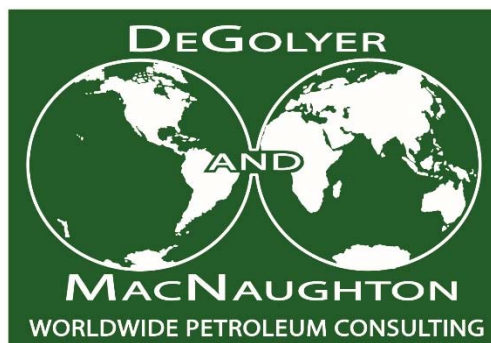


TWENTIETH CENTURY PETROLEUM STATISTICS

2016



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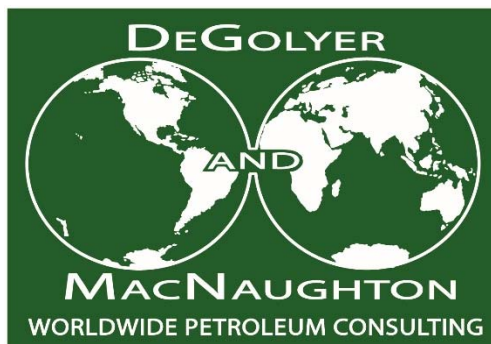
Dear Subscriber:

This is the 72nd edition of the *TWENTIETH CENTURY PETROLEUM STATISTICS*, which initially was prepared in 1945 by the office of the Director of Naval Petroleum and Oil Shale Reserves, Navy Department, Washington, D.C. The Director, Commodore W. G. Greenman, U.S. Navy, requested that DeGolyer and MacNaughton maintain the handbook on an annual basis, since demand indicated that there was a practical need for such information. Therefore, we have been publishing this manual ever since as a ready reference to students and members of the petroleum industry.

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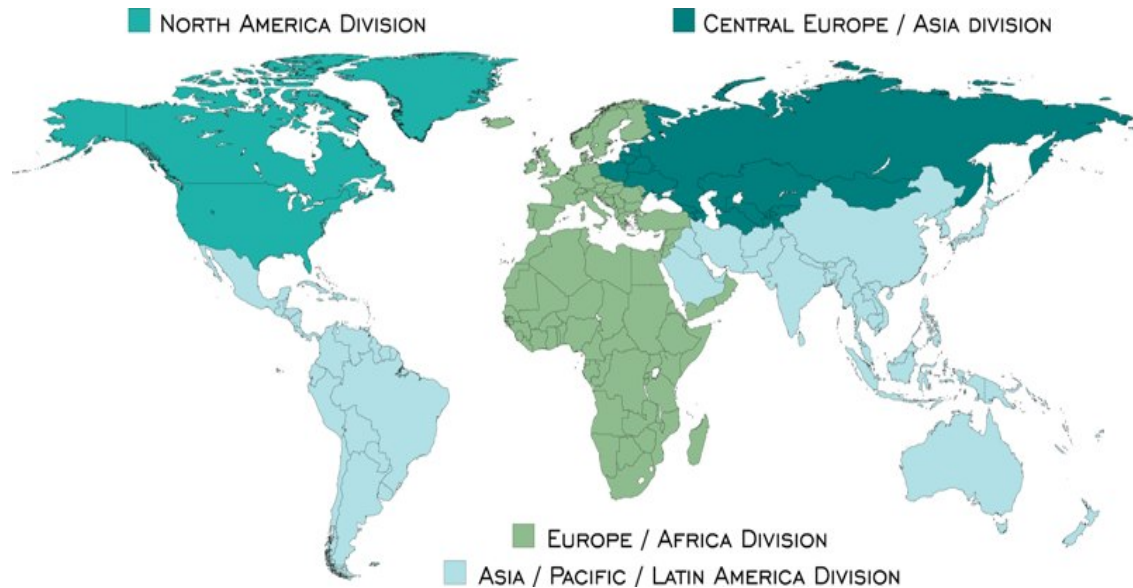
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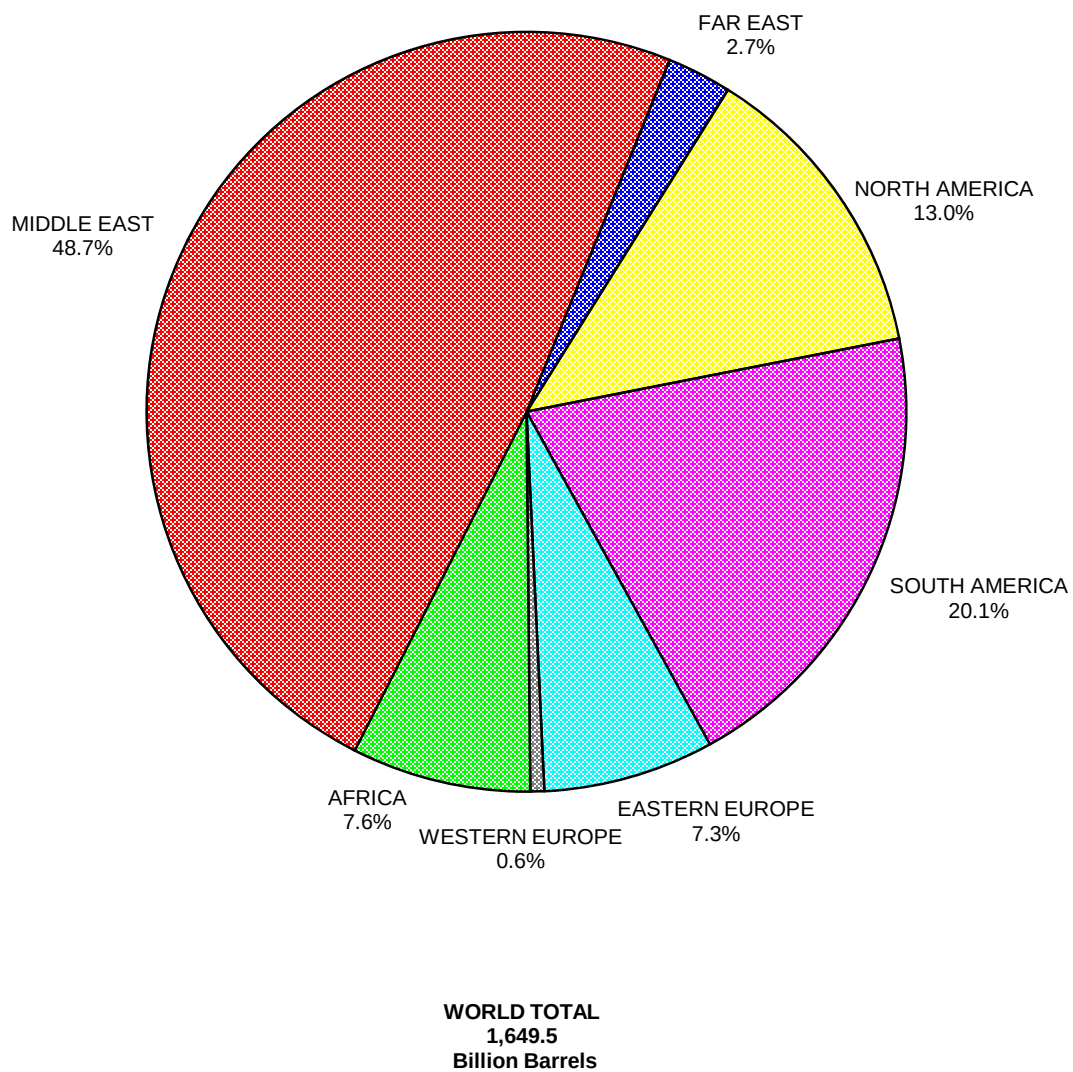
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**ESTIMATED WORLD CRUDE OIL RESERVES BY AREA
AS OF JANUARY 1, 2016
(Percentage)**



ESTIMATES OF WORLD PETROLEUM RESERVES AND CRUDE OIL PRODUCTION IN 2015

(Thousands of Barrels)

CONTINENT and COUNTRY	Estimated Reserves as of 1/1/15	Estimated Reserves as of 1/1/16	Percent World Reserves as of 1/1/16	Crude Oil Production 2015	Percent World Oil Production 2015	Reserve ¹ Production Ratio
NORTH AMERICA, TOTAL	220,328,000	214,823,000	13.02	5,630,825	19.19	38.6
Canada ²	170,459,000	169,758,000	10.29	1,338,147	4.56	127.1
Cuba	124,000	124,000	0.01	18,250	0.06	6.8
Mexico	9,812,000	9,711,000	0.59	840,410	2.87	11.6
United States	39,933,000	35,230,000	2.13	3,434,018	11.70	10.9
SOUTH AMERICA, TOTAL	329,541,369	331,062,298	20.07	2,644,192	9.01	124.9
Argentina	2,354,204	2,379,702	0.14	194,267	0.66	12.2
Bolivia	211,450	211,450	0.01	20,296	0.07	10.4
Brazil	15,544,400	16,184,100	0.98	889,667	3.03	17.8
Chile	150,000	150,000	0.01	2,285	0.01	65.6
Colombia	2,445,000	2,308,000	0.14	366,101	1.25	6.5
Ecuador	8,832,000	8,273,000	0.50	198,229	0.67	43.1
Peru	741,219	682,681	0.05	21,173	0.07	33.6
Trinidad and Tobago	728,300	728,300	0.04	28,710	0.10	25.4
Venezuela*	298,350,000	299,953,000	18.19	912,500	3.11	327.8
Other	184,796	192,065	0.01	10,964	0.04	17.2
EASTERN EUROPE, TOTAL	120,006,777	120,008,184	7.28	4,852,158	16.53	24.7
Azerbaijan	7,000,000	7,000,000	0.42	309,693	1.06	22.6
Kazakhstan	30,000,000	30,000,000	1.82	603,365	2.06	49.7
Romania	600,000	600,000	0.04	30,169	0.10	19.9
Russia	80,000,000	80,000,000	4.85	3,742,292	12.75	21.4
Turkmenistan	600,000	600,000	0.04	88,720	0.30	6.8
Ukraine	395,000	395,000	0.02	13,108	0.04	30.1
Uzbekistan	594,000	594,000	0.04	21,948	0.07	27.1
F.S.U. - Other	285,000	285,000	0.02	10,908	0.04	26.1
Eastern Europe - Other	532,777	534,184	0.03	31,955	0.11	16.7
WESTERN EUROPE, TOTAL	10,218,069	9,580,887	0.58	1,049,128	3.57	9.4
Austria	47,500	45,400	0.00	6,021	0.02	7.7
Denmark	611,000	551,000	0.03	57,056	0.19	10.2
France	84,075	78,431	0.00	6,085	0.02	13.4
Germany	146,880	132,480	0.01	17,543	0.06	8.0
Italy	544,522	579,232	0.04	36,577	0.13	15.4
Netherlands	144,665	140,892	0.01	9,966	0.03	14.3
Norway	5,497,285	5,138,767	0.31	587,749	2.00	9.0
United Kingdom	2,982,142	2,754,685	0.17	326,040	1.11	8.8
Other	160,000	160,000	0.01	2,091	0.01	76.5
AFRICA, TOTAL	126,503,112	125,915,112	7.63	2,817,307	9.60	44.8
Algeria*	12,200,000	12,200,000	0.74	521,585	1.78	23.4
Angola	9,011,000	8,423,000	0.51	657,680	2.24	13.3
Chad	1,500,000	1,500,000	0.09	44,895	0.15	33.4
Congo-Brazzaville	1,600,000	1,600,000	0.10	93,440	0.32	17.1
Egypt	4,400,000	4,400,000	0.27	237,985	0.81	18.5
Equatorial Guinea	1,100,000	1,100,000	0.07	91,250	0.31	12.1
Gabon	2,000,000	2,000,000	0.12	77,865	0.27	25.7
Libya*	48,363,000	48,363,000	2.93	147,450	0.50	328.0
Nigeria*	37,070,000	37,070,000	2.25	792,474	2.70	46.8
Sudan	5,000,000	5,000,000	0.30	40,350	0.14	123.9
Tunisia	425,000	425,000	0.02	13,140	0.04	32.3
Other	3,834,112	3,834,112	0.23	99,193	0.34	38.7
MIDDLE EAST, TOTAL	803,430,513	802,978,513	48.68	9,503,399	32.38	84.5
Bahrain	124,560	124,560	0.01	18,615	0.06	6.7
Iran*	157,800,000	157,530,000	9.55	1,204,500	4.10	130.9
Iraq*	144,211,000	143,069,000	8.68	1,479,725	5.04	97.1
Kuwait*	101,500,000	101,500,000	6.15	1,023,340	3.49	99.2
Oman	5,151,000	5,306,000	0.32	358,420	1.22	14.6
Qatar*	25,244,000	25,244,000	1.53	559,109	1.90	45.2
Saudi Arabia*	265,789,000	266,578,000	16.16	3,711,410	12.65	71.7
Syria	2,500,000	2,500,000	0.15	10,950	0.04	228.3
Turkey	296,000	312,000	0.02	17,706	0.06	17.2
United Arab Emirates*	97,800,000	97,800,000	5.93	1,102,100	3.76	88.7
Yemen	3,000,000	3,000,000	0.18	17,374	0.06	172.7
Other	14,953	14,953	0.00	150	0.00	99.7
FAR EAST, TOTAL	45,895,282	45,112,146	2.74	2,852,419	9.72	16.0
Australia	1,193,000	1,193,000	0.07	117,649	0.40	10.1
Brunei	1,100,000	1,100,000	0.07	42,095	0.14	26.1
Burma (Myanmar)	50,000	50,000	0.00	5,475	0.02	9.1
China	24,648,842	25,132,122	1.52	1,561,358	5.32	15.9
India	5,674,786	4,728,790	0.29	277,781	0.95	18.7
Indonesia*	3,741,330	3,692,500	0.22	286,803	0.98	13.0
Malaysia	3,800,000	3,600,000	0.22	238,775	0.81	15.5
New Zealand	67,200	64,100	0.01	15,069	0.05	4.4
Pakistan	371,000	353,500	0.02	32,928	0.11	11.0
Papua New Guinea	175,179	180,249	0.01	19,200	0.07	9.3
Philippines	138,500	138,500	0.01	8,805	0.03	15.7
Thailand	460,950	404,890	0.02	90,582	0.31	4.8
Vietnam	4,400,000	4,400,000	0.27	121,706	0.41	36.2
Other	74,495	74,495	0.01	34,193	0.12	2.2
TOTAL WORLD	1,655,923,122	1,649,480,140	100.00	29,349,428	100.00	56.3
*OPEC COUNTRIES	1,192,068,330	1,192,999,500	72.35	11,740,996	40.00	101.6

¹ Reserve production ratio based on average as of 1/1/15 and 1/1/16.² Break in data series by CAPP. Beginning in 2010, CAPP reserves are based on provincial data.

WORLDWIDE PETROLEUM PRODUCTION AND DEMAND IN 2015

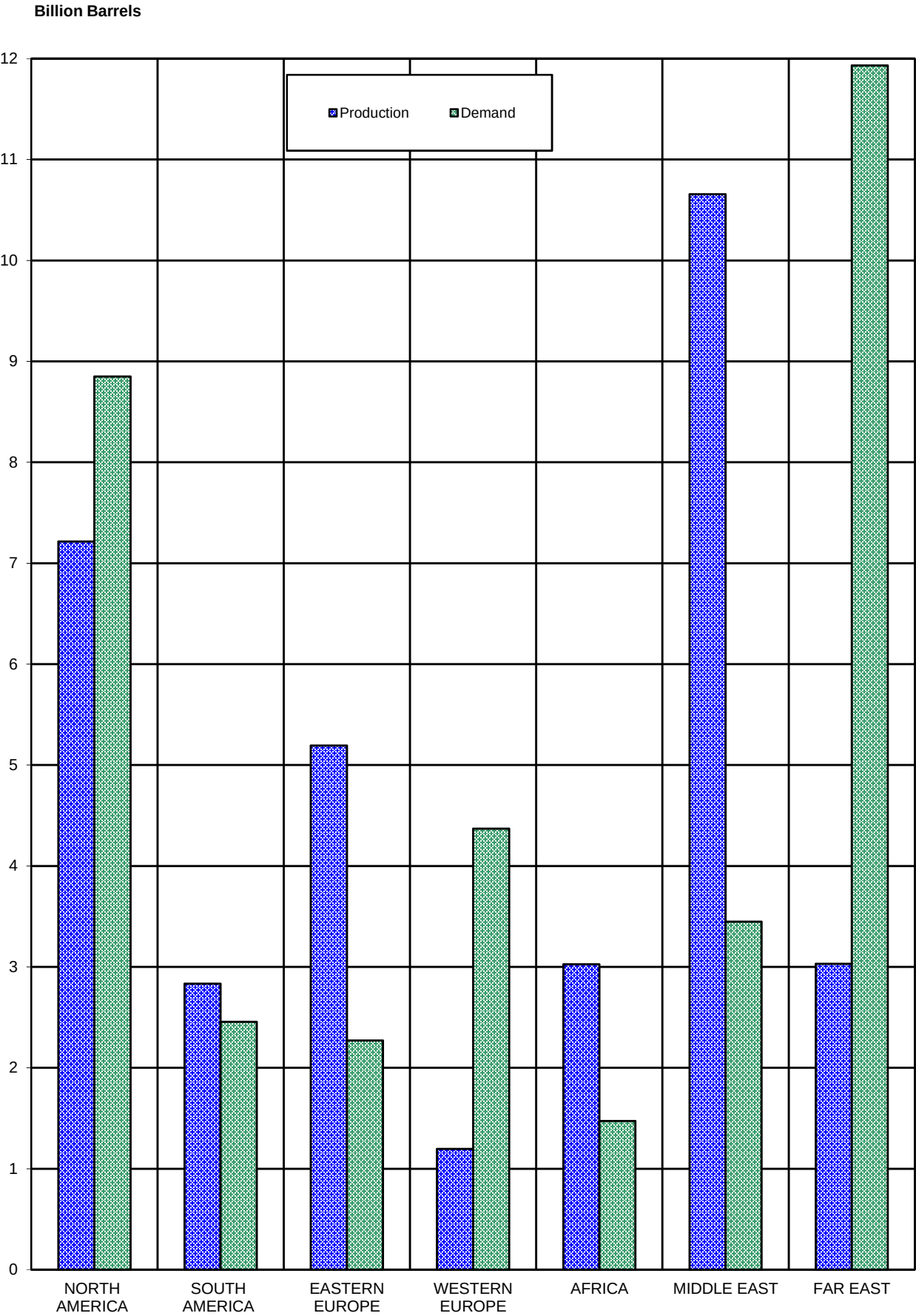


Chart 2

WORLDWIDE PETROLEUM PRODUCTION AND DEMAND IN 2015

CONTINENT and COUNTRY	Petroleum Production (000's bbls)			Petroleum Consumption	Production to Demand Ratio	Population ¹ (000's)	Per Capita	
	Crude Oil	Natural Gas Plant Liquids	Total				Production (bbl)	Demand (bbl)
NORTH AMERICA, TOTAL	5,630,825	1,583,192	7,214,017	8,851,072	0.815	493,164	14.63	17.95
Canada	1,338,147	257,930	1,596,077	865,780	1.844	35,100	45.47	24.67
Cuba	18,250	...	18,250	64,970	0.281	11,214	1.63	5.79
Mexico	840,410	105,313	945,723	732,190	1.292	121,737	7.77	6.01
United States	3,434,018	1,219,949	4,653,967	7,129,732	0.653	321,040	14.50	22.21
Other	...	...	...	58,400	...	4,073	...	14.34
SOUTH AMERICA, TOTAL	2,644,192	188,287	2,832,479	2,456,815	1.153	481,840	5.88	5.10
Argentina	194,267	39,608	233,875	293,095	0.798	43,475	5.38	6.74
Bolivia	20,296	5,590	25,886	31,390	0.825	10,801	2.40	2.91
Brazil	889,667	32,671	922,338	1,126,755	0.819	204,260	4.52	5.52
Chile	2,285	365	2,650	121,180	0.022	17,508	0.15	6.92
Colombia	366,101	1,460	367,561	115,705	3.177	46,737	7.86	2.48
Ecuador	198,229	365	198,594	100,010	1.986	15,868	12.52	6.30
Peru	21,173	33,360	54,533	90,520	0.602	30,445	1.79	2.97
Trinidad and Tobago	28,710	10,993	39,703	17,885	2.220	1,222	32.49	14.64
Venezuela*	912,500	63,875	976,375	246,740	3.957	30,514	32.00	8.09
Other	10,964	...	10,964	313,535	0.035	81,010	0.14	3.87
EASTERN EUROPE, TOTAL	4,852,158	341,780	5,193,938	2,271,395	2.287	408,747	12.71	5.56
Azerbaijan	309,693	1,349	311,042	36,865	8.437	9,781	31.80	3.77
Kazakhstan	603,365	34,761	638,126	92,345	6.910	18,157	35.14	5.09
Poland	6,722	...	6,722	194,545	0.035	38,562	0.17	5.04
Romania	30,169	1,460	31,629	66,795	0.474	21,666	1.46	3.08
Russia	3,742,292	276,189	4,018,481	1,281,880	3.135	142,424	28.21	9.00
Turkmenistan	88,720	11,680	100,400	56,940	1.763	5,231	19.19	10.89
Ukraine	13,108	6,486	19,594	81,030	0.242	44,429	0.44	1.82
FSU - Other ²	32,856	6,205	39,061	162,790	0.240	70,317	0.56	2.32
Eastern Europe - Other	25,233	3,650	28,883	298,205	0.097	58,180	0.50	5.13
WESTERN EUROPE, TOTAL	1,049,128	145,931	1,195,059	4,370,510	0.273	420,953	2.84	10.38
Austria	6,021	365	6,386	95,630	0.067	8,666	0.74	11.04
Denmark	57,056	...	57,056	56,210	1.015	5,582	10.22	10.07
France	6,085	146	6,231	617,580	0.010	66,554	0.09	9.28
Germany	17,543	...	17,543	864,320	0.020	80,854	0.22	10.69
Greece	393	...	393	107,675	0.004	10,776	0.04	9.99
Italy	36,577	...	36,577	465,010	0.079	61,855	0.59	7.52
Netherlands	9,966	3,285	13,251	351,130	0.038	16,948	0.78	20.72
Norway	587,749	123,278	711,027	83,950	8.470	5,208	136.53	16.12
Spain	1,698	...	1,698	455,155	0.004	48,146	0.04	9.45
United Kingdom	326,040	18,857	344,897	564,655	0.611	64,088	5.38	8.81
Other	...	...	...	709,195	...	52,276	...	13.57
AFRICA, TOTAL	2,817,307	208,807	3,026,114	1,472,775	2.055	1,165,516	2.60	1.26
Algeria*	521,585	134,320	655,905	156,220	4.199	39,542	16.59	3.95
Angola	657,680	9,855	667,535	51,830	12.879	27,292	24.46	1.90
Chad	44,895	...	44,895	730	61.500	11,631	3.86	0.06
Congo-Brazzaville	93,440	3,285	96,725	6,570	14.722	4,755	20.34	1.38
Egypt	237,985	24,151	262,136	284,700	0.921	92,297	2.84	3.08
Equatorial Guinea	91,250	6,570	97,820	1,825	53.600	741	132.01	2.46
Gabon	77,865	...	77,865	7,665	10.159	1,705	45.67	4.50
Libya*	147,450	10,950	158,400	94,535	1.676	6,412	24.70	14.74
Nigeria*	792,474	16,391	808,865	118,625	6.819	181,562	4.46	0.65
South Africa	1,095	1,825	2,920	241,630	0.012	53,676	0.05	4.50
Sudan and South Sudan	40,350	...	40,350	45,260	0.892	48,152	0.84	0.94
Tunisia	13,140	1,460	14,600	36,500	0.400	11,162	1.31	3.27
Other	98,098	...	98,098	426,685	0.230	686,589	0.14	0.62
MIDDLE EAST, TOTAL	9,503,399	1,151,755	10,655,154	3,448,155	3.090	312,810	34.06	11.02
Bahrain	18,615	4,015	22,630	21,170	1.069	1,347	16.80	15.72
Iran*	1,204,500	54,750	1,259,250	675,250	1.865	79,928	15.75	8.45
Iraq*	1,479,725	4,380	1,484,105	287,620	5.160	37,056	40.05	7.76
Kuwait*	1,023,340	55,480	1,078,820	178,485	6.044	2,789	386.81	64.00
Oman	358,420	2,555	360,975	66,065	5.464	3,287	109.82	20.10
Qatar*	559,109	131,050	690,159	93,075	7.415	2,195	314.42	42.40
Saudi Arabia*	3,711,410	662,640	4,374,050	1,205,230	3.629	27,752	157.61	43.43
Syria	10,950	2,920	13,870	50,735	0.273	17,065	0.81	2.97
Turkey	17,706	...	17,706	323,025	0.055	79,414	0.22	4.07
United Arab Emirates*	1,102,100	233,965	1,336,065	309,885	4.311	5,780	231.15	53.61
Yemen	17,374	...	17,374	36,500	0.476	26,737	0.65	1.37
Other	150	...	150	201,115	0.001	29,460	0.01	6.83
FAR EAST, TOTAL	2,852,419	177,854	3,030,273	11,931,120	0.254	3,965,007	0.76	3.01
Australia	117,649	19,929	137,578	403,690	0.341	22,751	6.05	17.74
Brunei	42,095	4,199	46,294	6,570	7.046	430	107.66	15.28
Burma (Myanmar)	5,475	73	5,548	39,420	0.141	54,090	0.10	0.73
China	1,561,358	1,825	1,563,183	4,517,240	0.346	1,367,485	1.14	3.30
India	277,781	39,324	317,105	1,511,830	0.210	1,251,696	0.25	1.21
Indonesia*	286,803	16,790	303,593	592,030	0.513	255,994	1.19	2.31
Japan	1,550	4,015	5,565	1,503,800	0.004	126,920	0.04	11.85
Malaysia	238,775	11,680	250,455	251,850	0.994	30,514	8.21	8.25
New Zealand	15,069	2,190	17,259	58,765	0.294	4,438	3.89	13.24
Pakistan	32,928	1,460	34,388	183,960	0.187	199,086	0.17	0.92
Papua New Guinea	19,200	...	19,200	15,330	1.252	6,672	2.88	2.30
Philippines	8,805	...	8,805	145,270	0.061	100,998	0.09	1.44
Thailand	90,582	74,460	165,042	456,980	0.361	67,976	2.43	6.72
Vietnam	121,706	1,825	123,531	157,680	0.783	94,349	1.31	1.67
Other	32,643	84	32,727	2,086,705	0.016	381,608	0.09	5.47
TOTAL, WORLD	29,349,428	3,797,606	33,147,034	34,801,842	0.952	7,248,037	4.57	4.80
*OPEC COUNTRIES	11,740,996	1,384,591	13,125,587	3,957,695	3.316	669,524	19.60	5.91

¹ Population at mid-year. Remote areas excluded.² Former Soviet Union.

PERCENTAGE OF WORLD CRUDE OIL PRODUCTION
BY MAJOR OPEC AND NON-OPEC PRODUCERS

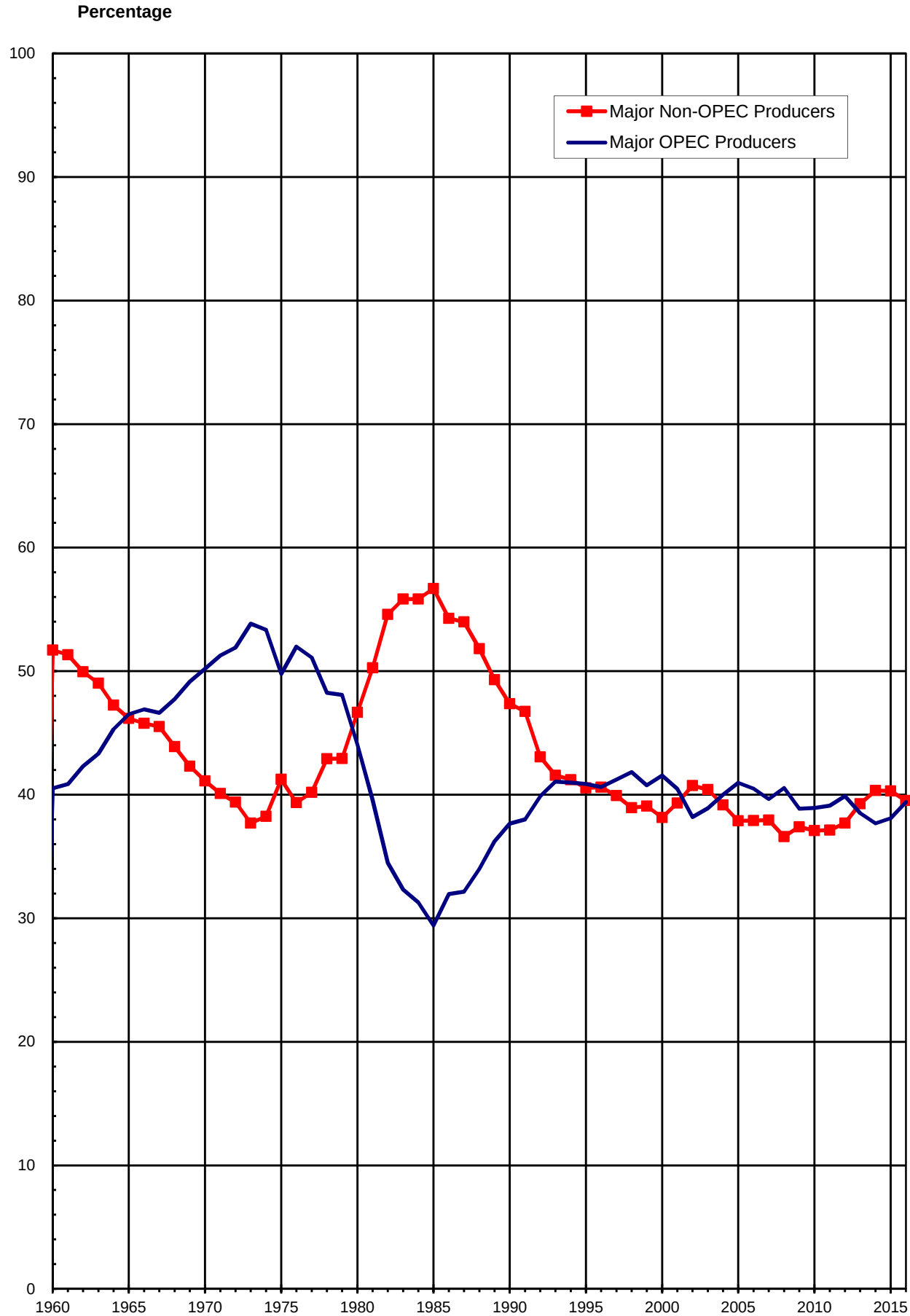


Chart 3

PERCENTAGE OF WORLD CRUDE OIL PRODUCTION BY MAJOR PRODUCING COUNTRIES

Year	Major Non-OPEC Producers								Major OPEC Producers									
	Canada	China	F.S.U. ²	Russia	Mexico	Norway	U.K.	U.S.A.	Algeria	Indonesia	Iran	Iraq	Kuwait ¹	Libya	Nigeria	Saudi ¹ Arabia	U.A.E.	Venezuela
1960	2.50	0.30	14.06	...	1.29	...	0.01	33.54	0.88	1.99	5.03	4.61	8.07	...	0.09	6.27	...	13.57
1961	2.74	0.34	14.84	...	1.31	...	0.01	32.09	1.49	1.90	5.28	4.48	7.75	0.08	0.21	6.62	...	13.05
1962	2.83	0.36	15.33	...	1.26	...	0.01	30.17	1.78	1.89	5.43	4.13	8.05	0.76	0.28	6.76	0.07	13.16
1963	2.75	0.37	15.80	...	1.21	...	0.01	28.90	1.94	1.73	5.65	4.44	8.01	1.78	0.29	6.84	0.18	12.45
1964	2.68	0.37	15.98	...	1.12	...	0.01	27.09	1.99	1.67	6.02	4.49	8.17	3.07	0.43	6.75	0.66	12.07
1965	2.65	0.44	16.19	...	1.07	...	0.01	25.81	1.87	1.61	6.24	4.37	7.78	4.04	0.90	7.30	0.93	11.49
1966	2.67	0.62	16.23	...	1.01	...	0.00	25.23	2.19	1.41	6.43	4.21	7.56	4.58	1.27	7.92	1.09	10.25
1967	2.74	0.48	16.26	...	1.03	...	0.01	24.99	2.31	1.44	7.36	3.48	7.09	4.95	0.91	7.96	1.09	10.05
1968	2.70	0.54	15.99	...	1.01	...	0.00	23.64	2.35	1.56	7.38	3.90	6.85	6.76	0.37	7.91	1.29	9.37
1969	2.76	0.49	15.73	...	1.11	...	0.00	22.20	2.27	1.78	8.11	3.66	6.73	7.48	1.30	7.73	1.47	8.64
1970	2.79	0.88	15.29	...	1.06	...	0.00	21.09	2.25	1.87	8.38	3.41	6.54	7.25	2.37	8.32	1.70	8.11
1971	2.80	0.95	15.74	...	1.00	0.01	0.01	19.57	1.58	1.85	9.42	3.54	6.61	5.71	3.16	9.87	2.19	7.34
1972	3.02	1.16	15.57	...	0.99	0.07	0.01	18.58	2.07	2.13	9.89	2.85	6.46	4.41	3.58	11.84	2.37	6.34
1973	3.22	1.95	15.16	...	0.81	0.05	0.01	16.49	1.97	2.40	10.50	3.61	5.41	3.90	3.68	13.61	2.75	6.03
1974	3.01	2.35	16.08	...	1.04	0.06	0.02	15.68	1.80	2.46	10.76	3.52	4.55	2.72	4.03	15.16	3.02	5.32
1975	2.70	2.81	18.17	...	1.36	0.36	0.04	15.81	1.86	2.47	10.10	4.27	3.94	2.85	3.37	13.36	3.14	4.43
1976	2.29	2.91	17.68	...	1.39	0.49	0.43	14.17	1.87	2.62	10.25	4.21	3.74	3.35	3.60	14.95	3.37	4.00
1977	2.22	3.14	17.59	...	1.64	0.47	1.29	13.83	1.93	2.83	9.50	3.94	3.30	3.46	3.50	15.51	3.35	3.76
1978	2.20	3.47	18.27	...	2.03	0.59	1.81	14.53	1.94	2.73	8.75	4.28	3.56	3.31	3.17	13.85	3.06	3.61
1979	2.40	3.40	17.93	...	2.34	0.65	2.51	13.70	1.85	2.55	5.08	5.57	4.01	3.35	3.69	15.27	2.93	3.78
1980	2.42	3.56	19.31	...	3.26	0.89	2.73	14.48	1.86	2.66	2.80	4.24	2.79	3.01	3.46	16.68	2.88	3.65
1981	2.30	3.61	20.71	...	4.15	0.90	3.25	15.37	1.80	2.88	2.47	1.79	2.02	2.04	2.57	17.59	2.64	3.77
1982	2.35	3.82	22.28	...	5.14	0.97	3.86	16.17	1.85	2.50	4.14	1.89	1.54	2.15	2.42	12.12	2.34	3.54
1983	2.53	3.98	22.49	...	5.05	1.15	4.30	16.32	1.82	2.52	4.58	1.89	2.00	2.08	2.33	9.55	2.16	3.38
1984	2.64	4.21	21.76	...	5.10	1.28	4.55	16.29	1.86	2.59	3.99	2.22	2.12	1.99	2.55	8.56	2.10	3.30
1985	2.73	4.64	21.46	...	5.09	1.46	4.69	16.62	1.92	2.45	4.17	2.65	1.90	1.96	2.77	6.28	2.21	3.11
1986	2.62	4.66	21.16	...	4.33	1.55	4.52	15.44	1.68	2.47	3.62	3.01	2.52	1.84	2.61	8.66	2.37	3.18
1987	2.71	4.75	21.26	...	4.50	1.80	4.24	14.73	1.85	2.37	4.05	3.67	2.80	1.71	2.37	7.52	2.72	3.09
1988	2.75	4.65	20.52	...	4.28	1.97	3.80	13.86	1.77	2.28	3.81	4.57	2.54	2.00	2.47	8.66	2.66	3.24
1989	2.61	4.60	19.56	...	4.21	2.60	3.01	12.71	1.83	2.35	4.69	4.84	2.98	1.92	2.87	8.46	3.11	3.18
1990	2.57	4.58	18.13	...	4.22	2.69	3.01	12.15	1.94	2.42	5.10	3.37	1.94	2.27	2.99	10.59	3.50	3.53
1991	2.57	4.71	16.60	...	4.45	3.11	2.99	12.32	2.04	2.64	5.50	0.51	0.32	2.46	3.14	13.48	3.96	3.95
1992	2.67	4.73	...	12.70	4.44	3.55	3.04	11.93	2.00	2.50	5.71	0.71	1.76	2.38	3.23	13.86	3.77	3.94
1993	2.79	4.80	...	11.18	4.44	3.79	3.18	11.38	1.94	2.51	5.88	0.85	3.08	2.26	3.26	13.62	3.59	4.07
1994	2.87	4.80	...	10.03	4.55	4.20	3.88	10.89	1.89	2.47	5.91	0.90	3.31	2.25	3.16	13.27	3.58	4.23
1995	2.90	4.79	...	9.60	4.34	4.43	3.99	10.51	1.86	2.41	5.83	0.90	3.29	2.23	3.19	13.18	3.58	4.40
1996	2.91	4.90	...	9.16	4.61	4.84	4.02	10.15	1.92	2.42	5.77	0.91	3.23	2.19	3.13	12.87	3.57	4.60
1997	2.96	4.86	...	8.99	4.72	4.77	3.82	9.80	1.91	2.31	5.57	1.75	3.05	2.20	3.24	12.70	3.52	4.98
1998	3.02	4.77	...	8.73	4.71	4.49	3.90	9.32	1.83	2.26	5.42	3.21	3.11	2.07	3.21	12.51	3.50	4.72
1999	2.91	4.84	...	9.21	4.54	4.58	4.07	8.91	1.78	2.23	5.39	3.80	2.88	2.00	3.23	11.87	3.29	4.28
2000	2.93	4.74	...	9.45	4.53	4.70	3.32	8.49	1.77	2.08	5.39	3.75	3.03	2.06	3.16	12.26	3.45	4.60
2001	3.00	4.84	...	10.15	4.72	4.73	3.35	8.51	1.86	1.97	5.46	3.51	2.93	2.01	3.31	11.78	3.24	4.42
2002	3.27	5.03	...	11.00	4.85	4.65	3.40	8.53	2.00	1.86	5.12	3.00	2.81	1.96	3.15	11.34	3.09	3.87
2003	3.28	4.91	...	11.71	4.98	4.38	3.01	8.14	2.18	1.66	5.39	1.88	3.08	2.05	3.28	12.64	3.38	3.36
2004	3.36	4.80	...	12.12	4.79	4.07	2.54	7.49	2.18	1.51	5.51	2.77	3.27	2.09	3.21	12.53	3.41	3.52
2005	3.18	4.89	...	12.26	4.64	3.66	2.24	7.03	2.29	1.45	5.61	2.55	3.43	2.21	3.56	12.95	3.44	3.48
2006	3.37	5.01	...	12.61	4.56	3.40	2.03	6.93	2.32	1.39	5.49	2.72	3.46	2.29	3.33	12.48	3.59	3.42
2007	3.55	5.11	...	12.90	4.30	3.10	2.05	6.94	2.34	1.30	5.35	2.85	3.37	2.33	3.21	11.92	3.56	3.40
2008	3.46	5.11	...	12.63	3.83	2.94	1.88	6.74	2.30	1.32	5.47	3.21	3.49	2.34	2.92	12.50	3.62	3.39
2009	3.55	5.20	...	13.02	3.63	2.83	1.82	7.33	2.17	1.30	5.53	3.28	3.22	2.26	3.03	11.31	3.31	3.45
2010	3.64	5.47	...	12.99	3.51	2.51	1.65	7.34	2.06	1.27	5.47	3.22	3.08	2.21	3.23	11.93	3.24	3.23
2011	3.88	5.42	...	13.08	3.48	2.35	1.37	7.55	2.06	1.21	5.43	3.51	3.39	0.62	3.31	12.66	3.59	3.35
2012	4.08	5.35	...	13.03	3.41	2.12	1.17	8.53	2.01	1.13	4.45	3.92	3.46	1.80	3.23	12.92	3.68	3.28
2013	4.39	5.46	...	13.19	3.36	2.01	1.05	9.80	1.92	1.09	4.09	4.01	3.48	1.21	3.03	12.72	3.70	3.28
2014	4.61	5.39	...	12.95	3.16	2.00	1.01	11.22	1.82	1.01	4.15	4.32	3.39	0.60	3.01	12.48	3.71	3.20
2015	4.56	5.32	...	12.75	2.86	2.00	1.11	11.70	1.78	0.98	4.10	5.04	3.49	0.50	2.70	12.65	3.76	3.11
2016	4.55	4.94	...	13.11	2.72	2.05	1.16	11.00	1.67	1.03	5.05	5.53	3.63	0.48	2.32	12.99	3.86	2.83

¹ Neutral Zone production is equally divided between and included with Kuwait and Saudi Arabia production amounts.² Former Soviet Union.

WORLD CRUDE OIL PRODUCTION

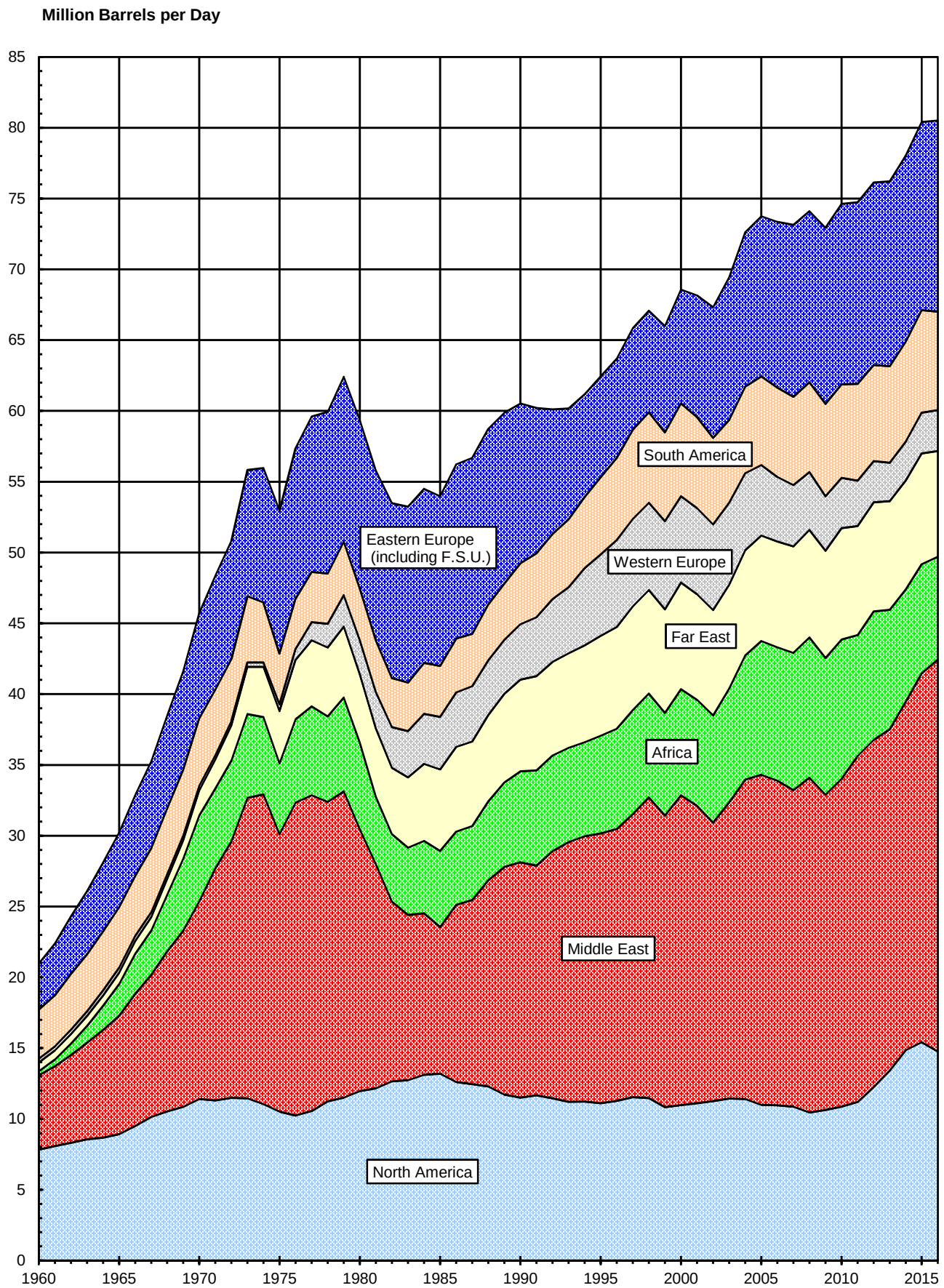


Chart 4

WORLD CRUDE OIL PRODUCTION

(Thousands of Barrels)

Year	Western Hemisphere			Percent of World	Eastern Hemisphere						Percent of World	World ¹ Total	Daily Average
	North America	South America	Total		Western Europe	Eastern Europe	Middle East	Africa	Far East	Total			
1960	2,865,930	1,266,561	4,132,491	53.83	100,283	1,189,722	1,923,285	105,321	225,126	3,543,737	46.17	7,676,228	20,973
1961	2,952,292	1,318,587	4,270,879	52.28	106,028	1,328,419	2,055,934	178,514	229,682	3,898,577	47.72	8,169,456	22,382
1962	3,038,956	1,438,572	4,477,528	50.47	111,644	1,481,229	2,257,951	293,386	249,675	4,393,885	49.53	8,871,413	24,305
1963	3,129,340	1,468,003	4,597,343	48.27	119,005	1,629,881	2,486,349	434,311	256,768	4,926,314	51.73	9,523,657	26,092
1964	3,178,195	1,528,589	4,706,784	45.76	130,210	1,772,524	2,786,200	623,586	266,397	5,578,917	54.24	10,285,701	28,103
1965	3,259,233	1,563,713	4,822,946	43.71	131,502	1,919,648	3,053,942	811,692	294,840	6,211,624	56.29	11,034,570	30,232
1966	3,469,607	1,548,946	5,018,553	41.82	127,889	2,085,686	3,408,361	1,029,674	331,191	6,982,801	58.18	12,001,354	32,880
1967	3,701,606	1,649,974	5,351,580	41.59	125,851	2,236,394	3,667,394	1,137,566	349,616	7,516,821	58.41	12,868,401	35,256
1968	3,852,495	1,694,752	5,547,247	39.40	124,532	2,399,272	4,135,045	1,460,968	413,956	8,533,773	60.60	14,081,020	38,473
1969	3,959,782	1,696,037	5,655,819	37.24	121,495	2,538,557	4,542,995	1,850,355	478,463	9,531,865	62.76	15,187,684	41,610
1970	4,161,242	1,737,804	5,899,046	35.37	117,238	2,704,540	5,094,381	2,215,237	648,812	10,780,208	64.63	16,679,254	45,697
1971	4,126,834	1,688,732	5,815,566	32.95	111,026	2,933,072	5,979,115	2,060,359	748,014	11,831,586	67.05	17,647,152	48,348
1972	4,203,591	1,602,171	5,805,762	31.21	115,646	3,056,218	6,630,500	2,085,873	907,066	12,795,303	68.79	18,601,065	50,823
1973	4,182,119	1,702,454	5,884,573	28.88	114,391	3,257,268	7,744,567	2,161,473	1,214,023	14,491,722	71.12	20,376,295	55,825
1974	4,030,364	1,549,552	5,579,916	27.32	116,863	3,456,655	7,985,377	1,989,898	1,296,140	14,844,933	72.68	20,424,849	55,958
1975	3,842,737	1,308,230	5,150,967	26.65	172,341	3,685,532	7,146,207	1,825,453	1,349,720	14,179,253	73.35	19,330,220	52,960
1976	3,750,843	1,296,926	5,047,769	24.04	284,221	3,888,617	8,089,933	2,149,478	1,537,149	15,949,398	75.96	20,997,167	57,369
1977	3,849,772	1,291,324	5,141,096	23.63	470,905	4,003,243	8,143,164	2,293,032	1,700,919	16,611,263	76.37	21,752,359	59,596
1978	4,102,462	1,293,927	5,396,389	24.67	613,528	4,164,437	7,722,975	2,201,143	1,774,629	16,476,712	75.33	21,873,100	59,926
1979	4,202,452	1,385,202	5,587,654	24.53	809,290	4,244,213	7,889,301	2,422,666	1,825,053	17,190,523	75.47	22,778,177	62,406
1980	4,382,426	1,333,256	5,715,682	26.31	878,833	4,349,308	6,766,608	2,240,564	1,771,208	16,006,521	73.69	21,722,203	59,350
1981	4,442,916	1,331,599	5,774,515	28.36	939,150	4,372,469	5,771,403	1,742,335	1,761,077	14,586,434	71.64	20,360,949	55,783
1982	4,621,871	1,258,207	5,880,078	30.13	1,052,687	4,509,137	4,630,472	1,735,771	1,710,441	13,638,508	69.87	19,518,586	53,476
1983	4,649,020	1,248,629	5,897,649	30.35	1,193,885	4,532,337	4,258,940	1,735,625	1,812,592	13,533,379	69.65	19,431,028	53,236
1984	4,799,678	1,316,598	6,116,276	30.66	1,297,588	4,496,800	4,176,287	1,873,388	1,985,563	13,829,626	69.34	19,945,902	54,497
1985	4,819,887	1,308,525	6,128,412	31.10	1,357,800	4,378,175	3,777,020	1,960,415	2,101,670	13,575,080	68.90	19,703,492	53,982
1986	4,601,874	1,385,175	5,987,049	29.17	1,406,345	4,491,325	4,565,420	1,888,510	2,184,160	14,535,760	70.83	20,522,809	56,227
1987	4,550,717	1,344,061	5,894,778	28.49	1,422,770	4,542,425	4,740,179	1,909,680	2,179,780	14,794,834	71.51	20,689,612	56,684
1988	4,498,840	1,440,096	5,938,936	27.62	1,418,616	4,543,524	5,330,007	2,042,646	2,227,110	15,561,903	72.38	21,500,839	58,745
1989	4,278,455	1,452,737	5,731,192	26.22	1,394,665	4,401,535	5,865,013	2,176,130	2,286,725	16,124,068	73.78	21,855,260	59,877
1990	4,198,581	1,571,012	5,769,593	26.12	1,428,540	4,117,200	6,065,397	2,347,794	2,360,895	16,319,826	73.88	22,089,419	60,519
1991	4,259,845	1,650,165	5,910,010	26.90	1,517,747	3,741,787	5,919,723	2,453,034	2,430,729	16,063,020	73.10	21,973,030	60,200
1992	4,194,654	1,685,433	5,880,087	26.73	1,623,441	3,215,667	6,389,128	2,467,633	2,421,175	16,117,044	73.27	21,997,131	60,101
1993	4,094,366	1,751,056	5,845,422	26.62	1,704,645	2,855,074	6,694,420	2,424,875	2,438,261	16,117,275	73.38	21,962,697	60,172
1994	4,095,551	1,837,601	5,933,152	26.57	1,991,551	2,648,533	6,840,779	2,426,822	2,490,001	16,397,686	73.43	22,330,838	61,180
1995	4,055,202	1,991,045	6,046,247	26.53	2,100,314	2,598,100	6,951,969	2,523,683	2,570,850	16,744,916	73.47	22,791,163	62,442
1996	4,130,018	2,123,455	6,253,473	26.83	2,250,917	2,560,603	7,022,929	2,590,304	2,629,964	17,054,717	73.17	23,308,190	63,684
1997	4,210,536	2,297,996	6,508,532	27.09	2,256,326	2,612,256	7,296,577	2,682,690	2,672,825	17,520,674	72.91	24,029,206	65,833
1998	4,186,199	2,337,264	6,523,463	26.64	2,246,536	2,614,213	7,753,740	2,671,715	2,673,378	17,959,582	73.36	24,483,045	67,077
1999	3,957,021	2,282,972	6,239,993	25.91	2,272,916	2,741,536	7,513,031	2,645,199	2,671,564	17,844,246	74.09	24,084,239	65,984
2000	4,017,788	2,399,967	6,417,755	25.58	2,232,452	2,935,709	8,008,157	2,740,658	2,758,827	18,675,803	74.42	25,093,558	68,562
2001	4,057,774	2,344,945	6,402,719	25.74	2,220,315	3,135,741	7,664,934	2,731,133	2,720,729	18,472,852	74.26	24,875,571	68,152
2002	4,108,566	2,230,010	6,338,576	25.79	2,207,774	3,367,678	7,182,783	2,758,844	2,717,377	18,234,456	74.21	24,573,032	67,323
2003	4,176,749	2,137,411	6,314,160	24.91	2,108,551	3,674,691	7,632,891	2,938,142	2,675,967	19,030,242	75.09	25,344,402	69,437
2004	4,177,406	2,236,558	6,413,964	24.13	1,996,130	3,993,072	8,253,296	3,207,016	2,719,092	20,168,606	75.87	26,582,570	72,630
2005	4,015,740	2,286,026	6,301,766	23.41	1,818,000	4,127,298	8,502,241	3,452,469	2,716,784	20,616,792	76.59	26,918,558	73,749
2006	3,999,832	2,300,838	6,300,670	23.53	1,668,080	4,271,612	8,372,602	3,436,897	2,722,793	20,471,984	76.47	26,772,654	73,350
2007	3,963,984	2,278,605	6,242,589	23.38	1,582,088	4,431,072	8,159,390	3,540,137	2,740,874	20,453,560	76.62	26,696,149	73,140
2008	3,827,073	2,322,391	6,149,464	22.67	1,497,690	4,417,726	8,656,953	3,620,685	2,779,411	20,972,465	77.33	27,121,929	74,104
2009	3,880,593	2,382,626	6,263,219	23.53	1,407,597	4,537,454	8,127,227	3,526,823	2,760,425	20,359,526	76.47	26,622,745	72,939
2010	3,964,656	2,410,869	6,375,525	23.41	1,297,171	4,647,910	8,455,183	3,586,645	2,872,450	20,859,359	76.59	27,234,884	74,616
2011	4,085,804	2,494,453	6,580,257	24.13	1,174,912	4,675,463	8,921,076	3,114,537	2,809,343	20,695,331	75.87	27,275,588	74,728
2012	4,483,669	2,483,988	6,967,657	25.01	1,065,992	4,713,327	8,971,083	3,321,859	2,821,091	20,893,352	74.99	27,861,009	76,123
2013	4,898,554	2,489,402	7,387,956	26.56	994,783	4,759,292	8,799,111	3,076,984	2,798,050	20,428,220	73.44	27,816,176	76,209
2014	5,426,638	2,579,543	8,006,181	28.11	999,521	4,792,948	8,981,868	2,890,217	2,812,324	20,476,878	71.89	28,483,059	78,036
2015	5,630,825	2,644,192	8,275,017	28.19	1,049,128	4,852,158	9,503,399	2,817,307	2,852,419	21,074,411	71.81	29,349,428	80,409
2016	5,400,376	2,540,743	7,941,119	26.95	1,059,351	4,942,449	10,134,097	2,657,829	2,731,805	21,525,531	73.05	29,466,650	80,510

¹ World total includes minor production of remote areas.

WORLD CRUDE OIL PRODUCTION NORTH AMERICA

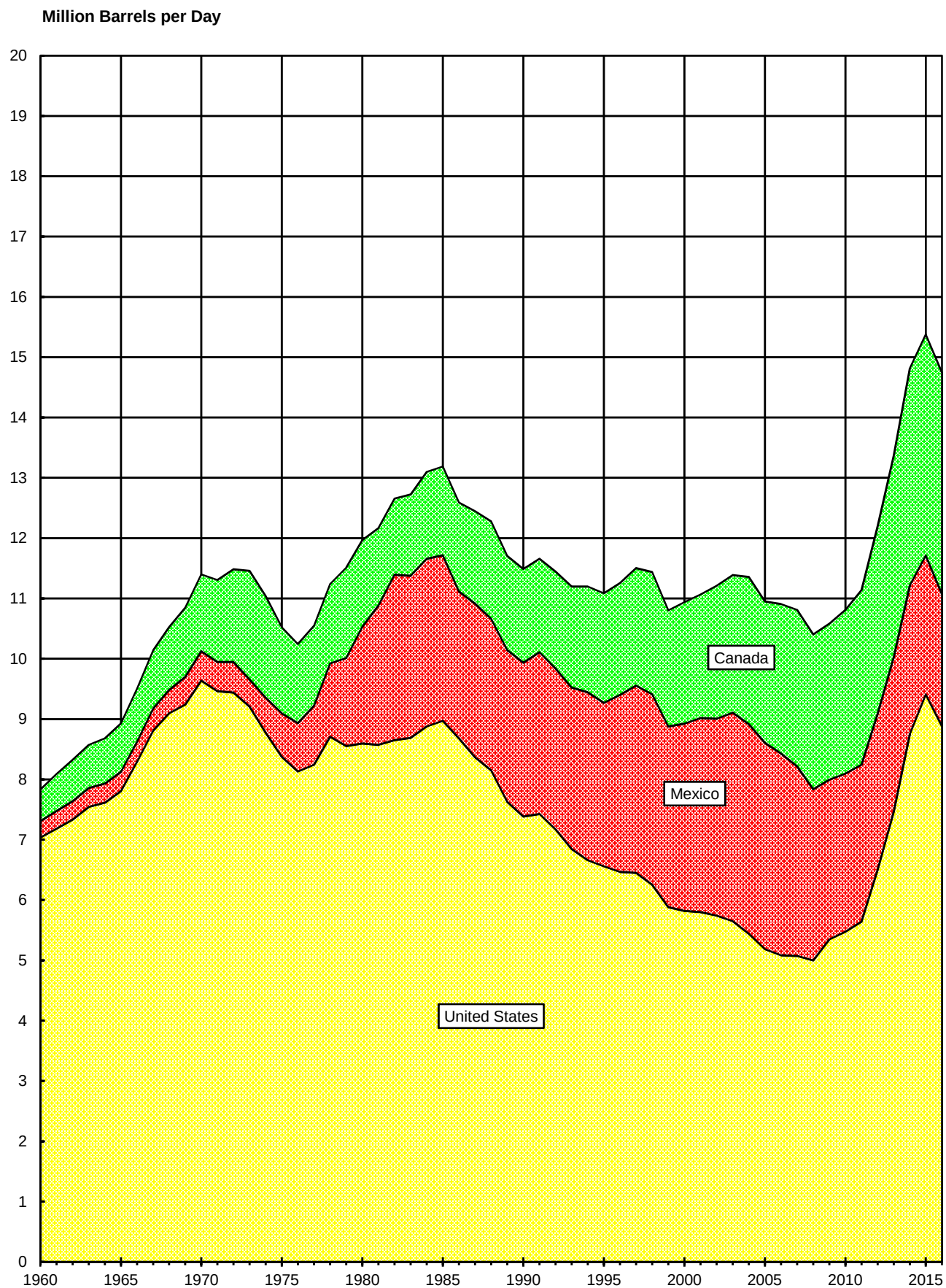


Chart 5

WORLD CRUDE OIL PRODUCTION

NORTH AMERICA
(Thousands of Barrels)

Year	Canada ^{1,2}	Cuba	Mexico	United States	North America	Daily Average
1960	191,840	108	99,049	2,574,933	2,865,930	7,830
1961	223,670	80	106,784	2,621,758	2,952,292	8,088
1962	250,847	90	111,830	2,676,189	3,038,956	8,326
1963	261,525	216	114,876	2,752,723	3,129,340	8,574
1964	275,533	264	115,576	2,786,822	3,178,195	8,684
1965	292,496	264	117,959	2,848,514	3,259,233	8,929
1966	320,435	260	121,149	3,027,763	3,469,607	9,506
1967	352,066	756	133,042	3,215,742	3,701,606	10,141
1968	380,134	1,062	142,257	3,329,042	3,852,495	10,526
1969	418,831	821	168,379	3,371,751	3,959,782	10,849
1970	465,408	785	177,599	3,517,450	4,161,242	11,401
1971	494,861	785	177,274	3,453,914	4,126,834	11,306
1972	562,437	775	185,011	3,455,368	4,203,591	11,485
1973	656,046	920	164,250	3,360,903	4,182,119	11,458
1974	614,959	1,120	211,700	3,202,585	4,030,364	11,042
1975	522,113	1,045	262,800	3,056,779	3,842,737	10,528
1976	480,903	960	292,800	2,976,180	3,750,843	10,248
1977	482,142	665	357,700	3,009,265	3,849,772	10,547
1978	480,436	335	443,475	3,178,216	4,102,462	11,240
1979	546,782	1,095	533,265	3,121,310	4,202,452	11,514
1980	525,501	1,830	708,576	3,146,519	4,382,426	11,974
1981	467,966	2,081	844,245	3,128,624	4,442,916	12,172
1982	458,194	3,942	1,003,020	3,156,715	4,621,871	12,663
1983	491,718	4,818	981,485	3,170,999	4,649,020	12,737
1984	526,866	5,636	1,017,480	3,249,696	4,799,678	13,114
1985	537,204	6,205	1,001,925	3,274,553	4,819,887	13,205
1986	538,277	6,570	888,775	3,168,252	4,601,874	12,608
1987	560,639	6,570	930,020	3,053,488	4,550,717	12,468
1988	590,786	5,490	919,392	2,983,172	4,498,840	12,292
1989	569,681	5,475	919,711	2,783,588	4,278,455	11,722
1990	566,989	5,220	931,855	2,694,517	4,198,581	11,503
1991	565,194	5,110	978,126	2,711,415	4,259,845	11,671
1992	587,051	6,036	976,935	2,624,632	4,194,654	11,461
1993	612,570	7,118	975,645	2,499,033	4,094,366	11,217
1994	639,856	8,826	1,015,393	2,431,476	4,095,551	11,221
1995	661,788	9,490	989,656	2,394,268	4,055,202	11,110
1996	678,465	10,950	1,074,586	2,366,017	4,130,018	11,284
1997	711,651	11,057	1,132,997	2,354,831	4,210,536	11,536
1998	739,546	11,496	1,153,238	2,281,919	4,186,199	11,469
1999	702,050	13,870	1,094,369	2,146,732	3,957,021	10,841
2000	735,985	15,006	1,136,090	2,130,707	4,017,788	10,978
2001	747,450	18,250	1,174,563	2,117,511	4,057,774	11,117
2002	803,758	17,263	1,190,957	2,096,588	4,108,566	11,256
2003	832,199	20,136	1,262,419	2,061,995	4,176,749	11,443
2004	892,658	21,202	1,272,152	1,991,394	4,177,406	11,414
2005	855,127	19,078	1,249,440	1,892,095	4,015,740	11,002
2006	903,561	18,850	1,221,081	1,856,340	3,999,832	10,958
2007	946,385	18,447	1,147,178	1,851,974	3,963,984	10,860
2008	939,747	19,122	1,039,070	1,829,134	3,827,073	10,456
2009	945,018	17,606	965,733	1,952,236	3,880,593	10,632
2010	990,151	19,345	956,716	1,998,444	3,964,656	10,862
2011	1,057,145	20,075	948,944	2,059,640	4,085,804	11,194
2012	1,137,990	19,060	948,857	2,377,762	4,483,669	12,250
2013	1,220,057	18,250	935,078	2,725,169	4,898,554	13,421
2014	1,312,453	18,250	901,020	3,194,915	5,426,638	14,868
2015	1,338,147	18,250	840,410	3,434,018	5,630,825	15,427
2016	1,340,150	18,239	800,396	3,241,591	5,400,376	14,755

¹ Includes synthetic crude production.² Figures from CAPP.

WORLD CRUDE OIL PRODUCTION SOUTH AMERICA

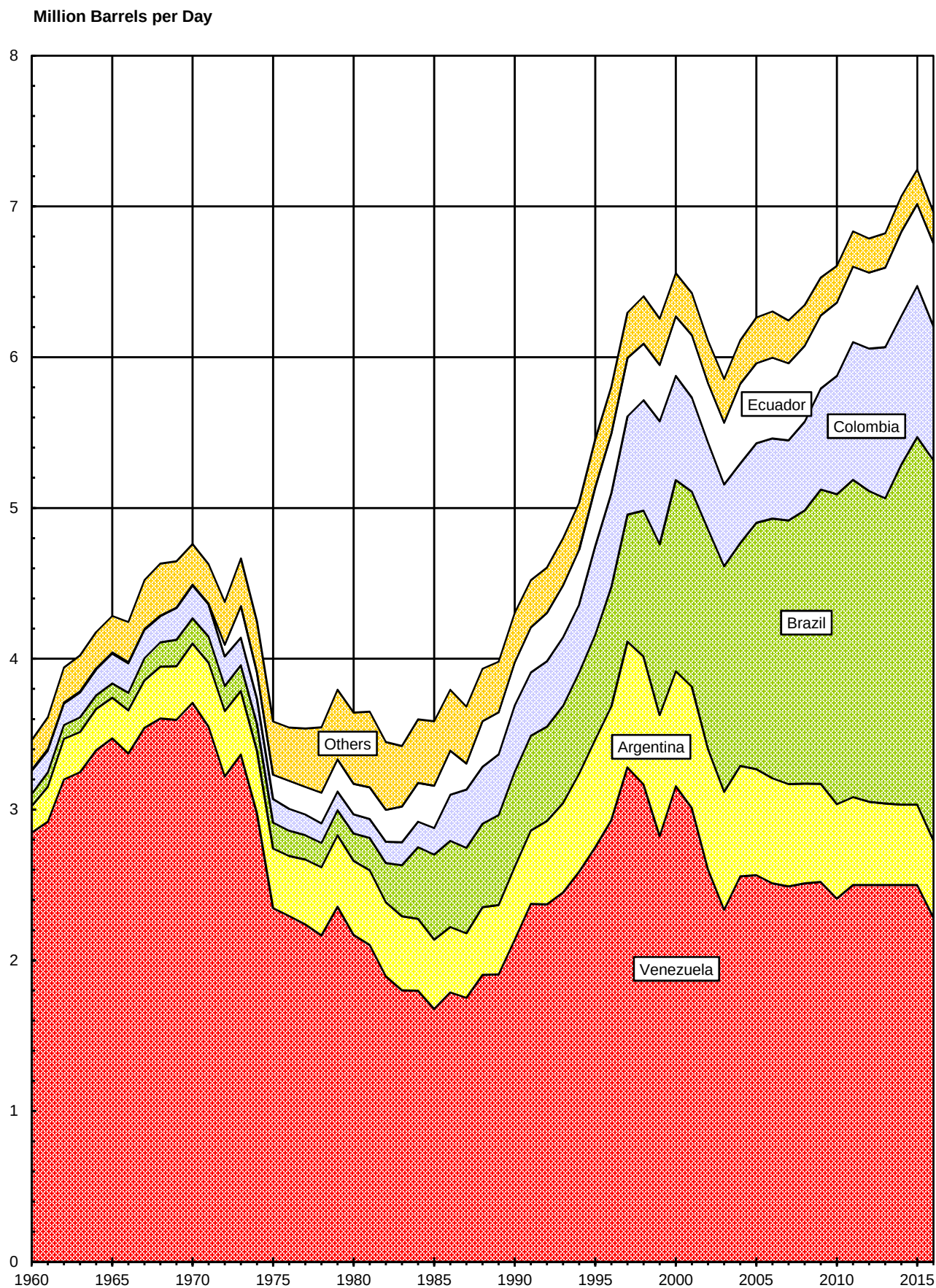


Chart 6

WORLD CRUDE OIL PRODUCTION

SOUTH AMERICA
(Thousands of Barrels)

Year	Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Peru	Trinidad and Tobago	Venezuela	Total ¹ South America	Daily Average
1960	64,323	3,574	29,613	7,231	55,770	2,730	19,255	42,357	1,041,708	1,266,561	3,461
1961	84,418	2,989	34,815	9,263	53,247	2,926	19,371	45,768	1,065,790	1,318,587	3,613
1962	98,154	2,911	33,401	11,689	51,918	2,573	21,134	48,876	1,167,916	1,438,572	3,941
1963	97,221	3,401	35,710	13,206	60,343	2,465	21,468	48,678	1,185,511	1,468,003	4,022
1964	100,370	3,195	33,313	13,687	62,596	2,796	23,119	47,731	1,241,782	1,528,589	4,176
1965	98,262	3,357	34,342	12,704	72,670	2,849	23,068	48,859	1,267,602	1,563,713	4,284
1966	104,757	6,085	42,451	12,429	71,431	2,660	23,027	55,603	1,230,503	1,548,946	4,244
1967	114,739	14,527	53,515	12,369	68,877	2,183	25,857	64,990	1,292,917	1,649,974	4,520
1968	125,492	14,974	58,785	13,696	63,673	1,815	27,056	69,904	1,319,357	1,694,752	4,630
1969	130,036	14,759	63,969	13,350	76,776	1,567	26,330	57,418	1,311,832	1,696,037	4,647
1970	143,399	8,820	60,923	12,432	80,050	1,444	26,269	51,047	1,353,420	1,737,804	4,761
1971	154,514	13,206	63,513	12,883	78,101	1,354	22,588	47,148	1,295,406	1,688,732	4,627
1972	158,464	15,967	61,088	12,527	71,674	28,579	23,635	51,719	1,178,487	1,602,171	4,378
1973	153,539	17,266	62,122	11,429	66,844	76,221	25,767	60,666	1,228,590	1,702,454	4,664
1974	151,110	16,603	64,751	10,055	60,867	63,678	28,069	68,131	1,086,240	1,549,552	4,245
1975	144,364	14,732	62,766	8,946	57,259	58,753	26,384	78,613	856,290	1,308,230	3,584
1976	145,561	14,856	61,026	8,372	53,376	68,362	27,936	77,673	839,604	1,296,926	3,544
1977	157,315	12,676	58,765	7,119	50,370	66,795	37,230	83,950	816,870	1,291,324	3,538
1978	165,345	11,844	58,400	6,281	47,815	73,730	55,115	84,680	790,225	1,293,927	3,545
1979	172,645	10,174	60,590	7,971	45,260	78,110	71,175	78,475	859,940	1,385,202	3,795
1980	179,706	9,882	66,612	12,078	46,116	74,664	71,370	77,226	793,488	1,333,256	3,643
1981	181,040	8,091	77,745	15,104	45,625	77,015	70,445	87,600	767,230	1,331,599	3,648
1982	179,215	8,921	94,900	15,626	51,465	77,015	71,175	65,700	691,675	1,258,207	3,447
1983	179,215	8,100	123,735	14,365	55,480	86,505	62,415	58,400	657,365	1,248,629	3,421
1984	174,948	7,621	173,850	14,036	61,488	94,428	67,344	62,220	658,068	1,316,598	3,597
1985	167,900	7,300	205,860	13,140	64,240	102,565	69,350	63,875	612,105	1,308,525	3,585
1986	158,410	6,570	208,780	11,315	111,325	106,945	64,970	61,320	652,255	1,385,175	3,795
1987	156,220	6,935	206,590	10,950	140,525	63,510	59,860	57,305	639,480	1,344,061	3,682
1988	164,334	6,954	202,764	8,930	138,348	110,532	51,606	57,462	696,498	1,440,096	3,935
1989	167,900	7,300	217,540	8,030	147,095	101,835	47,450	56,210	696,055	1,452,737	3,980
1990	176,295	7,635	230,133	7,157	160,600	104,025	47,074	54,750	780,005	1,571,012	4,304
1991	177,025	7,665	229,950	6,205	152,935	109,135	41,938	55,115	866,875	1,650,165	4,521
1992	202,385	7,783	229,085	5,490	158,478	117,486	42,555	50,320	867,786	1,685,433	4,605
1993	216,810	8,117	234,695	5,095	166,440	125,440	46,092	49,275	894,250	1,751,056	4,797
1994	237,290	8,249	245,070	4,530	164,250	133,225	46,690	48,009	944,620	1,837,601	5,035
1995	260,975	10,220	253,830	3,861	213,525	143,090	47,341	47,905	1,003,800	1,991,045	5,455
1996	275,934	11,001	290,176	3,350	227,382	144,463	43,698	47,296	1,072,370	2,123,455	5,802
1997	304,445	10,658	307,119	2,684	237,980	141,708	43,157	45,200	1,197,200	2,297,996	6,296
1998	309,040	12,628	353,503	2,948	267,369	137,051	42,191	44,759	1,155,960	2,337,264	6,403
1999	292,803	11,826	413,107	2,811	297,840	135,999	38,690	45,617	1,031,417	2,282,972	6,255
2000	278,578	10,952	464,454	2,475	252,751	144,541	34,985	44,712	1,154,730	2,399,967	6,557
2001	292,876	12,533	472,728	2,424	228,125	150,447	33,980	41,374	1,098,650	2,344,945	6,425
2002	291,689	11,740	531,145	2,190	210,583	143,273	33,896	44,471	950,440	2,230,010	6,110
2003	285,834	10,706	546,080	2,190	197,368	150,020	31,883	48,942	852,345	2,137,411	5,856
2004	268,154	17,434	540,717	2,046	193,527	193,338	29,243	44,982	935,840	2,236,558	6,111
2005	256,832	18,518	596,255	1,613	191,914	194,171	27,541	52,806	936,100	2,286,026	6,263
2006	254,205	17,847	628,797	1,092	193,829	195,523	28,314	52,093	916,350	2,300,838	6,304
2007	247,753	17,951	638,018	931	193,864	186,547	28,146	44,221	908,960	2,278,605	6,243
2008	242,005	14,229	663,275	1,132	215,339	184,730	28,027	41,826	918,660	2,322,391	6,345
2009	237,681	12,330	711,883	1,345	244,786	177,251	25,927	39,117	919,800	2,382,626	6,528
2010	228,510	12,608	749,954	1,520	286,717	177,422	26,531	35,837	879,650	2,410,869	6,605
2011	212,223	12,963	768,474	1,674	333,703	182,322	25,384	33,550	912,500	2,494,453	6,834
2012	201,710	15,219	754,409	2,226	345,584	184,315	24,396	29,915	915,000	2,483,988	6,787
2013	197,045	17,335	738,715	2,433	366,185	192,031	22,956	29,622	912,500	2,489,402	6,820
2014	194,238	18,651	822,929	2,402	360,623	203,071	25,296	29,661	912,500	2,579,543	7,067
2015	194,267	20,296	889,667	2,285	366,101	198,229	21,173	28,710	912,500	2,644,192	7,244
2016	186,865	21,714	920,658	1,619	324,258	200,722	14,737	26,194	833,370	2,540,743	6,942

¹ Total may include small amounts from countries not listed.

WORLD CRUDE OIL PRODUCTION EASTERN EUROPE

Million Barrels per Day

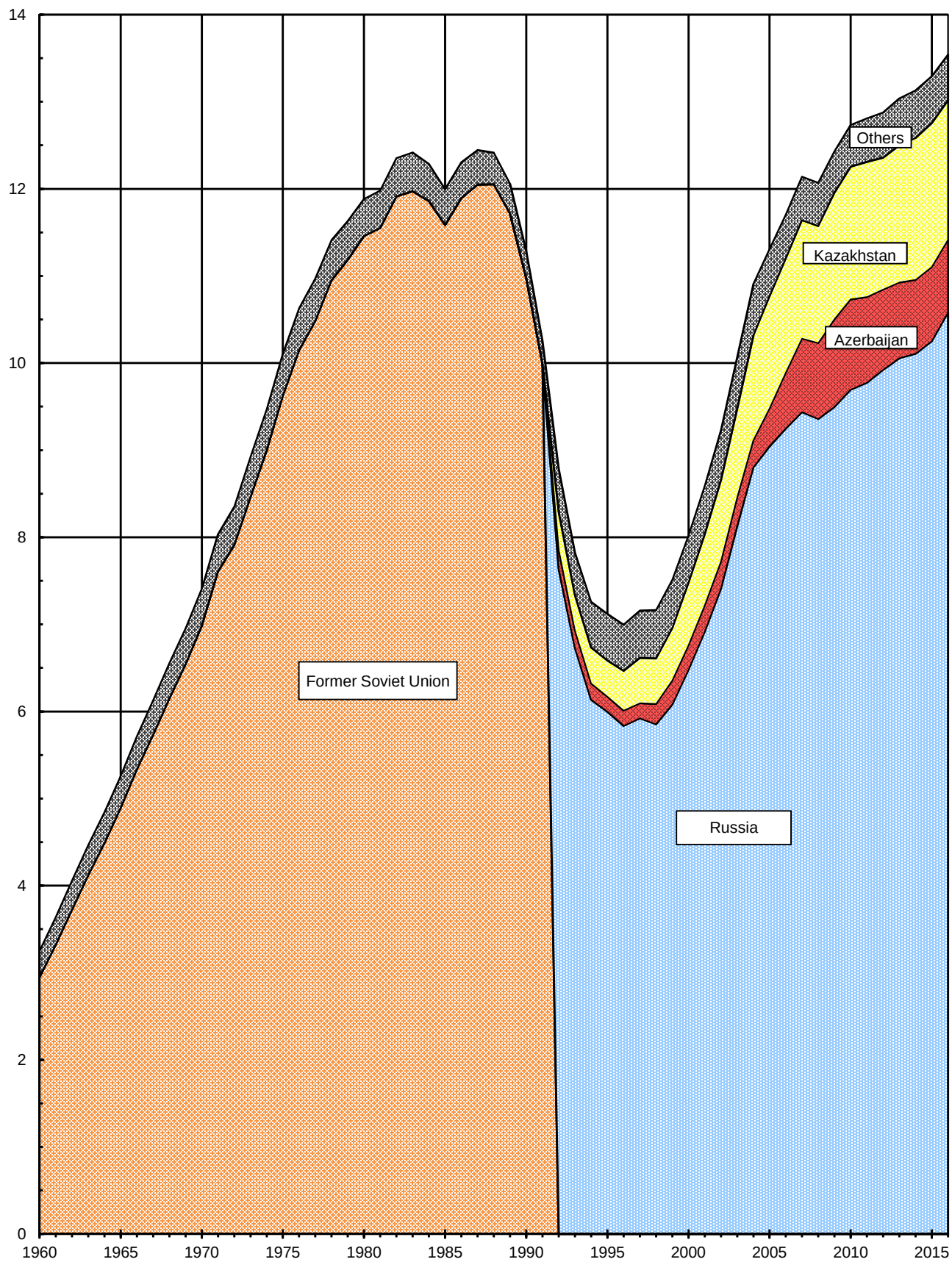


Chart 7

WORLD CRUDE OIL PRODUCTION

EASTERN EUROPE
(Thousands of Barrels)

Year	FORMER SOVIET UNION								Romania	Eastern Europe	Total Eastern Europe	Daily Average
	Azerbaijan	Kazakhstan	Russia	Turkmenistan	Ukraine	Uzbekistan	Other	F.S.U. ¹		Other	Europe	
1960	...	...	...	...	...	...	...	1,079,371	85,712	24,639	1,189,722	3,251
1961	...	...	...	...	...	...	...	1,212,300	86,321	29,798	1,328,419	3,640
1962	...	...	...	...	...	...	...	1,359,600	88,420	33,209	1,481,229	4,058
1963	...	...	...	...	...	...	...	1,504,300	91,171	34,410	1,629,881	4,465
1964	...	...	...	...	...	...	...	1,643,500	92,383	36,641	1,772,524	4,843
1965	...	...	...	...	...	...	...	1,786,000	93,693	39,955	1,919,648	5,259
1966	...	...	...	...	...	...	...	1,948,000	95,588	42,098	2,085,686	5,714
1967	...	...	...	...	...	...	...	2,092,609	97,804	45,981	2,236,394	6,127
1968	...	...	...	...	...	...	...	2,251,345	98,658	49,269	2,399,272	6,555
1969	...	...	...	...	...	...	...	2,389,061	98,100	51,396	2,538,557	6,955
1970	...	...	...	...	...	...	...	2,549,550	102,067	52,923	2,704,540	7,410
1971	...	...	...	...	...	...	...	2,778,300	102,479	52,293	2,933,072	8,036
1972	...	...	...	...	...	...	...	2,895,900	105,296	55,022	3,056,218	8,350
1973	...	...	...	...	...	...	...	3,089,725	108,040	59,503	3,257,268	8,924
1974	...	...	...	...	...	...	...	3,285,000	109,500	62,155	3,456,655	9,470
1975	...	...	...	...	...	...	...	3,513,125	108,739	63,668	3,685,532	10,097
1976	...	...	...	...	...	...	...	3,712,338	110,230	66,049	3,888,617	10,625
1977	...	...	...	...	...	...	...	3,827,025	110,595	65,623	4,003,243	10,968
1978	...	...	...	...	...	...	...	3,996,750	103,660	64,027	4,164,437	11,409
1979	...	...	...	...	...	...	...	4,083,255	93,075	67,883	4,244,213	11,628
1980	...	...	...	...	...	...	...	4,194,360	87,108	67,840	4,349,308	11,883
1981	...	...	...	...	...	...	...	4,216,480	87,965	68,024	4,372,469	11,979
1982	...	...	...	...	...	...	...	4,347,880	88,330	72,927	4,509,137	12,354
1983	...	...	...	...	...	...	...	4,369,780	87,600	74,957	4,532,337	12,417
1984	...	...	...	...	...	...	...	4,341,126	86,742	68,932	4,496,800	12,286
1985	...	...	...	...	...	...	...	4,228,525	80,300	69,350	4,378,175	11,995
1986	...	...	...	...	...	...	...	4,341,675	80,665	68,985	4,491,325	12,305
1987	...	...	...	...	...	...	...	4,398,250	78,475	65,700	4,542,425	12,445
1988	...	...	...	...	...	...	...	4,411,398	70,638	61,488	4,543,524	12,414
1989	...	...	...	...	...	...	...	4,275,975	65,700	59,860	4,401,535	12,059
1990	...	...	...	...	...	...	...	4,005,874	59,495	51,831	4,117,200	11,280
1991	...	...	...	...	...	...	...	3,647,080	51,100	43,607	3,741,787	10,251
1992	78,130	162,504	2,793,286	35,868	26,352	13,011	16,864	...	49,645	40,007	3,215,667	8,786
1993	73,000	148,920	2,456,450	28,835	24,090	17,155	16,798	...	48,545	41,281	2,855,074	7,822
1994	67,160	151,476	2,239,275	28,105	22,995	27,375	16,964	...	50,290	44,893	2,648,533	7,256
1995	63,875	151,110	2,188,175	25,550	21,900	41,975	16,444	...	49,275	39,796	2,598,100	7,118
1996	64,204	166,713	2,135,250	27,652	21,535	41,883	15,655	...	49,275	38,436	2,560,603	6,996
1997	63,072	190,165	2,160,800	32,485	20,805	41,008	16,460	...	49,082	38,379	2,612,256	7,157
1998	83,950	191,990	2,136,710	40,150	19,710	42,340	16,831	...	48,050	34,482	2,614,213	7,162
1999	100,740	220,314	2,218,816	50,890	19,345	37,230	16,569	...	45,625	32,007	2,741,536	7,511
2000	102,496	262,788	2,371,388	51,826	19,032	33,430	17,327	...	44,073	33,349	2,935,709	8,021
2001	109,926	297,425	2,524,705	56,575	18,980	31,025	18,572	...	45,260	33,273	3,135,741	8,591
2002	113,244	342,805	2,703,983	65,543	18,980	28,993	17,760	...	44,668	31,702	3,367,678	9,227
2003	116,820	374,749	2,968,253	68,388	20,440	32,865	17,772	...	42,473	32,931	3,674,691	10,068
2004	113,982	440,389	3,222,523	73,595	21,960	29,646	16,870	...	41,815	32,292	3,993,072	10,910
2005	157,962	470,224	3,300,725	66,890	22,995	24,648	15,938	...	38,437	29,479	4,127,298	11,308
2006	233,425	479,367	3,375,230	58,931	24,455	21,476	15,321	...	35,208	28,199	4,271,612	11,703
2007	307,358	496,555	3,444,528	59,711	24,090	23,725	14,632	...	34,463	26,010	4,431,072	12,140
2008	318,260	492,424	3,424,583	62,314	22,495	22,720	14,640	...	34,915	25,375	4,417,726	12,070
2009	367,134	531,130	3,465,808	64,336	21,074	15,860	13,505	...	33,456	25,151	4,537,454	12,431
2010	377,639	556,698	3,538,352	65,039	18,652	19,298	12,410	...	32,171	27,651	4,647,910	12,734
2011	358,793	566,822	3,567,334	71,809	17,625	21,382	12,410	...	31,705	27,583	4,675,463	12,809
2012	337,360	554,298	3,631,309	78,862	16,700	24,252	12,444	...	30,872	27,230	4,713,327	12,878
2013	317,767	574,108	3,669,653	83,395	15,772	25,550	12,410	...	31,022	29,615	4,759,292	13,039
2014	309,067	595,708	3,689,087	87,312	14,780	23,499	12,410	...	30,422	30,663	4,792,948	13,131
2015	309,693	603,365	3,742,292	88,720	13,108	21,948	10,908	...	30,169	31,955	4,852,158	13,294
2016	305,075	583,843	3,861,848	84,465	11,738	19,366	13,200	...	28,515	34,399	4,942,449	13,504

¹ Former Soviet Union as reported by World Oil until 1992.

WORLD CRUDE OIL PRODUCTION WESTERN EUROPE

Million Barrels per Day

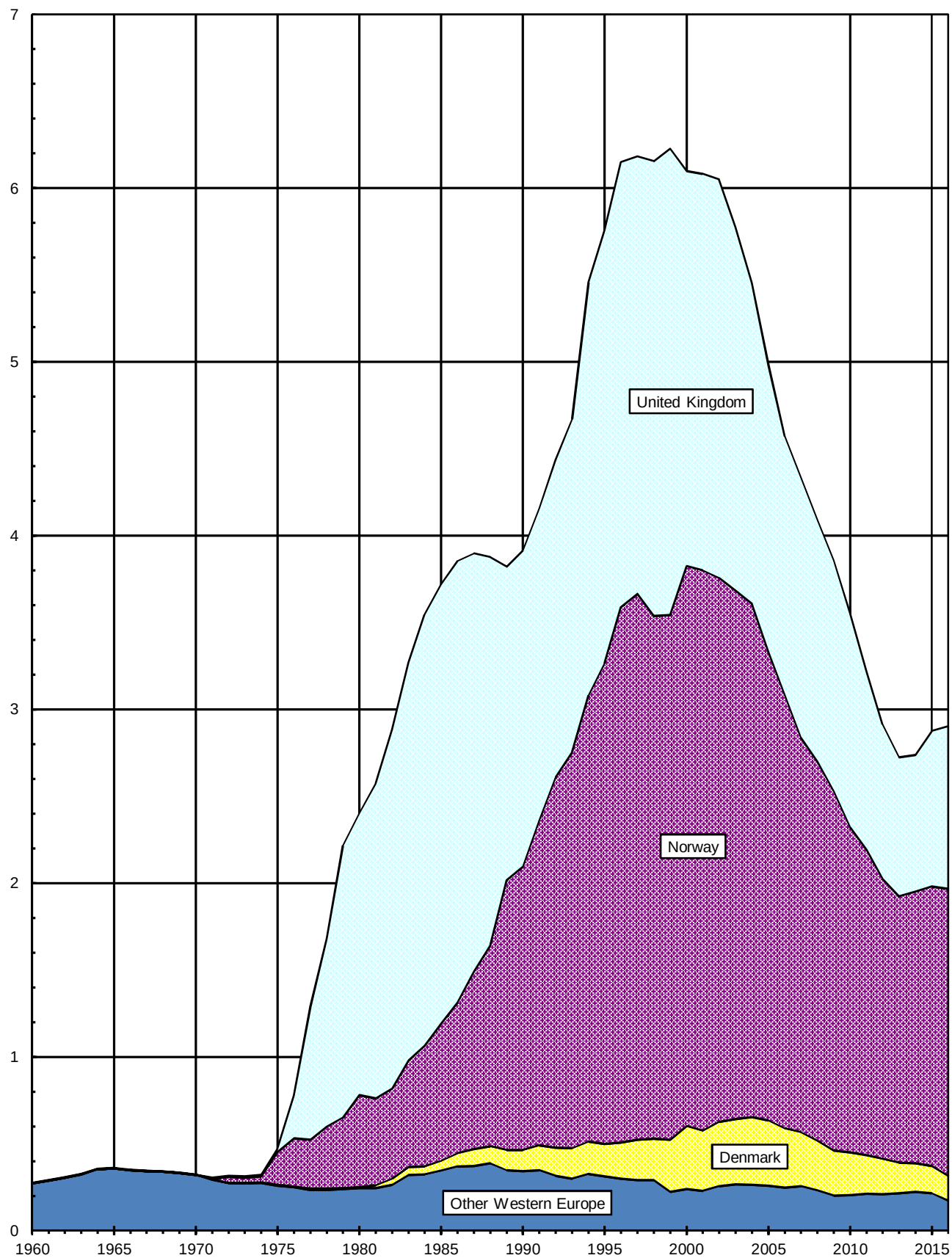


Chart 8

WORLD CRUDE OIL PRODUCTION

WESTERN EUROPE
(Thousands of Barrels)

Year	Austria	Denmark	France	Germany	Greece	Italy	Netherlands	Norway	Spain	United Kingdom	Total ¹ Western Europe	Daily Average
1960	16,874	...	14,233	41,536	...	13,613	13,378	...	...	649	100,283	274
1961	16,237	...	15,578	45,698	...	13,434	14,271	...	...	810	106,028	290
1962	16,694	...	17,071	49,782	...	12,303	14,974	...	...	820	111,644	306
1963	18,271	...	18,117	54,175	...	12,155	15,377	...	...	910	119,005	326
1964	18,571	...	20,428	56,330	...	18,184	15,758	...	...	939	130,210	356
1965	19,908	...	21,774	57,529	...	15,055	16,630	...	...	606	131,502	360
1966	19,228	...	21,365	57,528	...	12,836	16,127	...	236	569	127,889	350
1967	18,725	...	20,593	57,829	...	12,006	15,438	...	612	648	125,851	345
1968	18,999	...	19,528	59,584	...	10,260	14,645	...	925	591	124,532	340
1969	19,236	...	18,207	59,003	...	9,309	13,792	...	1,386	562	121,495	333
1970	19,515	...	16,825	56,179	...	9,575	13,080	...	1,457	607	117,238	321
1971	17,549	...	13,651	54,693	...	8,952	11,727	2,081	874	1,499	111,026	304
1972	17,284	622	10,811	52,147	...	7,850	11,158	12,126	1,020	2,628	115,646	316
1973	17,982	1,460	9,152	48,528	...	7,082	10,169	11,166	5,932	2,920	114,391	313
1974	15,609	689	7,863	45,193	...	6,956	10,227	12,707	14,334	3,285	116,863	320
1975	14,205	1,327	7,460	41,908	...	6,743	9,676	68,900	14,822	7,300	172,341	472
1976	13,466	1,492	7,710	40,340	...	7,553	10,538	101,900	11,552	89,670	284,221	777
1977	12,462	3,285	7,559	39,931	...	8,030	10,220	102,200	6,898	280,320	470,905	1,290
1978	12,486	3,650	8,136	37,376	...	10,950	10,220	129,940	5,840	394,930	613,528	1,681
1979	12,098	2,920	8,719	35,113	...	12,775	9,855	147,095	8,395	572,320	809,290	2,217
1980	10,248	2,196	10,316	34,037	...	13,908	9,150	193,248	12,078	593,652	878,833	2,401
1981	9,249	5,475	12,261	32,880	2,920	13,505	9,855	182,865	9,125	661,015	939,150	2,573
1982	8,964	12,775	11,503	31,025	7,300	12,775	13,870	189,800	10,950	753,725	1,052,687	2,884
1983	8,828	16,425	13,033	29,930	8,404	16,425	19,345	224,110	21,170	836,215	1,193,885	3,271
1984	8,430	16,836	15,037	29,280	9,591	16,470	22,326	255,102	16,836	907,680	1,297,588	3,545
1985	8,030	21,170	18,250	29,930	9,125	16,425	27,740	287,620	16,060	923,450	1,357,800	3,720
1986	8,030	27,740	21,900	29,565	9,125	17,885	33,945	317,550	13,870	926,735	1,406,345	3,853
1987	7,665	35,405	23,725	27,375	8,760	24,455	31,755	373,030	12,410	878,190	1,422,770	3,898
1988	8,418	36,234	24,522	28,914	7,686	32,940	28,182	423,828	10,980	816,912	1,418,616	3,876
1989	8,395	42,705	23,725	27,740	6,205	29,930	23,360	567,210	7,665	657,730	1,394,665	3,821
1990	8,030	44,165	22,265	26,207	5,475	31,755	25,550	594,953	5,840	664,300	1,428,540	3,914
1991	9,308	52,155	21,413	26,020	5,840	29,200	27,010	682,866	8,030	655,905	1,517,747	4,158
1992	8,364	59,628	21,110	23,111	4,857	30,510	19,485	780,270	8,009	668,090	1,623,441	4,436
1993	7,918	63,550	20,193	22,212	3,958	30,194	18,345	832,752	6,500	699,019	1,704,645	4,670
1994	7,790	67,517	20,496	21,299	3,740	31,480	28,553	937,886	6,050	866,710	1,991,551	5,456
1995	8,360	67,918	18,250	21,353	3,285	34,080	24,080	1,009,527	4,901	908,530	2,100,314	5,754
1996	7,847	75,892	15,755	21,760	2,920	36,901	20,527	1,128,219	3,833	937,263	2,250,917	6,150
1997	6,935	84,126	13,018	20,548	3,314	40,730	19,251	1,146,727	2,774	918,903	2,256,326	6,182
1998	7,484	86,999	12,590	21,403	2,370	39,038	18,980	1,099,100	3,862	954,710	2,246,536	6,155
1999	6,570	109,573	11,128	20,183	124	29,930	11,636	1,101,893	2,219	979,660	2,272,916	6,227
2000	6,954	132,834	10,614	23,357	1,738	32,940	10,533	1,179,075	1,739	832,668	2,232,452	6,100
2001	6,814	126,364	10,189	23,675	1,822	28,638	9,564	1,177,609	2,591	833,049	2,220,315	6,083
2002	6,782	135,328	9,825	25,135	1,154	31,157	16,910	1,142,663	2,340	836,480	2,207,774	6,049
2003	6,539	136,892	8,788	26,389	1,033	34,985	17,136	1,110,372	2,408	764,009	2,108,551	5,777
2004	6,617	142,428	8,539	24,852	1,038	38,125	15,606	1,081,338	2,195	675,392	1,996,130	5,454
2005	6,138	137,658	7,788	24,428	974	41,832	11,586	984,749	1,129	601,718	1,818,000	4,981
2006	6,115	124,832	7,847	24,657	671	40,275	9,608	909,061	1,093	543,921	1,668,080	4,570
2007	6,113	113,718	7,240	24,206	455	39,397	14,565	828,631	1,003	546,760	1,582,088	4,334
2008	5,886	104,864	7,137	21,960	366	36,399	12,264	798,596	976	509,242	1,497,690	4,092
2009	5,956	94,893	6,625	20,075	426	30,215	9,302	754,610	853	484,642	1,407,597	3,856
2010	6,112	89,556	6,601	17,885	852	35,042	7,300	682,771	939	450,113	1,297,171	3,554
2011	6,446	80,718	6,508	18,615	639	36,200	8,123	642,225	791	374,647	1,174,912	3,219
2012	6,191	74,022	5,948	18,666	611	36,954	7,625	589,834	1,099	325,042	1,065,992	2,913
2013	5,898	64,021	5,841	18,821	455	37,148	8,025	559,425	2,678	292,471	994,783	2,725
2014	6,267	60,316	5,598	17,552	424	38,795	10,756	570,197	2,281	287,335	999,521	2,738
2015	6,021	57,056	6,085	17,543	393	36,577	9,966	587,749	1,698	326,040	1,049,128	2,874
2016	5,549	51,473	6,009	17,051	1,161	25,867	6,620	603,159	976	341,486	1,059,351	2,894

¹ Total may include small amounts from countries not listed.

WORLD CRUDE OIL PRODUCTION MIDDLE EAST

Million Barrels per Day

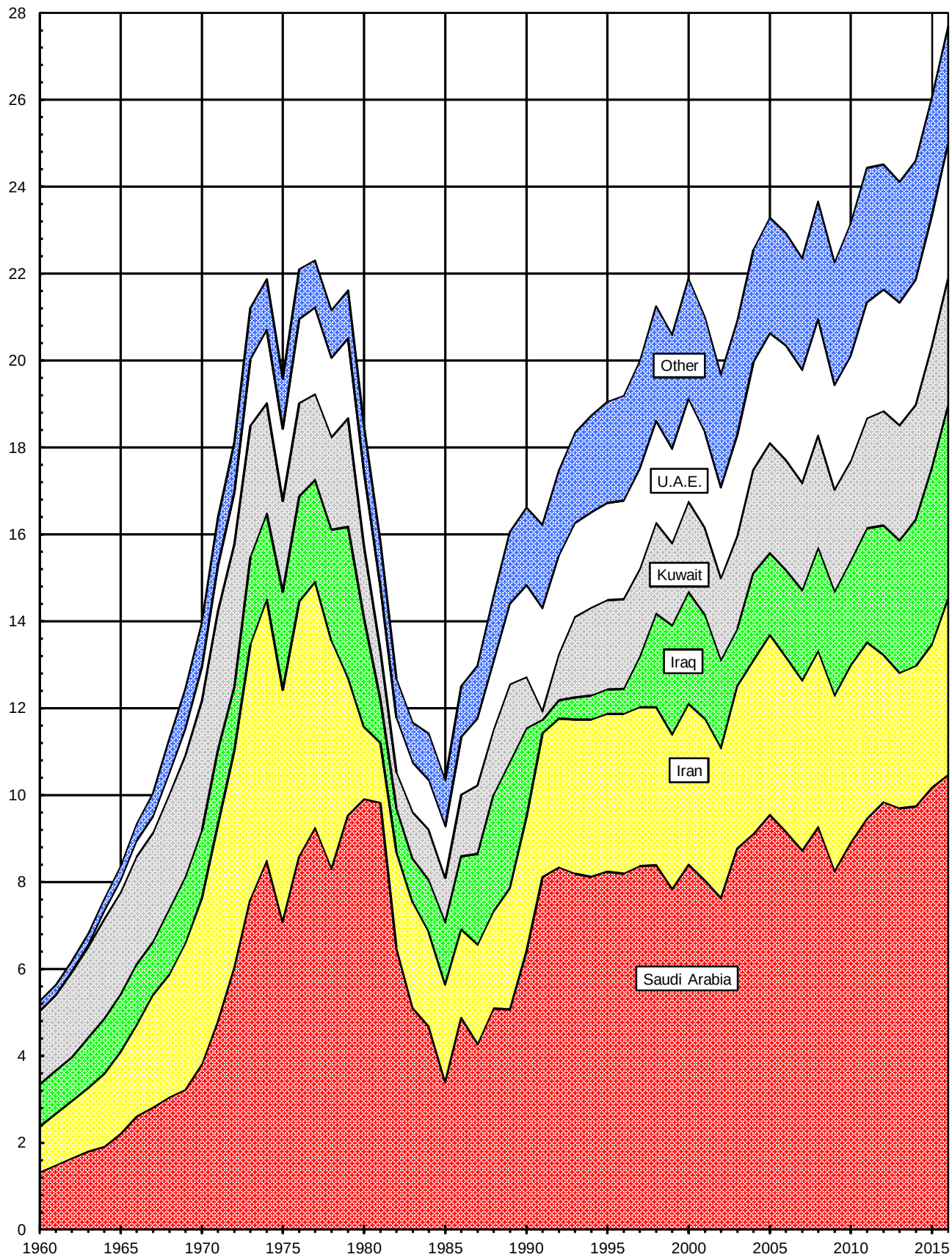


Chart 9

WORLD CRUDE OIL PRODUCTION

MIDDLE EAST³
(Thousands of Barrels)

Year	Bahrain	Iran	Iraq	Israel ¹	Kuwait	Oman	Qatar	Saudi Arabia	Syria	Turkey	U.A.E.	Yemen	Total ² Middle East	Daily Average
1960	16,500	385,748	353,833	932	619,193	...	63,088	481,368	...	2,624	...	...	1,923,285	5,255
1961	16,444	431,653	365,594	1,133	632,803	...	64,386	540,846	...	3,075	...	...	2,055,934	5,633
1962	16,446	481,939	366,832	1,126	713,896	...	67,911	599,668	...	4,157	5,976	...	2,257,951	6,186
1963	16,503	538,121	423,140	1,091	762,739	...	70,123	651,860	...	5,201	17,571	...	2,486,349	6,812
1964	18,000	618,731	461,961	1,435	840,523	...	77,885	693,803	...	6,397	67,465	...	2,786,200	7,613
1965	20,788	688,215	482,461	1,469	857,994	...	84,215	805,169	...	10,827	102,804	...	3,053,942	8,367
1966	22,521	771,234	505,428	1,359	907,253	...	105,945	950,065	...	13,277	131,279	...	3,408,361	9,338
1967	25,370	947,706	448,239	8,687	912,450	23,030	118,428	1,023,841	...	19,526	140,117	...	3,667,394	10,048
1968	27,598	1,039,367	548,705	14,689	964,486	87,854	124,266	1,114,134	9,955	22,235	181,756	...	4,135,045	11,298
1969	27,774	1,231,826	555,241	18,042	1,021,616	119,710	129,746	1,173,897	16,771	25,774	222,598	...	4,542,995	12,447
1970	27,973	1,397,460	568,547	31,798	1,090,040	121,210	132,456	1,387,265	29,356	24,776	283,500	...	5,094,381	13,957
1971	27,346	1,661,901	624,312	44,618	1,167,329	107,430	156,882	1,741,149	36,462	25,031	386,655	...	5,979,115	16,381
1972	25,508	1,838,825	529,419	43,920	1,201,346	103,131	176,545	2,202,049	45,209	24,416	440,132	...	6,630,500	18,116
1973	24,948	2,138,900	736,570	32,193	1,102,446	106,926	208,152	2,772,590	38,170	24,273	559,399	...	7,744,567	21,218
1974	24,597	2,198,030	719,145	36,500	929,678	106,046	189,348	3,095,641	45,352	24,555	616,485	...	7,985,377	21,878
1975	20,805	1,952,750	825,630	27,345	760,660	125,195	159,870	2,582,375	62,050	22,167	607,360	...	7,146,207	19,579
1976	21,288	2,153,178	883,890	256	785,070	133,956	181,902	3,139,182	64,050	18,585	708,576	...	8,089,933	22,104
1977	21,236	2,066,995	857,020	256	718,685	124,465	162,425	3,374,425	68,620	19,402	729,635	...	8,143,164	22,310
1978	20,191	1,913,330	935,495	3,650	777,815	114,975	177,755	3,029,865	62,050	19,534	668,315	...	7,722,975	21,159
1979	18,741	1,156,320	1,269,105	11,315	912,500	107,675	185,420	3,479,180	60,590	20,140	668,315	...	7,889,301	21,615
1980	17,568	608,292	920,124	12,810	606,096	103,212	172,752	3,623,400	60,024	16,836	625,494	...	6,766,608	18,488
1981	16,862	503,700	365,000	13,140	410,625	116,435	147,825	3,582,475	60,590	16,741	538,010	...	5,771,403	15,812
1982	16,068	808,110	369,380	365	300,395	118,260	120,450	3,366,295	58,400	16,499	456,250	...	4,630,472	12,686
1983	15,272	890,600	366,825	365	388,360	136,875	107,675	1,856,390	61,122	16,071	419,385	...	4,258,940	11,668
1984	15,289	795,684	442,494	366	423,462	151,524	144,204	1,706,658	62,220	14,950	419,436	...	4,176,287	11,411
1985	15,330	821,250	523,045	365	373,395	181,770	109,865	1,236,620	64,970	14,965	435,445	...	3,777,020	10,348
1986	16,060	742,775	616,850	365	517,935	204,400	112,420	1,777,550	70,810	16,790	485,450	3,650	4,565,420	12,508
1987	15,330	838,770	758,835	106	578,525	212,430	106,945	1,556,725	83,950	18,615	562,465	7,300	4,740,179	12,987
1988	15,738	819,840	982,710	132	546,072	225,822	126,636	1,861,476	96,990	18,300	572,790	63,318	5,330,007	14,563
1989	15,695	1,025,650	1,057,405	113	650,795	233,965	138,700	1,848,360	124,100	20,440	678,900	70,810	5,865,013	16,069
1990	15,330	1,127,120	744,600	73	428,875	250,025	148,190	2,339,650	141,620	26,645	772,705	70,445	6,065,397	16,618
1991	13,870	1,208,880	111,325	73	69,350	255,500	144,175	2,961,975	179,580	32,245	870,890	71,750	5,919,723	16,218
1992	13,448	1,255,050	155,550	68	387,265	270,840	154,891	3,049,402	176,027	30,573	829,356	66,640	6,389,128	17,457
1993	14,875	1,292,100	186,770	56	676,112	283,178	150,745	2,992,200	202,210	27,828	788,035	80,300	6,694,420	18,341
1994	14,892	1,320,570	201,675	37	739,125	295,650	151,475	2,963,800	204,400	26,426	800,445	122,275	6,840,779	18,742
1995	14,885	1,329,775	204,400	37	750,955	310,720	161,330	3,004,400	209,875	24,626	815,045	125,910	6,951,969	19,046
1996	12,775	1,345,284	211,261	73	752,503	322,437	186,325	2,999,597	212,541	24,520	831,342	124,260	7,022,929	19,188
1997	14,710	1,337,425	421,575	110	732,592	329,960	200,750	3,052,142	204,850	24,674	845,495	132,279	7,296,577	19,991
1998	13,751	1,326,325	784,765	73	761,150	328,440	253,895	3,061,950	201,980	23,818	856,035	141,547	7,753,740	21,243
1999	13,665	1,298,305	915,375	73	692,661	332,150	242,725	2,859,187	196,370	21,535	791,685	149,285	7,513,031	20,584
2000	13,908	1,352,846	940,870	29	760,731	355,020	271,471	3,075,790	191,354	19,279	866,625	160,219	8,008,157	21,880
2001	13,505	1,359,151	872,350	29	729,088	333,245	266,300	2,931,350	176,638	17,520	804,825	160,918	7,664,934	21,000
2002	13,432	1,257,170	738,395	37	691,368	327,304	258,825	2,786,554	172,363	17,036	759,928	160,364	7,182,783	19,679
2003	13,736	1,366,120	477,510	22	779,640	298,935	294,410	3,202,875	169,350	16,487	857,070	156,729	7,632,891	20,912
2004	13,542	1,464,525	736,198	27	869,505	274,851	329,910	3,330,900	163,257	15,526	907,044	148,004	8,253,296	22,550
2005	12,775	1,510,580	685,345	37	923,150	282,620	356,810	3,485,800	157,694	15,940	925,430	146,053	8,502,241	23,294
2006	12,775	1,470,150	728,395	37	925,400	269,242	363,410	3,340,600	148,327	15,388	962,030	136,841	8,372,602	22,939
2007	12,775	1,427,840	761,496	37	899,395	259,281	395,275	3,183,350	138,700	14,966	949,945	116,323	8,159,390	22,354
2008	12,810	1,482,400	869,347	37	946,384	277,180	438,344	3,389,618	135,163	15,220	981,254	109,189	8,656,953	23,653
2009	12,775	1,473,519	872,566	37	857,750	296,568	466,864	3,011,291	134,321	16,865	880,582	104,082	8,127,227	22,266
2010	12,775	1,489,353	875,745	37	839,650	315,575	532,455	3,248,500	139,895	17,643	881,349	102,199	8,455,183	23,165
2011	12,775	1,479,710	958,375	142	923,500	323,274	573,450	3,452,300	123,967	16,694	977,900	78,982	8,921,076	24,441
2012	15,006	1,239,587	1,091,900	143	964,390	336,196	567,814	3,598,630	53,154	16,381	1,026,120	61,754	8,971,083	24,511
2013	17,520	1,136,354	1,114,850	142	967,250	343,072	566,845	3,538,000	21,186	16,879	1,029,300	47,705	8,799,111	24,107
2014	18,069	1,182,260	1,229,335	142	964,350	344,370	562,255	3,553,400	8,271	17,400	1,056,380	45,628	8,981,868	24,608
2015	18,615	1,204,500	1,479,725	142	1,023,340	358,420	559,109	3,711,410	10,950	17,706	1,102,100	17,374	9,503,399	26,037
2016	17,934	1,488,770	1,629,255	143	1,070,120	368,504	557,382	3,828,620	10,492	18,116	1,136,824	7,930	10,134,097	27,689

¹ Includes production from Sinai fields under Israeli control, 1967–1975.² Total may include amounts from countries not listed.³ As of 1992, production figures are from the U.S. Energy Information Administration.

WORLD CRUDE OIL PRODUCTION AFRICA

Million Barrels per Day

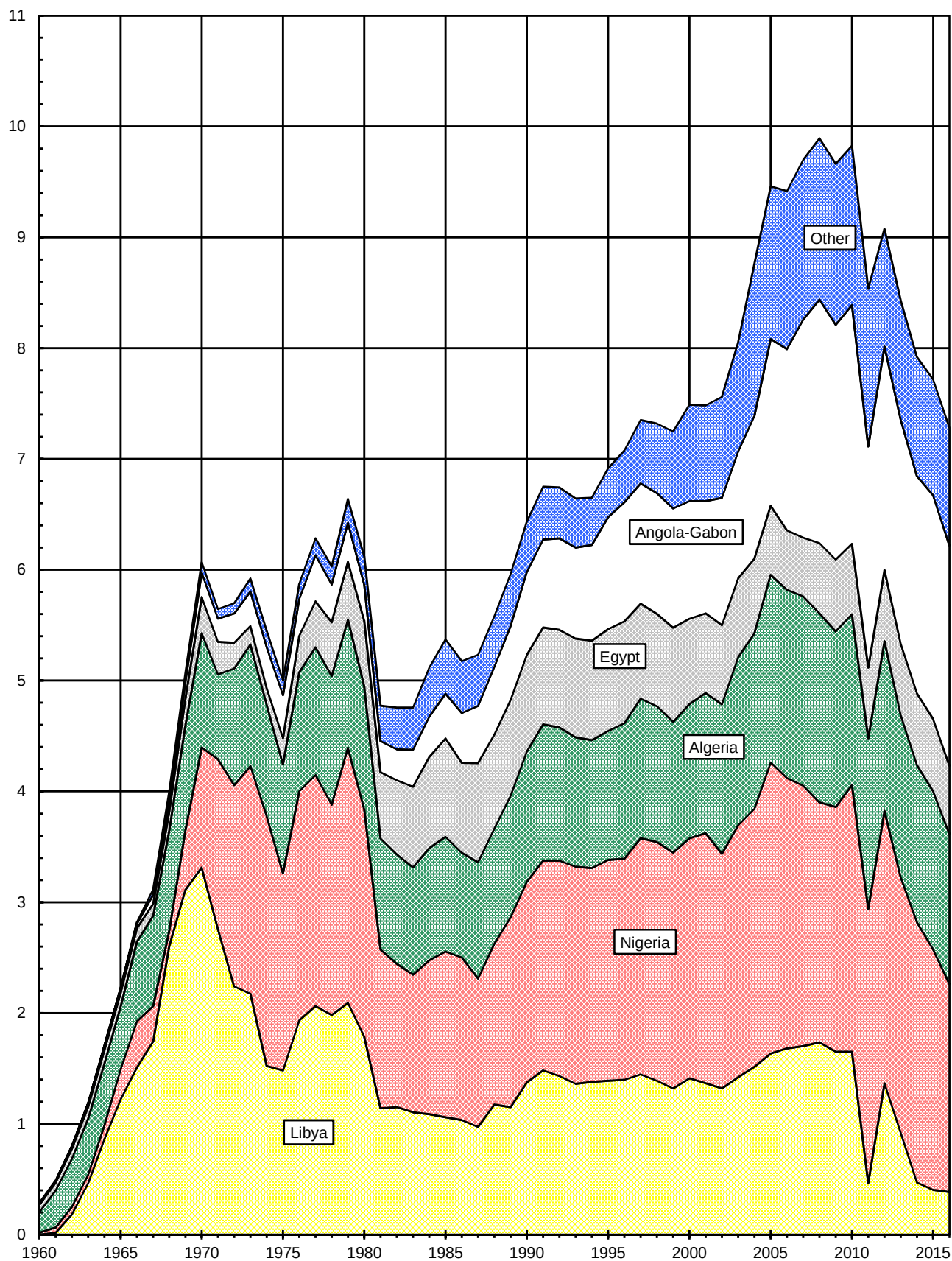


Chart 10

WORLD CRUDE OIL PRODUCTION

AFRICA

(Thousands of Barrels)

Year	Algeria	Angola	Cameroon	Chad	Congo - Brazzaville	Egypt	Equatorial Guinea	Gabon	Libya	Nigeria	Sudan	Tunisia	Total ¹ Africa	Daily Average
1960	67,613	477	...	...	6,003	23,968	...	...	...	6,552	...	...	105,321	288
1961	121,494	757	...	...	724	26,129	...	5,446	6,642	16,802	...	...	178,514	489
1962	158,094	3,404	...	...	926	32,321	...	5,992	67,052	24,624	...	...	293,386	804
1963	184,311	5,776	...	...	820	38,760	...	6,446	169,414	27,644	...	...	434,311	1,190
1964	204,300	6,535	...	...	619	43,915	...	7,668	315,642	43,997	...	...	623,586	1,704
1965	206,258	4,734	...	...	534	45,556	...	9,100	445,374	99,354	...	...	811,692	2,224
1966	262,377	4,549	...	...	467	44,070	...	10,440	550,186	152,428	...	4,402	1,029,674	2,821
1967	297,715	3,885	...	...	376	39,552	...	25,203	636,504	116,525	...	17,068	1,137,566	3,117
1968	330,922	5,401	...	...	342	62,208	...	33,630	951,345	51,907	...	24,539	1,460,968	3,992
1969	345,436	17,456	...	...	173	89,601	...	36,421	1,135,684	197,204	...	27,942	1,850,355	5,069
1970	376,024	40,838	...	...	137	119,165	...	39,292	1,209,314	395,836	...	34,296	2,215,237	6,069
1971	279,627	33,922	...	...	130	106,993	...	41,911	1,007,687	558,375	...	31,542	2,060,359	5,645
1972	384,858	51,405	...	...	2,522	84,693	...	45,671	819,619	665,282	...	31,607	2,085,873	5,699
1973	400,515	58,910	...	...	12,713	60,483	...	55,045	793,839	749,820	...	29,828	2,161,473	5,922
1974	368,139	61,392	...	...	22,434	53,715	...	73,548	555,291	823,347	...	31,841	1,989,898	5,452
1975	358,795	60,225	...	...	13,505	85,775	...	81,395	540,200	650,795	...	34,567	1,825,453	5,001
1976	393,450	39,528	...	...	14,274	120,780	...	81,618	707,478	756,522	...	26,718	2,149,478	5,873
1977	420,480	70,810	...	...	12,045	151,475	...	81,030	752,995	761,025	...	34,675	2,293,032	6,282
1978	423,765	47,815	4,745	...	12,045	177,025	...	76,285	723,795	692,405	...	36,500	2,201,143	6,031
1979	421,210	53,655	12,410	...	20,805	191,625	...	74,095	763,580	840,230	...	36,500	2,422,666	6,637
1980	404,796	54,900	21,228	...	23,790	217,770	...	64,050	654,042	752,130	...	40,260	2,240,564	6,122
1981	365,730	47,450	31,755	...	30,295	218,270	...	55,115	416,100	523,045	...	43,070	1,742,335	4,774
1982	360,255	44,530	39,785	...	32,485	244,550	...	56,940	419,750	472,675	...	43,800	1,735,771	4,756
1983	353,320	64,605	41,610	...	31,755	265,355	...	57,305	403,325	452,965	...	43,800	1,735,625	4,755
1984	371,124	76,128	49,410	...	44,286	300,852	...	57,462	397,842	508,008	...	43,920	1,873,388	5,119
1985	378,505	84,315	67,525	...	43,800	323,755	...	62,780	386,535	545,675	...	41,610	1,960,415	5,371
1986	344,925	102,930	64,605	...	43,435	296,745	...	60,590	377,410	535,455	...	40,515	1,888,510	5,174
1987	382,520	131,400	63,510	...	44,895	327,040	...	56,575	354,780	489,465	...	38,690	1,909,680	5,232
1988	380,640	165,432	59,658	...	52,704	310,368	...	58,194	430,050	530,700	...	37,698	2,042,646	5,581
1989	399,675	166,075	62,050	...	59,860	315,725	...	75,920	419,750	626,340	...	38,325	2,176,130	5,962
1990	428,875	173,375	58,765	...	60,225	318,645	...	98,550	501,875	660,650	...	33,945	2,347,794	6,432
1991	448,950	182,500	55,950	...	56,940	319,010	37	107,310	541,350	690,507	...	37,960	2,463,364	6,749
1992	439,790	192,634	51,370	...	63,684	322,525	567	108,940	524,368	711,138	110	39,916	2,467,633	6,742
1993	426,070	185,785	46,304	...	66,080	324,850	1,643	114,063	496,765	715,400	110	35,728	2,424,875	6,643
1994	421,575	195,640	39,400	...	65,700	326,931	1,825	119,920	502,820	704,779	40	33,465	2,426,822	6,649
1995	424,055	235,790	40,515	...	68,620	335,800	1,825	133,225	507,350	727,355	73	32,540	2,523,683	6,914
1996	447,908	258,706	39,420	...	73,365	336,408	6,239	134,452	511,309	730,194	730	31,753	2,590,304	7,077
1997	459,440	260,610	45,260	...	92,345	312,586	19,134	135,200	527,760	778,344	1,825	30,660	2,682,690	7,350
1998	447,640	268,305	43,983	...	96,725	304,264	30,295	128,480	507,350	786,012	3,650	29,292	2,671,715	7,320
1999	429,715	271,925	36,500	...	98,550	310,830	37,230	120,815	481,420	777,396	25,185	30,295	2,645,199	7,247
2000	444,290	273,184	31,045	...	102,480	281,209	61,305	115,290	516,070	792,390	68,436	28,794	2,740,658	7,488
2001	461,725	270,970	27,976	...	93,075	262,677	66,225	98,550	498,790	823,497	76,955	25,396	2,731,133	7,483
2002	492,385	327,175	25,484	...	90,959	261,127	77,585	91,688	481,260	773,020	87,780	27,670	2,758,844	7,558
2003	553,355	329,430	24,455	13,165	90,100	260,126	75,360	88,117	518,490	830,375	99,236	27,375	2,938,142	8,050
2004	578,930	384,930	24,152	62,435	86,185	246,457	133,758	87,493	554,570	852,400	126,212	29,193	3,207,016	8,762
2005	617,695	452,281	30,045	64,480	83,448	227,512	132,325	97,206	596,085	959,015	128,629	27,375	3,452,469	9,459
2006	620,160	510,275	31,537	57,640	88,200	195,296	125,146	86,585	613,580	890,550	139,192	27,900	3,436,897	9,416
2007	623,565	629,086	30,232	52,634	75,617	193,579	126,060	89,141	621,160	857,620	170,368	30,405	3,540,137	9,699
2008	624,030	713,954	29,765	46,542	85,377	231,824	123,281	90,818	635,315	792,551	175,618	30,356	3,620,685	9,893
2009	578,480	685,035	28,070	43,607	97,769	236,780	117,522	88,377	602,250	806,034	177,349	28,605	3,526,823	9,663
2010	562,100	696,610	23,725	44,720	111,325	232,261	108,690	89,745	602,250	878,930	178,298	27,350	3,586,645	9,826
2011	562,100	640,800	22,506	41,962	105,850	232,667	101,612	88,094	169,870	902,919	166,134	23,480	3,114,537	8,533
2012	560,801	654,060	23,058	38,241	102,480	234,834	105,920	84,180	500,250	899,302	34,482	23,166	3,321,859	9,076
2013	533,550	657,970	22,906	36,500	95,265	235,396	98,476	80,300	335,190	842,171	49,634	21,954	3,076,984	8,430
2014	518,300	635,690	27,375	44,165	95,630	235,466	94,900	80,300	171,855	856,720	42,297	18,103	2,890,217	7,918
2015	521,585	657,680	35,770	44,895	93,440	237,985	91,250	77,865	147,450	792,474	40,350	13,140	2,817,307	7,719
2016	493,500	647,679	33,672	41,724	108,336	225,359	83,082	77,160	140,795	684,861	39,180	13,908	2,657,829	7,262

¹ Total may include small amounts from countries not listed.

WORLD CRUDE OIL PRODUCTION FAR EAST

Million Barrels per Day

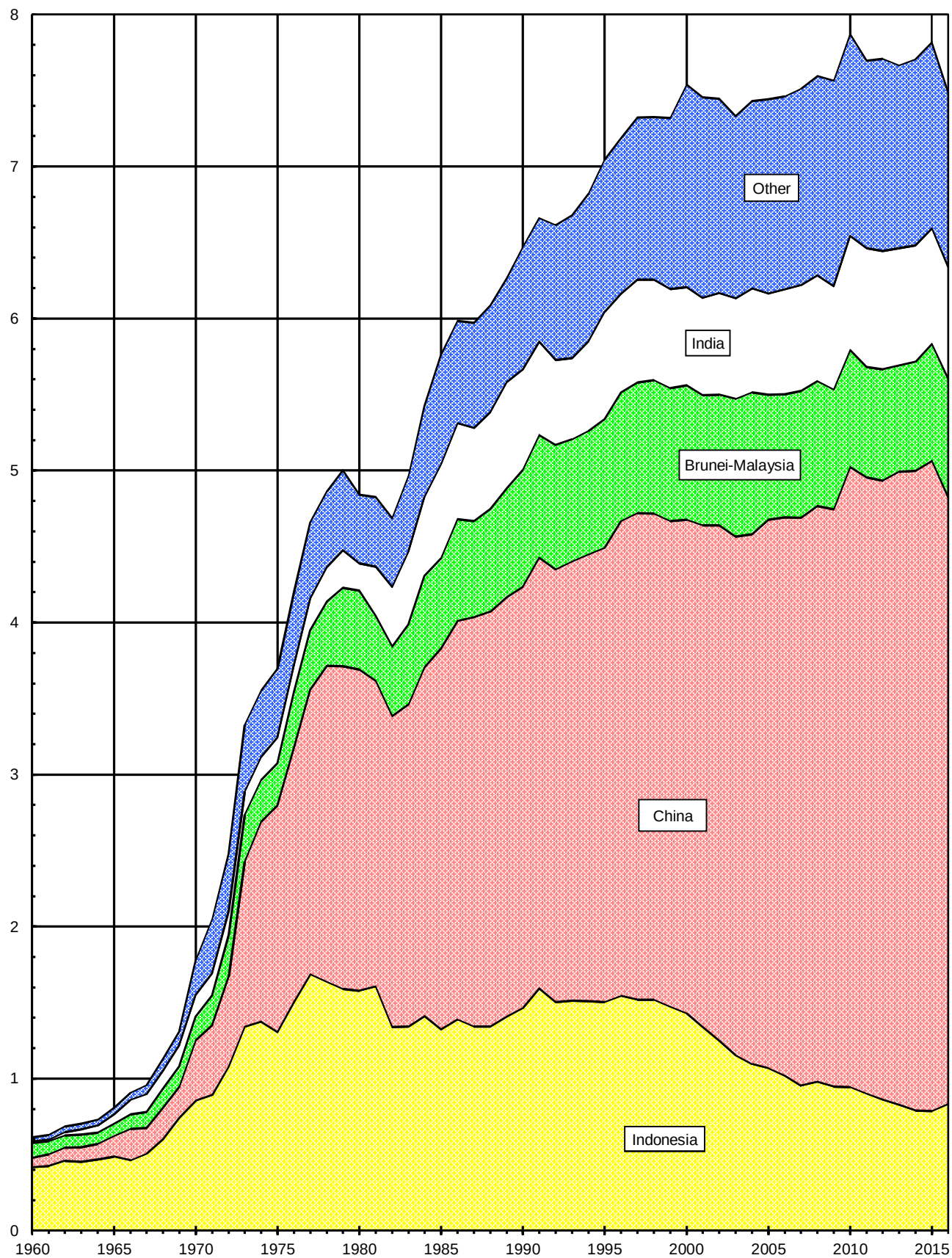


Chart 11

WORLD CRUDE OIL PRODUCTION
FAR EAST
(Thousands of Barrels)

Year	Australia	Brunei - Malaysia	Burma (Myanmar)	China	India	Indonesia	Japan	New Zealand	Pakistan	Papua New Guinea	Philippines	Thailand	Timor- Leste	Vietnam	Total ¹ Far East	Daily Average
1960	...	35,543	4,078	22,776	3,370	152,988	3,678	5	2,636	...	...	37	...	...	225,126	615
1961	...	31,633	4,194	27,667	3,356	155,369	4,590	4	2,829	...	...	18	...	...	229,682	629
1962	...	29,203	4,366	31,609	8,016	167,771	5,316	4	3,338	...	...	36	...	...	249,675	684
1963	...	30,563	4,761	35,113	12,266	165,002	5,485	...	3,514	...	...	45	...	...	256,768	703
1964	1,487	26,265	4,161	37,595	16,965	171,492	4,590	4	3,732	...	...	45	...	...	266,397	728
1965	2,614	29,342	4,065	49,085	22,494	178,177	4,944	5	3,943	...	...	40	...	...	294,840	808
1966	3,390	34,972	4,252	74,970	35,624	168,859	5,435	4	3,445	...	...	14	...	...	331,191	907
1967	7,600	38,363	4,442	61,421	43,400	184,961	5,511	3	3,633	...	...	37	...	...	349,616	958
1968	13,877	46,210	5,634	75,575	43,552	219,864	5,490	2	3,305	...	...	26	...	...	413,956	1,131
1969	15,805	48,902	6,433	75,000	51,724	271,001	5,538	3	3,460	...	...	16	...	...	478,463	1,311
1970	65,149	56,792	6,388	146,000	52,596	311,656	5,666	467	3,400	...	...	70	...	...	648,812	1,778
1971	112,914	72,553	6,652	167,900	52,091	325,673	5,529	804	3,000	...	...	95	...	...	748,014	2,049
1972	119,516	100,875	7,466	216,080	56,965	395,552	5,242	1,119	3,294	...	...	47	...	...	907,066	2,478
1973	142,277	112,055	7,514	397,850	55,388	488,536	5,142	1,290	2,871	...	...	45	...	...	1,214,023	3,326
1974	140,396	100,010	7,581	479,975	55,733	501,838	4,936	1,385	2,923	...	...	42	...	...	1,296,140	3,551
1975	149,285	101,835	6,700	543,850	61,611	477,055	4,378	1,423	2,190	...	...	42	...	...	1,349,720	3,698
1976	155,916	134,688	8,183	611,220	64,632	550,319	4,241	3,776	2,562	...	...	57	...	...	1,537,149	4,200
1977	157,315	143,810	9,490	684,010	75,787	615,390	4,334	5,415	3,720	...	...	...	...	...	1,700,919	4,660
1978	157,680	154,030	9,990	759,930	82,125	596,775	3,963	4,555	4,011	...	...	...	...	...	1,774,629	4,862
1979	160,965	188,705	10,800	774,530	89,790	580,715	3,516	2,998	3,827	...	7,754	...	...	...	1,825,053	5,000
1980	139,080	189,588	10,980	773,724	66,612	577,182	3,177	2,582	3,366	...	3,477	...	...	...	1,771,208	4,839
1981	143,810	155,855	8,395	734,380	118,625	585,825	2,865	3,440	3,377	...	3,355	...	...	...	1,761,077	4,825
1982	135,050	167,900	8,614	746,425	142,350	488,735	2,642	5,731	4,636	...	6,131	1,351	...	...	1,710,441	4,686
1983	151,840	192,355	8,030	773,800	175,200	490,195	2,667	5,317	4,763	...	5,322	2,179	...	...	1,812,592	4,966
1984	180,072	219,600	9,516	840,336	189,954	516,792	3,038	6,841	6,535	...	3,898	8,052	...	...	1,985,563	5,425
1985	209,875	216,445	10,950	914,325	226,300	483,625	4,015	6,935	12,775	...	3,285	12,410	...	...	2,101,670	5,758
1986	189,800	244,550	8,760	956,300	229,950	507,350	4,745	10,585	15,330	...	2,920	12,775	...	365	2,184,160	5,984
1987	199,655	232,140	6,205	981,850	222,285	490,195	4,380	10,220	15,330	...	2,190	12,045	...	1,825	2,179,780	5,972
1988	196,908	247,782	4,758	999,180	232,410	491,172	4,392	12,078	16,470	...	2,196	13,176	...	5,490	2,227,110	6,085
1989	178,850	261,705	5,475	1,006,305	255,500	514,285	4,015	13,870	17,520	...	1,825	14,600	...	11,680	2,286,725	6,265
1990	209,875	280,685	4,745	1,012,510	240,900	533,630	4,015	14,600	22,630	...	1,716	15,956	...	18,250	2,360,895	6,468
1991	198,925	294,628	5,475	1,034,775	224,475	581,080	5,447	14,965	22,630	73	1,095	16,875	...	29,200	2,430,729	6,660
1992	195,668	299,630	5,270	1,041,270	205,381	550,464	6,222	13,978	22,455	19,398	2,945	18,553	...	38,880	2,421,175	6,615
1993	183,595	293,825	4,964	1,054,850	194,910	551,653	4,545	14,962	22,031	45,945	3,321	19,086	...	43,797	2,438,261	6,680
1994	195,780	296,451	4,964	1,072,840	215,314	551,223	3,956	14,417	20,075	40,150	2,227	20,333	...	51,285	2,490,001	6,822
1995	205,055	308,605	3,489	1,091,350	256,760	548,480	4,015	11,654	20,842	36,496	1,241	18,761	...	63,255	2,570,850	7,043
1996	207,915	310,405	2,924	1,142,939	237,624	564,833	4,229	13,330	20,075	37,727	730	22,238	...	64,039	2,629,964	7,186
1997	214,508	313,900	3,285	1,168,125	246,238	554,800	3,630	21,024	20,805	29,200	365	26,186	...	69,810	2,672,825	7,323
1998	198,550	320,251	4,015	1,167,338	241,419	554,200	3,278	17,125	20,043	28,858	288	27,384	...	89,697	2,673,378	7,324
1999	196,728	319,375	3,467	1,166,175	238,221	537,280	2,890	15,330	19,345	35,259	314	30,528	...	105,777	2,671,564	7,319
2000	264,093	323,188	4,392	1,189,047	236,561	522,787	2,562	13,176	19,918	25,643	419	40,134	...	115,656	2,758,827	7,538
2001	239,805	311,867	3,650	1,204,501	234,475	489,100	2,312	12,105	21,853	24,638	3,088	41,523	...	130,212	2,720,729	7,454
2002	228,478	314,433	5,475	1,237,223	242,635	455,895	1,946	11,092	23,458	20,131	3,596	46,414	...	123,951	2,717,377	7,445
2003	186,940	331,348	5,475	1,244,238	240,910	421,710	1,825	8,757	21,900	18,430	5,030	58,030	...	128,665	2,675,967	7,331
2004	159,562	341,670	7,320	1,275,625	250,018	401,004	2,196	7,143	22,692	16,682	9,150	56,723	18,999	147,603	2,719,092	7,429
2005	162,633	300,007	7,300	1,317,147	242,600	389,363	2,402	6,927	23,953	14,703	9,125	66,933	34,465	136,631	2,716,784	7,443
2006	156,678	295,956	8,395	1,340,548	251,344	372,015	2,190	6,236	23,968	16,203	9,125	74,507	36,829	126,084	2,722,793	7,460
2007	163,728	303,746	7,724	1,363,630	254,599	348,179	2,068	15,015	25,641	14,039	8,987	77,894	36,500	115,972	2,740,874	7,509
2008	168,104	300,651	7,815	1,387,207	253,899	357,481	2,196	21,955	23,300	15,136	8,986	83,751	36,600	108,981	2,779,411	7,594
2009	169,244	287,369	6,601	1,385,525	248,358	346,313	1,945	20,399	22,781	14,435	12,775	86,848	34,599	119,437	2,760,425	7,563
2010	174,680	280,811	7,420	1,488,601	274,225	344,884	1,823	19,359	23,725	11,240	12,045	88,257	32,116	109,169	2,872,450	7,870
2011	150,136	265,131	7,300	1,479,000	285,554	329,250	1,825	16,908	24,090	10,644	12,410	81,807	30,566	110,277	2,809,343	7,697
2012	148,369	267,626	7,320	1,491,111	285,171	314,666	1,830	15,035	25,986	10,003	10,980	87,320	29,095	121,163	2,821,091	7,708
2013	122,122	254,747	7,300	1,519,793	281,808	302,307	1,703	12,872	29,565	8,381	12,775	87,879	28,929	121,208	2,798,050	7,666
2014	128,975	261,860	7,145	1,536,013	280,137	287,985	1,734	14,332	34,310	12,903	13,870	85,036	27,095	111,992	2,812,324	7,705
2015	117,649	280,870	5,475	1,561,358	277,781	286,803	1,550	15,069	32,928	19,200	8,805	90,582	22,652	121,706	2,852,419	7,815
2016	106,048	284,035	5,490	1,456,918	268,828	304,373	1,434	12,710	31,294	20,493	7,320	94,254	18,021	110,477	2,731,805	7,464

¹ Total may include small amounts from countries not listed.

ACCUMULATIVE CRUDE OIL PRODUCTION UNITED STATES AND WORLD TO JANUARY 1

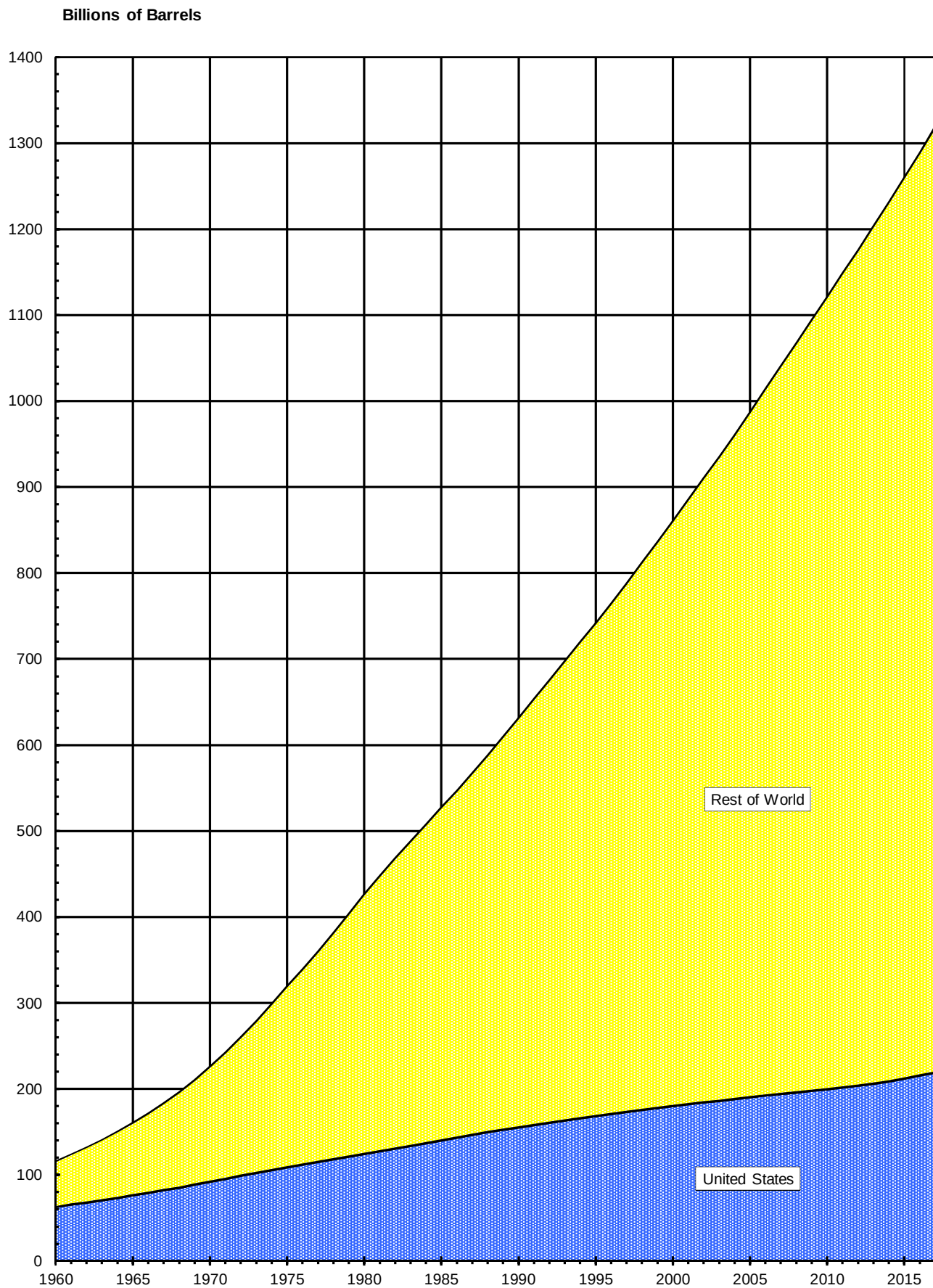


Chart 12

ACCUMULATIVE CRUDE OIL PRODUCTION**UNITED STATES AND WORLD TO JANUARY 1**
(Thousands of Barrels)

Year	World	United States	Percentage Provided by United States
1960	116,111,079	62,870,894	54.1
1961	123,787,307	65,445,827	52.9
1962	131,956,763	68,067,585	51.6
1963	140,828,176	70,743,774	50.2
1964	150,351,833	73,496,497	48.9
1965	160,637,534	76,283,319	47.5
1966	171,672,104	79,131,833	46.1
1967	183,673,458	82,159,596	44.7
1968	196,541,859	85,375,338	43.4
1969	210,622,879	88,704,380	42.1
1970	225,810,563	92,076,131	40.8
1971	242,489,817	95,593,581	39.4
1972	260,136,969	99,047,495	38.1
1973	278,738,034	102,502,863	36.8
1974	299,114,329	105,863,766	35.4
1975	319,539,178	109,066,351	34.1
1976	338,869,398	112,123,130	33.1
1977	359,866,565	115,099,310	32.0
1978	381,618,924	118,108,575	30.9
1979	403,492,024	121,286,791	30.1
1980	426,270,201	124,408,101	29.2
1981	447,992,404	127,554,620	28.5
1982	468,353,353	130,683,244	27.9
1983	487,871,939	133,839,959	27.4
1984	507,302,967	137,010,958	27.0
1985	527,248,869	140,260,654	26.6
1986	546,952,361	143,535,207	26.2
1987	567,475,170	146,703,459	25.9
1988	588,164,782	149,756,947	25.5
1989	609,665,621	152,740,119	25.1
1990	631,520,881	155,523,707	24.6
1991	653,610,300	158,218,224	24.2
1992	675,583,330	160,929,639	23.8
1993	697,580,461	163,554,271	23.4
1994	719,543,158	166,053,304	23.1
1995	741,873,996	168,484,780	22.7
1996	764,665,159	170,879,048	22.3
1997	787,973,349	173,245,065	22.0
1998	812,002,555	175,599,896	21.6
1999	836,485,600	177,881,815	21.3
2000	860,569,839	180,028,547	20.9
2001	885,663,397	182,159,254	20.6
2002	910,538,968	184,276,765	20.2
2003	935,112,000	186,373,353	19.9
2004	960,456,402	188,435,348	19.6
2005	987,038,972	190,426,742	19.3
2006	1,013,957,530	192,318,837	19.0
2007	1,040,730,184	194,175,177	18.7
2008	1,067,426,333	196,027,151	18.4
2009	1,094,548,263	197,856,285	18.1
2010	1,121,171,008	199,808,521	17.8
2011	1,148,405,892	201,806,965	17.6
2012	1,175,681,480	203,866,605	17.3
2013	1,203,542,489	206,244,367	17.1
2014	1,231,358,665	208,969,536	17.0
2015	1,259,841,724	212,164,451	16.8
2016	1,289,191,152	215,598,469	16.7
2017	1,318,657,802	218,840,060	16.6

AVERAGE WORLD CRUDE OIL PRICES

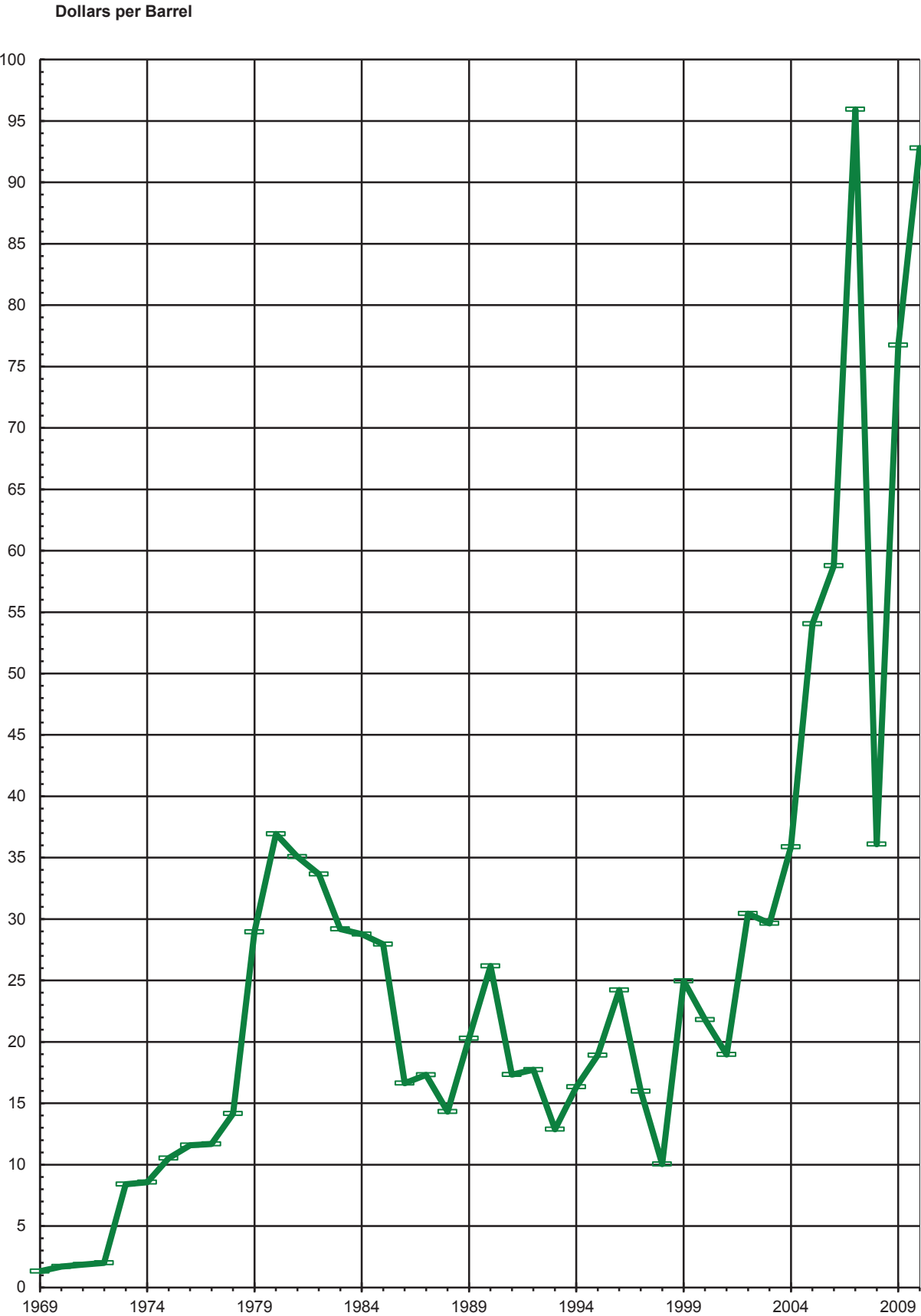


Chart 13

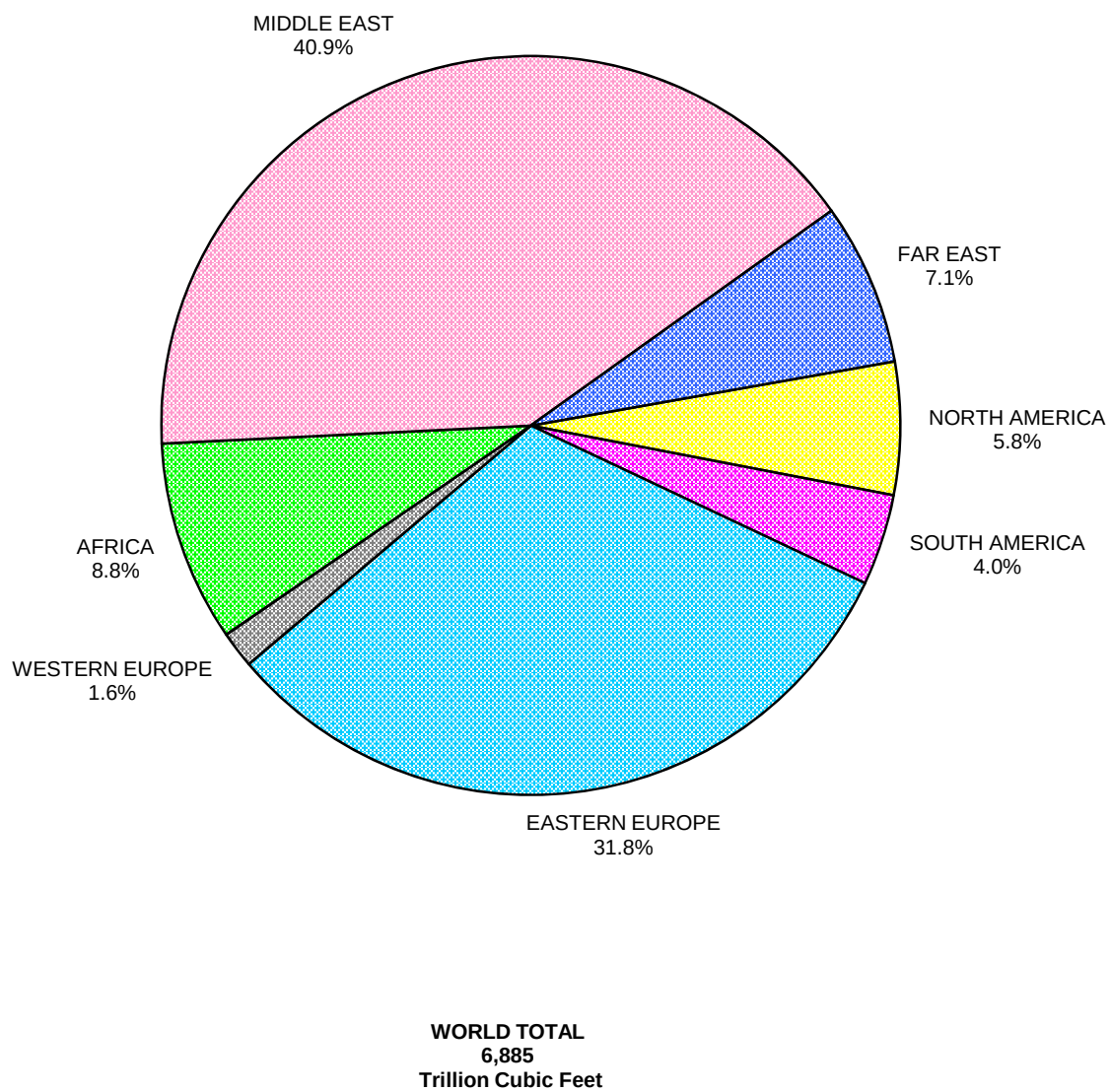
WORLD CRUDE OIL PRICES

(Year- End Prices in U.S.\$/bbl)

Year	Iran Light-34°	Indonesia Minas-34°	Libya¹ Es Sider-37°	Mexico Isthmus-33°	Nigeria³ Bonny Light-37°	Venezuela² Tia Juana Light-31°	Saudi Arabia* Light-34°	UK Brent Blend-38°
1969	1.36	1.67	2.09	...	2.10	2.05	1.35	...
1970	1.76	2.18	2.80	...	2.65	2.45	1.75	...
1971	1.91	2.96	2.80	...	2.80	2.45	1.90	...
1972	2.11	2.96	3.10	...	3.10	2.60	2.10	...
1973	10.63	10.80	14.30	...	12.60	9.30	9.60	...
1974	10.67	12.60	11.98	...	11.80	11.00	10.46	...
1975	11.62	12.80	12.21	12.10	12.84	11.12	11.51	...
1976	12.81	13.55	13.74	13.35	14.33	12.72	12.09	...
1977	12.81	13.55	13.80	13.40	14.33	12.82	12.70	...
1978	13.45	13.90	14.52	14.10	14.80	13.36	13.34	15.70
1979	30.37	27.50	34.50	32.00	29.97	25.20	26.00	26.02
1980	37.00	35.00	40.78	38.50	40.00	32.88	32.00	39.25
1981	34.20	35.00	36.50	35.00	36.50	32.88	34.00	36.60
1982	31.20	34.53	35.10	32.50	35.50	32.88	34.00	33.50
1983	28.00	29.53	30.15	29.00	30.00	27.88	29.00	30.00
1984	28.00	29.53	30.15	29.00	28.00	27.88	29.00	28.65
1985	28.05	28.53	30.15	26.21	28.65	28.05	28.00	26.00
1986	16.14	16.28	16.95	17.00	17.13	15.10	16.15	18.25
1987	15.55	17.56	18.52	14.83	18.92	17.62	17.52	18.00
1988	12.75	15.50	15.40	14.53	15.05	12.27	13.15	15.80
1989	18.20	18.55	20.40	19.90	21.20	24.69	18.40	21.00
1990	23.65	26.50	26.90	24.80	27.80	28.62	24.00	27.20
1991	15.50	18.65	17.20	15.80	18.20	19.67	15.90	17.75
1992	16.70	19.10	17.55	17.25	18.50	17.97	16.80	17.90
1993	12.40	14.15	12.55	11.86	13.50	12.97	12.40	13.15
1994	16.18	16.95	16.05	15.92	16.15	16.57	16.63	16.15
1995	17.73	20.05	19.20	18.53	19.70	18.52	18.20	19.37
1996	22.63	24.95	24.10	23.82	24.65	26.62	22.98	24.05
1997	14.93	16.50	16.72	15.80	16.50	15.93	15.50	15.89
1998	9.83	9.95	10.65	9.37	10.60	9.45	10.03	10.44
1999	24.63	24.15	25.85	24.75	25.55	24.85	24.78	25.10
2000	20.20	22.80	22.40	22.03	22.00	22.13	20.30	22.50
2001	18.90	18.89	19.63	17.72	19.88	17.78	17.68	21.20
2002	27.85	35.03	30.40	30.14	31.16	30.25	27.39	31.36
2003	28.67	32.10	29.47	29.99	29.97	30.10	27.08	29.73
2004	33.84	35.86	38.00	33.87	38.21	35.98	31.86	39.43
2005	52.56	53.95	55.89	52.41	56.97	52.52	50.86	57.25
2006	56.28	63.87	59.22	55.46	63.28	55.57	55.94	60.50
2007	94.96	98.34	96.79	93.74	98.52	93.85	93.02	98.42
2008	35.31	36.63	36.66	35.31	39.85	35.42	35.21	34.33
2009	74.94	79.97	76.73	76.00	77.69	76.11	75.21	77.27
2010	92.78	97.42	91.81	89.68	95.16	89.79	91.37	94.28

¹ Prices from 1974–1975 are for crude oil with 40° API gravity.² Prices from 1970–1985 are for 26° API gravity; 1986 to present 31° API gravity.³ Prices from 1969–2003 are for 36° API gravity.⁴ Prices from 1969–2003 are for 33° API gravity.

**ESTIMATED WORLD NATURAL GAS RESERVES BY AREA
AS OF JANUARY 1, 2016
(Percentage)**



ESTIMATED PROVED WORLD RESERVES OF NATURAL GAS BY COUNTRY

(Billions of Cubic Feet)

CONTINENT and COUNTRY	Estimated Reserves at 1/1/15	Estimated Reserves at 1/1/16	Percent World Reserves at 1/1/16	Production 2015	Reserve Production Ratio
NORTH AMERICA, TOTAL	457,932	402,198	5.84	36,604	11.7
Canada	70,179	76,678	1.11	5,448	13.5
Cuba	2,500	2,500	0.04	48	52.1
Mexico	16,549	15,290	0.22	2,336	6.8
United States	368,704	307,730	4.47	28,772	11.8
SOUTH AMERICA, TOTAL	271,323	271,914	3.95	9,452	28.7
Argentina	11,142	11,730	0.17	1,468 ¹	7.8
Bolivia	10,450	10,450	0.15	742	14.1
Brazil	16,172	16,636	0.24	1,238	13.3
Chile	3,460	3,460	0.05	39	88.7
Colombia	5,508	4,758	0.07	979	5.2
Ecuador	212	388	0.01	59	5.1
Peru	15,047	14,626	0.21	612	24.2
Trinidad and Tobago	12,240	11,503	0.17	1,481	8.0
Venezuela*	197,087	198,359	2.88	2,832	69.8
Other	5	4	0.00	1 ¹	4.5
EASTERN EUROPE, TOTAL	2,188,521	2,188,378	31.79	31,505	69.5
Azerbaijan	35,000	35,000	0.51	964	36.3
Kazakhstan	85,000	85,000	1.24	1,515	56.1
Poland	3,015	2,884	0.04	217	13.6
Romania	3,725	3,725	0.05	396	9.4
Russia	1,688,228	1,688,228	24.52	22,729	74.3
Turkmenistan	265,000	265,000	3.85	2,664 ¹	99.5
Ukraine	39,000	39,000	0.57	671	58.1
Uzbekistan	65,000	65,000	0.94	2,169 ¹	30.0
FSU - Other	800	800	0.01	10	80.0
Eastern Europe - Other	3,753	3,741	0.06	170	22.0
WESTERN EUROPE, TOTAL	118,895	107,691	1.56	8,380	13.5
Austria	301	279	0.00	45	6.4
Denmark	1,210	1,057	0.02	166	6.8
France	314	309	0.00	1	311.5
Germany	2,048	1,674	0.02	337	5.5
Italy	1,985	1,897	0.03	239	8.1
Netherlands	31,702	26,872	0.39	1,909	15.3
Norway	72,358	67,874	0.98	4,000 ¹	17.5
United Kingdom	8,502	7,254	0.11	1,675	4.7
Other	475	475	0.01	8	59.4
AFRICA, TOTAL	604,144	605,275	8.79	13,458	44.9
Algeria*	159,054	159,054	2.31	6,492	24.5
Angola	9,711	10,877	0.16	372	27.7
Cameroon	4,770	4,770	0.07	90	53.0
Egypt	77,200	77,200	1.12	1,742	44.3
Equatorial Guinea	1,300	1,300	0.02	297	4.4
Libya*	53,183	53,148	0.77	592	89.8
Mozambique	100,000	100,000	1.45	150 ¹	666.7
Nigeria*	180,490	180,490	2.62	3,010	60.0
Tunisia	2,300	2,300	0.03	87	26.4
Other	16,136	16,136	0.24	626	25.8
MIDDLE EAST, TOTAL	2,818,310	2,818,438	40.94	27,496	102.5
Bahrain	3,250	3,250	0.05	727	4.5
Iran*	1,201,382	1,201,382	17.45	9,098	132.0
Iraq*	111,522	111,522	1.62	885	126.0
Kuwait*	63,500	63,500	0.92	605	105.0
Oman	24,910	24,300	0.35	1,340 ¹	18.4
Qatar*	871,585	866,288	12.58	6,001	144.8
Saudi Arabia*	294,205	300,281	4.36	4,232	70.2
Syria	8,500	8,500	0.12	219	38.8
United Arab Emirates*	215,098	215,098	3.13	3,179	67.7
Yemen	16,900	16,900	0.25	1,072 ¹	15.8
Other	7,458	7,417	0.11	138	53.9
FAR EAST, TOTAL	489,772	490,954	7.13	19,664	24.9
Australia	30,400	30,400	0.44	2,384	12.8
Bangladesh	8,500	8,230	0.12	949	8.8
Brunei-Malaysia	52,084	52,765	0.77	3,219 ¹	16.3
Burma (Myanmar)	10,000	10,000	0.15	593 ¹	16.9
China	163,959	174,634	2.54	4,560	37.1
India	50,398	44,209	0.64	1,133	41.8
Indonesia*	103,350	101,540	1.47	3,000 ¹	34.1
New Zealand	1,361	1,303	0.02	181	7.4
Pakistan	24,700	23,640	0.34	1,500 ¹	16.1
Papua New Guinea	5,467	5,343	0.08	4 ¹	1351.3
Philippines	3,480	3,480	0.05	115 ¹	30.3
Thailand	8,415	7,752	0.11	1,535	5.3
Vietnam	24,700	24,700	0.36	365	67.7
Other	2,958	2,958	0.04	126	23.5
TOTAL WORLD	6,948,897	6,884,848	100.00	146,559	47.2
*OPEC COUNTRIES	3,450,456	3,450,662	50.12	39,926	86.4

¹ Estimated.

WORLD DEMAND FOR REFINED PRODUCTS

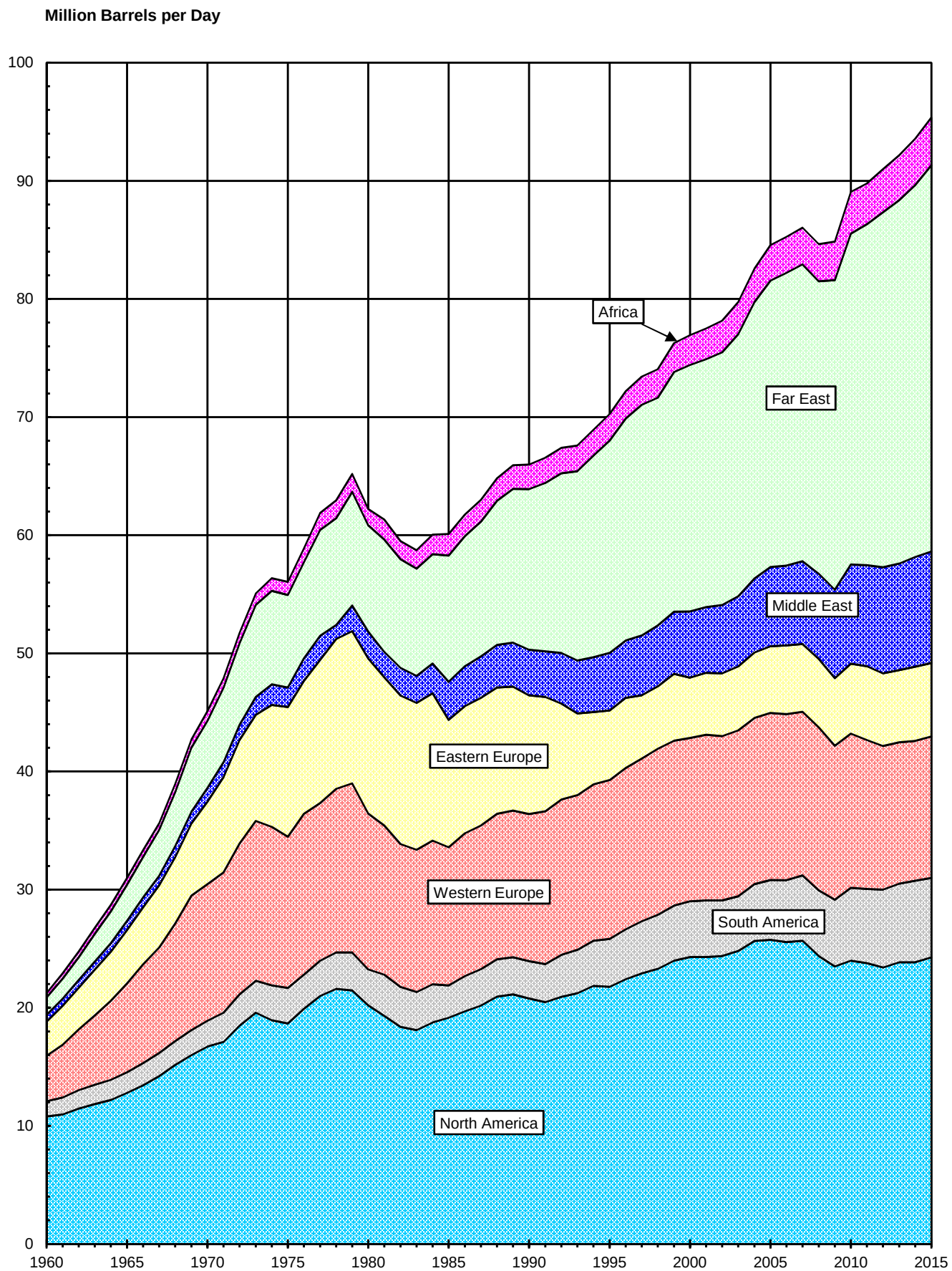


Chart 15

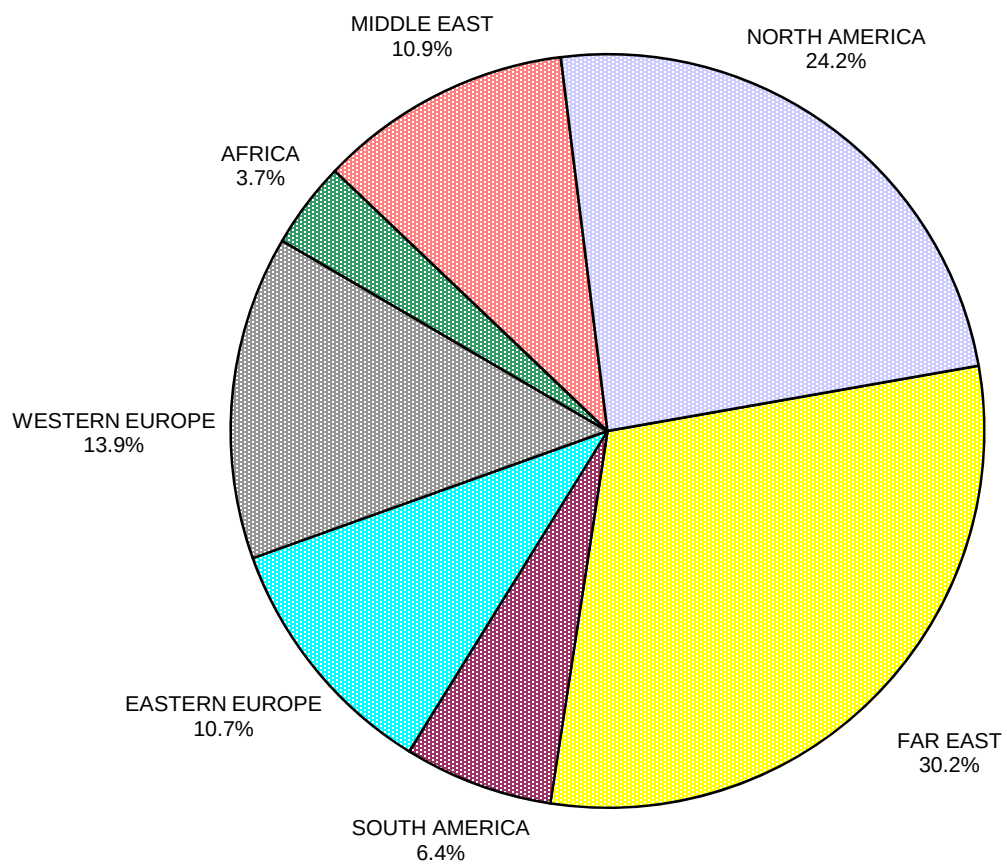
WORLD DEMAND FOR REFINED PRODUCTS

(World Petroleum Consumption)
(Thousands of Barrels per Day)

CONTINENT and COUNTRY	1992	1995	2000	2005	2010	2011	2012	2013	2014	2015
NORTH AMERICA, TOTAL	20,925	21,765	24,299	25,752	23,982	23,770	23,403	23,842	23,851	24,250
Canada	1,709	1,799	2,008	2,269	2,382	2,429	2,480	2,456	2,375	2,372
Cuba	180	187	195	198	164	171	171	167	175	178
Mexico	1,769	1,801	2,096	2,117	2,094	2,120	2,102	2,090	2,040	2,006
United States	17,033	17,725	19,701	20,802	19,180	18,887	18,487	18,967	19,100	19,534
Other	234	253	299	366	162	163	163	162	161	160
SOUTH AMERICA, TOTAL	3,554	4,061	4,704	5,058	6,167	6,282	6,596	6,653	6,902	6,731
Argentina	455	475	531	565	708	729	741	740	789	803
Brazil	1,521	1,788	2,121	2,171	2,699	2,776	2,924	3,033	3,157	3,087
Chile	165	212	240	272	322	332	332	339	336	332
Colombia	233	251	277	271	271	294	323	295	332	317
Dominican Republic	64	72	110	115	113	114	115	114	112	113
Ecuador	119	123	134	159	243	244	251	271	284	274
Panama	72	86	77	84	116	124	134	132	139	142
Peru	119	143	157	158	206	215	224	226	236	248
Venezuela*	414	448	500	633	813	749	828	778	790	676
Other	392	463	557	630	676	705	724	725	727	739
EASTERN EUROPE, TOTAL	8,126	5,902	5,097	5,654	5,929	6,241	6,151	6,121	6,287	6,223
Azerbaijan	203	179	137	115	83	92	97	100	100	101
Kazakhstan	404	269	195	229	234	271	245	251	249	253
Poland	279	318	411	471	568	559	533	505	505	533
Romania	250	244	224	222	193	188	191	190	179	183
Russia	4,423	2,976	2,579	2,785	3,135	3,423	3,444	3,490	3,615	3,512
Turkmenistan	76	64	62	96	134	138	147	143	155	156
Ukraine	813	484	260	307	307	293	262	242	246	222
Uzbekistan	190	185	146	145	82	77	68	63	60	60
F.S.U. - Other ¹	724	448	342	420	356	379	382	375	387	386
Eastern Europe - Other	764	735	741	864	837	821	782	762	791	817
WESTERN EUROPE, TOTAL	13,144	13,432	13,832	14,131	13,054	12,614	12,157	11,971	11,835	11,974
Austria	229	233	251	299	278	263	261	264	261	262
Belgium	509	550	606	660	659	618	604	623	617	650
Denmark	192	223	210	183	167	164	155	155	154	154
France	1,933	1,915	2,001	1,990	1,821	1,779	1,739	1,714	1,691	1,692
Germany	2,841	2,882	2,767	2,624	2,467	2,392	2,389	2,435	2,374	2,368
Greece	323	355	399	424	370	351	306	283	283	295
Italy	1,894	1,942	1,854	1,781	1,544	1,494	1,370	1,260	1,266	1,274
Netherlands	769	767	855	1,009	1,026	1,024	997	991	992	962
Norway	189	208	209	222	229	222	215	218	211	230
Portugal	279	290	333	337	274	256	230	234	233	238
Spain	1,104	1,187	1,433	1,607	1,441	1,385	1,301	1,208	1,200	1,247
Sweden	371	388	362	360	336	315	300	297	306	304
Switzerland	282	267	274	272	261	242	246	251	230	227
United Kingdom	1,815	1,816	1,765	1,819	1,626	1,582	1,535	1,508	1,509	1,547
Other	414	409	513	544	555	527	509	530	508	524
AFRICA, TOTAL	2,156	2,242	2,511	3,004	3,524	3,443	3,646	3,808	3,922	4,035
Algeria*	210	205	225	257	354	349	377	400	412	428
Egypt	444	448	539	657	705	709	743	745	763	780
Libya*	150	179	210	265	315	190	256	251	270	259
Morocco	130	142	158	174	268	281	291	287	281	283
Nigeria*	265	284	246	312	285	271	278	283	305	325
South Africa	412	421	458	537	584	616	639	635	627	662
Sudan and South Sudan	33	26	43	77	115	111	108	117	116	124
Tunisia	71	70	85	90	88	81	85	88	94	100
Other	441	467	547	635	810	835	869	1,002	1,054	1,074
MIDDLE EAST, TOTAL	4,296	4,875	5,613	6,702	8,399	8,552	8,985	9,015	9,297	9,447
Iran*	1,113	1,185	1,319	1,613	1,833	1,848	1,904	1,980	1,962	1,850
Iraq*	341	474	462	541	655	705	781	798	844	788
Israel	181	228	252	233	251	249	296	234	189	201
Kuwait*	120	173	264	330	445	445	450	441	498	489
Qatar*	30	35	48	86	197	206	228	217	246	255
Saudi Arabia*	1,219	1,255	1,537	1,964	2,716	2,785	2,980	2,964	3,086	3,302
Syria	185	226	256	259	308	293	222	180	143	139
Turkey	492	608	667	659	675	655	689	747	764	885
United Arab Emirates*	305	343	370	497	658	698	737	758	831	849
Yemen	83	73	97	128	163	135	130	141	134	100
Other	227	275	341	392	498	533	568	555	600	589
FAR EAST, TOTAL	15,195	17,981	20,872	24,257	28,001	28,879	30,049	30,766	31,477	32,688
Australia	730	811	872	964	1,035	1,073	1,104	1,125	1,113	1,106
China	2,662	3,363	4,796	6,795	9,527	10,053	10,550	11,084	11,637	12,376
Hong Kong	152	186	245	331	430	384	353	347	322	388
India	1,275	1,655	2,147	2,550	3,306	3,463	3,618	3,655	3,834	4,142
Indonesia*	707	807	1,037	1,279	1,487	1,575	1,649	1,664	1,685	1,622
Japan	5,446	5,659	5,480	5,298	4,328	4,344	4,630	4,504	4,248	4,120
Korea, South	1,527	2,008	2,135	2,191	2,269	2,259	2,322	2,328	2,348	2,473
Malaysia	302	399	465	522	631	674	671	716	733	690
New Zealand	109	125	134	153	153	153	152	155	157	161
Pakistan	227	298	365	336	416	415	424	441	482	504
Philippines	260	328	353	312	309	300	310	321	347	398
Singapore	420	512	717	869	1,150	1,217	1,225	1,243	1,285	1,334
Taiwan	557	737	865	940	1,021	945	934	932	947	955
Thailand	476	679	725	1,008	1,075	1,109	1,152	1,221	1,241	1,252
Vietnam	61	94	176	267	411	428	453	374	396	432
Other	284	320	360	442	453	487	502	656	702	735
TOTAL, WORLD	67,396	70,258	76,928	84,558	89,056	89,781	90,987	92,176	93,571	95,348
*OPEC COUNTRIES	4,874	5,388	6,218	7,777	9,758	9,821	10,468	10,534	10,929	10,843

¹ Former Soviet Union.

**WORLD REFINING CAPACITY BY AREA
AS OF JANUARY 1, 2017
(Percentage)**



WORLD TOTAL
91,593 Thousand Barrels per Day

WORLD REFINING CAPACITY AS OF JANUARY 1

(Thousands of Barrels per Day)

CONTINENT and COUNTRY	1950	1960	1970	1980	1990	2000	2016	2017	Percent of World Total as of 1/1/17
NORTH AMERICA, TOTAL	7,258	11,614	14,588	21,496	19,890	20,279	21,779	22,190	24.23
Canada	329	920	1,400	2,222	1,852	1,912	2,008	2,058	2.25
Cuba	73	87	93	160	280	301	134	134	0.15
Mexico	160	357	495	1,394	1,514	1,525	1,540	1,540	1.68
United States ¹	6,696	10,250	12,600	17,720	16,244	16,541	18,097	18,458	20.15
SOUTH AMERICA, TOTAL	1,164	2,397	4,526	7,066	5,521	6,147	5,988	5,867	6.40
Argentina	152	238	457	676	689	662	634	634	0.69
Brazil	12	156	502	1,205	1,397	1,783	2,032	2,138	2.33
Netherlands Antilles	617	680	840	792	320	320	320	320	0.35
Trinidad and Tobago	104	182	430	456	300	160	168	168	0.18
Venezuela	254	886	1,313	1,446	1,201	1,239	1,283	1,284	1.40
Other	25	255	984	2,491	1,614	1,983	1,551	1,323	1.45
EASTERN EUROPE	1,134	3,234	7,013	13,836	15,438	12,049	10,215	9,817	10.72
Azerbaijan	...	...	...	...	...	...	120	120	0.13
F.S.U.	900	2,800	5,640	10,950	12,300	9,762	...	...	...
Kazakhstan	...	...	...	...	...	...	340	340	0.37
Romania	182	260	356	608	617	499	380	377	0.41
Russia	...	...	...	...	...	...	5,452	5,122	5.59
Turkmenistan	...	...	...	...	...	...	237	237	0.26
Ukraine	...	...	...	...	...	...	880	880	0.96
F.S.U. - Other ³	...	...	...	...	...	...	885	819	0.90
Eastern Europe - Other	52	174	1,017	2,278	2,521	1,788	1,921	1,922	2.10
WESTERN EUROPE, TOTAL	863	3,970	13,763	19,946	13,509	13,770	12,833	12,766	13.94
France	306	769	2,317	3,385	1,820	1,902	1,406	1,406	1.54
Germany ²	81	573	2,359	2,986	1,507	2,275	2,188	2,189	2.39
Italy	107	773	2,963	4,131	2,804	2,341	2,117	2,117	2.31
Netherlands	77	359	1,362	1,828	1,381	1,188	1,213	1,213	1.32
Spain	17	146	685	1,455	1,293	1,316	1,428	1,428	1.56
United Kingdom	197	963	2,301	2,527	1,831	1,785	1,390	1,390	1.52
Other	78	387	1,776	3,634	2,873	2,963	3,091	3,023	3.30
AFRICA, TOTAL	39	116	787	1,665	2,824	3,045	3,359	3,334	3.64
Algeria	...	...	48	122	465	503	523	528	0.58
Egypt	39	87	175	234	489	578	763	763	0.83
Libya	...	...	10	138	329	348	380	380	0.42
Nigeria	...	...	46	160	433	439	445	424	0.46
South Africa	...	25	184	478	434	467	503	493	0.54
Other	...	4	324	533	674	710	745	746	0.81
MIDDLE EAST, TOTAL	916	1,436	2,439	3,519	5,172	6,617	10,021	9,950	10.86
Iran	502	495	645	921	530	1,474	2,039	2,039	2.23
Iraq	...	...	...	...	...	347	980	980	1.07
Kuwait	25	270	569	645	819	865	936	936	1.02
Saudi Arabia	140	189	377	487	1,484	1,710	2,907	2,907	3.17
Turkey	1	7	149	356	725	691	663	663	0.72
United Arab Emirates	...	...	...	...	...	429	1,178	1,107	1.21
Other	248	475	699	1,110	1,614	1,101	1,318	1,318	1.44
FAR EAST, TOTAL	284	1,473	5,866	11,986	12,181	19,643	26,348	27,669	30.21
Australia and New Zealand	14	237	660	799	770	910	555	555	0.61
Brunei, Malaysia, and Singapore	10	46	320	1,093	1,049	1,788	2,080	1,881	2.05
China	8	98	300	1,600	2,200	4,347	8,296	9,701	10.59
India	6	112	446	557	1,080	1,858	4,751	4,751	5.19
Indonesia	203	274	268	528	714	993	1,007	1,115	1.22
Japan	34	640	3,140	5,509	4,198	4,998	3,917	3,817	4.17
South Korea	...	...	180	601	867	2,540	2,959	2,959	3.23
Other	9	66	552	1,299	1,303	2,209	2,783	2,890	3.15
TOTAL WORLD	11,658	24,240	48,982	79,514	74,535	81,550	90,543	91,593	100.00

¹ Excludes shutdown refining capacity.² Excludes East Germany prior to 1990.³ Includes Armenia, Belarus, Estonia, Georgia, Kyrgyzstan, Latvia, Lithuania, Moldova, Tajikistan, and Uzbekistan.⁴ Not available.⁵ Included in other.

CRUDE OIL RESERVES OF THE UNITED STATES

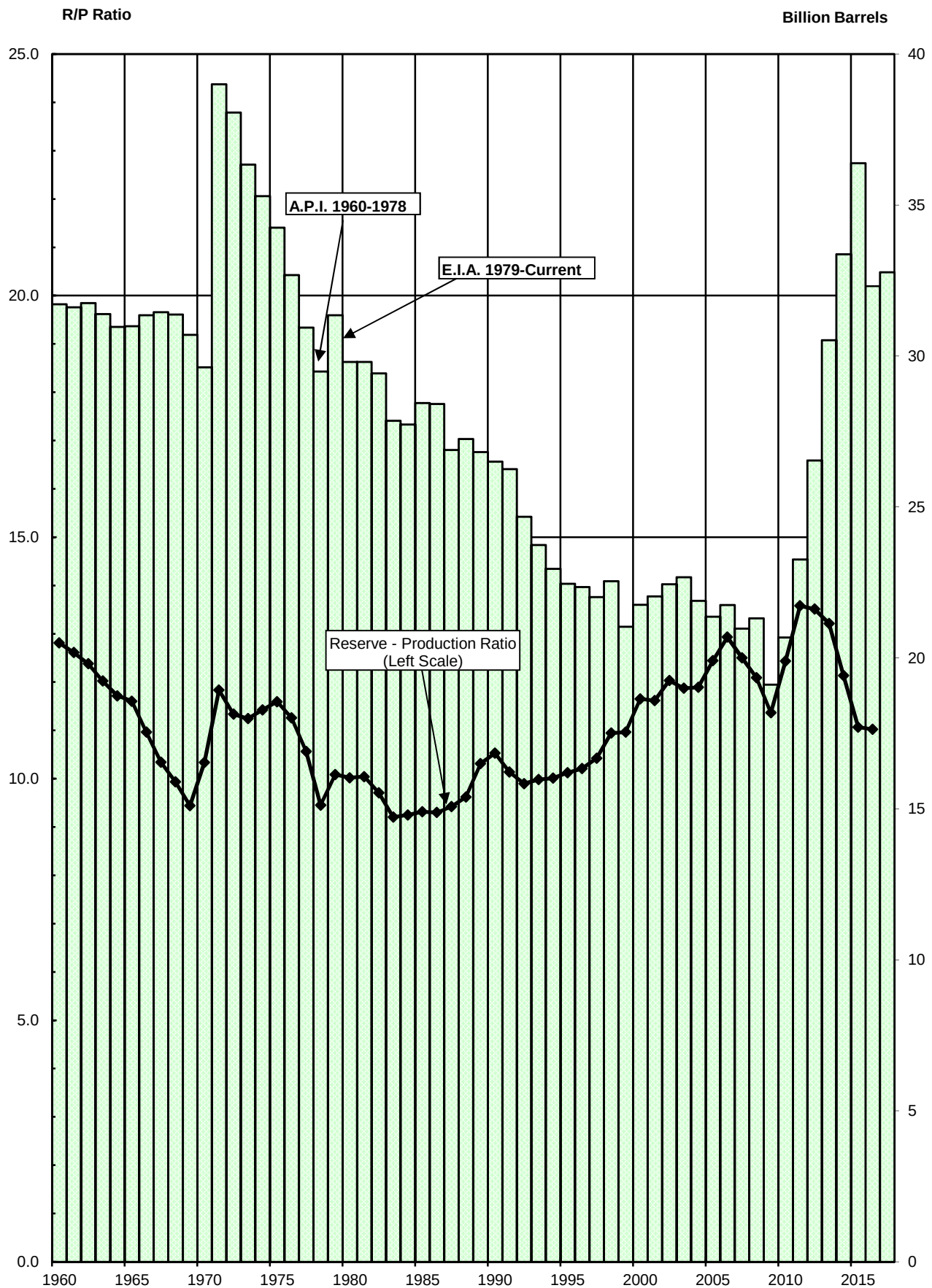


Chart 17

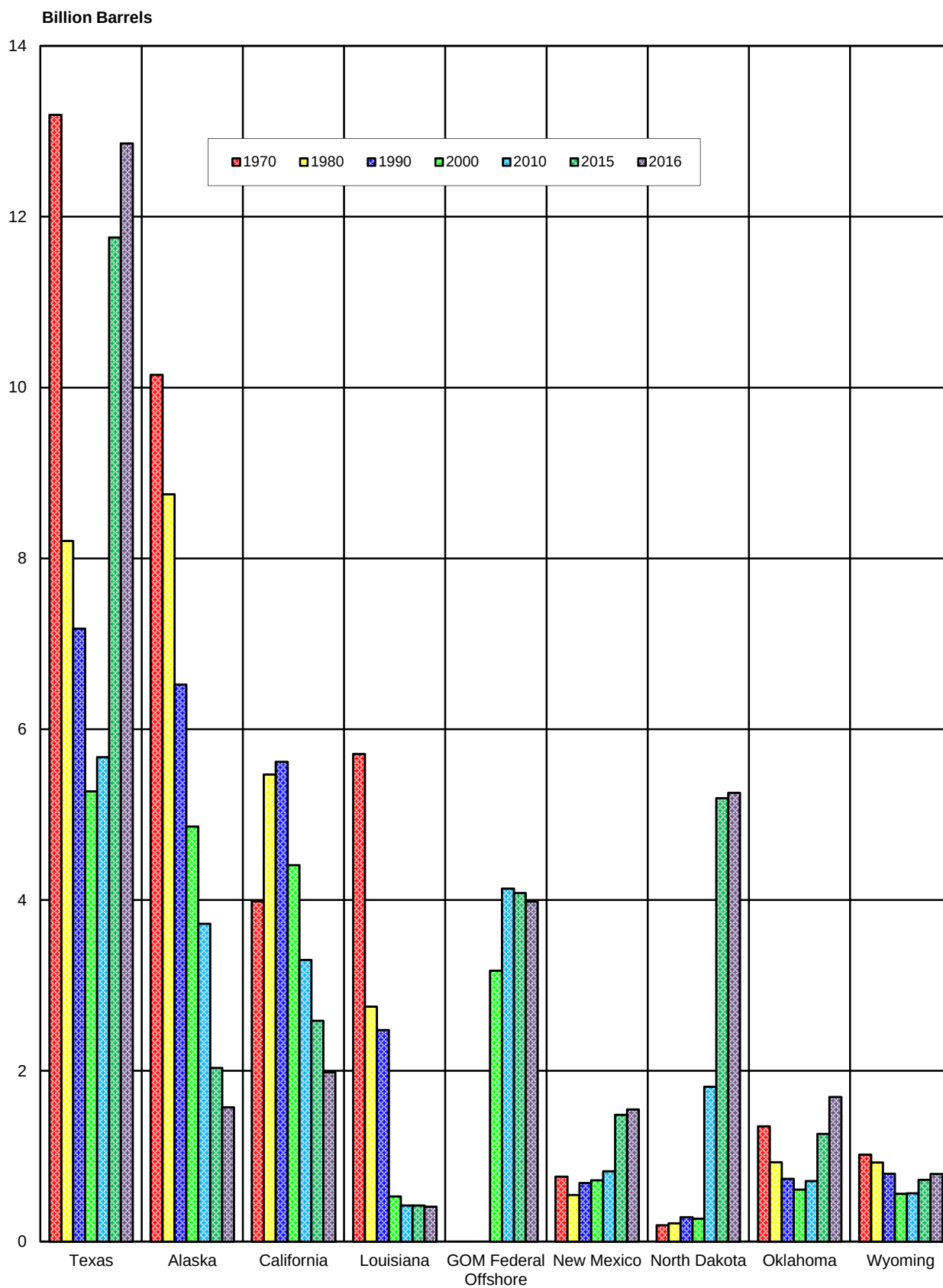
UNITED STATES CRUDE OIL RESERVES AND PRODUCTION¹

(Thousands of Barrels)

Year	Estimated Proved Reserves Beginning of Year	Reserves ² Proved During Year	Crude Oil Production During Year	Estimated Proved Reserves End of Year	Reserve Production Ratio
API Estimates					
1960	31,719,347	2,365,328	2,471,464	31,613,211	12.8
1961	31,613,211	2,657,567	2,512,273	31,758,505	12.6
1962	31,758,505	2,180,896	2,550,178	31,389,223	12.4
1963	31,389,223	2,174,110	2,593,343	30,969,990	12.0
1964	30,969,990	2,664,767	2,644,247	30,990,510	11.7
1965	30,990,510	3,048,079	2,686,198	31,352,391	11.6
1966	31,352,391	2,963,978	2,864,242	31,452,127	11.0
1967	31,452,127	2,962,122	3,037,579	31,376,670	10.3
1968	31,376,670	2,454,635	3,124,188	30,707,117	9.9
1969	30,707,117	2,120,036	3,195,291	29,631,862	9.4
1970	29,631,862	12,688,918 ³	3,319,445	39,001,335	10.3
1971	39,001,335	2,317,732	3,256,110	38,062,957	11.8
1972	38,062,957	1,557,848	3,281,397	36,339,408	11.3
1973	36,339,408	2,145,831	3,185,400	35,299,839	11.2
1974	35,299,839	1,993,573	3,043,456	34,249,956	11.4
1975	34,249,956	1,318,463	2,886,292	32,682,127	11.6
1976	32,682,127	1,085,291	2,825,252	30,942,166	11.3
1977	30,942,166	1,403,780	2,859,544	29,486,402	10.6
1978	29,486,402	1,347,256	3,029,898	27,803,760	9.5
EIA Estimates					
1979	31,355,000	1,410,000	2,955,000	29,810,000	10.1
1980	29,810,000	2,970,000	2,975,000	29,805,000	10.0
1981	29,805,000	2,570,000	2,949,000	29,426,000	10.0
1982	29,426,000	1,382,000	2,950,000	27,858,000	9.7
1983	27,858,000	2,897,000	3,020,000	27,735,000	9.2
1984	27,735,000	3,748,000	3,037,000	28,446,000	9.2
1985	28,446,000	3,022,000	3,052,000	28,416,000	9.3
1986	28,416,000	1,446,000	2,973,000	26,889,000	9.3
1987	26,889,000	3,240,000	2,873,000	27,256,000	9.4
1988	27,256,000	2,380,000	2,811,000	26,825,000	9.6
1989	26,825,000	2,262,000	2,586,000	26,501,000	10.3
1990	26,501,000	2,258,000	2,505,000	26,254,000	10.5
1991	26,254,000	940,000	2,512,000	24,682,000	10.1
1992	24,682,000	1,509,000	2,446,000	23,745,000	9.9
1993	23,745,000	1,551,000	2,339,000	22,957,000	10.0
1994	22,957,000	1,768,000	2,268,000	22,457,000	10.0
1995	22,457,000	2,107,000	2,213,000	22,351,000	10.1
1996	22,351,000	1,839,000	2,173,000	22,017,000	10.2
1997	22,017,000	2,667,000	2,138,000	22,546,000	10.4
1998	22,546,000	479,000	1,991,000	21,034,000	10.9
1999	21,034,000	2,683,000	1,952,000	21,765,000	11.0
2000	21,765,000	2,160,000	1,880,000	22,045,000	11.7
2001	22,045,000	2,316,000	1,915,000	22,446,000	11.6
2002	22,446,000	2,106,000	1,875,000	22,677,000	12.0
2003	22,677,000	1,091,000	1,877,000	21,891,000	11.9
2004	21,891,000	1,299,000	1,819,000	21,371,000	11.9
2005	21,371,000	2,119,000	1,733,000	21,757,000	12.4
2006	21,757,000	867,000	1,652,000	20,972,000	12.9
2007	20,972,000	2,036,000	1,691,000	21,317,000	12.5
2008	21,317,000	-524,000	1,672,000	19,121,000	12.1
2009	19,121,000	3,312,000	1,751,000	20,682,000	11.4
2010	20,682,000	4,352,000	1,767,000	23,267,000	12.4
2011	23,267,000	5,111,000	1,834,000	26,544,000	13.6
2012	26,544,000	6,097,000	2,112,000	30,529,000	13.5
2013	30,529,000	5,260,000	2,418,000	33,371,000	13.2
2014	33,371,000	5,888,000	2,874,000	36,385,000	12.1
2015	36,385,000	-963,000	3,104,000	32,318,000	11.1
2016	32,318,000	3,408,000	2,953,000	32,773,000	11.0
2017	32,773,000	...	...	...	...

¹ Excludes lease condensate production.² Total discoveries, revisions, and extensions.³ Includes 9.6 billion barrels for Alaska's Prudhoe Bay field discovered in 1968 and not previously included.

**PROVED CRUDE OIL RESERVES BY SELECTED STATES
AS OF DECEMBER 31**



PROVED CRUDE OIL RESERVES, BY STATES AS OF DECEMBER 31⁴

(Millions of Barrels)

P.A.D. DISTRICT AND STATES	API Estimates			EIA Estimates							
	1960	1970	1979	1979	1980	1990	2000	2010	2014	2015	2016
P.A.D. DISTRICT I	193	190	212	209	199	95	103	57	103	41	22
Florida	2	75	123	128	134	42	76	18	70	16	14
New York	32	11	10	... ¹	... ¹	... ¹	... ¹	... ¹	... ¹	... ¹	... ¹
Pennsylvania	108	51	51	33	35	22	15	22	22	13	2
West Virginia	51	53	28	48	30	31	12	17	11	12	6
P.A.D. DISTRICT II	4,096	2,624	2,058	2,069	1,992	1,731	1,400	2,998	7,902	6,963	7,460
Illinois	556	229	133	136	113	131	111	64	34	31	36
Indiana	66	37	25	40	23	12	15	8	8	8	4
Kansas	884	539	345	377	310	321	237	295	414	337	358
Kentucky	129	61	31	25	35	33	24	15	16	10	10
Michigan	78	46	176	159	205	124	56	40	53	43	51
Nebraska	86	41	30	25	46	26	18	10	15	17	14
North Dakota	431	192	175	211	214	285	270	1,814	6,043	5,193	5,256
Ohio	75	128	138	82	116	65	59	42	78	62	38
Oklahoma	1,791	1,351	1,005	1,014	930	734	610	710	1,241	1,262	1,693
P.A.D. DISTRICT III	21,369	20,216	10,957	12,017	11,867	10,672	9,959	11,385	19,174	18,024	19,008
Alabama	33	65	28	45	54	44	34	42	66	64	43
Arkansas	302	130	107	107	107	60	48	40	65	51	40
Gulf of Mexico Federal Offshore ⁵	... ³	... ³	... ³	... ³	... ³	... ³	3,174	4,135	4,531	4,082	3,983
Louisiana ²	4,785	5,710	2,555	2,780	2,751	2,477	529	424	534	424	408
Mississippi	407	355	169	238	202	227	182	247	230	158	126
New Mexico	1,084	761	462	563	547	687	719	823	1,476	1,486	1,549
Texas ²	14,758	13,195	7,636	8,284	8,206	7,177	5,273	5,674	12,272	11,759	12,859
P.A.D. DISTRICT IV	2,266	1,830	1,242	1,353	1,488	1,569	1,296	1,771	3,152	2,652	2,715
Colorado	364	389	152	159	183	305	217	386	1,200	1,212	1,267
Montana	267	242	137	152	179	221	235	369	444	326	285
Utah	208	182	144	201	198	249	283	449	555	389	372
Wyoming	1,427	1,017	809	841	928	794	561	567	953	725	791
P.A.D. DISTRICT V	3,686	14,133	12,569	14,140	14,221	12,144	9,270	7,021	6,027	4,620	3,555
Alaska	27	10,149	8,924	8,875	8,751	6,524	4,861	3,722	2,855	2,034	1,572
California ⁶	3,659	3,984	3,645	5,265	5,470	5,620	4,409	3,299	3,172	2,586	1,983
MISCELLANEOUS	3	8	13	22	38	43	17	35	27	18	13
TOTAL UNITED STATES	31,613	39,001	27,051	29,810	29,805	26,254	22,045	23,267	36,385	32,318	32,773
LOWER 48 STATES	31,586	28,852	18,127	20,935	21,054	19,730	17,184	19,545	33,530	30,284	31,201
Onshore	... ³	... ³	... ³	18,034	18,080	16,349	13,579	14,834	28,399	25,736	26,951
Offshore	... ³	... ³	... ³	2,901	2,974	3,381	3,605	4,711	5,131	4,548	4,250

¹ Included in miscellaneous.² Includes federal offshore waters until 2000.³ Not available.⁴ Excludes lease condensate.⁵ Beginning in 1992, Gulf of Mexico reported separately.⁶ Includes federal offshore waters.

CRUDE OIL RESERVES, PRODUCTION AND RESERVE ADDITIONS

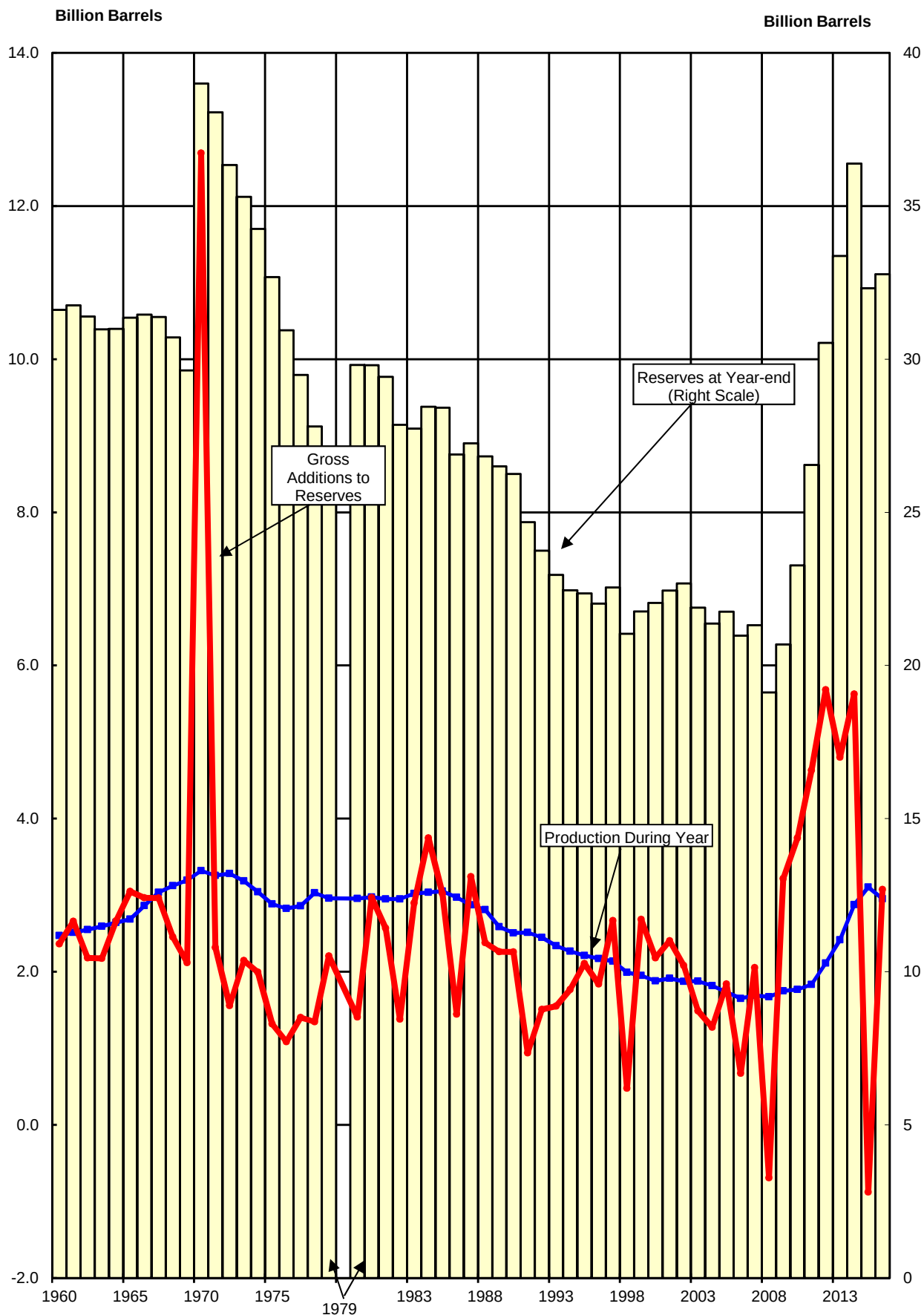


Chart 19

UNITED STATES CRUDE OIL RESERVE ESTIMATES^{1,2}AS OF DECEMBER 31
(Millions of Barrels)

Year	Net Adjustments	Net Revisions	Extensions	New Field Discoveries	New Reservoir Discoveries in Old Fields	Annual Production	Year-end Proved Reserves	Gross Reserves Added	Reserve Production Ratio
API Estimates									
1960	...	788	1,324	141	113	2,471	31,613	2,365	12.82
1961	...	1,087	1,209	107	254	2,512	31,759	2,658	12.61
1962	...	759	1,041	92	288	2,550	31,389	2,181	12.38
1963	...	966	858	97	253	2,593	30,970	2,174	12.02
1964	...	899	1,419	127	220	2,644	30,991	2,665	11.72
1965	...	1,783	793	237	235	2,686	31,352	3,048	11.61
1966	...	1,839	814	160	150	2,864	31,452	2,964	10.96
1967	...	1,901	716	125	220	3,038	31,377	2,962	10.34
1968	...	1,320	777	166	191	3,124	30,707	2,455	9.94
1969	...	1,258	615	96	151	3,195	29,632	2,120	9.44
1970	...	2,089	631	9,853	116	3,319	39,001	12,689	10.34
1971	...	1,600	561	91	65	3,256	38,063	2,318	11.83
1972	...	820	459	123	155	3,281	36,339	1,558	11.34
1973	...	1,552	390	116	88	3,185	35,300	2,146	11.25
1974	...	1,311	369	226	88	3,043	34,250	1,994	11.43
1975	...	677	340	173	128	2,886	32,682	1,318	11.60
1976	...	489	466	68	63	2,825	30,942	1,085	11.26
1977	...	770	365	160	109	2,860	29,486	1,404	10.56
1978	...	707	367	200	73	3,030	27,804	1,347	9.45
1979	...	1,491	368	239	108	2,958	27,051	2,206	9.27
EIA Estimates									
1979	337	437	424	108	104	2,955	29,810	1,410	10.35
1980	219	1,889	572	143	147	2,975	29,805	2,970	10.02
1981	138	1,271	750	254	157	2,949	29,426	2,570	10.04
1982	-83	434	634	204	193	2,950	27,858	1,382	9.71
1983	462	1,511	629	105	190	3,020	27,735	2,897	9.20
1984	159	2,445	744	242	158	3,037	28,446	3,748	9.25
1985	429	1,598	742	84	169	3,052	28,416	3,022	9.32
1986	57	855	405	48	81	2,973	26,889	1,446	9.30
1987	233	2,316	484	96	111	2,873	27,256	3,240	9.42
1988	364	1,463	355	71	127	2,811	26,825	2,380	9.62
1989	213	1,333	514	112	90	2,586	26,501	2,262	10.31
1990	86	1,483	456	98	135	2,505	26,254	2,258	10.53
1991	163	223	365	97	92	2,512	24,682	940	10.14
1992	290	735	391	8	85	2,446	23,745	1,509	9.90
1993	271	495	356	319	110	2,339	22,957	1,551	9.98
1994	189	1,007	397	64	111	2,268	22,457	1,768	10.01
1995	122	1,028	500	114	343	2,213	22,351	2,107	10.12
1996	175	737	543	243	141	2,173	22,017	1,839	10.21
1997	520	914	477	637	119	2,138	22,546	2,667	10.42
1998	-638	518	327	152	120	1,991	21,034	479	10.94
1999	139	1,819	259	321	145	1,952	21,765	2,683	10.96
2000	143	746	766	276	249	1,880	22,045	2,180	11.65
2001	-4	-158	866	1,407	292	1,915	22,446	2,403	11.62
2002	416	720	492	300	154	1,875	22,677	2,082	12.03
2003	163	94	426	705	101	1,877	21,891	1,489	11.87
2004	74	420	617	33	132	1,819	21,371	1,276	11.89
2005	221	569	805	205	41	1,733	21,757	1,841	12.44
2006	94	2	504	30	43	1,652	20,972	673	12.93
2007	65	1,200	651	66	73	1,691	21,317	2,055	12.50
2008	278	-2,039	805	142	124	1,672	19,121	-690	12.09
2009	-4	1,863	1,155	122	81	1,751	20,682	3,217	11.37
2010	144	1,859	1,495	88	161	1,767	23,267	3,747	12.44
2011	199	1,325	2,571	477	59	1,834	26,544	4,631	13.58
2012	109	935	4,462	53	122	2,112	30,529	5,681	13.51
2013	-620	518	4,395	188	319	2,418	33,371	4,800	13.21
2014	516	321	4,430	151	207	2,874	36,385	5,625	12.14
2015	1,155	-4,900	2,811	20	38	3,104	32,318	-876	11.07
2016	262	17	2,794	...	...	2,953	32,773	3,073	11.02

¹ Excludes lease condensate.² Excludes sales and acquisitions.³ Included in extensions.

UNITED STATES DOMESTIC PRODUCTION OF CRUDE OIL, NATURAL GAS LIQUIDS, AND OTHER HYDROCARBONS

Million Barrels Per Day

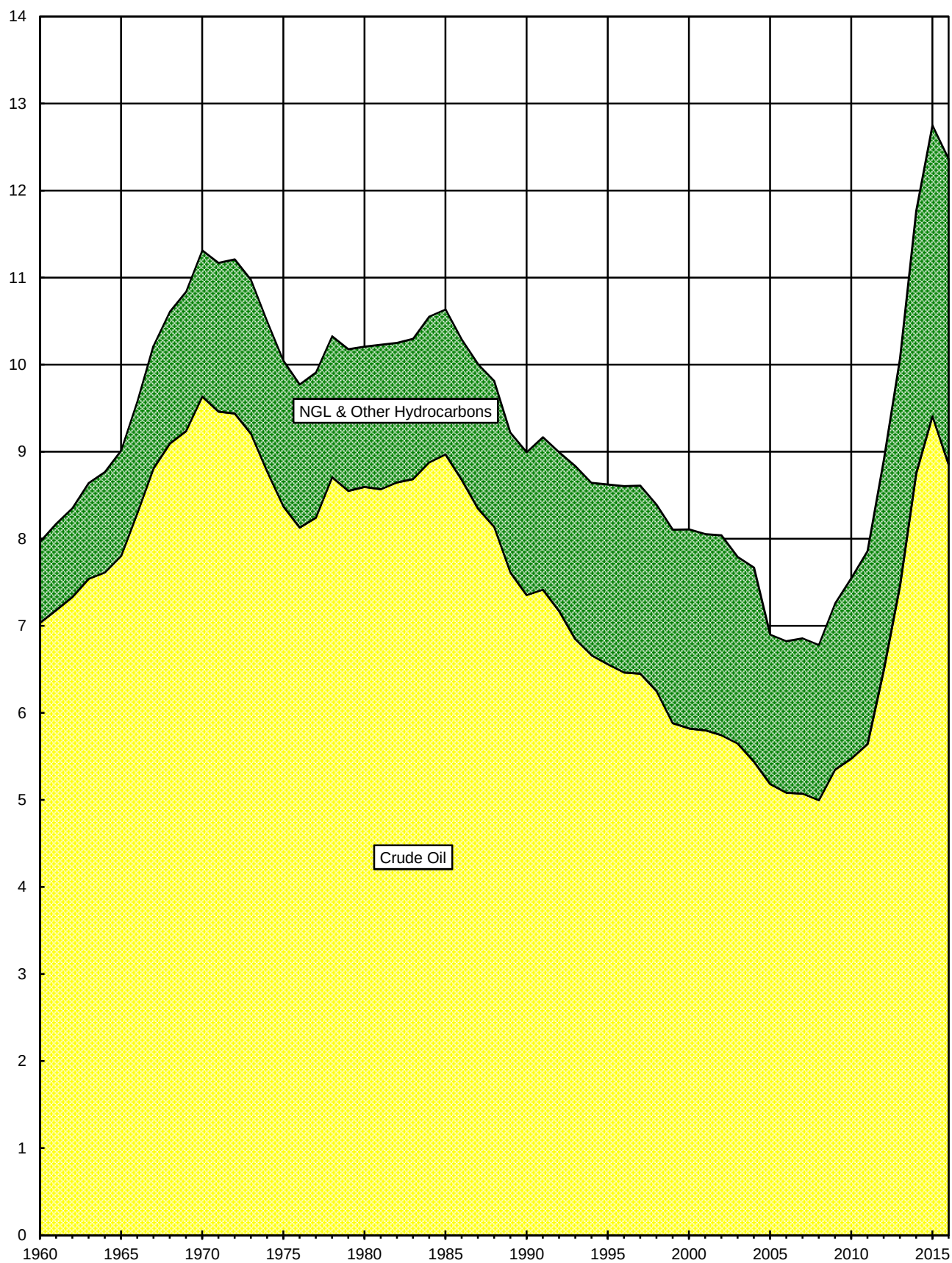


Chart 20

**UNITED STATES DOMESTIC PRODUCTION OF CRUDE OIL,
NATURAL GAS LIQUIDS, AND OTHER HYDROCARBONS**
(Thousands of Barrels)

<u>Year</u>	<u>Crude¹</u>	<u>Daily Average</u>	<u>Natural Gas Plant Liquids</u>	<u>Other^{2,3} Hydrocarbons</u>	<u>All Oils Total Production</u>	<u>Daily Average</u>
1960	2,574,933	7,035	340,157	275	2,915,365	7,965
1961	2,621,758	7,183	361,689	169	2,983,616	8,174
1962	2,676,189	7,332	372,665	91	3,048,945	8,353
1963	2,752,723	7,542	401,116	80	3,153,919	8,641
1964	2,786,822	7,614	422,471	29	3,209,322	8,769
1965	2,848,514	7,804	441,556	13	3,290,083	9,014
1966	3,027,763	8,295	468,635	30	3,496,428	9,579
1967	3,215,742	8,810	514,456	87	3,730,285	10,220
1968	3,329,042	9,096	550,311	3,377	3,882,730	10,609
1969	3,371,751	9,238	580,241	4,213	3,956,205	10,839
1970	3,517,450	9,637	605,916	6,238	4,129,604	11,314
1971	3,453,914	9,463	617,815	6,074	4,077,803	11,172
1972	3,455,368	9,441	638,216	10,118	4,103,702	11,212
1973	3,360,903	9,208	634,423	10,716	4,006,042	10,975
1974	3,202,585	8,774	616,098	13,057	3,831,740	10,498
1975	3,056,779	8,375	595,958	13,779	3,666,516	10,045
1976	2,976,180	8,132	587,045	13,949	3,577,174	9,774
1977	3,009,265	8,245	590,455	18,391	3,618,111	9,913
1978	3,178,216	8,707	572,086	19,291	3,769,593	10,328
1979	3,121,310	8,552	578,023	16,133	3,715,466	10,179
1980	3,146,519	8,597	572,274	17,447	3,736,240	10,208
1981	3,128,624	8,572	580,529	24,962	3,734,115	10,230
1982	3,156,715	8,649	561,908	23,198	3,741,821	10,252
1983	3,170,999	8,688	564,699	23,484	3,759,182	10,299
1984	3,249,696	8,879	595,152	17,911	3,862,759	10,554
1985	3,274,553	8,971	582,206	25,249	3,882,008	10,636
1986	3,168,252	8,680	564,401	22,722	3,755,375	10,289
1987	3,047,378	8,349	580,714	24,898	3,652,990	10,008
1988	2,979,123	8,140	593,283	20,945	3,593,351	9,818
1989	2,778,773	7,613	564,125	21,991	3,364,889	9,219
1990	2,684,687	7,355	568,999	29,253	3,282,939	8,994
1991	2,707,039	7,417	605,658	33,531	3,346,228	9,168
1992	2,624,632	7,171	621,178	46,812	3,292,622	8,996
1993	2,499,033	6,847	633,518	92,448	3,224,999	8,836
1994	2,431,476	6,662	630,200	93,717	3,155,393	8,645
1995	2,394,268	6,560	643,199	110,874	3,148,341	8,626
1996	2,366,017	6,465	669,820	114,424	3,150,261	8,607
1997	2,354,831	6,452	663,266	124,976	3,143,073	8,611
1998	2,281,919	6,252	642,202	138,904	3,063,025	8,392
1999	2,146,732	5,881	675,120	137,253	2,959,105	8,107
2000	2,130,707	5,822	699,415	138,134	2,968,256	8,110
2001	2,117,511	5,801	681,964	140,171	2,939,646	8,054
2002	2,096,588	5,744	686,288	152,408	2,935,284	8,042
2003	2,061,995	5,649	627,510	154,504	2,844,009	7,792
2004	1,991,394	5,441	662,151	154,128	2,807,673	7,671
2005	1,892,095	5,184	626,703	0	2,518,798	6,901
2006	1,856,340	5,086	634,654	0	2,490,994	6,825
2007	1,851,974	5,074	650,794	0	2,502,768	6,857
2008	1,829,134	4,998	652,822	0	2,481,956	6,781
2009	1,952,236	5,349	697,124	0	2,649,360	7,259
2010	1,998,444	5,475	757,019	0	2,755,463	7,549
2011	2,059,640	5,643	808,865	0	2,868,505	7,859
2012	2,377,762	6,497	881,306	0	3,259,068	8,905
2013	2,725,169	7,466	951,057	0	3,676,226	10,072
2014	3,194,915	8,753	1,100,298	0	4,295,213	11,768
2015	3,434,018	9,408	1,219,949	0	4,653,967	12,751
2016	3,241,591	8,857	1,284,357	0	4,525,948	12,366

¹ Includes field condensate.

² Includes oxygenates and finished petroleum products.

³ As of 2005, no longer included in domestic production.

PERCENTAGE OF TOTAL CRUDE OIL SUPPLIED BY SELECTED STATES

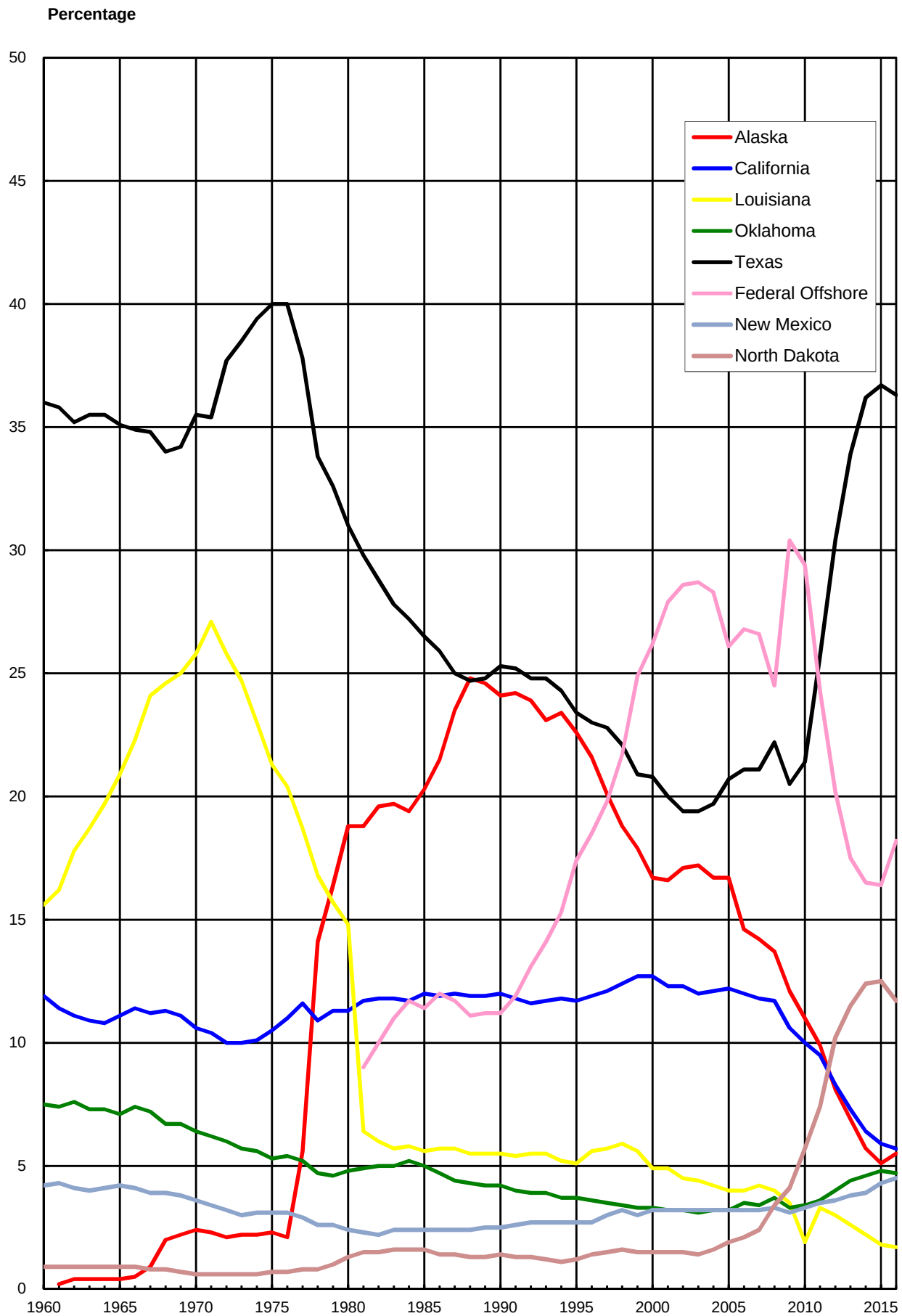


Chart 21

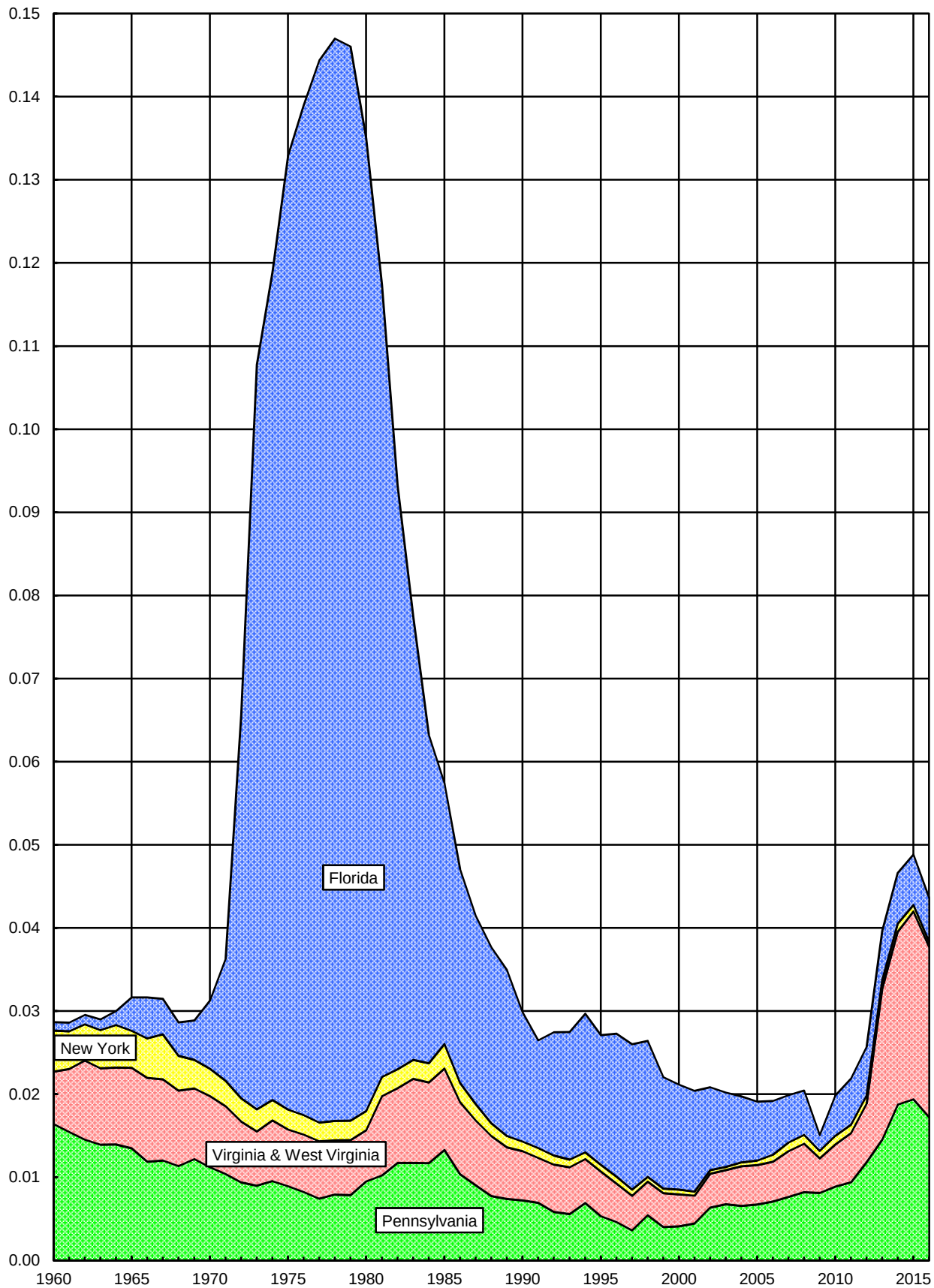
PERCENTAGE OF TOTAL CRUDE OIL SUPPLIED BY SELECTED STATES

Year	Alaska	California	Louisiana	New Mexico	North Dakota	Oklahoma	Texas	Federal Offshore ¹	Total Supplied by Selected States
1960	...	11.9	15.6	4.2	0.9	7.5	36.0	...	76.1
1961	0.2	11.4	16.2	4.3	0.9	7.4	35.8	...	76.2
1962	0.4	11.1	17.8	4.1	0.9	7.6	35.2	...	77.1
1963	0.4	10.9	18.7	4.0	0.9	7.3	35.5	...	77.7
1964	0.4	10.8	19.7	4.1	0.9	7.3	35.5	...	78.7
1965	0.4	11.1	20.9	4.2	0.9	7.1	35.1	...	79.7
1966	0.5	11.4	22.3	4.1	0.9	7.4	34.9	...	81.5
1967	0.9	11.2	24.1	3.9	0.8	7.2	34.8	...	82.9
1968	2.0	11.3	24.6	3.9	0.8	6.7	34.0	...	83.3
1969	2.2	11.1	25.0	3.8	0.7	6.7	34.2	...	83.7
1970	2.4	10.6	25.8	3.6	0.6	6.4	35.5	...	84.9
1971	2.3	10.4	27.1	3.4	0.6	6.2	35.4	...	85.4
1972	2.1	10.0	25.8	3.2	0.6	6.0	37.7	...	85.4
1973	2.2	10.0	24.7	3.0	0.6	5.7	38.5	...	84.7
1974	2.2	10.1	23.0	3.1	0.6	5.6	39.4	...	84.0
1975	2.3	10.5	21.3	3.1	0.7	5.3	40.0	...	83.2
1976	2.1	11.0	20.4	3.1	0.7	5.4	40.0	...	82.7
1977	5.6	11.6	18.7	2.9	0.8	5.2	37.8	...	82.6
1978	14.1	10.9	16.8	2.6	0.8	4.7	33.8	...	83.7
1979	16.4	11.3	15.7	2.6	1.0	4.6	32.6	...	84.2
1980	18.8	11.3	14.8	2.4	1.3	4.8	31.0	...	84.4
1981	18.8	11.7	6.4	2.3	1.5	4.9	29.8	9.0	75.4
1982	19.6	11.8	6.0	2.2	1.5	5.0	28.8	10.0	74.9
1983	19.7	11.8	5.7	2.4	1.6	5.0	27.8	11.0	74.0
1984	19.4	11.7	5.8	2.4	1.6	5.2	27.2	11.7	73.3
1985	20.3	12.0	5.6	2.4	1.6	5.0	26.5	11.4	73.4
1986	21.5	11.9	5.7	2.4	1.4	4.7	25.9	12.0	73.5
1987	23.5	12.0	5.7	2.4	1.4	4.4	25.0	11.7	74.4
1988	24.8	11.9	5.5	2.4	1.3	4.3	24.7	11.1	74.9
1989	24.6	11.9	5.5	2.5	1.3	4.2	24.8	11.2	74.8
1990	24.1	12.0	5.5	2.5	1.4	4.2	25.3	11.2	75.0
1991	24.2	11.8	5.4	2.6	1.3	4.0	25.2	11.9	86.4
1992	23.9	11.6	5.5	2.7	1.3	3.9	24.8	13.1	86.8
1993	23.1	11.7	5.5	2.7	1.2	3.9	24.8	14.1	87.0
1994	23.4	11.8	5.2	2.7	1.1	3.7	24.3	15.3	87.5
1995	22.6	11.7	5.1	2.7	1.2	3.7	23.4	17.4	87.8
1996	21.6	11.9	5.6	2.7	1.4	3.6	23.0	18.5	88.3
1997	20.1	12.1	5.7	3.0	1.5	3.5	22.8	19.8	88.5
1998	18.8	12.4	5.9	3.2	1.6	3.4	22.1	21.7	89.1
1999	17.9	12.7	5.6	3.0	1.5	3.3	20.9	24.9	89.8
2000	16.7	12.7	4.9	3.2	1.5	3.3	20.8	26.2	89.3
2001	16.6	12.3	4.9	3.2	1.5	3.2	20.0	27.9	89.6
2002	17.1	12.3	4.5	3.2	1.5	3.2	19.4	28.6	89.8
2003	17.2	12.0	4.4	3.2	1.4	3.1	19.4	28.7	89.4
2004	16.7	12.1	4.2	3.2	1.6	3.2	19.7	28.3	89.0
2005	16.7	12.2	4.0	3.2	1.9	3.2	20.7	26.1	88.0
2006	14.6	12.0	4.0	3.2	2.1	3.5	21.1	26.8	87.3
2007	14.2	11.8	4.2	3.2	2.4	3.4	21.1	26.6	86.9
2008	13.7	11.7	4.0	3.3	3.4	3.7	22.2	24.5	86.5
2009	12.1	10.6	3.5	3.1	4.1	3.3	20.5	30.4	87.6
2010	11.0	10.0	1.9	3.3	5.7	3.4	21.4	29.4	86.1
2011	9.9	9.5	3.3	3.5	7.4	3.6	25.7	24.3	87.2
2012	8.1	8.3	3.0	3.6	10.2	4.0	30.4	20.2	87.8
2013	6.9	7.3	2.6	3.8	11.5	4.4	33.9	17.5	87.9
2014	5.7	6.4	2.2	3.9	12.4	4.6	36.2	16.5	87.9
2015	5.1	5.9	1.8	4.3	12.5	4.8	36.7	16.4	87.5
2016	5.5	5.7	1.7	4.5	11.7	4.7	36.3	18.2	88.3

¹Beginning in 1981, federal offshore is reported separately.

CRUDE OIL PRODUCTION P.A.D. DISTRICT I

Million Barrels per Day



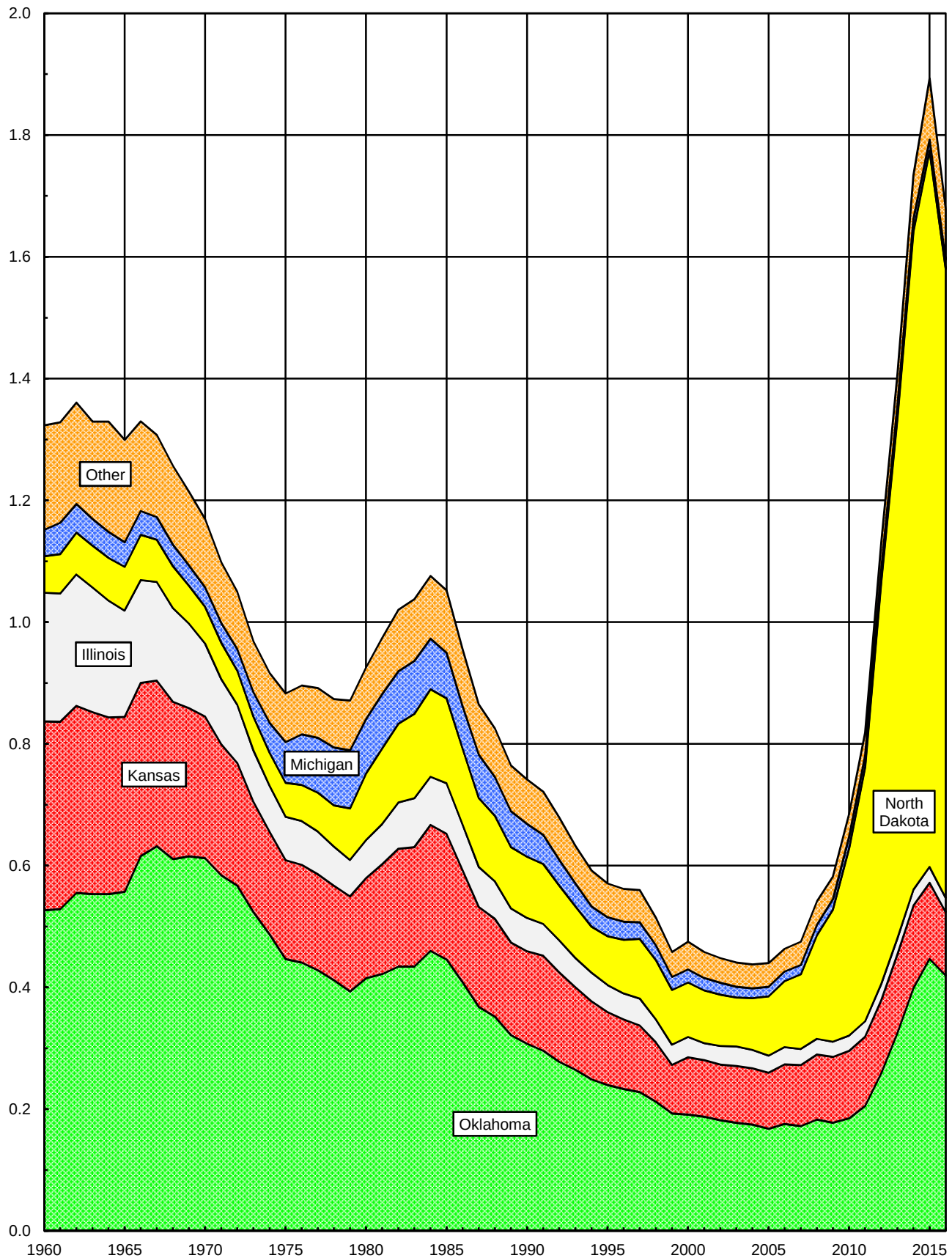
CRUDE OIL PRODUCTION¹**P.A.D. DISTRICT I**
(Thousands of Barrels)

<u>Year</u>	<u>Florida</u>	<u>New York</u>	<u>Pennsylvania</u>	<u>Virginia</u>	<u>West Virginia</u>	<u>Total</u>	<u>Daily Average</u>
1960	369	1,813	6,009	2	2,300	10,493	29
1961	374	1,658	5,643	2	2,760	10,437	29
1962	419	1,589	5,302	3	3,470	10,783	30
1963	464	1,679	5,083	3	3,350	10,579	29
1964	620	1,874	5,113	6	3,370	10,983	30
1965	1,464	1,632	4,922	4	3,530	11,552	32
1966	1,799	1,735	4,337	1	3,674	11,546	32
1967	1,568	1,972	4,387	3	3,561	11,491	31
1968	1,474	1,532	4,160	3	3,312	10,481	29
1969	1,731	1,256	4,448	1	3,104	10,540	29
1970	2,999	1,194	4,093	1	3,124	11,411	31
1971	5,347	1,126	3,798	1	2,969	13,241	36
1972	16,897	1,018	3,441	...	2,677	24,033	66
1973	32,695	967	3,282	...	2,385	39,329	108
1974	36,351	896	3,478	3	2,665	43,393	119
1975	41,877	875	3,264	3	2,479	48,498	133
1976	44,460	857	3,019	3	2,519	50,858	139
1977	46,641	824	2,715	2	2,518	52,700	144
1978	47,536	852	2,887	2	2,382	53,659	147
1979	47,168	855	2,874	4	2,406	53,307	146
1980	42,846	842	3,476	...	2,258	49,422	135
1981	34,773	841	3,729	13	3,473	42,829	117
1982	25,626	834	4,282	49	3,227	34,018	93
1983	19,476	831	4,282	65	3,628	28,282	77
1984	14,462	840	4,284	32	3,524	23,142	63
1985	11,458	1,071	4,851	26	3,555	20,961	57
1986	9,383	853	3,783	18	3,145	17,182	47
1987	8,270	710	3,302	17	2,835	15,134	41
1988	7,746	566	2,830	25	2,621	13,788	38
1989	7,289	498	2,698	23	2,243	12,751	35
1990	5,676	415	2,641	16	2,144	10,892	30
1991	4,726	427	2,532	13	1,963	9,661	26
1992	5,424	404	2,136	12	2,067	10,043	27
1993	5,603	335	2,036	12	2,048	10,034	27
1994	6,092	299	2,517	11	1,918	10,837	30
1995	5,693	304	1,939	11	1,948	9,895	27
1996	6,291	309	1,691	13	1,680	9,984	27
1997	6,380	276	1,321	10	1,509	9,496	26
1998	5,971	217	1,980	5	1,471	9,644	26
1999	4,894	206	1,470	8	1,471	8,049	22
2000	4,625	210	1,500	9	1,400	7,744	21
2001	4,426	166	1,620	11	1,226	7,449	20
2002	3,634	164	2,324	25	1,456	7,603	21
2003	3,263	143	2,466	18	1,481	7,371	20
2004	2,905	170	2,396	19	1,735	7,225	20
2005	2,585	202	2,461	26	1,696	6,970	19
2006	2,360	312	2,589	17	1,726	7,004	19
2007	2,078	379	2,788	19	1,992	7,256	20
2008	1,953	387	2,999	16	2,126	7,481	20
2009	696	333	2,967	12	1,501	5,509	15
2010	1,777	381	3,238	12	1,842	7,250	20
2011	2,023	375	3,430	11	2,146	7,985	22
2012	2,135	362	4,322	9	2,573	9,401	26
2013	2,174	366	5,307	10	6,612	14,469	40
2014	2,227	356	6,843	14	7,582	17,022	47
2015	2,208	284	7,075	11	8,243	17,821	49
2016	1,934	222	6,307	7	7,486	15,956	44

¹ Includes field condensate.

CRUDE OIL PRODUCTION P.A.D. DISTRICT II

Million Barrels per Day

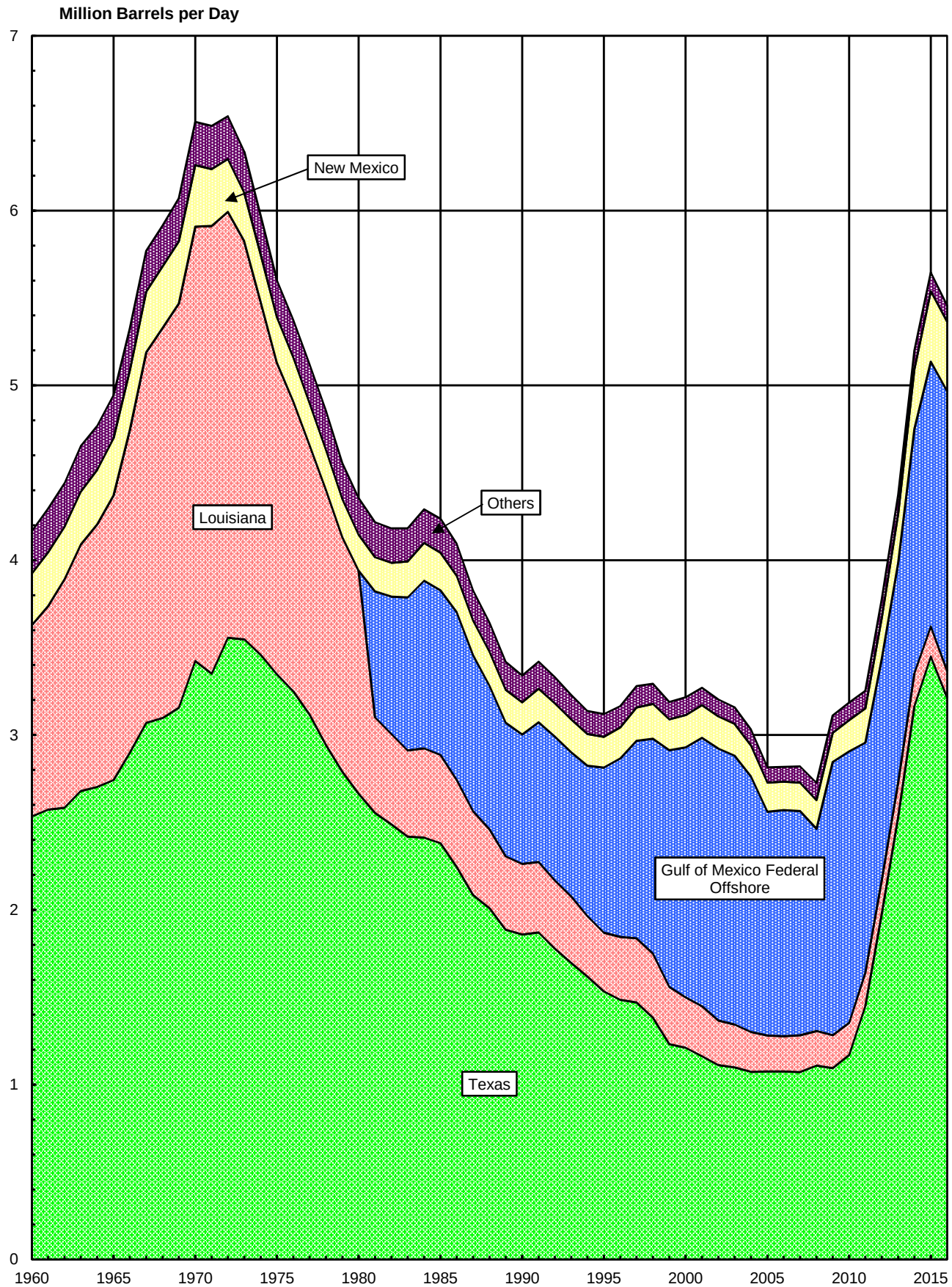


CRUDE OIL PRODUCTION¹**P.A.D. DISTRICT II**
(Thousands of Barrels)

Year	Illinois	Indiana	Kansas	Kentucky	Michigan	Missouri	Nebraska	North Dakota	Ohio	Oklahoma	South Dakota	Tennessee	Total	Daily Average
1960	77,341	12,054	113,453	21,147	15,899	...	23,825	21,992	5,405	192,913	...	...	484,405	1,324
1961	76,818	11,500	112,241	18,344	18,901	...	24,369	23,652	5,639	193,081	...	...	484,867	1,328
1962	78,796	12,077	112,076	17,789	17,114	2	24,894	25,181	5,835	202,732	22	...	496,732	1,361
1963	74,796	11,902	109,107	18,344	15,972	53	21,846	25,030	6,039	201,962	215	16	485,282	1,330
1964	70,168	11,283	106,252	19,772	15,601	...	19,113	25,731	15,859	202,524	...	...	486,625	1,330
1965	63,708	11,481	104,733	19,386	14,728	...	17,216	26,350	12,908	203,441	...	...	474,254	1,299
1966	61,661	10,617	103,738	18,066	14,273	...	13,850	27,126	10,899	224,839	...	...	485,412	1,330
1967	59,142	10,081	99,200	15,535	13,664	...	13,373	25,315	9,924	230,749	...	...	477,276	1,308
1968	56,391	8,692	94,505	14,036	12,974	65	13,183	25,040	11,204	223,623	187	6	459,906	1,257
1969	50,724	7,841	88,716	12,924	12,213	67	12,106	22,703	10,972	224,729	158	32	443,185	1,214
1970	43,747	7,487	84,853	11,575	11,693	66	11,451	21,998	9,864	223,574	160	309	426,777	1,169
1971	39,084	6,658	78,532	10,692	11,893	66	10,062	21,653	8,286	213,313	233	398	400,870	1,098
1972	34,874	6,130	73,744	9,702	12,990	60	8,705	20,624	9,358	207,633	219	198	384,237	1,050
1973	30,669	5,312	66,227	8,687	14,614	60	7,240	20,235	8,796	191,204	275	201	353,520	969
1974	27,553	4,919	61,691	7,837	18,021	56	6,611	19,697	9,088	177,785	494	769	334,521	916
1975	26,067	4,632	59,106	7,556	24,420	57	6,120	20,452	9,578	163,123	472	682	322,265	883
1976	26,272	4,630	58,714	7,483	30,421	61	6,182	21,725	9,994	161,426	447	598	327,953	896
1977	25,608	5,314	57,496	6,581	32,965	60	5,968	23,273	10,359	156,382	632	820	325,458	892
1978	23,362	4,689	56,586	5,724	34,667	54	5,862	24,812	11,154	150,456	869	593	318,828	874
1979	21,793	4,715	56,995	5,514	34,862	91	6,068	30,914	11,953	143,642	846	614	318,007	871
1980	22,935	4,627	60,152	5,934	32,753	71	6,255	40,014	12,518	151,960	789	742	338,750	926
1981	24,090	4,721	65,810	6,548	32,665	226	6,671	45,424	13,551	154,056	973	918	355,653	974
1982	27,710	5,563	70,525	7,349	31,462	202	6,872	47,271	14,571	158,621	1,158	1,132	372,436	1,020
1983	29,200	5,321	71,594	7,886	31,736	269	6,380	50,690	14,971	158,604	1,172	1,056	378,879	1,038
1984	28,868	5,526	75,729	7,777	30,554	285	6,452	52,652	15,271	168,385	1,340	920	393,759	1,076
1985	30,265	5,168	75,407	7,790	27,300	243	6,943	50,857	14,988	162,739	1,596	786	384,082	1,052
1986	27,245	4,759	67,034	6,475	25,688	110	7,098	45,628	13,442	149,105	1,586	644	348,814	956
1987	23,980	3,738	59,885	5,743	25,972	110	6,091	41,352	12,153	134,379	1,644	614	315,661	865
1988	22,476	3,665	58,824	5,458	23,250	156	5,978	39,343	11,711	128,874	1,657	601	301,993	825
1989	20,379	3,311	55,486	5,414	21,568	133	6,230	36,744	10,215	117,493	1,612	532	279,117	765
1990	19,954	3,000	55,429	5,409	19,676	146	5,889	36,718	10,008	112,274	1,648	506	270,657	742
1991	19,068	3,015	56,928	5,485	17,520	150	5,832	35,891	9,156	108,094	1,662	485	263,286	721
1992	19,303	3,016	53,614	5,479	15,579	143	5,474	32,894	9,197	101,808	1,557	501	248,565	679
1993	17,406	2,761	49,624	4,595	13,799	135	4,868	30,914	8,282	96,624	1,500	419	230,927	633
1994	17,148	2,492	46,732	4,013	12,207	123	4,216	27,575	8,758	90,974	1,453	417	216,108	592
1995	16,190	2,778	43,767	3,492	11,383	120	3,793	29,335	8,258	87,490	1,344	383	208,333	571
1996	15,575	2,523	41,789	3,602	10,837	115	3,541	32,317	8,305	85,378	1,257	381	205,620	562
1997	16,115	2,430	39,835	2,988	10,053	114	3,337	35,832	8,593	83,364	1,335	367	204,363	560
1998	13,732	2,208	35,541	2,921	8,994	93	3,174	35,562	6,541	77,579	1,206	287	187,838	515
1999	12,065	1,964	29,046	2,777	7,836	92	2,663	32,882	5,970	70,556	1,100	344	167,295	458
2000	12,206	2,098	34,463	3,465	7,907	94	2,957	32,719	6,575	69,975	1,170	346	173,975	475
2001	10,092	2,022	33,942	2,969	7,375	91	2,922	31,690	6,051	68,530	1,255	351	167,290	458
2002	11,100	1,962	33,380	2,721	7,218	95	2,782	30,803	5,631	66,421	1,214	275	163,602	448
2003	11,697	1,865	33,973	2,538	6,468	87	2,753	29,411	5,658	64,916	1,237	311	160,914	441
2004	10,984	1,755	33,879	2,548	5,951	88	2,506	31,152	5,783	63,976	1,357	361	160,340	438
2005	10,207	1,727	33,620	2,535	5,734	86	2,408	35,674	5,658	61,261	1,394	324	160,628	440
2006	10,324	1,773	35,668	2,340	5,849	87	2,313	39,592	5,439	64,236	1,390	192	169,203	464
2007	9,609	1,727	36,590	2,666	5,726	80	2,335	44,788	5,155	62,901	1,664	284	173,525	475
2008	9,430	1,859	39,039	2,645	6,360	99	2,394	62,347	5,113	67,028	1,700	338	198,352	542
2009	9,099	1,803	39,466	2,609	6,256	106	2,239	79,339	4,877	64,902	1,664	268	212,628	583
2010	9,067	1,835	40,468	2,519	6,976	146	2,331	112,531	4,769	67,512	1,607	257	250,018	685
2011	9,158	1,987	41,507	2,326	7,030	118	2,544	152,399	4,654	75,064	1,634	296	298,717	818
2012	9,733	2,350	43,743	3,198	7,445	175	3,025	242,329	5,108	94,928	1,754	371	414,159	1,132
2013	9,539	2,399	46,845	2,893	7,771	199	2,808	312,349	7,963	118,973	1,850	334	513,923	1,408
2014	9,546	2,507	49,513	3,376	7,406	196	3,050	394,654	14,927	145,598	1,798	330	632,901	1,734
2015	9,520	2,219	45,468	2,862	6,528	149	2,896	429,496	26,695	163,278	1,666	296	691,073	1,893
2016	8,639	1,817	38,053	2,595	5,616	123	2,258	377,968	22,010	153,653	1,407	257	614,396	1,679

¹ Includes field condensate.² Included in total.

CRUDE OIL PRODUCTION P.A.D. DISTRICT III



CRUDE OIL PRODUCTION¹

P.A.D. DISTRICT III
(Thousands of Barrels)

Year	Alabama	Arkansas	Louisiana²	GOM Federal Offshore	Mississippi	New Mexico	Texas²	Total	Daily Average
1960	7,329	30,117	400,832	...	51,673	107,380	927,479	1,524,810	4,166
1961	6,931	29,246	424,962	...	54,688	112,553	939,191	1,567,571	4,295
1962	7,473	27,649	477,153	...	55,713	109,328	943,328	1,620,644	4,440
1963	9,175	27,406	515,057	...	58,619	109,941	977,835	1,698,033	4,652
1964	8,498	26,737	549,698	...	56,777	113,863	989,525	1,745,098	4,768
1965	8,064	25,930	594,853	...	56,183	119,166	1,000,749	1,804,945	4,945
1966	8,030	23,824	674,318	...	55,227	124,154	1,057,706	1,943,259	5,324
1967	7,348	21,075	774,527	...	57,147	126,144	1,119,962	2,106,203	5,770
1968	7,635	19,464	817,426	...	58,708	128,550	1,133,380	2,165,163	5,916
1969	7,701	18,049	844,603	...	64,283	129,227	1,151,775	2,215,638	6,070
1970	7,263	18,035	906,907	...	65,119	128,184	1,249,697	2,375,205	6,507
1971	7,832	18,263	935,243	...	64,066	118,412	1,222,926	2,366,742	6,484
1972	9,934	18,519	891,827	...	61,100	110,525	1,301,685	2,393,590	6,540
1973	11,677	18,016	831,524	...	56,102	100,986	1,294,671	2,312,976	6,337
1974	13,323	16,527	737,324	...	50,779	98,695	1,262,126	2,178,774	5,969
1975	13,477	16,133	650,840	...	46,614	95,063	1,221,929	2,044,056	5,600
1976	14,706	18,097	606,501	...	46,072	92,130	1,189,523	1,967,029	5,374
1977	18,252	20,202	562,905	...	43,022	87,223	1,137,880	1,869,484	5,122
1978	19,829	20,329	532,740	...	42,024	83,365	1,074,050	1,772,337	4,856
1979	19,161	18,869	489,687	...	37,327	79,649	1,018,094	1,662,787	4,556
1980	21,911	18,210	466,964	...	36,533	75,456	975,239	1,594,313	4,356
1981	20,680	18,352	199,579	262,518	34,204	71,568	932,350	1,539,251	4,217
1982	20,014	18,849	188,749	286,725	33,047	71,024	908,217	1,526,625	4,183
1983	18,746	18,849	179,617	319,717	31,455	75,169	882,911	1,526,464	4,182
1984	19,804	18,730	187,011	349,857	32,776	79,336	883,174	1,570,688	4,291
1985	21,581	19,044	184,409	343,443	30,641	78,530	869,218	1,546,866	4,238
1986	21,122	15,778	181,791	350,328	29,997	75,712	819,595	1,494,323	4,094
1987	20,607	14,230	175,027	325,517	28,103	72,328	760,962	1,396,774	3,827
1988	20,797	13,606	165,005	299,460	27,553	71,235	735,494	1,333,150	3,642
1989	19,813	11,261	153,295	278,926	27,403	68,714	688,169	1,247,581	3,418
1990	18,538	10,386	147,582	269,804	27,034	67,250	678,477	1,219,071	3,340
1991	18,637	10,305	147,069	291,754	27,054	70,416	682,615	1,247,850	3,419
1992	19,025	10,260	143,075	300,909	25,182	69,972	650,623	1,219,046	3,331
1993	18,677	9,975	138,673	301,117	22,613	68,422	619,089	1,178,566	3,229
1994	18,345	9,568	126,484	313,822	20,124	65,846	590,736	1,144,925	3,137
1995	18,731	8,910	122,885	344,318	19,910	64,508	559,646	1,138,908	3,120
1996	16,868	8,814	132,151	373,643	19,509	64,479	543,342	1,158,806	3,166
1997	14,832	8,429	134,134	412,168	21,037	69,834	536,584	1,197,018	3,280
1998	12,398	7,998	134,219	448,387	22,031	72,328	504,661	1,202,022	3,293
1999	11,123	7,150	120,009	494,065	17,952	64,377	449,234	1,163,910	3,189
2000	10,457	7,154	105,425	523,249	19,844	67,198	443,396	1,176,723	3,215
2001	9,334	7,592	104,609	560,484	19,528	68,001	424,296	1,193,844	3,271
2002	8,636	7,252	93,321	567,420	19,371	67,562	405,776	1,169,338	3,204
2003	7,894	7,209	90,018	561,066	19,301	66,589	400,664	1,152,741	3,158
2004	7,443	6,747	83,272	535,355	19,242	64,517	392,714	1,109,290	3,031
2005	7,861	6,175	75,199	466,926	17,695	60,963	392,601	1,027,420	2,815
2006	7,539	5,948	73,619	472,078	17,356	59,452	392,481	1,028,473	2,818
2007	7,171	6,031	76,978	467,971	20,672	59,179	391,261	1,029,263	2,820
2008	7,696	6,079	72,347	423,326	22,104	60,155	406,020	997,727	2,726
2009	7,189	5,755	68,823	570,309	23,232	61,178	399,380	1,135,866	3,112
2010	7,155	5,415	67,274	566,628	24,080	65,569	426,724	1,162,845	3,186
2011	8,373	4,000	68,959	480,695	24,246	71,466	529,348	1,187,087	3,252
2012	9,525	4,605	70,588	463,278	24,593	85,548	723,952	1,382,089	3,776
2013	10,408	4,684	71,934	458,078	24,345	102,636	924,735	1,596,820	4,375
2014	9,826	4,860	68,750	509,954	24,346	124,715	1,155,448	1,897,899	5,200
2015	9,694	4,502	62,935	552,898	24,918	147,392	1,258,678	2,061,017	5,647
2016	8,107	5,467	56,432	584,744	20,385	146,026	1,176,040	1,997,201	5,457

¹ Includes field condensate.² Includes federal offshore estimates through 1980.

CRUDE OIL PRODUCTION P.A.D. DISTRICT IV

Million Barrels per Day

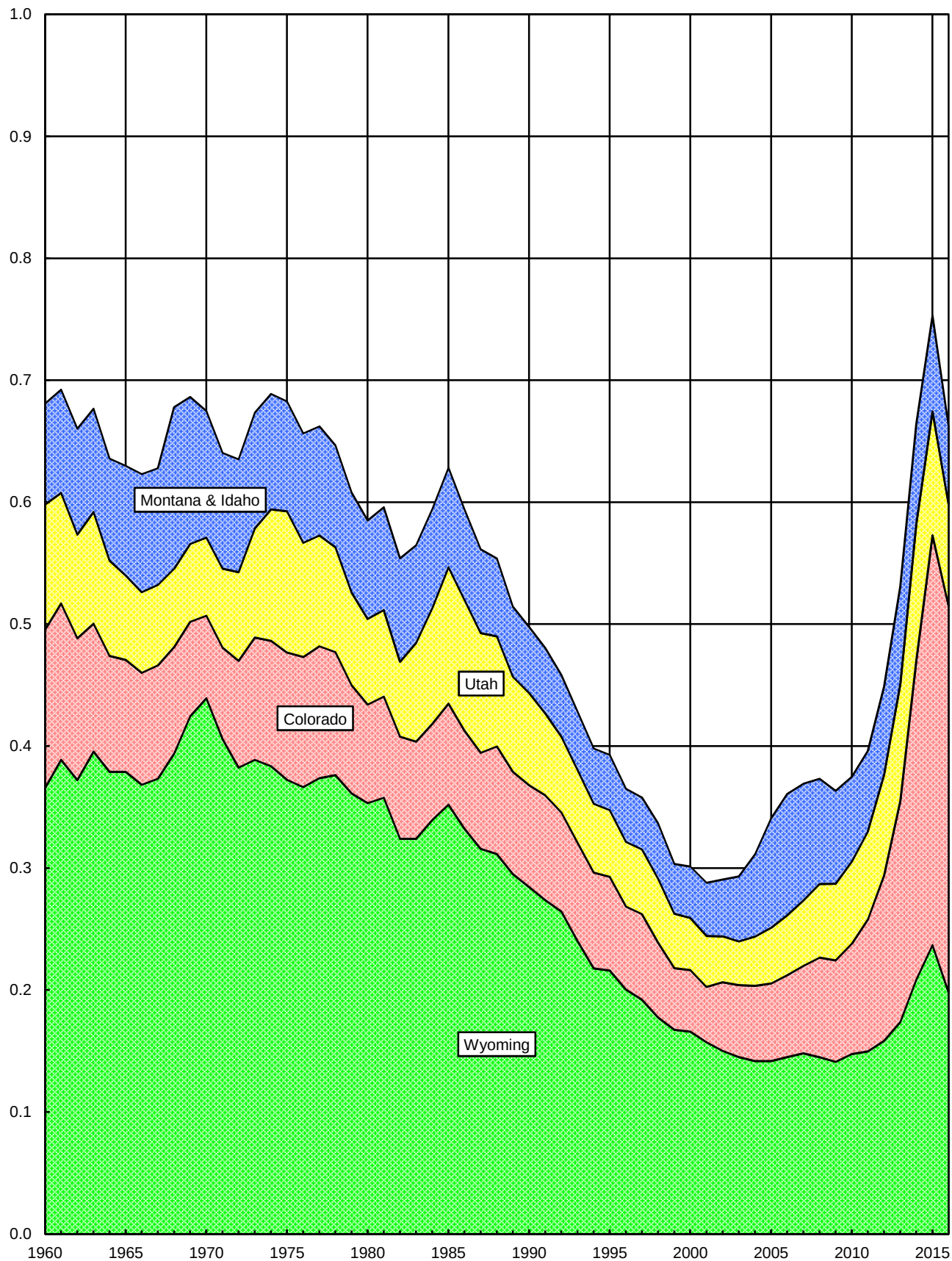


Chart 25

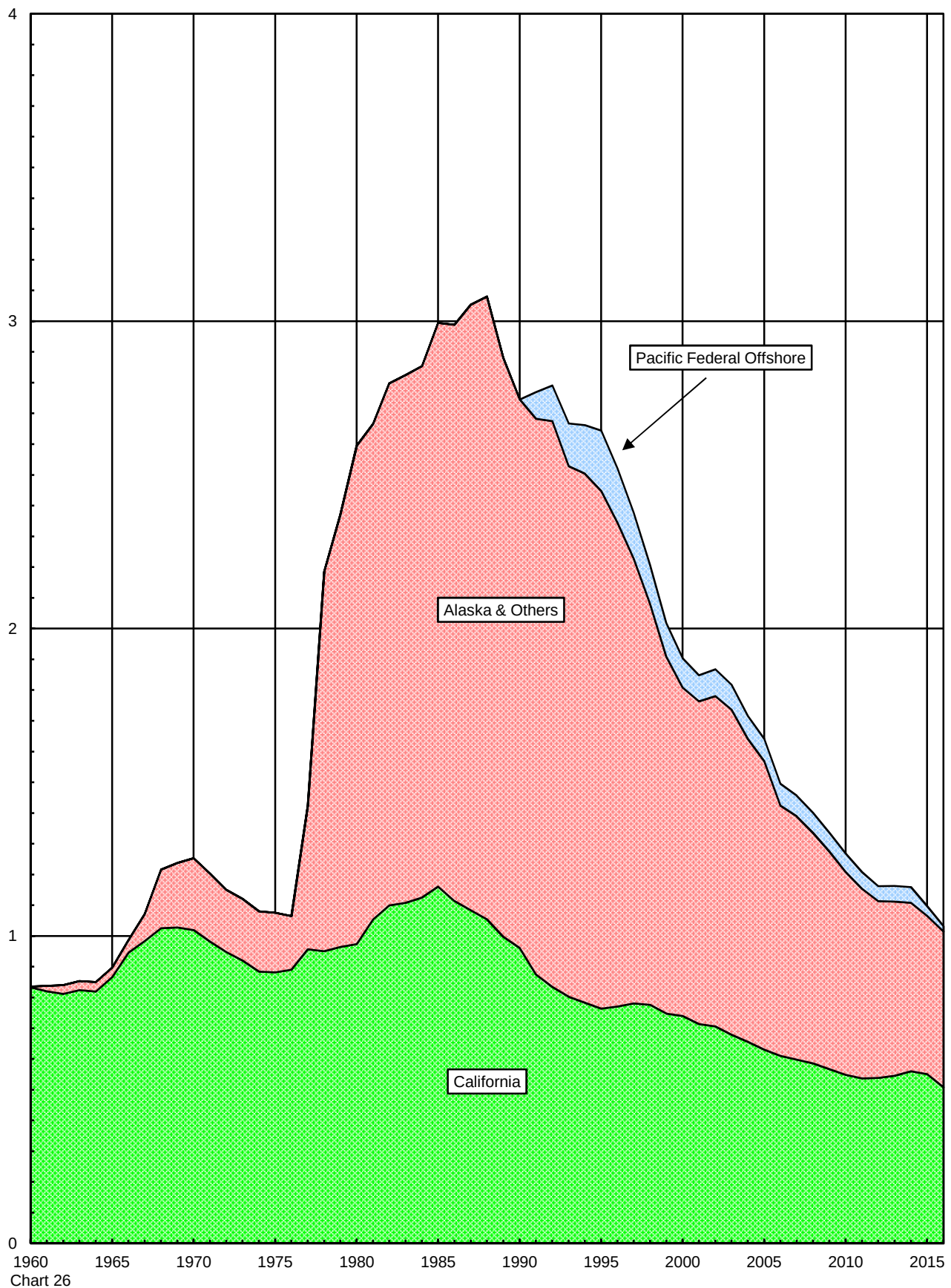
CRUDE OIL PRODUCTION¹**P.A.D. DISTRICT IV**
(Thousands of Barrels)

Year	Colorado	Idaho	Montana	Utah	Wyoming	Total	Daily Average
1960	47,469	...	30,240	37,594	133,910	249,213	681
1961	46,759	...	30,906	33,118	141,937	252,720	692
1962	42,477	...	31,648	31,029	135,847	241,001	660
1963	38,283	...	30,870	33,435	144,407	246,995	677
1964	34,755	...	30,647	28,575	138,752	232,729	636
1965	33,511	...	32,778	25,298	138,314	229,901	630
1966	33,492	...	35,380	24,112	134,470	227,454	623
1967	33,905	...	34,959	24,048	136,312	229,224	628
1968	31,937	...	48,460	23,504	144,250	248,151	678
1969	28,294	...	43,954	23,295	154,945	250,488	686
1970	24,723	...	37,879	23,370	160,345	246,317	675
1971	27,391	...	34,599	23,630	148,114	233,734	640
1972	32,015	...	33,904	26,570	140,011	232,500	635
1973	36,590	...	34,620	32,656	141,914	245,780	673
1974	37,508	...	34,554	39,363	139,997	251,422	689
1975	38,089	...	32,844	42,301	135,943	249,177	683
1976	38,992	...	32,814	34,304	134,149	240,259	656
1977	39,460	...	32,680	33,113	136,472	241,725	662
1978	36,797	...	30,467	31,368	137,385	236,017	647
1979	32,324	...	29,957	27,728	131,890	221,899	608
1980	29,565	...	29,566	25,721	129,309	214,161	585
1981	30,303	...	30,813	25,860	130,563	217,539	596
1982	30,545	...	30,921	22,440	118,300	202,206	554
1983	29,050	...	29,225	29,534	118,303	206,112	565
1984	28,845	...	29,761	34,689	124,269	217,564	594
1985	30,246	...	29,768	40,792	128,514	229,320	628
1986	29,309	...	27,072	39,172	121,337	216,890	594
1987	28,802	...	25,059	35,788	115,266	204,915	561
1988	32,352	...	23,338	33,018	113,985	202,693	554
1989	30,654	...	20,956	28,414	107,715	187,739	514
1990	30,453	...	19,810	27,604	103,856	181,723	498
1991	31,382	...	19,579	24,467	99,928	175,356	480
1992	29,787	...	18,482	22,720	96,810	167,799	458
1993	29,397	...	17,448	21,821	87,666	156,332	428
1994	28,613	...	16,528	20,661	79,528	145,330	398
1995	27,977	...	16,530	19,988	78,884	143,379	393
1996	24,953	...	15,919	19,401	73,364	133,637	365
1997	25,617	...	15,526	19,317	70,176	130,636	358
1998	22,364	...	16,483	19,199	64,782	122,828	337
1999	18,469	...	14,937	16,253	61,127	110,786	304
2000	18,480	...	15,427	15,635	60,724	110,266	301
2001	16,519	...	15,919	15,251	57,430	105,119	288
2002	20,522	...	16,990	13,771	54,801	106,084	291
2003	21,508	...	19,420	13,097	52,970	106,995	293
2004	22,532	...	24,718	14,744	51,940	113,934	311
2005	23,227	...	32,787	16,673	51,770	124,457	341
2006	24,501	...	36,294	17,927	52,974	131,696	361
2007	26,183	...	34,907	19,535	54,116	134,741	369
2008	29,949	...	31,596	22,041	53,045	136,631	373
2009	30,361	...	27,835	22,943	51,532	132,671	363
2010	32,996	...	25,332	24,664	53,892	136,884	375
2011	39,456	...	24,155	26,306	54,671	144,588	396
2012	49,596	...	26,494	30,210	57,967	164,267	449
2013	66,086	...	29,289	35,016	63,494	193,885	531
2014	95,475	...	29,897	40,898	76,139	242,409	664
2015	122,622	30	28,557	37,133	86,483	274,825	753
2016	115,897	215	23,187	30,522	72,544	242,365	662

¹ Includes field condensate.

CRUDE OIL PRODUCTION P.A.D. DISTRICT V

Million Barrels per Day



CRUDE OIL PRODUCTION¹**P.A.D. DISTRICT V**
(Thousands of Barrels)

Year	Alaska^{2,3}	California³	Arizona Nevada Washington	Pacific Federal Offshore	Total	Daily Average
1960	...	305,352	660	...	306,012	836
1961	6,327	299,609	227	...	306,163	839
1962	10,259	296,590	180	...	307,029	841
1963	10,740	300,908	186	...	311,834	854
1964	11,059	300,009	319	...	311,387	851
1965	11,128	316,428	306	...	327,862	898
1966	14,358	345,295	439	...	360,092	987
1967	29,126	359,219	3,203	...	391,548	1,073
1968	66,204	375,496	3,641	...	445,341	1,217
1969	73,953	375,291	2,656	...	451,900	1,238
1970	83,616	372,191	1,933	...	457,740	1,254
1971	79,494	358,484	1,349	...	439,327	1,204
1972	72,893	347,022	1,093	...	421,008	1,150
1973	72,323	336,075	900	...	409,298	1,121
1974	70,603	323,003	869	...	394,475	1,081
1975	69,834	322,199	750	...	392,783	1,076
1976	63,398	326,021	662	...	390,081	1,066
1977	169,201	349,609	1,088	...	519,898	1,424
1978	448,620	347,181	1,574	...	797,375	2,185
1979	511,335	352,268	1,707	...	865,310	2,371
1980	591,684	356,644	1,545	...	949,873	2,595
1981	587,337	384,958	1,057	...	973,352	2,667
1982	618,910	401,572	948	...	1,021,430	2,798
1983	625,527	404,688	1,047	...	1,031,262	2,825
1984	630,401	412,020	2,122	...	1,044,543	2,854
1985	666,233	423,877	3,214	...	1,093,324	2,995
1986	681,310	406,665	3,068	...	1,091,043	2,989
1987	715,954	395,697	3,243	...	1,114,894	3,055
1988	738,142	386,014	3,343	...	1,127,499	3,081
1989	683,982	364,250	3,353	...	1,051,585	2,881
1990	647,313	350,899	4,132	...	1,002,344	2,746
1991	656,346	319,497	3,524	31,519	1,010,886	2,770
1992	627,323	305,489	3,815	42,552	979,179	2,675
1993	577,494	293,089	1,953	50,638	923,174	2,529
1994	568,947	286,059	1,762	57,508	914,276	2,505
1995	541,654	278,977	1,413	71,709	893,753	2,449
1996	510,000	282,409	1,142	64,419	857,970	2,344
1997	472,949	285,172	1,062	54,135	813,318	2,228
1998	428,850	283,627	877	46,233	759,587	2,081
1999	383,200	273,018	772	39,702	696,692	1,909
2000	355,194	271,132	680	34,992	661,998	1,809
2001	351,412	260,663	631	31,103	643,809	1,764
2002	359,383	257,898	616	32,064	649,961	1,781
2003	355,603	248,093	540	29,738	633,974	1,737
2004	332,441	240,138	517	27,509	600,605	1,641
2005	315,386	230,230	497	26,507	572,620	1,569
2006	270,481	223,015	481	25,987	519,964	1,425
2007	263,595	218,518	451	24,625	507,189	1,390
2008	249,893	214,533	488	24,029	488,943	1,336
2009	235,510	207,262	484	22,306	465,562	1,276
2010	218,904	200,370	466	21,707	441,447	1,209
2011	204,829	196,172	445	19,817	421,263	1,154
2012	192,401	197,347	420	17,678	407,846	1,114
2013	187,923	199,196	394	18,559	406,072	1,113
2014	181,130	204,700	372	18,482	404,684	1,109
2015	176,235	201,284	318	11,445	389,282	1,067
2016	179,169	186,079	285	6,140	371,673	1,016

¹ Includes field condensate.² Alaska included with Nevada prior to 1961.³ Includes federal offshore production until 1991.

MARGINAL WELLS PRODUCING AT YEAR-END

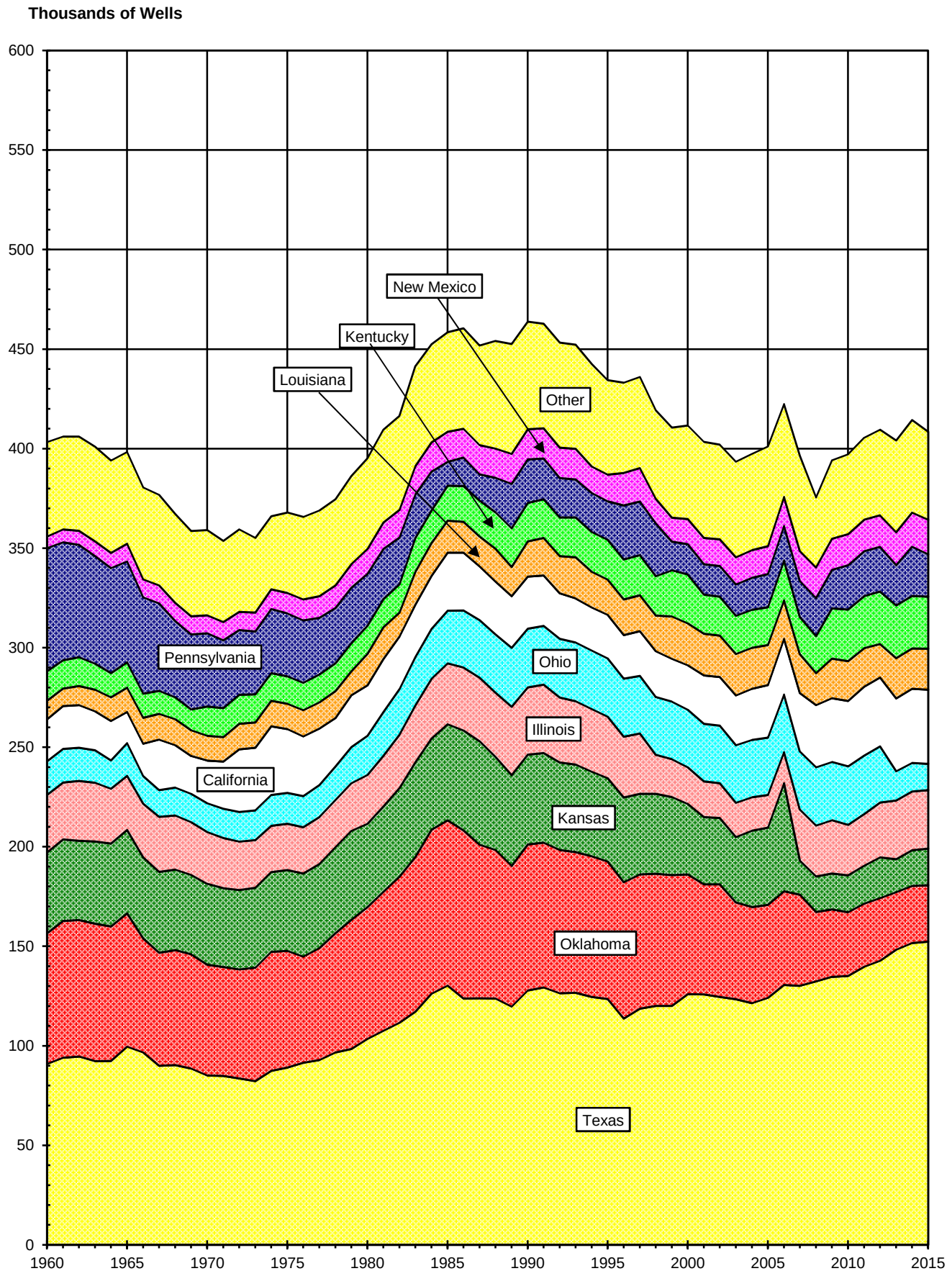


Chart 27A

UNITED STATES MARGINAL WELL SURVEY
AS OF DECEMBER 31, 2015

P.A.D. DISTRICT and STATES	Number of Marginal Wells	Marginal Wells as a Percent of Total Producing Oil Wells	Annual Production (Mbbl)	Average Daily Production Per Well (bbl)
P.A.D. DISTRICT I	28,554	95.9	2,545	0.24
New York	3,629	92.5	283	0.21
Pennsylvania	21,284	97.0	1,423	0.18
West Virginia	3,641	93.3	839	0.63
P.A.D. DISTRICT II	126,955	54.6	69,526	1.50
Illinois	29,386	... ¹	9,521	0.89
Indiana	4,320	... ¹	1,997	1.27
Kansas	18,375	33.4	16,955	2.53
Kentucky	26,192	... ¹	2,289	0.24
Michigan	2,305	58.7	3,625	4.31
Nebraska	1,697	89.7	1,596	2.58
North Dakota	3,087	23.0	12,834	11.39
Ohio	13,213	46.9	5,473	1.13
Oklahoma	28,351	30.3	15,189	1.47
South Dakota	29	17.6	47	4.44
P.A.D. DISTRICT III	196,503	80.2	157,340	2.19
Alabama	638	63.5	735	3.16
Arkansas	4,658	60.5	3,315	1.95
Gulf of Mexico	...	...	...	...
Louisiana	20,576	... ¹	8,997	1.20
Mississippi	992	43.0	1,171	3.23
New Mexico	17,263	71.0	16,463	2.61
Texas	152,376	81.1	126,659	2.28
P.A.D. DISTRICT IV	18,723	54.2	15,188	2.22
Colorado	9,992	67.3	5,830	1.60
Montana	2,880	58.3	2,048	1.95
Utah	2,710	56.3	4,019	4.06
Wyoming	3,141	31.6	3,291	2.87
P.A.D. DISTRICT V	37,283	73.8	47,722	3.51
Alaska	...	...	...	...
Arizona	21	... ¹	19	2.48
California	37,262	76.9	47,703	3.51
MISCELLANEOUS²	472	23.4	208	1.21
TOTAL UNITED STATES	408,490	68.7	292,529	1.96

¹ The reported number of marginal wells is greater than the reported number of total producing oil wells.

² Florida, Missouri, Nevada, Tennessee and Virginia.

Note: A marginal well is classified as an oil well capable of producing ten barrels of oil per day or less. The marginal wells were selected on an individual basis or on a marginal field basis in which the average production per well for all wells within the marginal field is ten barrels of oil per day or less.

MARGINAL WELLS PRODUCING AT YEAR-END

Thousands of Wells

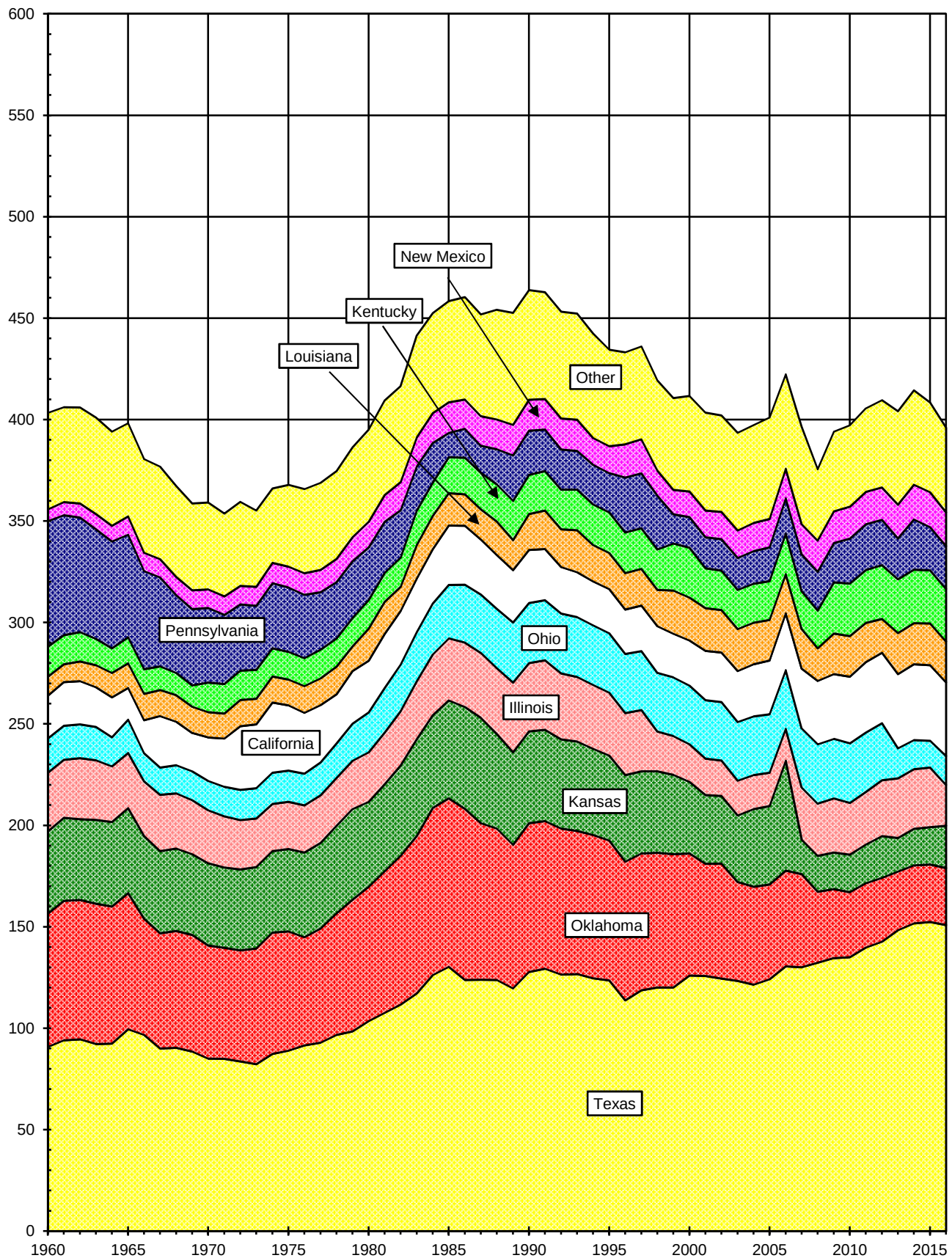


Chart 27B

UNITED STATES MARGINAL WELL SURVEY
AS OF DECEMBER 31, 2016

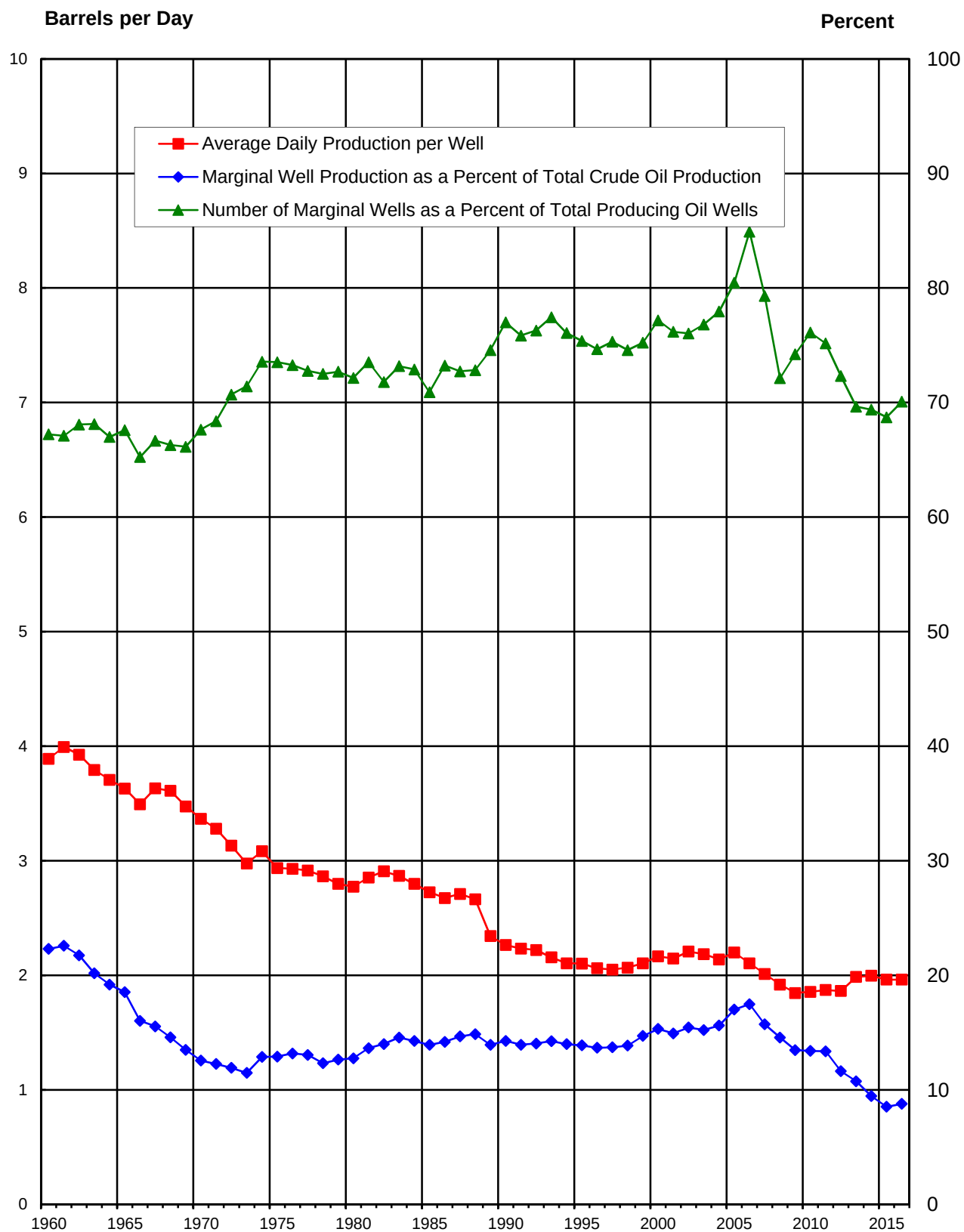
P.A.D. DISTRICT and STATES	Number of Marginal Wells	Marginal Wells as a Percent of Total Producing Oil Wells	Annual Production (Mbbbl)	Average Daily Production Per Well (bbl)
P.A.D. DISTRICT I	27,649	98.9	2,167	0.21
New York	3,528	89.2	221	0.17
Pennsylvania	21,136	... ¹	1,256	0.16
West Virginia	2,985	80.7	690	0.63
P.A.D. DISTRICT II	120,610	57.2	66,912	1.52
Illinois	20,220	... ¹	8,639	1.17
Indiana	3,587	83.3	1,637	1.25
Kansas	20,825	40.8	14,798	1.94
Kentucky	25,875	... ¹	2,205	0.23
Michigan	2,341	59.4	3,162	3.69
Nebraska	1,679	... ¹	1,434	2.33
North Dakota	3,824	27.3	17,278	12.35
Ohio	14,169	... ¹	3,102	0.60
Oklahoma	28,050	30.1	14,597	1.42
South Dakota	40	24.7	60	4.10
P.A.D. DISTRICT III	192,899	81.1	154,725	2.19
Alabama	242	26.7	285	3.22
Arkansas	4,072	53.3	2,738	1.84
Gulf of Mexico	...	...	...	...
Louisiana	20,087	... ¹	7,961	1.08
Mississippi	891	46.3	752	2.31
New Mexico	16,678	73.0	15,747	2.58
Texas	150,929	81.9	127,242	2.30
P.A.D. DISTRICT IV	18,005	53.5	14,868	2.26
Colorado	9,258	63.2	5,552	1.64
Montana	2,738	59.1	1,884	1.88
Utah	2,663	57.4	4,081	4.19
Wyoming	3,346	34.3	3,351	2.74
P.A.D. DISTRICT V	36,383	68.6	45,572	3.42
Alaska	...	...	...	...
Arizona	13	81.3	8	1.68
California	36,370	71.4	45,564	3.42
MISCELLANEOUS²	477	28.1	169	0.97
TOTAL UNITED STATES	396,023	70.1	284,413	1.96

¹ The reported number of marginal wells is greater than the reported number of total producing oil wells.

² Florida, Missouri, Nevada, Tennessee and Virginia.

Note: A marginal well is classified as an oil well capable of producing ten barrels of oil per day or less. The marginal wells were selected on an individual basis or on a marginal field basis in which the average production per well for all wells within the marginal field is ten barrels of oil per day or less.

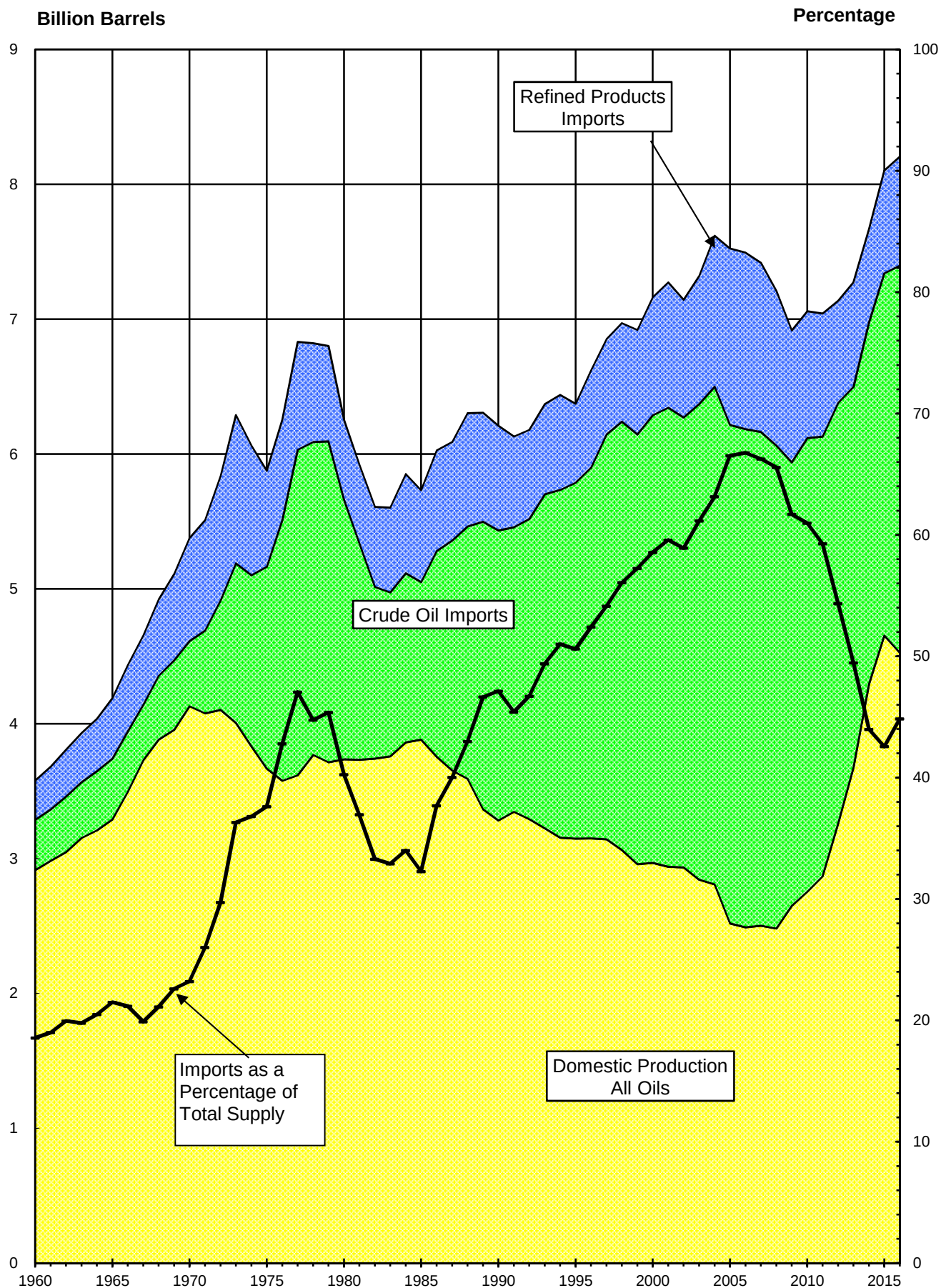
MARGINAL WELL STATISTICS FOR THE UNITED STATES



MARGINAL WELL STATISTICS FOR THE UNITED STATES

Year	Number of Wells	Annual Production (Mbbbl)	Average Daily Production per Well (bbl)	Number of Marginal Wells as a Percent of Total Producing Oil Wells	Marginal Well Production as a Percent of Total Crude Oil Production
1960	403,323	574,151	3.9	67.2	22.3
1961	406,102	591,911	4.0	67.1	22.6
1962	406,056	581,845	3.9	68.1	21.7
1963	401,031	555,130	3.8	68.1	20.2
1964	394,107	534,567	3.7	67.0	19.2
1965	398,299	527,739	3.6	67.6	18.5
1966	380,549	485,166	3.5	65.2	16.0
1967	376,851	499,601	3.6	66.7	15.5
1968	367,205	485,162	3.6	66.3	14.6
1969	358,650	454,820	3.5	66.1	13.5
1970	359,130	441,287	3.4	67.6	12.5
1971	353,696	423,322	3.3	68.4	12.3
1972	359,471	411,925	3.1	70.7	11.9
1973	355,229	385,683	3.0	71.4	11.5
1974	366,095	411,936	3.1	73.6	12.9
1975	367,872	394,163	2.9	73.5	12.9
1976	365,733	392,190	2.9	73.3	13.2
1977	368,930	392,532	2.9	72.8	13.0
1978	374,635	391,633	2.9	72.5	12.3
1979	386,310	394,405	2.8	72.7	12.6
1980	395,176	401,095	2.8	72.1	12.7
1981	409,539	426,502	2.9	73.5	13.6
1982	416,493	441,951	2.9	71.8	14.0
1983	441,501	462,013	2.9	73.2	14.6
1984	452,543	463,459	2.8	72.9	14.3
1985	458,447	455,884	2.7	70.9	13.9
1986	460,429	449,446	2.7	73.2	14.2
1987	451,787	446,837	2.7	72.7	14.7
1988	454,150	442,800	2.7	72.8	14.9
1989	452,589	386,916	2.3	74.6	13.9
1990	463,854	383,197	2.3	77.0	14.3
1991	462,823	377,288	2.2	75.8	13.9
1992	453,277	368,410	2.2	76.3	14.0
1993	452,248	355,961	2.2	77.5	14.2
1994	442,500	339,930	2.1	76.1	14.0
1995	433,048	332,288	2.1	75.4	13.9
1996	428,842	323,468	2.1	74.7	13.7
1997	431,552	322,789	2.0	75.3	13.7
1998	419,280	316,173	2.1	74.6	13.9
1999	410,680	315,514	2.1	75.2	14.7
2000	411,793	326,208	2.2	77.2	15.3
2001	403,459	316,099	2.1	76.2	14.9
2002	402,072	323,777	2.2	76.0	15.4
2003	393,463	313,748	2.2	76.8	15.2
2004	397,362	310,922	2.1	77.9	15.6
2005	401,072	321,762	2.2	80.5	17.0
2006	422,381	324,496	2.1	84.9	17.5
2007	396,537	291,068	2.0	79.3	15.7
2008	379,405	266,389	1.9	72.1	14.6
2009	390,480	262,978	1.8	74.2	13.5
2010	395,467	267,764	1.9	76.1	13.4
2011	402,828	275,174	1.9	75.2	13.4
2012	405,161	276,302	1.9	72.3	11.6
2013	404,174	292,932	2.0	69.6	10.7
2014	414,420	301,898	2.0	69.4	9.4
2015	408,490	292,529	2.0	68.7	8.5
2016	396,023	284,413	2.0	70.1	8.8

UNITED STATES TOTAL PRODUCTION, IMPORTS AND ANNUAL SUPPLY



UNITED STATES TOTAL PRODUCTION, IMPORTS, AND ANNUAL SUPPLY
(Thousands of Barrels)

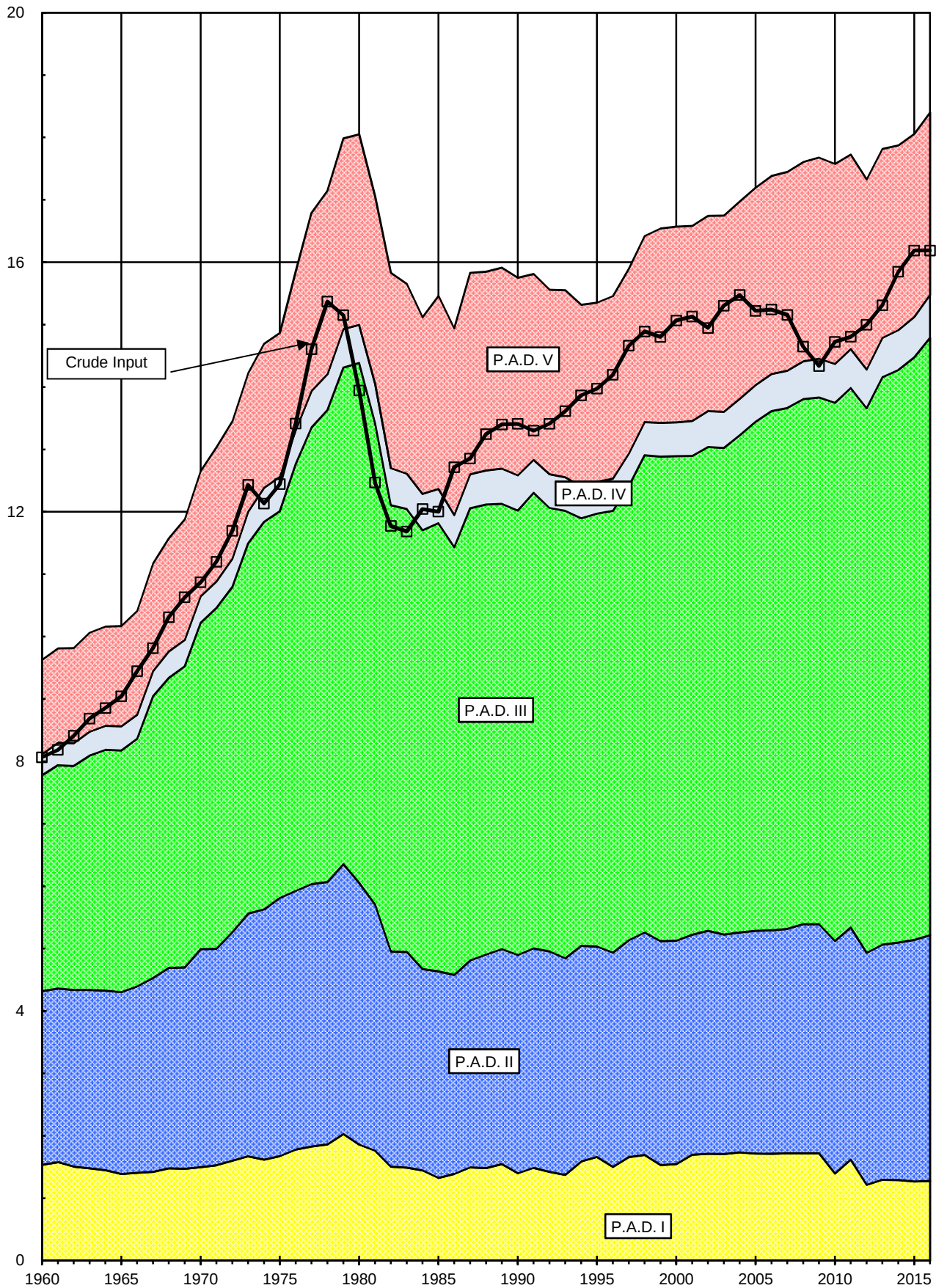
Year	Domestic¹ Production All Oils	Crude Oil Imports	Refined² Products Imports	Total Imports	Total Supply	Imports as a Percent of Total Supply
1960	2,915,365	371,575	292,536	664,111	3,579,476	18.6
1961	2,983,616	381,548	318,118	699,666	3,683,282	19.0
1962	3,048,945	411,039	348,754	759,793	3,808,738	19.9
1963	3,153,919	412,660	364,922	777,582	3,931,501	19.8
1964	3,209,322	438,643	388,093	826,736	4,036,058	20.5
1965	3,290,083	452,040	448,732	900,772	4,190,855	21.5
1966	3,496,428	447,120	492,042	939,162	4,435,590	21.2
1967	3,730,285	411,649	514,342	925,991	4,656,276	19.9
1968	3,882,730	472,323	567,046	1,039,369	4,922,099	21.1
1969	3,956,205	514,114	641,437	1,155,551	5,111,756	22.6
1970	4,129,604	483,293	764,769	1,248,062	5,377,666	23.2
1971	4,077,803	613,417	819,463	1,432,880	5,510,683	26.0
1972	4,103,702	811,135	924,179	1,735,314	5,839,016	29.7
1973	4,006,042	1,183,996	1,099,497	2,283,493	6,289,535	36.3
1974	3,831,740	1,269,155	961,792	2,230,947	6,062,687	36.8
1975	3,666,516	1,498,181	712,154	2,210,335	5,876,851	37.6
1976	3,577,174	1,935,012	741,399	2,676,411	6,253,585	42.8
1977	3,618,111	2,414,327	800,319	3,214,646	6,832,757	47.0
1978	3,769,593	2,319,826	732,798	3,052,624	6,822,217	44.7
1979	3,715,466	2,379,541	706,946	3,086,487	6,801,953	45.4
1980	3,736,240	1,926,162	589,548	2,515,710	6,251,950	40.2
1981	3,734,115	1,604,703	583,716	2,188,419	5,922,534	37.0
1982	3,741,821	1,273,214	593,144	1,866,358	5,608,179	33.3
1983	3,759,182	1,215,225	628,519	1,843,744	5,602,926	32.9
1984	3,862,759	1,253,949	735,987	1,989,936	5,852,695	34.0
1985	3,882,008	1,168,297	681,210	1,849,507	5,731,515	32.3
1986	3,755,375	1,524,978	746,604	2,271,582	6,026,957	37.7
1987	3,652,990	1,705,922	731,437	2,437,359	6,090,349	40.0
1988	3,593,351	1,869,005	840,135	2,709,140	6,302,491	43.0
1989	3,364,889	2,132,761	809,338	2,942,099	6,306,988	46.6
1990	3,282,939	2,151,387	775,008	2,926,395	6,209,334	47.1
1991	3,346,228	2,110,532	673,231	2,783,763	6,129,991	45.4
1992	3,292,622	2,226,341	660,556	2,886,897	6,179,519	46.7
1993	3,224,999	2,477,230	669,224	3,146,454	6,371,453	49.4
1994	3,155,393	2,578,072	705,549	3,283,621	6,439,014	51.0
1995	3,148,341	2,638,810	585,943	3,224,753	6,373,094	50.6
1996	3,150,261	2,747,839	721,289	3,469,128	6,619,389	52.4
1997	3,143,073	3,002,299	706,671	3,708,970	6,852,043	54.1
1998	3,063,025	3,177,584	730,862	3,908,446	6,971,471	56.1
1999	2,959,105	3,186,663	774,411	3,961,074	6,920,179	57.2
2000	2,968,256	3,319,816	874,270	4,194,086	7,162,342	58.6
2001	2,939,646	3,404,894	928,144	4,333,038	7,272,684	59.6
2002	2,935,284	3,336,175	872,363	4,208,538	7,143,822	58.9
2003	2,844,009	3,527,696	948,805	4,476,501	7,320,510	61.2
2004	2,807,673	3,692,063	1,119,041	4,811,104	7,618,777	63.1
2005	2,518,798	3,695,971	1,309,570	5,005,541	7,524,339	66.5
2006	2,490,994	3,693,081	1,310,001	5,003,082	7,494,076	66.8
2007	2,502,768	3,661,404	1,254,553	4,915,957	7,418,725	66.3
2008	2,481,956	3,580,694	1,146,300	4,726,994	7,208,950	65.6
2009	2,649,360	3,289,675	977,435	4,267,110	6,916,470	61.7
2010	2,755,463	3,362,856	941,677	4,304,533	7,059,996	61.0
2011	2,868,505	3,261,422	912,788	4,174,210	7,042,715	59.3
2012	3,259,068	3,120,755	758,097	3,878,852	7,137,920	54.3
2013	3,676,226	2,821,480	776,974	3,598,454	7,274,680	49.5
2014	4,295,213	2,680,626	692,278	3,372,904	7,668,117	44.0
2015	4,653,967	2,687,409	761,325	3,448,734	8,102,701	42.6
2016	4,525,948	2,873,208	807,019	3,680,227	8,206,175	44.8

¹ Includes crude oil, lease condensate, natural gas plant liquids and LRGs (liquified refinery gas), and other hydrocarbons.

² Includes natural gas plant liquids, LRGs (liquified refinery gas), and unfinished oils.

UNITED STATES REFINING CAPACITY BY P.A.D. DISTRICTS

Million Barrels Per Day

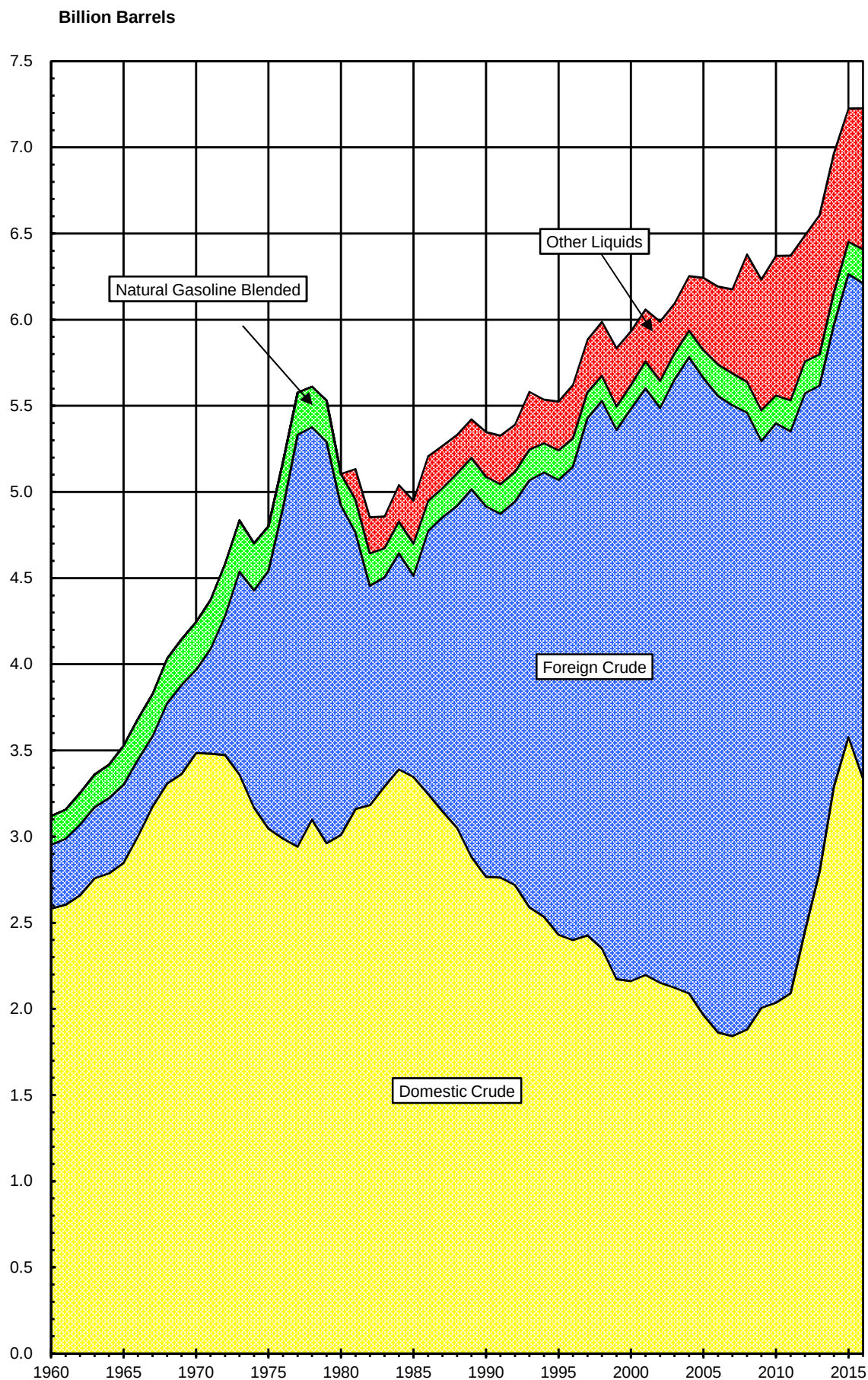


**OPERATING REFINING CAPACITY AND CRUDE INPUT
TO REFINERIES IN THE UNITED STATES**
(Thousands of Barrels per Day)

Year	Year- End Refining Capacity of P.A.D. Districts					Total ¹ United States	Crude Input United States
	I	II	III	IV	V		
1960	1,538	2,781	3,459	336	1,516	9,630	8,067
1961	1,578	2,783	3,580	358	1,513	9,812	8,184
1962	1,507	2,834	3,588	362	1,524	9,815	8,410
1963	1,480	2,860	3,753	384	1,586	10,063	8,687
1964	1,449	2,879	3,858	385	1,590	10,161	8,857
1965	1,391	2,913	3,872	387	1,608	10,171	9,043
1966	1,409	2,988	3,968	384	1,663	10,412	9,444
1967	1,423	3,109	4,513	403	1,725	11,173	9,815
1968	1,480	3,212	4,648	422	1,814	11,576	10,312
1969	1,473	3,226	4,826	422	1,935	11,882	10,630
1970	1,501	3,493	5,227	425	2,012	12,658	10,870
1971	1,528	3,470	5,463	423	2,151	13,035	11,199
1972	1,602	3,663	5,532	453	2,204	13,454	11,696
1973	1,673	3,889	5,933	506	2,219	14,220	12,431
1974	1,618	4,010	6,211	548	2,309	14,696	12,133
1975	1,677	4,137	6,197	552	2,305	14,868	12,442
1976	1,783	4,145	6,838	546	2,550	15,862	13,416
1977	1,831	4,204	7,318	583	2,858	16,794	14,608
1978	1,864	4,207	7,562	572	2,944	17,149	15,370
1979	2,028	4,329	7,955	616	3,060	17,988	15,152
1980	1,862	4,193	8,331	609	3,056	18,051	13,946
1981	1,764	3,942	7,716	629	3,002	17,053	12,470
1982	1,507	3,450	7,151	592	3,130	15,830	11,774
1983	1,490	3,459	7,098	566	3,040	15,653	11,685
1984	1,448	3,228	7,029	582	2,833	15,120	12,044
1985	1,327	3,309	7,182	548	3,095	15,461	12,002
1986	1,392	3,187	6,855	517	2,989	14,940	12,716
1987	1,494	3,320	7,245	545	3,227	15,831	12,854
1988	1,483	3,426	7,208	547	3,186	15,850	13,246
1989	1,548	3,447	7,133	566	3,218	15,912	13,401
1990	1,403	3,496	7,121	566	3,165	15,751	13,409
1991	1,487	3,520	7,298	528	2,979	15,812	13,301
1992	1,425	3,533	7,106	538	2,959	15,561	13,411
1993	1,375	3,474	7,167	538	2,998	15,552	13,613
1994	1,591	3,456	6,849	511	2,912	15,319	13,866
1995	1,662	3,375	6,934	513	2,870	15,354	13,973
1996	1,505	3,432	7,079	516	2,928	15,459	14,195
1997	1,662	3,476	7,275	521	2,965	15,898	14,662
1998	1,694	3,569	7,645	530	2,985	16,423	14,889
1999	1,533	3,591	7,764	541	3,112	16,541	14,804
2000	1,547	3,584	7,764	541	3,135	16,571	15,067
2001	1,698	3,526	7,672	560	3,127	16,583	15,128
2002	1,715	3,574	7,750	575	3,130	16,744	14,947
2003	1,709	3,518	7,798	578	3,145	16,748	15,304
2004	1,736	3,526	7,967	582	3,164	16,975	15,475
2005	1,717	3,569	8,159	589	3,162	17,196	15,220
2006	1,713	3,583	8,318	596	3,175	17,385	15,242
2007	1,720	3,596	8,349	598	3,187	17,450	15,156
2008	1,722	3,669	8,416	605	3,195	17,607	14,648
2009	1,723	3,671	8,440	622	3,222	17,678	14,336
2010	1,398	3,726	8,625	623	3,203	17,575	14,724
2011	1,618	3,721	8,646	624	3,117	17,726	14,806
2012	1,216	3,718	8,725	624	3,045	17,328	14,999
2013	1,295	3,769	9,095	630	3,029	17,818	15,312
2014	1,291	3,808	9,174	641	2,959	17,873	15,848
2015	1,271	3,869	9,336	649	2,933	18,058	16,188
2016	1,278	3,939	9,574	687	2,924	18,402	16,187

¹ Prior to 2001 source was International Petroleum Encyclopedia.

TOTAL UNITED STATES REFINERY INPUT



TOTAL UNITED STATES REFINERY INPUT

(Thousands of Barrels)

Year	Domestic Crude	Foreign ¹ Crude	Total Crude	Natural ² Gasoline Blended	Other ³ Liquids	Total Input
1960	2,581,568	370,966	2,952,534	166,518	...	3,119,052
1961	2,604,127	383,031	2,987,158	169,278	...	3,156,436
1962	2,659,826	409,805	3,069,631	182,756	...	3,252,387
1963	2,758,168	412,484	3,170,652	190,116	...	3,360,768
1964	2,785,895	437,434	3,223,329	193,734	...	3,417,063
1965	2,847,821	453,021	3,300,842	225,676	...	3,526,518
1966	3,000,789	446,404	3,447,193	235,580	...	3,682,773
1967	3,174,004	408,590	3,582,594	244,720	...	3,827,314
1968	3,308,044	466,316	3,774,360	259,336	...	4,033,696
1969	3,363,602	516,003	3,879,605	264,588	...	4,144,193
1970	3,485,332	482,171	3,967,503	278,334	...	4,245,837
1971	3,481,543	606,266	4,087,809	284,937	...	4,372,746
1972	3,473,880	806,983	4,280,863	302,445	...	4,583,308
1973	3,359,946	1,177,308	4,537,254	297,482	...	4,834,736
1974	3,168,596	1,260,130	4,428,726	272,416	...	4,701,142
1975	3,047,014	1,494,412	4,541,426	259,319	...	4,800,745
1976	2,989,129	1,921,111	4,910,240	265,451	...	5,175,691
1977	2,941,567	2,390,302	5,331,869	245,239	...	5,577,108
1978	3,098,455	2,278,245	5,376,700	233,424	...	5,610,124
1979	2,962,194	2,329,265	5,291,459	238,953	...	5,530,412
1980	3,010,008	1,910,724	4,920,732	183,555	...	5,104,287
1981	3,158,937	1,604,703	4,763,640	191,102	178,237	5,132,979
1982	3,182,665	1,273,214	4,455,879	188,051	208,679	4,852,609
1983	3,290,435	1,215,225	4,505,660	167,931	184,321	4,857,912
1984	3,390,178	1,253,949	4,644,127	183,022	212,763	5,039,912
1985	3,345,899	1,168,297	4,514,196	185,804	248,624	4,948,624
1986	3,247,629	1,524,978	4,772,607	174,778	259,672	5,207,057
1987	3,147,114	1,705,922	4,853,036	170,009	243,600	5,266,645
1988	3,051,089	1,869,005	4,920,094	186,902	223,309	5,330,305
1989	2,883,031	2,132,761	5,015,792	182,109	223,797	5,421,698
1990	2,765,918	2,151,387	4,917,305	170,589	260,108	5,348,002
1991	2,763,028	2,110,532	4,873,560	172,306	280,265	5,326,131
1992	2,718,999	2,226,341	4,945,340	171,701	272,676	5,389,717
1993	2,590,104	2,477,230	5,067,334	179,213	334,684	5,581,231
1994	2,535,187	2,578,072	5,113,259	169,868	252,283	5,535,410
1995	2,430,633	2,638,810	5,069,443	172,026	282,984	5,524,453
1996	2,399,408	2,747,839	5,147,247	164,552	308,415	5,620,214
1997	2,426,172	3,002,299	5,428,471	151,769	303,557	5,883,797
1998	2,350,562	3,177,584	5,528,146	146,921	311,257	5,986,324
1999	2,173,379	3,186,663	5,360,042	135,756	338,445	5,834,243
2000	2,161,856	3,319,816	5,481,672	138,921	310,696	5,931,289
2001	2,196,200	3,404,894	5,601,094	156,479	301,221	6,058,794
2002	2,151,619	3,336,175	5,487,794	156,429	343,516	5,987,739
2003	2,123,833	3,527,696	5,651,529	152,763	288,614	6,092,906
2004	2,089,737	3,692,063	5,781,800	154,356	316,838	6,252,994
2005	1,965,478	3,695,971	5,661,449	161,037	419,515	6,242,001
2006	1,863,729	3,693,081	5,556,810	182,924	451,824	6,191,558
2007	1,842,519	3,661,404	5,503,923	184,383	488,020	6,176,326
2008	1,880,525	3,580,694	5,461,219	177,559	739,047	6,377,825
2009	2,006,342	3,289,675	5,296,017	177,194	760,043	6,233,254
2010	2,036,179	3,362,856	5,399,035	161,479	809,799	6,370,313
2011	2,091,173	3,261,422	5,352,595	178,884	839,479	6,370,958
2012	2,451,238	3,120,755	5,571,993	186,270	730,907	6,489,170
2013	2,796,686	2,821,480	5,618,166	181,112	806,959	6,606,237
2014	3,289,572	2,680,626	5,970,198	186,601	808,104	6,964,903
2015	3,575,912	2,687,409	6,263,321	188,722	773,432	7,225,475
2016	3,338,191	2,873,208	6,211,399	196,281	819,058	7,226,738

¹ Includes SPR (Strategic Petroleum Reserves).² Includes field condensate, Natural Gas Liquids and LRG.³ Not available 1960-1980.

PRODUCTION OF REFINED PRODUCTS IN THE UNITED STATES

Million Barrels per Day

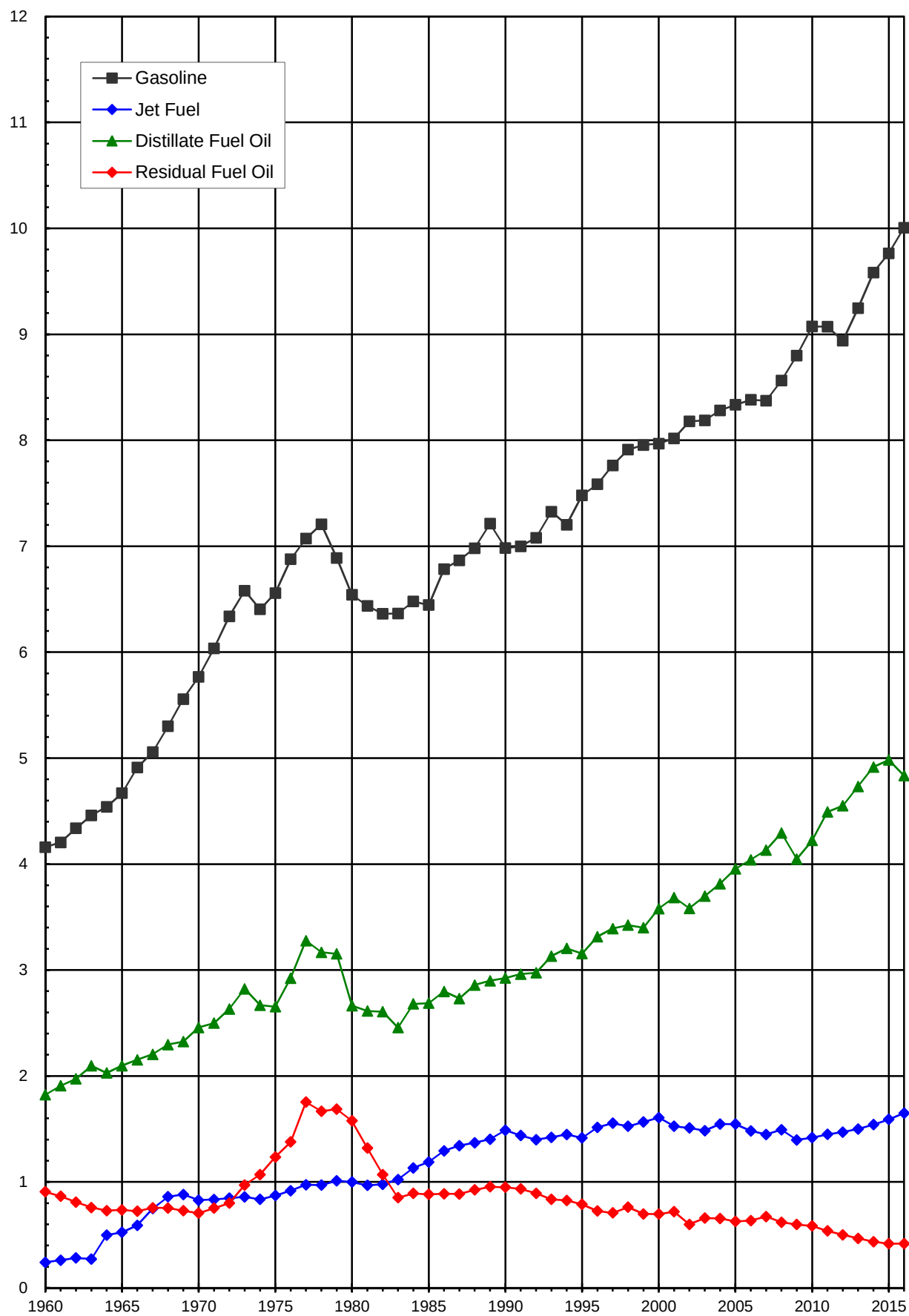


Chart 32

PRODUCTION OF REFINED PRODUCTS IN THE UNITED STATES
(Thousands of Barrels)

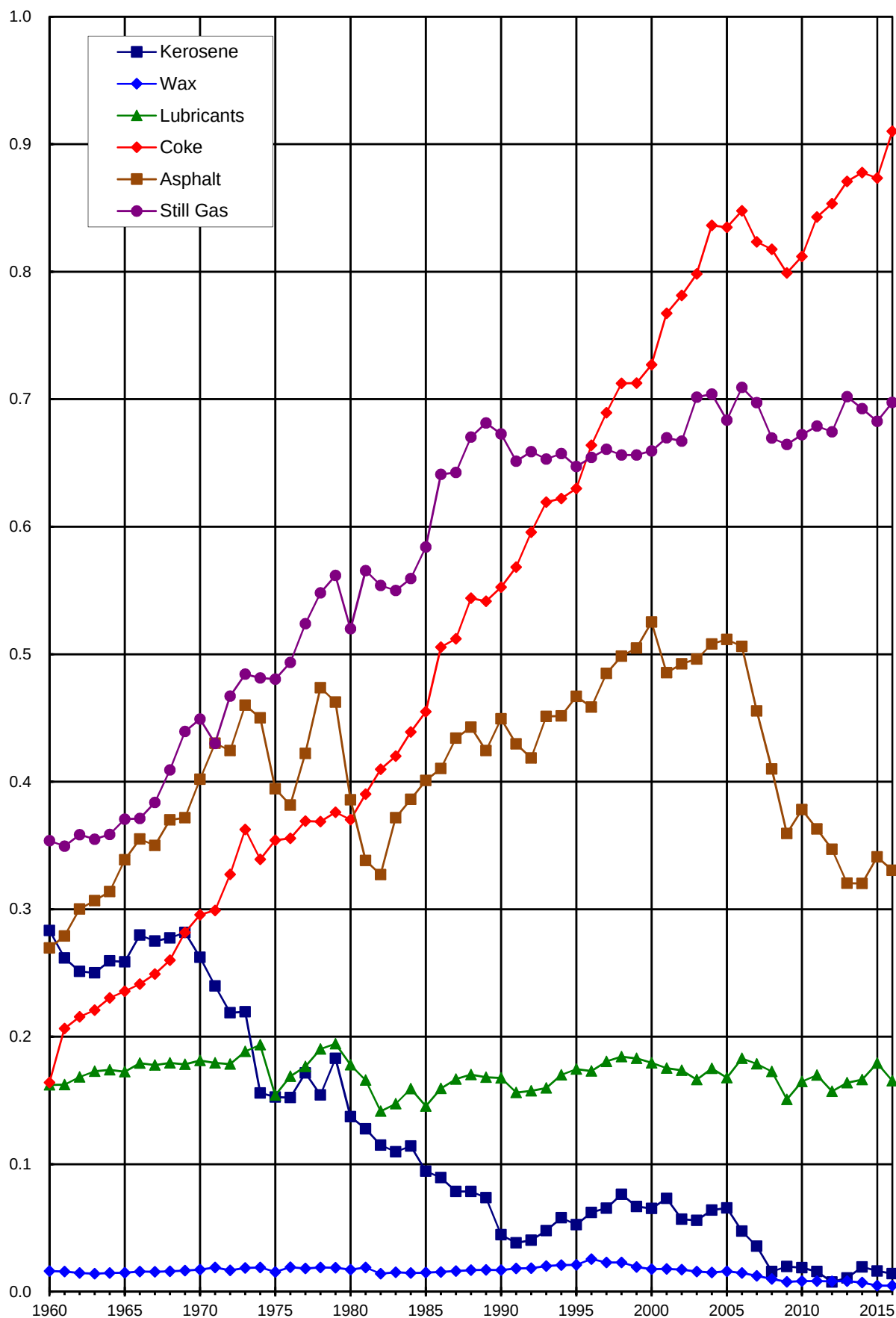
<u>Year</u>	<u>Gasoline¹</u>	<u>Jet Fuel</u>	<u>Distillate Fuel Oil</u>	<u>Residual Fuel Oil</u>
1960	1,522,497	88,248	667,050	332,147
1961	1,534,462	95,210	696,622	315,577
1962	1,583,370	102,974	720,087	295,679
1963	1,627,975 ²	99,280	764,953 ²	276,766 ²
1964	1,661,301	182,540	742,439	266,825
1965	1,704,401	191,168	765,430	268,576
1966	1,792,638	215,496	785,849	263,961
1967	1,845,783	273,229	804,788	275,956
1968	1,940,038	314,928	840,681	275,814
1969	2,028,152	321,718	848,404	265,906
1970	2,105,258	301,913	897,097	257,510
1971	2,202,573	304,674	912,097	274,684
1972	2,319,950	310,029	963,625	292,519
1973	2,401,860	313,689	1,030,178	354,597
1974	2,337,467	305,064	974,025	390,491
1975	2,393,637	317,981	968,650	450,957
1976	2,516,989	335,846	1,070,209	503,953
1977	2,581,238	355,044	1,196,298	640,140
1978	2,630,535	353,939	1,156,097	608,634
1979	2,514,568	369,218	1,150,771	615,579
1980	2,393,966	365,580	974,911	577,077
1981	2,349,428	353,215	953,829	482,088
1982	2,322,116	356,998	951,269	390,377
1983	2,323,332	373,162	896,517	310,863
1984	2,371,085	414,324	981,224	326,189
1985	2,352,325	433,892	980,936	321,997
1986	2,476,338	471,965	1,021,223	324,349
1987	2,506,215	490,082	996,635	323,201
1988	2,555,182	501,323	1,046,288	338,734
1989	2,632,726	512,071	1,057,975	348,148
1990	2,548,396	543,233	1,067,485	346,576
1991	2,554,005	524,973	1,081,018	341,080
1992	2,591,046	511,980	1,088,324	326,511
1993	2,673,762	518,851	1,143,075	304,780
1994	2,628,898	528,377	1,169,688	301,436
1995	2,730,239	516,759	1,151,735	287,601
1996	2,775,898	554,497	1,213,563	265,544
1997	2,833,299	567,295	1,238,041	258,290
1998	2,887,639	556,834	1,249,881	277,957
1999	2,903,441	571,271	1,240,783	254,839
2000	2,916,599	587,974	1,310,158	254,843
2001	2,934,572	558,319	1,348,525	263,017
2002	2,993,100	552,583	1,311,151	219,445
2003	2,996,706	543,139	1,353,138	240,871
2004	3,031,337	566,164	1,396,037	239,907
2005	3,042,056	564,226	1,443,348	229,074
2006	3,059,332	540,556	1,474,741	231,888
2007	3,056,588	528,476	1,508,530	245,521
2008	3,134,179	546,410	1,571,539	226,867
2009	3,211,756	509,684	1,477,534	218,339
2010	3,311,754	517,475	1,541,503	213,493
2011	3,311,362	528,811	1,639,606	196,168
2012	3,271,880	538,319	1,665,256	183,222
2013	3,374,684	547,275	1,727,493	170,445
2014	3,497,714	562,600	1,794,433	158,897
2015	3,564,070	580,431	1,818,780	152,266
2016	3,662,263	603,899	1,769,335	152,855

¹ Includes straight run, cracked, and natural blended at refineries.

² Production for 1963 is not strictly comparable to 1962 because of product reclassification resulting from separately reporting data for petrochemical feedstocks beginning January 1963.

PRODUCTION OF REFINED PRODUCTS IN THE UNITED STATES

Million Barrels per Day



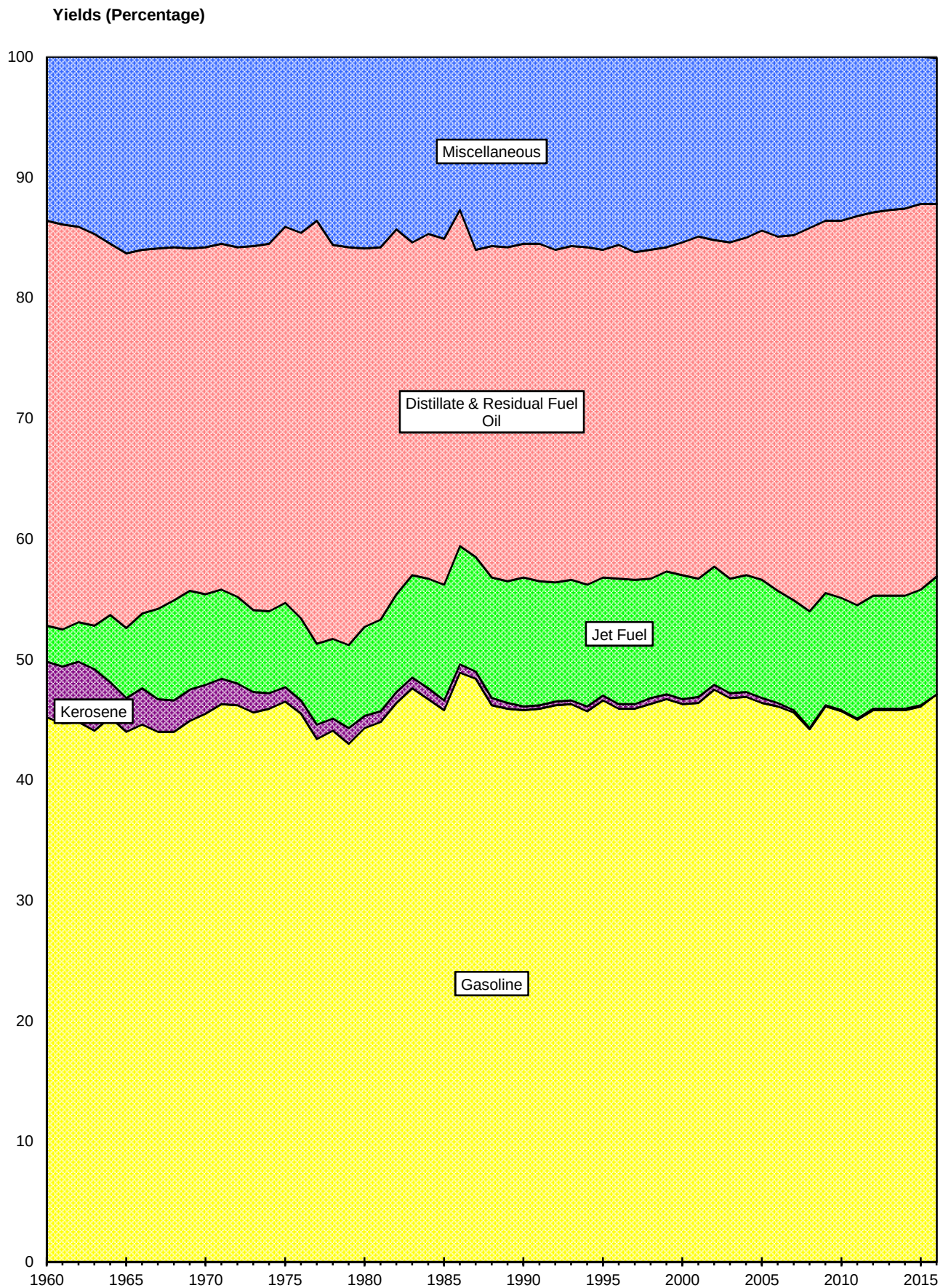
PRODUCTION OF REFINED PRODUCTS IN THE UNITED STATES

(Thousands of Barrels)

Year	Wax	Kerosene	Lubricants	Coke	Asphalt	Still Gas
1960	5,896	103,683	59,389	60,010	98,671	129,480
1961	5,781	95,503	59,254	75,333	101,819	127,537
1962	5,353	91,672	61,467	78,724	109,576	130,829
1963	5,126	91,245 ¹	63,086	80,628	111,948	129,518 ¹
1964	5,352	94,967	63,668	84,325	114,879	131,257
1965	5,456	94,455	62,925	86,040	123,604	135,295
1966	5,772	102,075	65,407	88,054	129,579	135,459
1967	5,719	100,354	64,870	90,933	127,767	140,034
1968	5,887	101,572	65,684	95,190	135,460	149,796
1969	6,049	102,859	65,080	102,868	135,691	160,363
1970	6,294	95,712	66,183	107,871	146,658	163,905
1971	6,939	87,499	65,473	109,114	157,039	156,967
1972	6,148	80,090	65,349	119,765	155,294	170,993
1973	6,768	80,126	68,742	132,290	167,884	176,758
1974	6,929	56,891	70,694	123,746	164,237	175,724
1975	5,665	55,673	56,221	129,241	143,957	175,351
1976	7,008	55,740	61,803	130,145	139,706	180,666
1977	6,655	62,622	64,484	134,739	154,058	191,257
1978	6,935	56,325	69,466	134,581	172,899	200,028
1979	6,892	66,791	70,983	137,274	168,785	205,069
1980	6,355	50,262	65,123	135,472	141,192	190,302
1981	6,943	46,580	60,561	142,430	123,452	206,399
1982	5,135	41,978	51,642	149,538	119,406	202,147
1983	5,535	40,015	53,808	153,305	135,659	200,707
1984	5,388	41,818	58,253	160,655	141,339	204,713
1985	5,506	34,480	53,081	166,019	146,332	213,181
1986	5,613	32,649	58,165	184,513	149,739	233,966
1987	5,879	28,691	60,870	186,902	158,434	234,529
1988	6,166	28,770	62,291	199,056	162,066	245,351
1989	6,223	26,938	61,387	197,665	154,887	248,658
1990	6,193	16,281	61,161	201,660	163,970	245,535
1991	6,681	13,952	57,001	207,463	156,840	237,759
1992	6,738	14,768	57,635	217,988	153,191	241,160
1993	7,328	17,438	58,285	226,016	164,714	238,365
1994	7,637	21,138	62,089	227,059	164,789	239,901
1995	7,713	19,182	63,690	229,955	170,394	236,242
1996	9,380	22,758	63,346	242,985	167,823	239,515
1997	8,372	23,887	65,899	251,619	177,019	241,184
1998	8,355	27,848	67,263	260,061	181,910	239,539
1999	7,075	24,353	66,784	260,115	184,280	239,520
2000	6,478	23,860	65,687	266,107	192,223	241,365
2001	6,523	26,679	63,961	280,077	177,189	244,432
2002	6,322	20,772	63,352	285,226	179,715	243,517
2003	5,739	20,421	60,730	291,376	181,120	256,051
2004	5,530	23,409	64,115	306,065	185,921	257,689
2005	5,808	23,933	61,238	304,730	186,736	249,514
2006	5,387	17,306	66,799	309,431	184,711	258,893
2007	4,504	13,034	65,241	300,570	166,270	254,476
2008	3,647	5,796	63,212	299,253	150,010	245,050
2009	2,804	7,171	55,013	291,615	131,192	242,503
2010	3,028	6,880	60,153	296,383	138,002	245,302
2011	3,038	5,749	62,003	307,668	132,487	247,829
2012	2,959	2,771	57,516	312,346	127,020	246,803
2013	3,039	3,946	59,797	317,819	116,946	256,216
2014	2,588	7,052	60,678	320,364	116,833	252,824
2015	1,755	5,937	65,449	318,834	124,429	249,171
2016	1,734	5,167	60,554	333,124	120,958	255,241

¹ Production for 1963 is not strictly comparable to 1962 because of product reclassification resulting from separately reporting data for petrochemical feedstocks beginning January 1963.

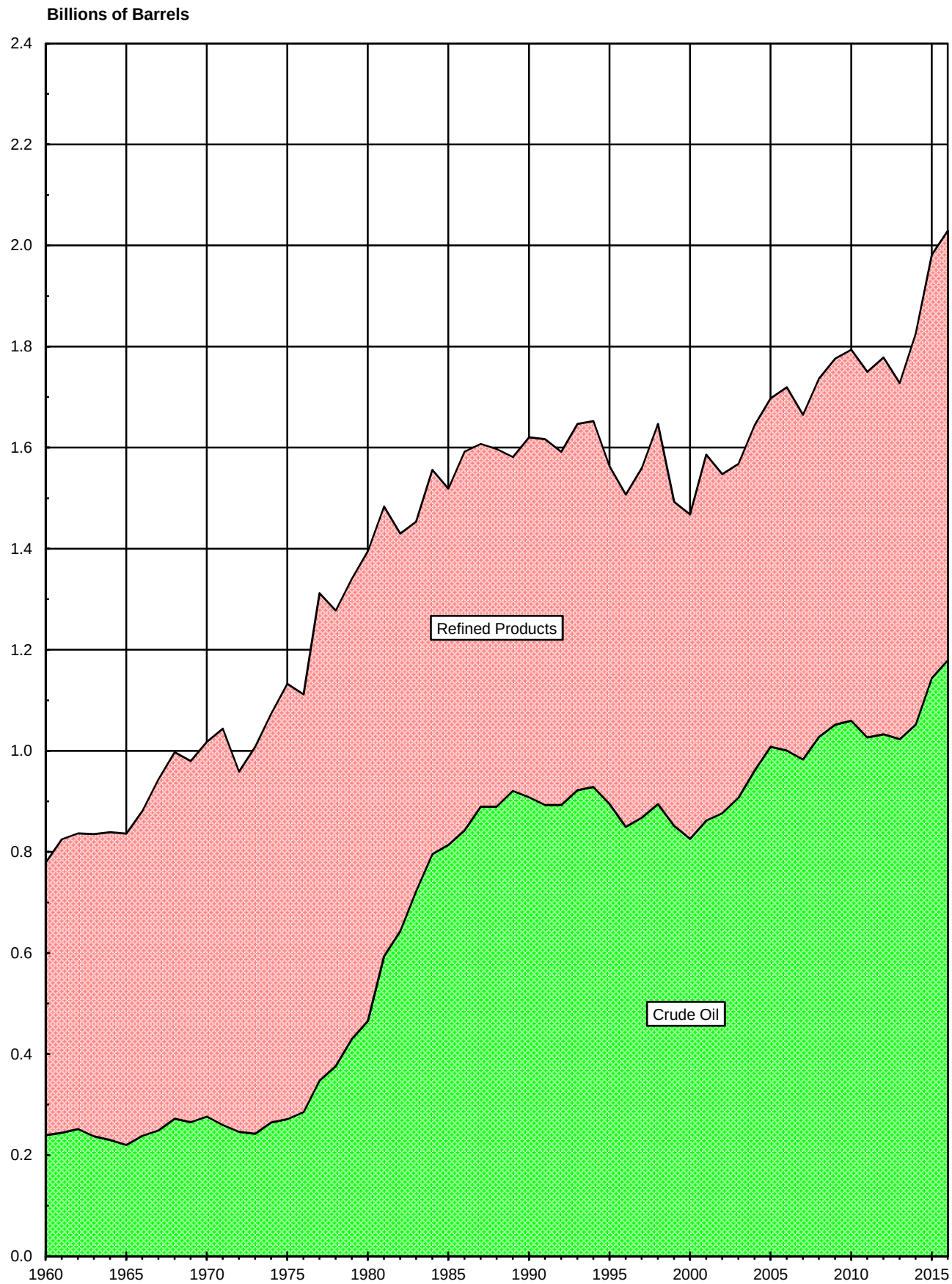
PERCENTAGE YIELDS OF MAJOR REFINED PRODUCTS IN THE UNITED STATES



**PERCENTAGE YIELDS OF THE MAJOR REFINED
PRODUCTS IN THE UNITED STATES**

<u>Year</u>	<u>Gasoline</u>	<u>Kerosene</u>	<u>Jet Fuel</u>	<u>Distillate and Residual Fuel Oil</u>	<u>Lubricants</u>	<u>Wax</u>	<u>Coke</u>	<u>Asphalt</u>	<u>Other Finished Products and Shortages</u>
1960	45.2	4.6	3.0	33.6	2.0	0.2	2.0	3.3	6.1
1961	44.7	4.7	3.1	33.6	2.0	0.2	2.5	3.4	5.8
1962	44.8	5.0	3.3	32.8	2.0	0.1	2.6	3.5	5.9
1963	44.1	5.1	3.6	32.5	2.0	0.1	2.6	3.5	6.5
1964	45.2	2.9	5.6	30.8	2.0	0.1	2.6	3.5	7.3
1965	44.0	2.8	5.8	31.1	1.9	0.2	2.6	3.7	7.9
1966	44.6	3.0	6.2	30.2	1.9	0.2	2.6	3.8	7.5
1967	44.0	2.7	7.5	29.9	1.8	0.2	2.5	3.5	7.9
1968	44.0	2.6	8.3	29.3	1.7	0.2	2.5	3.6	7.8
1969	44.9	2.6	8.2	28.4	1.7	0.1	2.6	3.5	8.0
1970	45.5	2.4	7.5	28.8	1.6	0.2	2.7	3.7	7.6
1971	46.3	2.1	7.4	28.7	1.6	0.2	2.6	3.8	7.3
1972	46.2	1.8	7.2	29.0	1.5	0.1	2.8	3.6	7.8
1973	45.6	1.7	6.8	30.2	1.5	0.2	2.9	3.6	7.5
1974	45.9	1.3	6.8	30.5	1.6	0.2	2.8	3.7	7.2
1975	46.5	1.2	7.0	31.2	1.2	0.1	2.8	3.2	6.8
1976	45.5	1.1	6.8	32.0	1.3	0.1	2.6	2.8	7.8
1977	43.4	1.2	6.7	35.1	1.2	0.1	2.5	2.9	7.6
1978	44.1	1.0	6.6	32.7	1.3	0.1	2.5	3.2	8.5
1979	43.0	1.3	6.9	33.0	1.3	0.1	2.6	3.1	8.7
1980	44.3	1.0	7.4	31.4	1.3	0.1	2.7	2.9	8.9
1981	44.8	0.9	7.6	30.9	1.3	0.1	3.1	2.7	8.6
1982	46.4	0.9	8.1	30.3	1.2	0.1	3.4	2.7	6.9
1983	47.6	0.9	8.5	27.6	1.2	0.1	3.5	3.1	7.5
1984	46.7	0.9	9.1	28.6	1.3	0.1	3.5	3.1	6.7
1985	45.8	0.8	9.6	28.7	1.2	0.1	3.7	3.2	6.9
1986	48.9	0.7	9.8	27.9	1.2	0.1	3.8	3.1	4.5
1987	48.4	0.6	9.5	25.5	1.2	0.1	3.6	3.1	8.0
1988	46.2	0.6	10.0	27.5	1.2	0.1	4.0	3.2	7.2
1989	45.9	0.5	10.1	27.7	1.2	0.1	3.9	3.1	7.5
1990	45.8	0.3	10.7	27.7	1.2	0.1	3.9	3.2	7.3
1991	45.9	0.3	10.3	28.0	1.1	0.1	4.1	3.1	7.2
1992	46.2	0.3	9.9	27.6	1.1	0.1	4.2	3.0	7.5
1993	46.3	0.3	10.0	27.7	1.1	0.1	4.3	3.2	6.9
1994	45.7	0.4	10.1	28.0	1.2	0.1	4.3	3.1	7.1
1995	46.6	0.4	9.8	27.2	1.2	0.1	4.3	3.2	7.2
1996	45.9	0.4	10.4	27.7	1.2	0.2	4.5	3.1	6.6
1997	45.9	0.4	10.3	27.2	1.2	0.2	4.6	3.2	6.9
1998	46.3	0.5	9.9	27.3	1.2	0.1	4.6	3.3	6.7
1999	46.7	0.4	10.2	26.9	1.2	0.1	4.7	3.3	6.6
2000	46.3	0.4	10.3	27.6	1.2	0.1	4.7	3.4	6.0
2001	46.4	0.5	9.8	28.4	1.1	0.1	4.9	3.1	5.7
2002	47.5	0.4	9.8	27.1	1.1	0.1	5.1	3.2	5.7
2003	46.8	0.4	9.5	27.9	1.1	0.1	5.1	3.2	5.9
2004	46.9	0.4	9.7	28.0	1.1	0.1	5.2	3.2	5.4
2005	46.4	0.4	9.8	29.0	1.1	0.1	5.3	3.2	4.7
2006	46.1	0.3	9.3	29.4	1.2	0.1	5.3	3.2	5.1
2007	45.6	0.2	9.1	30.3	1.1	0.1	5.2	2.9	5.5
2008	44.2	0.1	9.7	31.8	1.1	0.1	5.3	2.7	5.0
2009	46.1	0.1	9.3	30.9	1.0	0.1	5.3	2.4	4.8
2010	45.7	0.1	9.3	31.3	1.1	0.1	5.3	2.5	4.6
2011	45.0	0.1	9.4	32.3	1.1	0.1	5.5	2.4	4.1
2012	45.8	0.1	9.4	31.8	1.0	0.1	5.4	2.2	4.2
2013	45.8	0.1	9.4	32.0	1.0	0.1	5.4	2.0	4.2
2014	45.8	0.1	9.4	32.1	1.0	0.0	5.3	1.9	4.4
2015	46.1	0.1	9.6	32.0	1.1	0.0	5.2	2.0	3.9
2016	47.1	0.1	9.8	30.9	1.0	0.0	5.4	1.9	3.8

TOTAL UNITED STATES STOCKS-ALL OILS



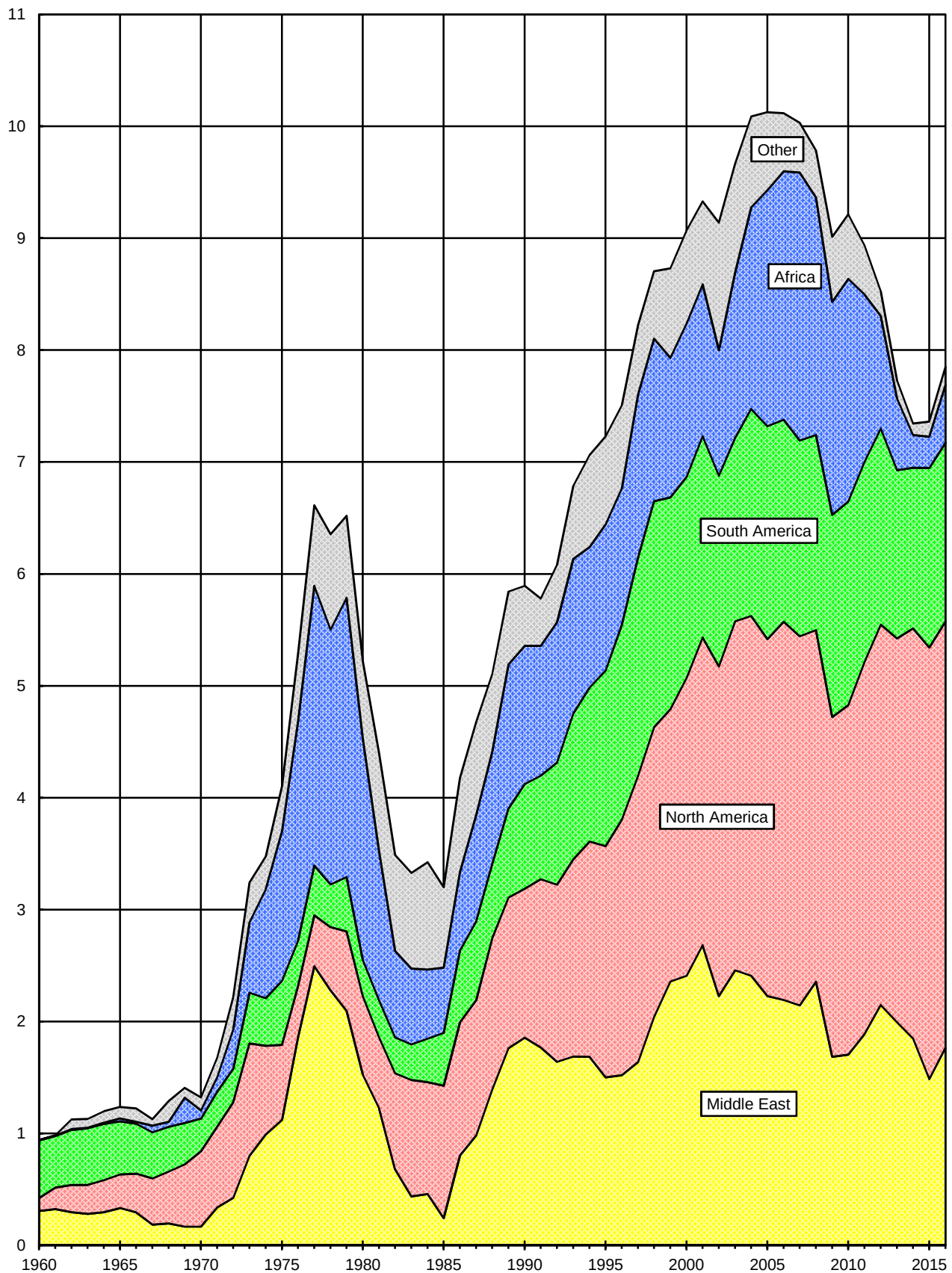
TOTAL UNITED STATES STOCKS--ALL OILS
(Thousands of Barrels)

<u>Year</u>	<u>Crude Oil</u>	<u>Refined¹ Products</u>	<u>Total Stocks Beginning of Period</u>	<u>Total Stocks End of Period</u>	<u>Change in Total Stocks</u>
1960	239,800	538,935	808,970	778,735	- 30,235
1961	244,664	580,410	784,558	825,074	+ 40,516
1962	252,011	584,858	825,074	836,869	+ 11,795
1963	237,361	598,198	834,296	835,559	+ 1,263
1964	230,057	609,178	835,559	839,235	+ 3,676
1965	220,289	616,055	839,235	836,344	- 2,891
1966	238,391	642,714	836,344	881,105	+ 44,761
1967	248,970	695,141	881,105	944,111	+ 63,006
1968	272,193	725,379	944,111	997,572	+ 53,461
1969	265,227	714,896	997,572	980,123	- 17,449
1970	276,367	741,494	980,123	1,017,861	+ 37,738
1971	259,648	784,299	1,017,861	1,043,947	+ 26,086
1972	246,395	712,584	1,043,947	958,979	- 84,968
1973	242,478	765,829	958,979	1,008,307	+ 49,328
1974	265,020	808,626	1,008,307	1,073,646	+ 65,339
1975	271,354	861,601	1,073,646	1,132,955	+ 59,309
1976	285,471	826,339	1,132,955	1,111,810	- 21,145
1977	347,683	964,217	1,111,810	1,311,900	+ 200,090
1978	376,281	901,338	1,311,900	1,277,619	- 34,281
1979	430,265	910,597	1,277,619	1,340,862	+ 63,243
1980	465,502	929,757	1,340,862	1,395,259	+ 54,397
1981	593,805	889,843	1,395,259	1,483,648	+ 88,389
1982	643,557	786,367	1,483,648	1,429,924	- 53,724
1983	722,939	730,698	1,429,924	1,453,637	+ 23,713
1984	795,881	760,346	1,453,637	1,556,227	+ 102,590
1985	814,208	704,561	1,556,227	1,518,769	- 37,458
1986	842,789	749,723	1,518,769	1,592,512	+ 73,743
1987	889,643	717,808	1,592,512	1,607,451	+ 14,939
1988	889,874	707,358	1,607,451	1,597,232	- 10,219
1989	921,148	660,271	1,597,232	1,581,419	- 15,813
1990	908,387	712,246	1,581,419	1,620,633	+ 39,214
1991	893,102	723,852	1,620,633	1,616,954	- 3,679
1992	892,864	699,110	1,616,954	1,591,974	- 24,980
1993	922,465	724,754	1,591,974	1,647,219	+ 55,245
1994	928,915	723,870	1,647,219	1,652,785	+ 5,566
1995	894,968	667,884	1,652,785	1,562,852	- 89,933
1996	849,669	657,747	1,562,852	1,507,416	- 55,436
1997	868,119	691,640	1,507,416	1,559,759	+ 52,343
1998	894,948	752,027	1,559,759	1,646,975	+ 87,216
1999	851,723	641,208	1,646,975	1,492,931	- 154,044
2000	826,185	641,362	1,492,931	1,467,547	- 25,384
2001	862,221	724,128	1,467,547	1,586,349	+ 118,802
2002	876,705	671,205	1,586,349	1,547,910	- 38,439
2003	907,263	661,040	1,547,910	1,568,303	+ 20,393
2004	961,341	683,464	1,568,303	1,644,805	+ 76,502
2005	1,008,248	689,356	1,644,805	1,697,604	+ 52,799
2006	1,000,881	718,625	1,697,604	1,719,506	+ 21,902
2007	983,046	682,299	1,719,506	1,665,345	- 54,161
2008	1,027,663	709,076	1,665,345	1,736,739	+ 71,394
2009	1,051,795	724,580	1,736,739	1,776,375	+ 39,636
2010	1,059,975	734,124	1,776,375	1,794,099	+ 17,724
2011	1,026,630	723,457	1,794,099	1,750,087	- 44,012
2012	1,033,064	745,492	1,750,087	1,778,556	+ 28,469
2013	1,023,160	704,725	1,778,556	1,727,885	- 46,404
2014	1,051,824	773,617	1,727,885	1,825,441	+ 97,556
2015	1,144,339	837,683	1,825,441	1,982,022	+ 156,581
2016	1,179,704	849,868	1,982,022	2,029,572	+ 47,550

¹ Includes other liquids.

UNITED STATES IMPORTS OF CRUDE OIL BY SOURCE

Million Barrels per Day



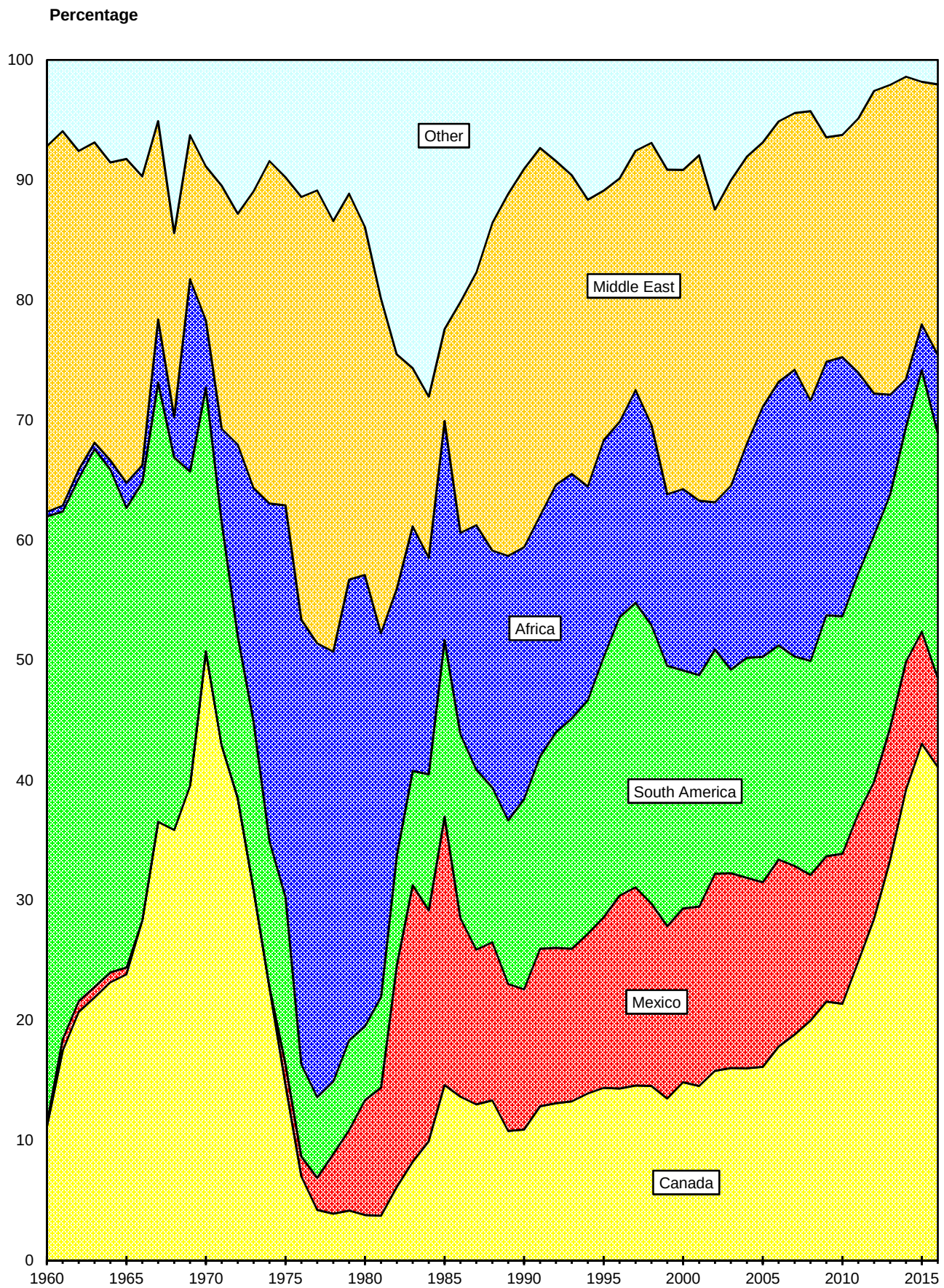
UNITED STATES CRUDE OIL IMPORTS BY SOURCE¹

(Thousands of Barrels)

Year	Canada	Mexico	Total North America	Colombia	Ecuador	Trinidad	Venezuela	Total South America	Algeria	Angola	Congo Brazzaville	Congo Kinshasa	Egypt	Gabon	Nigeria	Total Africa
1960	41,349	925	42,274	14,799	...	...	172,887	187,955	284	...	...	...	1,167	...	...	1,451
1961	66,614	3,655	70,269	10,050	...	...	155,751	167,726	...	...	...	...	1,887	...	...	1,887
1962	85,152	3,644	88,796	8,614	...	...	168,993	178,884	1,543	...	...	...	1,543	...	...	3,086
1963	90,394	3,657	94,051	8,293	...	...	174,537	184,882	380	...	...	...	1,772	...	...	2,152
1964	101,607	3,577	105,184	9,606	...	...	174,222	183,828	2,249	...	...	...	1,077	...	...	3,326
1965	107,762	2,552	110,314	15,211	...	...	157,852	173,063	3,256	...	...	...	881	...	5,296	9,433
1966	126,712	...	126,712	14,424	...	...	147,427	163,088	1,400	...	...	...	852	...	4,114	6,366
1967	150,409	...	150,409	11,855	...	...	131,089	150,593	1,447	...	...	...	1,318	...	1,432	21,659
1968	169,418	...	169,418	11,981	...	...	125,737	146,559	1,944	...	...	...	10,795	...	3,131	15,870
1969	203,298	...	203,298	15,551	...	...	111,722	134,549	358	...	...	...	14,778	...	17,958	82,380
1970	245,258	...	245,258	7,313	...	...	97,996	106,108	2,093	...	...	...	7,626	...	17,490	27,209
1971	263,294	...	263,294	3,175	...	...	110,574	114,010	4,685	1,301	...	...	6,924	...	34,826	47,736
1972	312,440	...	312,440	1,695	5,331	8,626	93,300	109,359	31,753	5,785	...	...	3,091	...	88,887	129,516
1973	365,370	489	365,859	778	17,229	...	125,742	165,488	43,619	17,753	...	...	5,296	...	163,687	230,355
1974	288,763	597	289,360	...	15,225	23,045	116,437	154,707	65,764	17,536	67	...	3,227	8,552	254,358	356,121
1975	219,175	25,660	244,835	...	20,679	42,097	144,221	208,937	96,459	26,051	...	...	1,687	9,811	272,265	488,515
1976	135,690	31,670	167,360	2,041	18,671	38,142	88,139	148,842	149,190	2,426	3,142	7,088	6,311	9,685	370,962	716,661
1977	101,778	64,711	166,489	...	20,229	48,841	91,331	161,979	198,468	6,150	2,440	...	13,034	12,632	412,498	912,631
1978	90,490	115,426	205,916	...	13,910	51,974	66,125	139,708	231,253	2,290	5,454	263	7,395	13,841	332,035	830,773
1979	99,081	159,616	258,697	...	11,010	44,950	106,794	177,828	222,042	14,088	909	1,379	20,205	15,328	390,116	912,631
1980	73,004	184,326	257,330	...	5,765	42,007	56,491	118,359	165,371	13,091	2,273	4,691	11,250	9,065	304,090	723,908
1981	59,904	171,363	231,267	...	13,967	37,186	53,590	120,701	95,165	16,528	1,276	5,977	12,155	12,633	222,981	486,766
1982	78,041	235,298	313,339	...	11,788	33,541	56,434	116,360	32,714	15,248	456	6,914	14,683	14,429	186,329	282,706
1983	100,142	279,703	379,845	...	20,594	30,207	59,854	115,669	64,274	25,763	6,616	8,158	8,958	21,415	109,807	247,555
1984	124,687	241,054	365,741	...	17,066	31,939	92,728	142,219	71,074	31,172	12,226	11,460	3,485	20,838	75,669	225,928
1985	170,800	261,019	431,819	...	20,334	35,595	111,627	171,927	30,524	37,889	5,962	12,569	956	18,797	102,134	213,090
1986	208,163	226,533	434,696	20,715	23,408	34,060	151,937	233,760	28,423	37,076	7,188	9,490	3,620	8,959	159,683	255,669
1987	221,981	219,552	441,533	41,809	8,217	27,408	178,163	255,976	41,932	65,657	5,960	8,128	19,884	12,655	193,004	347,220
1988	249,077	246,545	495,622	38,640	12,240	26,119	160,747	240,872	21,123	74,325	10,747	11,470	9,560	5,664	222,094	368,674
1989	230,043	261,244	491,287	49,615	29,208	26,815	180,598	290,507	21,841	101,943	3,997	9,493	5,515	17,774	292,165	469,676
1990	234,516	251,345	485,861	51,041	13,886	27,803	242,910	340,866	23,035	86,095	8,457	8,468	9,005	23,349	286,126	451,171
1991	271,375	276,864	548,239	44,924	19,199	26,433	243,986	338,078	15,990	92,839	10,598	9,852	6,322	30,556	249,403	423,148
1992	291,616	288,206	579,822	37,473	22,675	25,514	302,348	399,731	8,730	122,797	15,692	6,320	12,494	45,056	243,365	458,832
1993	328,504	314,961	643,465	51,520	28,378	20,209	368,641	475,067	8,746	122,741	19,222	6,826	24,688	54,952	263,532	504,307
1994	358,955	342,598	701,553	53,129	33,333	22,674	377,525	501,764	7,714	117,641	10,390	4,949	17,666	70,806	227,638	458,828
1995	379,518	374,719	754,237	75,436	35,098	22,589	419,996	572,118	9,789	131,281	7,316	5,233	11,718	83,642	226,574	476,879
1996	393,571	441,632	835,203	82,796	35,203	21,265	476,751	636,888	2,964	125,845	11,963	5,487	13,852	67,475	217,911	446,879
1997	437,396	496,275	933,671	98,461	41,567	20,300	508,730	711,427	2,195	155,298	17,178	7,599	12,989	84,109	251,608	531,416
1998	462,228	482,252	944,480	127,487	35,593	19,423	502,552	737,461	3,526	169,580	19,527	6,219	4,130	75,543	251,315	530,216
1999	429,962	457,655	887,617	165,078	41,567	14,748	419,893	690,709	9,305	130,168	16,645	900	8,127	61,247	227,471	455,487
2000	493,256	480,469	973,725	116,311	45,685	20,331	447,736	657,657	211	107,820	15,422	2,844	1,630	52,237	320,137	501,859
2001	494,796	508,715	1,003,511	94,844	41,403	18,562	471,243	656,074	3,966	117,254	14,430	345	0	51,065	307,173	495,488
2002	527,304	547,443	1,074,747	85,783	36,491	24,663	438,270	622,724	10,906	117,058	8,494	1,269	0	52,208	215,122	409,255
2003	565,533	572,572	1,138,105	60,491	50,726	24,629	431,704	598,255	40,992	132,349	9,755	698	0	47,670	303,617	539,580
2004	591,489	585,023	1,176,512	52,049	84,937	18,027	474,531	677,169	78,719	112,018	2,918	5,101	0	52,061	394,560	658,857
2005	596,183	567,955	1,164,138	57,002	100,730	23,192	452,914	694,555	83,359	166,404	9,216	688	1,363	46,515	393,038	769,423
2006	657,834	575,501	1,233,335	51,630	99,183	24,520	417,001	659,121	131,981	187,325	9,753	0	147	21,773	378,670	809,983
2007	689,209	514,124	1,203,333	50,099	72,138	17,608	419,180	638,451	161,770	181,813	23,123	473	403	22,897	395,554	874,415
2008	715,982	434,340	1,150,322	65,076	78,234	8,355	380,419	637,450	114,112	184,460	24,673	0	2,650	21,268	337,359	777,337
2009	709,106	398,524	1,107,630	91,574	66,010	14,662	347,285	659,936	102,559	163,604	23,500	3,412	3,272	22,926	283,091	694,555
2010	719,175	420,567	1,139,742	123,525	76,484	16,303	332,926	664,523	119,579	139,736	25,694	3,225	2,618	17,022	358,924	725,722
2011	811,964	402,052	1,214,016	144,974	74,230	12,115	316,839	652,641	64,816	122,210	19,192	3,999	1,543	12,532	280,079	545,729
2012	887,674	356,715	1,244,389	147,428	64,618	9,901	333,972	641,118	43,791	81,206	10,710	137	11,438	15,338	148,482	368,266
2013	941,236	310,402	1,251,638	133,964	84,717	2,775	275,459	548,815	10,461	73,445	6,532	1	1,553	8,759	87,403	234,026
2014	1,051,989	284,966	1,336,955	107,483	77,799	1,798	267,561	523,908	2,091	50,883	1,463	0	0	5,852	21,242	107,034
2015	1,156,617	251,102	1,407,719	135,985	82,302	2,537	283,405	585,192	1,060	45,103	3,111	0	542	3,578	19,856	102,407
2016	1,181,070	213,079	1,394,149	161,601	86,859	3,292	271,366	584,550 ²	18,515	58,133	1,147	0	3,833	439	75,807	188,762 ³

¹ Totals may include amounts from countries not listed.² Includes 4,441 from Argentina, 52,936 from Brazil, 318 from Bolivia, 2,711 from Guatemala and 1,026 from Peru.³ Includes 24,387 from Chad, 2,250 from Equatorial Guinea and 4,251 from Libya.

UNITED STATES CRUDE OIL IMPORTS BY SOURCE



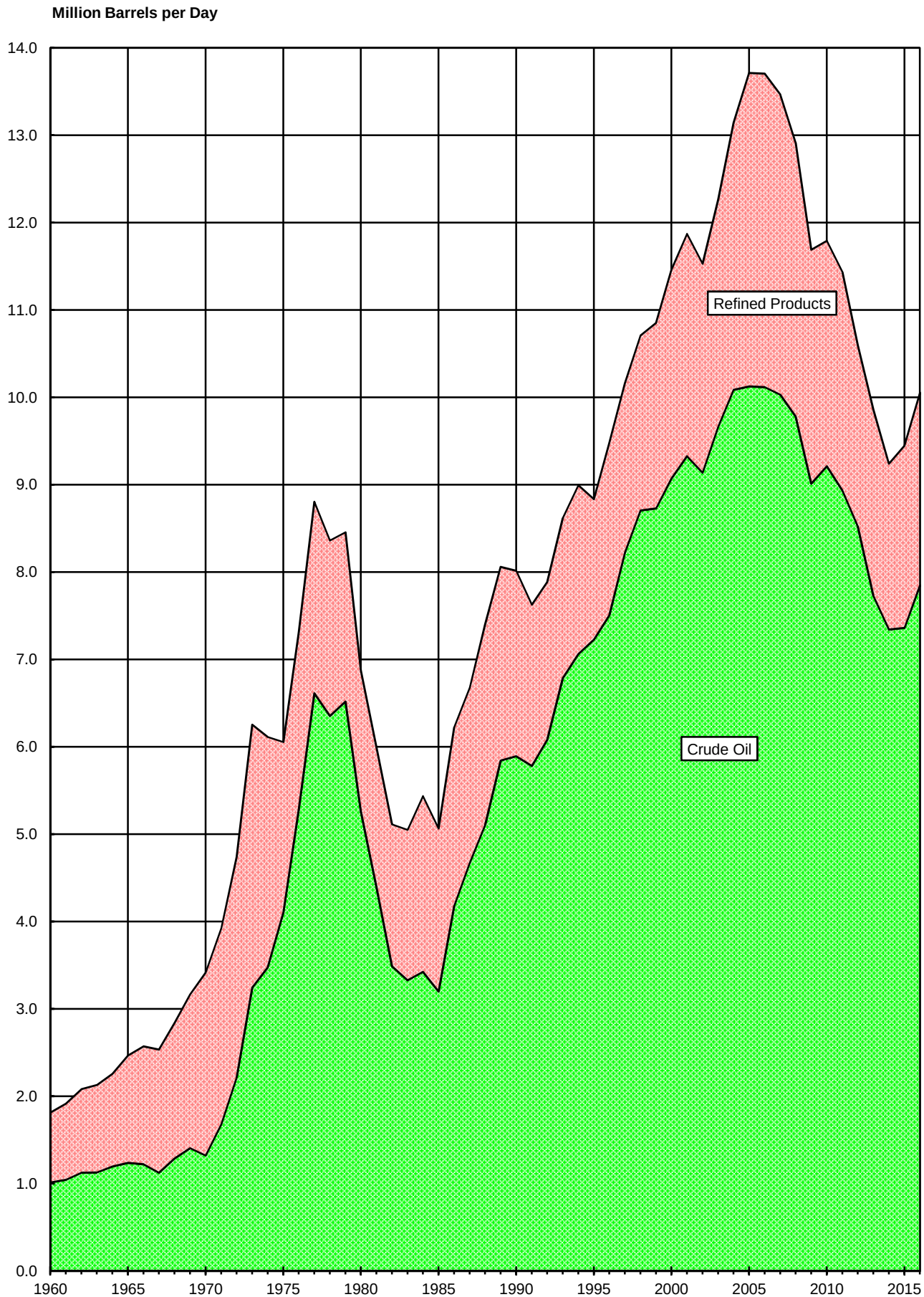
UNITED STATES CRUDE OIL IMPORTS BY SOURCE¹

(Thousands of Barrels)

Year	Iran	Iraq	Kuwait	Neutral Zone	Oman	Qatar	Saudi Arabia	United ² Arab Emirates	Total Middle East	Indonesia	Malaysia	Norway	United Kingdom	Other	Total All Countries
1960	13,056	6,363	47,512	16,363	...	...	28,232	...	113,175	26,720	...	...	...	...	371,575
1961	21,970	7,362	44,311	19,278	...	...	22,501	...	118,997	22,669	...	...	...	...	381,548
1962	17,735	856	40,749	15,837	...	...	24,359	...	109,071	24,480	...	...	...	6,722	411,039
1963	22,717	321	29,680	15,855	...	...	28,806	...	103,214	21,340	...	...	...	7,021	412,660
1964	24,143	...	23,263	17,565	...	...	35,464	1,112	108,841	23,047	...	...	...	14,417	438,643
1965	28,633	5,695	20,208	9,756	...	...	48,235	5,035	121,908	22,170	...	...	...	15,152	452,040
1966	30,833	9,447	9,543	7,028	...	...	45,771	4,781	107,579	18,198	...	...	...	25,177	447,120
1967	23,781	1,716	6,859	4,006	...	...	29,679	1,936	67,977	22,519	...	...	...	...	411,649
1968	21,154	...	15,863	10,749	...	...	18,959	5,605	72,330	26,555	...	...	...	41,591	472,323
1969	15,306	...	12,539	15,864	...	...	12,665	5,051	61,616	32,271	...	...	...	...	514,114
1970	12,184	...	12,123	8,398	...	...	6,140	23,047	61,892	25,670	...	...	...	17,156	483,293
1971	38,576	3,932	10,650	...	...	...	41,971	29,026	124,155	40,232	...	...	...	23,990	613,417
1972	49,700	1,315	13,205	...	...	...	63,626	26,873	155,982	59,633	966	...	...	43,239	811,135
1973	78,990	1,529	15,208	...	...	2,663	168,525	25,764	292,988	73,055	234	...	...	56,017	1,183,996
1974	168,956	...	1,820	...	236	6,189	159,827	25,158	362,186	103,482	510	322	...	2,467	1,269,155
1975	101,575	707	1,444	...	492	6,657	256,036	42,585	409,496	138,270	1,951	4,552	125	1,500	1,498,181
1976	109,073	9,542	451	...	10,943	8,631	447,071	93,105	681,184	196,599	5,914	12,881	4,923	648	1,935,012
1977	193,415	26,894	15,434	...	27,140	24,281	501,072	121,640	910,744	184,984	20,257	17,628	35,583	4,032	2,414,327
1978	202,357	22,673	1,718	...	22,240	23,224	416,910	140,653	832,305	194,620	13,677	37,815	61,555	3,457	2,319,826
1979	108,269	32,052	1,898	...	13,466	11,450	491,514	102,709	765,249	138,528	18,954	27,523	71,923	8,208	2,379,541
1980	2,625	10,119	7,182	...	7,747	7,920	456,475	65,553	558,408	112,302	22,213	51,718	63,614	18,310	1,926,162
1981	...	...	...	...	8,702	2,665	406,059	27,950	447,518	116,126	12,143	41,542	134,766	13,874	1,604,703
1982	12,854	974	904	...	8,183	2,600	193,536	29,509	248,560	82,315	6,574	37,299	161,061	25,000	1,273,214
1983	17,575	3,758	2,641	...	12,281	...	117,325	6,641	160,221	115,156	930	23,836	133,142	38,871	1,215,225
1984	3,706	4,554	8,780	...	3,755	1,497	113,078	32,966	168,336	111,404	...	40,927	138,246	61,148	1,253,949
1985	9,919	16,889	1,316	...	655	...	48,044	12,760	89,583	106,654	301	11,311	101,522	42,090	1,168,297
1986	7,078	29,401	10,106	...	2,897	4,365	225,627	13,806	293,280	108,376	3,883	19,403	115,659	60,252	1,524,978
1987	35,942	29,842	25,630	...	12,831	...	234,213	20,602	359,060	95,775	4,464	25,395	111,060	65,439	1,705,922
1988	25	125,515	29,381	3,274	2,439	...	330,194	8,270	509,826	68,127	6,868	22,570	92,910	63,536	1,869,005
1989	...	161,017	56,536	...	6,671	767	407,236	7,513	643,217	57,636	14,079	46,390	58,246	61,723	2,132,761
1990	...	187,485	28,942	...	13,037	1,293	436,193	3,300	678,056	35,912	14,749	34,878	56,497	53,397	2,151,387
1991	11,821	...	2,033	...	1,311	...	621,766	557	646,204	37,231	8,590	27,009	38,862	43,171	2,110,532
1992	...	...	14,231	...	1,500	...	584,682	...	600,413	25,685	3,709	43,394	73,339	41,416	2,226,341
1993	...	...	125,524	...	10,070	...	467,753	4,352	616,385	23,907	3,643	49,931	114,036	46,489	2,477,230
1994	...	...	112,073	...	16,746	...	473,356	4,031	615,692	33,526	2,361	69,304	144,655	50,389	2,578,072
1995	...	...	77,903	...	7,137	...	459,826	1,953	548,297	23,258	2,046	94,231	124,443	43,301	2,638,810
1996	...	423	86,127	...	12,808	...	456,896	980	557,234	16,155	2,064	107,223	78,913	67,280	2,747,839
1997	...	32,530	92,229	...	1,511	...	472,093	...	598,363	18,657	2,850	105,048	61,700	39,167	3,002,299
1998	...	122,518	109,412	...	...	504	512,452	995	745,881	18,328	9,375	80,820	58,658	52,365	3,177,584
1999	...	264,764	89,914	...	...	332	506,272	...	861,282	25,371	7,708	96,147	103,716	58,626	3,186,663
2000	...	226,804	96,367	...	782	...	557,569	1,001	882,523	13,338	10,671	110,653	106,332	63,058	3,319,816
2001	...	289,998	86,535	...	7,138	69	588,075	7,802	979,617	14,759	5,643	102,724	89,142	57,936	3,404,894
2002	...	167,638	78,803	...	6,060	3,194	554,500	3,505	813,700	18,246	3,219	127,136	147,935	119,213	3,336,175
2003	...	175,663	75,870	...	12,736	...	629,820	3,645	897,734	9,519	7,827	65,935	130,938	139,803	3,527,696
2004	...	239,758	88,359	...	3,570	1,383	547,125	1,885	882,080	12,360	6,551	52,365	87,193	138,976	3,692,063
2005	...	192,524	82,730	...	8,102	...	527,287	3,112	813,755	6,816	3,648	43,454	81,621	118,561	3,695,971
2006	...	201,866	65,227	...	12,826	428	519,236	1,675	801,258	5,939	2,551	35,897	47,271	97,726	3,693,081
2007	...	176,709	63,806	...	11,538	...	528,189	3,239	783,481	5,505	331	20,278	36,905	98,705	3,661,404
2008	...	229,300	75,353	...	6,307	...	550,276	1,400	862,636	6,021	626	10,899	28,498	106,905	3,580,694
2009	...	163,916	65,673	...	11,046	2,926	357,874	14,233	615,668	5,478	2,387	21,326	37,426	145,269	3,289,675
2010	...	151,619	71,275	...	4,357	...	394,967	609	622,827	12,102	959	9,201	43,873	143,907	3,362,856
2011	...	167,652	69,542	...	14,895	1,943	432,972	2,597	689,601	7,168	...	19,470	13,316	119,481	3,261,422
2012	...	174,080	110,892	...	3,460	...	498,109	...	786,541	2,022	...	9,338	6,445	62,636	3,120,755
2013	...	124,402	118,821	...	951	...	483,567	898	728,639	6,646	...	6,092	7,696	37,928	2,821,480
2014	...	134,642	112,913	...	...	...	423,066	4,866	675,487	7,220	...	3,161	3,479	23,382	2,680,626
2015	...	83,726	74,460	...	...	...	384,071	602	542,859	13,097	182	3,215	4,154	28,584	2,687,409
2016	...	153,531	76,459	...	10,950	...	402,118	4,151	647,209	12,312	1,657	12,988	7,070	24,511	2,873,208

¹ Totals may include amounts from countries not listed.² Listed formerly as Abu Dhabi.³ Included with Saudi Arabia 1971–1987.

UNITED STATES IMPORTS OF REFINED PRODUCTS AND CRUDE OIL

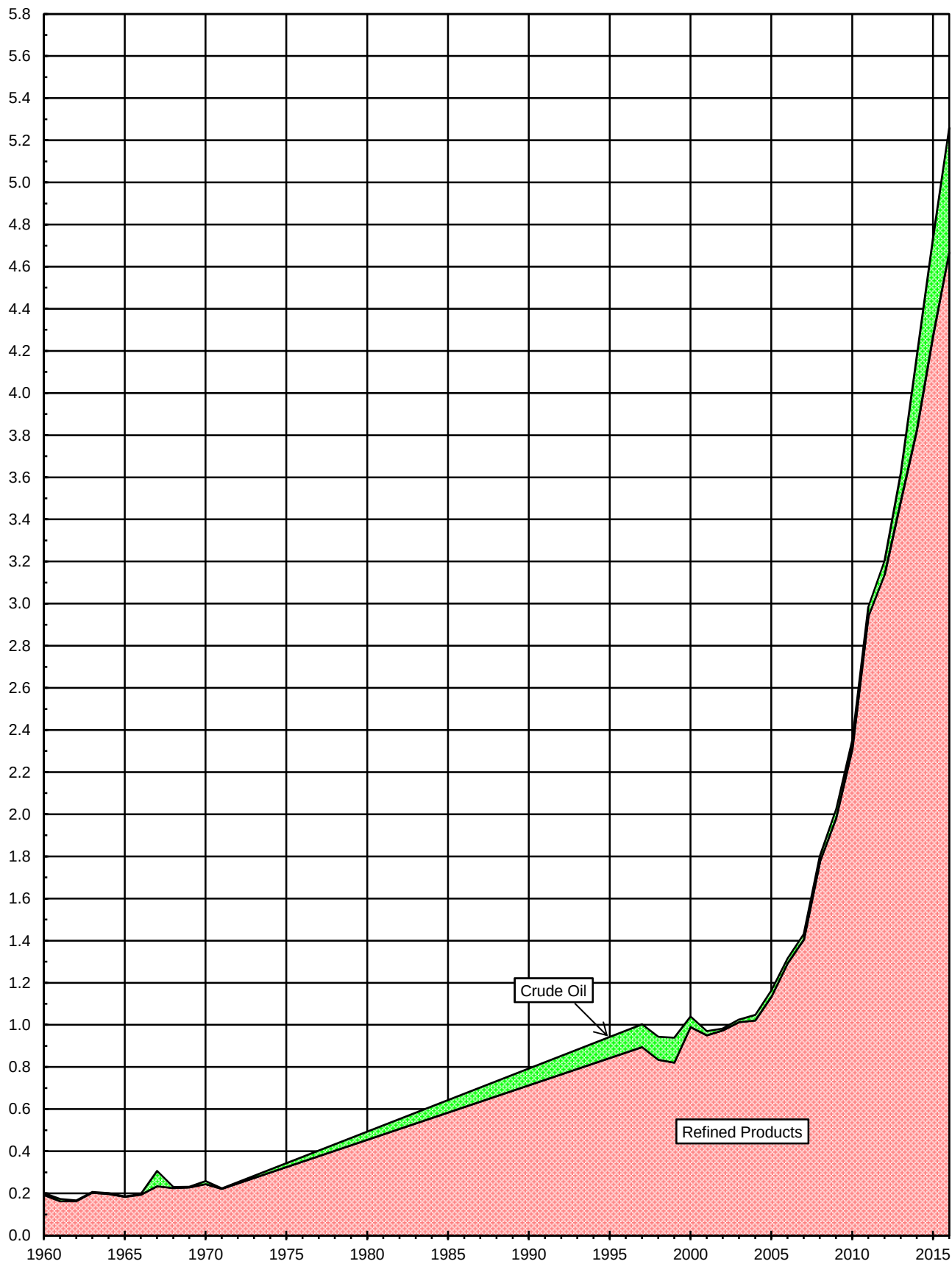


**UNITED STATES IMPORTS
OF REFINED PRODUCTS AND CRUDE OIL**
(Thousands of Barrels)

Year	Refined Imports		Crude Oil Imports		Refined and Crude Oil	
	Total	Daily Average	Total	Daily Average	From All Countries	Daily Average
1960	292,536	799	371,575	1,015	664,111	1,815
1961	318,118	872	381,548	1,045	699,666	1,917
1962	348,754	955	411,039	1,126	759,793	2,082
1963	364,922	1,000	412,660	1,131	777,582	2,130
1964	388,093	1,060	438,643	1,198	826,736	2,259
1965	448,732	1,229	452,040	1,238	900,772	2,468
1966	492,042	1,348	447,120	1,225	939,162	2,573
1967	514,342	1,409	411,649	1,128	925,991	2,537
1968	567,046	1,549	472,323	1,291	1,039,369	2,840
1969	641,437	1,757	514,114	1,409	1,155,551	3,166
1970	764,769	2,095	483,293	1,324	1,248,062	3,419
1971	819,463	2,245	613,417	1,681	1,432,880	3,926
1972	924,179	2,525	811,135	2,216	1,735,314	4,741
1973	1,099,497	3,012	1,183,996	3,244	2,283,493	6,256
1974	961,792	2,635	1,269,155	3,477	2,230,947	6,112
1975	712,154	1,951	1,498,181	4,105	2,210,335	6,056
1976	741,399	2,026	1,935,012	5,287	2,676,411	7,313
1977	800,319	2,193	2,414,327	6,614	3,214,646	8,807
1978	732,798	2,008	2,319,826	6,356	3,052,624	8,363
1979	706,946	1,937	2,379,541	6,519	3,086,487	8,456
1980	589,548	1,611	1,926,162	5,263	2,515,710	6,874
1981	583,716	1,599	1,604,703	4,396	2,188,419	5,996
1982	593,144	1,625	1,273,214	3,488	1,866,358	5,113
1983	628,519	1,722	1,215,225	3,329	1,843,744	5,051
1984	735,987	2,011	1,253,949	3,426	1,989,936	5,437
1985	681,210	1,866	1,168,297	3,201	1,849,507	5,067
1986	746,604	2,045	1,524,978	4,178	2,271,582	6,224
1987	731,437	2,004	1,705,922	4,674	2,437,359	6,678
1988	840,135	2,295	1,869,005	5,107	2,709,140	7,402
1989	809,338	2,217	2,132,761	5,843	2,942,099	8,061
1990	775,008	2,123	2,151,387	5,894	2,926,395	8,018
1991	673,231	1,844	2,110,532	5,782	2,783,763	7,627
1992	660,556	1,805	2,226,341	6,083	2,886,897	7,888
1993	669,224	1,833	2,477,230	6,787	3,146,454	8,620
1994	705,549	1,933	2,578,072	7,063	3,283,621	8,996
1995	585,943	1,605	2,638,810	7,230	3,224,753	8,835
1996	721,289	1,971	2,747,839	7,508	3,469,128	9,478
1997	706,671	1,936	3,002,299	8,225	3,708,970	10,162
1998	730,862	2,002	3,177,584	8,706	3,908,446	10,708
1999	774,411	2,122	3,186,663	8,731	3,961,074	10,852
2000	874,270	2,389	3,319,816	9,071	4,194,086	11,459
2001	928,144	2,543	3,404,894	9,328	4,333,038	11,871
2002	872,363	2,390	3,336,175	9,140	4,208,538	11,530
2003	948,805	2,599	3,527,696	9,665	4,476,501	12,264
2004	1,119,041	3,057	3,692,063	10,088	4,811,104	13,145
2005	1,309,570	3,588	3,695,971	10,126	5,005,541	13,714
2006	1,310,001	3,589	3,693,081	10,118	5,003,082	13,707
2007	1,254,553	3,437	3,661,404	10,031	4,915,957	13,468
2008	1,146,300	3,132	3,580,694	9,783	4,726,994	12,915
2009	977,435	2,678	3,289,675	9,013	4,267,110	11,691
2010	941,677	2,580	3,362,856	9,213	4,304,533	11,793
2011	912,788	2,501	3,261,422	8,935	4,174,210	11,436
2012	758,097	2,071	3,120,755	8,527	3,878,852	10,598
2013	776,974	2,129	2,821,480	7,730	3,598,454	9,859
2014	692,278	1,897	2,680,626	7,344	3,372,904	9,241
2015	761,325	2,086	2,687,409	7,363	3,448,734	9,449
2016	807,019	2,205	2,873,208	7,850	3,680,227	10,055

UNITED STATES EXPORTS OF CRUDE OIL AND REFINED PRODUCTS

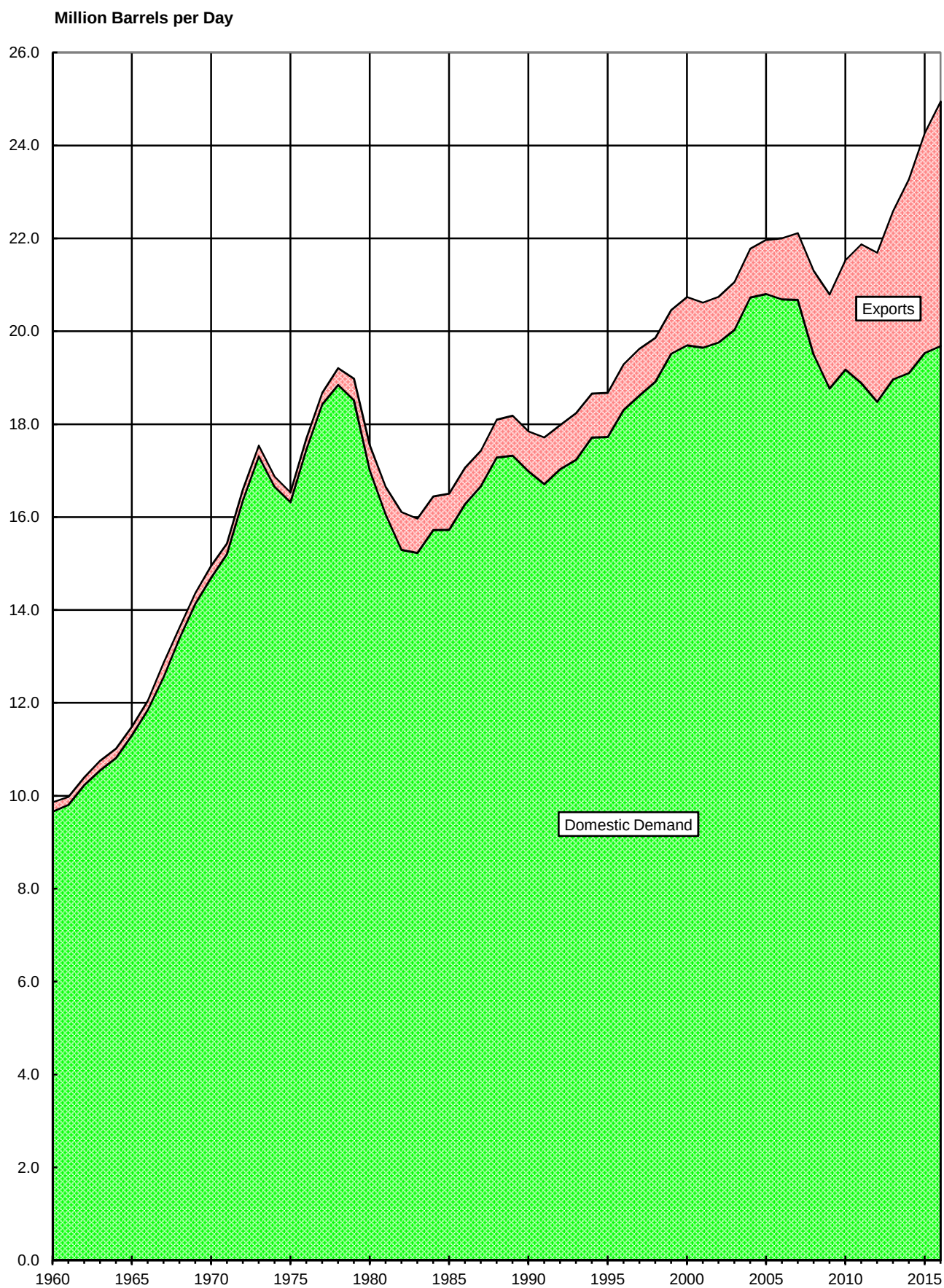
Million Barrels per Day



**UNITED STATES EXPORTS
OF CRUDE AND REFINED PRODUCTS**
(Thousands of Barrels)

<u>Year</u>	<u>Crude Oil Exported</u>	<u>Refined Products Exported</u>	<u>Total Exports</u>
1960	3,087	70,819	73,906
1961	3,227	60,336	63,563
1962	1,790	59,600	61,390
1963	1,737	74,048	75,785
1964	1,363	72,516	73,879
1965	1,097	67,191	68,288
1966	1,477	70,923	72,400
1967	26,541	85,519	112,060
1968	1,802	82,742	84,544
1969	1,436	83,449	84,885
1970	4,991	89,467	94,458
1971	503	81,342	81,845
1972	187	81,202	81,389
1973	697	83,716	84,413
1974	1,074	79,417	80,491
1975	2,146	74,282	76,428
1976	2,941	78,658	81,599
1977	18,255	70,333	88,588
1978	57,728	74,329	132,057
1979	85,707	86,149	171,856
1980	103,908	94,289	198,197
1981	83,166	133,858	217,024
1982	86,279	211,234	297,513
1983	59,948	209,906	269,854
1984	66,233	197,844	264,077
1985	74,513	210,556	285,069
1986	56,205	230,168	286,373
1987	54,964	223,767	278,731
1988	56,713	241,753	298,466
1989	51,683	261,777	313,460
1990	39,653	273,018	312,671
1991	42,385	322,956	365,341
1992	32,473	315,111	347,584
1993	35,834	330,140	365,974
1994	36,020	307,876	343,896
1995	34,509	311,968	346,477
1996	40,211	318,686	358,897
1997	39,308	326,950	366,258
1998	40,102	304,655	344,757
1999	43,031	299,986	343,017
2000	18,352	362,358	380,710
2001	7,386	347,035	354,421
2002	3,296	355,781	359,077
2003	4,538	370,172	374,710
2004	9,783	373,853	383,636
2005	11,619	413,571	425,190
2006	8,999	471,562	480,561
2007	10,006	512,873	522,879
2008	10,464	648,928	659,392
2009	15,985	722,818	738,803
2010	15,198	843,487	858,685
2011	17,158	1,072,690	1,089,848
2012	24,693	1,148,272	1,172,965
2013	48,968	1,272,819	1,321,787
2014	128,233	1,395,937	1,524,170
2015	169,741	1,559,637	1,729,378
2016	216,274	1,709,095	1,925,369

UNITED STATES DEMAND AND EXPORTS-ALL OILS



UNITED STATES DEMAND AND EXPORTS--ALL OILS
(Thousands of Barrels)

Year	Domestic Demand ¹		Exports		Total Domestic Demand and Exports	
	Annual	Daily Average	Annual	Daily Average	Annual	Daily Average
1960	3,535,805	9,661	73,906	202	3,609,711	9,863
1961	3,579,203	9,806	63,563	174	3,642,766	9,980
1962	3,735,593	10,235	61,600	169	3,797,193	10,403
1963	3,851,225	10,551	75,785	208	3,927,010	10,759
1964	3,958,503	10,816	73,879	202	4,032,382	11,017
1965	4,125,867	11,304	68,288	187	4,194,155	11,491
1966	4,325,069	11,850	72,400	198	4,397,469	12,048
1967	4,584,526	12,560	112,060	307	4,696,586	12,867
1968	4,901,789	13,393	84,544	231	4,986,333	13,624
1969	5,159,930	14,137	84,885	233	5,244,815	14,369
1970	5,364,473	14,697	94,458	259	5,458,931	14,956
1971	5,552,560	15,212	81,845	224	5,634,405	15,437
1972	5,990,316	16,367	81,389	222	6,071,705	16,589
1973	6,317,303	17,308	84,413	231	6,401,716	17,539
1974	6,078,239	16,653	80,491	221	6,158,730	16,873
1975	5,957,515	16,322	76,428	209	6,033,943	16,531
1976	6,390,750	17,461	81,599	223	6,472,349	17,684
1977	6,727,468	18,431	88,588	243	6,816,056	18,674
1978	6,879,017	18,847	132,057	362	7,011,074	19,208
1979	6,757,077	18,513	171,856	471	6,928,933	18,983
1980	6,224,308	17,006	198,197	542	6,422,505	17,548
1981	5,861,058	16,058	217,024	595	6,078,082	16,652
1982	5,582,938	15,296	297,513	815	5,880,451	16,111
1983	5,559,364	15,231	269,854	739	5,829,218	15,970
1984	5,755,575	15,726	264,077	722	6,019,652	16,447
1985	5,740,143	15,726	285,069	781	6,025,212	16,507
1986	5,942,429	16,281	286,373	785	6,228,802	17,065
1987	6,082,742	16,665	278,731	764	6,361,473	17,429
1988	6,325,692	17,283	298,466	815	6,624,158	18,099
1989	6,323,681	17,325	313,460	859	6,637,141	18,184
1990	6,200,801	16,988	312,671	857	6,513,472	17,845
1991	6,100,550	16,714	365,341	1,001	6,465,891	17,715
1992	6,234,025	17,033	347,584	950	6,581,609	17,983
1993	6,291,407	17,237	365,974	1,003	6,657,381	18,239
1994	6,467,128	17,718	343,896	942	6,811,024	18,660
1995	6,469,475	17,725	346,477	949	6,815,952	18,674
1996	6,701,059	18,309	358,897	981	7,059,956	19,289
1997	6,796,411	18,620	366,258	1,003	7,162,669	19,624
1998	6,904,756	18,917	344,757	945	7,249,513	19,862
1999	7,124,558	19,519	343,017	940	7,467,575	20,459
2000	7,210,594	19,701	380,710	1,040	7,591,304	20,741
2001	7,171,777	19,649	354,421	971	7,526,198	20,620
2002	7,212,876	19,761	359,077	984	7,571,953	20,745
2003	7,312,229	20,034	374,710	1,027	7,686,939	21,060
2004	7,587,601	20,731	383,636	1,048	7,971,237	21,779
2005	7,592,789	20,802	425,190	1,165	8,017,979	21,967
2006	7,550,907	20,687	480,561	1,317	8,031,468	22,004
2007	7,548,338	20,680	522,879	1,433	8,071,217	22,113
2008	7,136,255	19,498	659,392	1,802	7,795,647	21,300
2009	6,851,561	18,771	738,803	2,024	7,590,364	20,796
2010	7,000,745	19,180	858,685	2,353	7,859,430	21,533
2011	6,893,644	18,887	1,089,848	2,986	7,983,492	21,873
2012	6,766,117	18,487	1,172,965	3,205	7,939,082	21,691
2013	6,922,907	18,967	1,321,787	3,621	8,244,694	22,588
2014	6,971,530	19,100	1,524,170	4,176	8,495,700	23,276
2015	7,129,732	19,534	1,729,378	4,738	8,859,110	24,272
2016	7,205,528	19,687	1,925,369	5,261	9,130,897	24,948

¹ Includes net processing gain.

DOMESTIC DEMAND FOR REFINED PRODUCTS

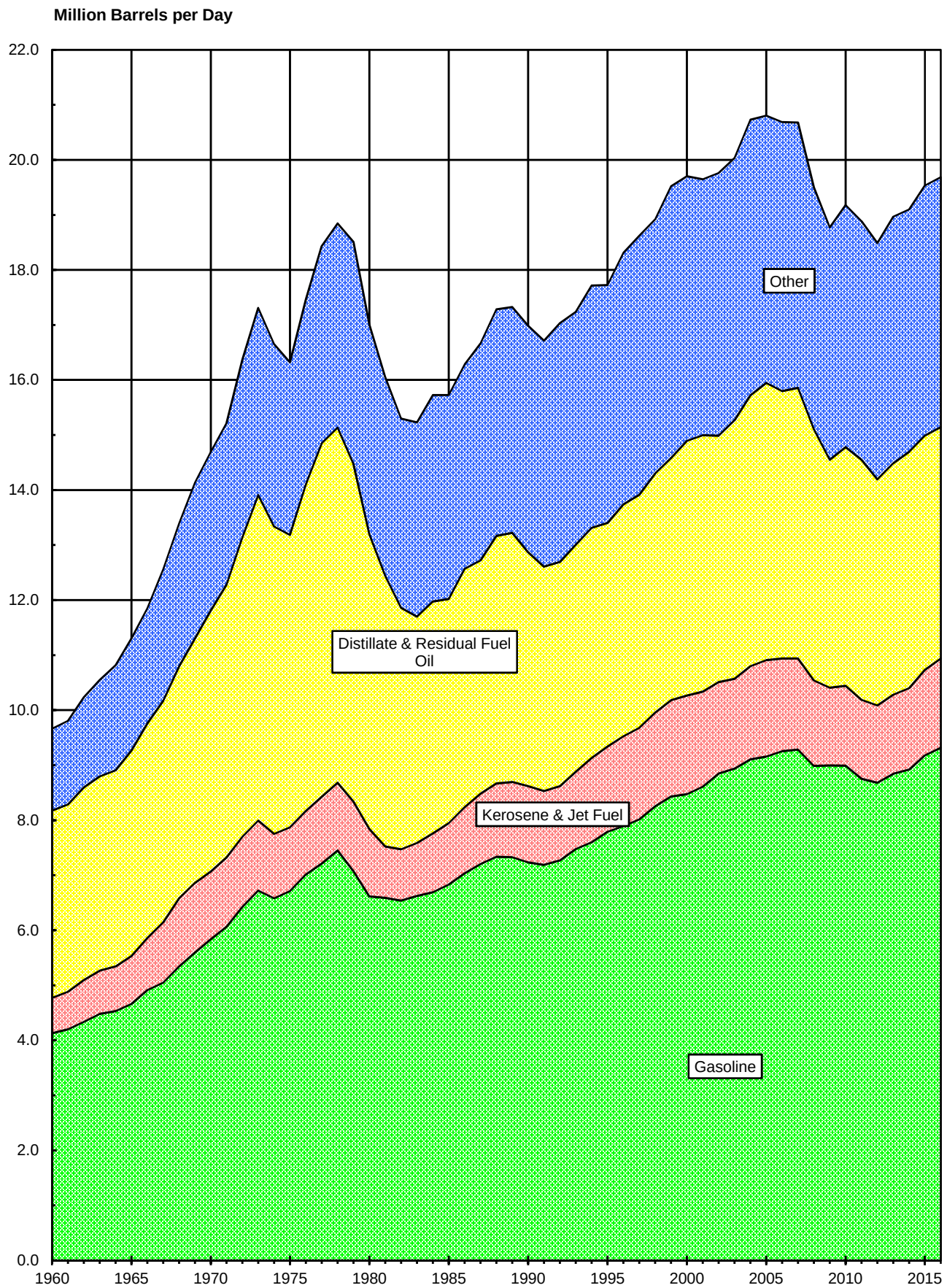


Chart 41

DOMESTIC DEMAND FOR REFINED PRODUCTS¹
(Thousands of Barrels per Day)

<u>Year</u>	<u>Gasoline</u>	<u>Kerosene²</u>	<u>Jet Fuel</u>	<u>Distillate and Residual Fuel Oil</u>	<u>Other</u>	<u>Total</u>
1960	4,130	362	281	3,401	1,487	9,661
1961	4,200	396	286	3,406	1,518	9,806
1962	4,338	449	308	3,500	1,639	10,234
1963	4,479	472	316	3,530	1,754	10,551
1964	4,530	253	558	3,566	1,909	10,816
1965	4,664	267	602	3,734	2,037	11,304
1966	4,913	277	670	3,901	2,089	11,850
1967	5,048	274	824	4,027	2,386	12,559
1968	5,344	281	955	4,215	2,597	13,392
1969	5,596	275	991	4,444	2,830	14,136
1970	5,839	263	967	4,744	2,884	14,697
1971	6,063	249	1,010	4,957	2,933	15,212
1972	6,423	234	1,045	5,442	3,223	16,367
1973	6,720	216	1,059	5,915	3,398	17,308
1974	6,582	176	993	5,587	3,314	16,652
1975	6,713	159	1,001	5,313	3,136	16,322
1976	7,014	169	987	5,934	3,356	17,460
1977	7,215	175	1,039	6,423	3,580	18,432
1978	7,450	175	1,057	6,454	3,710	18,846
1979	7,073	188	1,076	6,137	4,038	18,512
1980	6,614	159	1,069	5,358	3,807	17,007
1981	6,588	127	809	4,917	3,617	16,058
1982	6,539	129	804	4,387	3,437	15,296
1983	6,622	127	839	4,111	3,532	15,231
1984	6,693	115	953	4,214	3,751	15,726
1985	6,831	114	1,005	4,070	3,706	15,726
1986	7,034	98	1,105	4,332	3,712	16,281
1987	7,206	95	1,181	4,240	3,943	16,665
1988	7,336	96	1,236	4,500	4,115	17,283
1989	7,328	84	1,284	4,527	4,102	17,325
1990	7,235	43	1,340	4,250	4,120	16,988
1991	7,188	46	1,296	4,079	4,105	16,714
1992	7,268	41	1,310	4,073	4,341	17,033
1993	7,476	50	1,357	4,121	4,233	17,237
1994	7,601	49	1,480	4,183	4,405	17,718
1995	7,789	54	1,497	4,059	4,326	17,725
1996	7,891	62	1,575	4,213	4,568	18,309
1997	8,017	66	1,598	4,232	4,707	18,620
1998	8,253	78	1,623	4,348	4,615	18,917
1999	8,431	73	1,675	4,402	4,938	19,519
2000	8,472	67	1,725	4,631	4,806	19,701
2001	8,610	72	1,656	4,658	4,653	19,649
2002	8,848	43	1,621	4,476	4,773	19,761
2003	8,935	55	1,578	4,699	4,767	20,034
2004	9,105	64	1,630	4,923	5,009	20,731
2005	9,159	70	1,679	5,038	4,856	20,802
2006	9,253	54	1,633	4,858	4,889	20,687
2007	9,286	32	1,622	4,919	4,821	20,680
2008	8,989	14	1,539	4,567	4,389	19,498
2009	8,997	18	1,393	4,142	4,221	18,771
2010	8,993	20	1,432	4,335	4,400	19,180
2011	8,753	12	1,425	4,360	4,337	18,887
2012	8,682	5	1,398	4,110	4,292	18,487
2013	8,843	5	1,434	4,203	4,482	18,967
2014	8,921	9	1,470	4,294	4,406	19,100
2015	9,178	6	1,548	4,254	4,548	19,534
2016	9,317	9	1,614	4,203	4,544	19,687

¹ Computed from stocks at first of year, plus production, plus imports, minus exports, including shipments to noncontiguous territories, minus stocks at end of year. Demand for 1963 is not strictly comparable to 1962 because of product reclassification resulting from separately reporting data for petrochemical feedstocks beginning January 1963.

² Sales of commercial jet fuel are included with kerosene prior to 1964.

UNITED STATES SUPPLY AND DEMAND - ALL OILS

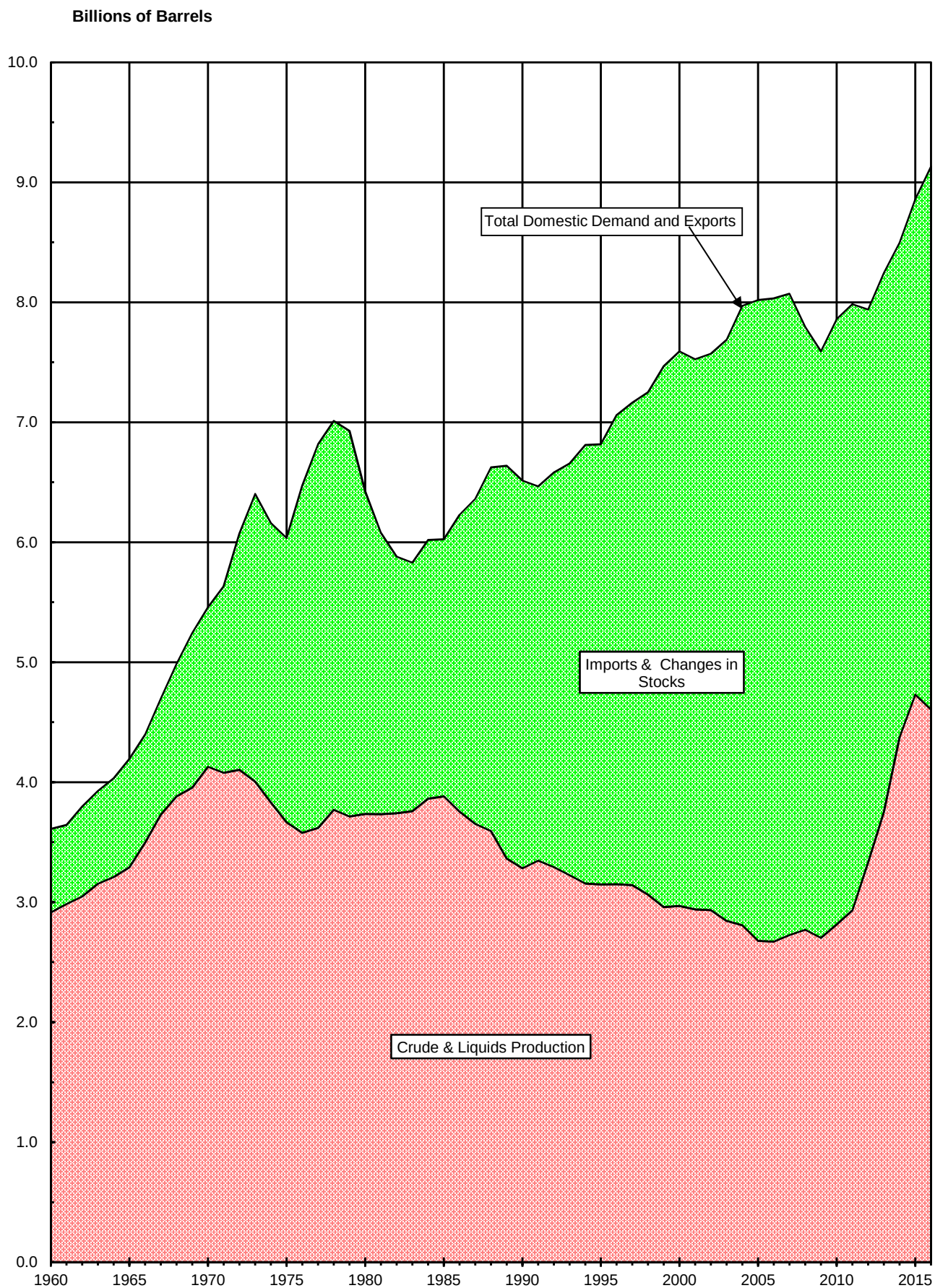


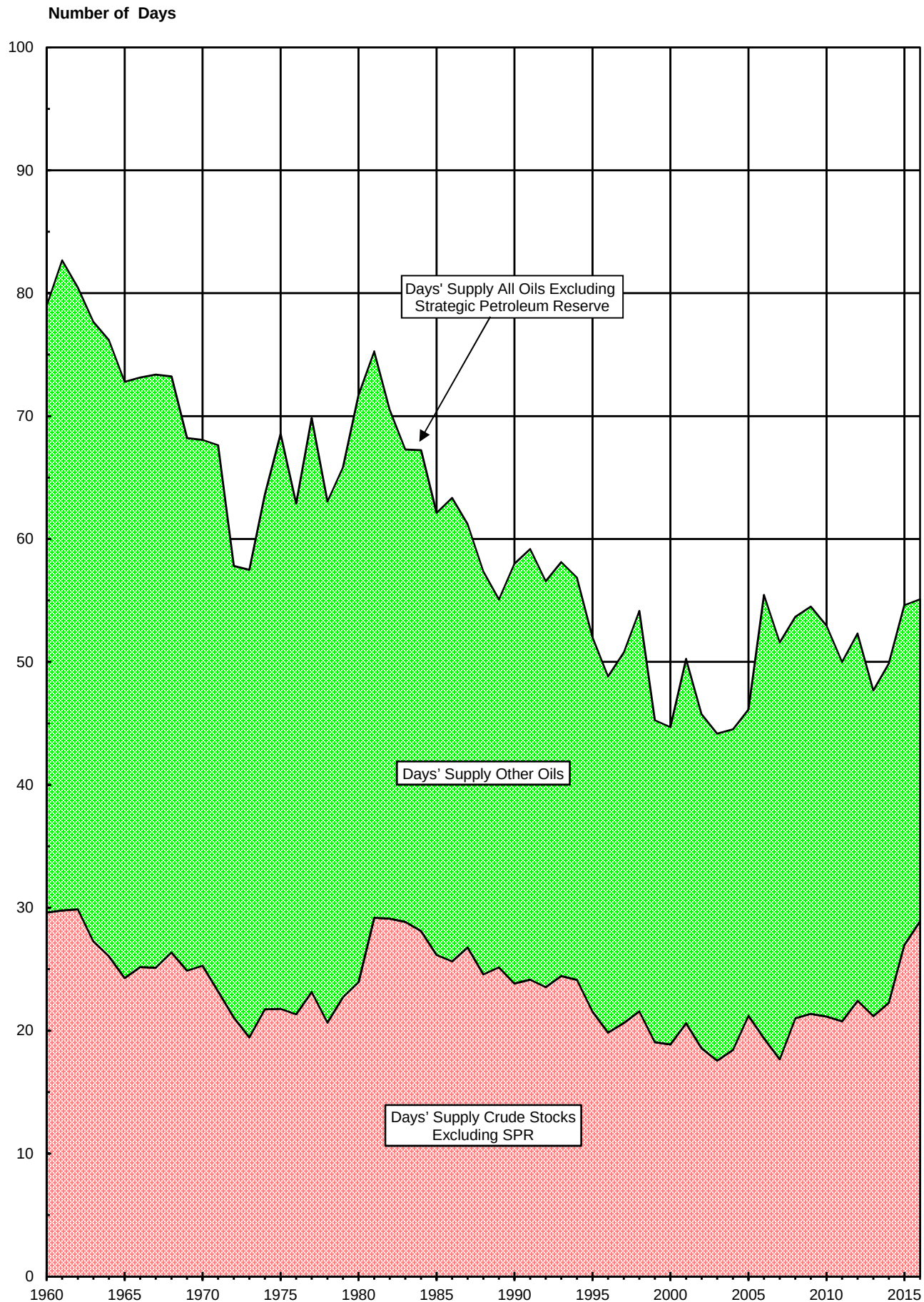
Chart 42

UNITED STATES SUPPLY AND DEMAND—ALL OILS
(Thousands of Barrels)

Year	Total Domestic Demand and Exports	Total New Supply ¹			Refined ³ Products Imports	Changes in Total Stocks
		Domestic ² Crude Oil Production	Liquids ³ Production	Crude Oil Imports		
1960	3,609,711	2,574,933	340,432	371,575	292,536	- 30,235
1961	3,642,766	2,621,758	361,858	381,548	318,118	+ 40,516
1962	3,797,193	2,676,189	372,756	411,039	348,754	+ 11,795
1963	3,927,010	2,752,723	401,196	412,660	364,922	+ 1,263
1964	4,032,382	2,786,822	422,500	438,643	388,093	+ 3,676
1965	4,194,155	2,848,514	441,569	452,040	448,732	- 2,891
1966	4,397,469	3,027,763	468,665	447,120	492,042	+ 44,761
1967	4,696,586	3,215,742	514,543	411,649	514,342	+ 63,006
1968	4,986,333	3,329,042	553,688	472,323	567,046	+ 53,461
1969	5,244,815	3,371,751	584,454	514,114	641,437	- 17,449
1970	5,458,931	3,517,450	612,154	483,293	764,769	+ 37,738
1971	5,634,405	3,453,914	623,889	613,417	819,463	+ 26,086
1972	6,071,705	3,455,368	648,334	811,135	924,179	- 84,968
1973	6,401,716	3,360,903	645,139	1,183,996	1,099,497	+ 49,328
1974	6,158,730	3,202,585	629,155	1,269,155	961,792	+ 65,339
1975	6,033,943	3,056,779	609,737	1,498,181	712,154	+ 59,309
1976	6,472,349	2,976,180	600,994	1,935,012	741,399	- 21,145
1977	6,816,056	3,009,265	608,846	2,414,327	800,319	+ 200,090
1978	7,011,074	3,178,216	591,377	2,319,826	732,798	- 34,281
1979	6,928,933	3,121,310	594,156	2,379,541	706,946	+ 63,243
1980	6,422,505	3,146,365	589,721	1,926,162	589,548	+ 54,397
1981	6,078,082	3,128,624	605,490	1,604,703	583,716	+ 88,389
1982	5,880,451	3,156,715	585,106	1,273,214	593,144	- 53,724
1983	5,829,218	3,170,999	588,183	1,215,225	628,519	- 7,322
1984	6,019,652	3,249,696	613,063	1,253,949	735,987	+ 102,590
1985	6,025,212	3,274,553	607,455	1,168,297	681,210	- 37,458
1986	6,228,802	3,168,252	587,123	1,524,978	746,604	+ 73,743
1987	6,361,473	3,047,378	605,612	1,705,922	731,437	+ 14,939
1988	6,624,158	2,979,123	614,228	1,869,005	840,135	- 10,219
1989	6,637,141	2,778,773	586,116	2,132,761	809,338	- 15,813
1990	6,513,472	2,684,687	598,252	2,151,387	775,008	+ 39,214
1991	6,465,891	2,707,039	639,189	2,110,532	673,231	- 3,679
1992	6,581,609	2,624,632	667,990	2,226,341	660,556	- 24,980
1993	6,657,381	2,499,033	725,966	2,477,230	669,224	+ 55,245
1994	6,811,024	2,431,476	723,917	2,578,072	705,549	+ 5,566
1995	6,815,952	2,394,268	754,073	2,638,810	585,943	- 89,933
1996	7,059,956	2,366,017	784,244	2,747,839	721,289	- 55,436
1997	7,162,669	2,354,831	788,242	3,002,299	706,671	+ 52,343
1998	7,249,513	2,281,919	781,106	3,177,584	730,862	+ 87,216
1999	7,467,575	2,146,732	812,373	3,186,663	774,411	- 154,044
2000	7,591,304	2,130,707	837,549	3,319,816	874,270	- 25,384
2001	7,526,198	2,117,511	822,135	3,404,894	928,144	+ 118,802
2002	7,571,953	2,096,588	838,696	3,336,175	872,363	- 38,439
2003	7,686,939	2,061,995	782,014	3,527,696	948,805	+ 20,393
2004	7,971,237	1,991,394	816,279	3,692,063	1,119,041	+ 76,502
2005	8,017,979	1,892,095	786,219	3,695,971	1,309,570	+ 53,141
2006	8,031,468	1,856,340	815,574	3,693,081	1,310,001	+ 21,498
2007	8,071,217	1,851,974	874,806	3,661,404	1,254,553	- 55,416
2008	7,795,647	1,829,134	940,973	3,580,694	1,146,300	+ 71,511
2009	7,590,364	1,952,236	750,250	3,289,675	977,435	+ 39,192
2010	7,859,430	1,998,444	817,422	3,362,856	941,677	+ 14,416
2011	7,983,492	2,059,640	872,947	3,261,422	912,788	- 47,115
2012	7,939,082	2,377,762	951,134	3,120,755	758,097	+ 53,750
2013	8,244,694	2,725,169	1,026,449	2,821,480	776,974	- 50,672
2014	8,495,700	3,194,915	1,180,111	2,680,626	692,278	+ 97,556
2015	8,859,110	3,434,018	1,296,261	2,687,409	761,325	+ 156,582
2016	9,130,897	3,241,591	1,362,211	2,873,208	807,019	+ 47,550

¹ Excludes processing gain and unaccounted for crude oil.² Includes field condensate.³ Includes natural gas plant liquids, LRG, other liquids and finished petroleum products.

DAYS' SUPPLY OF CRUDE PETROLEUM AND ALL OILS IN THE UNITED STATES



**STOCKS, DAILY AVERAGE DEMAND, AND DAYS' SUPPLY OF CRUDE
PETROLEUM AND ALL OILS IN THE UNITED STATES**
(Thousands of Barrels)

Year	Crude Oil Stocks at Year-End			Daily ¹ Average Crude Demand	Days' Supply Crude Stocks Excluding SPR Year-End	Stocks All Oils Year-End	Stocks All Oils Excluding SPR Year-End	Daily ¹ Average Demand All Oils	Days' Supply, Stocks All Oils Excluding SPR Year-End
	Strategic Petroleum Reserve (SPR)	Excluding ² SPR	Total Crude Oil Stocks						
1960	...	239,800	239,800	8,098	30	778,735	778,735	9,863	79
1961	...	244,664	244,664	8,215	30	825,074	825,074	9,980	83
1962	...	252,011	252,011	8,438	30	836,869	836,869	10,403	80
1963	...	237,361	237,361	8,712	27	835,559	835,559	10,759	78
1964	...	230,057	230,057	8,834	26	839,235	839,235	11,017	76
1965	...	220,289	220,289	9,069	24	836,344	836,344	11,491	73
1966	...	238,391	238,391	9,471	25	881,105	881,105	12,048	73
1967	...	248,970	248,970	9,909	25	944,111	944,111	12,867	73
1968	...	272,193	272,193	10,323	26	997,572	997,572	13,624	73
1969	...	265,227	265,227	10,665	25	980,123	980,123	14,369	68
1970	...	276,367	276,367	10,930	25	1,017,861	1,017,861	14,956	68
1971	...	259,648	259,648	11,189	23	1,043,947	1,043,947	15,437	68
1972	...	246,395	246,395	11,693	21	958,979	958,979	16,589	58
1973	...	242,478	242,478	12,462	19	1,008,307	1,008,307	17,539	57
1974	...	265,020	265,020	12,190	22	1,073,646	1,073,646	16,873	64
1975	...	271,354	271,354	12,462	22	1,132,955	1,132,955	16,531	69
1976	...	285,471	285,471	13,380	21	1,111,810	1,111,810	17,684	63
1977	7,665	340,018	347,683	14,689	23	1,311,900	1,304,235	18,674	70
1978	66,795	309,486	376,281	14,985	21	1,277,619	1,210,824	19,208	63
1979	91,250	339,015	430,265	14,923	23	1,340,862	1,249,612	18,983	66
1980	137,043	328,459	465,502	13,721	24	1,395,259	1,258,216	17,548	72
1981	230,341	363,464	593,805	12,450	29	1,483,648	1,253,307	16,652	75
1982	293,827	349,730	643,557	12,010	29	1,429,924	1,136,097	16,111	71
1983	379,089	343,850	722,939	11,917	29	1,453,637	1,074,548	15,970	67
1984	450,505	345,376	795,881	12,291	28	1,556,227	1,105,722	16,447	67
1985	493,316	320,892	814,208	12,267	26	1,518,769	1,025,453	16,507	62
1986	511,565	331,224	842,789	12,919	26	1,592,512	1,080,947	17,065	63
1987	540,648	348,995	889,643	13,039	27	1,607,451	1,066,803	17,429	61
1988	559,515	330,359	889,874	13,442	25	1,597,232	1,037,717	18,099	57
1989	579,857	341,291	921,148	13,571	25	1,581,419	1,001,562	18,184	55
1990	585,692	322,695	908,387	13,542	24	1,620,633	1,034,941	17,845	58
1991	568,508	324,594	893,102	13,435	24	1,616,954	1,048,446	17,715	59
1992	574,724	318,140	892,864	13,513	24	1,591,974	1,017,250	17,983	57
1993	587,080	335,385	922,465	13,721	24	1,647,219	1,060,139	18,239	58
1994	591,670	337,245	928,915	13,974	24	1,652,785	1,061,115	18,660	57
1995	591,640	303,328	894,968	14,075	22	1,562,852	971,212	18,674	52
1996	565,816	283,853	849,669	14,311	20	1,507,416	941,600	19,289	49
1997	563,429	304,690	868,119	14,772	21	1,559,759	996,330	19,623	51
1998	571,405	323,543	894,948	14,999	22	1,646,975	1,075,570	19,862	54
1999	567,241	284,482	851,723	14,922	19	1,492,931	925,690	20,459	45
2000	540,678	285,507	826,185	15,117	19	1,467,547	926,869	20,741	45
2001	550,241	311,980	862,221	15,148	21	1,586,349	1,036,108	20,620	50
2002	599,091	277,614	876,705	14,956	19	1,547,910	948,819	20,745	46
2003	638,388	268,875	907,263	15,316	18	1,568,303	929,915	21,061	44
2004	675,600	285,741	961,341	15,502	18	1,644,805	969,205	21,779	45
2005	684,544	323,704	1,008,248	15,252	21	1,697,604	1,013,060	21,967	46
2006	688,605	295,819	984,424	15,267	19	1,703,049	1,014,444	18,298	55
2007	696,941	268,393	965,334	15,183	18	1,647,633	950,692	18,432	52
2008	701,823	308,245	1,010,068	14,677	21	1,719,144	1,017,321	18,955	54
2009	726,616	307,140	1,033,756	14,380	21	1,758,336	1,031,720	18,928	55
2010	726,545	312,082	1,038,627	14,766	21	1,771,617	1,045,072	19,738	53
2011	695,951	308,221	1,004,172	14,853	21	1,724,807	1,028,856	20,582	50
2012	695,268	337,796	1,033,064	15,066	22	1,778,556	1,083,288	20,710	52
2013	695,969	327,191	1,023,160	15,446	21	1,727,885	1,031,916	21,640	48
2014	690,959	360,865	1,051,824	16,199	22	1,825,441	1,134,482	22,750	50
2015	695,119	449,220	1,144,339	16,653	27	1,982,022	1,286,903	23,562	55
2016	695,082	484,622	1,179,704	16,778	29	2,029,572	1,334,490	24,222	55

¹ Includes domestic demand and exports.² Excludes lease stock from 2016 to present.

NUMBER OF YEARS' SUPPLY-ALL OILS IN THE UNITED STATES

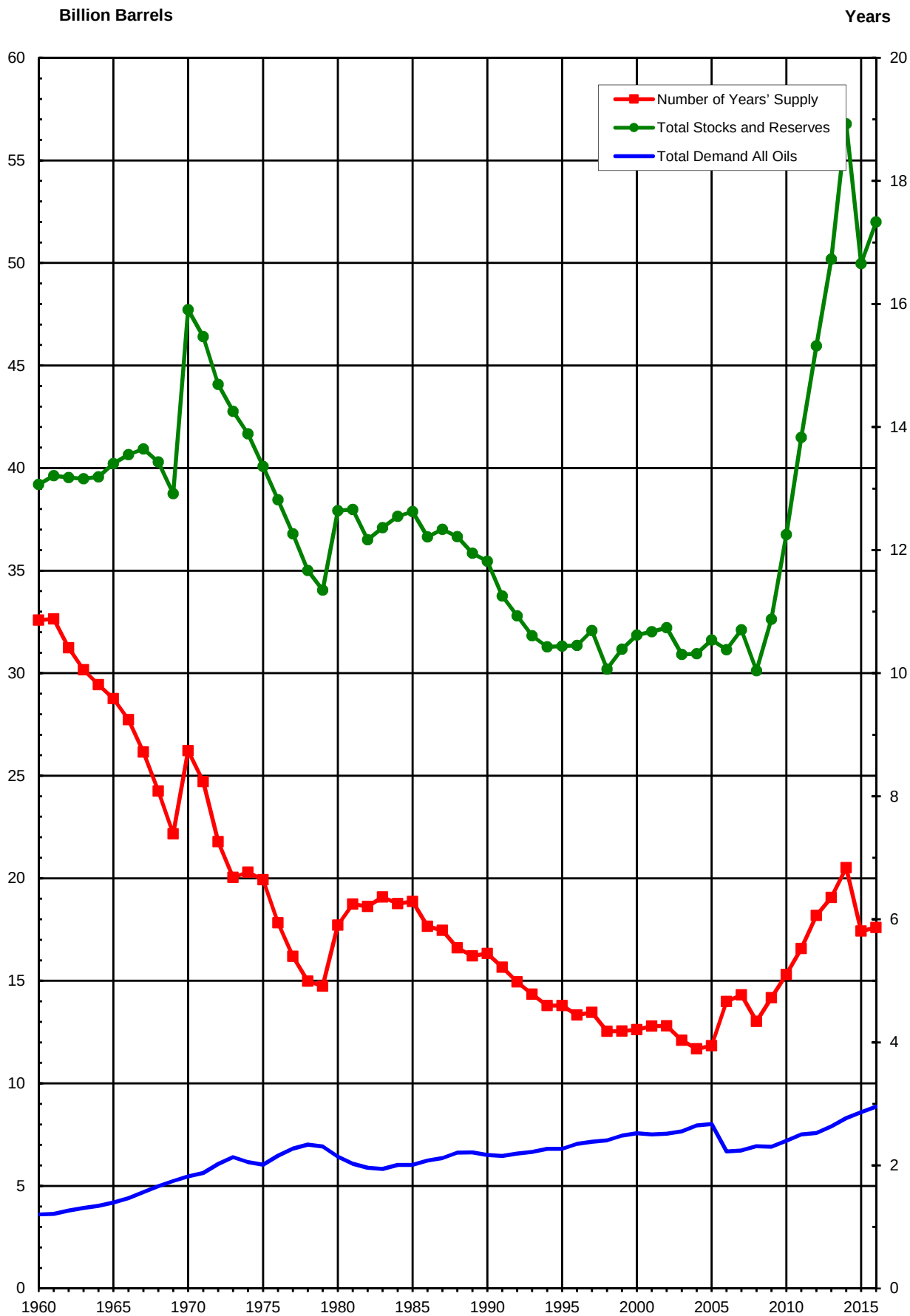


Chart 44

NUMBER OF YEARS' SUPPLY-ALL OILS IN THE UNITED STATES

(Thousands of Barrels)

Year	Stocks ^{1, 5} All Oils	Proved Reserves of Crude Petroleum	Proved ² Reserves of Natural Gas Liquids	Total Stocks and Reserves	Demand ³ All Oils	Number of Years' Supply All Oils
1960	778,735	31,613,211	6,816,059	39,208,005	3,609,711	10.9
1961	825,074	31,758,505	7,049,096	39,632,675	3,642,766	10.9
1962	836,869	31,389,223	7,311,517	39,537,609	3,797,193	10.4
1963	835,559	30,969,990	7,673,978	39,479,527	3,927,010	10.1
1964	839,235	30,990,510	7,746,632	39,576,377	4,032,382	9.8
1965	836,344	31,352,391	8,023,534	40,212,269	4,194,155	9.6
1966	874,465	31,452,127	8,328,966	40,655,558	4,397,469	9.2
1967	944,111	31,376,670	8,614,231	40,935,012	4,696,586	8.7
1968	997,572	30,707,117	8,598,108	40,302,797	4,986,333	8.1
1969	980,123	29,631,862	8,143,174	38,755,159	5,244,815	7.4
1970	1,017,861	39,001,335	7,702,941	47,722,137	5,458,931	8.7
1971	1,043,947	38,062,957	7,304,227	46,411,131	5,634,405	8.2
1972	958,979	36,339,408	6,786,559	44,084,946	6,071,705	7.3
1973	1,008,307	35,299,839	6,454,707	42,762,853	6,401,716	6.7
1974	1,073,646	34,249,956	6,350,449	41,674,051	6,158,730	6.8
1975	1,132,955	32,682,127	6,267,830	40,082,912	6,033,943	6.6
1976	1,111,810	30,942,166	6,401,967	38,455,943	6,472,349	5.9
1977	1,311,900	29,486,402	5,994,365	36,792,667	6,816,056	5.4
1978	1,277,619	27,803,760	5,925,852	35,007,231	7,011,074	5.0
1979	1,340,862	27,051,289	5,655,323	34,047,474	6,928,933	4.9
1980	1,395,259	29,805,000 ⁴	6,728,000 ⁴	37,928,259	6,422,505	5.9
1981	1,483,648	29,426,000	7,068,000	37,977,648	6,078,082	6.2
1982	1,429,924	27,858,000	7,221,000	36,508,924	5,880,450	6.2
1983	1,453,637	27,735,000	7,901,000	37,089,637	5,829,218	6.4
1984	1,556,227	28,446,000	7,643,000	37,645,227	6,018,686	6.3
1985	1,518,769	28,416,000	7,944,000	37,878,769	6,024,595	6.3
1986	1,592,512	26,889,000	8,165,000	36,646,512	6,227,921	5.9
1987	1,607,451	27,256,000	8,147,000	37,010,451	6,360,755	5.8
1988	1,597,232	26,825,000	8,238,000	36,660,232	6,623,374	5.5
1989	1,581,419	26,501,000	7,769,000	35,851,419	6,634,900	5.4
1990	1,620,633	26,254,000	7,586,000	35,460,633	6,512,885	5.4
1991	1,616,954	24,682,000	7,464,000	33,762,954	6,465,710	5.2
1992	1,591,974	23,745,000	7,451,000	32,787,974	6,581,289	5.0
1993	1,647,219	22,957,000	7,222,000	31,826,219	6,654,221	4.8
1994	1,652,785	22,457,000	7,170,000	31,279,785	6,804,894	4.6
1995	1,562,852	22,351,000	7,399,000	31,312,852	6,810,578	4.6
1996	1,507,416	22,017,000	7,823,000	31,347,416	7,051,203	4.4
1997	1,559,759	22,546,000	7,973,000	32,078,759	7,150,752	4.5
1998	1,646,975	21,034,000	7,524,000	30,204,975	7,228,114	4.2
1999	1,492,931	21,765,000	7,906,000	31,163,931	7,451,968	4.2
2000	1,467,547	22,045,000	8,345,000	31,857,547	7,572,100	4.2
2001	1,586,349	22,446,000	7,993,000	32,025,349	7,512,112	4.3
2002	1,547,910	22,677,000	7,994,000	32,218,910	7,547,850	4.3
2003	1,568,303	21,891,000	7,459,000	30,918,303	7,664,482	4.0
2004	1,644,805	21,371,000	7,928,000	30,943,805	7,947,410	3.9
2005	1,697,604	21,757,000	8,165,000	31,619,604	8,017,979	3.9
2006	1,703,049	20,972,000	8,472,000	31,147,049	6,678,663	4.7
2007	1,647,633	21,317,000	9,143,000	32,107,633	6,727,379	4.8
2008	1,719,144	19,121,000	9,275,000	30,115,144	6,937,285	4.3
2009	1,758,336	20,682,000	10,190,000	32,630,336	6,908,696	4.7
2010	1,771,617	23,267,000	11,723,000	36,761,617	7,204,057	5.1
2011	1,724,807	26,544,000	13,231,000	41,499,807	7,512,558	5.5
2012	1,778,556	30,529,000	13,651,000	45,958,556	7,579,658	6.1
2013	1,727,885	33,371,000	15,092,000	50,190,885	7,898,864	6.4
2014	1,825,441	36,385,000	18,577,000	56,787,441	8,303,512	6.8
2015	1,982,022	32,318,000	15,669,000	49,969,022	8,600,082	5.8
2016	2,029,572	32,773,000	17,193,000	51,995,572	8,865,103	5.9

¹ Includes strategic petroleum reserve.² In 2009, the EIA combined lease condensate and natural gas liquids for proved reserves of natural gas liquids.³ Includes exports.⁴ Proved reserves reported (for the first time) by EIA not strictly comparable to estimates reported by API in prior years.⁵ Excludes lease stock from 2016 to present.

ANALYSIS OF GASOLINE SUPPLY AND DEMAND IN THE UNITED STATES

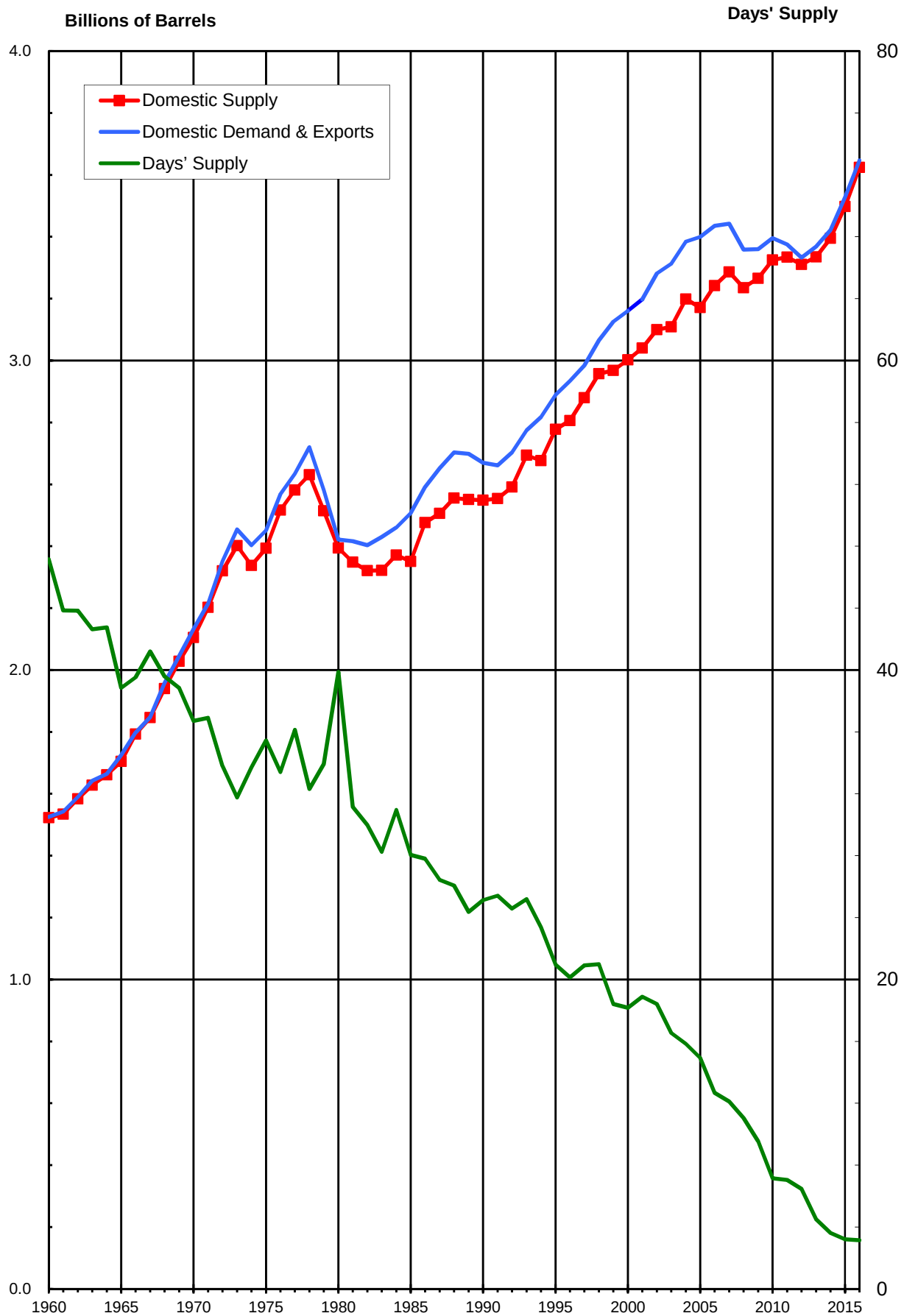


Chart 45

**ANALYSIS OF GASOLINE SUPPLY AND DEMAND
IN THE UNITED STATES**
(Thousands of Barrels)

<u>Year</u>	<u>Production¹</u>	<u>Imports</u>	<u>Exports</u>	<u>Stocks End of Year</u>	<u>Domestic Demand</u>	<u>Daily Average Domestic Demand</u>	<u>Days' Supply</u>
1960	1,522,497	9,790	13,456	194,774	1,511,670	4,130.2	47
1961	1,534,462	10,685	8,976	184,167	1,533,173	4,200.5	44
1962	1,583,370	13,878	6,454	190,138	1,583,404	4,338.1	44
1963	1,627,975	16,145	6,934	190,937	1,634,927	4,479.3	43
1964	1,661,301	10,482	6,209	193,633	1,657,906	4,529.8	43
1965	1,704,401	10,052	4,827	183,058	1,720,201	4,712.9	39
1966	1,792,638	15,648	3,786	194,177	1,793,381	4,913.4	40
1967	1,845,783	15,215	4,877	207,980	1,842,686	5,048.5	41
1968	1,940,038	21,591	2,083	211,526	1,956,000	5,344.3	40
1969	2,028,152	22,709	2,449	217,392	2,042,546	5,596.0	39
1970	2,105,258	24,320	1,370	214,348	2,131,252	5,839.0	37
1971	2,202,573	21,658	1,649	223,771	2,213,159	6,063.4	37
1972	2,319,950	24,787	656	217,149	2,350,703	6,422.7	34
1973	2,401,860	48,759	1,664	213,417	2,452,687	6,719.7	32
1974	2,337,467	74,402	1,013	221,881	2,402,392	6,581.9	34
1975	2,393,637	67,249	850	238,002	2,450,296	6,713.1	35
1976	2,516,989	47,774	1,297	234,272	2,567,196	7,014.2	33
1977	2,581,238	79,356	725	260,669	2,633,472	7,215.0	36
1978	2,630,535	69,518	470	240,788	2,719,464	7,450.6	32
1979	2,514,568	66,006	155	239,919	2,581,502	7,072.6	34
1980	2,393,966	51,071	494	263,776	2,420,686	6,613.9	40
1981	2,348,790	57,182	697	206,202	2,415,595	6,618.1	31
1982	2,321,416	71,811	7,195	196,804	2,396,131	6,564.7	30
1983	2,322,175	90,398	3,754	187,794	2,426,528	6,648.0	28
1984	2,371,085	109,308	2,116	207,918	2,458,153	6,716.3	31
1985	2,350,916	138,960	3,474	192,399	2,503,330	6,858.4	28
1986	2,476,338	118,982	12,172	196,438	2,579,108	7,066.0	28
1987	2,506,215	140,307	12,688	191,142	2,639,130	7,230.5	26
1988	2,555,182	148,567	8,071	191,970	2,694,851	7,363.0	26
1989	2,550,726	134,824	14,300	179,124	2,684,097	7,353.7	24
1990	2,548,396	124,729	20,228	182,370	2,649,652	7,259.3	25
1991	2,554,005	108,530	29,905	183,291	2,631,709	7,210.2	25
1992	2,591,046	107,794	34,963	179,122	2,668,046	7,289.7	25
1993	2,694,069	90,320	38,193	188,862	2,736,456	7,497.1	25
1994	2,676,629	130,013	35,302	178,147	2,782,054	7,622.1	23
1995	2,777,527	96,773	38,130	163,621	2,850,696	7,810.1	21
1996	2,805,973	123,148	38,127	159,262	2,895,354	7,910.8	20
1997	2,879,804	112,878	49,878	168,054	2,934,012	8,038.4	21
1998	2,957,066	113,649	45,618	173,622	3,019,529	8,272.7	21
1999	2,968,034	139,374	40,342	155,687	3,085,002	8,452.1	18
2000	3,002,537	156,566	52,539	154,289	3,107,962	8,491.7	18
2001	3,040,245	166,476	48,485	162,943	3,149,581	8,629.0	19
2002	3,099,676	182,125	45,315	163,288	3,236,141	8,866.1	18
2003	3,108,718	189,076	45,770	148,088	3,267,224	8,951.3	17
2004	3,198,924	181,801	45,498	144,547	3,338,768	9,122.3	16
2005	3,171,404	220,684	49,473	137,025	3,350,137	9,178.5	15
2006	3,242,359	173,670	51,765	117,488	3,383,800	9,270.7	13
2007	3,286,324	150,734	46,369	112,650	3,395,527	9,302.8	12
2008	3,234,910	110,443	62,841	99,502	3,295,660	9,004.5	11
2009	3,265,391	81,609	71,326	85,957	3,288,991	9,010.9	10
2010	3,324,946	49,079	107,963	64,353	3,287,677	9,007.3	7
2011	3,333,794	38,298	174,776	61,762	3,200,114	8,767.4	7
2012	3,310,329	16,176	149,657	56,254	3,182,662	8,695.8	6
2013	3,334,872	16,465	136,146	39,839	3,232,118	8,855.1	4
2014	3,395,348	18,015	161,225	32,319	3,260,405	8,932.6	4
2015	3,498,015	26,071	173,701	29,473	3,354,294	9,189.8	3
2016	3,623,776	21,755	232,562	29,377	3,414,105	9,328.2	3

¹ Includes field production of finished motor gasoline products from 1993–current.

ANALYSIS OF KEROSENE SUPPLY AND DEMAND IN THE UNITED STATES

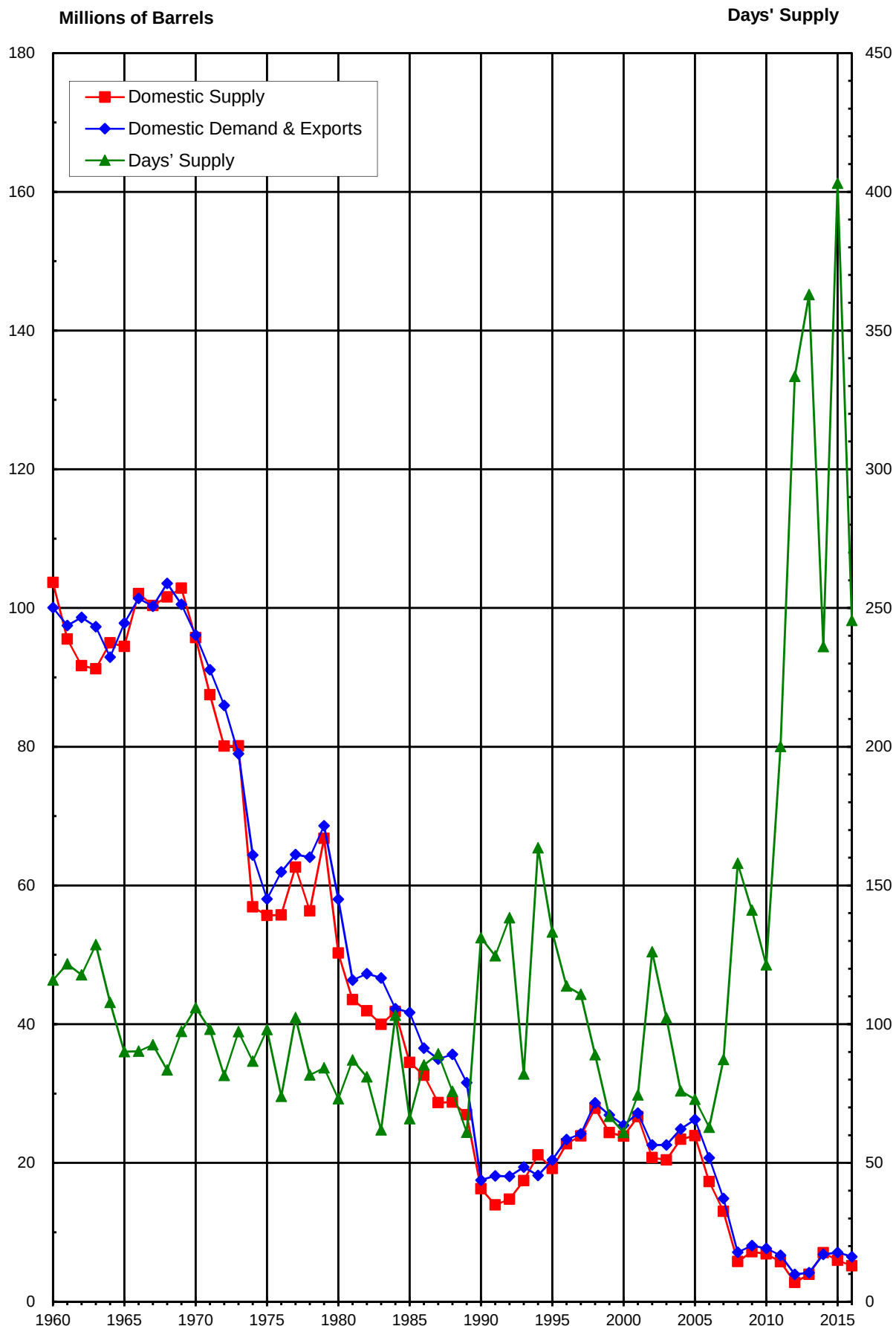


Chart 46

**ANALYSIS OF KEROSENE SUPPLY AND DEMAND
IN THE UNITED STATES**
(Thousands of Barrels)

<u>Year</u>	<u>Production</u>	<u>Imports</u>	<u>Exports</u>	<u>Stocks End of Year</u>	<u>Domestic Demand</u>	<u>Daily Average Domestic Demand</u>	<u>Days' Supply</u>
1960 ¹	103,683	68	689	31,445	99,340	271.4	116
1961	95,503	2,964	231	32,433	97,248	266.4	122
1962	91,672	6,417	336	31,725	98,313	269.4	118
1963	91,245	8,642	558	34,102	96,753	265.1	129
1964	94,967	4	170	27,325	92,738	253.4	108
1965	94,455	100	219	24,080	97,581	267.3	90
1966	102,075	219	254	25,004	101,116	277.0	90
1967	100,354	33	156	25,366	100,078	274.2	93
1968	101,572	190	613	23,480	102,934	281.2	83
1969	102,859	965	155	26,780	100,369	275.0	97
1970	95,712	1,451	121	27,848	95,974	262.9	106
1971	87,499	189	181	24,438	90,917	249.1	98
1972	80,090	526	91	19,111	85,852	234.6	81
1973	80,126	785	85	21,022	78,915	216.2	97
1974	56,891	1,744	36	15,269	64,352	176.3	87
1975	55,673	1,073	52	15,571	57,990	158.9	98
1976	55,740	3,163	40	12,514	61,920	169.2	74
1977	62,622	6,905	23	18,056	64,435	176.5	102
1978	56,325	4,031	40	14,330	64,042	175.5	82
1979	66,791	3,298	25	15,824	68,570	187.9	84
1980	50,262	3,690	32	11,570	57,970	158.4	73
1981	43,521	2,423	32	11,042	46,306	126.9	87
1982	41,937	4,677	315	10,420	46,963	128.7	81
1983	39,977	3,843	297	7,861	46,352	127.0	62
1984	41,808	4,444	45	11,893	42,185	115.3	103
1985	34,475	2,797	101	7,502	41,567	113.9	66
1986	32,647	4,752	662	8,379	35,862	98.3	85
1987	28,691	6,334	444	8,447	34,513	94.6	89
1988	28,770	5,701	435	7,284	35,199	96.2	76
1989	26,938	2,498	828	5,139	30,753	84.3	61
1990	16,281	1,665	1,985	5,576	15,524	42.5	131
1991	13,952	4,351	1,213	5,768	16,898	46.3	125
1992	14,768	3,259	2,915	5,727	15,153	41.4	138
1993	17,438	307	1,289	4,069	18,114	49.6	82
1994	21,138	978	314	8,006	17,865	48.9	164
1995	19,182	422	686	7,199	19,725	54.0	133
1996	22,758	452	793	7,021	22,595	61.7	114
1997	23,887	570	138	7,294	24,046	65.9	111
1998	27,848	466	175	6,943	28,490	78.1	89
1999	24,353	476	279	4,871	26,622	72.9	67
2000	23,860	822	779	4,107	24,667	67.4	61
2001	26,679	1,773	768	5,388	26,403	72.3	74
2002	20,772	1,883	6,763	5,463	15,817	43.3	126
2003	20,421	2,285	2,645	5,584	19,940	54.6	102
2004	23,409	765	1,333	4,885	23,540	64.3	76
2005	23,933	2,539	785	5,092	25,480	69.8	73
2006	17,306	1,697	1,128	3,373	19,594	53.7	63
2007	13,034	1,276	3,148	2,804	11,731	32.1	87
2008	5,796	760	1,904	2,248	5,208	14.2	158
2009	7,171	1,143	1,681	2,476	6,405	17.5	141
2010	6,880	717	380	2,419	7,274	19.9	121
2011	5,749	944	2,195	2,449	4,468	12.2	200
2012	2,771	464	1,994	1,759	1,931	5.3	333
2013	3,946	334	2,256	1,886	1,897	5.2	363
2014	7,052	7	3,537	2,124	3,284	9.0	236
2015	5,937	1,593	4,749	2,574	2,331	6.4	403
2016	5,167	855	3,295	2,128	3,173	8.7	245

¹ Data for commercial jet fuel, included with kerosene prior to 1960, now included with jet fuel.

ANALYSIS OF JET FUEL SUPPLY AND DEMAND IN THE UNITED STATES

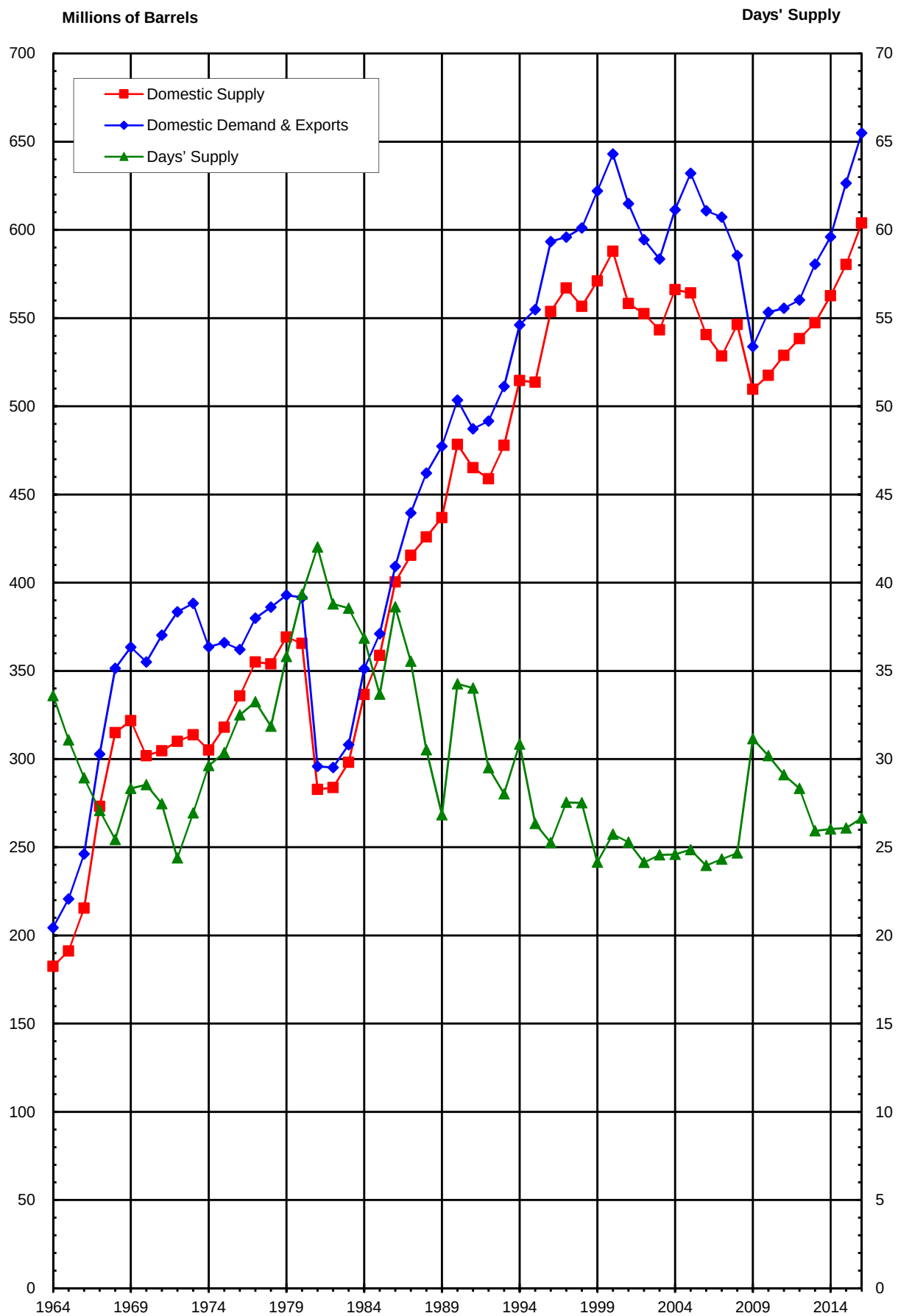


Chart 47

ANALYSIS OF JET FUEL SUPPLY AND DEMAND IN THE UNITED STATES¹

(Thousands of Barrels)

Year	Production	Imports	Exports	Stocks End of Year	Domestic Demand	Daily Average Domestic Demand	Days' Supply
1964	182,540	23,243	170	18,744	204,253	558	34
1965	191,168	29,426	1,007	18,699	219,632	602	31
1966	215,496	31,338	1,773	19,374	244,386	670	29
1967	273,229	32,391	2,021	22,312	300,770	824	27
1968	314,928	38,507	2,092	24,277	349,378	955	25
1969	321,718	45,539	1,730	28,073	361,731	991	28
1970	301,913	52,696	2,094	27,610	352,978	967	29
1971	304,674	65,712	1,536	27,737	368,723	1,010	27
1972	310,029	71,174	957	25,493	382,490	1,045	24
1973	313,689	77,557	1,568	28,544	386,627	1,059	27
1974	305,064	59,396	969	29,435	362,600	993	30
1975	317,981	48,523	610	30,380	365,290	1,001	30
1976	335,846	27,983	766	32,085	361,358	987	32
1977	355,044	27,282	606	34,548	379,257	1,039	33
1978	353,939	31,346	514	33,665	385,654	1,057	32
1979	369,218	28,566	230	38,520	392,699	1,076	36
1980	365,580	29,521	494	42,031	391,096	1,069	39
1981	282,787	11,185	425	34,011	295,460	809	42
1982	283,799	8,541	1,790	31,180	293,384	804	39
1983	298,175	10,422	1,954	32,346	306,246	839	39
1984	336,521	17,391	2,379	35,118	348,761	953	37
1985	358,753	11,011	4,361	33,825	366,696	1,005	34
1986	400,433	17,630	5,862	42,677	403,349	1,105	39
1987	415,470	23,325	8,517	41,973	430,982	1,181	36
1988	425,930	31,878	9,703	37,723	452,355	1,236	31
1989	436,817	37,302	8,546	34,471	468,825	1,284	27
1990	478,380	36,537	14,248	45,925	489,215	1,340	34
1991	465,136	20,169	14,264	44,068	472,898	1,296	34
1992	458,955	27,219	12,176	38,642	479,424	1,310	29
1993	477,861	32,793	15,784	38,044	495,468	1,357	28
1994	514,577	39,030	5,888	45,630	540,133	1,480	31
1995	513,661	34,965	8,303	39,449	546,504	1,497	26
1996	553,729	39,951	16,968	39,779	576,382	1,575	25
1997	567,054	33,109	12,687	44,009	583,246	1,598	28
1998	556,664	45,143	8,804	44,660	592,352	1,623	28
1999	571,074	46,732	10,756	40,447	611,263	1,675	24
2000	587,899	59,125	11,589	44,409	631,473	1,725	26
2001	558,230	54,065	10,496	41,871	604,337	1,656	25
2002	552,511	39,225	2,995	39,123	591,489	1,621	24
2003	543,345	39,809	7,434	38,767	576,076	1,578	25
2004	566,164	46,505	14,799	40,086	596,551	1,630	25
2005	564,226	69,463	19,203	41,741	612,831	1,679	25
2006	540,556	67,716	14,873	39,129	596,011	1,633	24
2007	528,476	79,034	15,010	39,458	592,171	1,622	24
2008	546,410	37,601	22,389	37,969	563,111	1,539	25
2009	509,684	29,488	25,230	43,397	508,514	1,393	31
2010	517,475	35,651	30,753	43,218	522,552	1,432	30
2011	528,811	25,028	35,324	41,483	520,250	1,425	29
2012	538,319	19,993	48,458	39,620	511,717	1,398	28
2013	547,275	30,832	56,989	37,183	523,555	1,434	26
2014	562,600	34,479	59,464	38,274	536,524	1,470	26
2015	580,431	48,118	61,324	40,390	565,109	1,548	26
2016	603,899	53,677	64,149	43,010	590,807	1,614	27

¹ Data has been revised for 1981-2004 to reflect the Authority's updated database as of 2016.

ANALYSIS OF DISTILLATE FUEL OIL SUPPLY AND DEMAND IN THE UNITED STATES

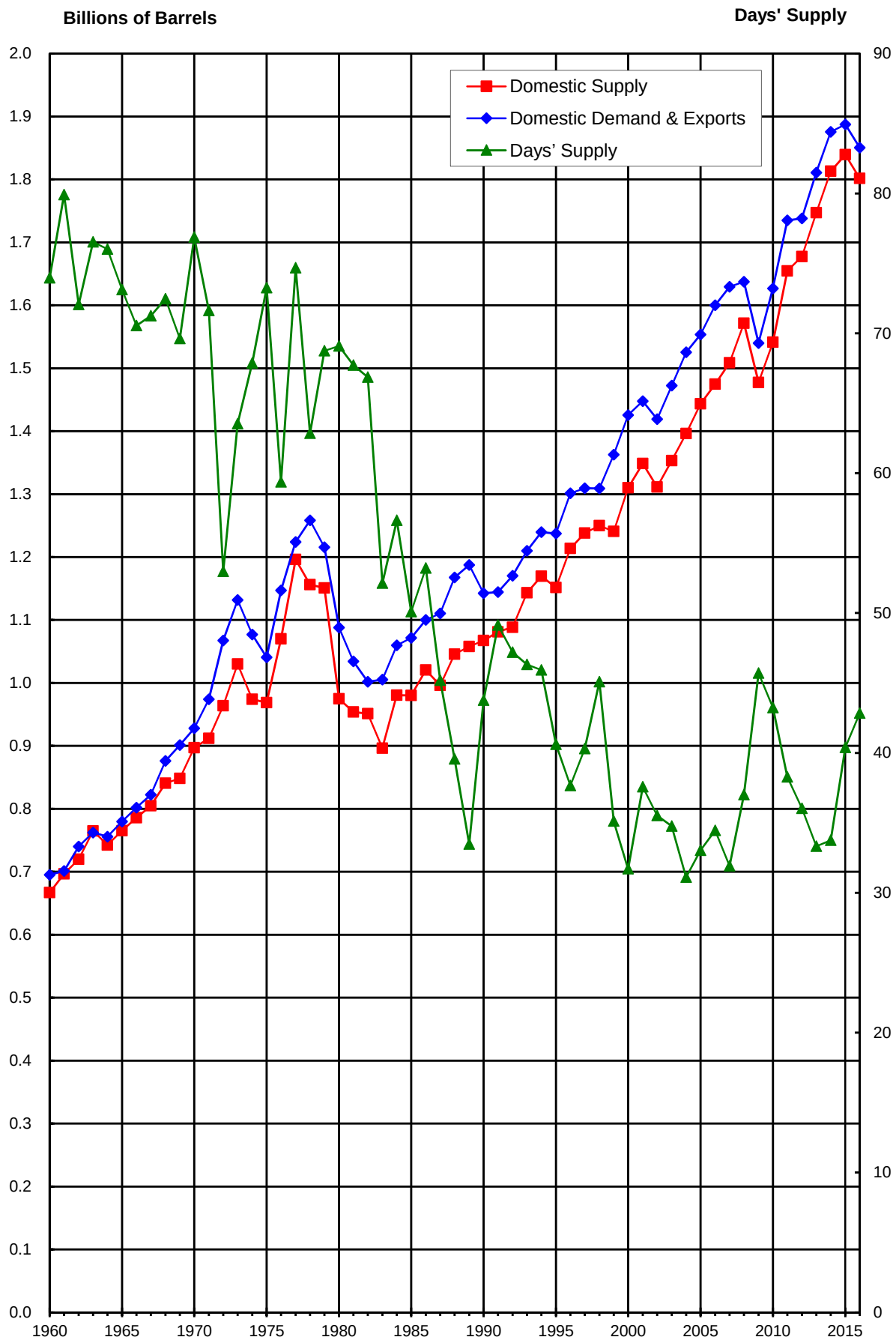


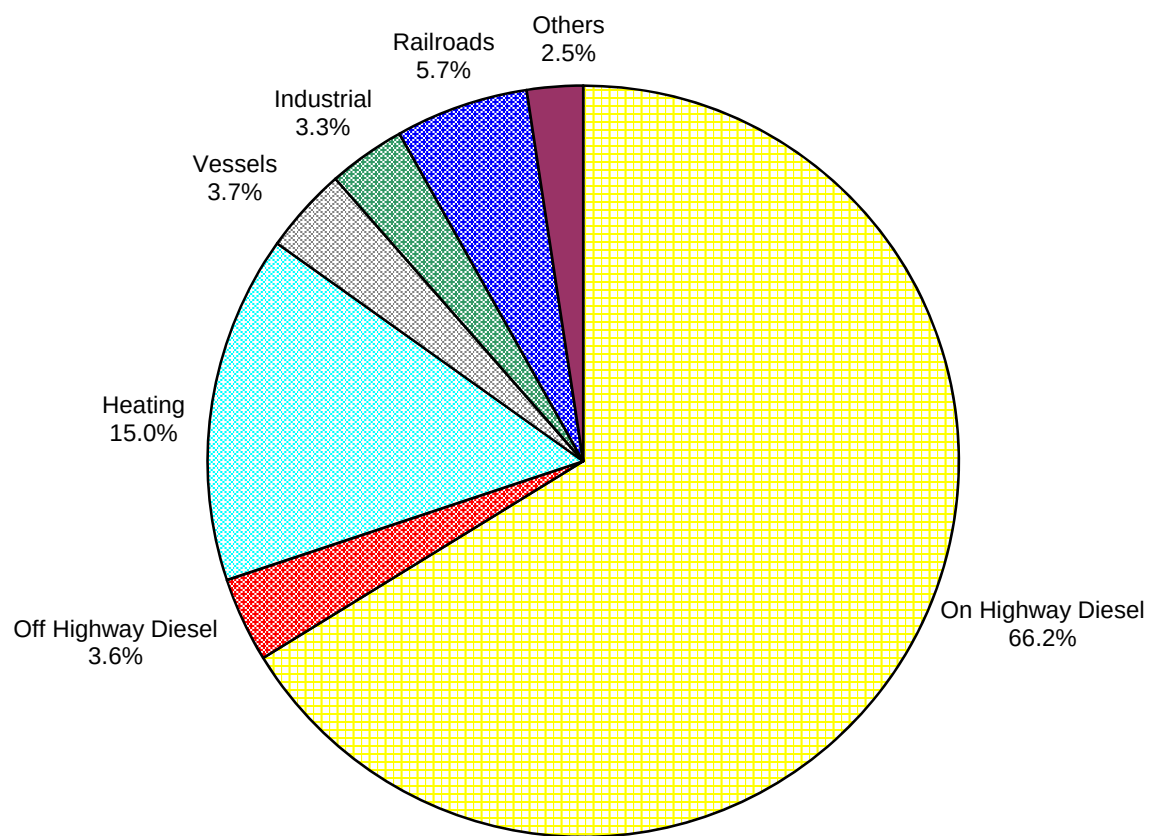
Chart 48

**ANALYSIS OF DISTILLATE FUEL OIL SUPPLY AND DEMAND
IN THE UNITED STATES**
(Thousands of Barrels)

<u>Year</u>	<u>Production</u>	<u>Imports</u>	<u>Exports</u>	<u>Stocks End of Year</u>	<u>Domestic¹ Demand</u>	<u>Daily Average Domestic Demand</u>	<u>Days' Supply</u>
1960	667,050	12,771	9,897	138,455	685,268	1,872.3	74
1961	696,622	17,377	6,931	152,018	694,356	1,902.3	80
1962	720,087	11,831	8,198	144,505	732,085	2,005.7	72
1963	764,953	9,149	14,972	156,677	747,221	2,047.2	77
1964	742,439	11,785	5,386	155,846	750,424	2,050.3	76
1965	765,430	13,002	3,830	155,407	775,814	2,125.5	73
1966	785,849	13,845	4,377	154,096	797,380	2,184.6	71
1967	804,788	18,492	4,269	159,703	818,150	2,241.5	71
1968	840,681	48,148	1,547	173,158	874,539	2,389.5	72
1969	848,404	50,883	1,123	171,714	900,262	2,466.5	70
1970	897,097	53,826	898	195,271	927,211	2,540.3	77
1971	912,097	55,783	2,761	190,622	971,316	2,661.1	72
1972	963,625	66,449	1,211	154,319	1,066,110	2,912.9	53
1973	1,030,178	143,149	3,231	196,461	1,128,714	3,092.4	64
1974	974,025	105,579	855	200,068	1,075,916	2,947.7	68
1975	968,650	56,678	267	208,833	1,040,571	2,850.9	73
1976	1,070,209	53,520	421	185,986	1,146,695	3,133.0	59
1977	1,196,298	91,318	519	250,295	1,223,328	3,351.6	75
1978	1,156,097	63,288	1,202	216,463	1,257,061	3,444.0	63
1979	1,150,771	70,489	1,079	228,712	1,214,374	3,327.1	69
1980	974,911	50,780	1,238	205,113	1,086,709	2,969.2	69
1981	953,732	63,071	1,885	191,541	1,032,476	2,828.7	68
1982	951,242	34,040	27,124	178,592	974,864	2,670.9	67
1983	896,504	63,542	23,396	140,263	981,927	2,690.2	52
1984	980,727	99,439	18,637	161,072	1,041,218	2,844.9	57
1985	980,351	73,089	24,597	143,673	1,046,827	2,868.0	50
1986	1,020,716	90,296	36,354	155,097	1,063,741	2,914.4	53
1987	996,119	93,176	24,010	134,485	1,086,413	2,976.5	45
1988	1,045,786	110,354	25,100	123,517	1,142,510	3,121.6	40
1989	1,057,975	111,674	35,242	105,700	1,152,224	3,156.8	33
1990	1,067,485	101,455	39,933	132,204	1,102,503	3,020.6	44
1991	1,081,018	74,778	78,404	143,515	1,066,081	2,920.8	49
1992	1,088,324	79,076	80,035	140,607	1,090,273	2,978.9	47
1993	1,143,075	67,184	99,957	140,867	1,110,043	3,041.2	46
1994	1,169,688	74,193	85,311	145,220	1,154,217	3,162.2	46
1995	1,151,735	70,601	66,923	130,214	1,170,419	3,206.6	41
1996	1,213,563	84,234	69,603	126,729	1,231,679	3,365.2	38
1997	1,238,041	83,102	55,507	138,427	1,253,938	3,435.4	40
1998	1,249,881	76,618	45,424	156,075	1,263,427	3,461.4	45
1999	1,240,783	91,428	59,044	125,463	1,303,779	3,572.0	35
2000	1,310,158	107,919	63,198	118,027	1,362,315	3,722.2	32
2001	1,348,525	125,586	43,543	144,513	1,404,082	3,846.8	38
2002	1,311,151	97,603	40,976	134,085	1,378,206	3,775.9	36
2003	1,353,138	121,672	38,980	136,542	1,433,373	3,927.0	35
2004	1,396,037	119,118	40,101	126,272	1,485,324	4,058.3	31
2005	1,443,348	120,009	50,533	136,022	1,503,074	4,118.0	33
2006	1,474,741	133,126	78,507	143,651	1,521,731	4,169.1	34
2007	1,508,530	110,997	97,726	133,944	1,531,508	4,195.9	32
2008	1,571,539	77,930	193,376	146,013	1,444,024	3,945.4	37
2009	1,477,534	82,172	214,411	165,964	1,325,344	3,631.1	46
2010	1,541,503	83,379	239,425	164,306	1,387,115	3,800.3	43
2011	1,654,500	65,234	311,747	149,212	1,423,082	3,898.9	38
2012	1,677,409	46,179	368,633	134,809	1,369,358	3,741.4	36
2013	1,747,182	56,465	413,888	127,543	1,397,025	3,827.5	33
2014	1,813,164	71,050	401,875	136,286	1,473,595	4,037.2	34
2015	1,839,198	73,178	429,075	161,326	1,458,262	3,995.2	40
2016	1,801,676	53,642	431,475	166,095	1,419,074	3,877.3	43

¹ Domestic demand includes crude oil used as distillate.

**UNITED STATES SALES OF DISTILLATE FUEL OIL BY USE-2016
(Percentage)**



**TOTAL SALES
1,447 Million Barrels**

UNITED STATES SALES OF DISTILLATE FUEL OIL BY USE¹

(Thousands of Barrels)

Year	Heating	Industrial	Oil Company Use	Electric ² Utility Companies	Railroads	Vessels	Military	On Highway Diesel	Off Highway Diesel	Other	Total	Daily Average
1960	438,010	34,271	8,347	4,742	86,490	18,730	10,793	36,467	38,095	7,380	683,325	1,867
1961	450,292	31,226	8,743	4,151	85,180	14,566	11,484	40,972	36,853	7,407	690,874	1,893
1962	466,830	34,951	9,055	4,100	86,803	15,836	13,041	49,236	40,493	8,750	729,095	1,998
1963	465,315	36,647	10,253	4,149	88,117	15,148	13,436	66,773	39,568	8,718	748,124	2,050
1964	451,860	36,007	10,576	3,849	88,198	16,001	13,609	76,131	41,403	9,917	747,551	2,042
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	73,776	50,346	13,281	786,891	2,156
1966	472,778	47,108	10,485	3,612	89,104	16,642	16,303	81,516	54,260	17,905	809,713	2,218
1967	501,026	44,997	8,997	2,858	88,688	17,478	17,325	...	...	147,831	829,200	2,272
1968	510,682	45,795	9,975	8,509	84,030	18,235	12,593	124,082	47,691	11,508	873,100	2,386
1969	511,768	42,456	13,867	12,158	86,429	18,877	13,958	138,814	49,439	12,534	900,300	2,467
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	148,796	46,123	10,874	927,250	2,540
1971	522,475	50,731	14,088	35,329	86,251	20,959	17,427	166,981	46,925	10,154	971,320	2,661
1972	543,337	60,388	13,405	68,334	97,001	22,125	20,187	189,055	50,186	10,852	1,074,870	2,937
1973	536,856	67,306	14,902	77,950	102,828	26,786	19,598	221,420	55,541	11,876	1,135,063	3,110
1974	493,223	64,036	13,805	84,661	102,949	24,757	17,748	221,033	48,743	10,131	1,081,086	2,962
1975	488,388	63,993	13,633	63,420	93,191	26,138	18,004	217,906	48,977	10,096	1,043,746	2,860
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	242,820	54,429	11,365	1,150,929	3,145
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	264,412	66,452	14,394	1,230,179	3,370
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	290,943	69,856	14,059	1,257,061	3,444
1979 ⁴	454,955	99,583	22,043	46,579	103,493	41,725	18,570	327,402	65,212	34,812	1,214,374	3,327
1980	393,112	86,089	24,205	31,812	102,022	35,201	19,138	323,431	51,705	19,994	1,086,709	2,969
1981	345,728	80,216	29,185	18,192	100,482	41,025	17,763	340,002	38,851	21,032	1,032,476	2,829
1982	324,912	71,340	29,482	12,134	93,150	33,885	15,201	338,006	37,118	19,636	974,864	2,671
1983	311,290	69,332	29,957	11,744	91,681	33,785	15,924	362,276	36,737	19,201	981,927	2,690
1984	352,127	56,114	21,623	16,405	82,308	40,287	16,579	399,939	39,847	15,988	1,041,217	2,845
1985	358,058	61,730	20,869	12,246	76,422	45,102	18,290	411,420	38,493	4,197	1,046,827	2,868
1986	356,380	63,907	17,857	14,628	73,800	48,434	18,105	426,822	40,458	3,349	1,063,740	2,914
1987	355,899	69,467	20,994	15,382	74,944	52,935	21,057	432,689	41,241	1,805	1,086,413	2,976
1988	362,328	62,325	20,765	19,050	77,601	55,009	23,354	477,112	43,377	1,589	1,142,510	3,122
1989	346,590	61,078	20,124	25,688	77,720	56,106	22,103	503,135	38,988	693	1,152,225	3,157
1990	305,226	58,389	23,066	17,469	76,431	52,310	18,676	508,583	42,294	61	1,102,503	3,021
1991	303,585	55,393	21,685	14,067	72,055	51,610	19,732	487,747	40,149	57	1,066,080	2,921
1992	311,669	52,830	18,693	11,162	76,601	53,337	15,480	508,926	41,406	169	1,090,273	2,979
1993	313,284	46,799	18,168	13,973	69,214	48,661	11,495	541,877	46,515	57	1,110,043	3,041
1994	306,609	49,800	16,761	17,981	72,939	48,260	12,537	581,967	47,345	19	1,154,218	3,162
1995	307,618	48,272	13,241	14,314	75,977	47,098	8,767	608,963	46,170	...	1,170,419	3,207
1996	320,850	50,171	14,895	16,292	77,782	51,848	8,836	641,873	49,132	...	1,231,679	3,365
1997	309,781	51,599	15,062	15,399	73,033	50,180	8,033	681,286	49,565	...	1,253,939	3,435
1998	278,841	53,768	13,457	22,927	67,459	50,609	6,612	717,862	51,894	...	1,263,427	3,461
1999	279,777	51,668	13,738	21,734	66,427	49,157	6,879	763,392	51,007	...	1,303,779	3,572
2000	299,311	50,417	15,980	27,137	72,051	48,606	5,429	788,802	54,583	...	1,362,315	3,722
2001	314,836	55,453	19,590	34,645	70,448	49,976	8,267	790,841	60,027	...	1,404,083	3,847
2002	287,784	52,947	19,569	18,804	72,888	48,963	7,789	816,878	52,584	...	1,378,206	3,776
2003	285,169	48,401	11,105	29,372	73,485	44,361	6,518	883,418	51,544	...	1,433,373	3,927
2004	301,463	57,410	13,177	19,220	78,624	55,082	8,498	883,934	67,916	...	1,485,324	4,058
2005	289,382	59,690	12,012	19,179	87,609	50,366	6,482	906,027	72,328	...	1,503,075	4,118
2006	272,772	63,922	17,627	11,881	98,171	52,540	8,762	931,388	64,666	...	1,521,730	4,169
2007	268,776	60,808	20,922	15,709	93,677	51,403	8,867	947,661	63,684	...	1,531,507	4,196
2008	289,617	61,756	25,397	14,655	76,896	47,224	6,452	893,535	62,040	...	1,477,572	4,037
2009	227,361	51,415	18,116	13,843	65,694	45,547	5,803	813,043	47,276	...	1,288,097	3,529
2010	228,500	48,694	22,651	13,051	70,825	47,687	5,791	847,205	51,159	...	1,335,563	3,659
2011	221,036	51,904	32,884	12,062	74,313	50,795	5,863	860,960	49,292	...	1,359,109	3,724
2012	215,779	55,369	40,727	10,993	74,242	42,103	3,398	865,311	49,718	...	1,357,639	3,709
2013	215,110	54,073	41,694	11,079	80,233	39,893	3,485	888,810	49,127	...	1,383,504	3,790
2014	227,524	57,569	50,120	17,072	87,389	37,938	5,253	917,462	47,957	...	1,448,284	3,968
2015	234,135	47,847	28,041	13,461	86,425	57,555	3,615	930,535	48,010	...	1,449,624	3,972
2016	216,561	48,059	21,016	11,184	82,916	53,460	2,613	958,220	52,717	...	1,446,745	3,953

¹ Includes diesel fuel.² Includes gas turbine plants after 1967 and includes some kerosene-type jet fuel.³ Included in other.⁴ Data for 1979 are not necessarily comparable with prior years because of questionnaire format changes made by EIA.

ANALYSIS OF RESIDUAL FUEL OIL SUPPLY AND DEMAND IN THE UNITED STATES

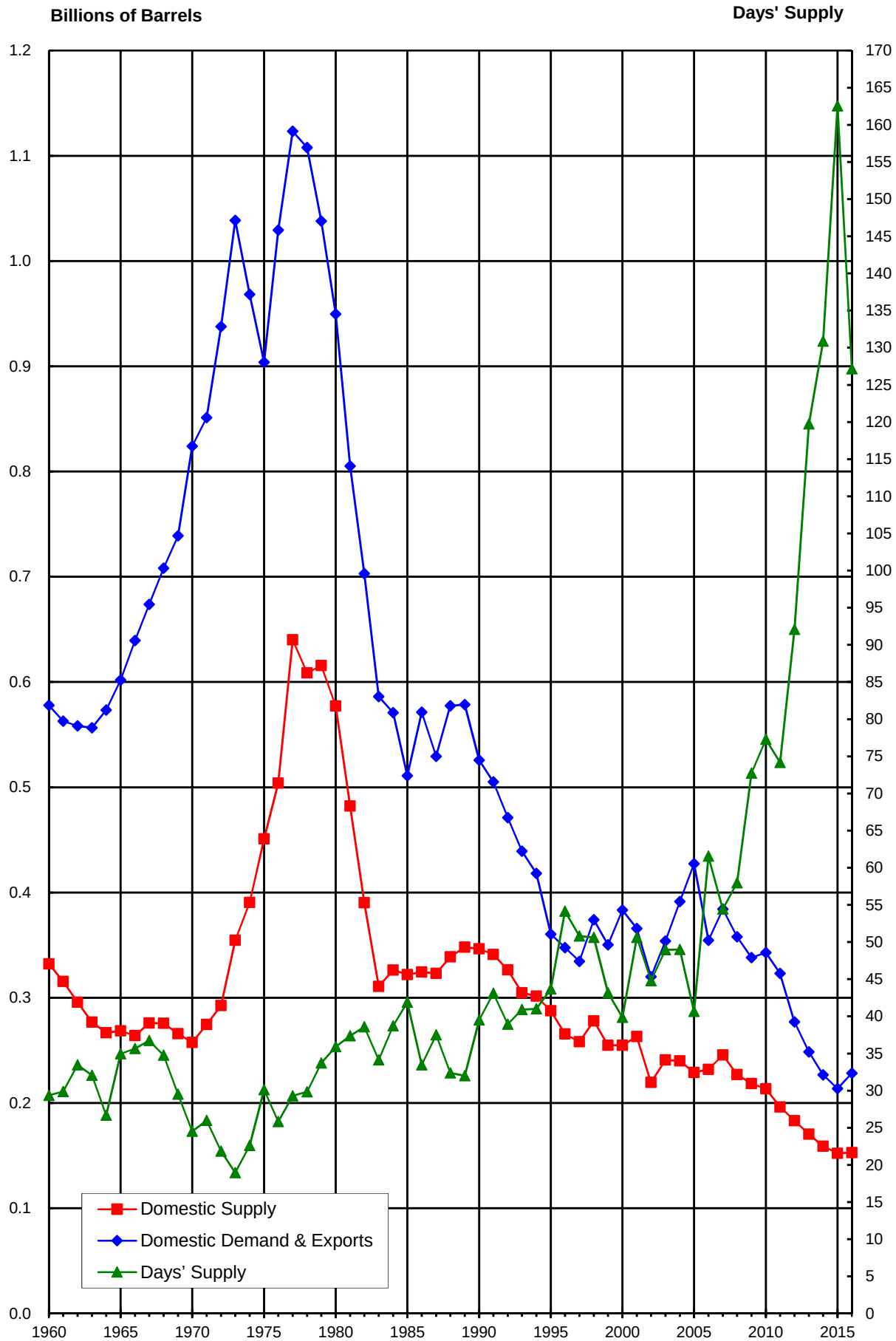


Chart 50

**ANALYSIS OF RESIDUAL FUEL OIL SUPPLY AND DEMAND
IN THE UNITED STATES**
(Thousands of Barrels)

<u>Year</u>	<u>Production</u>	<u>Imports</u>	<u>Exports</u>	<u>Stocks End of Year</u>	<u>Domestic¹ Demand</u>	<u>Daily Average Domestic Demand</u>	<u>Days' Supply</u>
1960	332,147	233,208	18,495	44,870	559,439	1,528.5	29
1961	315,577	243,268	14,022	44,869	548,678	1,503.2	30
1962	295,679	264,314	12,870	49,996	545,382	1,494.2	33
1963	276,766	274,314	15,281	47,538	541,341	1,483.1	32
1964	266,825	295,771	18,870	40,403	554,581	1,515.2	27
1965	268,576	345,187	14,882	56,214	587,011	1,608.2	35
1966	263,961	376,795	12,895	61,196	626,430	1,716.2	36
1967	275,956	395,939	21,940	65,597	651,885	1,786.0	37
1968	275,814	409,928	20,013	65,359	688,239	1,880.4	35
1969	265,906	461,611	16,891	58,395	721,924	1,977.9	30
1970	257,510	557,845	19,785	53,994	804,288	2,203.5	25
1971	274,684	557,700	13,217	59,681	838,045	2,296.0	26
1972	292,519	637,401	12,060	55,216	925,647	2,529.1	22
1973	354,597	676,225	8,507	53,480	1,030,177	2,822.4	19
1974	390,491	579,157	4,969	59,694	963,216	2,638.9	23
1975	450,957	446,528	5,342	74,126	898,572	2,461.8	30
1976	503,953	517,325	4,210	72,344	1,025,148	2,801.0	26
1977	640,140	496,065	2,305	89,993	1,120,927	3,071.0	29
1978	608,634	494,640	4,634	90,194	1,103,233	3,022.6	30
1979	615,579	420,144	3,266	95,598	1,034,610	2,834.5	34
1980	577,077	336,579	12,232	92,000	937,466	2,561.4	36
1981	482,088	292,070	43,243	77,992	762,030	2,087.8	37
1982	390,377	283,101	76,448	66,200	626,510	1,716.5	39
1983	310,863	255,213	67,500	48,504	518,604	1,420.8	34
1984	326,189	249,211	69,704	53,000	501,199	1,369.4	39
1985	321,997	186,284	72,060	50,381	438,840	1,202.3	42
1986	324,349	244,153	53,729	47,437	517,717	1,418.4	33
1987	323,201	206,138	67,862	47,410	461,504	1,264.4	37
1988	338,734	235,860	73,108	44,621	504,275	1,377.8	32
1989	348,148	229,595	78,459	43,838	500,067	1,370.0	32
1990	346,576	183,841	77,173	48,561	448,521	1,228.8	40
1991	341,080	165,424	82,542	49,899	422,624	1,157.9	43
1992	326,511	137,280	70,570	42,589	400,531	1,094.3	39
1993	304,780	136,151	45,064	44,194	394,262	1,080.2	41
1994	301,436	114,440	45,632	41,851	372,587	1,020.8	41
1995	287,601	68,133	49,486	37,188	310,911	851.8	44
1996	265,544	90,854	37,165	45,920	310,501	848.4	54
1997	258,290	70,829	43,782	40,462	290,795	796.7	51
1998	277,957	100,537	50,248	44,909	323,799	887.1	51
1999	254,839	86,343	47,263	35,830	302,998	830.1	43
2000	254,843	128,912	50,858	36,200	332,527	908.5	40
2001	263,017	107,688	69,779	41,047	296,079	811.2	51
2002	219,445	90,896	64,698	31,333	255,357	699.6	45
2003	240,871	119,496	72,072	37,800	281,828	772.1	49
2004	239,907	156,024	74,885	42,363	316,483	864.7	49
2005	229,074	193,294	91,553	37,387	335,791	920.0	41
2006	231,888	127,761	103,210	42,397	251,429	688.8	62
2007	245,521	135,676	120,395	39,338	263,861	722.9	54
2008	226,867	127,682	130,105	36,057	227,725	622.2	58
2009	218,339	120,936	151,606	37,168	186,558	511.1	73
2010	213,493	133,646	147,649	41,347	195,311	535.1	77
2011	196,168	119,888	154,921	34,189	168,293	461.1	74
2012	183,222	93,672	142,167	33,951	134,965	368.8	92
2013	170,445	82,173	132,152	38,144	116,273	318.6	120
2014	158,897	63,294	132,798	33,662	93,875	257.2	131
2015	152,266	69,914	119,040	42,148	94,654	259.3	163
2016	152,855	74,849	108,979	41,475	119,398	326.2	127

¹ Domestic demand includes crude oil used as residual.

UNITED STATES SALES OF RESIDUAL FUEL OIL BY USE

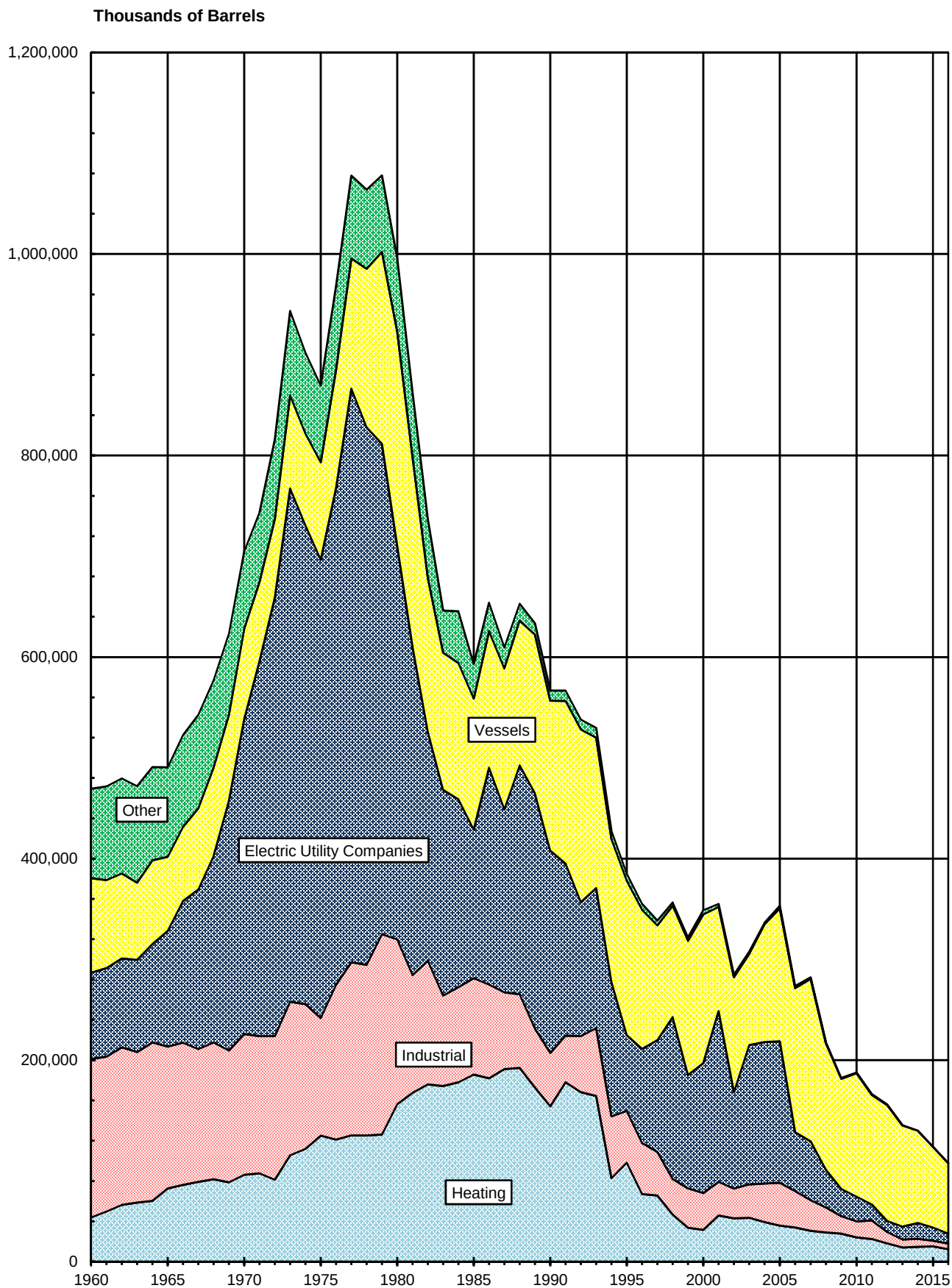


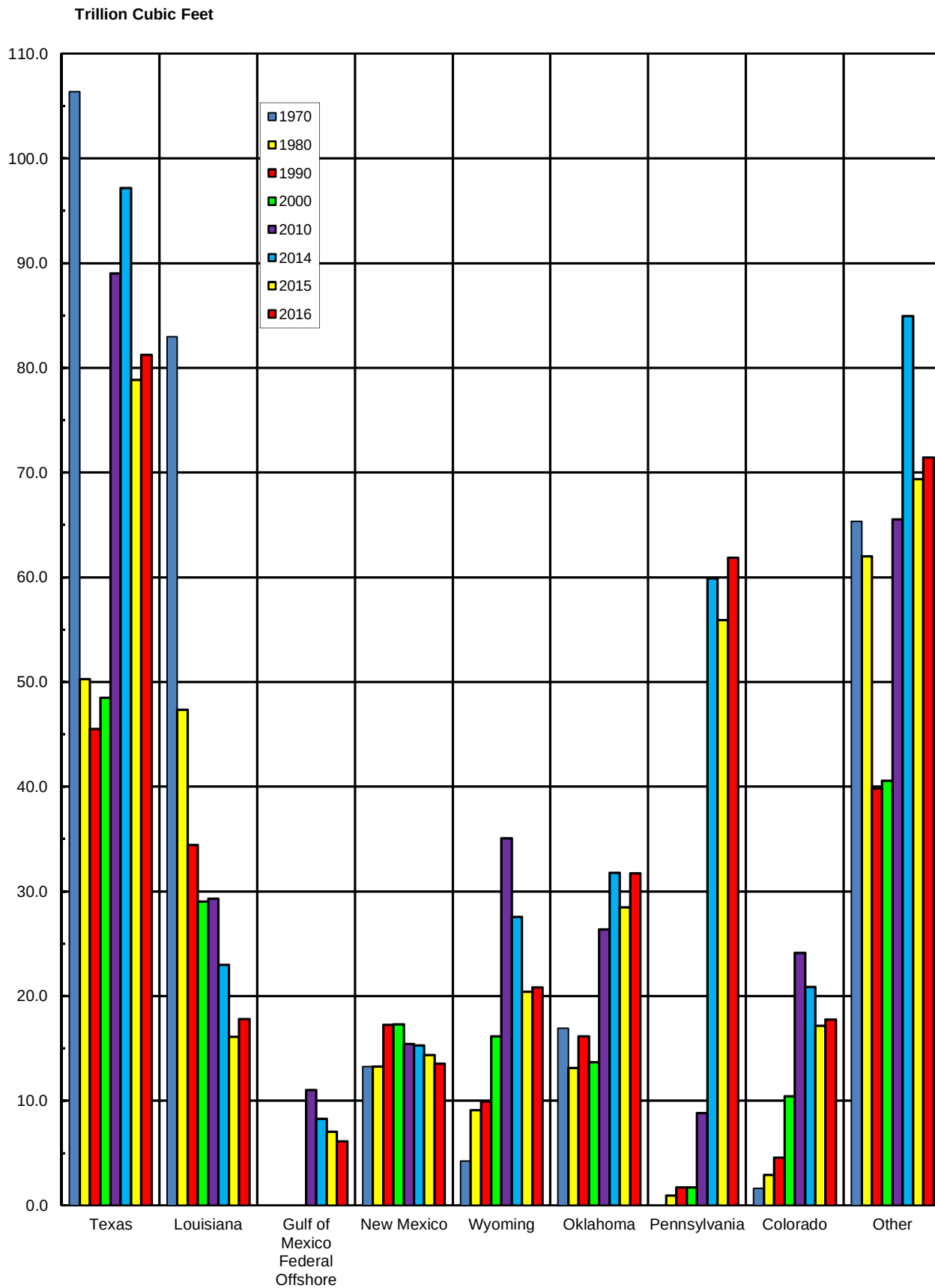
Chart 51

UNITED STATES SALES OF RESIDUAL FUEL OIL BY USE¹
(Thousands of Barrels)

Year	Heating	Industrial	Oil Company Use	Electric Utility Companies	Railroads	Vessels	Military	Other	Total	Daily Average
1960	125,088	157,270	45,061	85,408	5,610	94,084	31,724	6,291	550,536	1,504
1961	121,097	153,766	44,399	87,881	5,347	87,308	36,762	6,426	542,986	1,488
1962	125,164	156,221	45,978	88,261	5,501	84,415	35,667	7,226	548,433	1,503
1963	125,248	149,269	46,976	91,615	5,342	76,502	36,444	7,126	538,522	1,475
1964	126,215	157,176	43,098	97,595	5,350	83,024	35,568	8,606	556,632	1,521
1965	156,254	140,602	34,354	114,884	4,001	73,639	40,380	10,004	574,118	1,573
1966	167,471	141,050	35,177	140,642	3,792	73,641	41,861	10,338	613,972	1,682
1967	175,990	131,819	37,880	158,417	5,494	80,680	40,465	8,794	639,539	1,752
1968	174,326	135,664	39,329	184,956	4,296	87,575	34,990	8,348	669,484	1,829
1969	178,095	130,654	36,559	247,634	3,381	85,581	31,750	8,875	722,529	1,980
1970	185,831	139,647	38,318	312,420	2,222	89,850	28,704	7,295	804,287	2,204
1971	182,062	136,221	32,626	371,820	1,262	78,727	29,217	6,109	838,044	2,296
1972	191,111	142,320	44,291	435,348	1,137	77,932	24,622	8,886	925,647	2,529
1973	192,252	152,267	50,652	509,457	1,214	92,415	22,892	9,028	1,030,177	2,822
1974	172,896	143,726	50,236	475,204	1,176	91,052	20,423	8,503	963,216	2,639
1975	154,103	116,657	50,487	454,935	583	96,673	19,068	6,066	898,572	2,462
1976	178,139	153,596	58,212	492,974	423	117,458	18,561	5,785	1,025,148	2,801
1977	168,279	171,967	60,582	569,429	329	128,966	16,646	4,729	1,120,927	3,071
1978	164,536	169,403	57,690	533,193	206	157,495	16,583	4,127	1,103,233	3,023
1979 ²	82,729	198,759	51,062	486,636	245	190,543	7,736	16,900	1,034,610	2,835
1980	98,034	163,564	59,519	390,105	665	213,131	8,066	4,382	937,466	2,561
1981	67,035	117,024	51,870	325,486	178	188,632	7,008	4,797	762,030	2,088
1982	65,781	122,619	45,319	227,419	170	152,586	7,829	4,787	626,510	1,716
1983	46,743	89,573	32,820	204,238	140	136,290	5,411	3,389	518,604	1,421
1984	33,777	94,375	27,680	186,318	43	135,408	5,291	18,307	501,199	1,369
1985	31,592	95,509	18,477	147,238	147	130,323	4,593	10,961	438,840	1,202
1986	45,923	92,826	18,490	215,276	14	135,484	4,308	5,396	517,717	1,418
1987	42,985	76,092	15,317	181,712	7	139,742	4,549	1,098	461,502	1,264
1988	43,517	73,137	12,393	227,164	...	143,465	3,269	1,329	504,274	1,378
1989	39,296	58,428	8,208	233,285	3	157,645	2,506	698	500,069	1,370
1990	35,793	53,044	7,485	200,797	...	148,764	1,952	686	448,521	1,229
1991	33,968	46,154	7,179	170,705	...	161,573	2,862	184	422,625	1,158
1992	30,714	55,546	7,079	133,029	...	171,407	2,397	225	400,397	1,094
1993	28,995	67,215	7,533	139,076	...	149,283	2,050	110	394,262	1,080
1994	27,893	61,417	6,379	133,566	...	141,544	1,628	161	372,586	1,021
1995	23,999	51,443	5,501	75,344	...	153,125	1,324	175	310,911	852
1996	22,493	50,654	4,059	93,467	...	138,214	1,363	251	310,501	848
1997	17,975	43,218	3,653	110,852	...	114,044	960	93	290,795	797
1998	14,057	35,341	2,506	160,684	...	110,480	661	70	323,799	887
1999	14,748	38,817	2,831	112,619	...	133,301	587	95	302,998	830
2000	15,281	36,460	3,531	129,005	...	147,436	654	160	332,527	909
2001	12,389	33,420	2,528	169,351	...	103,459	385	98	321,630	881
2002	13,441	29,385	2,553	95,902	...	113,904	91	81	255,357	700
2003	17,662	33,038	1,965	138,377	...	90,510	239	36	281,828	772
2004	19,398	38,199	1,161	140,592	...	116,357	751	25	316,483	865
2005	18,327	42,502	1,884	140,436	...	131,751	754	137	335,791	920
2006	11,897	36,048	1,620	58,544	...	142,867	298	154	251,429	689
2007	12,271	30,267	1,121	58,400	...	161,285	452	66	263,861	723
2008	9,618	24,854	1,379	37,262	...	125,186	220	89	198,608	543
2009	9,884	17,291	599	26,938	...	109,263	348	155	164,477	451
2010	8,484	15,897	495	24,540	...	122,442	235	140	172,232	472
2011	7,541	18,397	471	15,990	...	108,573	349	63	151,385	415
2012	5,384	11,547	406	11,017	...	114,750	246	34	143,383	392
2013	4,219	7,987	350	12,762	...	100,274	201	1	125,794	345
2014	1,630	7,996	332	15,510	...	91,599	57	1	117,125	321
2015	685	5,515	324	13,133	...	79,950	0	2	99,609	273
2016	497	5,580	287	9,868	...	69,754	0	0	85,986	235

¹ Includes crude oil burned as fuel.² Data for 1979 are not necessarily comparable with prior years because of questionnaire format changes made by EIA.

**PROVED NATURAL GAS RESERVES BY SELECTED STATES
AS OF DECEMBER 31**



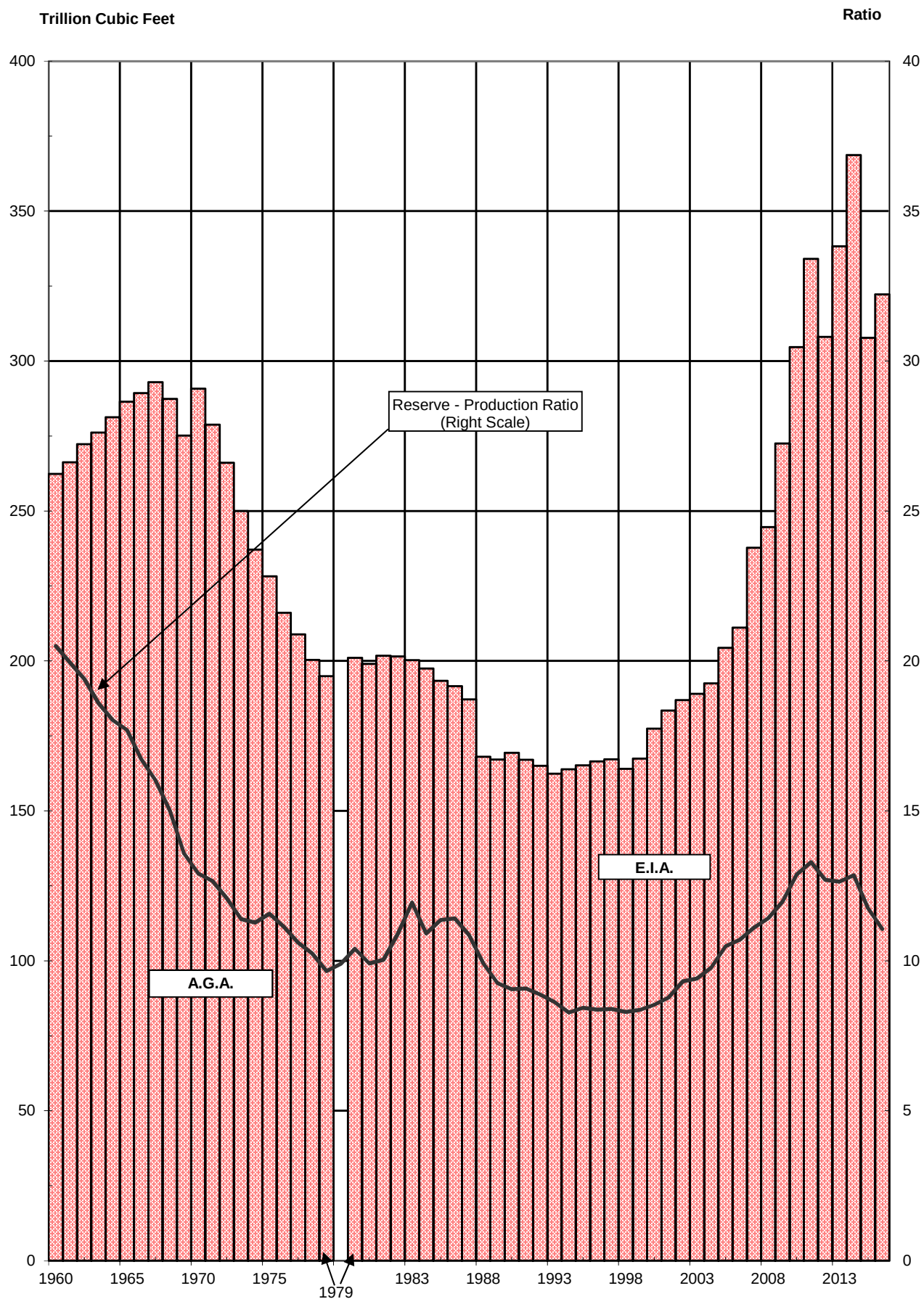
PROVED NATURAL GAS RESERVES BY STATES AS OF DECEMBER 31

(Billions of Cubic Feet at 14.73 PSIA and 60° F)

P.A.D. DISTRICT and STATES	AGA ESTIMATES				EIA ESTIMATES ¹							
	1950	1960	1970	1979	1979	1980	1990	2000	2010	2014	2015	2016
P.A.D. DISTRICT I	2,343	3,105	4,000	5,511	3,361	3,665	4,464	6,749	24,512	92,248	79,047	87,434
Florida	...	2	61	109	77	84	45	82	56	...	...	1
New York	65	96	126	283	211	208	354	322	281	143	104	120
Pennsylvania	627	1,186	1,377	2,251	1,515	951	1,720	1,741	13,960	59,873	55,894	61,841
Virginia	... ²	... ²	... ²	... ²	... ²	... ²	138	1,704	3,215	2,800	2,496	2,447
West Virginia	1,651	1,821	2,436	2,868	1,558	2,422	2,207	2,900	7,000	29,432	20,553	23,025
P.A.D. DISTRICT II	27,914	40,680	34,313	29,010	27,649	26,796	29,824	25,105	38,049	52,350	52,724	59,115
Illinois	230	172	415	471	... ²	... ²	... ²	... ²	... ²	... ²	... ²	... ²
Indiana	31	34	83	52	... ²	... ²	... ²	... ²	... ²	... ²	... ²	... ²
Kansas	13,791	19,514	13,325	12,516	10,243	9,508	9,614	5,299	3,673	4,359	3,183	2,821
Kentucky	1,330	1,138	978	699	468	508	1,016	1,760	2,613	1,611	1,362	1,123
Michigan	195	582	940	1,798	1,204	1,406	1,243	2,729	2,919	1,845	1,386	1,286
Nebraska	44	117	58	85	... ²	... ²	... ²	... ²	... ²	... ²	... ²	... ²
North Dakota	... ²	1,145	567	489	439	537	586	433	1,667	6,034	6,203	7,030
Ohio	659	761	993	1,709	1,479	1,699	1,214	1,185	832	6,723	12,104	15,143
Oklahoma	11,634	17,217	16,954	11,191	13,816	13,138	16,151	13,699	26,345	31,778	28,486	31,712
P.A.D. DISTRICT III	141,355	201,396	206,677	114,619	120,646	115,078	104,141	101,163	162,387	159,082	127,385	128,245
Alabama ³	... ²	15	162	933	652	636	4,125	4,149	2,629	2,036	2,182	1,791
Arkansas	908	1,452	2,581	1,631	1,703	1,774	1,731	1,581	14,178	12,789	8,339	7,416
Gulf of Mexico Federal Offshore ⁶	...	...	...	...	...	...	...	...	11,041	8,287	7,057	6,114
Louisiana ⁴	28,533	63,042	82,957	45,554	50,042	47,325	34,407	29,027	29,277	22,975	16,097	17,816
Mississippi	2,519	2,528	1,334	1,429	1,504	1,769	1,126	618	853	558	480	357
New Mexico	6,991	15,519	13,290	13,461	13,724	13,287	17,260	17,322	15,412	15,283	14,364	13,527
Texas	102,404	118,840	106,353	51,611	53,021	50,287	45,492	48,466	88,997	97,154	78,866	81,224
P.A.D. DISTRICT IV	4,192	8,086	8,037	8,441	11,907	14,510	16,908	31,706	67,118	55,756	41,814	42,642
Colorado	1,115	2,032	1,629	2,043	2,608	2,922	4,555	10,428	24,119	20,851	17,139	17,761
Montana	797	623	1,100	1,036	825	1,287	899	885	944	667	692	569
Utah	85	1,518	1,065	677	948	1,201	1,510	4,235	6,981	6,685	3,547	3,494
Wyoming	2,195	3,913	4,243	4,685	7,526	9,100	9,944	16,158	35,074	27,553	20,436	20,818
P.A.D. DISTRICT V	9,760	8,903	37,431	36,984	37,281	38,796	13,939	12,662	12,209	9,092	6,637	4,686
Alaska	...	107	31,131	31,940	32,259	33,382	9,300	9,237	8,838	6,745	4,566	3,316
California	9,760	8,796	6,300	5,044	5,022	5,414	4,639	3,425	3,371	2,347	2,071	1,370
MISCELLANEOUS	27	156	288	352	153	176	70	42	350	176	123	112
TOTAL UNITED STATES	185,591	262,326	290,746	194,917	200,997	199,021	169,346	177,427	304,625	368,704	307,730	322,234
LOWER 48 STATES	185,591	262,219	259,615	162,977	168,738	165,639	160,046	168,190	295,787	361,959	303,164	318,918
Onshore	... ⁵	... ⁵	... ⁵	... ⁵	127,070	126,328	126,994	140,257	283,454	352,987	295,548	312,269
Offshore	... ⁵	... ⁵	... ⁵	... ⁵	41,668	39,311	33,052	27,933	12,333	8,972	7,616	6,649

¹ EIA reserves are on a dry gas basis.² Included in miscellaneous.³ Includes Alabama state offshore 1990–current..⁴ Includes Alabama federal offshore.⁵ Not available.⁶ Beginning in 2001, Gulf of Mexico reported separately.

UNITED STATES NATURAL GAS RESERVES AND RESERVES PRODUCTION RATIO AT YEAR-END



**UNITED STATES MARKETED PRODUCTION OF NATURAL GAS,
NATURAL GAS RESERVES, AND RESERVE – PRODUCTION RATIO**
(As of December 31)

Year	Marketed Production (Tcf)	Reserves (Tcf)	Reserve Production Ratio
AGA Estimates¹			
1960	12.77	262.33	20.5
1961	13.25	266.27	19.9
1962	13.88	272.28	19.4
1963	14.75	276.15	18.6
1964	15.46	281.25	18.0
1965	16.04	286.47	17.7
1966	17.21	289.33	16.7
1967	18.17	292.91	16.0
1968	19.32	287.35	15.0
1969	20.70	275.11	13.6
1970	21.92	290.75	12.9
1971	22.49	278.80	12.7
1972	22.53	266.08	12.1
1973	22.65	249.95	11.4
1974	21.60	237.13	11.3
1975	20.11	228.20	11.6
1976	19.95	216.03	11.1
1977	20.03	208.88	10.6
1978	19.97	200.30	10.2
1979	20.47	194.92	9.7
EIA Estimates²			
1979	19.66	201.00	10.4
1980	20.18	199.02	9.9
1981	19.96	201.73	10.0
1982	18.52	201.51	10.9
1983	16.82	200.25	11.9
1984	18.23	197.46	10.9
1985	17.20	193.37	11.4
1986	16.86	191.59	11.4
1987	17.43	187.21	10.9
1988	17.92	168.02	9.9
1989	18.10	167.12	9.3
1990	18.59	169.35	9.0
1991	18.53	167.06	9.1
1992	18.71	165.02	8.9
1993	18.98	162.42	8.6
1994	19.71	163.84	8.3
1995	19.51	165.15	8.4
1996	19.81	166.47	8.4
1997	19.87	167.22	8.4
1998	19.96	164.04	8.3
1999	19.80	167.41	8.4
2000	20.20	177.43	8.5
2001	20.57	183.46	8.8
2002	19.88	186.95	9.3
2003	19.97	189.04	9.4
2004	19.52	192.51	9.8
2005	18.93	204.39	10.5
2006	19.41	211.09	10.7
2007	20.20	237.73	11.1
2008	21.11	244.66	11.4
2009	21.60	272.51	12.0
2010	22.40	304.63	12.9
2011	24.04	334.07	13.3
2012	25.28	308.04	12.7
2013	25.56	338.26	12.6
2014	27.50	368.70	12.9
2015	28.77	307.73	11.8
2016	28.48	322.23	11.1

¹ The AGA, for 1960–1963, reported reserves on a old pressure base of 14.65 psia. For comparability, the reported figure for those years has been converted to the new pressure base of 14.73 psia.

² EIA reserves are on a dry gas basis.

UNITED STATES NATURAL GAS RESERVES, PRODUCTION, AND RESERVE ADDITIONS

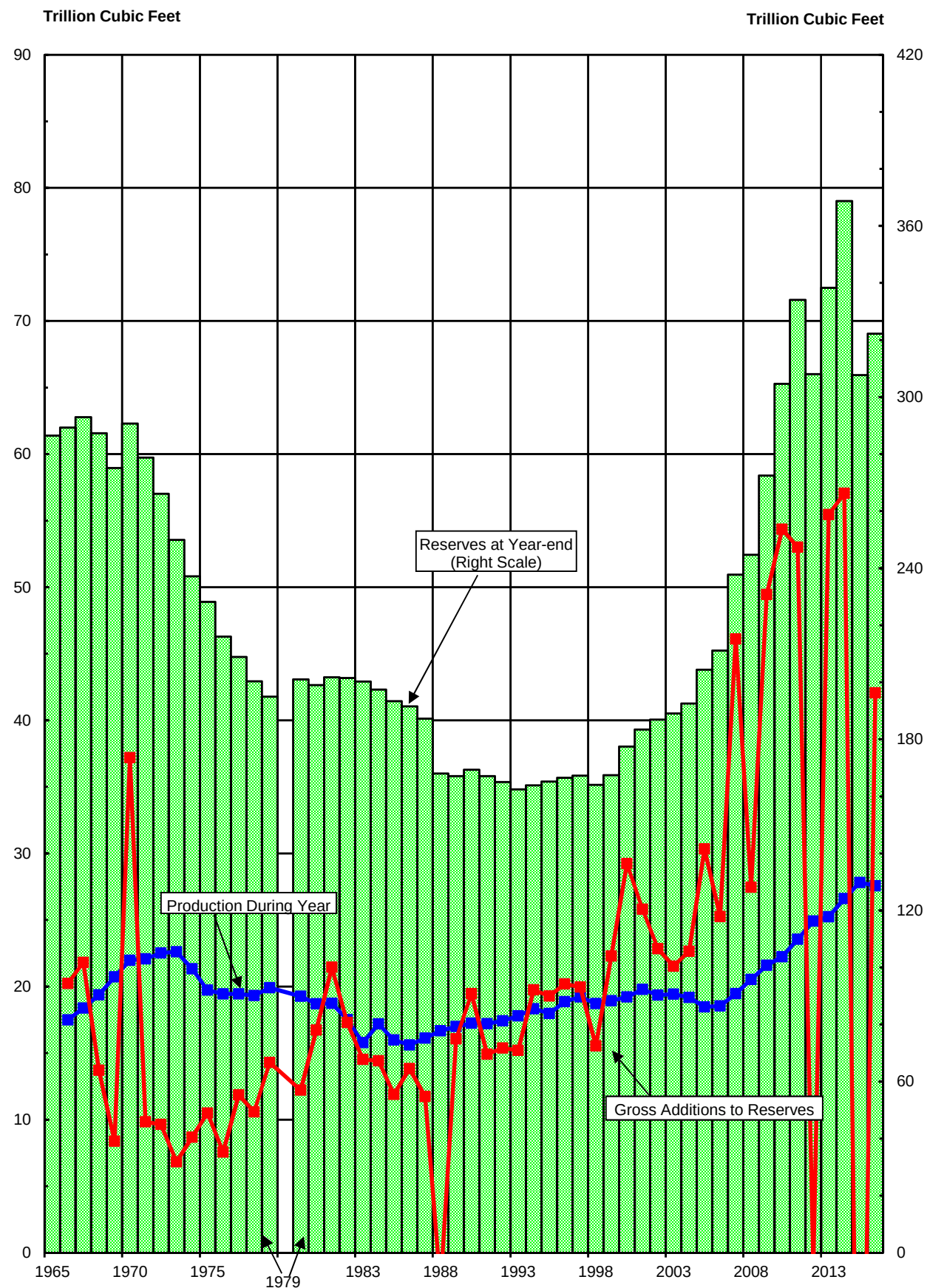


Chart 54

UNITED STATES NATURAL GAS RESERVES ESTIMATES

AS OF DECEMBER 31

(Billions of Cubic Feet at 14.73 PSIA and 60° F)

Year	Net Adjustments	Net Revisions ³	Extensions	New Field ⁴ Discoveries	New ⁴ Reservoir Discoveries in Old Fields	Production	Year-End Proved Reserves	Gross Reserves Added	Reserve Production Ratio
AGA Estimates¹									
1965	...	...	...	...	...	...	286,469	...	...
1966	...	4,938	9,225	2,947	3,110	17,491	289,333	20,220	16.46
1967	...	6,571	9,539	3,171	2,525	18,381	292,908	21,806	15.84
1968	...	3,016	7,759	1,376	1,546	19,373	287,350	13,697	14.98
1969	...	-1,238	5,800	1,770	2,043	20,723	275,109	8,375	13.57
1970	...	-100	6,158	27,770	3,368	21,961	290,746	37,196	12.88
1971	...	-1,227	6,375	1,318	3,361	22,077	278,806	9,827	12.90
1972	...	-1,078	6,154	1,463	3,096	22,512	266,085	9,635	12.10
1973	...	-3,475	6,177	2,152	1,970	22,605	249,950	6,824	11.41
1974	...	-1,333	5,847	2,014	2,151	21,318	237,132	8,679	11.42
1975	...	383	6,027	2,423	1,649	19,719	228,200	10,482	11.80
1976	...	-1,197	5,338	1,421	1,994	19,452	216,026	7,556	11.42
1977	...	984	6,601	2,115	2,153	19,447	208,878	11,853	10.92
1978	...	118	6,733	1,720	2,014	19,311	200,302	10,585	10.59
1979	...	2,908	7,113	2,576	1,690	19,910	194,917	14,287	9.93
EIA Estimates²									
1978	...	...	...	...	...	...	208,033	...	...
1979	-2,264	-219	8,950	3,188	2,566	19,257	200,997	12,221	10.62
1980	1,201	1,049	9,357	2,539	2,577	18,699	199,021	16,723	10.70
1981	1,627	2,599	10,491	3,731	2,998	18,737	201,730	21,446	10.69
1982	2,378	455	8,349	2,687	3,419	17,506	201,512	17,288	11.52
1983	3,090	-15	6,909	1,574	2,965	15,788	200,247	14,523	12.72
1984	-2,241	3,129	8,299	2,536	2,686	17,193	197,463	14,409	11.57
1985	-1,708	2,471	7,169	999	2,960	15,985	193,369	11,891	12.22
1986	1,320	3,572	6,065	1,099	1,771	15,610	191,586	13,827	12.33
1987	1,268	3,296	4,587	1,089	1,499	16,114	187,211	11,739	11.75
1988	2,193	-15,060	6,803	1,638	1,909	16,670	168,024	-2,517	10.65
1989	3,013	3,030	6,339	1,450	2,243	16,983	167,116	16,075	9.87
1990	1,557	5,538	7,952	2,004	2,412	17,233	169,346	19,463	9.76
1991	2,960	4,416	5,090	848	1,604	17,202	167,062	14,918	9.78
1992	2,235	6,093	4,675	649	1,724	17,423	165,015	15,376	9.53
1993	972	5,349	6,103	899	1,866	17,789	162,415	15,189	9.20
1994	1,945	5,484	6,941	1,894	3,480	18,322	163,837	19,744	8.90
1995	580	7,734	6,843	1,666	2,452	17,966	165,146	19,275	9.16
1996	3,785	4,086	7,757	1,451	3,110	18,861	166,474	20,189	8.79
1997	-590	4,902	10,585	2,681	2,382	19,211	167,223	19,960	8.69
1998	-1,635	5,740	8,197	1,074	2,162	18,720	164,041	15,538	8.85
1999	982	10,504	7,043	1,568	2,196	18,928	167,406	22,293	8.76
2000	-891	10,993	14,787	1,983	2,368	19,219	177,427	29,240	8.97
2001	2,742	312	16,380	3,578	2,800	19,779	183,460	25,812	9.12
2002	3,727	1,317	14,769	1,332	1,694	19,353	186,946	22,839	9.57
2003	2,841	-604	16,454	1,222	1,610	19,425	189,044	21,523	9.68
2004	-114	2,588	18,198	759	1,206	19,168	192,513	22,637	9.95
2005	1,887	5,243	21,050	942	1,208	18,458	204,385	30,330	10.75
2006	743	1,160	21,778	409	1,155	18,545	211,085	25,245	11.20
2007	1,147	15,869	27,107	796	1,188	19,466	237,726	46,107	11.53
2008	207	-2,233	26,687	1,170	1,622	20,523	244,656	27,453	11.75
2009	5,098	-1,760	42,139	1,372	2,598	21,594	272,509	49,447	11.97
2010	509	6,545	44,783	850	1,668	22,239	304,625	54,355	12.98
2011	1,731	3,183	45,909	947	1,227	23,555	334,067	52,997	13.56
2012	-1,588	-45,836	45,167	762	376	24,912	308,036	-1,119	12.89
2013	543	3,965	49,131	256	1,566	25,233	338,264	55,461	12.81
2014	2,256	7,002	44,599	632	2,562	26,611	368,704	57,051	13.28
2015	9,998	-76,047	31,233	29	1,631	27,818	307,730	-33,156	12.16
2016	5,652	212	36,198	...	...	27,558	322,234	42,062	11.43

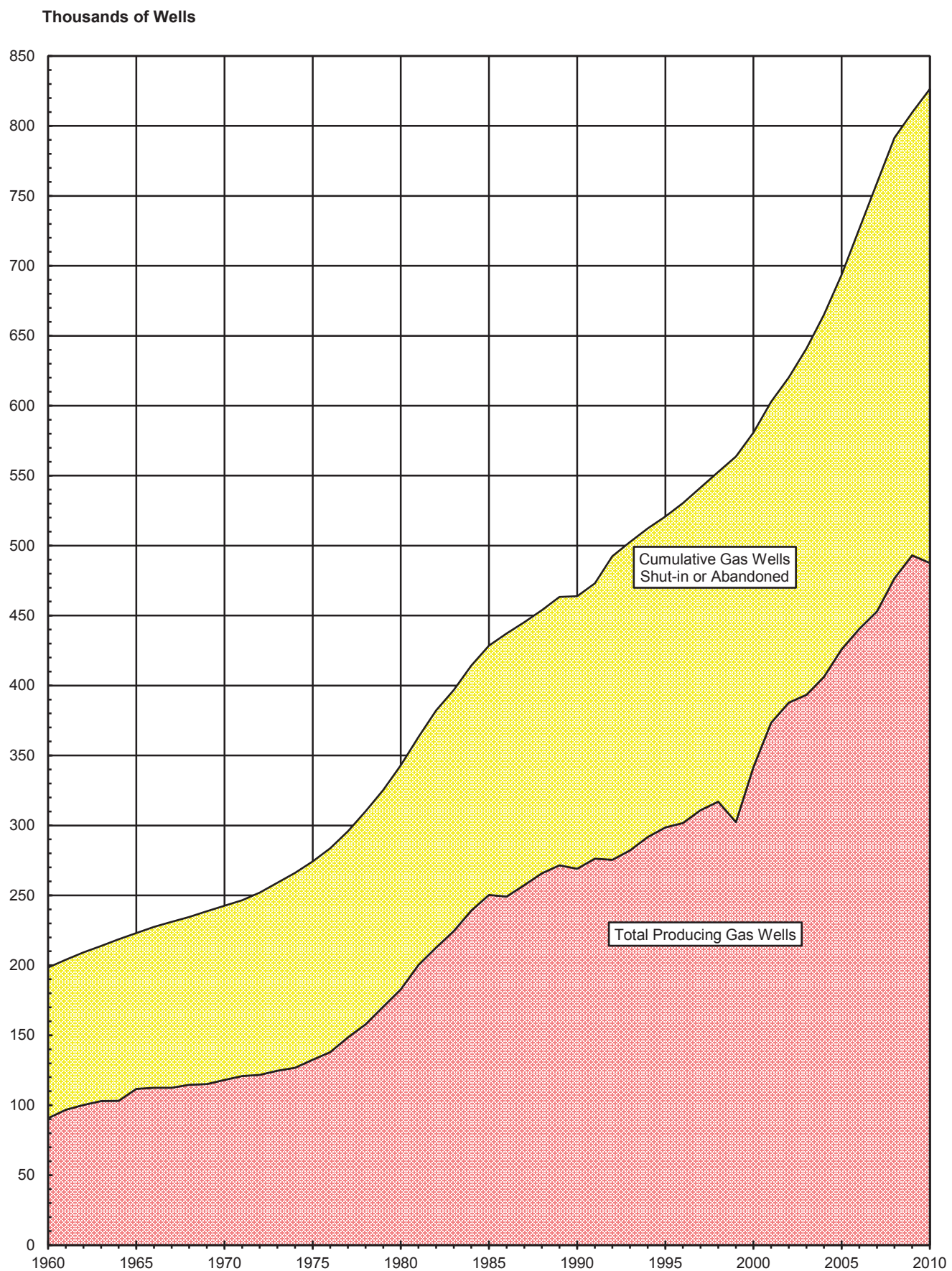
¹ Sum of reserves at the beginning of the year, plus gross additions less production will not equal reserves at year-end due to net changes in underground storage for the AGA data.

² EIA reserves are on a dry gas basis.

³ Net revisions includes sales and acquisitions.

⁴ Discoveries included in extensions from 2016 to present.

UNITED STATES GAS WELLS DRILLED, ABANDONED AND PRODUCING AT YEAR-END

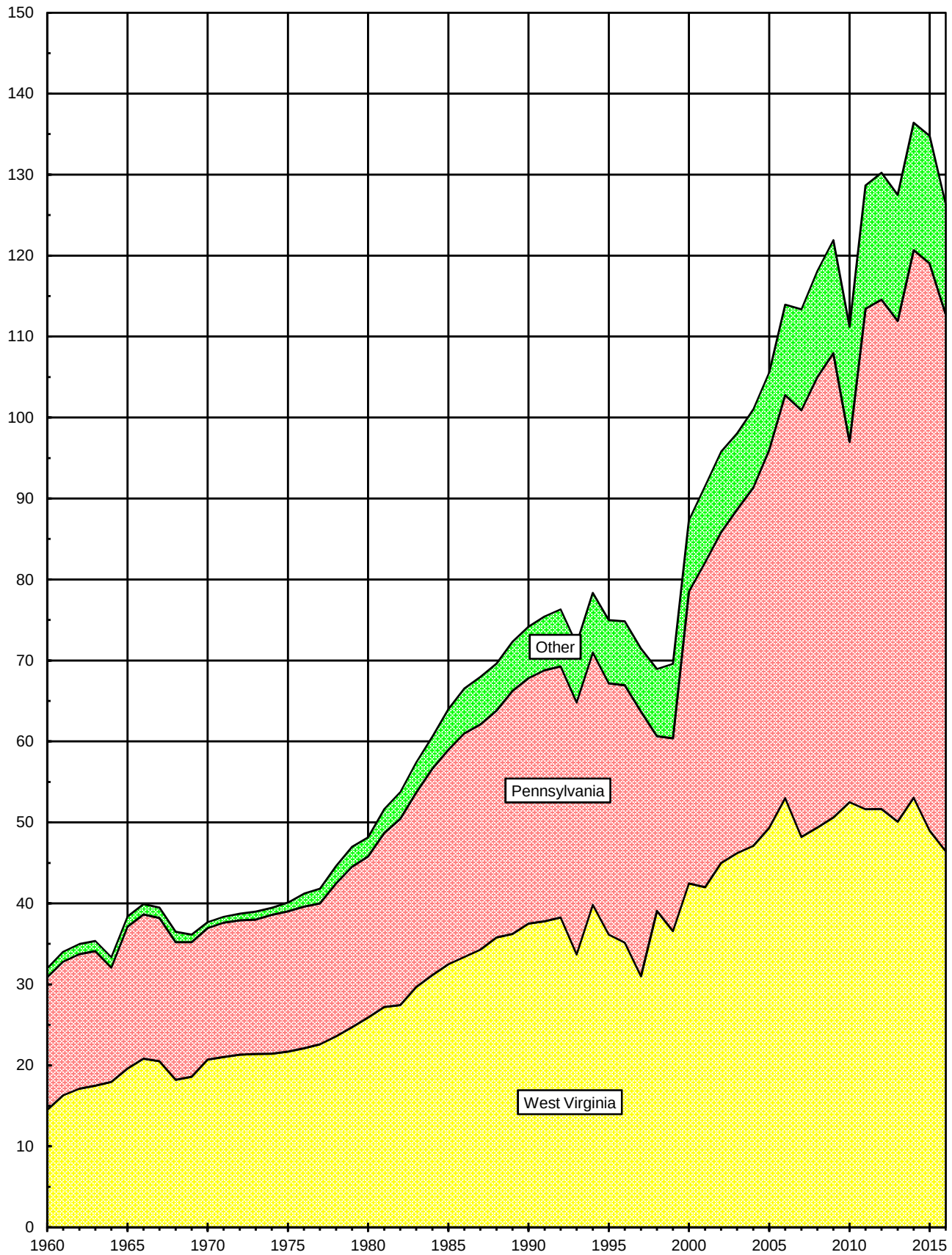


**UNITED STATES GAS WELLS DRILLED, ABANDONED,
AND PRODUCING AT YEAR-END**

<u>Year</u>	<u>Producing Gas Wells Drilled</u>	<u>Gas Wells Drilled Cumulative</u>	<u>Gas Wells Shut-in or Abandoned</u>	<u>Gas Wells Shut-in or Abandoned Cumulative</u>	<u>Total Producing Gas Wells on Dec. 31</u>	<u>Average Life in Years</u>
1960	5,149	198,458	-2,387	107,697	90,761	27.0
1961	5,486	203,944	-562	107,135	96,809	26.0
1962	5,353	209,297	1,895	109,030	100,267	27.0
1963	4,570	213,867	1,871	110,901	102,966	27.4
1964	4,694	218,561	4,576	115,477	103,084	26.9
1965	4,482	223,043	-4,114	111,363	111,680	29.2
1966	4,377	227,420	3,503	114,866	112,554	29.2
1967	3,659	231,079	3,779	118,645	112,434	28.0
1968	3,456	234,535	1,259	119,904	114,631	28.7
1969	4,083	238,618	3,571	123,475	115,143	28.6
1970	4,011	242,629	1,024	124,499	118,130	29.4
1971	3,971	246,600	1,256	125,755	120,845	29.7
1972	5,440	252,040	4,541	130,296	121,744	29.0
1973	6,933	258,973	3,960	134,256	124,717	29.0
1974	7,138	266,111	4,987	139,243	126,868	28.3
1975	8,127	274,238	2,423	141,666	132,572	28.8
1976	9,409	283,647	4,090	145,756	137,891	28.4
1977	12,122	295,769	1,544	147,300	148,469	28.9
1978	14,413	310,182	4,969	152,269	157,913	28.8
1979	15,254	325,436	2,729	154,998	170,438	29.1
1980	17,461	342,897	5,019	160,017	182,880	28.7
1981	20,250	363,147	2,907	162,924	200,223	29.0
1982	19,076	382,223	6,670	169,594	212,629	28.3
1983	14,684	396,907	2,814	172,408	224,499	28.4
1984	17,338	414,245	2,726	175,134	239,111	29.8
1985	14,324	428,569	3,109	178,243	250,326	29.1
1986	8,599	437,168	9,679	187,922	249,246	28.2
1987	8,096	445,264	-1	187,921	257,343	29.2
1988	8,578	453,842	200	188,121	265,721	30.1
1989	9,522	463,364	3,769	191,890	271,474	30.5
1990	11,126	474,490	2,935	194,825	269,100	30.4
1991	9,611	484,101	1,823	196,648	276,337	31.0
1992	8,305	492,406	20,344	216,992	275,414	31.2
1993	10,174	502,580	3,436	220,428	282,152	30.9
1994	9,739	512,319	118	220,546	291,773	32.3
1995	8,454	520,773	1,686	222,232	298,541	32.6
1996	9,539	530,312	6,269	228,501	301,811	32.4
1997	11,186	541,498	2,026	230,527	310,971	32.8
1998	11,127	552,625	5,169	235,696	316,929	33.0
1999	11,121	563,746	25,629	261,325	302,421	27.9
2000	17,051	580,797	-22,206	239,119	341,678	35.7
2001	22,072	602,869	-9,554	229,565	373,304	36.7
2002	17,342	620,211	2,874	232,439	387,772	37.4
2003	20,722	640,933	15,167	247,606	393,327	36.3
2004	24,186	665,119	11,366	258,972	406,147	34.7
2005	28,590	693,709	8,850	267,822	425,887	34.4
2006	32,838	726,547	18,209	286,031	440,516	33.5
2007	32,719	759,266	20,290	306,321	452,945	33.2
2008	32,246	791,512	8,539	314,860	476,652	33.4
2009	18,088	809,600	1,640	316,500	493,100	33.2
2010	16,696	826,296	22,169	338,669	487,627	29.4

TOTAL PRODUCING GAS WELLS P.A.D. DISTRICT I

Thousands of Wells



TOTAL PRODUCING NATURAL GAS WELLS
P.A.D. DISTRICT I

<u>Year</u>	<u>Maryland</u>	<u>New York</u>	<u>Pennsylvania</u>	<u>Virginia</u>	<u>West Virginia</u>	<u>Total¹</u>
1960	38	1,000	16,350	92	14,500	31,980
1961	34	1,109	16,500	98	16,297	34,038
1962	33	1,130	16,600	98	17,121	34,982
1963	33	1,130	16,600	98	17,500	35,361
1964	16	1,155	14,120	100	17,960	33,351
1965	20	1,150	17,516	99	19,600	38,385
1966	8	1,164	17,808	104	20,830	39,914
1967	13	1,159	17,700	104	20,500	39,476
1968	15	1,155	17,000	111	18,214	36,495
1969	13	818	16,600	111	18,600	36,142
1970	16	600	16,239	115	20,702	37,672
1971	14	600	16,586	115	21,025	38,340
1972	16	650	16,600	130	21,324	38,720
1973	15	789	16,600	178	21,400	38,982
1974	15	700	17,123	174	21,450	39,462
1975	15	900	17,300	186	21,700	40,101
1976	14	1,400	17,500	180	22,100	41,194
1977	12	1,600	17,391	202	22,600	41,805
1978	12	1,900	18,900	227	23,575	44,614
1979	12	2,200	19,800	258	24,725	46,995
1980	9	2,076	19,900	258	25,900	48,143
1981	10	2,636	21,500	288	27,200	51,634
1982	8	2,969	23,000	298	27,450	53,725
1983	8	3,423	24,000	299	29,675	57,405
1984	9	3,500	25,500	425	31,150	60,584
1985	7	4,500	26,500	495	32,475	63,977
1986	6	4,947	27,600	573	33,400	66,526
1987	8	5,167	27,800	689	34,300	67,964
1988	8	5,090	28,000	728	35,800	69,626
1989	8	5,304	30,000	752	36,240	72,304
1990	7	5,525	30,300	819	37,500	74,151
1991	7	5,737	31,000	886	37,800	75,430
1992	9	5,906	31,000	1,153	38,250	76,318
1993	7	5,757	31,100	1,426	33,716	72,006
1994	7	5,884	31,150	1,470	39,830	78,341
1995	7	6,134	31,025	1,671	36,144	74,981
1996	8	6,208	31,792	1,671	35,148	74,827
1997	8	5,731	32,692	2,046	31,000	71,477
1998	8	5,903	21,576	2,388	39,072	68,947
1999	8	6,422	23,822	2,752	36,575	69,579
2000	7	5,775	36,000	3,051	42,475	87,308
2001	7	5,913	40,100	3,521	42,000	91,541
2002	5	6,496	40,830	3,429	45,000	95,760
2003	7	5,878	42,437	3,506	46,203	98,031
2004	7	5,781	44,227	3,870	47,117	101,002
2005	7	5,449	46,654	4,132	49,335	105,577
2006	7	5,985	49,750	5,179	53,003	113,924
2007	7	6,680	52,700	5,735	48,215	113,337
2008	7	6,675	55,631	6,426	49,364	118,103
2009	7	6,628	57,356	7,303	50,602	121,896
2010	7	6,736	44,500	7,470	52,498	111,211
2011	7	7,372	61,815	7,781	51,629	128,650
2012	7	7,731	62,922	7,874	51,646	130,221
2013	7	7,553	61,838	7,956	50,097	127,491
2014	5	7,619	67,621	8,061	53,060	136,409
2015	5	7,605	70,051	8,111	48,977	134,793
2016	1	5,410	66,304	8,152	46,427	126,337

¹ Includes Florida.

TOTAL PRODUCING GAS WELLS P.A.D. DISTRICT II

Thousands of Wells

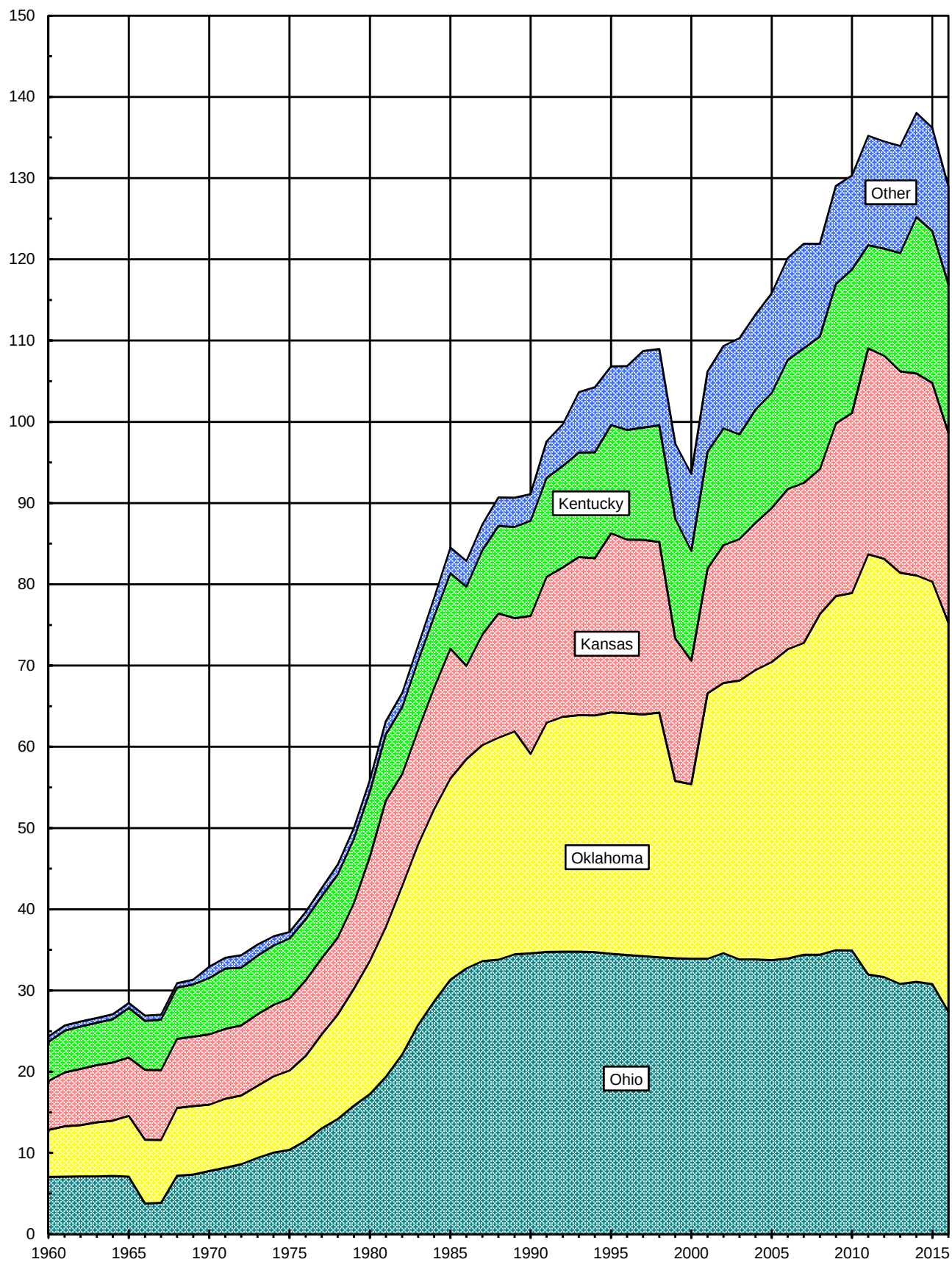


Chart 57

TOTAL PRODUCING NATURAL GAS WELLS
P.A.D. DISTRICT II

Year	North										South		Total
	Illinois	Indiana	Kansas	Kentucky	Michigan	Missouri	Nebraska	Dakota	Ohio	Oklahoma	Dakota	Tennessee	
1960	45	350	6,003	4,829	154	9	53	28	7,063	5,800	...	30	24,364
1961	74	300	6,633	5,119	155	9	49	28	7,077	6,218	...	23	25,685
1962	30	290	6,915	5,200	174	6	47	29	7,117	6,324	...	30	26,162
1963	25	285	7,050	5,210	175	6	44	31	7,128	6,639	...	30	26,623
1964	25	280	7,174	5,320	195	6	41	31	7,160	6,813	...	30	27,075
1965	25	275	7,200	6,100	226	11	39	31	7,100	7,447	...	20	28,474
1966	3	275	8,608	6,020	250	11	37	31	3,790	7,841	...	20	26,886
1967	3	271	8,603	6,215	244	11	37	31	3,865	7,726	...	21	27,027
1968	5	265	8,509	6,290	199	11	36	19	7,211	8,337	...	23	30,905
1969	5	263	8,567	6,413	211	11	35	33	7,334	8,432	...	26	31,330
1970	8	50	8,660	6,913	1,235	11	35	29	7,789	8,168	...	15	32,913
1971	14	83	8,585	7,413	1,171	2	29	29	8,179	8,507	...	20	34,032
1972	31	87	8,621	7,099	1,317	3	29	21	8,630	8,457	...	45	34,340
1973	36	106	8,785	7,224	1,145	2	29	44	9,406	8,868	...	6	35,651
1974	37	474	8,800	7,307	503	3	25	34	10,038	9,401	20	13	36,655
1975	41	478	8,865	7,386	209	3	19	18	10,382	9,769	20	5	37,195
1976	34	563	9,330	7,505	214	3	17	34	11,509	10,436	20	7	39,672
1977	34	596	9,375	7,649	212	7	18	34	13,032	11,570	20	49	42,596
1978	51	641	9,450	7,776	376	7	22	23	14,197	12,861	20	75	45,499
1979	51	655	10,544	7,883	376	...	20	78	15,827	14,417	10	184	50,045
1980	70	698	12,820	7,984	423	...	22	80	17,251	16,419	13	177	55,957
1981	70	720	15,550	8,151	448	...	25	65	19,405	18,451	39	255	63,179
1982	57	736	13,800	8,219	484	...	23	66	22,112	20,742	38	340	66,617
1983	64	737	14,100	8,532	414	...	23	51	25,762	22,230	40	540	72,493
1984	81	758	14,925	8,798	535	4	23	55	28,657	23,691	42	780	78,349
1985	123	1,272	15,980	9,285	655	4	19	62	31,343	24,756	44	988	84,531
1986	152	1,289	11,485	9,747	651	9	16	61	32,721	25,762	44	921	82,858
1987	169	1,298	13,631	10,366	722	3	20	61	33,616	26,595	52	840	87,373
1988	293	1,295	15,300	10,777	988	4	18	61	33,793	27,307	51	802	90,689
1989	241	1,310	13,935	11,248	1,207	4	15	61	34,450	27,443	53	700	90,667
1990	356	1,307	16,980	11,713	1,438	8	11	103	34,586	24,547	54	...	91,103
1991	373	1,334	17,948	12,169	2,620	6	12	100	34,760	28,216	54	...	97,592
1992	382	1,333	18,400	12,483	3,257	5	22	104	34,784	28,902	38	...	99,710
1993	385	1,336	19,472	12,836	5,500	8	59	101	34,782	29,118	47	...	103,644
1994	390	1,348	19,365	13,036	6,000	12	87	104	34,731	29,121	55	...	104,249
1995	372	1,347	22,020	13,311	5,258	15	87	99	34,520	29,733	56	...	106,818
1996	370	1,367	21,388	13,501	5,826	24	88	108	34,380	29,733	61	...	106,846
1997	372	1,458	21,500	13,825	6,825	...	91	104	34,238	29,734	60	505	108,712
1998	185	1,479	21,000	14,381	7,000	...	95	99	34,098	30,101	59	460	108,957
1999	300	1,498	17,568	14,750	6,750	...	96	96	33,982	21,790	60	420	97,310
2000	280	1,502	15,206	13,487	7,068	...	98	94	33,897	21,507	71	380	93,590
2001	300	1,533	15,357	14,370	7,425	...	96	95	33,917	32,672	68	350	106,183
2002	225	1,545	16,957	14,367	7,700	...	106	100	34,593	33,279	69	400	109,341
2003	240	2,291	17,387	12,900	8,600	...	109	117	33,828	34,334	61	430	110,297
2004	251	2,386	18,120	13,920	8,500	...	111	117	33,828	35,612	61	280	113,186
2005	316	2,321	18,946	14,175	8,900	...	114	148	33,735	36,704	69	400	115,828
2006	316	2,336	19,713	15,892	9,200	...	114	200	33,945	38,060	69	330	120,175
2007	43	2,350	19,713	16,563	9,712	...	186	200	34,416	38,364	71	305	121,923
2008	45	525	17,862	16,290	9,995	...	322	194	34,416	41,921	71	285	121,926
2009	51	563	21,243	17,152	10,600	...	285	196	34,963	43,600	89	310	129,052
2010	50	620	22,145	17,670	10,100	...	276	188	34,931	44,000	102	230	130,312
2011	40	914	25,362	12,708	10,480	19	307	526	31,966	51,712	155	1,027	135,216
2012	40	819	25,013	13,179	10,381	15	299	451	31,647	51,472	159	1,027	134,502
2013	34	921	24,802	14,557	10,322	7	246	423	30,804	50,606	133	1,089	133,944
2014	36	895	24,840	19,256	10,246	6	109	398	31,060	50,044	128	1,006	138,024
2015	35	899	24,468	18,698	10,028	...	140	455	30,794	49,522	122	1,005	136,166
2016	36	807	23,389	18,246	9,577	...	149	457	27,403	47,831	105	923	128,923

TOTAL PRODUCING GAS WELLS P.A.D. DISTRICT III

Thousands of Wells

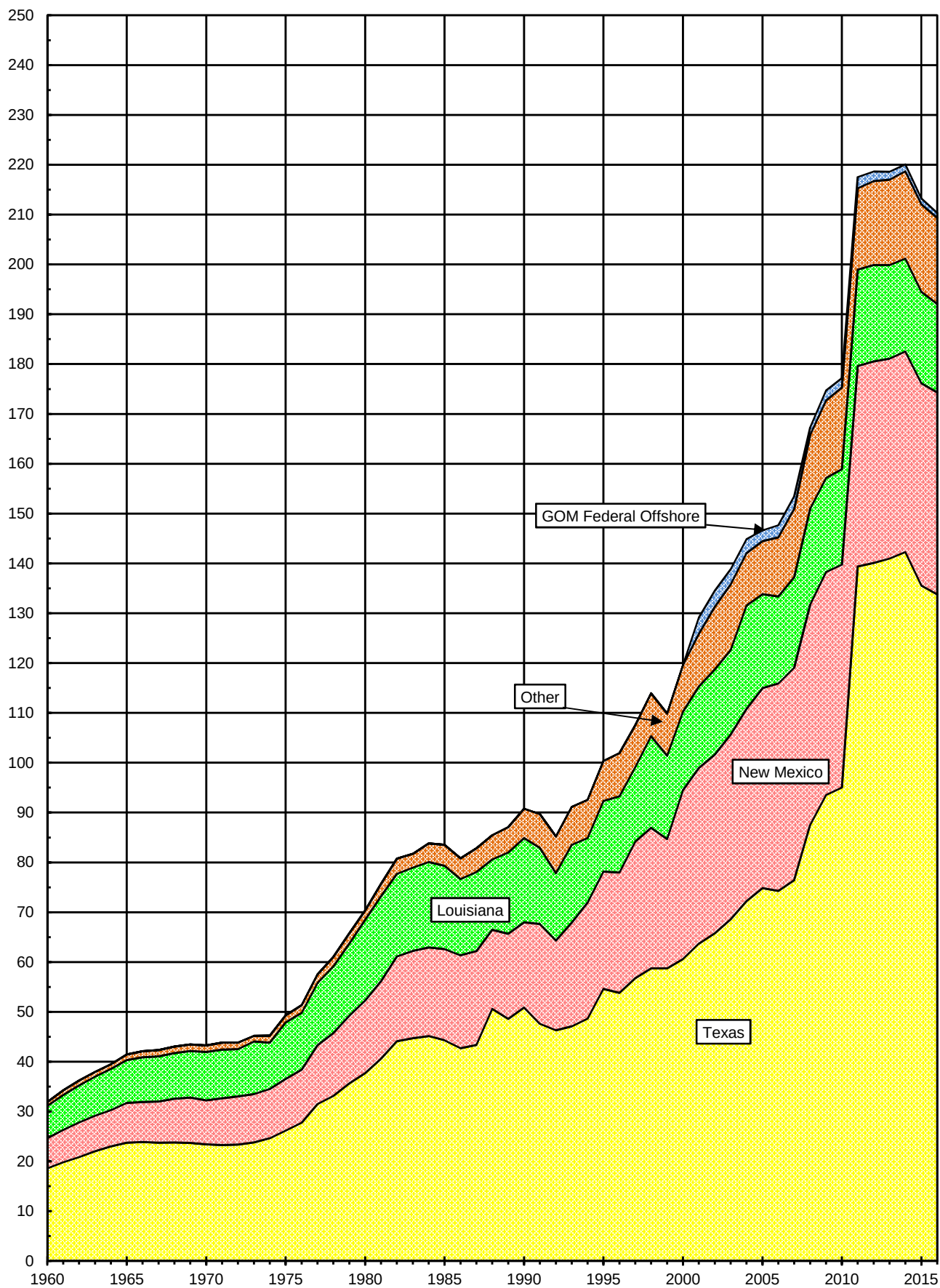


Chart 58

TOTAL PRODUCING NATURAL GAS WELLS
P.A.D. DISTRICT III

Year	Alabama	Arkansas	GOM Federal Offshore ¹	Louisiana	Mississippi	New	Texas	Total
						New Mexico		
1960	4	370	...	6,479	400	6,047	18,612	31,912
1961	...	485	...	6,990	472	6,491	19,831	34,269
1962	...	480	...	7,442	490	6,967	20,834	36,213
1963	2	490	...	7,859	450	7,150	22,016	37,967
1964	...	515	...	8,260	435	7,306	22,995	39,511
1965	...	744	...	8,563	370	8,010	23,748	41,435
1966	...	818	...	8,977	376	8,017	23,907	42,095
1967	...	909	...	9,036	360	8,274	23,760	42,339
1968	1	947	...	9,163	347	8,754	23,805	43,017
1969	1	998	...	9,354	322	9,100	23,689	43,464
1970	2	1,008	...	9,690	325	8,848	23,417	43,290
1971	...	1,013	...	9,748	400	9,388	23,280	43,829
1972	15	1,041	...	9,456	252	9,679	23,373	43,816
1973	15	876	...	10,551	250	9,711	23,805	45,208
1974	6	1,172	...	9,248	239	9,915	24,646	45,226
1975	45	1,128	...	11,359	248	10,352	26,184	49,316
1976	66	1,223	...	11,370	257	10,674	27,762	51,352
1977	69	1,253	...	12,484	365	11,812	31,512	57,495
1978	189	1,335	...	13,333	402	12,609	33,157	61,025
1979	250	1,402	...	14,464	433	13,598	35,650	65,797
1980	314	1,114	...	16,190	447	14,571	37,724	70,360
1981	385	1,600	...	17,048	470	15,560	40,612	75,675
1982	489	1,959	...	16,586	596	16,967	44,130	80,727
1983	461	1,763	...	16,700	552	17,547	44,699	81,722
1984	690	2,371	...	17,124	683	17,806	45,139	83,813
1985	863	2,623	...	16,716	710	18,308	44,320	83,540
1986	1,029	2,719	...	15,313	414	18,647	42,713	80,835
1987	1,135	2,847	...	15,890	775	18,806	43,375	82,828
1988	1,264	2,996	...	14,071	634	15,909	50,588	85,462
1989	1,701	2,830	...	16,309	543	17,087	48,609	87,079
1990	2,362	2,952	...	16,889	585	17,124	50,867	90,779
1991	3,392	2,780	...	15,271	629	20,021	47,615	89,708
1992	3,350	3,500	...	13,512	507	18,040	46,298	85,207
1993	3,514	3,500	...	15,569	620	20,846	47,101	91,150
1994	3,565	3,500	...	12,958	583	23,292	48,654	92,552
1995	3,526	3,988	...	14,169	535	23,510	54,635	100,363
1996	4,105	4,020	...	15,295	568	24,134	53,816	101,938
1997	4,156	3,700	...	14,958	560	27,421	56,747	107,542
1998	4,171	3,900	...	18,399	527	28,200	58,736	113,933
1999	4,204	3,650	...	16,717	560	26,007	58,712	109,850
2000	4,359	4,000	...	15,700	997	33,948	60,577	119,581
2001	4,597	4,825	3,271	16,350	1,143	35,217	63,704	129,107
2002	4,803	6,755	3,245	17,100	979	35,873	65,779	134,534
2003	5,157	7,606	3,039	16,939	427	37,100	68,572	138,840
2004	5,526	3,460	2,781	20,734	1,536	38,574	72,237	144,848
2005	5,523	3,462	2,123	18,838	1,676	40,157	74,827	146,606
2006	6,227	3,814	2,419	17,459	1,836	41,634	74,265	147,654
2007	6,591	4,773	2,552	18,145	2,315	42,644	76,436	153,456
2008	6,860	5,592	1,527	19,213	2,343	44,241	87,556	167,332
2009	6,913	6,314	1,984	18,860	2,320	44,784	93,507	174,682
2010	7,026	7,397	1,852	19,137	1,979	44,748	95,014	177,153
2011	6,243	8,428	2,226	19,318	1,703	40,231	139,368	217,517
2012	6,203	9,012	1,892	19,345	1,666	40,441	140,087	218,646
2013	6,174	9,324	1,588	18,802	1,632	40,119	140,964	218,603
2014	6,117	9,778	1,377	18,660	1,594	40,244	142,292	220,062
2015	6,047	9,959	1,156	18,347	1,566	40,578	135,560	213,213
2016	5,981	9,795	989	17,760	1,497	40,535	133,767	210,324

¹ Beginning in 2001, Federal Offshore Gulf of Mexico producing gas wells are reported separately from Alabama, Louisiana and Texas.

TOTAL PRODUCING GAS WELLS P.A.D. DISTRICT IV

Thousands of Wells

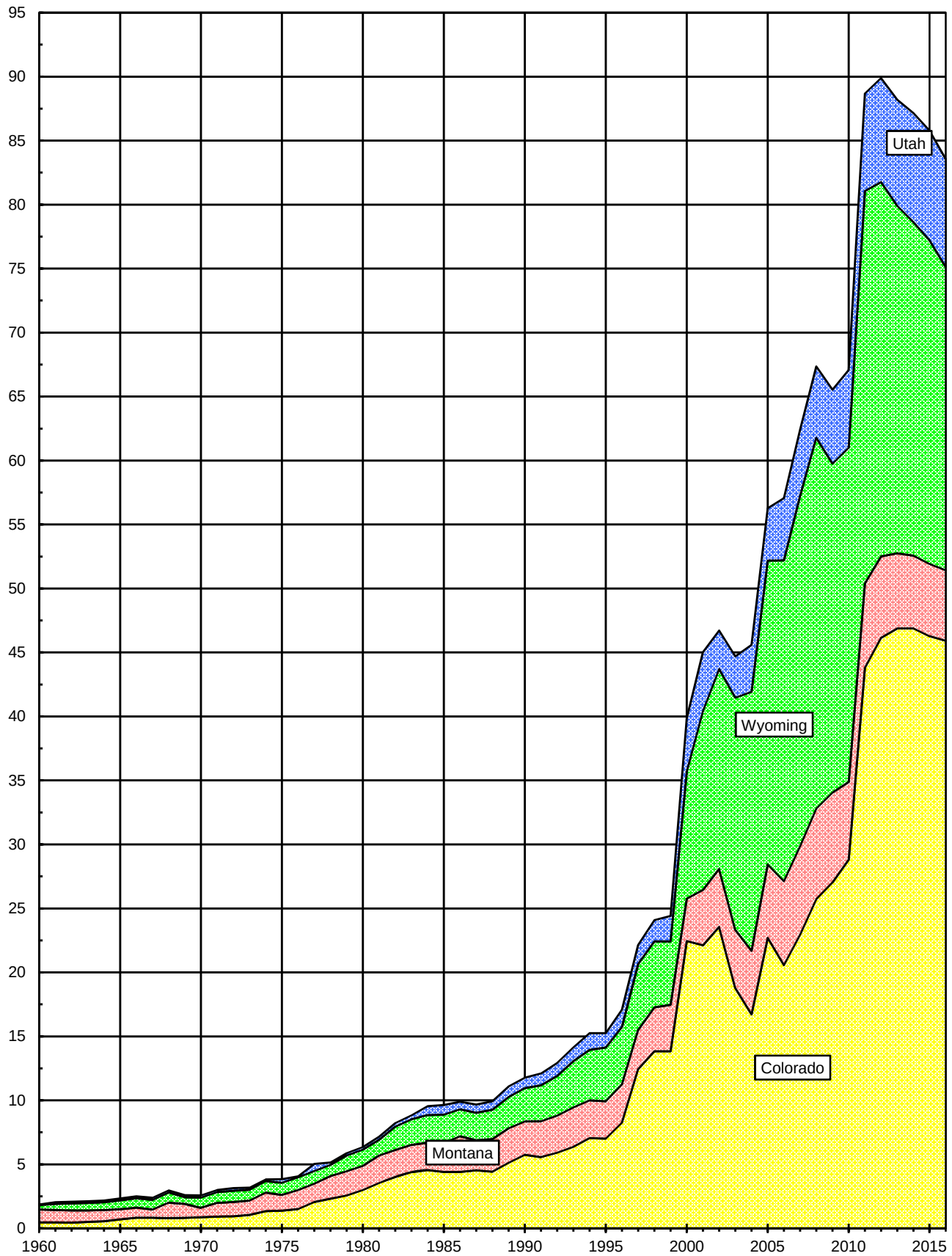


Chart 59

TOTAL PRODUCING NATURAL GAS WELLS
P.A.D. DISTRICT IV

<u>Year</u>	<u>Colorado</u>	<u>Montana</u>	<u>Utah</u>	<u>Wyoming</u>	<u>Total¹</u>
1960	466	999	35	350	1,850
1961	462	981	135	460	2,038
1962	451	954	121	547	2,073
1963	501	905	135	578	2,119
1964	560	869	135	610	2,174
1965	701	784	148	701	2,334
1966	826	784	156	741	2,507
1967	827	648	168	749	2,392
1968	810	1,196	165	787	2,958
1969	805	1,098	171	521	2,595
1970	861	739	173	800	2,573
1971	928	1,056	178	840	3,002
1972	934	1,116	200	887	3,137
1973	1,050	1,118	158	850	3,176
1974	1,347	1,450	114	900	3,811
1975	1,380	1,235	271	950	3,836
1976	1,500	1,490	71	990	4,051
1977	2,053	1,438	535	995	5,021
1978	2,318	1,755	171	888	5,132
1979	2,574	1,881	182	1,236	5,873
1980	2,997	1,881	200	1,264	6,342
1981	3,543	2,140	226	1,243	7,152
1982	4,008	2,111	282	1,827	8,228
1983	4,391	2,133	322	1,986	8,832
1984	4,549	2,153	700	2,148	9,550
1985	4,401	2,260	755	2,220	9,636
1986	4,398	2,799	594	2,101	9,892
1987	4,530	2,349	645	2,147	9,671
1988	4,426	2,553	665	2,284	9,928
1989	5,125	2,700	834	2,431	11,090
1990	5,741	2,607	822	2,600	11,770
1991	5,562	2,802	913	2,821	12,098
1992	5,912	2,890	1,006	3,111	12,919
1993	6,372	3,075	1,061	3,615	14,123
1994	7,056	2,940	1,303	3,942	15,241
1995	7,017	2,918	1,127	4,196	15,258
1996	8,251	2,990	1,339	4,510	17,090
1997	12,433	3,071	1,475	5,160	22,139
1998	13,838	3,423	1,643	5,166	24,070
1999	13,838	3,634	1,978	4,950	24,400
2000	22,442	3,321	4,178	9,907	39,848
2001	22,117	4,331	4,601	13,978	45,027
2002	23,554	4,544	3,005	15,608	46,711
2003	18,774	4,539	3,220	18,154	44,687
2004	16,718	4,971	3,657	20,244	45,590
2005	22,691	5,751	4,092	23,734	56,268
2006	20,568	6,578	4,858	25,052	57,056
2007	22,949	6,925	5,197	27,350	62,421
2008	25,716	7,095	5,578	28,969	67,358
2009	27,021	7,031	5,774	25,710	65,536
2010	28,813	6,059	6,075	26,124	67,071
2011	43,792	6,615	7,603	30,653	88,663
2012	46,141	6,366	8,121	29,254	89,882
2013	46,883	5,870	8,300	27,141	88,194
2014	46,876	5,682	8,537	26,055	87,150
2015	46,268	5,651	8,583	25,297	85,805
2016	45,903	5,528	8,428	23,694	83,561

¹ Includes Idaho.

TOTAL PRODUCING GAS WELLS P.A.D. DISTRICTS I - V

Thousands of Wells

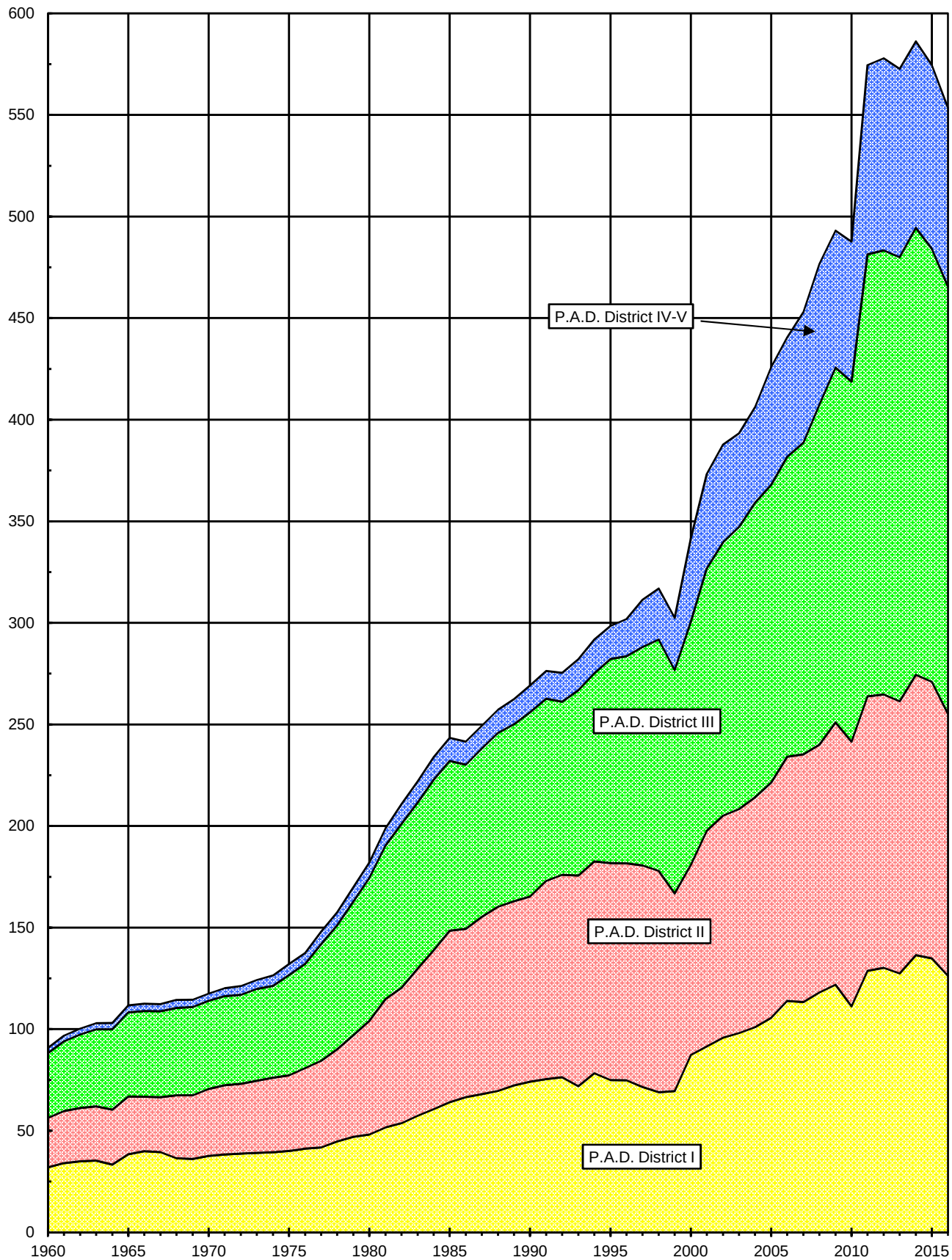


Chart 60

TOTAL PRODUCING NATURAL GAS WELLS

P.A.D. DISTRICT V

TOTAL UNITED STATES

Year	Alaska	Arizona	California	Other States ¹	Total	Total United States
1960	2	1	652	...	655	90,761
1961	5	...	774	...	779	96,809
1962	8	3	826	...	837	100,267
1963	10	7	879	...	896	102,966
1964	13	10	950	...	973	103,084
1965	11	8	1,033	...	1,052	111,680
1966	19	9	1,068	...	1,096	112,498
1967	21	7	1,059	...	1,087	112,321
1968	18	4	994	...	1,016	114,391
1969	44	4	897	...	945	114,476
1970	51	4	980	...	1,035	117,483
1971	40	5	962	...	1,007	120,210
1972	50	4	1,086	...	1,140	121,153
1973	52	4	1,095	...	1,151	124,168
1974	52	1	1,142	...	1,195	126,349
1975	61	1	1,585	...	1,647	132,095
1976	50	1	1,123	...	1,174	137,443
1977	50	1	1,050	...	1,101	148,018
1978	52	1	1,131	...	1,184	157,454
1979	58	1	1,117	5	1,181	169,891
1980	71	1	1,125	5	1,202	182,004
1981	79	1	1,110	9	1,199	198,839
1982	97	1	1,352	6	1,456	210,753
1983	78	1	1,413	8	1,500	221,952
1984	81	1	1,469	6	1,557	233,853
1985	84	1	1,566	9	1,660	243,344
1986	85	1	1,316	14	1,416	241,527
1987	85	...	1,294	10	1,389	249,225
1988	91	...	1,469	14	1,574	257,279
1989	108	3	1,214	18	1,343	262,483
1990	111	5	1,162	19	1,297	269,100
1991	110	6	1,377	16	1,509	276,337
1992	112	6	1,126	16	1,260	275,414
1993	113	6	1,092	18	1,229	282,152
1994	104	6	1,261	19	1,390	291,773
1995	100	7	997	17	1,121	298,541
1996	102	7	978	23	1,110	301,811
1997	141	8	930	22	1,101	310,971
1998	148	8	847	19	1,022	316,929
1999	99	8	1,152	23	1,282	302,421
2000	152	9	1,169	21	1,351	341,678
2001	170	8	1,244	24	1,446	373,304
2002	165	7	1,232	22	1,426	387,772
2003	195	9	1,249	19	1,472	393,327
2004	224	6	1,272	19	1,521	406,147
2005	227	6	1,356	19	1,608	425,887
2006	231	7	1,451	18	1,707	440,516
2007	239	7	1,540	22	1,808	452,945
2008	261	6	1,645	21	1,933	476,652
2009	261	6	1,643	24	1,934	493,100
2010	269	5	1,580	26	1,880	487,627
2011	274	5	4,240	28	4,547	574,593
2012	281	4	4,356	24	4,665	577,916
2013	300	3	4,183	24	4,510	572,742
2014	338	6	4,211	13	4,568	586,213
2015	323	6	4,210	14	4,553	574,530
2016	338	3	3,997	12	4,350	553,495

¹ Other states include Nevada, Oregon and Washington.

DAILY AVERAGE NATURAL GAS PRODUCTION PER PRODUCING GAS WELL IN THE UNITED STATES

Thousands of Cubic Feet

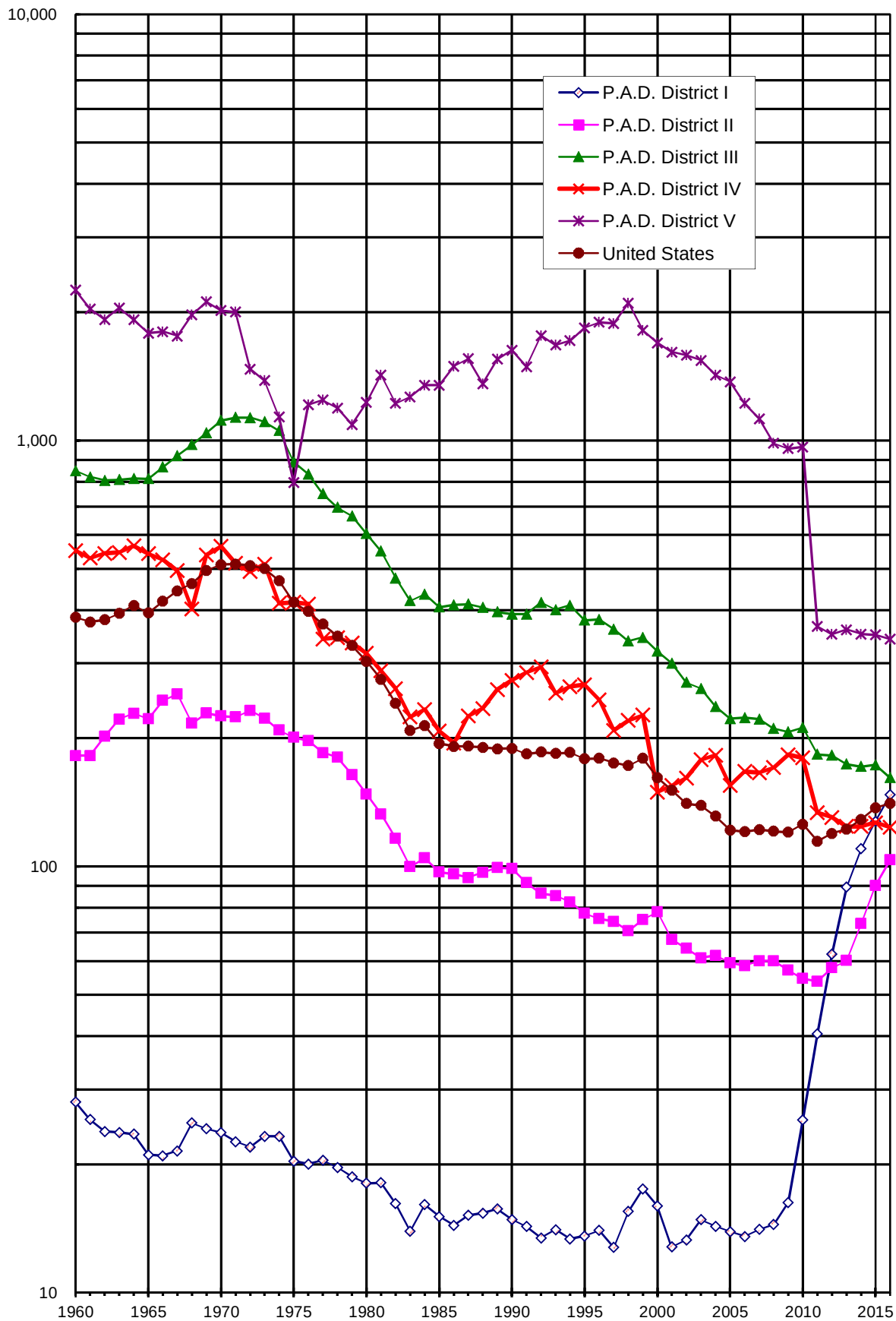
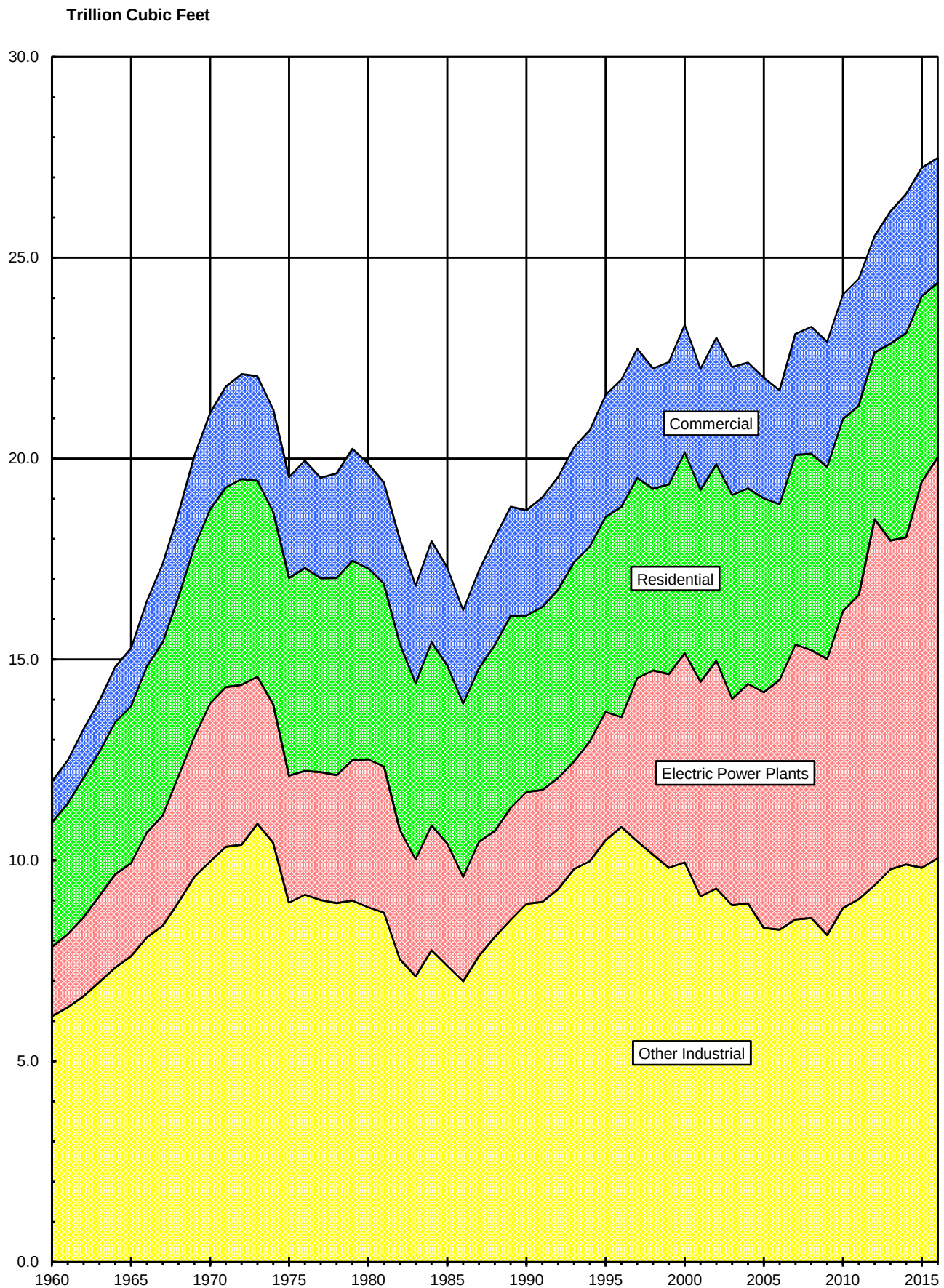


Chart 61

DAILY AVERAGE NATURAL GAS PRODUCTION PER PRODUCING GAS WELL**P.A.D. DISTRICTS I-V****TOTAL UNITED STATES**
(Thousands of Cubic Feet)

Year	P.A.D. District I	P.A.D. District II	P.A.D. District III	P.A.D. District IV	P.A.D. District V	Weighted Average United States
1960	28	182	848	552	2,250	384
1961	25	182	820	530	2,036	375
1962	24	202	805	543	1,920	379
1963	24	222	808	546	2,047	392
1964	24	229	814	566	1,918	410
1965	21	222	813	542	1,785	393
1966	21	245	865	525	1,798	419
1967	22	254	921	495	1,756	443
1968	25	217	976	402	1,972	462
1969	24	229	1,041	539	2,116	495
1970	24	226	1,113	564	2,017	511
1971	23	224	1,131	515	2,000	513
1972	22	232	1,130	492	1,470	508
1973	23	223	1,106	513	1,382	500
1974	23	209	1,054	415	1,134	468
1975	20	201	890	417	796	417
1976	20	197	833	413	1,212	397
1977	20	185	749	342	1,243	371
1978	20	180	696	345	1,190	348
1979	19	164	665	335	1,088	330
1980	18	148	604	317	1,228	303
1981	18	133	549	288	1,424	275
1982	16	116	475	261	1,220	242
1983	14	100	420	224	1,264	208
1984	16	105	436	233	1,348	214
1985	15	97	406	208	1,348	194
1986	14	96	411	195	1,493	191
1987	15	94	412	226	1,555	192
1988	15	97	405	235	1,358	190
1989	16	99	396	260	1,551	189
1990	15	99	391	274	1,628	189
1991	14	92	391	285	1,489	184
1992	13	86	416	294	1,762	186
1993	14	85	400	255	1,674	184
1994	13	83	410	264	1,712	185
1995	14	78	379	267	1,837	179
1996	14	75	380	246	1,893	179
1997	13	74	360	209	1,880	175
1998	16	71	338	220	2,100	173
1999	18	75	345	227	1,811	179
2000	16	78	320	150	1,693	162
2001	13	67	300	155	1,612	151
2002	13	64	270	161	1,584	140
2003	15	61	262	178	1,541	139
2004	14	62	237	183	1,424	131
2005	14	59	222	155	1,373	122
2006	14	59	223	167	1,222	121
2007	14	60	222	166	1,124	122
2008	14	60	211	171	984	121
2009	16	57	207	183	956	120
2010	25	55	212	180	966	126
2011	41	54	183	134	366	115
2012	62	58	182	130	351	120
2013	89	60	174	124	359	122
2014	110	73	172	124	351	129
2015	128	90	173	127	350	137
2016	148	104	162	124	342	141

CONSUMPTION OF NATURAL GAS IN THE UNITED STATES BY TYPE OF CUSTOMER



CONSUMPTION OF NATURAL GAS IN THE UNITED STATES
BY TYPE OF CUSTOMER
(Billions of Cubic Feet)

<u>Year</u>	<u>Residential</u>	<u>Commercial</u>	<u>Electric² Power Plants</u>	<u>Other^{1,2} Industrial</u>	<u>Total Consumption</u>
1960	3,103	1,020	1,725	6,119	11,967
1961	3,248	1,077	1,825	6,339	12,489
1962	3,478	1,207	1,966	6,615	13,266
1963	3,589	1,268	2,144	6,969	13,970
1964	3,787	1,374	2,323	7,330	14,814
1965	3,903	1,444	2,321	7,612	15,280
1966	4,138	1,623	2,610	8,081	16,452
1967	4,313	1,959	2,746	8,370	17,388
1968	4,450	2,076	3,148	8,958	18,632
1969	4,728	2,253	3,488	9,587	20,056
1970	4,837	2,399	3,932	9,971	21,139
1971	4,972	2,509	3,976	10,336	21,793
1972	5,126	2,608	3,977	10,390	22,101
1973	4,879	2,597	3,660	10,913	22,049
1974	4,786	2,556	3,443	10,438	21,223
1975	4,924	2,508	3,158	8,948	19,538
1976	5,051	2,668	3,081	9,146	19,946
1977	4,821	2,501	3,191	9,008	19,521
1978	4,903	2,601	3,188	8,935	19,627
1979	4,965	2,786	3,491	8,999	20,241
1980	4,752	2,611	3,682	8,832	19,877
1981	4,546	2,520	3,640	8,698	19,404
1982	4,633	2,606	3,226	7,536	18,001
1983	4,381	2,433	2,911	7,110	16,835
1984	4,555	2,524	3,111	7,761	17,951
1985	4,433	2,432	3,044	7,372	17,281
1986	4,314	2,318	2,602	6,987	16,221
1987	4,315	2,430	2,844	7,622	17,211
1988	4,630	2,670	2,636	8,094	18,030
1989	4,781	2,718	2,787	8,515	18,801
1990	4,391	2,623	2,787	8,915	18,716
1991	4,556	2,729	2,789	8,961	19,035
1992	4,690	2,803	2,766	9,285	19,544
1993	4,956	2,863	2,682	9,778	20,279
1994	4,848	2,897	2,987	9,976	20,708
1995	4,850	3,034	3,197	10,500	21,581
1996	5,241	3,161	2,732	10,831	21,965
1997	4,984	3,215	4,065	10,473	22,737
1998	4,520	2,999	4,588	10,138	22,245
1999	4,726	3,045	4,820	9,814	22,405
2000	4,996	3,182	5,206	9,949	23,333
2001	4,771	3,023	5,342	9,103	22,239
2002	4,889	3,144	5,672	9,302	23,007
2003	5,079	3,179	5,135	8,884	22,277
2004	4,869	3,129	5,464	8,927	22,389
2005	4,827	2,999	5,869	8,316	22,011
2006	4,368	2,832	6,222	8,277	21,699
2007	4,722	3,013	6,841	8,528	23,104
2008	4,892	3,153	6,668	8,564	23,277
2009	4,779	3,119	6,873	8,139	22,910
2010	4,782	3,103	7,387	8,815	24,087
2011	4,714	3,155	7,574	9,034	24,477
2012	4,150	2,895	9,111	9,382	25,538
2013	4,897	3,295	8,191	9,772	26,155
2014	5,087	3,466	8,146	9,894	26,593
2015	4,613	3,202	9,613	9,816	27,244
2016	4,345	3,105	9,984	10,052	27,486

¹ Includes extraction loss.

² As of 1997, electric power plants include gas used by the electric utility sector and a portion of the industrial sector.

MARKETED PRODUCTION OF NATURAL GAS P.A.D. DISTRICT I

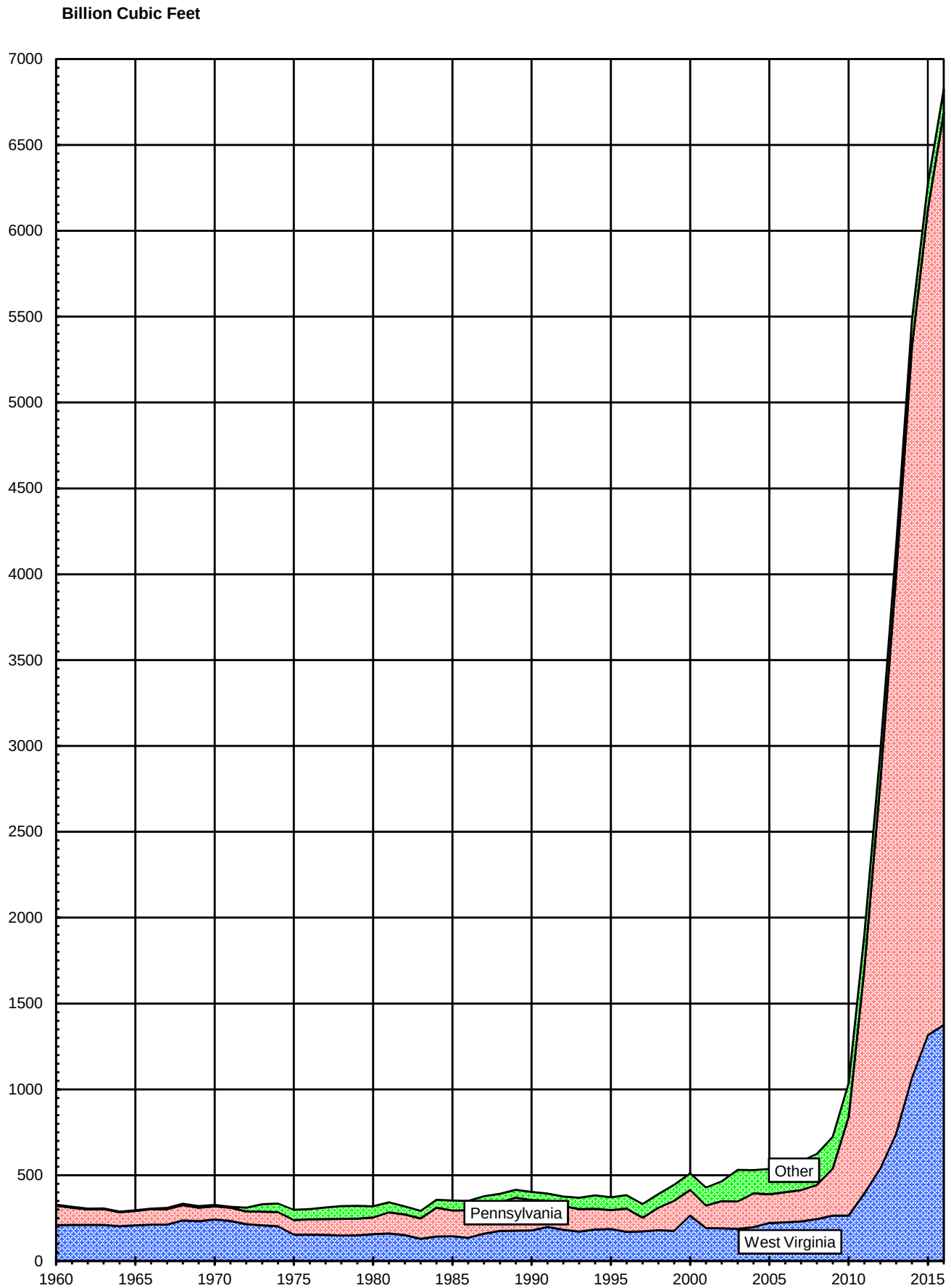


Chart 63

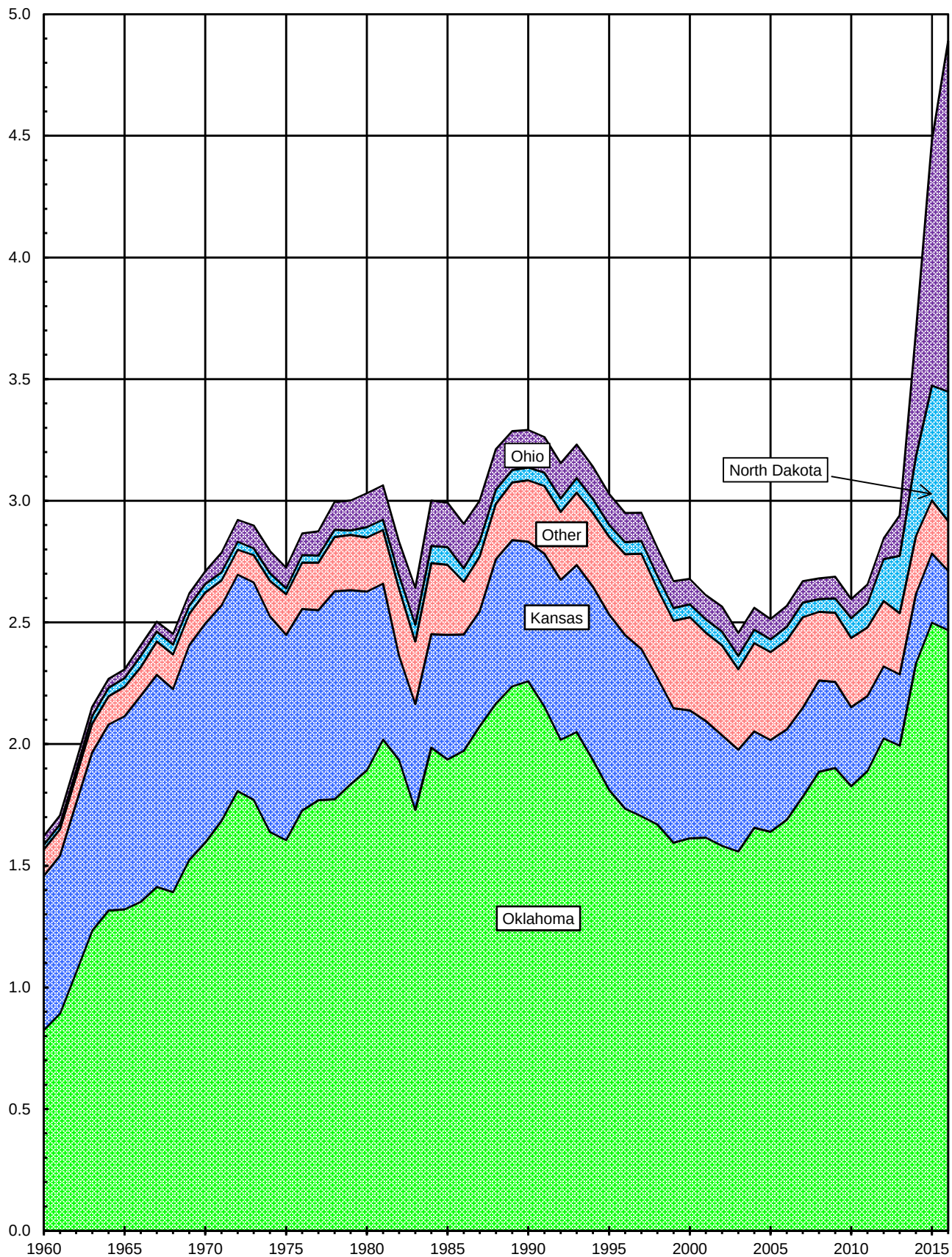
MARKETED PRODUCTION OF NATURAL GAS

P.A.D. DISTRICT I
(Millions of Cubic Feet)

Year	Florida	Maryland	New York	Pennsylvania	Virginia	West Virginia	Total
1960	...	...	4,990	113,928	...	208,757	327,675
1961	...	...	5,742	100,427	...	210,556	316,725
1962	...	...	4,262	90,053	...	210,698	305,013
1963	...	...	3,962	92,657	...	210,223	306,842
1964	...	...	3,108	81,720	...	202,765	287,593
1965	...	...	3,340	84,461	...	207,416	295,217
1966	...	...	2,699	90,914	...	211,610	305,223
1967	123	621	3,837	89,966	3,818	211,460	309,825
1968	108	864	4,632	87,987	3,389	236,971	333,951
1969	50	978	4,861	79,134	2,846	231,759	319,628
1970	...	813	3,358	76,841	2,805	242,452	326,269
1971	903	214	2,202	76,451	2,619	234,027	316,416
1972	15,521	244	3,679	73,958	2,787	214,951	311,140
1973	33,857	298	4,539	78,514	5,101	208,676	330,985
1974	38,137	133	4,990	82,637	7,096	202,306	335,299
1975	44,383	93	7,628	84,676	6,723	154,484	297,987
1976	43,165	75	9,235	89,386	6,937	153,322	302,120
1977	48,171	82	10,682	91,717	8,220	152,767	311,639
1978	51,595	88	13,900	97,763	8,492	148,564	320,402
1979	50,190	28	15,500	96,313	8,544	150,505	321,080
1980	40,638	68	15,643	97,439	7,812	156,551	318,151
1981	32,470	56	16,074	122,454	8,903	161,251	341,208
1982	22,515	36	15,877	121,111	6,880	150,850	317,269
1983	21,056	31	17,836	118,372	4,346	130,078	291,719
1984	12,585	60	25,200	166,342	8,901	143,730	356,818
1985	10,545	39	31,561	150,234	15,041	144,883	352,303
1986	8,833	20	29,964	159,889	15,427	135,431	349,564
1987	8,281	44	25,676	163,318	19,223	160,000	376,542
1988	7,484	29	23,455	167,089	18,424	174,942	391,423
1989	7,534	34	20,433	191,774	17,935	177,192	414,902
1990	6,483	22	25,023	177,609	14,774	178,000	401,911
1991	4,884	29	22,777	152,500	14,906	198,605	393,701
1992	6,657	33	23,508	138,675	24,733	182,000	375,606
1993	7,085	28	21,183	132,130	37,840	171,024	369,290
1994	7,486	26	20,465	120,506	50,259	183,773	382,515
1995	6,463	22	18,400	111,000	49,818	186,231	371,934
1996	6,006	135	18,131	135,000	54,290	169,839	383,401
1997	6,114	118	16,188	80,000	58,249	172,268	332,937
1998	5,796	63	16,699	130,317	57,263	180,000	390,138
1999	5,933	18	16,122	174,701	72,189	176,015	444,978
2000	6,491	34	17,757	150,000	71,545	264,139	509,966
2001	5,710	32	27,787	130,853	71,543	191,889	427,814
2002	3,353	22	36,816	157,800	76,915	190,249	465,155
2003	3,087	48	36,137	159,827	143,644	187,723	530,466
2004	3,123	34	46,050	197,217	85,508	197,217	529,149
2005	2,616	46	55,180	168,501	88,610	221,108	536,061
2006	2,540	48	55,980	175,950	103,027	225,530	563,075
2007	1,778	35	54,942	182,277	112,057	231,184	582,273
2008	2,436	28	50,320	198,295	128,454	244,880	624,413
2009	257	43	44,849	273,869	140,738	264,436	724,192
2010	12,409	43	35,813	572,902	147,255	265,174	1,033,596
2011	15,125	34	31,124	1,310,592	151,094	394,125	1,902,094
2012	773	44	26,424	2,256,696	146,405	539,860	2,970,202
2013	292	32	23,458	3,259,042	139,382	741,853	4,164,059
2014	496	20	20,201	4,257,693	133,661	1,067,114	5,479,185
2015	764	38	17,325	4,812,983	127,586	1,315,248	6,273,944
2016	716	34	13,446	5,313,258	120,241	1,375,108	6,822,803

MARKETED PRODUCTION OF NATURAL GAS P.A.D. DISTRICT II

Trillion Cubic Feet

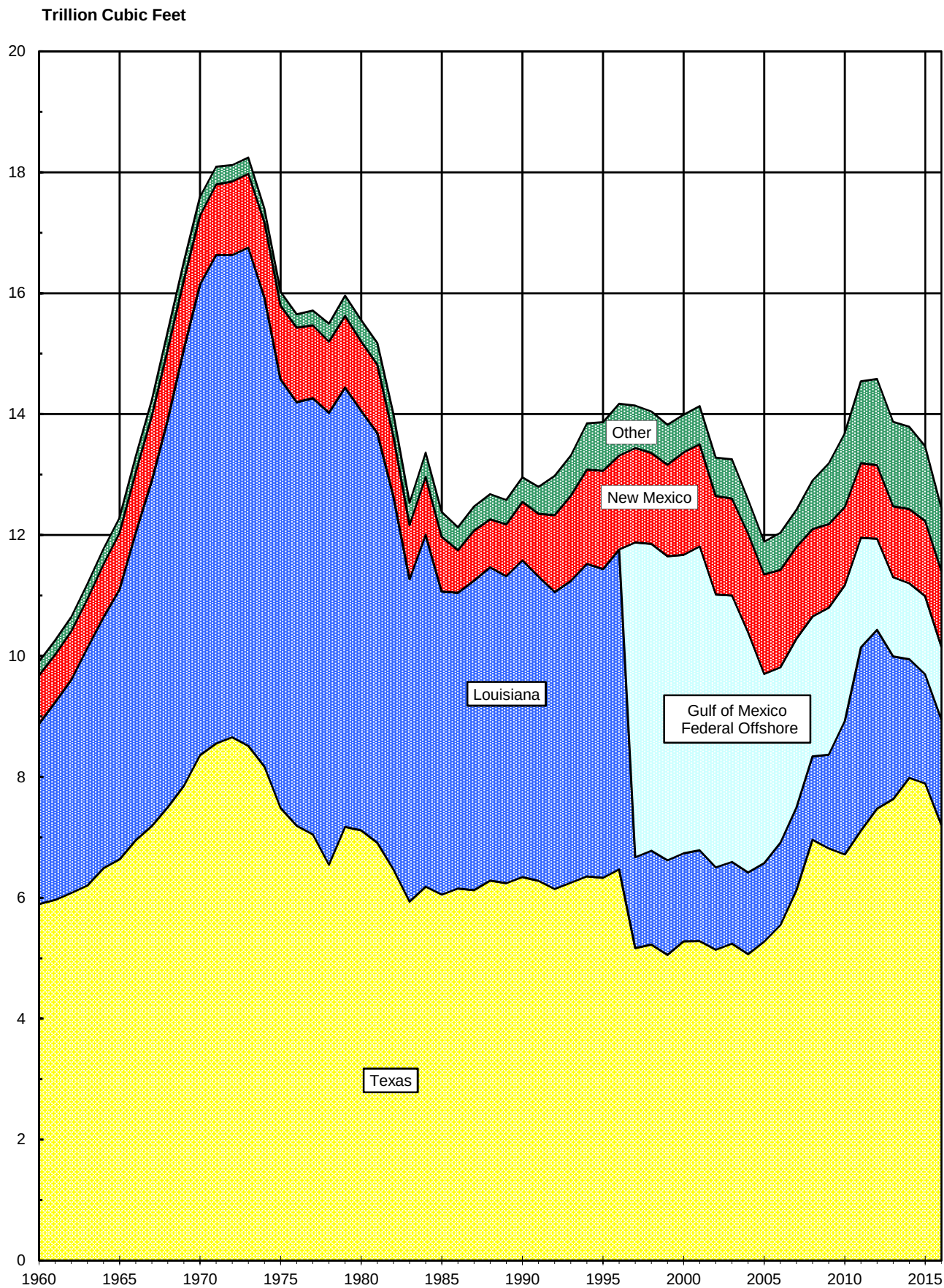


MARKETED PRODUCTION OF NATURAL GAS
P.A.D. DISTRICT II
(Millions of Cubic Feet)

<u>Year</u>	<u>Illinois</u>	<u>Indiana</u>	<u>Kansas</u>	<u>Kentucky</u>	<u>Michigan</u>	<u>North Dakota</u>	<u>Ohio</u>	<u>Oklahoma</u>	<u>Total¹</u>
1960	11,666	342	634,410	75,329	20,790	19,483	36,074	824,266	1,622,360
1961	9,970	382	649,083	70,937	27,697	20,100	36,423	892,697	1,707,289
1962	10,650	284	694,352	70,241	28,987	25,155	36,747	1,060,717	1,927,133
1963	9,459	286	732,946	74,634	32,850	32,798	36,817	1,233,883	2,153,673
1964	7,824	199	764,073	76,940	31,388	34,512	37,106	1,316,201	2,268,243
1965	7,396	239	793,379	78,976	34,558	35,652	35,684	1,320,995	2,306,879
1966	7,230	215	847,495	76,536	34,120	46,585	43,133	1,351,225	2,406,539
1967	5,144	198	871,971	89,168	33,589	40,462	41,315	1,412,952	2,503,431
1968	4,380	234	835,555	89,024	40,480	41,023	42,673	1,390,884	2,452,444
1969	3,800	171	883,156	81,304	36,163	33,587	49,793	1,523,715	2,618,861
1970	4,850	153	899,955	77,892	38,851	34,889	52,113	1,594,943	2,709,788
1971	498	537	885,144	72,723	25,662	33,864	79,903	1,684,260	2,786,198
1972	1,194	355	889,268	63,648	34,221	32,472	89,995	1,806,887	2,921,552
1973	1,638	276	893,118	62,396	44,579	27,703	93,610	1,770,980	2,898,189
1974	1,436	176	886,782	71,876	69,133	31,206	92,055	1,638,942	2,794,194
1975	1,440	346	843,625	60,511	102,113	24,786	84,960	1,605,410	2,725,813
1976	1,556	192	829,170	66,137	119,262	31,470	88,891	1,726,513	2,865,778
1977	1,003	183	781,289	60,902	129,954	29,173	99,327	1,769,519	2,874,422
1978	1,159	163	854,484	70,044	148,047	30,499	114,098	1,773,582	2,995,426
1979	1,585	350	797,762	59,520	159,731	18,468	123,431	1,835,366	3,001,276
1980	1,574	463	735,035	57,180	158,302	42,346	138,856	1,891,824	3,030,564
1981	1,295	330	640,114	61,312	152,593	42,573	141,134	2,019,199	3,063,943
1982	1,162	233	429,597	51,924	153,051	53,818	138,391	1,934,412	2,832,501
1983	1,030	135	434,736	46,720	138,910	69,319	151,300	1,730,061	2,642,049
1984	1,530	392	465,979	61,518	144,537	70,496	186,480	1,985,869	3,000,778
1985	1,324	367	512,872	73,126	131,855	72,633	182,245	1,936,341	2,992,179
1986	1,887	365	478,963	80,195	127,287	55,098	182,072	1,971,988	2,904,957
1987	1,371	217	472,752	70,125	146,996	62,258	166,593	2,073,461	3,001,176
1988	1,338	412	592,845	73,629	146,145	57,747	166,690	2,167,050	3,212,790
1989	1,477	416	601,196	72,417	155,988	51,174	159,730	2,237,037	3,286,586
1990	677	399	573,603	75,333	172,151	52,169	154,619	2,258,471	3,291,170
1991	466	232	628,459	78,904	195,749	53,479	147,651	2,153,852	3,262,329
1992	347	174	658,007	79,690	194,815	54,883	144,815	2,017,356	3,154,517
1993	340	192	686,347	86,966	204,635	59,851	137,285	2,049,942	3,230,652
1994	333	107	712,730	73,081	222,657	57,805	132,151	1,934,864	3,140,061
1995	335	249	721,436	74,754	238,203	49,468	126,336	1,811,734	3,027,843
1996	298	360	712,796	81,435	245,740	49,674	119,251	1,734,887	2,949,361
1997	231	526	687,215	79,547	305,950	52,401	116,246	1,703,888	2,950,787
1998	209	615	603,586	81,869	278,076	53,185	115,083	1,669,367	2,806,725
1999	195	855	553,419	76,770	277,364	52,862	109,509	1,594,002	2,669,167
2000	189	899	525,729	81,545	296,556	52,426	105,125	1,612,890	2,679,379
2001	185	1,064	480,145	81,723	275,036	54,732	100,107	1,615,384	2,612,684
2002	180	1,309	454,901	88,259	274,476	57,048	103,158	1,581,606	2,565,200
2003	174	1,464	418,893	87,608	236,987	55,693	93,641	1,558,155	2,456,975
2004	170	3,401	397,121	94,259	259,681	55,009	90,476	1,655,769	2,560,555
2005	166	3,135	377,229	92,795	261,112	52,557	83,523	1,639,310	2,514,191
2006	170	2,921	371,044	95,320	263,009	55,273	86,315	1,688,985	2,567,863
2007	1,394	3,606	365,877	95,437	264,907	60,255	88,095	1,783,682	2,669,745
2008	1,193	4,701	374,310	114,116	153,130	52,444	84,858	1,886,710	2,680,888
2009	1,445	4,927	354,440	113,300	153,736	59,369	88,824	1,901,556	2,688,110
2010	1,702	6,802	324,720	135,330	131,118	81,837	78,122	1,827,328	2,596,196
2011	2,121	9,075	309,124	124,243	138,162	97,102	78,858	1,888,870	2,656,213
2012	2,125	8,814	296,299	106,122	129,333	172,242	84,482	2,023,461	2,845,116
2013	2,887	7,938	292,467	94,665	123,622	235,711	166,017	1,993,754	2,939,707
2014	1,929	6,616	286,480	93,091	115,065	326,491	512,371	2,331,086	3,694,148
2015	2,080	7,250	284,184	95,907	107,664	471,360	1,007,270	2,499,599	4,480,621
2016	2,183	6,205	243,459	91,609	100,599	531,889	1,439,905	2,468,312	4,888,785

¹Includes Missouri, Nebraska, South Dakota and Tennessee starting in 1967.

MARKETED PRODUCTION OF NATURAL GAS P.A.D. DISTRICT III



MARKETED PRODUCTION OF NATURAL GAS

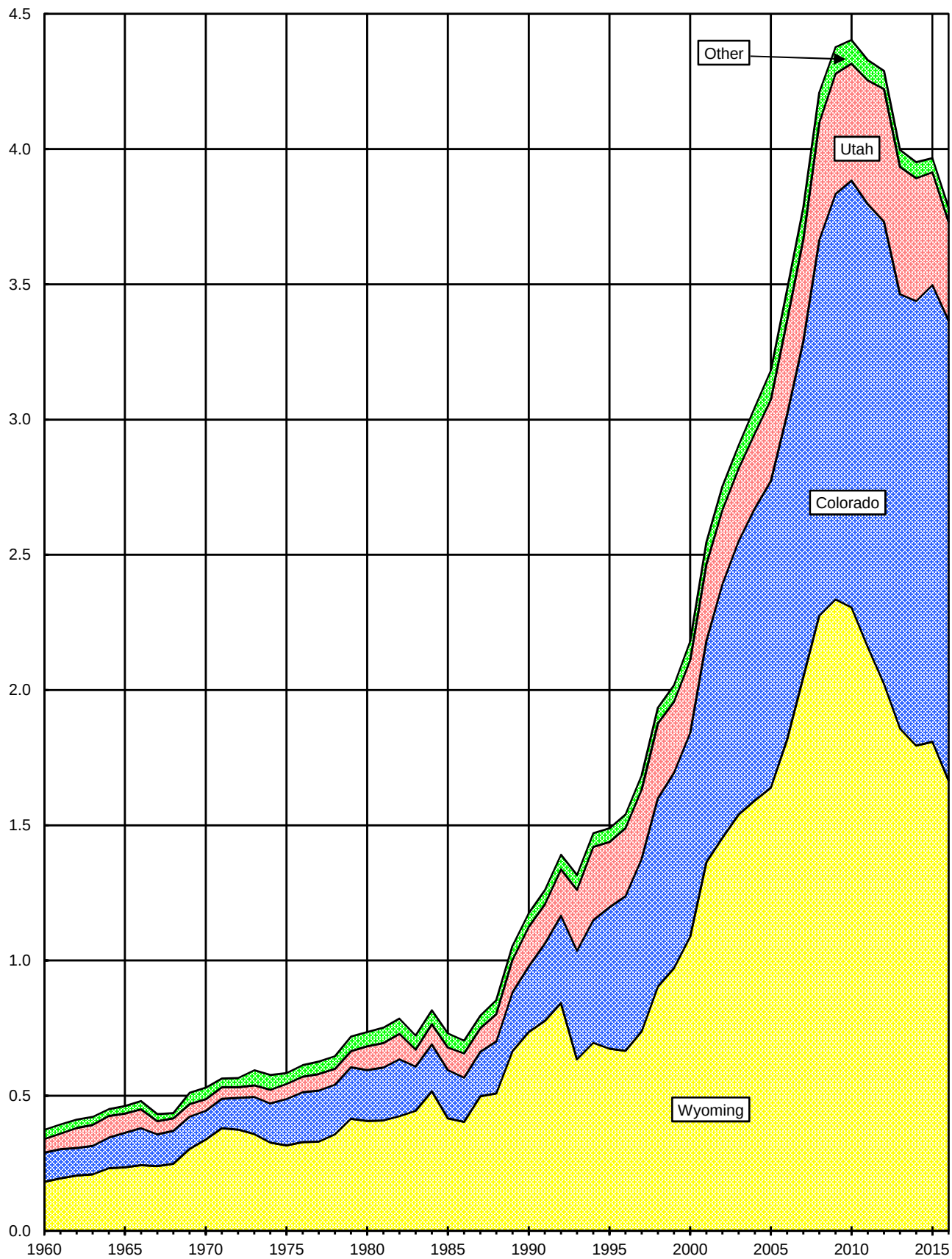
P.A.D. DISTRICT III
(Millions of Cubic Feet)

Year	GOM							
	Alabama	Arkansas	Federal Offshore ¹	Louisiana	Mississippi	New Mexico	Texas	Total
1960	57	55,451	...	2,988,414	172,478	798,928	5,892,704	9,908,032
1961	56	59,547	...	3,271,857	172,543	789,662	5,963,605	10,257,270
1962	128	66,213	...	3,525,456	170,271	804,612	6,080,210	10,646,890
1963	173	76,101	...	3,928,427	176,807	808,377	6,205,034	11,194,919
1964	165	75,753	...	4,152,731	180,428	873,947	6,490,202	11,773,226
1965	203	82,831	...	4,466,786	166,825	937,205	6,636,555	12,290,405
1966	252	105,174	...	5,081,435	156,652	998,076	6,953,790	13,295,379
1967	248	116,522	...	5,716,857	139,497	1,067,510	7,188,900	14,229,534
1968	230	156,627	...	6,416,015	135,051	1,164,182	7,495,414	15,367,519
1969	180	169,257	...	7,227,826	131,234	1,138,133	7,853,199	16,519,829
1970	627	181,351	...	7,788,276	126,031	1,138,980	8,357,716	17,592,981
1971	355	172,154	...	8,081,907	118,805	1,167,577	8,550,705	18,091,503
1972	3,644	166,522	...	7,972,678	103,989	1,216,061	8,657,840	18,120,734
1973	11,271	157,529	...	8,242,423	99,706	1,218,749	8,513,850	18,243,528
1974	27,865	123,975	...	7,753,631	78,787	1,244,779	8,170,798	17,399,835
1975	37,814	116,237	...	7,090,645	74,345	1,217,430	7,485,764	16,022,235
1976	41,427	109,533	...	7,006,596	70,762	1,230,976	7,191,859	15,651,153
1977	57,227	104,096	...	7,215,006	82,995	1,202,973	7,051,027	15,713,324
1978	85,599	106,792	...	7,476,497	106,579	1,174,198	6,548,184	15,497,849
1979	85,815	109,452	...	7,266,217	144,077	1,181,363	7,174,623	15,961,547
1980	65,294	111,808	...	6,939,924	175,061	1,148,086	7,115,889	15,556,062
1981	79,244	92,986	...	6,780,184	181,238	1,132,066	6,910,021	15,175,739
1982	75,003	124,611	...	6,171,627	167,231	991,178	6,468,817	13,998,467
1983	90,801	127,561	...	5,332,113	151,204	895,279	5,938,561	12,535,519
1984	101,821	135,161	...	5,825,055	157,911	957,366	6,185,021	13,362,335
1985	107,342	155,099	...	5,013,702	144,172	905,272	6,052,663	12,378,250
1986	107,184	131,075	...	4,895,394	140,833	702,614	6,151,775	12,128,875
1987	117,241	141,151	...	5,122,509	139,727	823,773	6,126,315	12,470,716
1988	129,524	166,573	...	5,180,267	124,053	791,819	6,286,029	12,678,265
1989	128,411	174,158	...	5,078,125	102,645	854,615	6,241,425	12,579,379
1990	135,276	174,956	...	5,241,989	94,616	965,104	6,343,146	12,955,087
1991	170,847	164,702	...	5,034,361	108,031	1,038,284	6,280,654	12,796,879
1992	355,099	202,479	...	4,914,300	91,697	1,268,863	6,145,862	12,978,300
1993	388,024	196,370	...	4,991,138	80,695	1,409,429	6,249,624	13,315,280
1994	515,272	187,673	...	5,169,705	63,448	1,557,689	6,353,844	13,847,631
1995	519,661	187,242	...	5,108,366	95,533	1,625,837	6,330,048	13,866,687
1996	530,841	221,822	...	5,289,742	103,263	1,554,087	6,470,620	14,170,375
1997	388,596	208,514	5,206,023	1,505,014	107,300	1,558,633	5,167,334	14,141,414
1998	392,394	188,372	5,076,496	1,551,979	108,068	1,501,098	5,227,477	14,045,884
1999	381,701	170,006	5,029,704	1,566,916	111,021	1,511,671	5,054,486	13,825,505
2000	363,467	171,642	4,934,387	1,455,014	88,558	1,695,295	5,282,104	13,990,467
2001	356,810	166,804	5,027,623	1,502,086	107,541	1,689,125	5,282,723	14,132,712
2002	356,061	161,871	4,511,942	1,361,751	112,980	1,632,080	5,141,075	13,277,760
2003	346,145	169,599	4,406,450	1,350,399	133,901	1,604,015	5,243,567	13,254,076
2004	316,021	187,069	3,969,450	1,353,249	63,353	1,632,539	5,067,315	12,588,996
2005	296,528	190,533	3,132,089	1,296,048	52,923	1,645,166	5,276,401	11,889,688
2006	286,220	270,293	2,901,969	1,361,119	60,531	1,609,223	5,548,022	12,037,377
2007	270,407	269,886	2,798,718	1,365,333	73,460	1,517,922	6,123,180	12,418,906
2008	257,884	446,457	2,314,342	1,377,969	96,641	1,446,204	6,960,693	12,900,190
2009	236,029	679,952	2,428,916	1,548,607	88,157	1,383,004	6,818,973	13,183,638
2010	222,932	926,639	2,245,062	2,210,099	73,721	1,292,185	6,715,294	13,685,932
2011	195,581	1,072,212	1,812,328	3,029,206	81,487	1,237,303	7,112,863	14,540,980
2012	215,710	1,146,168	1,507,564	2,955,437	63,843	1,215,773	7,475,495	14,579,990
2013	196,326	1,139,654	1,309,246	2,360,202	59,272	1,171,640	7,633,618	13,869,958
2014	181,060	1,122,733	1,253,678	1,960,813	54,446	1,229,519	7,985,019	13,787,268
2015	168,246	1,010,382	1,291,945	1,805,197	58,181	1,245,145	7,890,459	13,469,555
2016	164,804	823,223	1,206,328	1,743,259	48,506	1,251,013	7,203,012	12,440,145

¹ Beginning in 1997, Federal Offshore Gulf of Mexico production reported separately from Alabama, Louisiana and Texas.

MARKETED PRODUCTION OF NATURAL GAS P.A.D. DISTRICT IV

Trillion Cubic Feet



MARKETED PRODUCTION OF NATURAL GAS

P.A.D DISTRICT IV
(Millions of Cubic Feet)

Year	Colorado	Montana	Utah	Wyoming	Total¹
1960	107,404	33,418	51,040	181,610	373,472
1961	108,142	33,901	57,175	194,674	393,892
1962	101,826	29,955	74,128	204,996	410,905
1963	105,705	30,026	77,122	209,060	421,913
1964	113,691	25,051	79,739	231,613	450,094
1965	126,381	28,105	71,616	235,849	461,951
1966	136,667	30,685	69,366	243,381	480,099
1967	116,857	25,866	48,965	240,074	431,762
1968	121,424	19,313	46,151	248,481	435,369
1969	118,754	41,229	46,733	303,517	510,233
1970	105,804	42,705	42,781	338,520	529,810
1971	108,537	32,720	42,418	380,105	563,780
1972	116,949	33,474	39,474	375,059	564,956
1973	137,725	56,175	42,715	357,731	594,346
1974	144,629	54,873	50,522	326,657	576,681
1975	171,629	40,734	55,354	316,123	583,840
1976	183,972	42,563	57,416	328,768	612,719
1977	188,792	46,819	60,696	330,180	626,487
1978	183,693	46,522	58,416	357,267	645,898
1979	191,239	53,888	58,605	414,416	718,148
1980	188,001	51,867	87,766	407,072	734,706
1981	195,706	56,565	91,191	408,356	751,818
1982	209,892	56,517	94,255	424,657	785,321
1983	163,545	51,967	63,158	443,988	722,658
1984	173,257	51,474	74,698	516,683	816,112
1985	178,233	52,494	83,405	416,565	730,697
1986	163,684	46,592	90,013	403,266	703,555
1987	164,557	46,456	87,158	497,980	796,151
1988	191,544	51,654	101,372	509,058	853,628
1989	216,737	51,307	120,089	665,699	1,053,832
1990	242,997	50,429	145,875	735,728	1,175,029
1991	285,961	51,999	144,817	776,528	1,259,305
1992	323,041	53,867	171,293	842,576	1,390,777
1993	400,985	54,528	225,401	634,957	1,315,871
1994	453,207	50,416	270,858	696,018	1,470,499
1995	523,084	50,264	241,290	673,775	1,488,413
1996	572,071	50,996	250,767	666,036	1,539,870
1997	637,375	52,437	257,139	738,368	1,685,319
1998	696,321	57,645	277,340	903,836	1,935,142
1999	722,738	61,163	262,614	971,230	2,017,745
2000	752,985	69,936	269,285	1,088,328	2,180,534
2001	817,206	81,397	283,913	1,363,879	2,546,395
2002	937,245	86,075	274,739	1,453,957	2,752,016
2003	1,011,285	86,027	268,058	1,539,318	2,904,688
2004	1,079,235	96,762	277,969	1,592,203	3,046,169
2005	1,133,086	107,918	301,223	1,639,317	3,181,544
2006	1,202,821	112,845	348,320	1,816,201	3,480,187
2007	1,242,571	116,848	376,409	2,047,882	3,783,710
2008	1,389,399	112,529	433,566	2,274,850	4,210,344
2009	1,499,070	98,245	444,162	2,335,328	4,376,805
2010	1,578,379	87,539	432,045	2,305,525	4,403,488
2011	1,637,576	74,624	457,525	2,159,422	4,329,147
2012	1,709,376	66,954	490,393	2,022,275	4,288,998
2013	1,604,860	63,242	470,863	1,858,207	3,997,172
2014	1,643,487	59,160	454,545	1,794,413	3,951,605
2015	1,688,733	51,356	417,020	1,808,519	3,966,706
2016	1,701,735	47,807	364,665	1,664,604	3,783,448

¹ Includes Idaho beginning in 2015.

MARKETED PRODUCTION OF NATURAL GAS IN THE UNITED STATES

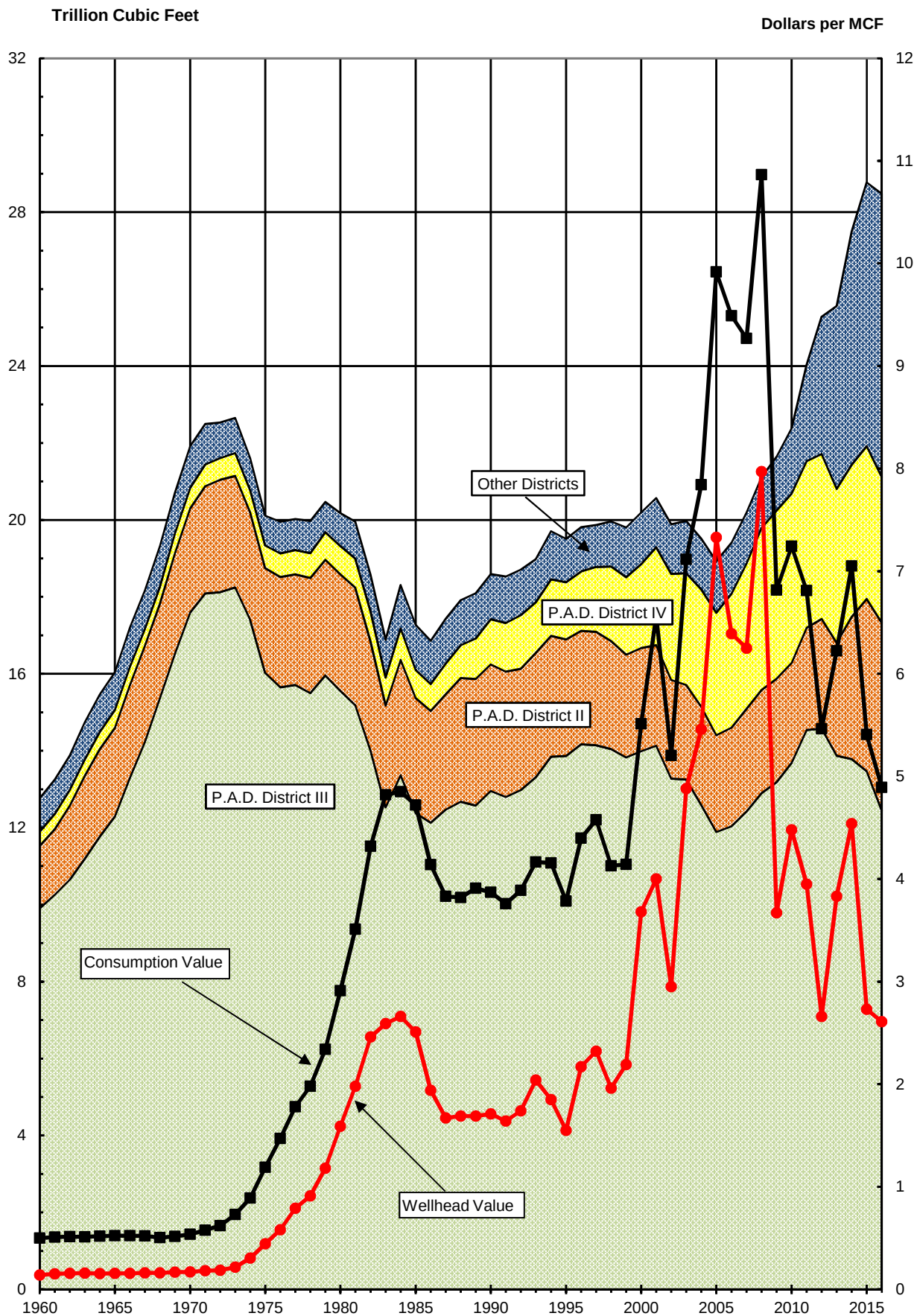


Chart 67

MARKETED PRODUCTION OF NATURAL GAS

P.A.D. DISTRICT V

TOTAL UNITED STATES

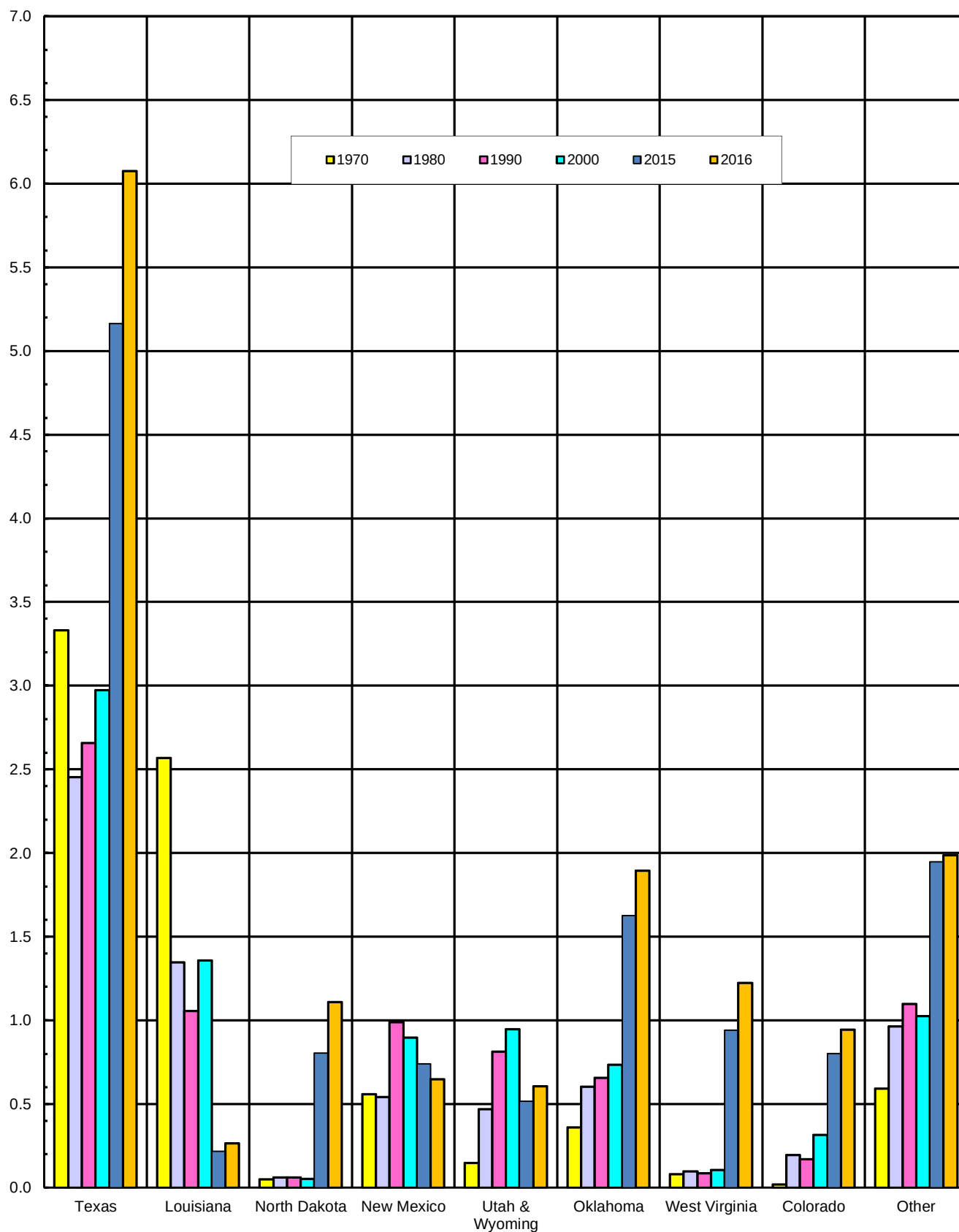
(Millions of Cubic Feet)

Year	P.A.D. District V				Total United States	Average per Thousand Cubic Feet (Dollars)	
	Alaska	California	Other ¹	Total		Value at Wells ²	Value at Points of Consumption
1960	246	517,535	21,718	539,499	12,771,038	0.140	0.500
1961	631	556,241	21,977	578,849	13,254,025	0.151	0.510
1962	2,184	564,220	20,277	586,681	13,876,622	0.155	0.514
1963	4,498	646,486	18,328	669,312	14,746,659	0.158	0.512
1964	6,238	660,444	16,305	682,987	15,462,143	0.154	0.519
1965	7,255	660,384	17,662	685,301	16,039,753	0.156	0.522
1966	11,267	689,607	18,484	719,358	17,206,598	0.157	0.523
1967	14,438	681,080	1,255	696,773	18,171,325	0.160	0.520
1968	17,343	714,893	881	733,117	19,322,400	0.161	0.504
1969	50,864	677,689	1,136	729,689	20,698,240	0.167	0.515
1970	111,576	649,117	1,101	761,794	21,920,642	0.171	0.536
1971	121,618	612,629	868	735,115	22,493,012	0.182	0.576
1972	125,596	487,278	442	613,316	22,531,698	0.186	0.620
1973	131,007	449,369	125	580,501	22,647,549	0.216	0.730
1974	128,935	365,354	224	494,513	21,600,522	0.304	0.890
1975	160,270	318,308	208	478,786	20,108,661	0.445	1.190
1976	166,072	354,334	262	520,668	19,952,438	0.580	1.470
1977	187,889	311,462	240	499,591	20,025,463	0.790	1.780
1978	203,088	311,084	286	514,458	19,974,033	0.910	1.980
1979	220,754	248,206	249	469,209	20,471,260	1.180	2.340
1980	230,588	309,434	219	540,241	20,179,724	1.590	2.910
1981	242,564	380,359	192	623,115	19,955,823	1.980	3.510
1982	264,364	383,977	102	648,443	18,582,001	2.460	4.320
1983	276,691	415,324	135	692,150	16,884,095	2.590	4.820
1984	289,129	476,333	2,835	768,297	18,304,340	2.660	4.850
1985	321,346	491,283	4,165	816,794	17,270,223	2.510	4.720
1986	304,841	462,218	4,665	771,724	16,858,675	1.940	4.140
1987	359,837	424,621	3,858	788,316	17,432,901	1.670	3.830
1988	378,638	399,663	4,058	782,359	17,918,465	1.690	3.820
1989	393,729	362,860	3,859	760,448	18,095,147	1.690	3.910
1990	402,907	362,748	4,940	770,595	18,593,792	1.710	3.870
1991	437,822	378,384	4,019	820,225	18,532,439	1.640	3.760
1992	443,597	365,632	3,379	812,608	18,711,808	1.740	3.890
1993	430,350	315,851	4,621	750,822	18,981,915	2.040	4.165
1994	555,402	309,427	3,990	868,819	19,709,525	1.850	4.157
1995	469,550	279,555	2,492	751,597	19,506,474	1.550	3.785
1996	480,828	286,494	1,912	769,234	19,812,241	2.170	4.398
1997	468,311	285,690	1,635	755,636	19,866,093	2.320	4.577
1998	466,648	315,277	1,534	783,459	19,961,348	1.960	4.129
1999	462,967	382,715	1,771	847,453	19,804,848	2.190	4.143
2000	458,995	376,580	1,590	837,165	20,197,511	3.680	5.514
2001	471,440	377,824	1,426	850,690	20,570,295	4.000	6.564
2002	463,301	360,205	1,143	824,649	19,884,780	2.950	5.204
2003	489,757	337,216	1,182	828,155	19,974,360	4.880	7.116
2004	471,899	319,919	804	792,622	19,517,491	5.460	7.842
2005	487,282	317,637	692	805,611	18,927,095	7.330	9.918
2006	444,724	315,209	1,239	761,172	19,409,674	6.390	9.491
2007	433,485	307,160	1,067	741,712	20,196,346	6.250	9.270
2008	398,442	296,469	1,307	696,218	21,112,053	7.970	10.866
2009	397,077	276,575	1,539	675,191	21,647,936	3.670	6.816
2010	374,226	286,841	1,594	662,661	22,381,873	4.480	7.243
2011	356,225	250,177	1,516	607,918	24,036,352	3.950	6.811
2012	351,259	246,822	891	598,972	25,283,278	2.660	5.465
2013	338,182	252,310	844	591,336	25,562,232	3.830	6.225
2014	345,310	238,988	1,250	585,548	27,497,754	4.540	7.051
2015	343,625	236,648	945	581,218	28,772,044	2.730	5.409
2016	338,095	205,024	988	544,107	28,479,288	2.610	4.893

¹ Includes Arizona, Nevada, and Oregon starting in 1967.² As of 2013 forward, gas prices cited will be Natural Gas Henry Hub Spot Price.

PROVED NATURAL GAS LIQUIDS RESERVES BY SELECTED STATES AS OF DECEMBER 31

Billion Barrels



PROVED NATURAL GAS LIQUIDS RESERVES BY STATES⁵
AS OF DECEMBER 31
(Millions of Barrels)

P.A.D. DISTRICT and STATES	AGA Estimates			EIA Estimates							
	1960	1970	1979	1979	1980	1990	2000	2010	2014	2015	2016
P.A.D. DISTRICT I	47	83	122	96	124	94	123	203	1,627	1,382	1,791
Florida	...	...	18	21	27	8	11	...	...	...	...
Pennsylvania	2	1	...	1	...	...	7	81	398	441	566
West Virginia	45	82	104	74	97	86	105	122	1,229	941	1,225
P.A.D. DISTRICT II	684	762	910	1,170	1,191	1,136	1,185	1,794	2,610	2,650	3,237
Kansas	198	294	470	402	389	313	306	195	186	122	165
Kentucky	49	48	38	26	25	25	56	124	108	73	55
Michigan	2	10	71	112	112	81	35	48	24	25	14
Nebraska	6	2	1	...	...	...	...	...	...	...	...
North Dakota	91	49	54	47	61	60	54	157	540	804	1,108
Oklahoma	338	359	276	583	604	657	734	1,270	1,752	1,626	1,895
P.A.D. DISTRICT III	5,577	6,512	3,988	4,682	4,601	4,894	5,388	5,377	8,173	6,507	7,335
Alabama	...	21	198	213	226	170	150	68	59	58	48
Arkansas	27	12	13	17	16	9	5	2	5	4	3
Gulf of Mexico Federal Offshore ^{2,6}	...	...	...	...	...	...	...	340	397	322	293
Louisiana ²	1,433	2,567	1,186	1,424	1,346	1,057	1,357	216	243	218	265
Mississippi	36	23	12	16	20	11	8	4	4	2	2
New Mexico	485	559	439	530	541	990	896	764	789	740	649
Texas	3,596	3,330	2,140	2,482	2,452	2,657	2,972	3,983	6,676	5,163	6,075
P.A.D. DISTRICT IV	183	175	139	531	678	996	1,267	2,023	1,914	1,332	1,561
Colorado	24	19	55	177	194	169	316	879	813	801	943
Montana	12	9	3	10	16	15	4	11	14	15	13
Utah	51	36	28	59	127	...	...	132	206	98	94
Wyoming	96	111	53	285	341	812	947	1,001	881	418	511
P.A.D. DISTRICT V	314	170	496	134	131	463	382	403	355	293	269
Alaska	...	...	407	23	11	340	277	288	241	211	201
California ⁷	314	170	89	111	120	123	105	115	114	82	68
MISCELLANEOUS	11	1	...	2	3	3	8	9	350	593	560
TOTAL UNITED STATES	6,816	7,703	5,655	6,615	6,728	7,586	8,353	9,809	15,029	12,757	14,753
LOWER 48 STATES	6,816	7,703	5,248	6,592	6,717	7,246	8,076	9,521	14,788	12,546	14,552
Onshore	...	...	...	5,884	5,943	6,571	6,956	9,156	14,374	12,207	14,248
Offshore	...	...	...	708	774	675	1,120	365	414	339	304

¹ Included in miscellaneous.² Includes Alabama and Texas offshore.³ Included with Wyoming.⁴ Not available.⁵ Included lease condensate from 1950 - 2008. Beginning in 2009, lease condensate was excluded from the proved NGL Reserves.⁶ Beginning in 2001, Gulf of Mexico reported separately.⁷ Includes Pacific Federal Offshore.

UNITED STATES NATURAL GAS LIQUIDS RESERVES AND RESERVE-PRODUCTION RATIO AT YEAR-END

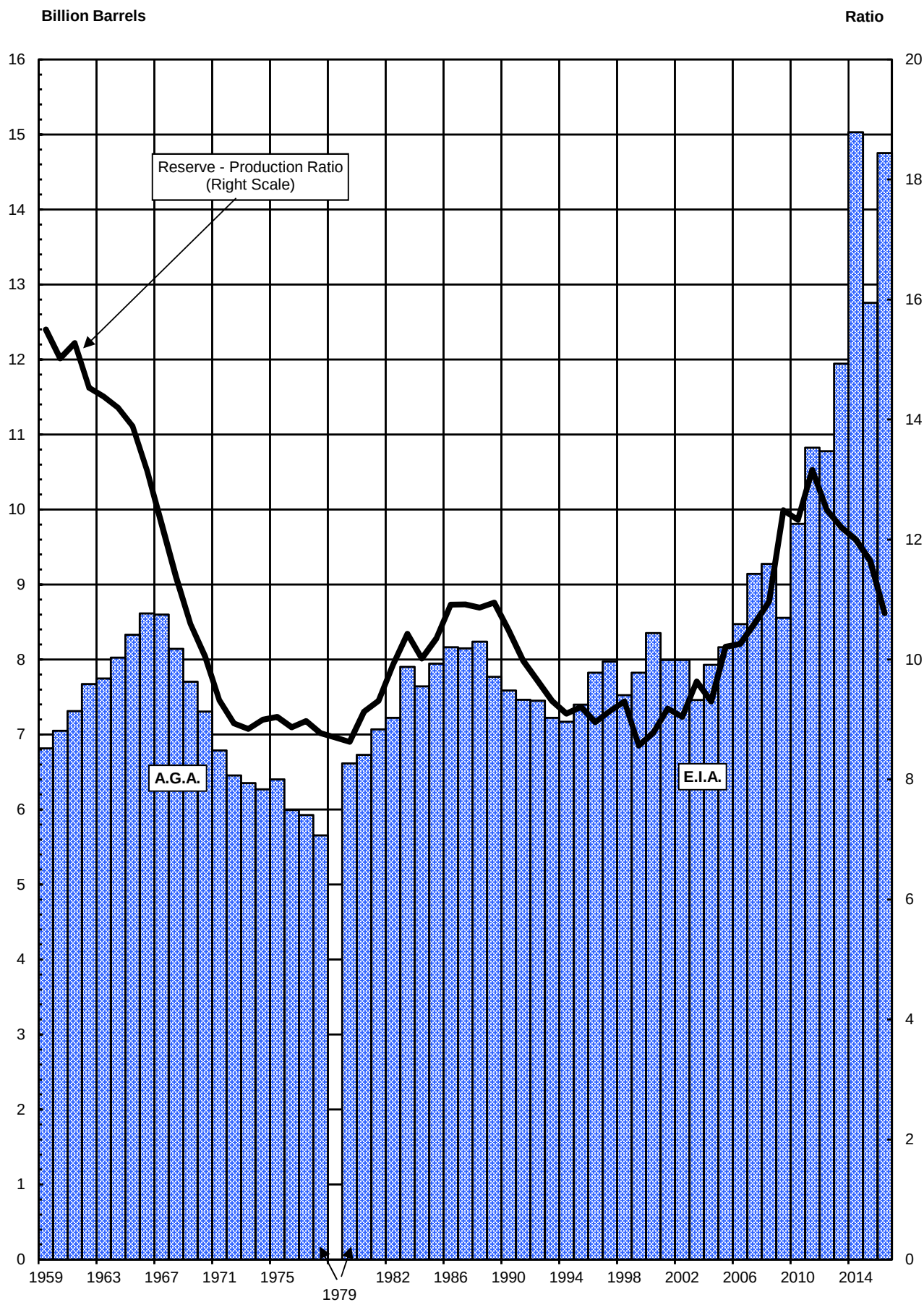


Chart 69

UNITED STATES NATURAL GAS LIQUIDS¹
RESERVES AND PRODUCTION
(Thousands of Barrels)

<u>Year</u>	<u>Production</u>	<u>Estimated Proved Reserves Year-End</u>	<u>Reserve Production Ratio</u>
AGA Estimates			
1960	431,379	6,816,059	15.5
1961	461,649	7,049,096	15.0
1962	470,128	7,311,517	15.3
1963	515,659	7,673,978	14.5
1964	536,090	7,746,632	14.4
1965	555,410	8,023,534	14.2
1966	588,684	8,328,966	13.9
1967	644,493	8,614,231	13.1
1968	701,782	8,598,108	12.3
1969	735,962	8,143,174	11.4
1970	747,812	7,702,941	10.6
1971	746,434	7,304,227	10.1
1972	755,941	6,786,559	9.3
1973	740,831	6,454,707	8.9
1974	724,099	6,350,449	8.8
1975	701,123	6,267,830	9.0
1976	700,629	6,401,967	9.0
1977	698,773	5,994,365	8.9
1978	664,179	5,925,852	9.0
1979	660,334	5,655,323	8.8
EIA Estimates			
1979	727,000	6,615,000	8.6
1980	731,000	6,728,000	9.1
1981	741,000	7,068,000	9.3
1982	721,000	7,221,000	9.9
1983	725,000	7,901,000	10.4
1984	776,000	7,643,000	10.0
1985	753,000	7,944,000	10.3
1986	738,000	8,165,000	10.9
1987	747,000	8,147,000	10.9
1988	754,000	8,238,000	10.9
1989	731,000	7,769,000	10.9
1990	732,000	7,586,000	10.5
1991	754,000	7,464,000	10.0
1992	773,000	7,451,000	9.6
1993	788,000	7,222,000	9.3
1994	791,000	7,170,000	9.1
1995	791,000	7,399,000	9.2
1996	850,000	7,823,000	9.0
1997	864,000	7,973,000	9.1
1998	833,000	7,524,000	9.3
1999	896,000	7,823,000	8.6
2000	921,000	8,353,000	8.8
2001	890,000	7,993,000	9.2
2002	884,000	7,994,000	9.0
2003	802,000	7,459,000	9.6
2004	827,000	7,928,000	9.3
2005	788,000	8,165,000	10.2
2006	811,000	8,472,000	10.3
2007	831,000	9,143,000	10.6
2008	840,000	9,275,000	11.0
2009	714,000	8,557,000	12.5
2010	745,000	9,809,000	12.3
2011	784,000	10,825,000	13.2
2012	865,000	10,777,000	12.5
2013	931,000	11,943,000	12.2
2014	1,124,000	15,029,000	12.0
2015	1,193,000	12,757,000	11.6
2016	1,277,000	14,753,000	10.8

¹ Includes lease condensate through 2008, after that year lease condensate is excluded.

PLANT PRODUCTION OF NATURAL GASOLINE AND ALLIED PRODUCTS IN THE UNITED STATES

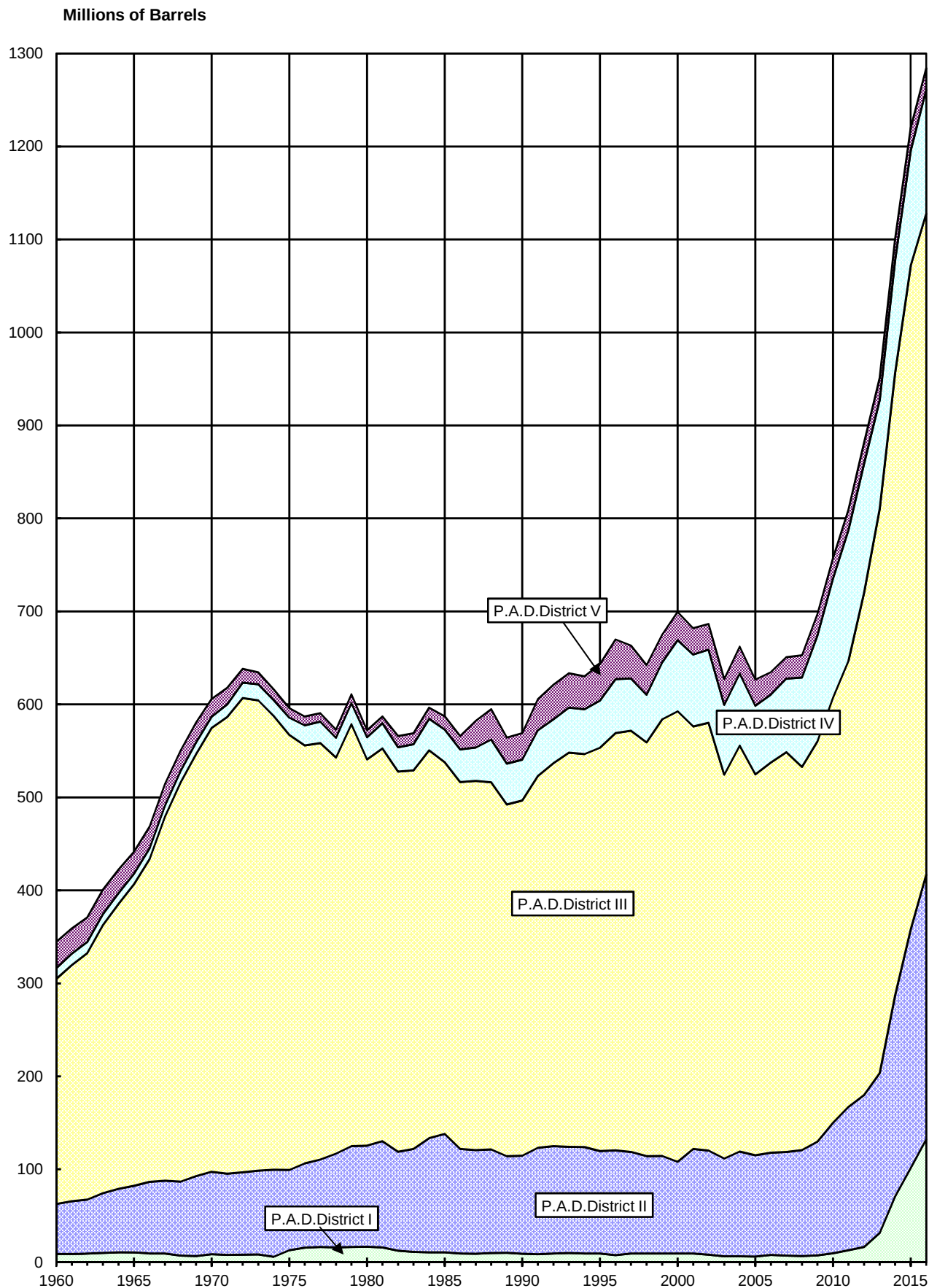


Chart 70

PLANT PRODUCTION OF NATURAL GASOLINE AND ALLIED PRODUCTS¹**P.A.D. DISTRICTS I-V****TOTAL UNITED STATES**
(Thousands of Barrels)

Year	P.A.D. District I	P.A.D. District II	P.A.D. District III	P.A.D. District IV	P.A.D. District V	Total United States
1960	9,082	53,727	242,092	11,418	28,212	344,531
1961	9,089	56,630	254,110	12,201	27,050	359,080
1962	9,232	58,233	265,126	12,088	26,310	370,989
1963	10,297	64,070	288,336	11,783	26,400	400,886
1964	10,662	68,290	306,473	11,499	25,547	422,471
1965	10,422	71,909	324,191	11,347	23,687	441,556
1966	9,609	76,964	347,047	11,497	23,519	468,636
1967	9,428	78,246	391,538	11,908	23,335	514,455
1968	7,237	79,544	429,165	12,373	21,992	550,311
1969	6,824	85,694	453,864	12,604	21,255	580,241
1970	8,804	88,598	477,188	12,282	19,044	605,916
1971	7,938	87,501	491,080	13,431	17,865	617,815
1972	8,118	88,675	509,969	16,541	14,913	638,216
1973	8,554	89,956	505,906	17,101	12,906	634,423
1974	5,963	93,666	487,756	17,212	11,501	616,098
1975	12,977	86,294	467,878	18,715	10,094	595,958
1976	15,644	90,789	449,471	21,595	9,546	587,045
1977	16,437	94,095	447,898	23,052	8,973	590,455
1978	16,109	100,917	425,863	21,265	8,825	572,979
1979	16,538	108,385	453,727	22,779	9,521	610,950
1980	16,673	108,842	415,215	23,844	7,700	572,274
1981	16,040	114,261	422,321	27,022	7,476	587,120
1982	12,523	106,430	408,862	26,076	11,984	565,875
1983	11,123	110,788	407,134	27,992	11,889	568,926
1984	10,757	122,770	417,035	33,869	12,046	596,477
1985	10,865	127,095	399,744	35,368	14,286	587,358
1986	9,530	112,353	394,640	34,979	14,498	566,000
1987	9,340	111,276	397,122	35,979	28,574	582,291
1988	9,971	111,346	395,025	45,852	32,498	594,692
1989	10,195	103,877	378,190	44,020	27,843	564,125
1990	9,169	105,545	381,887	44,092	28,306	568,999
1991	8,775	114,418	399,885	49,186	33,394	605,658
1992	9,404	115,447	411,992	47,179	37,156	621,178
1993	10,071	114,094	423,953	48,464	36,936	633,518
1994	9,521	114,368	422,830	48,164	35,317	630,200
1995	9,488	110,264	433,593	50,823	39,031	643,199
1996	7,678	112,759	448,781	57,913	42,689	669,820
1997	9,446	109,286	453,080	55,992	35,462	663,266
1998	9,564	104,652	445,042	51,188	31,756	642,202
1999	9,395	105,023	469,559	61,262	29,881	675,120
2000	9,447	98,781	484,393	76,421	30,373	699,415
2001	9,421	112,575	454,320	77,112	28,536	681,964
2002	8,287	111,843	460,070	78,620	27,468	686,288
2003	6,400	105,125	412,905	75,227	27,853	627,510
2004	6,510	112,784	436,314	77,614	28,929	662,151
2005	6,273	108,834	409,777	73,658	28,161	626,703
2006	8,019	109,950	419,491	73,169	24,025	634,654
2007	7,312	111,346	429,981	78,904	23,251	650,794
2008	6,751	113,890	412,253	95,952	23,976	652,822
2009	7,365	122,334	430,431	113,354	23,640	697,124
2010	9,692	140,233	457,454	127,802	21,838	757,019
2011	12,991	154,020	479,646	140,610	21,598	808,865
2012	16,548	163,238	540,336	138,760	22,424	881,306
2013	31,631	171,974	606,848	116,917	23,687	951,057
2014	70,807	216,201	669,470	121,275	22,545	1,100,298
2015	101,401	256,479	713,764	124,119	24,186	1,219,949
2016	132,038	285,045	710,874	133,259	23,141	1,284,357

¹ Natural gasoline, cycle products, and liquefied petroleum gases.

ROTARY RIGS AND SEISMIC ACTIVITY RUNNING IN THE UNITED STATES

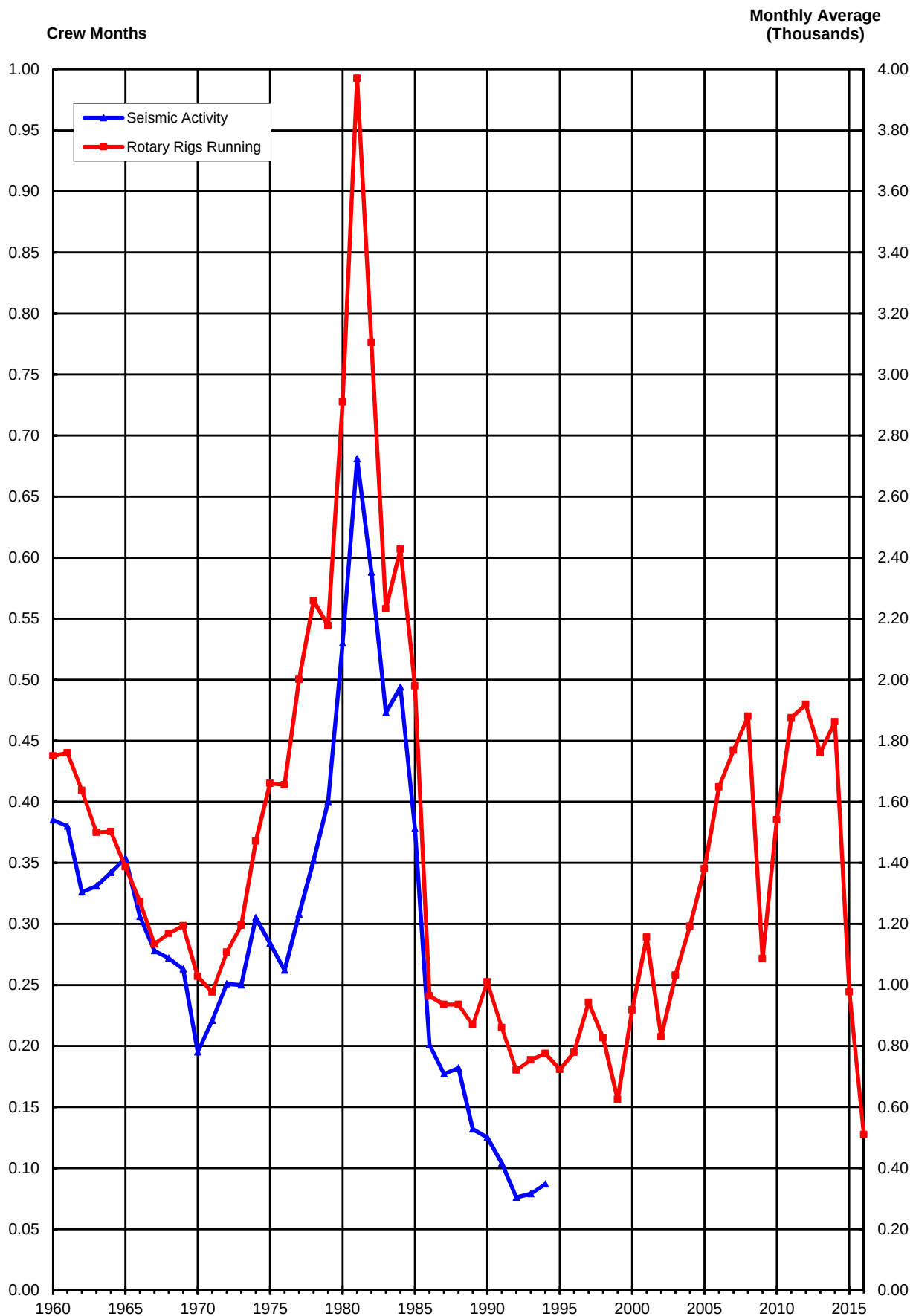


Chart 71

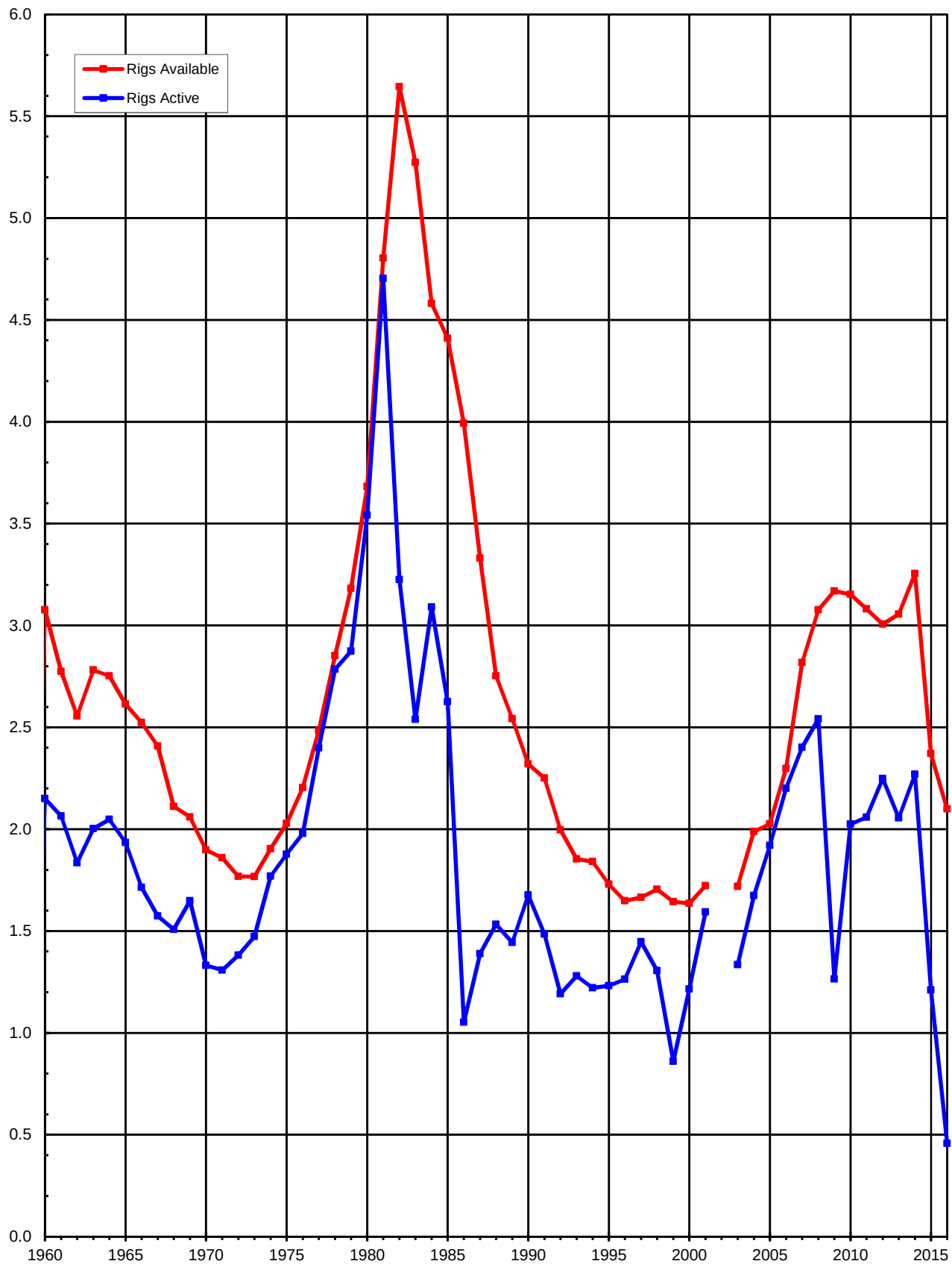
ROTARY RIGS AND SEISMIC ACTIVITY **RUNNING IN THE UNITED STATES**

Rotary Rigs Running (Monthly Average)												Seismic Activity (Avg. Crews/Mo.)
Year	California	Colorado	Kansas	Louisiana	New Mexico	North Dakota	Oklahoma	Texas	Wyoming	All Other States	Total U.S.	
1960	80	... ²	112	287	... ²	... ²	179	604	63	425	1,750	385
1961	82	... ²	105	275	... ²	... ²	197	628	58	415	1,760	380
1962	97	... ²	101	261	... ²	... ²	174	570	53	381	1,637	326
1963	85	... ²	96	265	... ²	... ²	158	500	55	341	1,500	331
1964	93	... ²	87	282	... ²	... ²	158	477	48	357	1,502	342
1965	89	... ²	70	270	... ²	... ²	163	425	50	320	1,387	354
1966	79	... ²	56	256	... ²	... ²	141	387	48	306	1,273	306
1967	83	... ²	41	235	... ²	... ²	101	340	44	290	1,134	278
1968	87	17	35	233	68	13	106	329	75	206	1,169	272
1969	78	23	38	230	64	12	120	322	81	226	1,194	263
1970	52	25	30	204	40	8	98	302	71	198	1,028	195
1971	46	30	29	194	47	9	90	291	45	195	976	221
1972	46	36	24	215	57	7	90	338	61	233	1,107	251
1973	51	42	28	205	62	10	115	376	70	236	1,195	250
1974	72	46	44	203	79	12	146	508	107	254	1,471	305
1975	80	42	57	228	71	17	177	638	107	243	1,660	284
1976	89	38	51	231	54	19	186	653	86	249	1,656	262
1977	90	45	67	292	69	24	233	779	118	284	2,001	308
1978	94	41	76	338	75	39	258	855	137	346	2,259	352
1979	96	40	66	347	87	56	247	770	147	321	2,177	400
1980	120	61	120	427	117	83	397	988	156	441	2,910	530
1981	155	82	196	456	135	119	698	1,316	191	622	3,970	681
1982	129	60	158	344	103	69	623	994	143	482	3,105	588
1983	106	52	124	283	65	42	285	796	96	383	2,232	473
1984	107	54	128	310	78	51	319	850	115	416	2,428	494
1985	80	50	91	282	71	39	251	677	93	346	1,980	378
1986	49	24	47	143	29	13	142	313	36	168	964	201
1987	61	25	48	136	35	14	137	296	40	144	936	177
1988	60	29	40	164	37	15	126	281	37	147	936	182
1989	49	27	43	140	36	15	122	266	34	137	869	132
1990	49	30	47	151	50	20	125	349	37	152	1,010	125
1991	47	29	37	115	41	13	106	317	31	124	860	104
1992	35	33	27	88	32	12	98	251	38	107	721	76
1993	34	33	29	105	44	10	105	265	38	91	754	79
1994	30	30	33	132	36	7	106	274	33	94	775	87 ¹
1995	27	15	29	141	37	12	96	251	24	91	723	...
1996	27	14	23	156	35	19	106	283	24	92	779	...
1997	32	16	19	193	53	18	103	357	39	113	943	...
1998	28	13	13	187	45	11	85	302	39	104	827	...
1999	18	13	7	137	36	6	60	217	30	101	625	...
2000	24	18	22	194	68	13	99	342	41	97	918	...
2001	36	32	23	215	68	14	131	464	55	118	1,156	...
2002	22	28	7	166	42	10	91	338	40	86	830	...
2003	22	39	9	157	65	14	129	449	54	94	1,032	...
2004	24	54	7	167	67	15	159	506	74	119	1,192	...
2005	27	74	7	182	83	21	152	614	78	143	1,381	...
2006	33	89	10	188	94	32	179	746	99	179	1,649	...
2007	35	107	14	177	78	39	188	834	74	223	1,769	...
2008	42	114	11	167	78	68	200	898	74	228	1,880	...
2009	23	50	20	150	44	50	94	432	40	183	1,086	...
2010	32	58	20	192	62	114	128	659	40	236	1,541	...
2011	45	72	28	165	79	168	180	838	48	252	1,875	...
2012	44	65	30	124	84	188	196	899	47	242	1,919	...
2013	38	63	27	108	77	173	179	835	48	213	1,761	...
2014	42	68	29	111	92	176	199	882	54	209	1,862	...
2015	13	38	13	77	53	84	117	430	27	125	977	...
2016	6	19	3	46	25	31	69	236	11	64	510	...

¹ Monthly average is based on 7 months. Data not available after July 1994.² Data unavailable.

UNITED STATES ROTARY RIG SURVEY

Thousands of Rigs

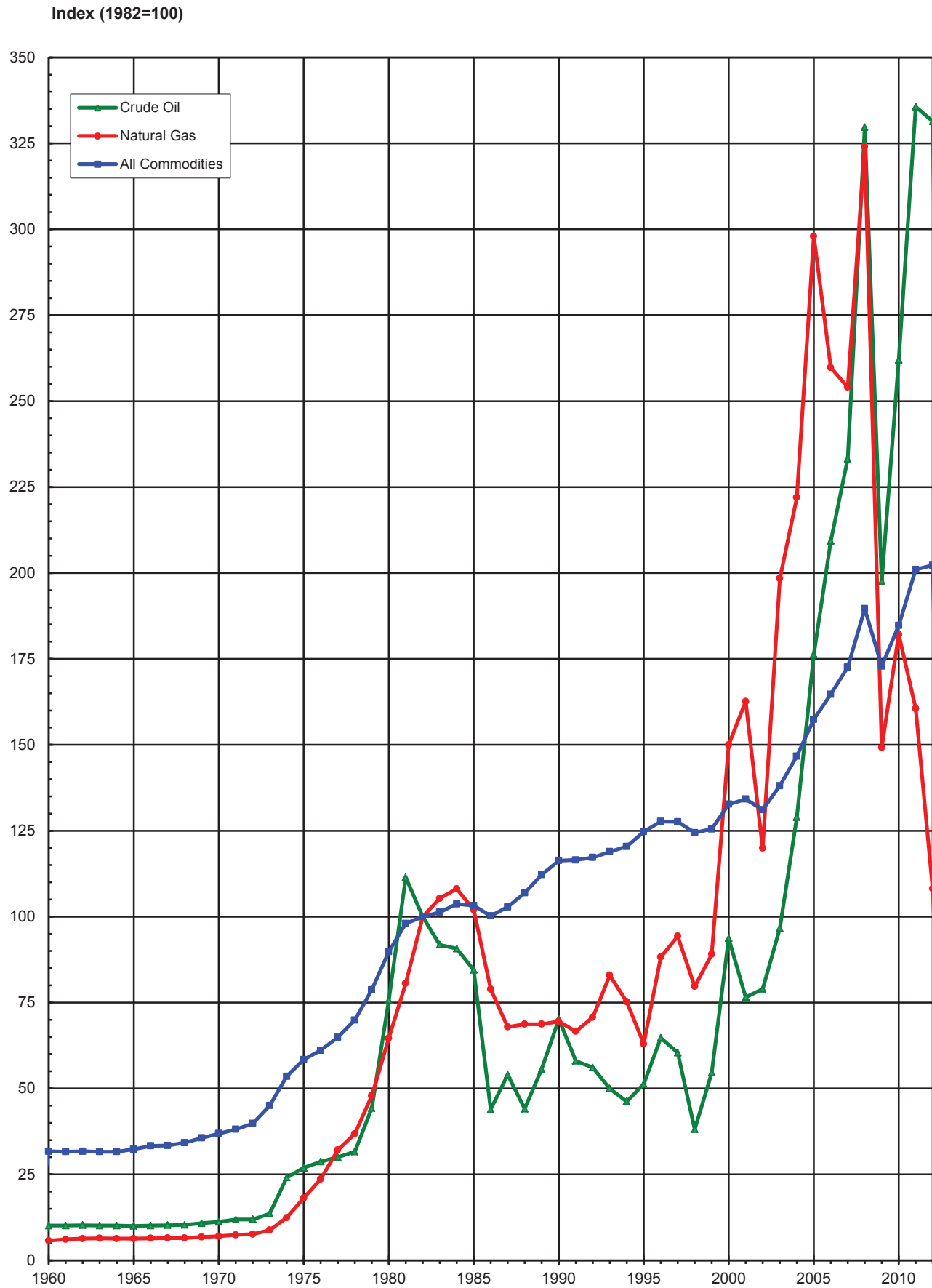


UNITED STATES ROTARY RIG SURVEY

Year	Rigs Available	Rigs Active	Utilization Rate(%)	Depth Capacity of Available Rigs (ft)					Land Rigs Available	Offshore Rigs Available
				Over 16,000	13,000 to 15,999	10,000 to 12,999	6,000 to 9,999	3,000 to 5,999		
1960	3,077	2,150	69.9	210	378	477	1,033	979	2,837	240
1961	2,774	2,064	74.4	193	356	399	937	889	2,535	239
1962	2,555	1,835	71.8	218	307	471	823	736	2,300	255
1963	2,781	2,002	72.0	272	298	479	964	768	2,514	267
1964	2,752	2,048	74.4	305	251	463	1,029	704	2,479	273
1965	2,614	1,934	74.0	322	242	449	936	665	2,343	271
1966	2,524	1,714	67.9	350	206	461	863	644	2,259	265
1967	2,408	1,573	65.3	375	199	435	776	623	2,114	294
1968	2,111	1,508	71.4	372	185	381	680	493	1,825	286
1969	2,060	1,649	80.0	366	188	352	626	528	1,827	233
1970	1,898	1,331	70.1	343	219	322	580	434	1,662	236
1971	1,859	1,308	70.4	361	198	329	535	436	1,592	267
1972	1,768	1,381	78.1	397	171	301	490	409	1,551	217
1973	1,767	1,473	83.4	413	164	318	517	355	1,570	197
1974	1,904	1,769	92.9	425	214	339	529	397	1,725	179
1975	2,028	1,877	92.6	448	225	380	579	396	1,839	189
1976	2,204	1,979	89.8	498	239	366	633	468	1,964	240
1977	2,482	2,399	96.7	577	274	461	628	542	2,186	296
1978	2,851	2,785	97.7	693	313	565	723	557	2,524	327
1979	3,182	2,874	90.3	872	350	631	783	546	2,802	380
1980	3,682	3,542	96.2	1,069	419	704	885	605	3,265	417
1981	4,803	4,703	97.9	1,405	595	950	1,080	773	4,316	487
1982	5,644	3,225	57.1	1,717	717	1,104	1,285	821	5,139	505
1983	5,273	2,539	48.2	1,639	662	993	1,233	746	4,832	441
1984	4,580	3,090	67.5	1,408	591	933	1,077	571	4,102	478
1985	4,409	2,625	59.5	1,332	570	894	1,084	529	3,940	469
1986	3,993	1,052	26.3	1,220	496	789	971	517	3,573	420
1987	3,331	1,388	41.7	991	427	637	841	435	2,956	375
1988	2,752	1,532	55.7	771	365	529	751	336	2,429	323
1989	2,542	1,444	56.8	704	329	515	700	294	2,249	293
1990	2,320	1,677	72.3	620	313	488	623	276	2,061	259
1991	2,251	1,485	66.0	590	304	491	603	263	2,006	245
1992	1,996	1,192	59.7	490	267	441	553	245	1,809	187
1993	1,853	1,279	69.0	455	240	420	513	225	1,660	193
1994	1,841	1,221	66.3	473	245	411	499	213	1,613	228
1995	1,729	1,232	71.3	465	239	393	453	179	1,500	229
1996	1,649	1,263	76.6	450	221	384	435	159	1,425	224
1997	1,665	1,447	86.9	476	230	387	421	151	1,428	237
1998	1,705	1,305	76.5	518	238	391	412	146	1,449	256
1999	1,644	860	52.3	509	232	368	395	140	1,384	260
2000	1,636	1,215	74.3	526	231	355	381	143	1,370	266
2001	1,722	1,593	92.5	585	254	373	371	139	1,452	270
2002	...	...	...	...	...	...	...	...	...	...
2003	1,719	1,334	77.6	595	274	368	359	123	1,488	231
2004	1,988	1,674	84.2	654	295	473	435	131	1,736	252
2005	2,026	1,920	94.8	626	311	472	474	143	1,813	213
2006	2,298	2,200	95.7	681	384	562	521	150	2,100	198
2007	2,817	2,402	85.3	800	508	658	609	242	2,598	219
2008	3,076	2,541	82.6	849	605	741	621	260	2,871	205
2009	3,169	1,264	39.9	927	670	754	577	241	2,971	198
2010	3,153	2,024	64.2	989	662	721	555	226	2,938	215
2011	3,081	2,059	66.8	1,021	646	667	552	195	2,885	196
2012	3,006	2,248	74.8	1,103	606	616	496	185	2,828	178
2013	3,055	2,055	67.3	1,267	551	600	469	168	2,877	178
2014	3,254	2,269	69.7	1,427	567	599	480	181	3,062	192
2015	2,371	1,210	51.0	1,232	386	320	313	120	2,193	178
2016	2,100	457	21.8	1,269	393	331	211	45	2,249	119

¹ 2002 Census was not taken

UNITED STATES WHOLESALE PRICE INDICES (1982 = 100)



UNITED STATES WHOLESALE PRICE INDICES

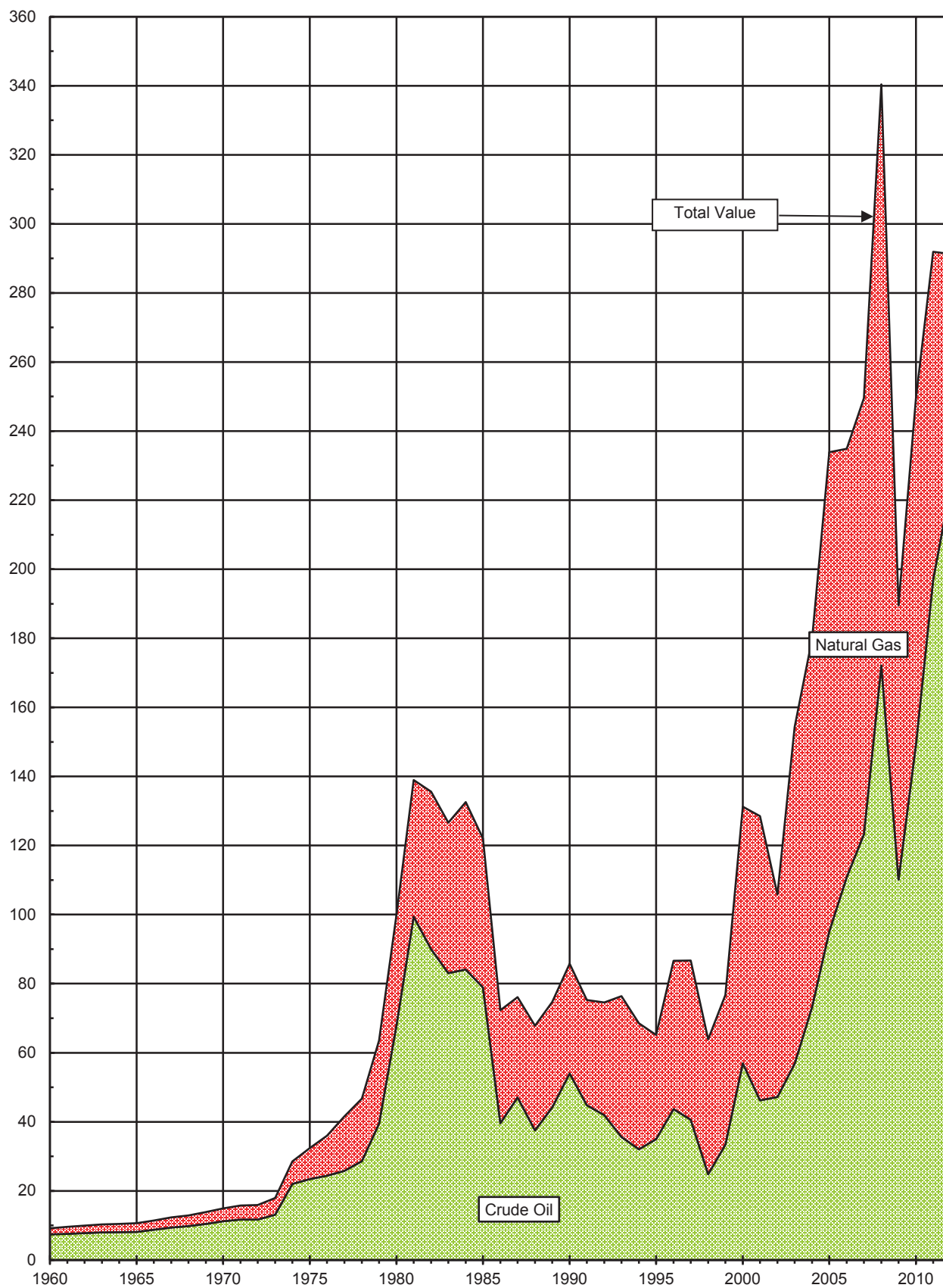
(1982 = 100)

Year	Crude Oil Price Index	Natural Gas Price Index	Petroleum Products, Refined Price Index	Producer ¹ Price Index All Commodities
1960	10.1	5.7	12.5	31.7
1961	10.1	6.1	12.8	31.6
1962	10.2	6.3	12.6	31.7
1963	10.1	6.4	12.5	31.6
1964	10.1	6.3	11.9	31.6
1965	10.0	6.3	12.3	32.3
1966	10.1	6.4	12.8	33.3
1967	10.2	6.5	13.1	33.4
1968	10.3	6.5	12.9	34.2
1969	10.8	6.8	13.1	35.6
1970	11.2	7.0	13.3	36.9
1971	11.9	7.4	14.1	38.1
1972	11.9	7.6	14.3	39.8
1973	13.6	8.8	16.9	45.0
1974	24.1	12.4	29.3	53.5
1975	26.9	18.1	33.8	58.4
1976	28.7	23.6	36.3	61.1
1977	30.0	32.1	40.5	64.9
1978	31.6	36.8	42.2	69.9
1979	44.3	47.9	58.4	78.7
1980	75.7	64.6	88.6	89.8
1981	111.4	80.6	105.9	98.0
1982	100.0	100.0	100.0	100.0
1983	91.8	105.3	89.9	101.3
1984	90.7	108.1	87.4	103.7
1985	84.5	102.0	83.2	103.2
1986	43.9	78.9	53.2	100.2
1987	54.0	67.9	56.8	102.8
1988	44.1	68.7	53.9	106.9
1989	55.6	68.7	61.2	112.2
1990	70.2	69.5	74.8	116.3
1991	58.0	66.6	67.2	116.5
1992	56.1	70.7	64.7	117.2
1993	50.0	82.9	62.0	118.9
1994	46.2	75.2	59.1	120.4
1995	51.3	63.0	60.8	124.7
1996	64.7	88.2	70.1	127.7
1997	60.4	94.3	68.0	127.6
1998	38.1	79.7	51.3	124.4
1999	54.6	89.0	60.9	125.5
2000	93.7	150.0	91.3	132.7
2001	76.6	162.6	85.3	134.2
2002	78.9	119.9	79.5	131.1
2003	96.6	198.4	97.7	138.1
2004	128.9	222.0	119.9	146.7
2005	176.3	298.0	165.0	157.4
2006	209.3	259.8	193.2	164.7
2007	233.2	254.1	214.2	172.6
2008	329.7	324.0	271.7	189.6
2009	197.6	149.2	175.5	172.9
2010	262.0	182.1	225.2	184.7
2011	335.7	160.6	298.9	201.0
2012	331.4	108.1	306.5	202.2

¹ Prior to 1977, Wholesale Price Index.

VALUE OF DOMESTIC PRODUCTION AT WELLS IN THE UNITED STATES

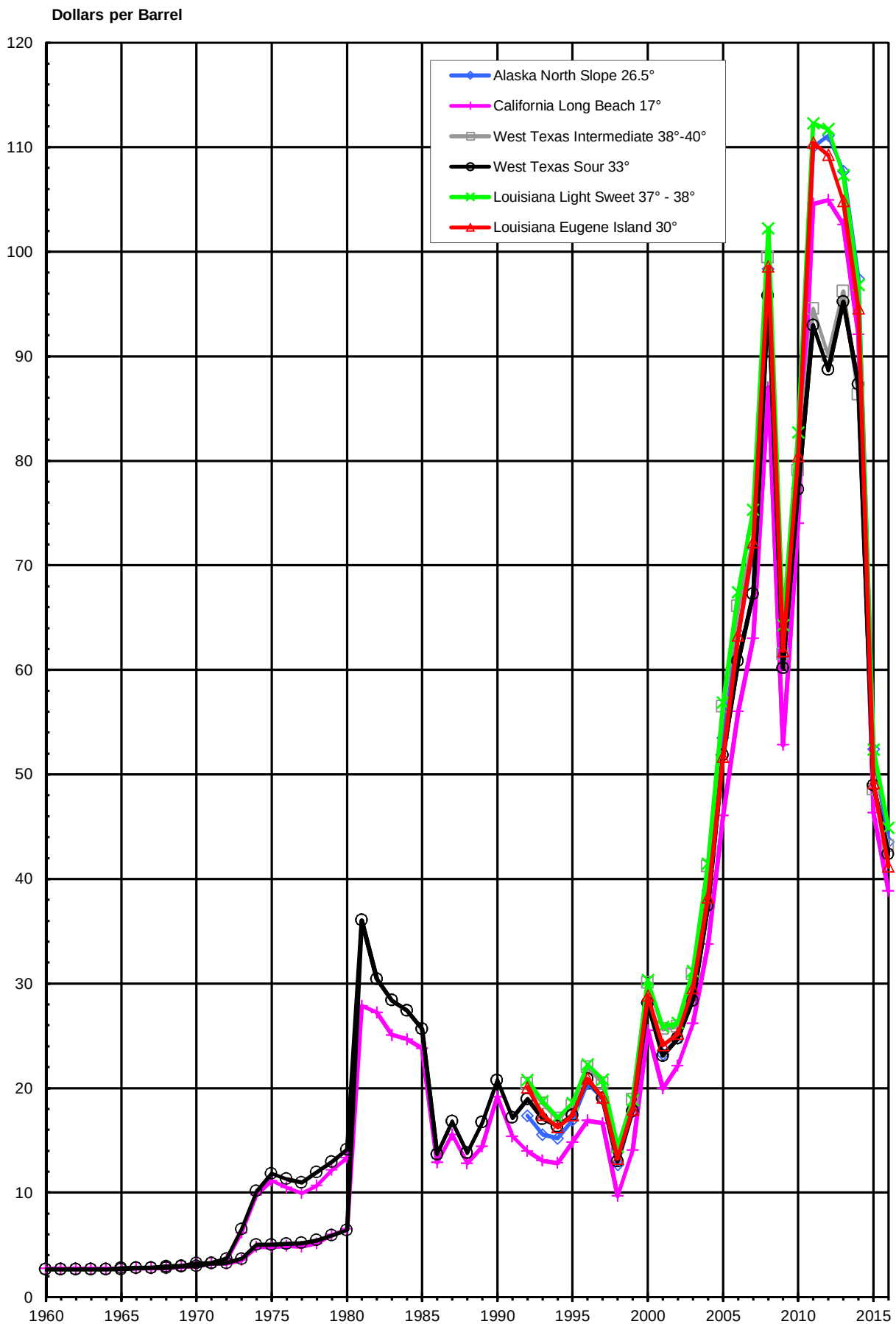
Billions of Dollars



VALUE OF DOMESTIC PRODUCTION AT WELLS IN THE UNITED STATES

Year	Crude Oil			Natural Gas			Total Value (M\$)
	Production (Mbbl)	Wellhead Price (\$/bbl)	Value (M\$)	Production (MMcf)	Wellhead Price (\$/Mcf)	Value (M\$)	
1960	2,574,933	2.88	7,415,807	12,771,038	0.140	1,787,945	9,203,752
1961	2,621,758	2.89	7,576,881	13,254,025	0.151	2,001,358	9,578,238
1962	2,676,189	2.90	7,760,948	13,876,622	0.155	2,150,876	9,911,825
1963	2,752,723	2.89	7,955,369	14,746,659	0.158	2,329,972	10,285,342
1964	2,786,822	2.88	8,026,047	15,462,143	0.154	2,381,170	10,407,217
1965	2,848,514	2.86	8,146,750	16,039,753	0.156	2,502,201	10,648,952
1966	3,027,763	2.88	8,719,957	17,206,598	0.157	2,701,436	11,421,393
1967	3,215,742	2.92	9,389,967	18,171,325	0.160	2,907,412	12,297,379
1968	3,329,042	2.94	9,787,383	19,322,400	0.161	3,110,906	12,898,290
1969	3,371,751	3.09	10,418,711	20,698,240	0.167	3,456,606	13,875,317
1970	3,517,450	3.18	11,185,491	21,920,642	0.171	3,748,430	14,933,921
1971	3,453,914	3.39	11,708,768	22,493,012	0.182	4,093,728	15,802,497
1972	3,455,368	3.39	11,713,698	22,531,698	0.186	4,190,896	15,904,593
1973	3,360,903	3.89	13,073,913	22,647,549	0.216	4,891,871	17,965,783
1974	3,202,585	6.87	22,001,759	21,600,522	0.304	6,566,559	28,568,318
1975	3,056,779	7.67	23,445,495	20,108,661	0.445	8,948,354	32,393,849
1976	2,976,180	8.19	24,374,914	19,952,438	0.580	11,572,414	35,947,328
1977	3,009,265	8.57	25,789,401	20,025,463	0.790	15,820,116	41,609,517
1978	3,178,216	9.00	28,603,944	19,974,033	0.905	18,076,500	46,680,444
1979	3,121,310	12.64	39,453,358	20,471,260	1.178	24,115,144	63,568,503
1980	3,146,519	21.59	67,933,345	20,179,724	1.588	32,045,402	99,978,747
1981	3,128,624	31.77	99,396,384	19,955,823	1.982	39,552,441	138,948,826
1982	3,156,715	28.52	90,029,512	18,519,675	2.460	45,558,401	135,587,912
1983	3,170,999	26.19	83,048,464	16,822,144	2.590	43,569,353	126,617,817
1984	3,249,696	25.88	84,102,132	18,229,638	2.660	48,490,837	132,592,970
1985	3,274,553	24.09	78,883,982	17,197,999	2.510	43,166,977	122,050,959
1986	3,168,252	12.51	39,634,833	16,858,675	1.940	32,705,830	72,340,662
1987	3,053,488	15.40	47,023,715	17,432,901	1.670	29,112,945	76,136,660
1988	2,983,172	12.58	37,528,304	17,918,465	1.690	30,282,206	67,810,510
1989	2,783,588	15.86	44,147,706	18,095,147	1.690	30,580,798	74,728,504
1990	2,694,517	20.03	53,971,176	18,593,792	1.710	31,795,384	85,766,560
1991	2,711,415	16.54	44,846,804	18,532,439	1.640	30,393,200	75,240,004
1992	2,624,632	15.99	41,967,866	18,711,808	1.740	32,558,546	74,526,412
1993	2,499,033	14.25	35,611,220	19,981,915	2.040	40,763,107	76,374,327
1994	2,431,476	13.19	32,071,168	19,709,525	1.850	36,462,621	68,533,790
1995	2,394,268	14.62	35,004,198	19,506,474	1.546	30,157,009	65,161,207
1996	2,366,017	18.46	43,676,674	19,812,241	2.168	42,952,938	86,629,612
1997	2,354,831	17.23	40,573,738	19,866,093	2.322	46,129,068	86,702,806
1998	2,281,919	10.87	24,804,460	19,961,348	1.958	39,084,319	63,888,779
1999	2,146,732	15.56	33,403,150	19,804,848	2.188	43,333,007	76,736,157
2000	2,130,707	26.72	56,932,491	20,197,511	3.681	74,347,038	131,279,529
2001	2,117,511	21.84	46,246,440	20,570,295	4.000	82,281,180	128,527,620
2002	2,096,588	22.51	47,194,196	19,884,780	2.950	58,660,101	105,854,297
2003	2,061,995	27.56	56,828,582	19,974,360	4.880	97,474,877	154,303,459
2004	1,991,394	36.77	73,223,557	19,517,491	5.460	106,565,501	179,789,058
2005	1,892,095	50.28	95,134,537	18,927,095	7.330	138,735,606	233,870,143
2006	1,856,606	59.69	110,820,812	19,409,674	6.390	124,027,817	234,848,629
2007	1,853,243	66.52	123,277,724	20,196,346	6.250	126,227,163	249,504,887
2008	1,830,416	94.04	172,132,321	21,112,053	7.970	168,263,062	340,395,383
2009	1,954,241	56.35	110,121,480	21,647,936	3.670	79,447,925	189,569,405
2010	1,998,583	74.71	149,314,136	22,381,873	4.480	100,270,791	249,584,927
2011	2,057,608	95.73	196,974,814	24,036,352	3.950	94,943,590	291,918,404
2012	2,370,114	94.52	224,023,175	25,283,278	2.660	67,253,519	291,276,695

UNITED STATES POSTED PRICE PER BARREL OF PETROLEUM AT WELLS, BY GRADES



UNITED STATES POSTED PRICE PER BARREL OF PETROLEUM AT WELLS, BY GRADES
(Yearly Average)

Year	Alaska North Slope 26.5° Gravity	California¹ Long Beach 17° Gravity	West Texas Intermediate 38°-40° Gravity	West Texas² Sour 33° Gravity	Louisiana Light Sweet 37° - 38° Gravity	Louisiana Eugene Island 30° Gravity
1960	...	2.74	...	2.65	...	...
1961	...	2.74	...	2.65	...	...
1962	...	2.74	...	2.65	...	...
1963	...	2.74	...	2.65	...	...
1964	...	2.74	...	2.65	...	...
1965	...	2.74	...	2.65	...	...
1966	...	2.74	...	2.78	...	...
1967	...	2.74	...	2.80	...	...
1968	...	2.74	...	2.80	...	...
1969	...	2.90	...	2.93	...	...
1970	...	2.96	...	2.97	...	...
1971	...	3.19	...	3.22	...	...
1972	...	3.19	...	3.25	...	...
1973 Old Oil	...	3.53	...	3.66	...	...
1973 New Oil ³	...	6.14	...	6.48	...	...
1974 Old Oil	...	4.79	...	5.00	...	...
1974 New Oil ³	...	9.78	...	10.11	...	...
1975 Old Oil	...	4.79	...	5.00	...	...
1975 New Oil ³	...	11.14	...	11.80	...	...
1976 Lower Tier	...	4.88	...	5.10	...	...
1976 Upper Tier	...	10.49	...	11.29	...	...
1977 Lower Tier	...	4.82	...	5.16	...	...
1977 Upper Tier	...	9.94	...	10.96	...	...
1978 Lower Tier	...	5.13	...	5.43	...	...
1978 Upper Tier	...	10.66	...	11.95	...	...
1979 Lower Tier	...	5.96	...	5.88	...	...
1979 Upper Tier	...	12.15	...	12.94	...	...
1980 Lower Tier	...	6.52	...	6.41	...	...
1980 Upper Tier	...	13.32	...	14.11	...	...
1981	...	27.86	...	36.03	...	...
1982	...	27.22	...	30.42	...	...
1983	...	25.06	...	28.38	...	...
1984	...	24.66	...	27.41	...	...
1985	...	23.80	...	25.65	...	...
1986	...	12.86	...	13.66	...	...
1987	...	15.56	...	16.79	...	...
1988	...	12.80 ³	...	13.80	...	...
1989	...	14.40	...	16.69	...	...
1990	...	19.16	...	20.74	...	...
1991	...	15.38	...	17.16	...	...
1992	17.34	13.94	20.43	18.92	20.75	20.07
1993	15.55	13.04	18.53	17.03	18.72	17.41
1994	15.20	12.83	17.07	16.32	17.21	16.25
1995	16.93	14.80	18.27	17.39	18.56	17.37
1996	20.45	16.88	22.01	20.84	22.25	20.90
1997	18.99	16.62	20.46	19.02	20.83	19.09
1998	12.67	9.68	14.27	12.97	14.35	13.24
1999	17.73	14.04	18.89	17.77	18.84	17.93
2000	28.28	25.51	30.06	28.13	30.31	28.85
2001	23.21	19.96	25.63	23.08	25.87	24.10
2002	24.72	22.12	25.88	24.72	26.22	25.17
2003	29.64	26.17	30.85	28.36	31.20	29.58
2004	38.89	33.74	41.17	37.45	41.47	38.24
2005	53.50	46.07	56.46	51.82	56.88	51.70
2006	63.53	56.01	66.09	60.84	67.44	63.27
2007	71.68	63.02	72.35	67.27	75.32	72.23
2008	98.35	87.00	99.42	95.77	102.25	98.56
2009	62.28	52.80	61.46	60.18	64.28	61.81
2010	79.89	74.02	79.08	77.24	82.73	80.46
2011	110.01	104.56	94.52	92.96	112.28	110.42
2012	111.11	104.92	90.06	88.70	111.72	109.24
2013	107.68	102.59	96.19	95.22	107.34	104.84
2014	97.42	92.07	86.32	87.30	96.83	94.55
2015	52.43	46.31	48.52	48.95	52.37	49.18
2016	43.53	38.84	43.13	42.36	44.88	41.17

¹ API gravity for 1960–1991 27°-27.9°.² API gravity for 1960–1991 30°-30.9°.³ Estimated.

POPULATION AND PER CAPITA CONSUMPTION – ALL OILS IN THE UNITED STATES

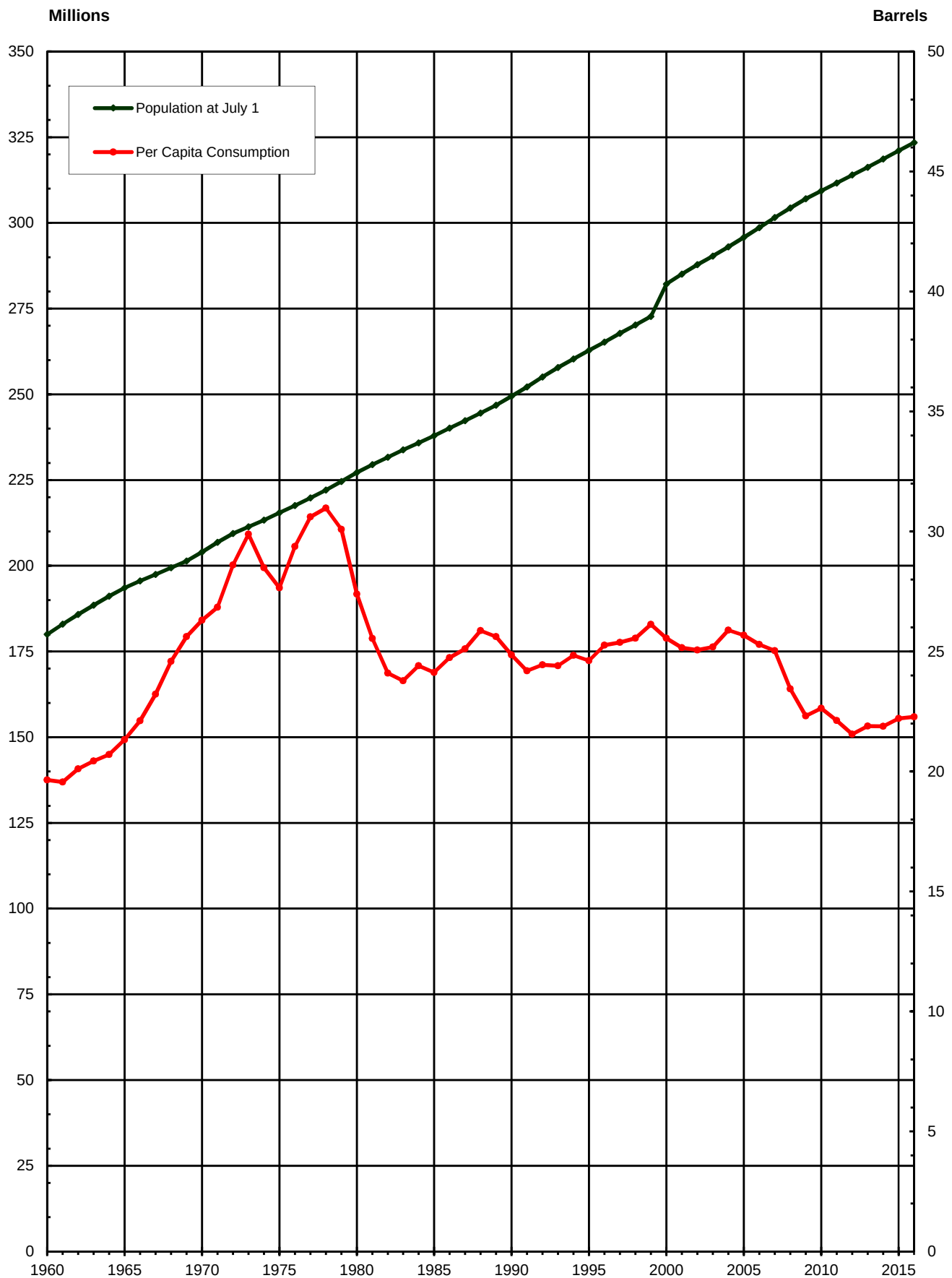


Chart 76

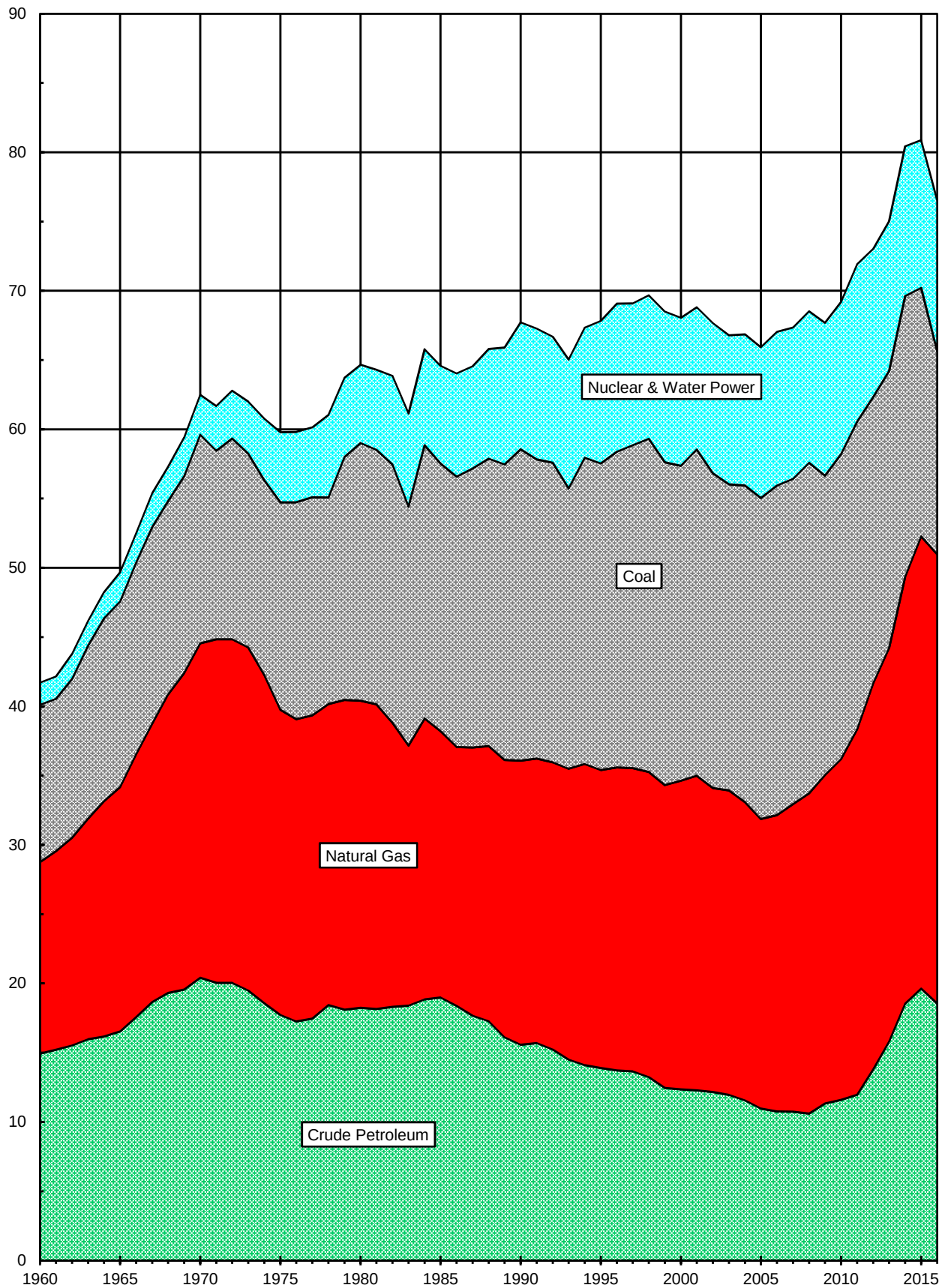
**POPULATION AND PER CAPITA CONSUMPTION – ALL OILS
IN THE UNITED STATES**

Year	Population¹ (M)	Domestic Demand (Mbbbl)	Per Capita Consumption (bbl)
1960	179,979	3,535,805	19.6
1961	182,992	3,579,203	19.6
1962	185,771	3,735,593	20.1
1963	188,483	3,851,225	20.4
1964	191,141	3,958,503	20.7
1965	193,526	4,125,867	21.3
1966	195,576	4,325,069	22.1
1967	197,457	4,584,526	23.2
1968	199,399	4,901,789	24.6
1969	201,385	5,159,930	25.6
1970	203,984	5,364,473	26.3
1971	206,827	5,552,560	26.8
1972	209,395	5,990,316	28.6
1973	211,357	6,317,303	29.9
1974	213,342	6,078,239	28.5
1975	215,465	5,957,515	27.6
1976	217,563	6,390,750	29.4
1977	219,760	6,727,468	30.6
1978	222,095	6,879,017	31.0
1979	224,567	6,757,077	30.1
1980	227,225	6,224,308	27.4
1981	229,466	5,861,058	25.5
1982	231,664	5,582,938	24.1
1983	233,792	5,559,364	23.8
1984	235,825	5,755,575	24.4
1985	237,924	5,740,143	24.1
1986	240,133	5,942,429	24.7
1987	242,289	6,082,742	25.1
1988	244,499	6,325,692	25.9
1989	246,819	6,323,681	25.6
1990	249,464	6,200,801	24.9
1991	252,153	6,100,550	24.2
1992	255,030	6,234,025	24.4
1993	257,783	6,291,407	24.4
1994	260,327	6,467,128	24.8
1995	262,803	6,469,475	24.6
1996	265,229	6,701,059	25.3
1997	267,784	6,796,411	25.4
1998	270,248	6,904,756	25.5
1999	272,691	7,124,558	26.1
2000	282,172	7,210,594	25.6
2001	285,082	7,171,777	25.2
2002	287,804	7,212,876	25.1
2003	290,326	7,312,229	25.2
2004	293,046	7,587,601	25.9
2005	295,753	7,592,789	25.7
2006	298,593	7,550,907	25.3
2007	301,580	7,548,338	25.0
2008	304,375	7,136,255	23.4
2009	307,007	6,851,561	22.3
2010	309,338	7,000,745	22.6
2011	311,644	6,893,644	22.1
2012	313,993	6,766,117	21.5
2013	316,235	6,922,907	21.9
2014	318,623	6,971,530	21.9
2015	321,040	7,129,732	22.2
2016	323,406	7,205,528	22.3

¹ Total population residing in U.S. as of July 1, from 1960–1979 includes armed forces overseas.
Population for all other years excludes armed forces overseas.

UNITED STATES ENERGY PRODUCTION BY SOURCE

Quadrillion B.T.U.



UNITED STATES ENERGY PRODUCTION BY SOURCE

(Trillions of British Thermal Units)

Year	Crude Petroleum	Natural ¹ Gas	Electricity		Bituminous Coal and Lignite	Anthracite	Total ²
			Water Power	Nuclear Power			
1960	14,935	13,822	1,578	5	10,886	478	41,704
1961	15,206	14,336	1,605	17	10,558	443	42,165
1962	15,522	15,004	1,774	23	11,034	429	43,786
1963	15,966	15,941	1,741	33	12,024	464	46,169
1964	16,164	16,989	1,861	34	12,759	436	48,243
1965	16,521	17,652	2,059	38	13,017	378	49,665
1966	17,561	18,984	2,062	57	13,507	329	52,500
1967	18,651	20,087	2,347	80	13,904	311	55,380
1968	19,308	21,548	2,349	130	13,664	291	57,290
1969	19,556	22,838	2,648	146	13,957	266	59,411
1970	20,401	24,154	2,630	229	14,820	247	62,481
1971	20,033	24,805	2,825	404	13,385	222	61,674
1972	20,041	24,792	2,866	576	14,319	181	62,775
1973	19,493	24,756	2,861	910	13,992	... ³	62,012
1974	18,575	23,681	3,177	1,272	14,074	... ³	60,779
1975	17,729	22,014	3,155	1,900	14,989	... ³	59,787
1976	17,262	21,807	2,976	2,111	15,654	... ³	59,810
1977	17,454	21,892	2,333	2,702	15,755	... ³	60,136
1978	18,434	21,730	2,937	3,024	14,910	... ³	61,035
1979	18,104	22,362	2,931	2,776	17,540	... ³	63,713
1980	18,249	22,162	2,900	2,739	18,598	... ³	64,648
1981	18,146	22,006	2,758	3,008	18,377	... ³	64,295
1982	18,309	20,510	3,266	3,131	18,639	... ³	63,855
1983	18,392	18,777	3,527	3,203	17,247	... ³	61,146
1984	18,848	20,281	3,386	3,553	19,719	... ³	65,787
1985	18,992	19,221	2,970	4,076	19,325	... ³	64,584
1986	18,376	18,690	3,071	4,380	19,509	... ³	64,026
1987	17,675	19,351	2,635	4,754	20,141	... ³	64,556
1988	17,279	19,859	2,334	5,587	20,738	... ³	65,797
1989	16,117	20,005	2,837	5,602	21,346	... ³	65,907
1990	15,571	20,501	3,046	6,104	22,488	... ³	67,710
1991	15,701	20,535	3,021	6,422	21,594	... ³	67,273
1992	15,223	20,738	2,617	6,479	21,629	... ³	66,686
1993	14,494	20,992	2,892	6,410	20,249	... ³	65,037
1994	14,103	21,739	2,683	6,694	22,111	... ³	67,330
1995	13,887	21,524	3,205	7,075	22,130	... ³	67,821
1996	13,723	21,874	3,590	7,087	22,790	... ³	69,064
1997	13,658	21,889	3,640	6,597	23,310	... ³	69,094
1998	13,235	22,033	3,297	7,068	24,045	... ³	69,678
1999	12,451	21,869	3,268	7,610	23,295	... ³	68,493
2000	12,358	22,273	2,811	7,862	22,735	... ³	68,039
2001	12,282	22,713	2,242	8,029	23,547	... ³	68,813
2002	12,160	21,941	2,689	8,145	22,732	... ³	67,667
2003	11,960	21,979	2,793	7,960	22,094	... ³	66,786
2004	11,550	21,540	2,688	8,223	22,852	... ³	66,853
2005	10,974	20,890	2,703	8,161	23,185	... ³	65,913
2006	10,767	21,378	2,869	8,215	23,790	... ³	67,019
2007	10,741	22,195	2,446	8,459	23,493	... ³	67,334
2008	10,609	23,122	2,511	8,426	23,851	... ³	68,519
2009	11,323	23,713	2,669	8,355	21,624	... ³	67,684
2010	11,591	24,587	2,539	8,434	22,038	... ³	69,189
2011	11,946	26,376	3,103	8,269	22,221	... ³	71,915
2012	13,791	27,856	2,629	8,062	20,677	... ³	73,015
2013	15,806	28,391	2,562	8,244	20,001	... ³	75,004
2014	18,531	30,814	2,467	8,338	20,286	... ³	80,436
2015	19,632	32,634	2,321	8,337	17,946	... ³	80,870
2016	18,548	32,419	2,472	8,427	14,667	... ³	76,533

¹ Beginning in 1965 and subsequent years, new pressure base for computing Btu content of natural gas (wet). Includes natural gas plant liquids.² Excludes small amounts of geothermal power and electricity produced from wood and waste.³ Included with bituminous coal and lignite.

NOTE: The data for crude petroleum, bituminous coal, lignite, and anthracite, in 1965 and subsequent years, is not strictly comparable to earlier data because of the application of new weighted average heat values.

PERCENTAGE OF ENERGY CONSUMPTION BY SOURCE AND PER CAPITA CONSUMPTION IN THE UNITED STATES

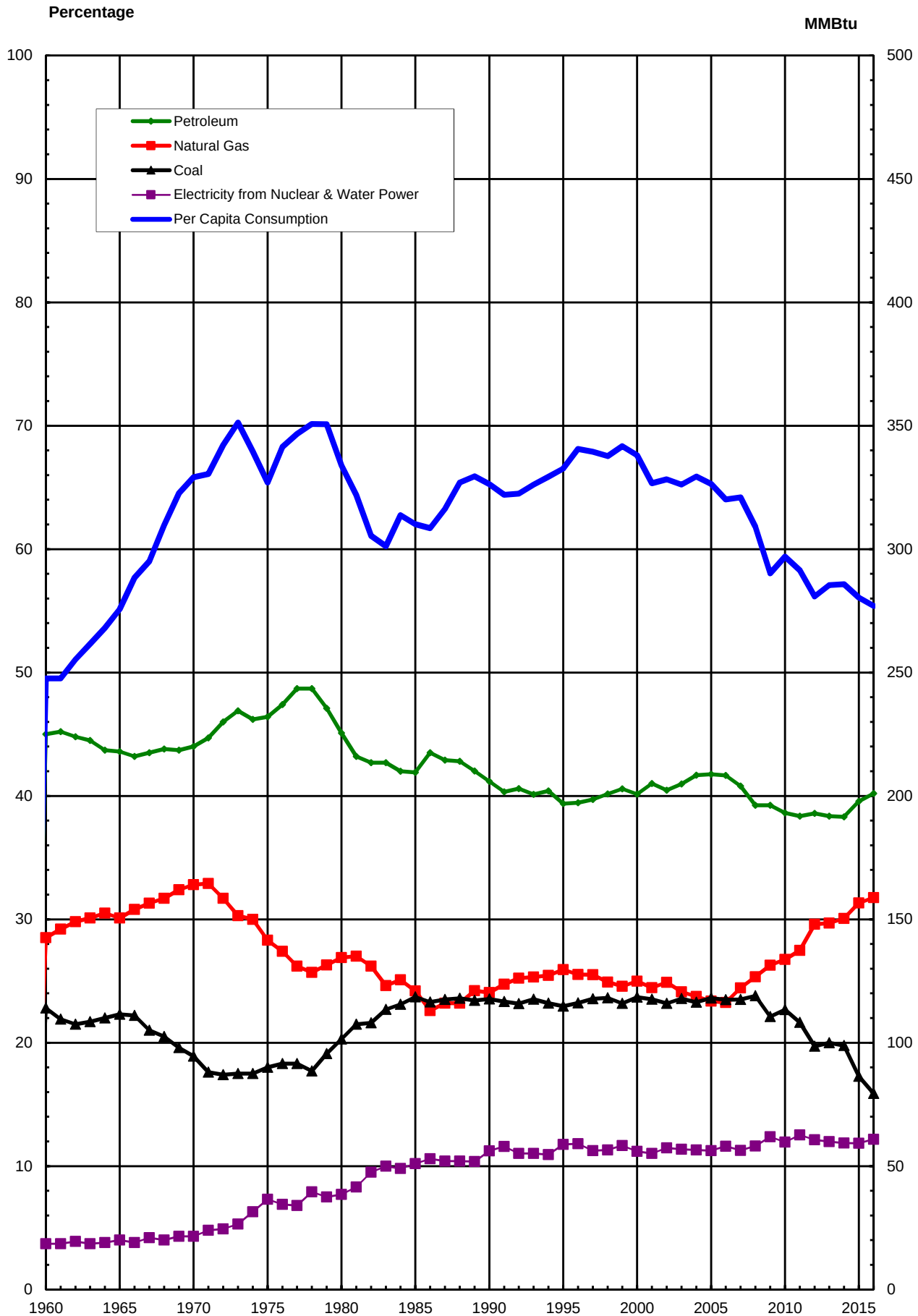


Chart 78

**PERCENTAGE OF ENERGY CONSUMPTION BY SOURCE
IN THE UNITED STATES**

Year	Petroleum ¹	Natural Gas (Dry)	Electricity			Coal ²	Total	Calculated Consumption ³	
			Water Power	Nuclear				Total (Trillion Btu's)	Per Capita (MMBtu's)
1960	45.0	28.5	3.7	...		22.8	100.0	44,569	247.6
1961	45.2	29.2	3.7	...		21.9	100.0	45,319	247.7
1962	44.8	29.8	3.8	0.1		21.5	100.0	47,422	255.3
1963	44.5	30.1	3.6	0.1		21.7	100.0	49,308	261.6
1964	43.7	30.5	3.7	0.1		22.0	100.0	51,240	268.1
1965	43.6	30.1	3.9	0.1		22.3	100.0	53,343	275.6
1966	43.2	30.8	3.7	0.1		22.2	100.0	56,412	288.4
1967	43.5	31.3	4.0	0.2		21.0	100.0	58,265	295.1
1968	43.8	31.7	3.8	0.2		20.5	100.0	61,763	309.7
1969	43.7	32.4	4.1	0.2		19.6	100.0	64,979	322.7
1970	44.0	32.8	4.0	0.3		18.9	100.0	67,143	329.2
1971	44.7	32.9	4.2	0.6		17.6	100.0	68,348	330.5
1972	46.0	31.7	4.1	0.8		17.4	100.0	71,643	342.1
1973	46.9	30.3	4.1	1.2		17.5	100.0	74,243	351.3
1974	46.2	30.0	4.6	1.7		17.5	100.0	72,431	339.5
1975	46.4	28.3	4.6	2.7		18.0	100.0	70,461	327.0
1976	47.4	27.4	4.1	2.8		18.3	100.0	74,281	341.4
1977	48.7	26.2	3.3	3.5		18.3	100.0	76,192	346.7
1978	48.7	25.7	4.0	3.9		17.7	100.0	77,896	350.7
1979	47.1	26.3	4.0	3.5		19.1	100.0	78,745	350.7
1980	45.1	26.9	4.1	3.6		20.3	100.0	75,876	333.9
1981	43.2	27.0	4.2	4.1		21.5	100.0	73,879	322.0
1982	42.7	26.2	5.1	4.4		21.6	100.0	70,761	305.4
1983	42.7	24.6	5.5	4.5		22.7	100.0	70,407	301.2
1984	42.0	25.1	5.0	4.8		23.1	100.0	73,982	313.7
1985	41.9	24.2	4.6	5.6		23.7	100.0	73,781	310.1
1986	43.5	22.6	4.6	6.0		23.3	100.0	74,082	308.5
1987	42.9	23.2	4.0	6.4		23.5	100.0	76,640	316.3
1988	42.8	23.2	3.3	7.1		23.6	100.0	79,943	327.0
1989	42.0	24.2	3.5	6.9		23.4	100.0	81,329	329.5
1990	41.2	24.1	3.7	7.5		23.5	100.0	81,410	326.3
1991	40.3	24.7	3.7	7.9		23.3	100.0	81,188	322.0
1992	40.6	25.2	3.2	7.8		23.2	100.0	82,236	322.5
1993	40.1	25.3	3.4	7.6		23.5	100.0	84,070	326.1
1994	40.4	25.5	3.1	7.8		23.2	100.0	85,722	329.3
1995	39.4	25.9	3.7	8.1		23.0	100.0	87,399	332.6
1996	39.4	25.5	4.0	7.8		23.2	100.0	90,333	340.6
1997	39.7	25.5	4.0	7.2		23.5	100.0	90,899	339.4
1998	40.2	24.9	3.6	7.7		23.6	100.0	91,248	337.6
1999	40.6	24.6	3.5	8.2		23.2	100.0	93,174	341.7
2000	40.1	25.0	2.9	8.2		23.7	100.0	95,396	338.1
2001	41.0	24.4	2.4	8.6		23.5	100.0	93,148	326.7
2002	40.5	24.9	2.8	8.6		23.2	100.0	94,474	328.3
2003	41.0	24.1	2.9	8.4		23.6	100.0	94,695	326.2
2004	41.7	23.7	2.8	8.5		23.3	100.0	96,527	329.4
2005	41.8	23.4	2.8	8.5		23.6	100.0	96,529	326.4
2006	41.7	23.3	3.0	8.6		23.5	100.0	95,594	320.1
2007	40.8	24.4	2.5	8.7		23.5	100.0	96,806	321.0
2008	39.2	25.3	2.7	9.0		23.8	100.0	94,074	309.1
2009	39.2	26.3	3.0	9.4		22.1	100.0	89,090	290.2
2010	38.6	26.7	2.8	9.2		22.7	100.0	91,870	297.0
2011	38.4	27.5	3.4	9.1		21.6	100.0	90,813	291.4
2012	38.6	29.6	3.0	9.1		19.7	100.0	88,170	280.8
2013	38.4	29.7	2.8	9.1		20.0	100.0	90,269	285.4
2014	38.3	30.1	2.7	9.2		19.8	100.0	91,060	285.8
2015	39.6	31.3	2.6	9.3		17.3	100.0	90,003	280.3
2016	40.2	31.8	2.8	9.4		15.9	100.0	89,587	277.0

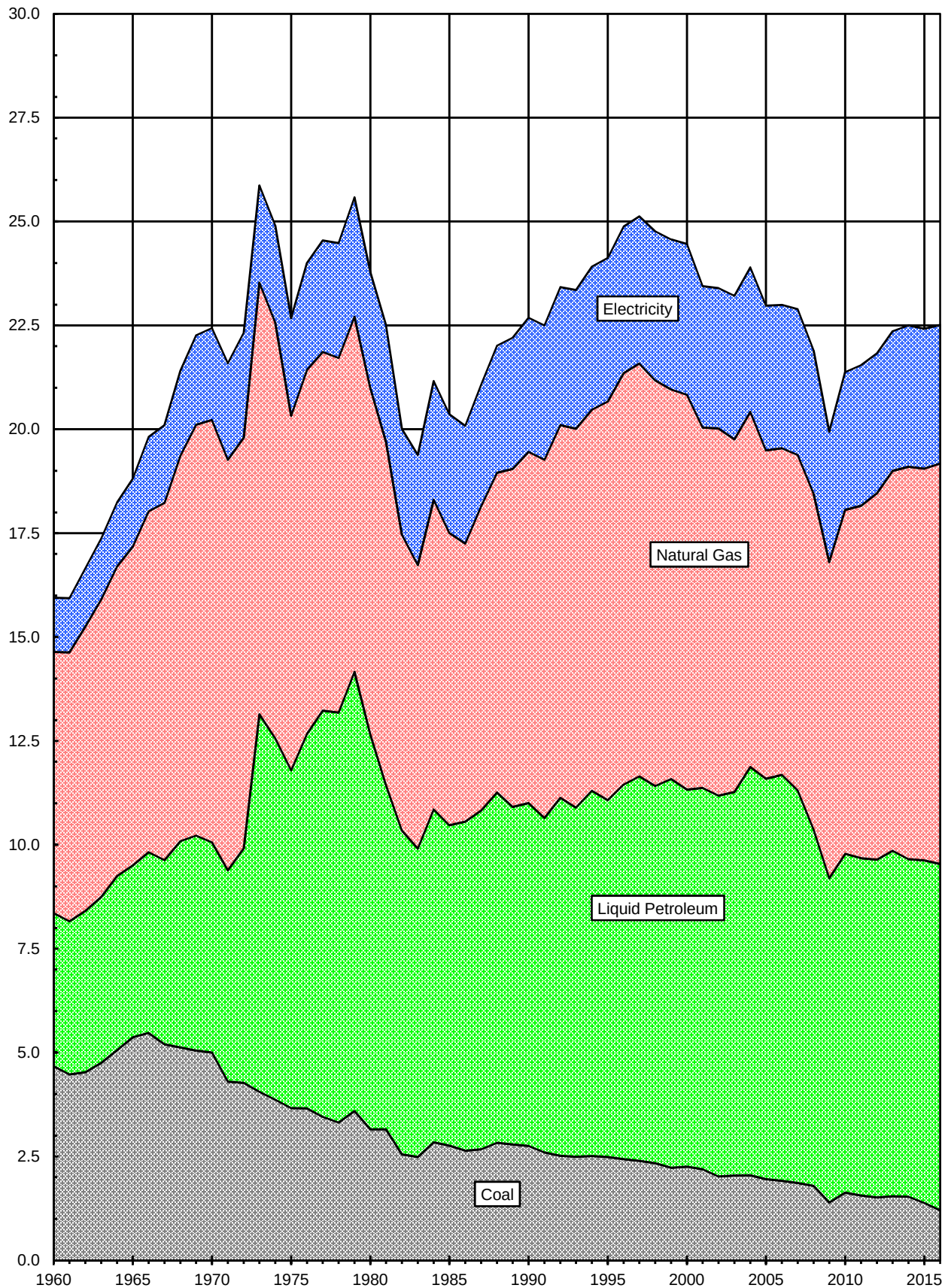
¹ Adjusted for net exports or imports of petroleum products. Includes still gas, liquefied refinery gas, and natural gas liquids from 1960–current.

² Includes bituminous coal, lignite and anthracite.

³ Excludes small amounts of geothermal power and electricity produced from wood and waste.

UNITED STATES END-USE ENERGY DEMAND IN THE INDUSTRIAL SECTOR

Quadrillion B.T.U.

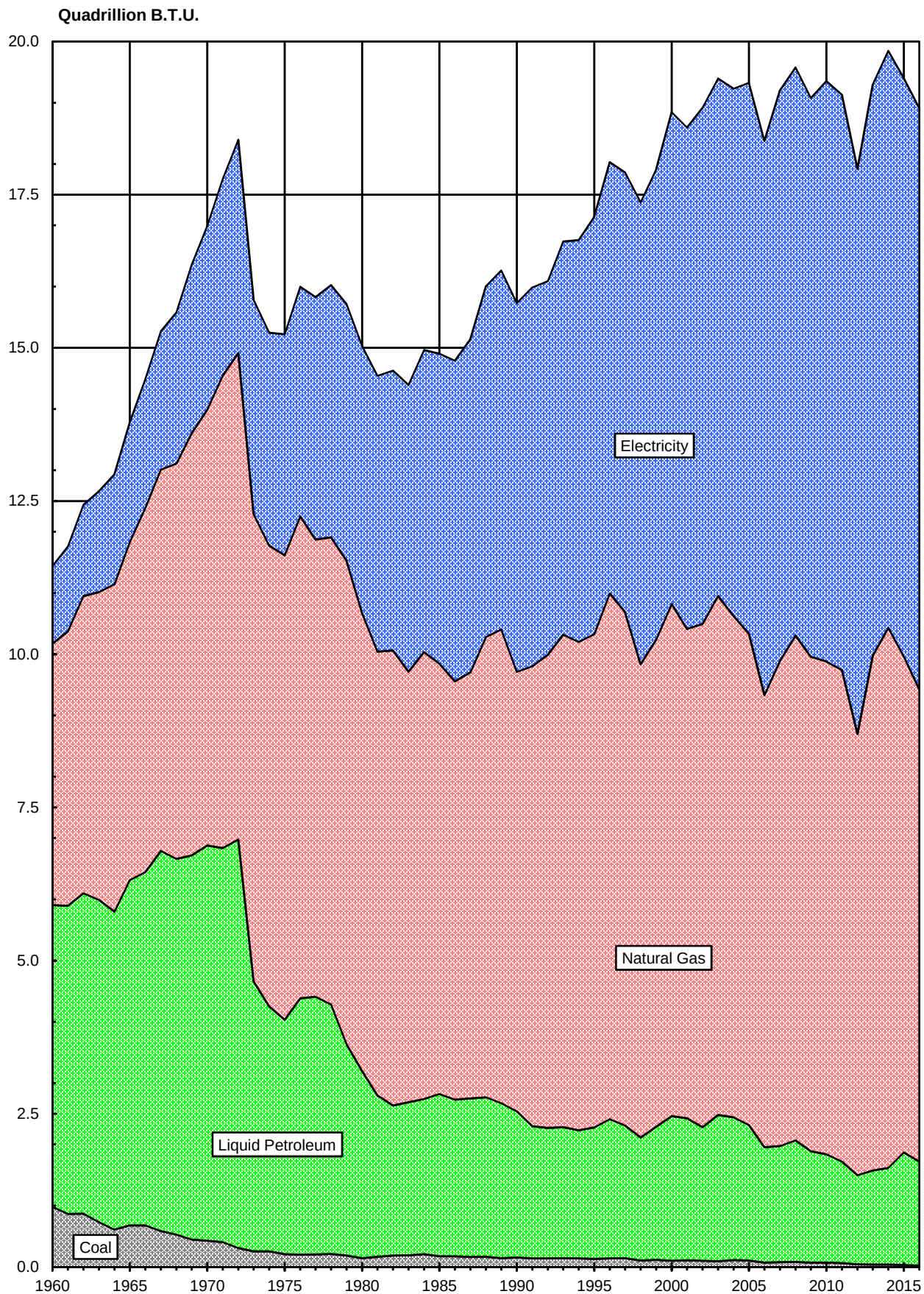


UNITED STATES END-USE ENERGY DEMAND IN THE INDUSTRIAL SECTOR

Year	Coal		Liquid Petroleum		Natural Gas		Electricity ¹		Total Trillion Btu
	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	
1960	4,673	29.3	3,682	23.1	6,287	39.4	1,306	8.2	15,948
1961	4,478	28.1	3,682	23.1	6,471	40.6	1,306	8.2	15,937
1962	4,527	27.2	3,880	23.3	6,842	41.1	1,402	8.4	16,651
1963	4,754	27.4	3,994	23.0	7,160	41.2	1,464	8.4	17,372
1964	5,063	27.8	4,184	22.9	7,451	40.8	1,544	8.5	18,242
1965	5,366	28.5	4,139	22.0	7,671	40.8	1,634	8.7	18,810
1966	5,472	27.6	4,353	22.0	8,203	41.4	1,788	9.0	19,816
1967	5,199	25.9	4,432	22.1	8,599	42.8	1,868	9.3	20,098
1968	5,124	23.9	4,965	23.2	9,274	43.3	2,044	9.5	21,407
1969	5,051	22.7	5,171	23.2	9,885	44.4	2,155	9.7	22,262
1970	5,002	22.3	5,061	22.6	10,161	45.3	2,210	9.9	22,434
1971	4,303	19.9	5,088	23.6	9,874	45.7	2,327	10.8	21,592
1972	4,275	19.1	5,643	25.3	9,882	44.3	2,528	11.3	22,328
1973	4,057	15.7	9,083	35.1	10,388	40.2	2,341	9.0	25,869
1974	3,870	15.5	8,694	34.9	10,004	40.2	2,337	9.4	24,905
1975	3,667	16.2	8,127	35.8	8,532	37.6	2,346	10.3	22,672
1976	3,661	15.3	9,010	37.5	8,762	36.5	2,573	10.7	24,006
1977	3,454	14.1	9,774	39.8	8,635	35.2	2,682	10.9	24,545
1978	3,314	13.5	9,867	40.3	8,539	34.9	2,761	11.3	24,481
1979	3,593	14.0	10,568	41.3	8,549	33.4	2,873	11.2	25,583
1980	3,155	13.3	9,509	40.0	8,333	35.0	2,781	11.7	23,778
1981	3,157	14.0	8,285	36.8	8,257	36.7	2,817	12.5	22,516
1982	2,552	12.8	7,794	39.0	7,121	35.6	2,542	12.7	20,009
1983	2,490	12.8	7,420	38.3	6,826	35.2	2,648	13.7	19,384
1984	2,842	13.4	8,014	37.9	7,448	35.2	2,859	13.5	21,163
1985	2,760	13.6	7,714	37.9	7,032	34.5	2,855	14.0	20,361
1986	2,641	13.1	7,920	39.4	6,690	33.3	2,834	14.1	20,085
1987	2,673	12.7	8,151	38.7	7,323	34.7	2,928	13.9	21,075
1988	2,828	12.8	8,430	38.3	7,696	35.0	3,059	13.9	22,013
1989	2,787	12.6	8,126	36.6	8,131	36.6	3,158	14.2	22,202
1990	2,756	12.1	8,251	36.4	8,451	37.3	3,226	14.2	22,684
1991	2,601	11.6	8,047	35.8	8,619	38.3	3,230	14.4	22,497
1992	2,515	10.7	8,617	36.8	8,967	38.3	3,319	14.2	23,418
1993	2,496	10.7	8,399	36.0	9,120	39.1	3,334	14.3	23,349
1994	2,510	10.5	8,792	36.8	9,172	38.4	3,439	14.4	23,913
1995	2,488	10.3	8,586	35.6	9,592	39.8	3,455	14.3	24,121
1996	2,434	9.8	9,019	36.2	9,901	39.8	3,527	14.2	24,881
1997	2,395	9.5	9,255	36.8	9,933	39.5	3,542	14.1	25,125
1998	2,335	9.4	9,082	36.7	9,763	39.4	3,587	14.5	24,767
1999	2,227	9.1	9,356	38.1	9,375	38.2	3,611	14.7	24,569
2000	2,256	9.2	9,073	37.1	9,500	38.8	3,631	14.8	24,460
2001	2,192	9.3	9,177	39.1	8,676	37.0	3,400	14.5	23,445
2002	2,019	8.6	9,167	39.2	8,832	37.7	3,379	14.4	23,397
2003	2,041	8.8	9,229	39.8	8,488	36.6	3,454	14.9	23,212
2004	2,047	8.6	9,825	41.1	8,550	35.8	3,473	14.5	23,895
2005	1,954	8.5	9,634	41.9	7,907	34.4	3,477	15.1	22,972
2006	1,914	8.3	9,767	42.5	7,861	34.2	3,451	15.0	22,993
2007	1,865	8.1	9,442	41.3	8,074	35.3	3,507	15.3	22,888
2008	1,793	8.2	8,576	39.2	8,083	36.9	3,444	15.7	21,896
2009	1,392	7.0	7,806	39.2	7,609	38.2	3,130	15.7	19,937
2010	1,631	7.6	8,153	38.1	8,278	38.7	3,314	15.5	21,376
2011	1,561	7.2	8,120	37.7	8,481	39.4	3,382	15.7	21,544
2012	1,513	6.9	8,131	37.3	8,819	40.4	3,363	15.4	21,826
2013	1,546	6.9	8,313	37.2	9,140	40.9	3,362	15.0	22,361
2014	1,530	6.8	8,125	36.1	9,441	42.0	3,404	15.1	22,500
2015	1,380	6.2	8,247	36.8	9,426	42.0	3,366	15.0	22,419
2016	1,205	5.4	8,333	37.0	9,638	42.8	3,333	14.8	22,509

¹ Excludes energy lost in the generation and transmission of electricity.

UNITED STATES END-USE ENERGY DEMAND IN THE RESIDENTIAL AND COMMERCIAL SECTORS

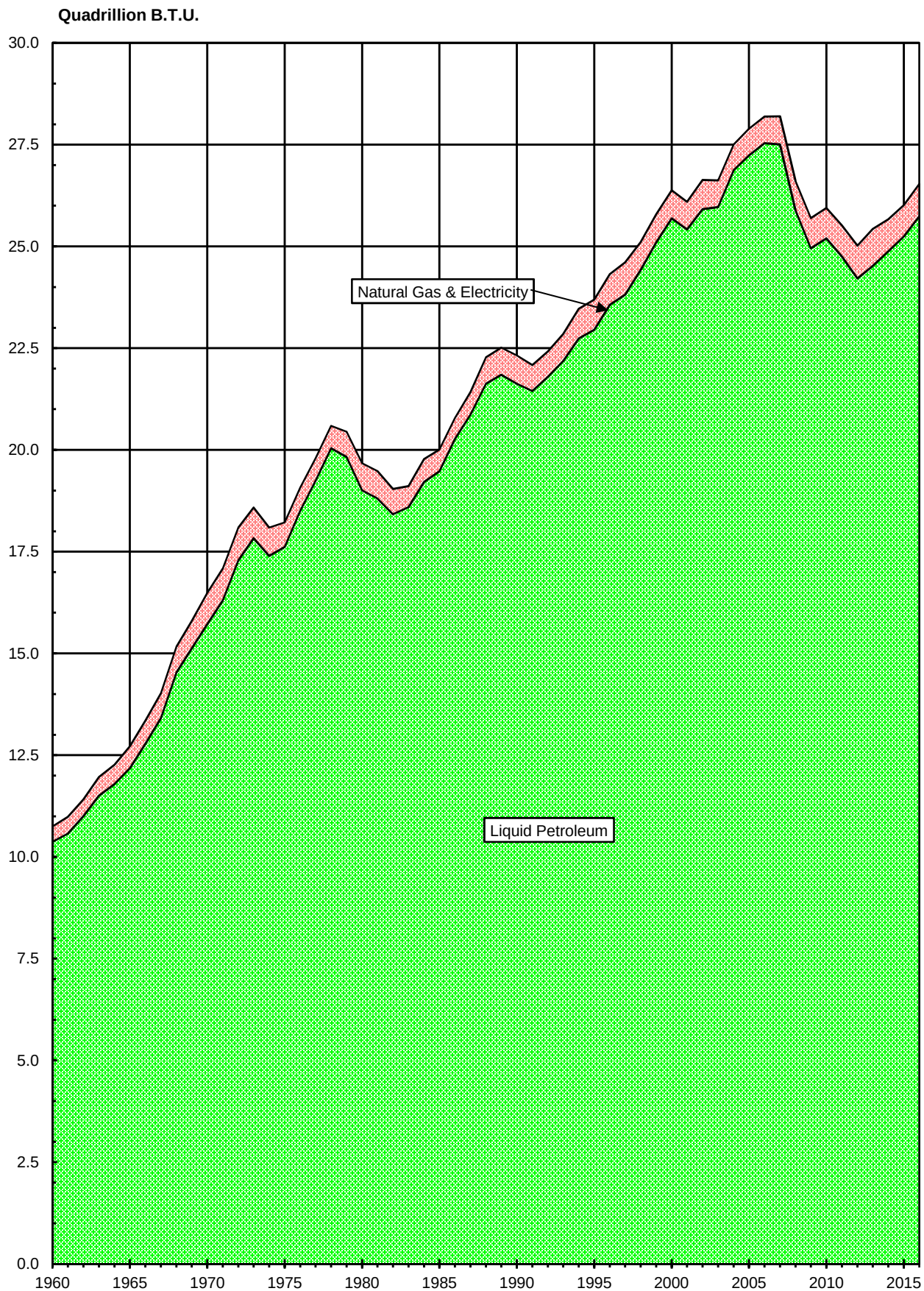


UNITED STATES END-USE ENERGY DEMAND IN THE RESIDENTIAL AND COMMERCIAL SECTORS

Year	Coal		Liquid Petroleum		Natural Gas		Electricity ¹		Total Trillion Btu
	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	
1960	983	8.6	4,923	43.0	4,268	37.3	1,262	11.0	11,436
1961	868	7.4	5,028	42.8	4,477	38.1	1,385	11.8	11,758
1962	872	7.0	5,227	42.0	4,849	39.0	1,490	12.0	12,438
1963	731	5.8	5,258	41.5	5,027	39.7	1,645	13.0	12,661
1964	609	4.7	5,191	40.1	5,343	41.3	1,792	13.9	12,935
1965	678	4.9	5,635	40.9	5,517	40.0	1,948	14.1	13,778
1966	677	4.7	5,766	39.8	5,945	41.0	2,101	14.5	14,489
1967	585	3.8	6,206	40.6	6,223	40.8	2,257	14.8	15,271
1968	529	3.4	6,129	39.3	6,451	41.4	2,467	15.8	15,576
1969	447	2.7	6,269	38.3	6,890	42.1	2,752	16.8	16,358
1970	427	2.5	6,453	38.0	7,108	41.8	3,000	17.7	16,988
1971	406	2.3	6,430	36.2	7,713	43.4	3,209	18.1	17,758
1972	308	1.7	6,666	36.2	7,943	43.2	3,478	18.9	18,395
1973	254	1.6	4,407	27.9	7,626	48.3	3,493	22.1	15,780
1974	257	1.7	3,996	26.2	7,518	49.3	3,474	22.8	15,245
1975	210	1.4	3,825	25.1	7,581	49.8	3,605	23.7	15,221
1976	203	1.3	4,181	26.1	7,866	49.2	3,747	23.4	15,997
1977	205	1.3	4,206	26.6	7,461	47.1	3,955	25.0	15,827
1978	214	1.3	4,070	25.4	7,624	47.6	4,115	25.7	16,023
1979	187	1.2	3,448	21.9	7,891	50.2	4,184	26.6	15,710
1980	146	1.0	3,052	20.3	7,476	49.7	4,354	29.0	15,028
1981	167	1.1	2,634	18.1	7,243	49.8	4,498	30.9	14,542
1982	187	1.3	2,449	16.7	7,427	50.8	4,566	31.2	14,629
1983	192	1.3	2,498	17.4	7,024	48.8	4,679	32.5	14,393
1984	209	1.4	2,535	16.9	7,292	48.7	4,926	32.9	14,962
1985	176	1.2	2,648	17.8	7,022	47.1	5,060	33.9	14,906
1986	176	1.2	2,555	17.3	6,825	46.1	5,233	35.4	14,789
1987	162	1.1	2,587	17.1	6,954	45.9	5,440	35.9	15,143
1988	168	1.0	2,600	16.2	7,513	46.9	5,722	35.8	16,003
1989	146	0.9	2,526	15.5	7,731	47.5	5,857	36.0	16,260
1990	155	1.0	2,385	15.2	7,173	45.6	6,013	38.2	15,726
1991	141	0.9	2,154	13.5	7,510	47.0	6,178	38.7	15,983
1992	142	0.9	2,126	13.2	7,725	48.0	6,094	37.9	16,087
1993	143	0.9	2,140	12.8	8,037	48.0	6,413	38.3	16,733
1994	139	0.8	2,093	12.5	7,967	47.5	6,557	39.1	16,756
1995	134	0.8	2,143	12.5	8,050	47.0	6,809	39.7	17,136
1996	139	0.8	2,274	12.6	8,580	47.6	7,038	39.0	18,031
1997	145	0.8	2,165	12.1	8,378	46.9	7,174	40.2	17,862
1998	105	0.6	2,006	11.5	7,729	44.5	7,534	43.4	17,374
1999	117	0.7	2,172	12.1	7,950	44.4	7,672	42.8	17,911
2000	103	0.5	2,359	12.5	8,357	44.3	8,025	42.6	18,844
2001	109	0.6	2,317	12.5	7,986	42.9	8,184	44.0	18,596
2002	102	0.5	2,181	11.5	8,207	43.4	8,427	44.5	18,917
2003	94	0.5	2,387	12.3	8,470	43.7	8,443	43.5	19,394
2004	114	0.6	2,328	12.1	8,182	42.5	8,606	44.8	19,230
2005	105	0.5	2,211	11.4	8,019	41.5	8,989	46.5	19,324
2006	71	0.4	1,882	10.2	7,378	40.1	9,046	49.2	18,377
2007	78	0.4	1,895	9.9	7,920	41.2	9,310	48.5	19,203
2008	81	0.4	1,984	10.1	8,238	42.1	9,270	47.4	19,573
2009	73	0.4	1,816	9.5	8,070	42.3	9,116	47.8	19,075
2010	70	0.4	1,768	9.1	8,043	41.6	9,472	48.9	19,353
2011	62	0.3	1,659	8.7	8,021	41.9	9,386	49.1	19,128
2012	44	0.2	1,453	8.1	7,202	40.2	9,218	51.4	17,917
2013	41	0.2	1,532	7.9	8,403	43.5	9,321	48.3	19,297
2014	40	0.2	1,576	7.9	8,814	44.4	9,415	47.4	19,845
2015	31	0.2	1,839	9.5	8,093	41.7	9,434	48.6	19,397
2016	24	0.1	1,696	9.0	7,709	40.8	9,480	50.1	18,909

¹ Excludes energy lost in the generation and transmission of electricity.

UNITED STATES END-USE ENERGY DEMAND IN THE TRANSPORTATION SECTOR



UNITED STATES END-USE ENERGY DEMAND IN THE TRANSPORTATION SECTOR

Year	Coal ¹		Liquid Petroleum		Natural Gas		Electricity ²		Total Trillion Btu
	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	
1960	87	0.8	10,372	95.7	359	3.3	18	0.2	10,836
1961	21	0.2	10,575	96.1	390	3.5	19	0.2	11,005
1962	18	0.2	11,001	96.2	396	3.5	18	0.1	11,433
1963	18	0.2	11,506	96.0	438	3.7	19	0.2	11,981
1964	19	0.2	11,791	96.0	451	3.7	20	0.2	12,281
1965	18	0.1	12,179	95.7	517	4.1	18	0.1	12,732
1966	16	0.1	12,777	95.6	552	4.2	16	0.1	13,361
1967	13	0.1	13,408	95.6	594	4.2	17	0.1	14,032
1968	11	0.1	14,535	95.8	610	4.0	18	0.1	15,174
1969	8	0.1	15,125	95.7	651	4.1	17	0.1	15,801
1970	8	0.0	15,720	95.3	745	4.5	16	0.1	16,489
1971	6	0.0	16,304	95.4	766	4.5	17	0.1	17,093
1972	4	0.0	17,290	95.5	787	4.3	17	0.1	18,098
1973	3	0.0	17,832	95.9	743	4.0	11	0.1	18,589
1974	2	0.0	17,399	96.1	685	3.8	10	0.1	18,096
1975	1	0.0	17,615	96.7	595	3.3	10	0.1	18,221
1976	0	0.0	18,506	97.0	559	2.9	10	0.1	19,075
1977	0	0.0	19,241	97.2	543	2.7	10	0.1	19,794
1978	0	0.0	20,041	97.3	539	2.6	10	0.1	20,590
1979	0	0.0	19,825	97.0	612	3.0	10	0.0	20,447
1980	0	0.0	19,009	96.6	650	3.3	11	0.1	19,670
1981	0	0.0	18,811	96.6	658	3.4	11	0.1	19,480
1982	0	0.0	18,420	96.7	612	3.2	11	0.1	19,043
1983	0	0.0	18,593	97.3	505	2.6	13	0.1	19,111
1984	0	0.0	19,216	97.2	545	2.8	14	0.1	19,775
1985	0	0.0	19,472	97.3	519	2.6	14	0.1	20,005
1986	0	0.0	20,269	97.5	499	2.4	15	0.1	20,783
1987	0	0.0	20,870	97.4	535	2.5	16	0.1	21,421
1988	0	0.0	21,629	97.1	632	2.8	16	0.1	22,277
1989	0	0.0	21,848	97.0	649	2.9	16	0.1	22,513
1990	0	0.0	21,626	96.9	680	3.0	16	0.1	22,322
1991	0	0.0	21,448	97.1	620	2.8	16	0.1	22,084
1992	0	0.0	21,798	97.2	608	2.7	16	0.1	22,422
1993	0	0.0	22,185	97.1	645	2.8	16	0.1	22,846
1994	0	0.0	22,739	96.9	709	3.0	17	0.1	23,465
1995	0	0.0	22,955	96.9	724	3.1	17	0.1	23,696
1996	0	0.0	23,565	96.9	737	3.0	17	0.1	24,319
1997	0	0.0	23,813	96.8	780	3.2	17	0.1	24,610
1998	0	0.0	24,422	97.3	666	2.7	17	0.1	25,105
1999	0	0.0	25,098	97.3	675	2.6	17	0.1	25,790
2000	0	0.0	25,689	97.4	672	2.5	18	0.1	26,379
2001	0	0.0	25,419	97.4	658	2.5	20	0.1	26,097
2002	0	0.0	25,917	97.3	699	2.6	19	0.1	26,635
2003	0	0.0	25,969	97.6	627	2.4	23	0.1	26,619
2004	0	0.0	26,872	97.7	602	2.2	25	0.1	27,499
2005	0	0.0	27,236	97.7	624	2.2	26	0.1	27,886
2006	0	0.0	27,538	97.7	625	2.2	25	0.1	28,188
2007	0	0.0	27,505	97.5	663	2.4	28	0.1	28,196
2008	0	0.0	25,888	97.3	692	2.6	26	0.1	26,606
2009	0	0.0	24,955	97.1	715	2.8	27	0.1	25,697
2010	0	0.0	25,198	97.1	719	2.8	26	0.1	25,943
2011	0	0.0	24,755	97.0	734	2.9	26	0.1	25,515
2012	0	0.0	24,214	96.8	780	3.1	25	0.1	25,019
2013	0	0.0	24,519	96.4	887	3.5	26	0.1	25,432
2014	0	0.0	24,878	96.9	760	3.0	26	0.1	25,664
2015	0	0.0	25,243	97.0	745	2.9	26	0.1	26,014
2016	0	0.0	25,743	97.0	767	2.9	26	0.1	26,536

¹ Since 1978, the small amounts of coal consumed for transportation have been reported as industrial sector consumption.

² Excludes energy lost in the generation and transmission of electricity.

UNITED STATES DEMAND FOR ENERGY USED IN THE GENERATION OF ELECTRICITY BY UTILITIES

Quadrillion B.T.U.

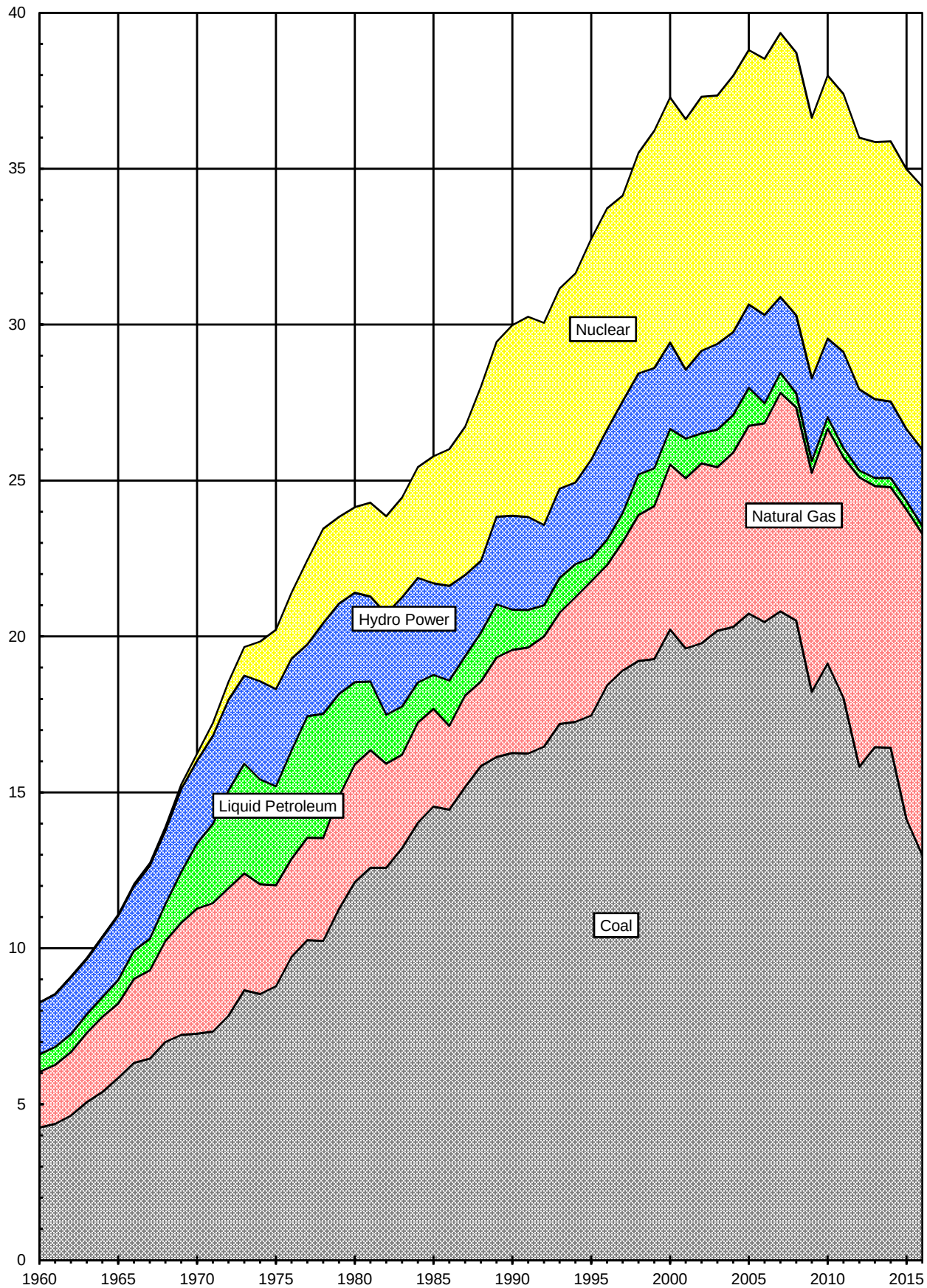


Chart 82

UNITED STATES DEMAND FOR ENERGY USED IN THE GENERATION OF ELECTRICITY BY UTILITIES

Year	Coal		Liquid Petroleum		Natural Gas		Hydropower		Nuclear Power		Total ¹
	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu	Percent of Total	Trillion Btu
1960	4,251	51.4	564	6.8	1,785	21.6	1,657	20.1	6	0.1	8,263
1961	4,374	51.2	577	6.8	1,889	22.1	1,680	19.7	17	0.2	8,537
1962	4,636	51.0	579	6.4	2,034	22.4	1,821	20.0	23	0.3	9,093
1963	5,065	52.3	600	6.2	2,218	22.9	1,767	18.2	33	0.3	9,683
1964	5,395	52.0	636	6.1	2,403	23.2	1,907	18.4	34	0.3	10,375
1965	5,843	52.8	744	6.7	2,392	21.6	2,058	18.6	38	0.3	11,075
1966	6,327	52.5	905	7.5	2,692	22.3	2,073	17.2	57	0.5	12,054
1967	6,457	50.7	1,013	8.0	2,834	22.3	2,344	18.4	80	0.6	12,728
1968	6,994	50.3	1,181	8.5	3,245	23.4	2,342	16.9	130	0.9	13,892
1969	7,227	47.4	1,628	10.7	3,594	23.6	2,659	17.4	146	1.0	15,254
1970	7,261	44.7	2,087	12.9	4,015	24.7	2,650	16.3	229	1.4	16,242
1971	7,330	42.6	2,543	14.8	4,117	23.9	2,828	16.4	404	2.3	17,222
1972	7,836	42.3	3,134	16.9	4,086	22.0	2,911	15.7	576	3.1	18,543
1973	8,658	44.0	3,515	17.9	3,748	19.1	2,827	14.4	910	4.6	19,658
1974	8,534	43.0	3,365	17.0	3,519	17.7	3,143	15.8	1,272	6.4	19,833
1975	8,786	43.5	3,166	15.7	3,240	16.0	3,122	15.4	1,900	9.4	20,214
1976	9,720	45.4	3,477	16.2	3,152	14.7	2,943	13.8	2,111	9.9	21,403
1977	10,262	45.7	3,901	17.4	3,284	14.6	2,301	10.2	2,702	12.0	22,450
1978	10,238	43.7	3,987	17.0	3,297	14.1	2,905	12.4	3,024	12.9	23,451
1979	11,260	47.3	3,283	13.8	3,613	15.2	2,897	12.2	2,776	11.6	23,829
1980	12,123	50.2	2,634	10.9	3,778	15.6	2,867	11.9	2,739	11.3	24,141
1981	12,583	51.8	2,202	9.1	3,768	15.5	2,725	11.2	3,008	12.4	24,286
1982	12,582	52.7	1,568	6.6	3,342	14.0	3,233	13.6	3,131	13.1	23,856
1983	13,213	54.0	1,544	6.3	2,998	12.3	3,494	14.3	3,203	13.1	24,452
1984	14,019	55.1	1,286	5.1	3,220	12.7	3,353	13.2	3,553	14.0	25,431
1985	14,542	56.4	1,090	4.2	3,135	12.2	2,937	11.4	4,076	15.8	25,780
1986	14,444	55.5	1,452	5.6	2,691	10.3	3,038	11.7	4,380	16.8	26,005
1987	15,173	56.8	1,257	4.7	2,935	11.0	2,602	9.7	4,754	17.8	26,721
1988	15,850	56.6	1,563	5.6	2,709	9.7	2,302	8.2	5,587	19.9	28,011
1989	16,137	54.8	1,703	5.8	3,192	10.8	2,808	9.5	5,602	19.0	29,442
1990	16,261	54.2	1,289	4.3	3,309	11.0	3,014	10.1	6,104	20.4	29,977
1991	16,250	53.7	1,198	4.0	3,399	11.2	2,985	9.9	6,422	21.2	30,254
1992	16,466	54.8	991	3.3	3,534	11.8	2,586	8.6	6,479	21.6	30,056
1993	17,196	55.2	1,124	3.6	3,560	11.4	2,861	9.2	6,410	20.6	31,151
1994	17,261	54.6	1,059	3.3	4,000	12.6	2,620	8.3	6,694	21.2	31,634
1995	17,466	53.3	755	2.3	4,302	13.1	3,149	9.6	7,075	21.6	32,747
1996	18,429	54.6	817	2.4	3,862	11.5	3,528	10.5	7,087	21.0	33,723
1997	18,905	55.4	927	2.7	4,126	12.1	3,581	10.5	6,597	19.3	34,136
1998	19,216	54.1	1,306	3.7	4,675	13.2	3,241	9.1	7,068	19.9	35,506
1999	19,279	53.2	1,211	3.3	4,902	13.5	3,218	8.9	7,610	21.0	36,220
2000	20,220	54.2	1,144	3.1	5,293	14.2	2,768	7.4	7,862	21.1	37,287
2001	19,614	53.6	1,276	3.5	5,458	14.9	2,209	6.0	8,029	21.9	36,586
2002	19,783	53.0	961	2.6	5,767	15.5	2,650	7.1	8,145	21.8	37,306
2003	20,185	54.1	1,205	3.2	5,246	14.0	2,749	7.4	7,960	21.3	37,345
2004	20,305	53.5	1,201	3.2	5,595	14.7	2,655	7.0	8,223	21.7	37,979
2005	20,737	53.4	1,222	3.1	6,015	15.5	2,670	6.9	8,161	21.0	38,805
2006	20,462	53.1	637	1.7	6,375	16.5	2,839	7.4	8,215	21.3	38,528
2007	20,808	52.9	648	1.6	7,005	17.8	2,430	6.2	8,459	21.5	39,350
2008	20,513	53.0	459	1.2	6,829	17.6	2,494	6.4	8,426	21.8	38,721
2009	18,225	49.7	382	1.0	7,022	19.2	2,650	7.2	8,355	22.8	36,634
2010	19,133	50.4	370	1.0	7,528	19.8	2,521	6.6	8,434	22.2	37,986
2011	18,035	48.2	295	0.8	7,712	20.6	3,085	8.2	8,269	22.1	37,396
2012	15,821	44.0	214	0.6	9,287	25.8	2,606	7.2	8,062	22.4	35,990
2013	16,451	45.9	255	0.7	8,376	23.4	2,529	7.1	8,244	23.0	35,855
2014	16,427	45.8	295	0.8	8,362	23.3	2,454	6.8	8,338	23.2	35,876
2015	14,138	40.4	276	0.8	9,926	28.4	2,308	6.6	8,337	23.8	34,985
2016	12,996	37.7	244	0.7	10,301	29.9	2,459	7.1	8,427	24.5	34,427

¹ Excludes small amounts of electricity produced from geothermal power, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.

BARRELS OF CRUDE OIL PER METRIC TON IN 2015

Albania	6.594	Kyrgyzstan	7.270
Algeria	8.067	Libya	7.671
Angola	7.310	Lithuania	7.270
Argentina	7.120	Malaysia	7.641
Australia	7.890	Mexico	7.080
Austria	7.040	Morocco	7.600
Azerbaijan	7.270	Netherlands	7.090
Bahrain	7.320	New Zealand	8.130
Belarus	7.270	Nigeria	7.420
Bolivia	7.881	Norway	7.490
Brazil	7.197	Oman	6.960
Brunei	7.340	Pakistan	7.500
Bulgaria	7.332	Papau New Guinea	7.809
Burma	7.084	Peru	7.407
Cameroon	7.205	Philippines	7.285
Canada	7.180	Poland	7.418
Chad	6.760	Qatar	7.153
Chile	7.506	Romania	7.506
China	7.320	Russia	7.270
Colombia	7.080	Saudi Arabia	7.345
Congo (Brazzaville)	7.506	Serbia and Montenegro	7.418
Congo (Kinshasa)	7.320	Slovakia	6.780
Croatia	7.418	Slovenia	7.418
Cuba	6.449	South Africa	7.720
Czech Republic	6.780	Spain	7.440
Denmark	7.400	Sudan & South Sudan	7.452
Ecuador	7.027	Sweden	7.370
Egypt	7.260	Syria	7.290
Equatorial Guinea	7.275	Taiwan	6.568
France	7.330	Tajikistan	7.270
Gabon	7.305	Thailand	6.758
Georgia	7.270	Timor-Leste	8.343
Germany	7.200	Trinidad and Tobago	7.084
Greece	7.230	Tunisia	7.689
Hungary	6.690	Turkey	7.030
India	7.440	Turkmenistan	7.270
Indonesia	7.418	Ukraine	7.270
Iran	7.402	United Arab Emirates	7.583
Iraq	7.395	United Kingdom	7.560
Israel	7.247	United States	7.333
Italy	6.830	Uzbekistan	7.270
Japan	7.370	Venezuela	6.791
Kazakhstan	7.270	Vietnam	7.082
Kuwait	7.210	Yemen	7.631

CONVERSION FACTORS USED IN THE PETROLEUM INDUSTRY

DISTANCE

1 foot = 0.305 meters
 1 meter = 3.281 feet
 1 statute mile = 1.609 kilometers = 0.868 nautical miles
 1 nautical mile = 1.852 kilometers = 1.15152 statute miles
 1 kilometer = 0.621 statute miles = 0.540 nautical miles

AREA

1 square mile = 640 acres = 2.590 square kilometers = 259.0 hectares
 1 square kilometer = 0.386 square miles = 100 hectares = 247.1 acres
 1 acre = 0.405 hectares
 1 hectare = 2.471 acres

VOLUME OR CAPACITY

1 cubic foot = 0.028317 cubic meters
 1 cubic meter = 35.314667 cubic feet
 1 cubic meter = 6.2898 barrels
 1 cubic meter (Canadian) = 6.29287 barrels
 1 U.S. gallon = 3.7854 liters
 1 liter = 0.2642 U.S. gallons
 1 barrel = 42 gallons = 158.99 liters = 0.15899 kiloliters
 1 kiloliter = 1,000 liters = 6.2898 barrels

WEIGHT

1 long ton = 1.01605 metric tons = 1.120 short tons = 2,240 pounds
 1 short ton = 0.907185 metric tons = 0.892857 long tons = 2,000 pounds
 1 metric ton = 0.98420 long tons = 1.10231 short tons = 2,204.6 pounds

HEAT

1 therm = 100,000 Btu = 25,200 kilocalories = 25.2 thermie
 1 thermie = 1,000 kilocalories = 3,968 Btu

HEAT VALUE OF PETROLEUM PRODUCTS (Btu per Barrel)

natural gasoline	= 4,620,000	distillate fuel oil	= 5,773,000
liquefied gases ¹	= 3,714,000	residual fuel oil	= 6,287,000
gasoline	= 5,222,000	lubricants	= 6,065,000
jet fuel-naphtha type	= 5,355,000	petroleum coke	= 6,104,000
kerosene	= 5,670,000	asphalt	= 6,636,000

AVERAGE HEAT VALUE OF 2015 U.S. ENERGY PRODUCTION

coal ² (Btu per short ton)	= 19,977,000
crude oil (Btu per barrel)	= 5,722,000
natural gas, wet (Btu per cubic feet)	= 1,127
natural gas, dry (Btu per cubic feet)	= 1,037
hydropower (Btu per kilowatt hour)	= 9,232
nuclear power (Btu per kilowatt hour)	= 10,459

¹ Natural gas plant liquids.

² Bituminous coal and lignite

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