365	340	330	326	317	312	308

118: Plastic bottles

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	0	0	0	0
Indirect Purchases	122	114	113	114	109	107	107
Total:	123	115	113	114	110	108	107

Note: Numbers may not add due to rounding

119: Other plastics products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	52	49	48	48	45	44	44
Indirect Purchases	2,539	2,384	2,307	2,252	2,168	2,121	2,101
Total:	2,592	2,432	2,354	2,300	2,213	2,165	2,145

120: Tires

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	59	56	65	59	34	28	25
Indirect Purchases	292	265	248	244	238	238	238
Total:	351	321	313	303	272	266	263

121: Rubber and plastics hoses and beltings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	5	6	5	3	3	2
Indirect Purchases	85	77	75	72	69	67	67
Total:	90	82	80	77	72	70	69

Note: Numbers may not add due to rounding

122: Other rubber products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	16	15	15	14	11	10	10
Indirect Purchases	479	449	433	422	409	403	401
Total:	496	463	447	436	420	414	411

123: Pottery, ceramics, and plumbing fixtures

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	7	7	7	6	6
Indirect Purchases	59	54	53	51	49	48	47
Total:	67	62	60	58	55	54	53

124: Clay building materials and refractories

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	0	0	0
Indirect Purchases	200	185	179	173	168	164	162
Total:	200	186	180	174	168	164	162

Note: Numbers may not add due to rounding

125: Glass and glass products, exc containers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	5	6	6	3	2	2
Indirect Purchases	635	603	588	561	547	535	536
Total:	640	608	594	567	550	538	539

126: Glass containers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	26	24	24	24	23	23	23
Total:	27	24	24	25	24	23	23

127: Cement

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	156	145	140	135	130	126	124
Total:	157	145	140	136	130	127	125

Note: Numbers may not add due to rounding

128: Ready-mix concrete(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	327	303	293	283	270	263	258
Total:	328	304	294	284	271	264	259

129: Concrete pipe, brick, and blocks(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	137	127	123	120	115	113	111
Total:	138	128	124	121	116	114	112

130: Other concrete products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	20	17	16	13	12	10	10
Indirect Purchases	287	266	257	249	239	234	230
Total:	307	283	272	262	251	244	240

Note: Numbers may not add due to rounding

131: Lime and gypsum products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	209	191	183	176	167	162	160
Total:	211	192	184	176	168	163	161

132: Abrasive products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	7	6	6	5	5
Indirect Purchases	218	205	195	188	179	174	173
Total:	226	212	202	194	184	179	178

133: Cut stone and stone products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	0	0	0
Indirect Purchases	97	89	86	83	80	78	76
Total:	97	90	87	84	81	78	77

Note: Numbers may not add due to rounding

134: Other non-metallic mineral products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	15	13	14	13	12	11	10
Indirect Purchases	182	170	162	157	149	144	142
Total:	197	183	176	170	161	155	152

135: Primary ferrous metal products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	37	30	31	29	23	22	22
Indirect Purchases	6,220	5,843	5,628	5,342	5,111	4,976	4,964
Total:	6,257	5,873	5,659	5,371	5,135	4,998	4,986

136: Primary aluminum production

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	3	2	2	2	2
Indirect Purchases	1,059	984	925	907	871	856	847
Total:	1,062	987	927	909	873	857	849

Note: Numbers may not add due to rounding

137: Aluminum product manufacturing from purchased aluminum

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	16	14	14	11	10	9
Indirect Purchases	1,918	1,796	1,682	1,648	1,579	1,549	1,534
Total:	1,936	1,812	1,696	1,662	1,590	1,559	1,543

138: Primary smelting and refining of copper

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	656	604	583	569	546	539	535
Total:	657	605	583	569	546	539	535

139: Primary smelting and refining of nonferrous metal (except copper and aluminum)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	666	619	606	596	570	560	557
Total:	667	620	607	597	571	561	557

Note: Numbers may not add due to rounding

140: Copper rolling, drawing, extruding and alloying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	4	4	4	3	3	3
Indirect Purchases	1,163	1,088	1,027	1,007	969	955	946
Total:	1,166	1,091	1,031	1,011	972	958	949

141: Nonferrous metal (except copper and aluminum) rolling, drawing, extruding and alloying

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	9	11	10	7	7	7
Indirect Purchases	761	731	681	662	640	625	621
Total:	771	740	692	673	647	631	628

142: Ferrous metal foundries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7	5	5	5	4	5	4
Indirect Purchases	701	649	616	586	554	541	536
Total:	708	654	621	590	559	545	541

Note: Numbers may not add due to rounding

143: Nonferrous metal foundries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14	11	11	11	10	10	10
Indirect Purchases	475	452	422	408	385	373	367
Total:	489	463	433	419	395	383	377

144: Forging and stamping

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	40	31	31	31	28	28	28
Indirect Purchases	1,771	1,690	1,630	1,548	1,505	1,474	1,482
Total:	1,811	1,721	1,661	1,579	1,533	1,501	1,510

145: Cutlery, utensils, pots, and pans

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	7	7	6	6	5	5
Indirect Purchases	119	117	108	107	103	99	97
Total:	128	124	114	113	109	105	103

Note: Numbers may not add due to rounding

146: Handtools(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	113	95	84	78	72	69	69
Indirect Purchases	130	121	115	112	108	106	106
Total:	243	216	199	190	179	175	175

147: Plate work and fabricated structural products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	184	169	192	178	122	104	99
Indirect Purchases	2,175	2,063	1,977	1,899	1,832	1,791	1,781
Total:	2,359	2,232	2,169	2,077	1,953	1,896	1,880

148: Ornamental and architectural metal products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	17	17	17	16	15	15
Indirect Purchases	1,501	1,341	1,260	1,240	1,223	1,223	1,220
Total:	1,519	1,359	1,278	1,257	1,238	1,238	1,235

Note: Numbers may not add due to rounding

149: Power boilers and heat exchangers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	232	299	331	324	362	374	370
Indirect Purchases	87	81	79	76	74	73	72
Total:	319	380	411	401	436	447	442

150: Metal tanks (heavy gauge)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	174	148	132	133	130	135	138
Indirect Purchases	52	48	47	44	42	41	40
Total:	225	196	178	177	172	176	178

151: Metal cans, boxes, and other metal containers (light gauge)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	108	107	98	93	82	78	78
Indirect Purchases	290	271	259	252	242	238	237
Total:	398	378	356	345	324	316	315

Note: Numbers may not add due to rounding

152: Ammunition(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,982	3,327	2,511	2,474	2,429	2,470	2,503
Indirect Purchases	17	17	13	13	13	14	14
Total:	3,000	3,344	2,524	2,487	2,442	2,483	2,518

153: Arms, ordnance, and accessories(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,277	988	941	893	863	865	856
Indirect Purchases	12	9	9	8	8	8	8
Total:	1,288	997	949	902	871	873	864

154: Hardware manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	100	88	104	101	71	63	62
Indirect Purchases	741	691	648	628	591	575	563
Total:	841	779	751	730	662	638	625

Note: Numbers may not add due to rounding

155: Springs and wire products(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	17	18	16	11	10	9
Indirect Purchases	143	133	128	125	121	119	118
Total:	160	150	146	141	132	129	128

156: Machine shops(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	58	53	51	48	45	44	44
Indirect Purchases	1,615	1,510	1,436	1,401	1,352	1,329	1,320
Total:	1,672	1,563	1,487	1,450	1,397	1,373	1,363

157: Turned products and screws, nuts, and bolts(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	34	35	57	54	17	9	8
Indirect Purchases	1,266	1,192	1,121	1,092	1,049	1,025	1,016
Total:	1,299	1,227	1,179	1,146	1,066	1,034	1,024

Note: Numbers may not add due to rounding

158: Coating, engraving, heat treating and allied activities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	19	16	15	13	12	12
Indirect Purchases	1,212	1,131	1,073	1,052	1,016	1,002	995
Total:	1,234	1,150	1,089	1,067	1,030	1,014	1,007

159: Metal valves

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	69	72	91	86	53	45	43
Indirect Purchases	1,757	1,691	1,625	1,545	1,500	1,461	1,463
Total:	1,826	1,763	1,716	1,631	1,552	1,505	1,506

160: Ball and roller bearings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	30	25	37	35	16	12	12
Indirect Purchases	323	301	289	281	265	259	256
Total:	353	326	327	316	281	271	268

Note: Numbers may not add due to rounding

161: Fabricated pipe and pipe fittings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	67	63	57	59	55	53	53
Indirect Purchases	195	182	175	170	163	159	157
Total:	262	246	232	229	218	213	210

162: Other fabricated metal products

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	89	80	85	79	61	56	55
Indirect Purchases	643	599	572	558	539	531	527
Total:	732	678	657	638	600	587	581

163: Farm machinery and equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7	6	8	7	4	4	3
Indirect Purchases	29	27	27	26	25	25	24
Total:	36	34	35	34	30	28	28

Note: Numbers may not add due to rounding

164: Lawn and garden equipment(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4	4	3	3	3	3	3
Indirect Purchases	8	7	7	7	7	7	7
Total:	12	11	11	10	10	10	9

165: Construction machinery(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	164	139	141	122	89	75	73
Indirect Purchases	111	113	113	101	101	97	101
Total:	276	252	254	223	189	173	174

166: Mining and oil and gas field machinery(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4	3	3	3	2	2	2
Indirect Purchases	66	62	61	61	58	57	57
Total:	70	65	64	63	60	59	58

Note: Numbers may not add due to rounding

167: Other industrial machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	103	92	90	85	76	72	71
Indirect Purchases	120	110	107	105	100	98	97
Total:	223	202	197	190	176	170	169

168: Plastics and rubber industry machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4	4	4	3	3	3	3
Indirect Purchases	13	12	12	12	11	11	11
Total:	17	16	16	15	14	14	14

169: Semiconductor machinery manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	8	7	7	6	6	6
Indirect Purchases	40	38	37	36	35	35	35
Total:	49	45	44	43	42	41	41

Note: Numbers may not add due to rounding

170: Vending, commercial, industrial, and office machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	130	133	128	127	130	134	137
Indirect Purchases	43	40	39	39	37	37	36
Total:	173	173	167	166	167	170	174

171: Optical instruments and lenses

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	624	512	484	460	436	423	417
Indirect Purchases	37	32	31	30	29	28	28
Total:	661	544	515	490	464	451	445

172: Photographic and photocopying equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	59	55	56	55	48	46	46
Indirect Purchases	4	4	4	4	4	3	3
Total:	63	58	60	58	51	50	50

Note: Numbers may not add due to rounding

173: Other commercial and service industry machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,299	1,194	1,111	1,026	959	911	908
Indirect Purchases	58	56	53	52	50	48	47
Total:	1,358	1,250	1,163	1,078	1,009	959	955

174: Air purification and ventilation equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	63	53	51	45	38	35	34
Indirect Purchases	124	115	111	107	103	101	100
Total:	187	168	162	153	141	136	134

175: Heating equipment (except warm air furnaces)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	3	3	2	1	1
Indirect Purchases	109	101	97	94	91	89	88
Total:	112	103	101	98	93	91	89

Note: Numbers may not add due to rounding

176: Air conditioning, refrigeration, and warm air heating equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	119	106	102	94	83	78	78
Indirect Purchases	532	488	467	454	436	428	422
Total:	651	594	570	548	520	506	500

177: Industrial molds

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6	4	4	4	4	4	4
Indirect Purchases	184	183	168	166	159	151	146
Total:	190	188	172	171	163	155	150

178: Metal cutting and forming machine tools

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	70	60	56	53	46	43	43
Indirect Purchases	62	59	57	55	51	48	48
Total:	132	119	113	108	96	91	91

Note: Numbers may not add due to rounding

179: Special tools, dies, jigs, and fixtures

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	8	7	7	7	7	7
Indirect Purchases	235	235	214	212	202	192	185
Total:	244	242	222	219	209	198	192

180: Cutting tool and machine tool accessories

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14	12	12	11	9	8	8
Indirect Purchases	402	388	365	355	339	328	323
Total:	416	400	377	366	348	336	331

181: Rolling mill and other metalworking machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	16	15	16	16	16	16	16
Indirect Purchases	7	7	6	6	6	6	6
Total:	23	22	22	22	22	22	22

Note: Numbers may not add due to rounding

182: Turbine and turbine generator set units

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	139	127	129	122	108	99	94
Indirect Purchases	417	434	441	384	388	374	395
Total:	556	561	570	506	496	473	489

183: Speed changers and mechanical power transmission equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	106	123	148	137	110	116	116
Indirect Purchases	613	622	625	559	563	551	579
Total:	719	744	773	696	673	667	695

184: Other engine equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	91	78	77	75	63	60	59
Indirect Purchases	1,899	1,935	1,925	1,699	1,698	1,645	1,721
Total:	1,990	2,013	2,002	1,775	1,761	1,705	1,779

Note: Numbers may not add due to rounding

185: Pump and pumping equipment(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	68	66	78	75	51	44	43
Indirect Purchases	71	66	63	61	58	56	56
Total:	139	131	141	136	108	101	99

186: Air and gas compressors(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	20	21	20	17	16	16
Indirect Purchases	17	15	15	14	14	13	13
Total:	39	36	36	35	31	29	29

187: Material handling equipment(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	183	181	189	167	162	160	158
Indirect Purchases	251	234	225	217	209	204	202
Total:	434	415	414	384	371	364	360

Note: Numbers may not add due to rounding

188: Power-driven handtool manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	11	9	9	8	7	7	7
Indirect Purchases	5	4	4	4	4	4	4
Total:	15	13	13	12	11	11	11

189: Other general purpose machinery(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	260	256	257	251	238	234	232
Indirect Purchases	218	204	196	190	183	178	176
Total:	478	459	454	440	421	412	408

190: Packaging machinery(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	1	1	1	1	1
Indirect Purchases	3	3	3	3	3	3	3
Total:	5	5	4	4	4	4	4

Note: Numbers may not add due to rounding

191: Industrial process furnaces and ovens

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	8	8	7	6	6	6
Indirect Purchases	7	6	6	6	5	5	5
Total:	16	14	14	13	12	11	11

192: Fluid power process machinery

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	9	9	9	7	6	6
Indirect Purchases	622	601	580	542	525	508	511
Total:	632	610	589	551	532	514	518

193: Computers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,710	1,449	1,370	1,318	1,254	1,216	1,212
Indirect Purchases	165	143	137	133	128	125	125
Total:	1,875	1,592	1,507	1,451	1,382	1,341	1,336

Note: Numbers may not add due to rounding

194: Computer storage devices

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	210	190	186	183	174	169	167
Indirect Purchases	306	271	262	256	246	241	240
Total:	516	461	448	440	420	411	408

195: Computer terminals and other computer peripherals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	299	268	259	250	236	228	226
Indirect Purchases	385	354	344	339	329	324	322
Total:	684	622	604	589	564	552	548

196: Telephone apparatus

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	867	711	704	710	684	676	672
Indirect Purchases	131	117	114	113	109	107	107
Total:	998	828	818	823	793	783	779

Note: Numbers may not add due to rounding

197: Broadcast and wireless communications equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,626	4,287	4,326	4,422	4,367	4,324	4,265
Indirect Purchases	1,992	1,891	1,946	2,131	2,197	2,206	2,184
Total:	6,618	6,178	6,272	6,553	6,564	6,530	6,449

198: Other communications equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,484	1,375	1,368	1,383	1,370	1,372	1,373
Indirect Purchases	99	90	87	85	82	81	80
Total:	1,583	1,466	1,456	1,468	1,452	1,453	1,453

199: Audio and video equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	85	80	81	79	71	68	68
Indirect Purchases	61	56	56	56	55	55	54
Total:	146	136	137	135	126	123	122

Note: Numbers may not add due to rounding

200: Semiconductors and electron tubes

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	97	97	99	91	79	75	73
Indirect Purchases	2,899	2,682	2,636	2,643	2,583	2,555	2,532
Total:	2,996	2,779	2,735	2,735	2,662	2,630	2,605

201: All other electronic components

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,893	1,871	2,001	2,058	2,013	2,011	1,978
Indirect Purchases	2,672	2,474	2,455	2,457	2,399	2,377	2,361
Total:	4,565	4,345	4,456	4,515	4,412	4,389	4,340

202: Electromedical and electrotherapeutic apparatus

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	52	50	61	57	34	28	28
Indirect Purchases	69	63	63	64	62	62	62
Total:	121	114	124	121	97	90	89

Note: Numbers may not add due to rounding

203: Search, detection, and navigation instruments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8,460	7,847	7,920	7,974	7,864	7,917	7,917
Indirect Purchases	724	672	653	631	597	575	563
Total:	9,184	8,519	8,573	8,604	8,461	8,492	8,480

204: Automatic environmental controls

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	28	25	26	25	21	20	20
Indirect Purchases	48	45	43	42	40	39	39
Total:	76	70	69	67	61	59	59

205: Industrial process variable instruments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	122	120	131	137	118	118	114
Indirect Purchases	119	110	107	106	101	100	99
Total:	241	230	238	242	219	218	214

Note: Numbers may not add due to rounding

206: Totalizing fluid meters and counting devices

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6	6	10	10	3	1	1
Indirect Purchases	57	52	51	50	48	47	47
Total:	63	58	61	59	51	49	48

207: Electricity and signal testing instruments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	377	356	349	345	326	321	312
Indirect Purchases	102	94	94	94	92	91	90
Total:	479	450	443	439	418	412	402

208: Analytical laboratory instruments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	308	272	261	241	216	203	200
Indirect Purchases	159	149	146	146	143	144	143
Total:	467	421	408	387	360	347	342

Note: Numbers may not add due to rounding

209: Irradiation apparatus manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	90	75	65	62	61	61	62
Indirect Purchases	25	23	22	23	23	23	23
Total:	115	97	87	86	84	84	85

210: Watch, clock, and other measuring and controlling devices

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	206	198	201	193	167	160	156
Indirect Purchases	276	254	249	245	232	224	217
Total:	482	452	449	439	399	384	373

211: Software, audio, and video media reproducing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	17	17	17	15	15	14
Indirect Purchases	98	90	88	87	84	83	82
Total:	116	108	105	103	99	97	97

Note: Numbers may not add due to rounding

212: Magnetic and optical recording media

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6	6	5	5	5	5	5
Indirect Purchases	87	81	79	78	76	75	75
Total:	93	87	84	83	81	80	79

213: Electric lamp bulbs and parts

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	9	10	10	9	8	8
Indirect Purchases	23	21	20	20	19	19	18
Total:	32	30	30	30	28	27	27

214: Lighting fixtures

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12	12	13	13	8	7	6
Indirect Purchases	411	381	366	354	341	332	326
Total:	423	392	379	366	349	339	333

Note: Numbers may not add due to rounding

215: Small electrical appliances

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	1	1	1
Indirect Purchases	31	28	27	26	25	25	24
Total:	33	30	29	28	27	26	26

216: Household cooking appliances

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	1	1	1	1
Indirect Purchases	10	9	9	8	8	8	8
Total:	12	11	10	10	9	9	9

217: Household refrigerators and home freezers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	3	3	3	3	3
Indirect Purchases	3	2	2	2	2	2	2
Total:	6	5	5	5	5	5	5

Note: Numbers may not add due to rounding

218: Household laundry equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	5	5	4	4	4	4
Indirect Purchases	2	1	1	1	1	1	1
Total:	6	6	6	6	6	6	6

219: Other major household appliances

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	8	8	8	8	8	8
Indirect Purchases	13	12	11	11	10	10	10
Total:	21	20	20	19	19	18	18

220: Power, distribution, and specialty transformers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	55	47	47	45	39	37	36
Indirect Purchases	168	156	134	132	131	134	135
Total:	224	203	181	178	171	171	171

Note: Numbers may not add due to rounding

221: Motors and generators

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	90	89	98	93	70	61	57
Indirect Purchases	519	492	478	451	432	420	420
Total:	609	581	576	544	501	481	477

222: Switchgear and switchboard apparatus

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	32	30	33	31	24	22	22
Indirect Purchases	239	217	208	200	191	186	184
Total:	270	246	241	231	216	208	205

223: Relays and industrial controls

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12	13	18	17	10	8	8
Indirect Purchases	433	412	404	388	375	368	368
Total:	446	425	421	405	385	376	377

Note: Numbers may not add due to rounding

224: Storage batteries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	11	20	19	5	2	1
Indirect Purchases	85	79	77	75	73	72	71
Total:	95	89	96	94	78	74	72

225: Primary battery manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	17	16	16	15	13	13	12
Indirect Purchases	9	8	8	8	8	7	7
Total:	25	24	24	23	21	20	20

226: Communication and energy wires and cables

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	53	53	54	53	48	48	48
Indirect Purchases	1,025	943	916	899	868	855	845
Total:	1,078	996	970	952	916	903	893

Note: Numbers may not add due to rounding

227: Wiring devices(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	22	22	31	30	15	12	12
Indirect Purchases	340	312	304	297	285	278	274
Total:	361	334	335	327	300	290	286

228: Carbon and graphite and miscellaneous electrical equipment(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	644	556	538	539	522	516	517
Indirect Purchases	252	232	224	220	210	206	203
Total:	896	789	762	759	732	723	719

229: Automobiles(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	137	114	106	115	128	141	145
Indirect Purchases	4	4	3	3	3	3	3
Total:	141	117	109	118	131	144	149

Note: Numbers may not add due to rounding

230: Heavy duty trucks(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	237	158	135	162	182	201	202
Indirect Purchases	26	22	20	21	21	22	23
Total:	264	179	155	183	203	223	225

231: Motor vehicle bodies(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	143	120	112	134	141	154	159
Indirect Purchases	9	7	6	7	7	8	8
Total:	151	127	118	141	149	161	168

232: Truck trailer manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	802	632	480	533	566	629	664
Indirect Purchases	3	2	2	2	2	2	3
Total:	806	635	482	535	569	631	666

Note: Numbers may not add due to rounding

233: Motor homes, trailers and campers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	37	31	28	25	23	21	21
Indirect Purchases	71	61	53	54	54	55	57
Total:	108	92	81	79	77	77	77

234: Motor vehicle parts

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,099	992	926	916	849	848	848
Indirect Purchases	3,449	3,175	3,003	2,936	2,838	2,807	2,791
Total:	4,548	4,167	3,928	3,853	3,687	3,655	3,639

235: Aircraft

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	27,890	26,937	25,225	24,780	23,253	21,937	21,001
Indirect Purchases	163	149	144	141	134	131	128
Total:	28,053	27,085	25,368	24,921	23,388	22,068	21,129

Note: Numbers may not add due to rounding

236: Aircraft engines and engine parts

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,764	4,479	3,994	3,836	3,442	3,297	3,144
Indirect Purchases	4,036	3,703	3,475	3,372	3,096	2,969	2,855
Total:	8,800	8,182	7,469	7,208	6,538	6,266	5,998

237: Other aircraft parts and auxiliary equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8,928	8,289	7,528	7,028	6,291	6,024	5,785
Indirect Purchases	3,063	2,863	3,130	3,524	3,654	3,688	3,637
Total:	11,991	11,152	10,658	10,552	9,945	9,712	9,422

238: Guided missiles and space vehicles

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	12,542	11,725	12,566	15,496	17,297	18,158	18,222
Indirect Purchases	323	296	266	271	269	270	265
Total:	12,864	12,021	12,832	15,767	17,566	18,428	18,487

Note: Numbers may not add due to rounding

239: Propulsion units and parts for space vehicles and guided missiles

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,870	1,778	1,660	1,917	2,072	2,132	2,077
Indirect Purchases	1,708	1,558	1,377	1,425	1,431	1,442	1,416
Total:	3,578	3,336	3,038	3,342	3,503	3,573	3,493

240: Railroad rolling stock

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4	3	3	2	2	2	2
Indirect Purchases	53	50	47	46	44	43	43
Total:	57	53	50	48	46	45	45

241: Ship building and repairing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	16,264	17,946	18,584	15,479	15,935	15,260	16,532
Indirect Purchases	195	186	180	172	171	169	175
Total:	16,459	18,132	18,764	15,651	16,106	15,430	16,707

Note: Numbers may not add due to rounding

242: Boat building(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9,803	9,168	8,446	8,207	7,828	7,727	7,642
Indirect Purchases	88	81	78	73	72	71	74
Total:	9,891	9,249	8,524	8,280	7,900	7,798	7,716

243: Motorcycles, bicycles, and parts(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	4	4	4	4	4	4
Indirect Purchases	9	8	8	7	7	7	7
Total:	14	12	12	11	11	11	10

244: Military armored vehicles, tanks, and tank components(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,941	2,358	1,955	2,090	2,277	2,498	2,623
Indirect Purchases	112	86	68	72	79	87	92
Total:	3,053	2,444	2,023	2,162	2,357	2,585	2,715

Note: Numbers may not add due to rounding

245: All other transportation equipment

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	58	49	42	45	46	49	50
Indirect Purchases	13	12	11	11	11	11	11
Total:	71	61	53	56	57	59	61

246: Wood kitchen cabinet and countertops

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	149	138	133	128	123	120	118
Total:	150	138	133	128	123	120	119

247: Household and institutional furniture

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	165	169	168	162	159	157	156
Indirect Purchases	64	60	58	58	56	55	54
Total:	228	229	226	220	215	212	211

Note: Numbers may not add due to rounding

248: Office furniture (including fixtures)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	136	133	129	125	117	112	107
Indirect Purchases	100	93	90	87	84	82	80
Total:	236	226	219	212	201	194	188

249: Mattresses, blinds and shades

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7	8	9	8	7	7	7
Indirect Purchases	11	11	11	10	10	10	10
Total:	18	19	20	18	17	17	17

250: Laboratory apparatus and furniture

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21	19	22	20	15	13	13
Indirect Purchases	2	2	2	2	1	1	1
Total:	23	21	23	22	16	15	14

Note: Numbers may not add due to rounding

251: Surgical and medical instruments

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	202	190	191	178	150	139	138
Indirect Purchases	163	147	147	148	141	138	137
Total:	365	337	338	326	291	277	276

252: Surgical appliances and supplies

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	445	409	441	405	293	258	255
Indirect Purchases	297	271	269	269	259	255	254
Total:	742	680	710	674	553	512	509

253: Dental equipment and supplies

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	30	28	26	24	22	21	21
Indirect Purchases	119	108	108	112	110	110	110
Total:	150	135	133	135	132	130	130

Note: Numbers may not add due to rounding

254: Ophthalmic goods(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	215	187	175	166	159	153	152
Indirect Purchases	8	7	7	7	6	6	6
Total:	223	194	182	173	165	159	159

255: Dental laboratories(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1	1	1	1	1	1	1
Indirect Purchases	224	203	202	210	207	206	206
Total:	225	204	204	211	208	207	207

256: Jewelry and silverware(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3	3	4	3	3	3	3
Indirect Purchases	14	13	12	12	11	11	11
Total:	17	16	16	15	14	14	14

Note: Numbers may not add due to rounding

257: Sporting and athletic goods

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	209	216	292	274	153	127	125
Indirect Purchases	18	17	21	20	13	12	12
Total:	227	233	313	294	166	138	136

258: Dolls, toys, and games

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6	5	5	5	5	5	5
Indirect Purchases	2	1	1	1	1	1	1
Total:	8	7	7	7	6	6	6

259: Office supplies (except paper)

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	378	315	316	314	296	287	277
Indirect Purchases	76	69	67	66	64	63	62
Total:	454	384	383	380	360	349	340

Note: Numbers may not add due to rounding

260: Sign manufacturing(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	9	9	8	8	7	7
Indirect Purchases	12	11	11	11	10	10	10
Total:	23	21	20	19	18	17	17

261: Gasket, packing, and sealing devices(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	19	18	23	22	13	11	11
Indirect Purchases	226	209	199	196	188	185	183
Total:	246	227	222	218	201	196	194

262: Musical instruments(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	8	7	7	7	6	6
Indirect Purchases	4	4	4	4	3	3	3
Total:	13	12	11	11	10	10	10

Note: Numbers may not add due to rounding

263: All other miscellaneous manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	516	469	475	477	436	424	424
Indirect Purchases	127	119	116	114	109	107	107
Total:	643	588	591	591	545	532	531

264: Broom, brush, and mop manufacturing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	2
Indirect Purchases	26	24	24	23	22	22	22
Total:	29	26	26	25	24	24	23

265: Wholesale trade

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	456	414	420	433	416	411	411
Indirect Purchases	15,461	14,436	14,028	13,727	13,223	12,976	12,901
Total:	15,917	14,850	14,448	14,160	13,639	13,387	13,313

Note: Numbers may not add due to rounding

266: Retail trade

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,189	1,082	1,101	1,145	1,105	1,096	1,097
Indirect Purchases	1,941	1,796	1,710	1,659	1,585	1,551	1,535
Total:	3,130	2,878	2,811	2,804	2,690	2,647	2,633

267: Air transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13,354	12,156	11,641	11,401	11,056	10,874	10,776
Indirect Purchases	1,926	1,826	1,739	1,708	1,649	1,607	1,586
Total:	15,281	13,981	13,380	13,109	12,705	12,481	12,362

268: Rail transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,438	1,356	1,269	1,224	1,195	1,178	1,177
Indirect Purchases	1,462	1,349	1,300	1,265	1,212	1,187	1,179
Total:	2,899	2,704	2,569	2,489	2,407	2,365	2,356

Note: Numbers may not add due to rounding

269: Water transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,850	5,744	5,466	5,335	5,213	5,147	5,145
Indirect Purchases	375	356	356	351	343	337	332
Total:	6,225	6,100	5,821	5,686	5,555	5,484	5,478

270: Truck transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	11,016	10,399	9,736	9,390	9,158	9,025	9,018
Indirect Purchases	4,465	4,148	3,990	3,885	3,731	3,658	3,629
Total:	15,480	14,547	13,727	13,275	12,889	12,682	12,648

271: Transit and ground passenger transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	452	415	394	384	374	368	366
Indirect Purchases	633	589	574	562	546	539	535
Total:	1,085	1,003	968	947	920	906	901

Note: Numbers may not add due to rounding

272: Pipeline transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	759	703	683	664	625	610	606
Total:	759	703	683	664	625	610	606

273: Scenic and sightseeing transportation and support activities for transportation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3,702	3,432	3,325	3,296	3,129	3,031	2,994
Indirect Purchases	3,797	3,552	3,407	3,331	3,229	3,174	3,154
Total:	7,499	6,984	6,731	6,627	6,358	6,205	6,147

274: Couriers and messengers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	10	8	8	8	7	7	7
Indirect Purchases	2,580	2,420	2,321	2,265	2,194	2,157	2,145
Total:	2,590	2,428	2,329	2,273	2,202	2,164	2,152

Note: Numbers may not add due to rounding

275: Warehousing and storage

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,921	2,758	2,606	2,511	2,416	2,372	2,368
Indirect Purchases	1,552	1,453	1,399	1,362	1,317	1,294	1,290
Total:	4,473	4,212	4,005	3,873	3,733	3,666	3,658

276: Newspaper publishers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	2
Indirect Purchases	13	12	12	12	11	11	11
Total:	15	14	14	13	13	13	13

277: Periodical publishers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	29	26	25	24	23	22	22
Indirect Purchases	121	114	112	111	108	106	105
Total:	149	139	137	135	131	128	127

Note: Numbers may not add due to rounding

278: Book publishers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	81	69	68	67	64	62	61
Indirect Purchases	103	96	94	93	91	89	89
Total:	184	165	162	161	155	151	149

279: Directory, mailing list, and other publishers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	58	52	50	50	46	44	44
Indirect Purchases	197	183	178	175	170	167	165
Total:	255	235	229	224	216	211	209

280: Software publishers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,182	2,013	1,968	1,960	1,906	1,889	1,889
Indirect Purchases	2,119	1,965	1,927	1,920	1,884	1,869	1,864
Total:	4,301	3,979	3,896	3,880	3,791	3,757	3,753

Note: Numbers may not add due to rounding

281: Motion picture and video industries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	58	52	51	52	50	49	49
Indirect Purchases	1,314	1,195	1,160	1,144	1,107	1,087	1,077
Total:	1,372	1,247	1,212	1,195	1,157	1,136	1,127

282: Sound recording industries

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	2	2	2	2	2	2
Indirect Purchases	76	70	68	67	65	64	64
Total:	78	72	70	70	67	66	66

283: Radio and television broadcasting

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	16	16	17	17	17	17
Indirect Purchases	348	323	313	308	298	293	290
Total:	366	340	330	325	315	309	307

Note: Numbers may not add due to rounding

284: Cable and internet(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	8	8	8	7	7	7
Indirect Purchases	939	854	831	819	793	779	772
Total:	948	862	839	826	800	786	779

285: Telecommunications(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	13,554	11,830	11,494	11,367	10,954	10,748	10,661
Indirect Purchases	8,544	7,794	7,585	7,481	7,251	7,136	7,083
Total:	22,098	19,625	19,079	18,847	18,206	17,884	17,744

286: Data processing, hosting and internet service providers(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	256	228	221	216	206	200	199
Indirect Purchases	2,693	2,521	2,459	2,396	2,325	2,287	2,275
Total:	2,949	2,749	2,680	2,611	2,530	2,487	2,474

Note: Numbers may not add due to rounding

287: Other information services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	137	122	118	114	108	104	103
Indirect Purchases	307	290	284	280	272	267	264
Total:	444	412	402	394	380	371	366

288: Monetary authorities and depository credit intermediation

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	8,777	8,213	7,979	7,820	7,584	7,458	7,396
Total:	8,777	8,213	7,979	7,820	7,584	7,458	7,396

289: Nondepository credit intermediation and related activities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	8	7	7	8	8	7	7
Indirect Purchases	2,759	2,575	2,494	2,434	2,358	2,319	2,307
Total:	2,767	2,582	2,502	2,442	2,366	2,327	2,315

Note: Numbers may not add due to rounding

290: Securities, commodity contracts, investments, and related activities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	184	188	169	159	155	154	153
Indirect Purchases	7,005	6,605	6,399	6,211	6,029	5,926	5,905
Total:	7,190	6,793	6,568	6,370	6,184	6,080	6,059

291: Insurance carriers

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,395	2,491	2,337	2,260	2,244	2,236	2,240
Indirect Purchases	5,459	5,096	4,936	4,863	4,744	4,694	4,664
Total:	7,854	7,587	7,273	7,124	6,989	6,930	6,904

292: Insurance agencies, brokerages, and related activities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	17	16	14	13	12	11	11
Indirect Purchases	2,676	2,568	2,467	2,414	2,362	2,337	2,324
Total:	2,694	2,584	2,481	2,427	2,375	2,349	2,336

Note: Numbers may not add due to rounding

293: Funds, trusts, and other financial vehicles

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	395	376	363	354	346	341	338
Total:	395	376	363	355	346	341	338

294: Real estate

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,560	4,091	3,895	3,808	3,711	3,649	3,623
Indirect Purchases	14,570	13,551	13,223	13,059	12,696	12,517	12,421
Total:	19,130	17,642	17,118	16,867	16,407	16,165	16,044

296: Automotive equipment rental and leasing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,882	1,748	1,651	1,604	1,564	1,542	1,536
Indirect Purchases	2,369	2,203	2,142	2,099	2,031	1,998	1,983
Total:	4,251	3,951	3,793	3,704	3,594	3,540	3,519

Note: Numbers may not add due to rounding

297: General and consumer goods rental except video tapes and discs

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	26	22	20	19	18	17	16
Indirect Purchases	361	335	325	318	307	302	299
Total:	387	357	346	337	325	318	316

298: Video tape and disc rental

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0

299: Commercial and industrial machinery and equipment rental and leasing

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	211	195	189	182	169	162	161
Indirect Purchases	2,489	2,309	2,230	2,186	2,111	2,071	2,050
Total:	2,700	2,504	2,419	2,368	2,280	2,233	2,211

Note: Numbers may not add due to rounding

300: Lessors of nonfinancial intangible assets

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	0	0	0	0	0	0	0
Indirect Purchases	5,369	5,090	5,007	4,914	4,741	4,674	4,659
Total:	5,370	5,090	5,007	4,915	4,741	4,675	4,660

301: Legal services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21	20	19	18	17	17	17
Indirect Purchases	5,827	5,453	5,346	5,308	5,188	5,124	5,087
Total:	5,849	5,473	5,365	5,327	5,205	5,141	5,104

302: Accounting, tax preparation, bookkeeping, and payroll services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	335	313	318	312	282	272	270
Indirect Purchases	3,567	3,314	3,223	3,158	3,060	3,013	2,993
Total:	3,902	3,627	3,541	3,470	3,342	3,285	3,263

Note: Numbers may not add due to rounding

303: Architectural, engineering, and related services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	33,944	32,099	31,449	31,456	31,459	32,168	31,914
Indirect Purchases	7,310	6,805	6,612	6,459	6,273	6,187	6,129
Total:	41,254	38,903	38,062	37,915	37,733	38,354	38,043

304: Specialized design services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	54	47	43	39	36	34	33
Indirect Purchases	2,543	2,374	2,271	2,237	2,187	2,169	2,153
Total:	2,597	2,420	2,314	2,276	2,223	2,203	2,186

305: Custom computer programming services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,204	3,802	3,640	3,512	3,330	3,236	3,204
Indirect Purchases	542	504	489	487	466	461	455
Total:	4,746	4,306	4,129	3,999	3,796	3,697	3,659

Note: Numbers may not add due to rounding

306: Computer systems design services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,477	5,005	4,929	4,870	4,690	4,588	4,516
Indirect Purchases	771	717	699	685	664	654	651
Total:	6,248	5,722	5,629	5,555	5,354	5,243	5,167

307: Other computer related services, including facilities management

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7,442	6,872	6,759	6,767	6,541	6,443	6,437
Indirect Purchases	2,711	2,527	2,469	2,425	2,359	2,330	2,312
Total:	10,153	9,399	9,227	9,192	8,900	8,773	8,749

308: Management, scientific, and technical consulting services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5,859	5,185	4,911	4,627	4,343	4,200	4,183
Indirect Purchases	7,994	7,496	7,331	7,157	6,967	6,864	6,828
Total:	13,853	12,681	12,242	11,784	11,310	11,064	11,011

Note: Numbers may not add due to rounding

309: Environmental and other technical consulting services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,383	1,203	1,145	1,093	1,034	991	975
Indirect Purchases	1,155	1,082	1,058	1,035	1,009	997	991
Total:	2,538	2,285	2,203	2,128	2,043	1,988	1,967

310: Scientific research and development services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	40,062	38,806	39,115	38,726	37,925	37,271	36,545
Indirect Purchases	3,556	3,326	3,272	3,199	3,092	3,049	3,046
Total:	43,618	42,132	42,386	41,925	41,017	40,320	39,591

311: Advertising and related services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	820	723	673	623	584	554	549
Indirect Purchases	8,304	7,764	7,545	7,471	7,251	7,131	7,070
Total:	9,125	8,487	8,218	8,094	7,835	7,685	7,618

Note: Numbers may not add due to rounding

312: All other miscellaneous professional, scientific, and technical services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	7,466	7,044	6,952	6,806	6,716	6,608	6,521
Indirect Purchases	3,965	3,729	3,652	3,581	3,490	3,449	3,425
Total:	11,431	10,773	10,604	10,387	10,206	10,058	9,946

313: Photographic services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	4	4	3	3	3	3
Indirect Purchases	134	125	122	120	117	116	115
Total:	138	129	125	123	120	119	118

314: Veterinary services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14	14	14	13	13	12	12
Indirect Purchases	21	20	20	20	19	19	19
Total:	35	34	34	33	32	32	31

Note: Numbers may not add due to rounding

315: Management of companies and enterprises

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	23,953	22,301	21,598	21,235	20,424	20,114	19,950
Total:	23,953	22,301	21,598	21,235	20,424	20,115	19,951

316: Office administrative services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	460	395	376	357	335	319	314
Indirect Purchases	1,956	1,826	1,780	1,747	1,702	1,679	1,668
Total:	2,416	2,221	2,157	2,105	2,037	1,999	1,982

317: Facilities support services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6,755	5,877	5,471	5,077	4,737	4,488	4,408
Indirect Purchases	460	426	409	403	393	389	387
Total:	7,216	6,303	5,881	5,480	5,131	4,877	4,794

Note: Numbers may not add due to rounding

318: Business support services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	191	171	157	154	147	142	139
Indirect Purchases	2,557	2,388	2,309	2,262	2,201	2,170	2,157
Total:	2,748	2,559	2,466	2,416	2,348	2,312	2,297

319: Investigation and security services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	519	470	453	441	420	408	405
Indirect Purchases	1,267	1,180	1,136	1,116	1,086	1,072	1,064
Total:	1,786	1,650	1,589	1,557	1,507	1,480	1,469

320: Services to buildings and dwellings

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,313	1,150	1,097	1,039	974	930	916
Indirect Purchases	3,569	3,352	3,281	3,221	3,127	3,076	3,047
Total:	4,882	4,502	4,379	4,260	4,101	4,006	3,963

Note: Numbers may not add due to rounding

321: Other support services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	1,772	1,556	1,529	1,538	1,491	1,465	1,458
Indirect Purchases	1,752	1,634	1,576	1,551	1,512	1,497	1,486
Total:	3,524	3,190	3,105	3,088	3,003	2,961	2,944

322: Employment services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	247	243	238	234	225	220	218
Indirect Purchases	7,373	6,866	6,650	6,532	6,359	6,277	6,229
Total:	7,620	7,109	6,888	6,766	6,583	6,497	6,447

323: Travel arrangement and reservation services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	6	5	5	4	4	3	3
Indirect Purchases	918	856	829	810	787	773	768
Total:	924	861	834	814	790	776	771

Note: Numbers may not add due to rounding

324: Waste management and remediation services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	3,175	2,631	2,397	2,141	1,951	1,806	1,776
Indirect Purchases	1,823	1,667	1,601	1,541	1,478	1,440	1,429
Total:	4,998	4,298	3,998	3,682	3,429	3,245	3,206

325: Elementary and secondary schools

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	43	39	40	41	41	40	40
Indirect Purchases	4	4	4	4	4	3	3
Total:	48	44	44	45	44	44	44

326: Junior colleges, colleges, universities, and professional schools

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,965	2,674	2,608	2,493	2,332	2,206	2,153
Indirect Purchases	115	104	101	99	96	94	93
Total:	3,079	2,778	2,709	2,593	2,428	2,300	2,246

Note: Numbers may not add due to rounding

327: Other educational services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,429	2,227	2,181	2,137	2,077	2,030	2,000
Indirect Purchases	71	64	62	61	59	57	57
Total:	2,500	2,291	2,243	2,198	2,136	2,088	2,057

328: Offices of physicians, dentists, and other health practitioners

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	21,034	19,023	19,007	19,728	19,468	19,377	19,395
Indirect Purchases	22	9	9	11	12	14	18
Total:	21,057	19,033	19,016	19,739	19,480	19,391	19,413

329: Medical and diagnostic labs and outpatient and other ambulatory care services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	357	303	285	268	251	239	235
Indirect Purchases	414	374	372	384	378	376	376
Total:	771	677	657	652	629	615	611

Note: Numbers may not add due to rounding

330: Home health care services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	26	24	24	25	25	25	25
Indirect Purchases	0	0	0	0	0	0	0
Total:	26	24	24	25	25	25	25

331: Hospitals

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	671	625	615	614	594	583	579
Indirect Purchases	2	2	2	2	2	2	2
Total:	674	626	617	616	596	585	581

332: Nursing and residential care facilities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	46	42	42	44	43	43	43
Indirect Purchases	1	1	1	1	1	1	1
Total:	47	42	43	44	44	44	44

Note: Numbers may not add due to rounding

333: Social assistance, except child day care services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	359	313	296	275	256	241	237
Indirect Purchases	6	6	5	5	5	5	5
Total:	365	319	301	280	261	246	241

334: Child day care services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2	1	1	1	1	1	1
Indirect Purchases	6	6	5	5	5	5	5
Total:	8	7	7	6	6	5	5

335: Performing arts

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	18	16	16	15	14	14	14
Indirect Purchases	1,001	925	898	881	853	839	833
Total:	1,019	942	913	896	867	853	847

Note: Numbers may not add due to rounding

336: Museums, historical sites, zoos, and parks

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	9	7	7	6	5	5	5
Indirect Purchases	0	0	0	0	0	0	0
Total:	9	8	7	6	6	5	5

337: Spectator sports

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	5	4	4	3	3	3	3
Indirect Purchases	456	423	410	403	391	384	381
Total:	461	427	414	406	394	387	384

338: Amusements, gambling, & recreation activities

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	14	12	11	10	10	9	9
Indirect Purchases	247	230	224	219	213	210	208
Total:	261	242	235	230	222	219	217

Note: Numbers may not add due to rounding

339: Hotels and other accommodations

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	4,305	3,997	3,773	3,660	3,563	3,510	3,495
Indirect Purchases	2,279	2,136	2,066	2,024	1,964	1,930	1,914
Total:	6,584	6,133	5,840	5,684	5,527	5,440	5,409

340: Food services and drinking places

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,172	2,019	1,907	1,853	1,806	1,781	1,773
Indirect Purchases	5,577	5,185	5,049	4,965	4,834	4,776	4,742
Total:	7,749	7,204	6,956	6,818	6,639	6,556	6,516

341: Automotive repair, maintenance and car washes

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	1,592	1,483	1,437	1,399	1,348	1,322	1,312
Total:	1,592	1,483	1,438	1,399	1,349	1,322	1,312

Note: Numbers may not add due to rounding

342: Electronic and precision equipment repair and maintenance

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	911	850	829	813	789	778	771
Total:	911	850	829	813	789	778	771

343: Commercial and industrial machinery and equipment repair and maintenance

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	1,608	1,497	1,455	1,418	1,366	1,339	1,329
Total:	1,608	1,497	1,455	1,418	1,366	1,339	1,329

344: Personal and household goods repair and maintenance

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	789	726	701	680	654	638	632
Total:	789	726	702	680	654	638	632

Note: Numbers may not add due to rounding

345: Personal care services(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	2	2	2	2	1	1	1
Total:	2	2	2	2	2	1	1

346: Death care services(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	1	1	0	0	0	0	0
Total:	1	1	1	1	1	0	0

347: Dry-cleaning and laundry services(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	281	265	259	250	243	238	238
Total:	281	266	259	250	243	238	238

Note: Numbers may not add due to rounding

348: Other personal services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	294	273	266	262	255	252	250
Total:	294	273	266	262	255	253	250

349: Religious, grantmaking, civic & professional organizations

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	1,249	1,166	1,139	1,118	1,084	1,069	1,060
Total:	1,249	1,166	1,139	1,118	1,084	1,069	1,060

351: Postal service

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	2,319	2,010	1,937	1,921	1,854	1,823	1,810
Indirect Purchases	2,293	2,143	2,061	2,017	1,954	1,922	1,910
Total:	4,612	4,153	3,998	3,938	3,808	3,745	3,720

Note: Numbers may not add due to rounding

352: Other federal government enterprises

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	79	74	72	70	68	67	66
Total:	79	74	72	70	68	67	66

353: Other state and local government enterprises

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Indirect Purchases	446	413	402	393	380	372	370
Total:	446	413	402	393	380	372	370

354: General Federal defense government services

(Millions of 2016 dollars)

	2014	2015	2016	2017	2018	2019	2020
SUMMARY OF DEFENSE PURCHASES							
Direct Purchases	174,447	183,577	179,725	175,802	174,446	174,366	174,492
Indirect Purchases	175	81	78	89	101	122	153
Total:	174,623	183,659	179,803	175,891	174,547	174,488	174,645

Note: Numbers may not add due to rounding