

GAS FACTS

2015

ENERGY RESERVES NATURAL GAS SUPPLY
END-USERS SALES TRANSPORTATION VOLUMES
DISTRIBUTION AND TRANSMISSION
FINANCE PERSONNEL DATA
UNDERGROUND STORAGE
ENERGY CONSUMPTION
REVENUES PRICES
HOUSING DATA
GLOSSARY
INDEX

PUBLISHED BY: THE AMERICAN GAS ASSOCIATION
400 N. CAPITOL STREET, N.W.
WASHINGTON, D.C. 20001

PREPARED BY: POLICY ANALYSIS GROUP
CHRIS MCGILL, VICE PRESIDENT, POLICY ANALYSIS
PAUL PIERSON, DIRECTOR, STATISTICAL SERVICES

COVER DESIGN BY: **LUCY CASTANEDA-LAND**, SPECIALIST, POLICY ANALYSIS

GAS FACTS

2015

Unless otherwise noted, material presented in this volume is based on data collected from individual utilities by the Department of Statistics of the American Gas Association. It may be excerpted without charge, but credit to the source is requested.

COPYRIGHT © 2015
BY THE
AMERICAN GAS ASSOCIATION

Printed in the United States of America

CATALOG #F1012014

Statistics and Survey System

The underlying data for many of the tables in *Gas Facts* can be accessed by **AGA members** via the Statistics and Survey System, a Web-based application housed on the AGA website. To access this online database system, visit the site at www.aga.org, and when prompted, enter your AGA website username and password.

For further information or assistance with the Statistics system, AGA members may contact Mr. Paul Pierson, Director, Statistical Services at (202) 824-7133 or via e-mail at ppierson@aga.org.

AGA members and non-members may request specific queries of the database for a nominal fee. If you would like information regarding available data or query fees, please contact Mr. Paul Pierson, Director, Statistical Services at (202) 824-7133 or via e-mail at ppierson@aga.org.

CONTENTS

	PAGE
Introduction	viii
Section 1: 2013 in Review	1
Section 2: Natural Gas Reserves and Producing Gas Wells	3
Section 3: Natural Gas Imports, Exports and Supplementals	11
Section 4: Underground Gas Storage	15
Section 5: Distribution and Transmission Pipeline Miles.....	23
Section 6: Energy Consumption	33
Section 7: Revenues from Sales.....	53
Section 8: End Users	61
Section 9: Prices	71
Section 10: Appliance and Housing Data	79
Section 11: Income Accounts, Balance Sheets and Analytical Ratios	85
Section 12: Construction Expenditures	101
Section 13: Personnel Data	105
Appendix A: Glossary of Gas Industry Terms	109
Appendix B: Conversion Table	121
Index	123

LIST OF CHARTS

CHART NUMBER		PAGE
2-1.	Proved Reserves and Net Production of Natural Gas In the United States, 2004-2013.....	4
4-1.	Distribution of Underground Storage by Type of Pool.....	17
4-2.	Total Working Gas In Storage Comparison of Current Year To Prior 5-Year Average.....	19
5-1.	United States, Miles of Main by Material, 2013.....	29
5-2.	United States, Number of Services by Material, 2013.....	31
6-1.	Gas Utility Industry Sales, by Class of Service, 2004-2013.....	34
7-1.	Gas Utility Industry Sales Revenues, by Class of Service, 2004-2013.....	55
12-1.	Gas Utility Industry Construction Expenditures, 2013.....	102

INTRODUCTION

GENERAL

The American Gas Association assumed its present status as a gas utility industry trade association in 1918, after a merger of two predecessor organizations. Today it renders assistance to the gas utility industry and provides an advocacy platform for local distribution companies, so that the industry may serve its customers more efficiently. The Association recognizes the need for factual information regarding the gas industry for the use, not only of industry organizations, but also interested outside publics. Its statistical efforts are a vital part of this function, and the publication of *Gas Facts* is one result of these efforts.

This publication contains detailed statistics for 2013 and summary statistics for prior years for the gas utility industry which by definition, consists of the companies engaged in natural gas distribution and transmission. The publication also contains relevant data on the gas producing segment of the industry. Gas volumes are expressed in millions of cubic feet (at 14.73 psi and 60°F unless otherwise noted) and in British thermal units (Btu) to permit direct comparison with other energy data. A conversion table is included as Appendix B. Throughout the publication numbers may not add up to total due to independent rounding.

The user should be aware that a large transportation market has developed, which directly impacts gas utility sales quantities, revenues and number of customers. Although total pipeline throughput may remain the same, as transportation volumes to end-users increase, gas utility sales quantities to end-users will decrease.

Data presented in *Gas Facts*, broken down by company type, are not necessarily comparable from year to year. Acquisitions, mergers and corporate reorganizations continue to cause the number of companies in any given category to vary from year to year. Some of these changes are significant and can cause a dramatic shift in the data reported for a specific category from prior years.

In addition, data and resulting estimates are attributed to utility industry segments in *Gas Facts* as distribution, transmission or integrated, based not only on company operating revenues (see glossary) but also on how the company submitted information in the *Uniform Statistical Report* (USR). For example, if a company submits data under one corporate name, such as qualifying revenue, for distribution and transmission activities combined, then it is placed in the integrated category. However, if a large company submits data for its distribution companies separate from transmission companies, no effort is made to recombine the data to produce an integrated result. Distribution data in this case is attributed to the distribution segment and transmission data to the transmission segment.

SOURCES OF INFORMATION

Most of the information contained in this volume is developed from data forms contained in the *Uniform Statistical Report* and other sources such as the Energy Information Administration (EIA) and the Federal Energy Regulatory Commission (FERC). Tables presented in *Gas Facts* use data primarily from distribution companies submitting a *Uniform Statistical Report* (USR) and estimates for those companies not reporting based on recent historical experience.

Estimates of proved reserves of natural gas are taken from the U.S. Department of Energy report *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves*. Data for gas spaceheating customers were taken from the *AGA Residential Natural Gas Market Survey*. Changes in the quantity and format of data reported to AGA, the Energy Information Administration, the Federal Energy Regulatory Commission and others have influenced the quality and type of tables that can be constructed from the available sources. As a result, tables in this edition have been modified or eliminated compared with previous *Gas Facts* editions based on judgements regarding sample size and data quality.

ACKNOWLEDGEMENTS

Our thanks go to those companies participating in the *Uniform Statistical Report* data gathering effort. Their cooperation and support are the essential elements to making this publication a primary source of gas utility industry data. Also greatly appreciated is the cooperation of the public and governmental agencies credited in *Gas Facts* tables.

Key contributions to this publication have been made by the Director, Statistical Services, Paul Pierson; Statistical Consultant, Kelly Hopkins; and Specialist, Lucy Castañeda-Land.

SECTION 1

2013 IN REVIEW

Highlights from this edition of *Gas Facts*

Supply

- Estimated working gas capacity in underground storage was 4,216 Bcf, with a total deliverability of 95,233 MMcf per day.
- The United States imported 3.0 trillion cubic feet of natural gas in 2013, primarily from Canada.

Delivery

- The U.S. natural gas industry had 2.46 million miles of pipeline — including distribution, services, transmission, and gathering lines — in place in 2013.

Sales

- Gas utility sales increased 13.2 percent in 2013 to 8,023 trillion Btu.
- Residential sales increased 18.1 percent from 2013 levels.
- Commercial sales increased 15.6 percent.
- Industrial sales increased 5.9 percent.

Prices

- The average retail natural gas price increased 2.0 percent in 2013 compared to 2012.
- The average residential price decreased 3.6 percent.
- Average commercial prices increased 0.4 percent.
- Average industrial prices increased 18.9 percent.

TABLE 1-1
GAS UTILITY INDUSTRY SALES CUSTOMERS, SALES VOLUMES, REVENUES AND PRICES
BY CLASS OF SERVICE
2012 and 2013

	2012	2013	Percentage Change
END-USERS—TOTAL ^a	64,669	64,406	- 0.4
Residential	60,020	59,788	- 0.4
Commercial	4,518	4,482	- 0.8
Industrial	122	123	+ 0.9
Other	8	12	+ 45.8
SALES—TOTAL ^b	7,086	8,023	+ 13.2
Residential	3,673	4,337	+ 18.1
Commercial	1,574	1,820	+ 15.6
Industrial	1,816	1,263	+ 5.9
Other	23	25	+ 5.1
REVENUES —TOTAL ^c	57,019	65,887	+ 15.6
Residential	37,703	42,937	+ 13.9
Commercial	12,650	14,684	+ 16.1
Industrial	6,481	8,032	+ 23.9
Other	184	234	+ 27.3
PRICES—TOTAL ^d	\$8.05	\$8.21	+ 2.0
Residential	10.27	9.90	- 3.6
Commercial	8.04	8.07	+ 0.4
Industrial	3.80	4.52	+ 18.9
Other	7.87	9.50	+ 20.7

^aYearly averages (Thousands)

^bSales quantities (Trillion Btu)

^cRevenues (\$ Million)

^dPrices (\$/Million Btu)

SECTION 2

NATURAL GAS RESERVES AND PRODUCING GAS WELLS

U.S. NATURAL GAS RESERVES AS OF DECEMBER 31

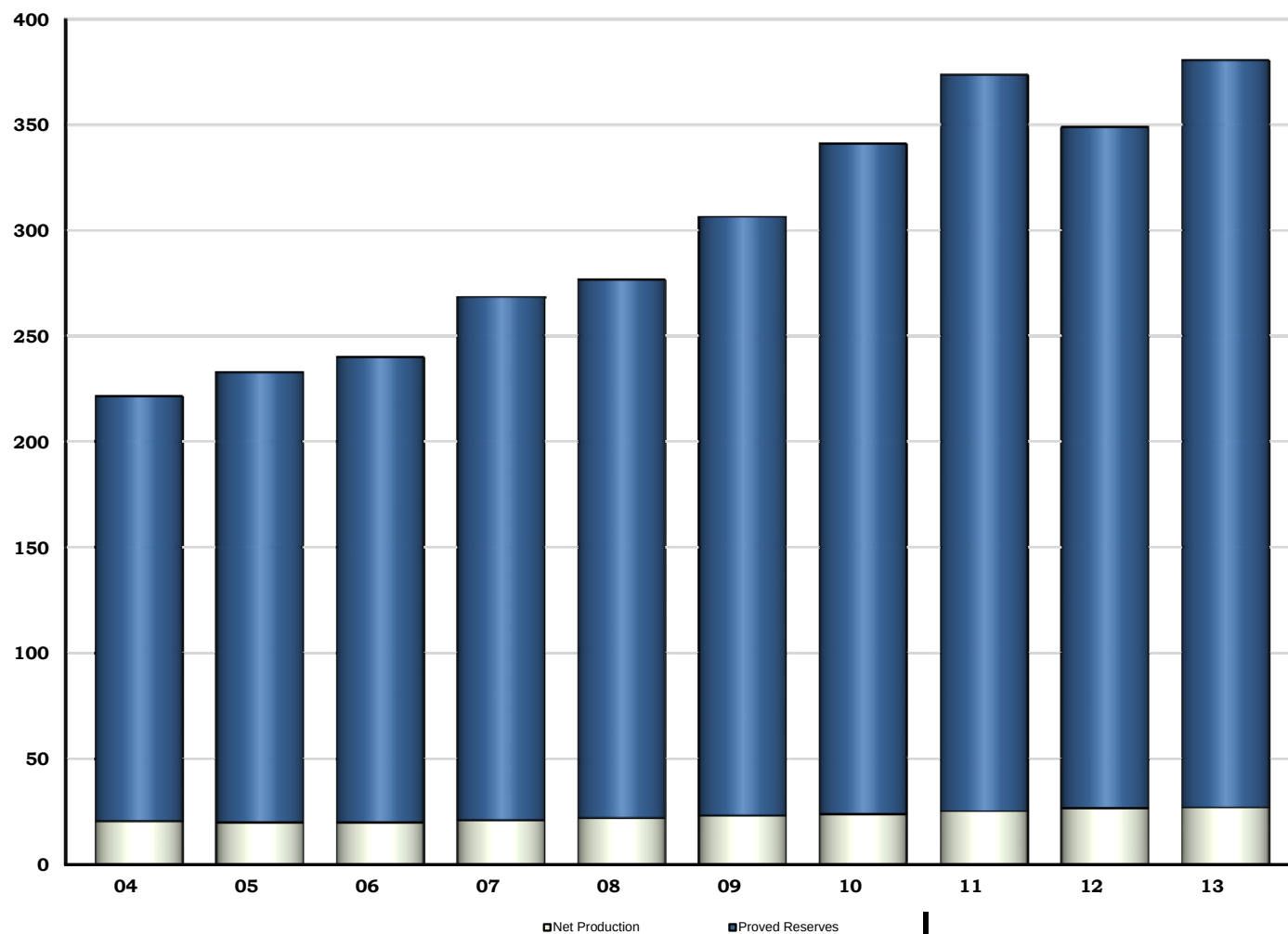
	<u>2013</u>	<u>% Change</u> <u>2013/2012</u>
Reserves (Billion Cubic Feet)		
Proved Reserves	353,994	+ 9.7
Discoveries	53,017	+ 9.9
Production	26,467	+ 1.4

U.S. NATURAL GAS WELLS

	<u>2013</u>	<u>% Change</u> <u>2013/2012</u>
Producing Wells	487,286	+ 0.9

NATURAL GAS RESERVES, PRODUCING GAS WELLS

Chart 2-1
**PROVED RESERVES & NET PRODUCTION
OF NATURAL GAS IN THE UNITED STATES -- 2004-2013**
(Trillion Cubic Feet)



Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 2014 Annual Report

NATURAL GAS RESERVES, PRODUCING GAS WELLS

TABLE 2-1
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS IN THE UNITED STATES
2001 - 2013
 (Billion Cubic Feet)

Year	Adjustments (1)	Net Revisions (2)	Revisions ^a and Adjustments (3)	Net of Sales ^b and Adjustments (4)	Extensions (5)	New Field Discoveries (6)	New Reservoir Discoveries In Old Fields (7)	Total ^c Discoveries (8)	Estimated Production (9)	Proved ^d Reserves 12/31 (10)	Change from Prior Year (11)
2001	1,849	-2,438	-589	2,715	17,183	3,668	2,898	23,749	20,642	191,743	5,233
2002	4,006	1,038	5,044	428	15,468	1,374	1,752	18,594	20,248	195,561	3,818
2003	2,323	-1,715	608	1,107	17,195	1,252	1,653	20,100	20,231	197,145	1,584
2004	170	825	995	1,975	19,068	790	1,244	21,102	20,017	201,200	4,055
2005	1,693	2,715	4,408	2,674	22,069	973	1,243	24,285	19,259	213,308	12,108
2006	946	-2,099	-1,153	3,178	22,834	425	1,197	24,456	19,373	220,416	7,108
2007	990	15,936	16,926	452	28,255	814	1,244	30,313	20,318	247,789	27,373
2008	271	-3,254	-2,983	937	27,800	1,229	1,678	30,707	21,415	255,035	7,246
2009	5,923	-1,899	4,024	-222	43,500	1,423	2,656	47,579	22,537	283,879	28,844
2010	1,292	4,055	5,347	2,766	46,283	895	1,701	48,879	23,224	317,647	33,768
2011	2,715	-112	2,603	3,298	47,635	987	1,260	49,882	24,621	348,809	31,162
2012	-810	-45,614	-46,424	-1,859	47,053	780	408	48,241	26,097	322,670	-26,139
2013	693	2,794	3,487	1,287	51,074	263	1,680	53,017	26,467	353,994	31,324

^a Revisions and adjustments = Col. 1 + Col. 2.

^b Net of sales and acquisitions = acquisitions – sales.

^c Total discoveries = Col. 5 + Col. 6 + Col. 7.

^d Proved reserves = Col. 10 from prior year + Col. 3 + Col. 4 + Col. 8 – Col. 9.

Note: “Old” means discovered in a prior year. “New” means discovered during the report year.

Source: U.S. Energy Information Administration, Form EIA-23, “Annual Survey of Domestic Oil and Gas Proved Reserves,” 2001-2013.

NATURAL GAS RESERVES, PRODUCING GAS WELLS

TABLE 2-2
SUMMARY OF ANNUAL ESTIMATES OF ESTABLISHED RESERVES OF NATURAL GAS IN CANADA^a
2001-2012
(Million Cubic Meters)

Year	Reserves Remaining at Beginning of Year	Reserves Remaining at End of Year	Change during Year
2001		1,693,752	---
2002	1,693,752	1,664,205	(29,547)
2003	1,664,205	1,594,001	(70,204)
2004	1,594,001	1,593,042	(959)
2005	1,593,042	1,632,560	39,518
2006	1,632,560	1,639,712	7,152
2007	1,639,712	1,633,824	(5,888)
2008	1,633,824	1,754,234	120,410
2009	1,754,234	1,727,450	(26,784)
Break in Data Series			
2010	1,727,450	1,982,503	255,053
2011	1,982,503	1,920,618	(61,885)
2012	1,896,903	2,022,717	102,099

^aVolumes are calculated at a pressure base of 101.325 kPa and at a standard temperature of 15°C.

Parentheses, (), denote a volume decrease (negative number).

Source: Canadian Association of Petroleum Producers

NATURAL GAS RESERVES, PRODUCING GAS WELLS

TABLE 2-3
MARKETABLE NATURAL GAS
REMAINING ESTABLISHED RESERVES IN CANADA
AT YEAR END
2001- 2012
(Million Cubic Meters)

	Main Terr. (S. 68° N)	British Columbia	Alberta	Sask.	Ontario	New Brunswick*	E. Coast Offshore	Canada
2001	15,026	251,451	1,272,232	81,730	11,513	105	61,695	1,693,752
2002	12,656	254,661	1,252,562	76,649	11,419	105	56,153	1,664,205
2003	12,456	259,905	1,198,748	87,877	11,586	105	23,324	1,594,001
2004	11,872	289,432	1,175,892	85,007	11,456	105	19,278	1,593,042
2005	11,260	347,833	1,153,480	91,614	13,021	105	15,247	1,632,560
2006	10,241	367,653	1,131,234	98,829	20,006	105	11,644	1,639,712
2007	9,995	375,929	1,124,930	95,060	19,842	105	7,963	1,633,824
2008	10,089	483,051	1,138,557	88,621	19,637	105	14,174	1,754,234
2009	10,000	534,208	1,072,114	81,026	19,418	105	10,579	1,727,450
<i>Break in Data Series</i>								
2010	13,146	782,049	1,092,700	63,700	19,208	3,900	7,800	1,982,503
2011	13,146	805,764	1,007,100	63,700	19,208	3,900	7,800	1,920,618
2012	13,017	948,690	972,400	60,059	18,977	3,806	5,768	2,022,717

*Note: Effective 2010 New Brunswick included. Prior years was "Other Eastern Canada"

Note: Effective 2010 CAPP Reserves are based on provincial and NEB data. Year ends vary.

Source: Canadian Association of Petroleum Producers

TABLE 2-4
CHANGE DURING YEAR IN
MARKETABLE NATURAL GAS
REMAINING ESTABLISHED RESERVES IN CANADA
2001- 2012
(Million Cubic Meters)

	Main Terr. (S. 68° N)	British Columbia	Alberta	Sask.	Ontario	New Brunswick*	E. Coast Offshore	Canada
2001/02	(2,370)	3,210	(19,670)	(5,081)	(94)	0	(5,542)	(29,547)
2002/03	(200)	5,244	(53,814)	11,228	167	0	(32,829)	(70,204)
2003/04	(584)	29,527	(22,856)	(2,870)	(130)	0	(4,046)	(959)
2004/05	(612)	58,401	(22,412)	6,607	1,565	0	(4,031)	39,518
2005/06	(1,019)	19,820	(22,246)	7,215	6,985	0	(3,603)	7,152
2006/07	(246)	8,276	(6,304)	(3,769)	(164)	0	(3,681)	(5,888)
2007/08	94	107,122	13,627	(6,439)	(205)	0	6,211	120,410
2008/09	(89)	51,157	(66,443)	(7,595)	(219)	0	(3,595)	(26,784)
<i>Break in Data Series</i>								
2009/10	3,146	247,841	20,586	(17,326)	(210)	3,795	(2,779)	255,053
2010/11	0	23,715	(85,600)	0	0	0	0	(61,885)
2011/12	(129)	142,926	(34,700)	(3,641)	(231)	(94)	(2,032)	102,099

*Note: Effective 2010 New Brunswick included. Prior years was "Other Eastern Canada"

Note: Effective 2010 CAPP Reserves are based on provincial and NEB data. Year ends vary.

() Denotes negative number

Source: Canadian Association of Petroleum Producers

NATURAL GAS RESERVES, PRODUCING GAS WELLS

TABLE 2-5
NUMBER OF PRODUCING GAS WELLS BY STATE
1995-2013^{a,b}

Division and State	1995	2000	2005	2010	2012	2013
UNITED STATES	298,541	341,678	425,887	487,627	482,822	487,286
New England	0	0	0	0	0	0
Middle Atlantic	37,159	41,775	52,103	51,236	62,312	64,213
New Jersey	0	0	0	0	0	0
New York	6,134	5,775	5,449	6,736	7,176	7,145
Pennsylvania	31,025	36,000	46,654	44,500	55,136	57,068
East North Central	41,497	42,747	45,272	45,701	46,863	44,544
Illinois	372	280	316	50	40	35
Indiana	1,347	1,502	2,321	620	819	931
Michigan	5,258	7,068	8,900	10,100	10,900	10,858
Ohio	34,520	33,897	33,735	34,931	35,104	32,720
Wisconsin	0	0	0	0	0	0
West North Central	22,277	15,469	19,277	22,711	25,373	25,341
Iowa	0	0	0	0	0	0
Kansas	22,020	15,206	18,946	22,145	24,697	24,844
Minnesota	0	0	0	0	0	0
Missouri	15	0	0	0	100	0
Nebraska	87	98	114	276	270	232
North Dakota	99	94	148	188	211	200
South Dakota	56	71	69	102	95	65
South Atlantic	37,822	45,533	53,474	59,975	58,552	61,189
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	0	0	0	0	0	0
Georgia	0	0	0	0	0	0
Maryland	7	7	7	7	9	7
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	1,671	3,051	4,132	7,470	7,843	7,864
West Virginia	36,144	42,475	49,335	52,498	50,700	53,318
East South Central	17,372	19,223	21,774	26,905	26,144	26,035
Alabama	3,526	4,359	5,523	7,026	6,327	6,068
Kentucky	13,311	13,487	14,175	17,670	17,936	18,087
Mississippi	535	997	1,676	1,979	1,669	1,643
Tennessee	0	380	400	230	212	237
West South Central	102,525	101,784	133,83^R	165,548	164,947	166,864
Arkansas	3,988	4,000	3,462 ^R	7,397	8,538	9,787
Louisiana	14,169	15,700	18,838	19,137	19,792	19,683
Oklahoma	29,733	21,507	36,704	44,000	40,000	39,776
Texas	54,635	60,577	74,827	95,014	96,617	97,618
Mountain	38,775	73,809	96,435	111,824	95,522	96,174
Arizona	7	9	6	5	5	5
Colorado	7,017	22,442	22,691	28,813	32,000	32,371
Idaho	0	0	0	0	0	0
Montana	2,918	3,321	5,751	6,059	6,240	5,754
Nevada	0	4	4	0	0	0
New Mexico	23,510	33,948	40,157	44,748	28,206	27,957
Utah	1,127	4,178	4,092	6,075	6,900	7,073
Wyoming	4,196	9,907	23,734	26,124	22,171	23,014
Pacific	1,114	1,338	1,598	1,875	1,635	1,526
Alaska	100	152	227	269	185	152
California	997	1,169	1,356	1,580	1,423	1,346
Hawaii	0	0	0	0	0	0
Oregon	17	17	15	26	27	28
Washington	0	0	0	0	0	0
Gulf of Mexico^b	n.a	n.a	2,123	1,852	1,474	1,400

^aData pertain only to dry gas and condensate wells. Data as of December 31.

^bBeginning in 2001, the number of Federal offshore Gulf of Mexico producing gas and gas condensate wells is reported separately. For previous years, the well counts for the Federal offshore Gulf of Mexico were included in the well counts for the States of Alabama, Louisiana and Texas.

n.a. – Not Available

Source: Energy Information Administration, *Natural Gas Annual 2013*, December 2014

TABLE 2-6
CRUDE OIL AND NATURAL GAS WELLS DRILLED
1981-2010

Year	Crude Oil	Natural Gas	Dry	TOTAL
1981	43,598	20,166	27,789	91,553
1982	39,199	18,979	26,219	84,397
1983	37,120	14,564	24,153	75,837
1984	42,605	17,127	25,681	85,413
1985	35,261	14,324	21,211	70,796
1986	19,097	8,615	12,678	40,291
1987	16,164	8,055	11,112	35,331
1988	13,636	8,555	10,041	32,232
1989	10,204	9,539	8,188	27,931
1990	12,839	11,246	8,245	32,330
1991	11,770	9,526	7,596	28,892
1992	8,757	8,209	6,118	23,084
1993	8,407	10,017	6,328	24,752
1994	6,721	9,538	5,307	21,566
1995	8,248	8,082	4,814	21,144
1996	8,836	9,027	4,890	22,753
1997	11,206	11,498	5,874	28,578
1998	7,682	11,639	4,761	24,082
1999	4,805	12,027	3,550	20,382
2000	8,090	17,051	4,146	29,287
2001	8,888	22,072	4,598	35,558
2002	6,775	17,342	3,754	27,871
2003	8,129	20,722	3,982	32,833
2004	8,789	24,186	4,082	37,057
2005	10,779	28,590	4,653	44,022
2006	13,385	32,838	5,206	51,429
2007	13,371	32,719	4,981	51,071
2008	16,633	32,246	5,423	54,302
2009	11,190	18,088	3,525	32,803
2010	15,753	16,696	4,162	36,611

Source: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, December 2013

The Energy Information Administration is currently evaluating the validity of the post-2010 data for this table. If it is determined that the table is no longer going to be updated it will be replaced in next year's edition.

NATURAL GAS RESERVES, PRODUCING GAS WELLS

TABLE 2-7
Average Weekly Rotary Rigs
Drilling Direction
1991-2013

Year	Directional	Horizontal	Vertical	TOTAL
1991	107	75	678	860
1992	85	54	582	720
1993	99	50	605	754
1994	137	50	588	775
1995	145	52	526	723
1996	169	58	552	779
1997	207	69	668	943
1998	210	46	571	827
1999	159	39	427	625
2000	217	55	646	918
2001	281	77	799	1,156
2002	226	60	543	830
2003	262	81	689	1,032
2004	311	119	761	1,192
2005	341	181	862	1,383
2006	384	285	980	1,649
2007	376	393	999	1,768
2008	372	553	954	1,879
2009	201	456	433	1,089
2010	222	822	501	1,546
2011	230	1,074	574	1,878
2012	216	1,151	552	1,919
2013	224	1,102	435	1,761

Source: Baker Hughes, North America Rotary Rig Counts

SECTION 3

NATURAL GAS IMPORTS, EXPORTS AND SUPPLEMENTALS

	<u>2013</u>	<u>% Change</u> <u>2013/2012</u>
Imports (Billion cubic feet)	2,961	- 10.6
Exports (Billion cubic feet)	1,572	- 2.9

SUPPLY
TABLE 3-1
EXPORTS OF NATURAL GAS FROM THE UNITED STATES – 1983-2013
(Million Cubic Feet)

Year	TOTAL	Canada	Mexico	Japan ^a	Other ^b
1983	54,639	136	1,646	52,857	0
1984	54,753	127	1,786	52,840	0
1985	55,268	178	2,207	52,883	0
1986	61,271	9,203	1,896	50,172	0
1987	54,021	3,297	2,125	48,599	0
1988	73,638	19,738	2,327	51,573	0
1989	106,871	38,443	17,004	51,424	0
1990	85,564	17,359	15,659	52,546	0
1991	129,244	14,791	60,448	54,005	0
1992	216,282	67,777	95,973	52,532	0
1993	140,183	44,518	39,676	55,989	0
1994	161,738	52,556	46,500	62,682	0
1995	154,120	27,554	61,283	65,283	0
1996	153,393	51,905	33,840	67,648	0
1997	157,006	56,447	38,372	62,187	0
1998	159,008	39,891	53,133	65,951	33
1999	163,415	38,508	61,025	63,607	275
2000	243,716	72,586	105,102	65,610	418
2001	373,278	166,690	140,370	65,753	465
2002	516,233	189,313	263,078	63,439	403
2003	679,922	270,988	342,859	65,698	376
2004	854,138	394,585	397,086	62,099	368
2005	728,601	358,280	304,954	65,124	242
2006	723,958	341,065	321,955	60,765	173
2007	822,454	482,196	291,773	46,501	1,984
2008	963,263	558,650	365,396	39,164	53
2009	1,072,357	700,596	338,406	30,536	2,819
2010	1,136,789	738,745	333,251	32,922	31,871
2011	1,505,651	936,993	498,657	18,012	51,989
2012	1,618,829	970,729	619,802	14,379	13,919
2013	1,572,299	911,007	658,368	0	2,924

^aLNG exports from Alaska

^bIncludes all other LNG Exports

Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Monthly*, December 2014

TABLE 3-2
PIPELINE IMPORTS OF NATURAL GAS TO THE UNITED STATES – 1983-2013
(Million Cubic Feet)

Year	TOTAL	Canada	Mexico
1983	787,284	711,923	75,361
1984	806,870	755,368	51,502
1985	926,056	926,056	0
1986	748,780	748,780	0
1987	992,532	992,532	0
1988	1,276,322	1,276,322	0
1989	1,339,357	1,339,357	0
1990	1,448,065	1,448,065	0
1991	1,709,716	1,709,716	0
1992	2,094,387	2,094,387	0
1993	2,268,429	2,266,751	1,678
1994	2,573,062	2,566,049	7,013
1995	2,823,130	2,816,408	6,722
1996	2,897,139	2,883,277	13,862
1997	2,916,395	2,899,152	17,243
1998	3,066,605	3,052,073	14,532
1999	3,422,075	3,367,545	54,530
2000	3,555,567	3,543,966	11,601
2001	3,738,813	3,728,537	10,276
2002	3,786,733	3,784,978	1,755
2003	3,437,230	3,437,230	0
2004	3,606,543	3,606,543	0
2005	3,709,774	3,700,454	9,320
2006	3,602,744	3,589,995	12,749
2007	3,836,770	3,782,708	54,062
2008	3,632,403	3,589,089	43,314
2009	3,299,403	3,271,107	28,296
2010	3,309,747	3,279,752	29,995
2011	3,119,753	3,117,081	2,672
2012	2,963,141	2,962,827	314
2013	2,786,496	2,785,427	1,069

Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Monthly*, December 2014

SUPPLY

TABLE 3-3
LNG IMPORTS AND EXPORTS
1983-2013
(Million Cubic Feet)

Year	IMPORTS					EXPORTS		TOTAL NET
	Algeria	Egypt	Nigeria	Trinidad	Other ^a	Japan	Other ^b	
1983	131,124	0	0	0	0	52,857	0	78,267
1984	36,191	0	0	0	0	52,840	0	-16,649
1985	23,659	0	0	0	0	52,883	0	-29,224
1986	0	0	0	0	1,669	50,172	0	-48,503
1987	0	0	0	0	0	48,599	0	-48,599
1988	17,490	0	0	0	0	51,573	0	-34,083
1989	42,163	0	0	0	0	51,424	0	-9,262
1990	84,193	0	0	0	0	52,546	0	31,647
1991	63,596	0	0	0	0	54,005	0	9,591
1992	43,116	0	0	0	0	52,532	0	-9,415
1993	81,685	0	0	0	0	55,989	0	25,697
1994	50,778	0	0	0	0	62,682	0	-11,904
1995	17,918	0	0	0	0	65,283	0	-47,364
1996	35,325	0	0	0	4,949	67,648	0	-27,374
1997	65,675	0	0	0	12,103	62,187	0	15,591
1998	68,567	0	0	0	16,886	65,951	33	19,469
1999	75,763	0	0	50,777	36,890	63,607	275	99,548
2000	46,947	0	12,654	98,949	67,485	65,610	418	160,008
2001	64,945	0	37,966	98,009	37,207	65,753	465	171,908
2002	26,584	0	8,123	151,104	42,919	63,439	403	164,888
2003	53,423	0	50,067	378,069	24,959	65,698	376	440,444
2004	120,343	0	11,818	462,100	57,754	62,099	368	589,548
2005	97,157	72,540	8,149	439,246	14,168	65,124	242	565,894
2006	17,449	119,528	57,292	389,268	0	60,765	173	522,599
2007	77,299	114,580	95,028	447,758	36,146	46,501	1,984	722,327
2008	0	54,839	12,049	266,821	17,989	39,164	53	312,481
2009	0	160,435	13,306	236,202	42,014	30,536	2,819	418,602
2010	0	72,990	41,733	189,748	126,539	32,922	31,871	366,218
2011	0	35,120	2,362	128,620	182,837	18,012	51,989	278,939
2012	0	2,811	0	112,207	59,631	14,379	13,919	146,351
2013	0	0	2,590	69,744	24,525	0	2,924	93,936

^aOther includes imports from Australia, Brunei, Equatorial Guinea, Indonesia, Malaysia, Oman, Qatar and United Arab Emirates.

^bOther includes exports to Brazil, India, Mexico, South Korea, Spain and United Kingdom.

Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Monthly*, December 2014

SECTION 4

UNDERGROUND GAS STORAGE

	<u>2012</u>
Number of Sites	397
Est. Total Capacity (Billion cubic feet)	8,549
Est. Base Gas Capacity (Billion cubic feet)	4,353
Est. Working Gas Capacity (Billion cubic feet)	4,216
Maximum Deliverability (Billion cubic feet/day)	95

Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014

UNDERGROUND STORAGE

TABLE 4-1
UNDERGROUND STORAGE SITES AND WORKING GAS CAPACITY
IN THE UNITED STATES
2012

Year	Sites	States	Est. Working Gas Capacity (Billion Cubic Feet)	Maximum Deliverability (Million Cubic Feet/Day)
2012	397	30	4,216	95,233

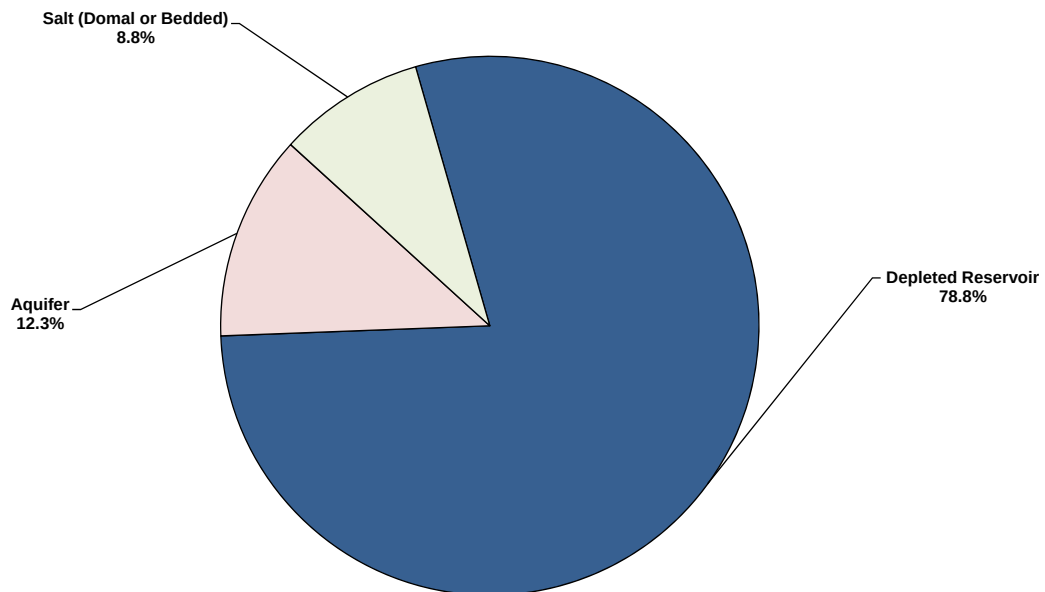
Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014

TABLE 4-2
UNDERGROUND STORAGE BY RESERVOIR TYPE AND WORKING CAPACITY
2012

	Sites	States	Est. Working Gas Capacity (Billion Cubic Feet)	Est. Base Gas Capacity (Billion Cubic Feet)	Total Underground Storage Capacity (Billion Cubic Feet)
Depleted Reservoir	313	25	3,631	3,307	6,939
Aquifer	49	10	353	920	1,273
Salt (Domal or Bedded)	35	8	232	105	338
TOTAL	397	30	4,216	4,333	8,549

Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014

Chart 4-1
Distribution of Underground Storage by Reservoir Type



Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014

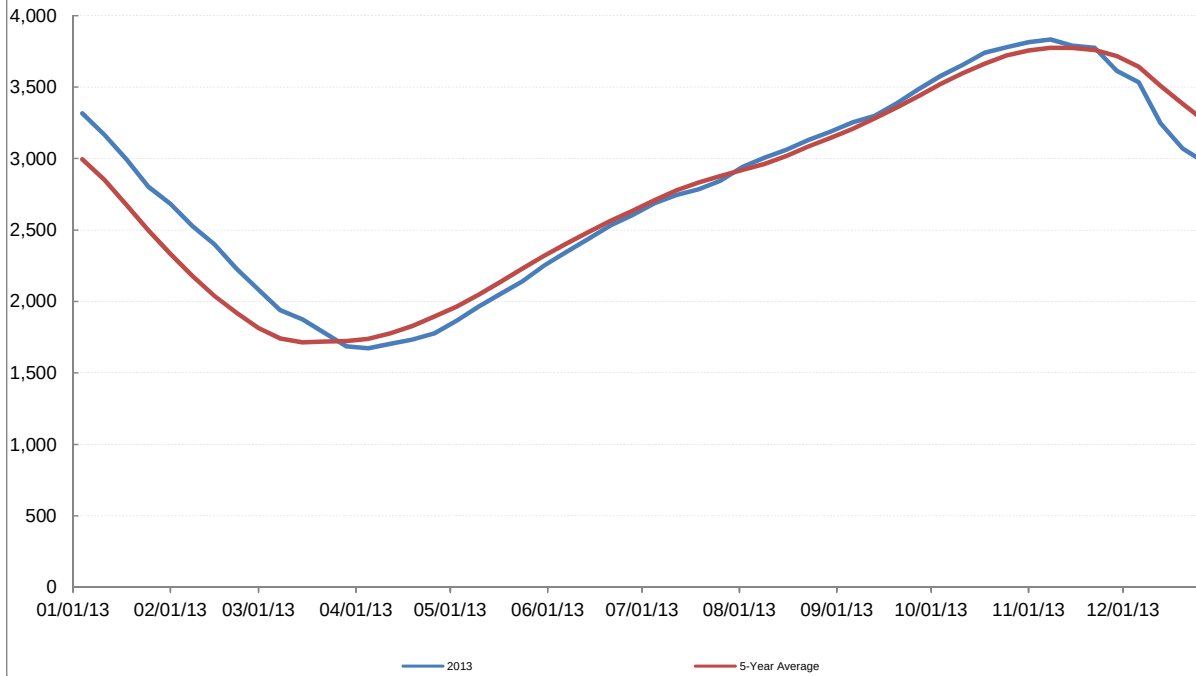
TABLE 4-3
DISTRIBUTION OF UNDERGROUND STORAGE BY RESERVOIR TYPE
IN THE UNITED STATES
2012

	Sites (%)	Working Gas (%)	Base Gas (%)
Depleted Reservoir	78.8	86.1	76.3
Aquifer	12.3	8.4	21.2
Salt (Domal or Bedded)	8.8	5.5	2.4
TOTAL	100	100	100

Numbers may not add up due to independent rounding.

Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014.

Chart 4-2
Total Working Gas in Storage
 Comparison of 2013 to Prior 5-Year Average



Source: U.S. Department of Energy, Energy Information Administration, *Weekly Natural Gas Storage Report*

UNDERGROUND STORAGE

TABLE 4-4
WORKING GAS STORAGE SURVEY WEEKLY DATA
2013

Date	Regions			TOTAL U.S.
	Producing ^a	East ^b	West ^c	
Jan 04	1,152	1,686	478	3,316
Jan 11	1,113	1,600	455	3,168
Jan 18	1,060	1,520	416	2,996
Jan 25	1,013	1,391	398	2,802
Feb 01	993	1,303	388	2,684
Feb 08	960	1,187	380	2,527
Feb 15	925	1,108	367	2,400
Feb 22	875	999	355	2,229
Mar 01	817	922	344	2,083
Mar 08	769	830	339	1,938
Mar 15	754	783	339	1,876
Mar 22	737	710	334	1,781
Mar 29	695	662	330	1,687
Apr 05	690	646	337	1,673
Apr 12	703	665	336	1,704
Apr 19	714	686	334	1,734
Apr 26	734	704	339	1,777
May 03	765	756	344	1,865
May 10	796	811	357	1,964
May 17	828	857	368	2,053
May 24	851	910	380	2,141
May 31	888	968	396	2,252
Jun 07	913	1,025	409	2,347
Jun 14	933	1,085	420	2,438
Jun 21	957	1,143	433	2,533
Jun 28	971	1,191	443	2,605
Jul 05	998	1,244	445	2,687
Jul 12	1,013	1,281	451	2,745
Jul 19	1,025	1,306	455	2,786
Jul 26	1,034	1,350	461	2,845
Aug 02	1,049	1,408	484	2,941
Aug 09	1,053	1,459	494	3,006
Aug 16	1,057	1,506	500	3,063
Aug 23	1,073	1,555	502	3,130
Aug 30	1,085	1,598	505	3,188
Sep 06	1,099	1,647	507	3,253
Sep 13	1,100	1,688	511	3,299
Sep 20	1,125	1,742	519	3,386
Sep 27	1,158	1,800	529	3,487
Oct 04	1,188	1,851	538	3,577
Oct 11	1,212	1,897	545	3,654
Oct 18	1,245	1,947	549	3,741
Oct 25	1,263	1,964	552	3,779
Nov 01	1,285	1,974	555	3,814
Nov 08	1,297	1,984	553	3,834
Nov 15	1,284	1,953	552	3,789
Nov 22	1,291	1,939	546	3,776
Nov 29	1,223	1,861	530	3,614
Dec 06	1,214	1,815	504	3,533
Dec 13	1,115	1,683	450	3,248
Dec 20	1,074	1,568	429	3,071
Dec 27	1,061	1,501	412	2,974

^aIncludes Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas and Mississippi.

^bIncludes all states east of the Mississippi River—except Mississippi and Alabama—and Iowa, Nebraska and Missouri.

^cIncludes all states west of the Mississippi River—except Iowa, Nebraska, and Missouri—and Producing Region states.

Source: U.S. Department of Energy, Energy Information Administration, *Weekly Natural Gas Storage Report*

TABLE 4-5
CANADIAN UNDERGROUND NATURAL GAS STORAGE STATISTICS
2012

	TOTAL CANADA	Alberta	British Columbia	Ontario	Quebec	Saskatchewan
Number of Facilities						
Depleted Reservoir	46	5	1	35	2	3
Salt Cavern	8	1	0	0	0	7
TOTAL	54	6	1	35	2	10
Working Gas Capacity (Bcf)						
Depleted Reservoir	608.4	260.4	48.0	267.5	5.0	27.4
Salt Cavern	17.0	2.8	0.0	0.0	0.0	14.2
TOTAL	625.4	263.2	48.0	267.5	5.0	41.7
Maximum Deliverability (Bcf/d)						
Depleted Reservoir	4.7*	3.8	0.7	n.a.	0.1	0.1
Salt Cavern	1.1	0.6	0.0	0.0	0.0	0.5
TOTAL	5.8*	4.4	0.7	n.a.	0.1	0.6

*Does Not Include Ontario

n.a. – Not Available

Source: American Gas Association, *Survey of Underground Storage of Natural Gas in the United States and Canada*, January 2014.

UNDERGROUND STORAGE

SECTION 5

DISTRIBUTION AND TRANSMISSION

MILES OF PIPELINE

	<u>2013</u>	<u>% Change</u> <u>2013/2012</u>
MILES OF PIPELINE (Thousands)	2,463.9	+ 0.7
Gathering	17.4	- 1.7
Transmission	302.8	+ 1.3
Distribution	1,253.6	+ 0.6
Services	890.1	+ 0.7

Source: Tables in the section are compiled from U.S. Department of Transportation data

TABLE 5-1
GAS INDUSTRY MILES OF PIPELINE AND MAIN BY TYPE
1990-2013^a
 (Thousands)

Year	TOTAL ^a	Gathering	Transmission Pipeline	Distribution Main
1990	1,189.2	32.4	292.2	864.6
1991	1,208.2	32.7	294.1	891.4
1992	1,216.1	32.6	291.5	892.0
1993	1,277.2	32.1	293.3	951.8
1994	1,288.4	31.3	301.5	955.6
1995	1,277.6	30.9	296.9	949.8
1996	1,323.6	29.6	292.2	1,001.8
1997	1,331.8	34.7	294.0	1,003.1
1998	1,351.2	29.0	300.1	1,022.1
1999	1,340.3	31.8	301.0	1,007.5
2000	1,369.3	27.1	296.6	1,045.6
2001	1,373.5	20.1	287.1	1,066.3
2002	1,411.4	22.3	309.5	1,079.6
2003	1,424.2	22.3	304.0	1,097.9
2004	1,462.3	23.7	298.9	1,139.8
2005	1,437.5	23.3	296.4	1,117.8
2006	1,534.3	19.9	300.4	1,214.0
2007	1,520.2	19.1	300.0	1,201.1
2008	1,525.0	20.0	299.0	1,206.0
2009	1,526.4	19.7	297.2	1,209.5
2010	1,530.7	18.7	307.6	1,204.4
2011	1,557.1	20.4	304.5	1,232.3
2012	1,563.0	17.7	299.0	1,246.3
2013	1,573.8	17.4	302.8	1,253.6
Steel	864.5	16.3	301.3	546.9
Plastic	676.5	0.0	1.4	674.2
Other	32.9	0.2	0.1	32.6

^a Excludes service pipe and underground storage.
 Numbers may not add up to totals due to independent rounding.

DISTRIBUTION AND TRANSMISSION

TABLE 5-2
GAS INDUSTRY MILES OF MAIN BY STATE
2000-2013

Division and State	2000	2005	2010	2012	2013
UNITED STATES	1,045,641	1,117,784	1,204,432	1,246,251	1,253,630
New England	32,281	35,768	35,218	35,592	35,949
Connecticut	7,084	7,465	7,666	7,751	7,822
Maine	452	602	748	803	937
Massachusetts	19,650	20,792	21,133	21,285	21,383
New Hampshire	1,609	3,066	1,863	1,875	1,896
Rhode Island	3,024	3,095	3,132	3,174	3,179
Vermont	462	748	678	704	733
Middle Atlantic	117,877	125,092	128,337	129,344	129,672
New Jersey	30,486	32,301	33,455	33,919	34,101
New York	44,681	46,444	47,591	47,880	47,988
Pennsylvania	42,710	46,348	47,290	47,545	47,583
East North Central	221,379	226,084	250,000	251,964	253,269
Illinois	52,801	45,647	60,991	60,881	61,076
Indiana	34,988	38,003	39,541	40,128	40,127
Michigan	50,434	54,054	55,917	56,496	56,905
Ohio	50,897	54,775	56,318	56,786	57,102
Wisconsin	32,259	33,605	37,233	37,674	38,059
West North Central	103,804	111,339	102,035	116,944	118,297
Iowa	16,679	20,343	17,533	17,670	17,818
Kansas	20,570	18,435	21,770	22,021	22,227
Minnesota	24,986	28,039	15,923	30,023	30,474
Missouri	23,781	25,721	26,912	26,891	27,155
Nebraska	10,861	11,930	12,422	12,529	12,638
North Dakota	2,461	2,723	2,992	3,162	3,296
South Dakota	4,466	4,149	4,483	4,649	4,689
South Atlantic	124,090	137,647	166,074	170,032	171,881
Delaware	2,144	2,422	2,809	2,872	2,984
District of Columbia	1,202	1,188	1,190	1,197	1,199
Florida	7,202	22,479	26,587	26,556	27,240
Georgia	37,113	39,583	43,065	43,585	43,729
Maryland	12,116	13,531	14,275	14,477	14,610
North Carolina	21,426	11,602	28,379	29,128	29,515
South Carolina	15,978	18,010	18,725	20,726	20,954
Virginia	17,435	19,242	20,602	20,847	20,942
West Virginia	9,474	9,590	10,441	10,644	10,706
East South Central	83,517	88,192	97,389	102,220	102,822
Alabama	23,811	26,964	29,659	30,257	30,387
Kentucky	14,848	15,779	16,565	17,471	17,920
Mississippi	13,581	14,124	14,659	16,299	16,309
Tennessee	31,277	31,325	36,506	38,193	38,205
West South Central	148,195	163,086	163,880	174,508	175,486
Arkansas	16,374	18,980	19,964	20,186	20,352
Louisiana	24,185	24,425	24,909	26,304	26,739
Oklahoma	21,520	23,992	25,100	25,878	25,906
Texas	86,116	95,690	93,906	102,140	102,489
Mountain	91,457	105,467	117,021	120,267	119,919
Arizona	17,838	21,488	23,852	24,145	24,293
Colorado	25,566	31,561	34,147	36,122	35,208
Idaho	5,986	7,033	7,945	8,022	8,105
Montana	5,645	6,494	6,713	6,970	7,027
Nevada	8,837	8,476	9,736	9,799	9,830
New Mexico	11,612	12,513	13,276	13,349	13,437
Utah	12,250	14,204	16,450	16,746	16,911
Wyoming	3,723	3,697	4,901	5,114	5,108
Pacific	123,041	125,108	144,479	145,380	146,336
Alaska	2,550	2,732	2,957	2,982	3,091
California	90,164	99,052	104,043	104,693	105,106
Hawaii	597	609	613	606	608
Oregon	11,906	14,199	15,289	15,345	15,461
Washington	17,824	8,516	21,577	21,754	22,070

Data not adjusted to common diameter equivalent. Mileage shown is as of end of year.

DISTRIBUTION AND TRANSMISSION

TABLE 5-3
GAS INDUSTRY MILES OF PIPELINE AND MAIN BY STATE AND TYPE OF MAIN
2013a,b,c

Division and State	TOTAL	Field and Gathering	Transmission	Distribution
UNITED STATES	1,573,870	17,432	302,808	1,253,630
New England	38,267	0	2,318	35,949
Connecticut	8,236	0	414	7,822
Maine	1,586	0	649	937
Massachusetts	21,418	0	35	21,383
New Hampshire	1,915	0	19	1,896
Rhode Island	4,309	0	1,130	3,179
Vermont	804	0	71	733
Middle Atlantic	134,726	598	4,456	129,672
New Jersey	34,540	0	439	34,101
New York	51,274	131	3,156	47,988
Pennsylvania	48,912	468	861	47,583
East North Central	296,826	1,588	41,969	253,269
Illinois	90,421	10	29,335	61,076
Indiana	42,815	24	2,664	40,127
Michigan	64,724	255	7,564	56,905
Ohio	60,478	1,300	2,076	57,102
Wisconsin	38,387	0	328	38,059
West North Central	125,307	319	6,691	118,297
Iowa	18,163	0	345	17,818
Kansas	26,300	310	3,763	22,227
Minnesota	31,866	0	1,392	30,474
Missouri	27,916	0	761	27,155
Nebraska	12,732	0	94	12,638
North Dakota	3,426	9	121	3,296
South Dakota	4,904	0	215	4,689
South Atlantic	197,387	285	25,222	171,881
Delaware	14,359	42	11,333	2,984
District of Columbia	1,199	0	0	1,199
Florida	27,755	0	515	27,240
Georgia	47,968	0	4,239	43,729
Maryland	14,975	0	365	14,610
North Carolina	33,339	3	3,821	29,515
South Carolina	21,692	0	738	20,954
Virginia	25,006	28	4,036	20,942
West Virginia	11,093	211	175	10,706
East South Central	168,302	4,636	60,845	102,822
Alabama	88,432	4,048	53,997	30,387
Kentucky	23,710	562	5,228	17,920
Mississippi	17,449	26	1,114	16,309
Tennessee	38,710	0	505	38,205
West South Central	265,443	7,513	82,444	175,486
Arkansas	60,420	1,168	38,900	20,352
Louisiana	47,467	2,296	18,432	26,739
Oklahoma	33,041	482	6,653	25,906
Texas	124,515	3,567	18,459	102,489
Mountain	185,361	2,068	63,374	119,919
Arizona	41,187	8	16,886	24,293
Colorado	70,844	1,872	33,763	35,208
Idaho	10,579	0	2,474	8,105
Montana	13,488	120	6,341	7,027
Nevada	10,751	0	921	9,830
New Mexico	15,933	63	2,433	13,437
Utah	16,983	4	68	16,911
Wyoming	5,597	2	487	5,108
Pacific	162,251	425	15,490	146,336
Alaska	4,320	244	985	3,091
California	118,682	181	13,395	105,106
Hawaii	631	0	23	608
Oregon	16,462	0	1,001	15,461
Washington	22,156	0	86	22,070

^a Includes field and gathering, transmission and distribution main but excludes service pipe and underground storage.

^b Data not adjusted to common diameter equivalent. Mileage shown as of end of year.

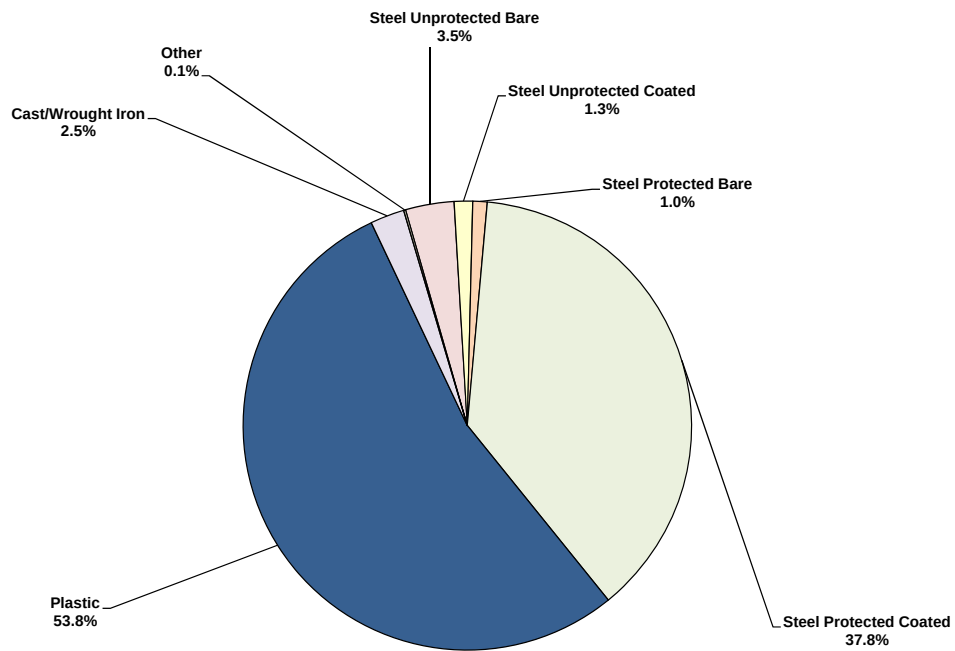
^c Transmission data is reported under state of company headquarters reporting if reporting for multiple states within a single DOT report.

DISTRIBUTION AND TRANSMISSION

TABLE 5-4
MILES OF MAIN BY MATERIAL BY STATE
2013

Division and States	Steel Unprotected		Steel Cathodically Protected		Plastic	Cast Wrought Iron	Ductile Iron	Copper	Other	Total Miles of Main All Material
	Bare	Coated	Bare	Coated						
UNITED STATES	43,892	16,724	12,971	473,263	674,176	30,888	672	24	1,020	1,253,630
New England	2,064	1,420	159	10,738	15,412	6,124	29	0	2	35,949
Connecticut	174	48	0	3,271	2,891	1,426	12	0	0	7,822
Maine	2	15	0	210	658	51	0	0	1	937
Massachusetts	1,539	1,150	159	5,745	9,097	3,691	1	0	1	21,383
New Hampshire	30	20	0	728	993	125	0	0	0	1,896
Rhode Island	320	188	0	596	1,227	831	16	0	0	3,179
Vermont	0	0	0	187	546	0	0	0	0	733
Middle Atlantic	14,709	3,718	1,012	37,099	60,586	12,250	221	4	73	129,672
New Jersey	1,472	780	85	10,587	16,257	4,881	32	2	6	34,101
New York	6,125	1,424	391	13,961	21,818	4,254	0	0	15	47,988
Pennsylvania	7,113	1,514	536	12,551	22,511	3,115	189	2	53	47,583
East North Central	9,712	3,216	1,329	110,448	122,267	5,501	270	4	521	253,269
Illinois	159	3	145	39,083	19,797	1,645	244	0	0	61,076
Indiana	736	167	6	17,119	21,806	275	18	0	0	40,127
Michigan	578	1,759	776	20,927	29,834	3,011	2	1	15	56,905
Ohio	8,240	1,287	402	20,563	25,574	570	5	1	460	57,102
Wisconsin	0	0	0	12,755	25,257	0	0	1	46	38,059
West North Central	1,298	171	4,935	42,784	67,424	1,659	11	1	15	118,297
Iowa	63	115	110	7,539	9,984	7	0	0	0	17,818
Kansas	655	0	2,778	7,290	11,415	86	3	0	0	22,227
Minnesota	430	53	9	7,067	22,883	29	0	0	4	30,474
Missouri	1	0	1,189	11,636	13,257	1,071	0	1	0	27,155
Nebraska	145	2	813	6,261	4,940	457	8	0	11	12,638
North Dakota	0	0	8	1,182	2,106	0	0	0	0	3,296
South Dakota	4	0	29	1,808	2,839	9	0	0	0	4,689
South Atlantic	4,692	1,251	380	60,422	102,566	2,445	95	13	17	171,881
Delaware	17	24	6	611	2,239	86	1	0	0	2,984
District of Columbia	28	65	0	318	370	418	0	0	0	1,199
Florida	1,111	449	25	10,548	14,892	211	0	0	5	27,240
Georgia	39	0	42	17,216	26,427	5	0	0	0	43,729
Maryland	307	101	1	5,294	7,524	1,378	2	0	2	14,610
North Carolina	0	0	0	10,760	18,755	0	0	0	0	29,515
South Carolina	0	0	10	8,318	12,627	0	0	0	0	20,954
Virginia	317	443	258	5,555	13,926	333	93	13	6	20,942
West Virginia	2,873	169	39	1,802	5,805	14	0	0	4	10,706
East South Central	1,091	632	942	43,386	55,112	1,540	46	2	72	102,822
Alabama	310	516	281	12,544	15,390	1,288	6	2	51	30,387
Kentucky	735	81	97	7,919	8,983	86	0	0	20	17,920
Mississippi	4	34	525	8,032	7,645	49	21	0	0	16,309
Tennessee	42	1	40	14,891	23,095	118	19	0	0	38,205
West South Central	6,791	427	3,230	70,564	93,110	1,321	0	0	42	175,486
Arkansas	728	23	614	7,434	11,450	103	0	0	0	20,352
Louisiana	3	100	961	14,243	11,038	392	0	0	2	26,739
Oklahoma	1,201	73	583	9,281	14,767	0	0	0	0	25,906
Texas	4,860	231	1,073	39,605	55,854	827	0	0	40	102,489
Mountain	195	878	742	36,897	81,113	14	0	0	79	119,919
Arizona	0	0	549	7,026	16,719	0	0	0	0	24,293
Colorado	153	863	77	11,764	22,265	14	0	0	72	35,208
Idaho	0	0	0	2,915	5,190	0	0	0	0	8,105
Montana	7	0	3	2,266	4,751	0	0	0	0	7,027
Nevada	0	0	0	1,412	8,416	0	0	0	1	9,830
New Mexico	8	15	90	5,526	7,797	0	0	0	0	13,437
Utah	0	0	7	3,900	13,005	0	0	0	0	16,911
Wyoming	26	0	17	2,088	2,971	0	0	0	5	5,108
Pacific	3,339	5,012	242	60,927	76,586	32	0	0	199	146,336
Alaska	8	0	0	468	2,615	0	0	0	0	3,091
California	3,204	5,012	227	43,957	52,677	29	0	0	0	105,106
Hawaii	109	0	0	167	332	0	0	0	0	608
Oregon	6	0	4	7,850	7,572	0	0	0	29	15,461
Washington	13	0	10	8,486	13,389	3	0	0	170	22,070

Chart 5 - 1
2013 U.S. Miles of Main By Material



DISTRIBUTION AND TRANSMISSION

TABLE 5-5
NUMBER OF SERVICES BY MATERIAL BY STATE
2013

Division and States	Steel Unprotected		Steel Cathodically Protected		Plastic	Cast Wrought Iron	Ductile Iron	Copper	Other	Total Number of Services All Material
	Bare	Coated	Bare	Coated						
UNITED STATES	1,977,876	1,630,753	353,311	14,423,680	46,135,494	11,991	320	973,074	1,612,341	67,118,840
New England	292,716	76,191	74	256,262	1,314,125	1,891	16	12,632	104,025	2,057,932
Connecticut	55,468	8,522	0	68,553	290,396	37	0	1,248	5,741	429,965
Maine	185	216	0	236	26,956	47	0	1	52	27,693
Massachusetts	188,544	55,966	68	158,060	771,079	1,583	0	10,903	95,366	1,281,569
New Hampshire	6,698	1,921	6	14,568	64,140	39	0	273	1,882	89,527
Rhode Island	41,821	9,566	0	10,150	130,002	185	16	207	984	192,931
Vermont	0	0	0	4,695	31,552	0	0	0	0	36,247
Middle Atlantic	867,464	217,779	16,080	1,021,870	5,872,307	7,268	0	272,030	57,714	8,332,512
New Jersey	269,636	5,282	0	404,915	1,576,495	0	0	67,718	0	2,324,046
New York	304,290	145,796	13,157	321,702	2,194,269	7,208	0	183,491	9,886	3,179,799
Pennsylvania	293,538	66,701	2,923	295,253	2,101,543	60	0	20,821	47,828	2,828,667
East North Central	191,824	238,216	38,715	2,598,320	9,274,270	144	294	474,046	1,277,484	14,093,313
Illinois	16,624	620	9,973	813,378	2,090,050	74	294	52,783	717,788	3,701,584
Indiana	2,145	12,970	934	475,323	1,490,384	0	0	278	288	1,982,322
Michigan	36,153	187,611	13,340	509,753	2,146,141	17	0	305,765	37,437	3,236,217
Ohio	136,902	36,985	14,468	520,025	2,217,634	53	0	100,012	520,336	3,546,415
Wisconsin	0	30	0	279,841	1,330,061	0	0	15,208	1,635	1,626,775
West North Central	94,629	27,258	57,781	1,017,609	4,442,317	7	0	93,391	86,760	5,819,752
Iowa	1,361	10,897	6,957	278,723	619,344	7	0	470	19,515	937,274
Kansas	74,517	6,234	43,160	94,617	729,827	0	0	333	0	948,688
Minnesota	5,414	7,058	68	124,975	1,323,473	0	0	13,755	9,099	1,483,842
Missouri	9,070	1,414	4,508	227,667	1,206,985	0	0	69,225	82	1,518,951
Nebraska	3,892	938	1,238	203,650	309,210	0	0	9,522	55,132	583,582
North Dakota	0	0	68	41,647	106,236	0	0	26	1,544	149,521
South Dakota	375	717	1,782	46,330	147,242	0	0	60	1,388	197,894
South Atlantic	234,220	82,214	17,403	1,453,968	6,135,723	108	10	93,076	14,677	8,031,399
Delaware	957	13,041	0	16,542	136,481	0	0	4,914	1,525	173,460
District of Columbia	6,908	13,161	0	4,389	87,740	0	0	11,338	0	123,536
Florida	37,703	12,969	5,330	197,760	623,843	0	0	312	2,599	880,516
Georgia	5,871	193	5,837	434,307	1,573,413	0	0	10	0	2,019,631
Maryland	91,223	12,001	47	141,053	720,907	0	0	49,626	0	1,014,857
North Carolina	0	0	0	278,823	1,116,945	0	0	0	0	1,395,768
South Carolina	8	0	402	178,613	589,956	0	0	0	0	768,979
Virginia	14,895	29,134	105	136,002	1,016,767	78	10	26,837	6,553	1,230,381
West Virginia	76,655	1,715	5,682	66,479	269,671	30	0	39	4,000	424,271
East South Central	70,892	6,856	114,087	1,175,152	2,459,836	1,578	0	11,083	4,370	3,843,854
Alabama	52,201	3,041	101,867	252,177	660,588	344	0	1,121	4,283	1,075,622
Kentucky	17,096	1,263	8,570	244,205	566,205	1,233	0	7,536	87	846,195
Mississippi	53	1,194	2,126	273,662	320,732	1	0	186	0	597,954
Tennessee	1,542	1,358	1,524	405,108	912,311	0	0	2,240	0	1,324,083
West South Central	198,925	82,120	64,385	2,695,015	4,997,812	995	0	9,541	6,180	8,054,973
Arkansas	12,972	26,976	9,833	228,218	398,919	0	0	0	4	676,922
Louisiana	5,678	34,271	22,023	578,441	474,682	995	0	3,518	2,105	1,121,713
Oklahoma	35,363	1,473	19,242	449,171	797,747	0	0	0	35	1,303,031
Texas	144,912	19,400	13,287	1,439,185	3,326,464	0	0	6,023	4,036	4,953,307
Mountain	19,033	23,888	25,717	1,370,850	4,543,943	0	0	0	53,519	6,036,950
Arizona	0	0	11,487	189,115	1,068,037	0	0	0	0	1,268,639
Colorado	15,842	23,421	3,259	494,500	1,058,919	0	0	0	47,034	1,642,975
Idaho	0	0	0	94,164	326,836	0	0	0	52	421,052
Montana	545	0	54	107,725	185,447	0	0	0	0	293,771
Nevada	0	0	0	37,655	707,405	0	0	0	991	746,051
New Mexico	0	467	10,477	230,602	385,571	0	0	0	0	627,117
Utah	0	0	8	142,993	707,075	0	0	0	5,433	855,509
Wyoming	2,646	0	432	74,096	104,653	0	0	0	9	181,836
Pacific	8,173	876,231	19,069	2,834,634	7,095,161	0	0	7,275	7,612	10,848,155
Alaska	0	36	0	14,578	108,173	0	0	1,635	0	124,422
California	350	876,195	17,457	2,277,584	5,511,068	0	0	5,572	0	8,688,226
Hawaii	7,272	0	0	5,317	19,380	0	0	33	2,853	34,855
Oregon	49	0	20	236,370	536,747	0	0	0	2,478	775,664
Washington	502	0	1,592	300,785	919,793	0	0	35	2,478	1,229,918

Chart 5 - 2
2013 U.S. Number of Services By Material

