

**Table 9a. U.S. Macroeconomic Indicators and CO<sub>2</sub> Emissions**

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) .....	16,525	16,583	16,713	16,786	16,883	16,987	17,085	17,178	17,310	17,417	17,525	17,630	16,652	17,033	17,471
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR) .....	11,365	11,485	11,563	11,635	11,721	11,791	11,871	11,947	12,051	12,141	12,229	12,319	11,512	11,832	12,185
Real Fixed Investment (billion chained 2009 dollars - SAAR) .....	2,787	2,779	2,772	2,812	2,847	2,885	2,913	2,941	2,970	2,999	3,030	3,058	2,787	2,896	3,014
Business Inventory Change (billion chained 2009 dollars - SAAR) .....	42	-15	4	-5	-13	-4	4	17	41	57	64	64	6	1	56
Real Government Expenditures (billion chained 2009 dollars - SAAR) .....	2,913	2,901	2,903	2,912	2,919	2,923	2,924	2,925	2,930	2,935	2,942	2,944	2,907	2,923	2,938
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR) .....	2,102	2,111	2,163	2,144	2,154	2,171	2,189	2,202	2,216	2,230	2,247	2,267	2,130	2,179	2,240
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR) .....	2,668	2,670	2,684	2,704	2,733	2,769	2,807	2,846	2,889	2,938	2,981	3,018	2,681	2,789	2,957
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) .....	12,556	12,647	12,731	12,823	12,902	13,004	13,084	13,177	13,399	13,505	13,599	13,699	12,689	13,042	13,550
Non-Farm Employment (millions) .....	143.5	144.0	144.6	145.1	145.6	146.0	146.3	146.7	147.2	147.7	148.2	148.6	144.3	146.2	147.9
Civilian Unemployment Rate (percent) .....	4.9	4.9	4.9	4.7	4.7	4.6	4.6	4.5	4.4	4.3	4.2	4.2	4.9	4.6	4.3
Housing Starts (millions - SAAR) .....	1.15	1.16	1.15	1.27	1.20	1.22	1.25	1.28	1.29	1.31	1.32	1.34	1.18	1.24	1.32
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	104.1	103.9	104.4	104.0	104.3	104.8	105.8	106.8	107.7	108.4	109.3	109.9	104.1	105.4	108.8
Manufacturing .....	103.9	103.6	103.8	103.9	104.2	104.4	105.1	106.1	106.9	107.5	108.3	108.9	103.8	104.9	107.9
Food .....	104.4	104.8	105.4	105.0	105.7	106.3	106.9	107.5	108.0	108.5	109.1	109.7	104.9	106.6	108.8
Paper .....	96.4	95.6	95.4	94.7	94.2	94.2	94.2	94.3	94.2	94.0	94.0	94.1	95.5	94.2	94.1
Petroleum and Coal Products .....	106.5	105.5	105.1	105.1	105.8	106.3	106.9	107.4	107.8	108.2	108.6	109.1	105.5	106.6	108.4
Chemicals .....	99.1	98.3	97.0	97.3	97.5	98.1	98.9	99.9	100.7	101.5	102.6	103.7	98.0	98.6	102.1
Nonmetallic Mineral Products .....	117.1	115.6	113.8	114.5	115.2	116.0	117.0	118.1	119.0	119.9	120.8	121.6	115.3	116.6	120.3
Primary Metals .....	94.8	95.7	92.7	93.0	92.7	92.7	92.9	93.3	93.2	93.1	93.4	94.2	94.0	92.9	93.5
Coal-weighted Manufacturing (a) .....	102.8	102.2	101.0	101.0	101.1	101.5	102.0	102.7	103.1	103.6	104.2	105.0	101.7	101.8	104.0
Distillate-weighted Manufacturing (a) .....	106.2	105.7	105.1	105.4	105.8	106.3	106.9	107.7	108.3	108.8	109.4	110.1	105.6	106.7	109.1
Electricity-weighted Manufacturing (a) .....	103.5	103.0	102.6	102.6	102.7	102.9	103.5	104.4	105.0	105.6	106.4	107.4	102.9	103.4	106.1
Natural Gas-weighted Manufacturing (a) .....	104.4	103.5	103.3	103.1	103.3	103.9	104.7	105.8	106.6	107.4	108.4	109.7	103.6	104.4	108.0
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00) .....	2.38	2.39	2.40	2.42	2.44	2.45	2.47	2.48	2.50	2.51	2.53	2.54	2.40	2.46	2.52
Producer Price Index: All Commodities (index, 1982=1.00) .....	1.83	1.85	1.86	1.88	1.91	1.91	1.92	1.93	1.95	1.96	1.97	1.98	1.85	1.92	1.97
Producer Price Index: Petroleum (index, 1982=1.00) .....	1.21	1.46	1.53	1.63	1.70	1.76	1.78	1.71	1.69	1.81	1.84	1.80	1.46	1.74	1.78
GDP Implicit Price Deflator (index, 2009=100) .....	110.6	111.3	111.7	112.2	113.0	113.7	114.3	115.0	115.7	116.3	117.0	117.6	111.4	114.0	116.7
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	8,203	9,159	9,077	8,659	8,305	9,263	9,156	8,799	8,436	9,401	9,296	8,944	8,775	8,883	9,021
Air Travel Capacity (Available ton-miles/day, thousands) .....	548	603	609	578	566	594	595	579	571	597	600	587	585	583	589
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	326	366	375	355	341	362	368	359	344	367	372	363	356	357	362
Airline Ticket Price Index (index, 1982-1984=100) .....	281.8	305.0	273.0	271.9	280.9	309.1	289.0	298.6	300.4	325.0	301.5	309.3	283.0	294.4	309.1
Raw Steel Production (million short tons per day) .....	0.238	0.247	0.238	0.231	0.238	0.240	0.212	0.178	0.226	0.229	0.209	0.168	0.239	0.217	0.208
<b>Carbon Dioxide (CO<sub>2</sub>) Emissions (million metric tons)</b>															
Petroleum .....	571	571	588	582	568	577	592	585	573	583	599	593	2,313	2,321	2,349
Natural Gas .....	440	328	344	374	443	323	333	388	452	330	340	394	1,486	1,486	1,515
Coal .....	311	298	415	338	357	321	407	352	350	315	403	352	1,362	1,437	1,420
Total Energy (c) .....	1,325	1,201	1,350	1,297	1,371	1,224	1,334	1,327	1,378	1,231	1,346	1,342	5,173	5,256	5,296

- = no data available

SAAR = Seasonally-adjusted annual rate

 (a) Fuel share weights of individual sector indices based on EIA *Manufacturing Energy Consumption Survey*.

(b) Total highway travel includes gasoline and diesel fuel vehicles.

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

**Notes:** The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.

**Projections:** EIA Regional Short-Term Energy Model. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.