

Residential Natural Gas Market Survey



**March 2017
(2015 Data)**



RESIDENTIAL NATURAL GAS MARKET SURVEY

2015 DATA

68th Annual Survey of the U.S. Natural Gas Utility Industry

Published by the Energy Analysis and Standards Group
American Gas Association
400 N. Capitol Street, NW, Suite 450
Washington, D.C. 20001
www.aga.org

Notice

In issuing and making this publication available, AGA is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is AGA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. The statements in this publication are for general information and represent an unaudited compilation of statistical information that could contain coding or processing errors. AGA makes no warranties, express or implied, nor representations about the accuracy of the information in the publication or its appropriateness for any given purpose or situation.

This publication shall not be construed as including, advice, guidance, or recommendations to take, or not to take, any actions or decisions in relation to any matter, including without limitation relating to investments or the purchase or sale of any securities, shares or other assets of any kind. Should you take any such action or decision; you do so at your own risk. Information on the topics covered by this publication may be available from other sources, which the user may wish to consult for additional views or information not covered by this publication.

© January 2017 by the American Gas Association. All rights reserved.
*Reproduction in whole or in part is prohibited without
the permission of the copyright owner.*

AGA Catalog No. F00017

11/11/2017 11:11:11 AM

.

CONTENTS

Introduction.....	1
Executive Summary	2
United States Housing Market in 2015	4
New Housing Completions	4
Existing Housing.....	8
Residential Natural Gas Customers in 2015.....	11
Total Residential Customers	11
House-Heating Customers	11
Natural Gas Customer and Unit Additions	11
House-Heating Conversions	11
Natural Gas Appliance Market Share and Consumption.....	13
Market Share of Natural Gas Appliances in Residences	14
Natural Gas Consumption per Appliance	17
Gas Hearth Shipments.....	18
Residential Bill Payment Assistance Programs.....	18
Competitive Residential Energy Prices.....	20

Appendix A – Sales Customers, Consumption, and Revenue Data by Company

Appendix B – Transportation Customers and Consumption Data by Company

Appendix C – Changes in Customers and Consumption from Previous Year by Company

Appendix D – Metropolitan Statistical Area Natural Gas Market Shares

Appendix E – U.S. Census Regions

11/11/2017 11:11:11 AM

LIST OF TABLES

	<u>Page</u>
1. 2015 Private Housing Completions by Heating Fuel.....	5
2. Comparison of 2014 and 2015 Private Housing Completions.....	6
3. Market Share of Private Housing Completions by Heating Fuel (2005-2015)	8
4. 2015 Household Space Heating Market Share.....	9
5. Historic Household Space Heating Market Shares.....	10
6. 2015 Gas Customers and Unit Additions.....	12
7. Changes in U. S. Primary Home Heating Energy Sources 2000 – 2010.....	13
8. Market Share of Natural Gas Space Heating 1987-2015.....	14
9. Market Share of Natural Gas Cooking 1987-2015.....	14
10. Market Share of Natural Gas Water Heating 1987-2015.....	15
11. Market Share of Natural Gas Clothes Drying 1987-2015.....	15
12. Market Share of Natural Gas, 2015.....	16
13. Natural Gas Market Share by Sector, 2013.....	16
14. U.S. Natural Gas Customer Appliance Profile.....	17
15. 2015 Annual Gas Consumption per Appliance by Region.....	17
16. Hearth Industry Unit Shipments.....	18
17. Energy Assistance and Energy Efficiency Contributions.....	19
18. 2015 Competitive Fuel Prices.....	20

LIST OF FIGURES

	<u>Page</u>
1. Gas Heat is Preferred in New Homes over Electricity and Oil–Single Family Completions 2001-2015.....	3
2. Heating Market Share of All Private Housing Completions 2004-2015.....	7

Introduction

This year's report is the 68th annual *Residential Natural Gas Market Survey* conducted by the American Gas Association (AGA). The data collected for 2015 provide a unique and comprehensive portrait of the residential natural gas market. Detailed information is presented by state and region, including customers, market share, inventory additions from new homes, and conversions from alternative fuels. Company-specific data are reported in Appendices A, B and C. Appendix D presents natural gas market shares data for the metropolitan statistical areas.

A total of 55 natural gas utility companies responded to this year's survey, representing 42 percent of the total U.S. residential customers. These responses are an increase from the 54 utilities that responded to last year's survey. Company-specific data were also derived from the Energy Information Administration's Form 176 database.

Incorporated in the survey results are data regarding new private housing completions as well as existing homes from the U.S. Bureau of the Census. The source of these data is different from the statistics compiled from the survey respondents and should be evaluated separately.

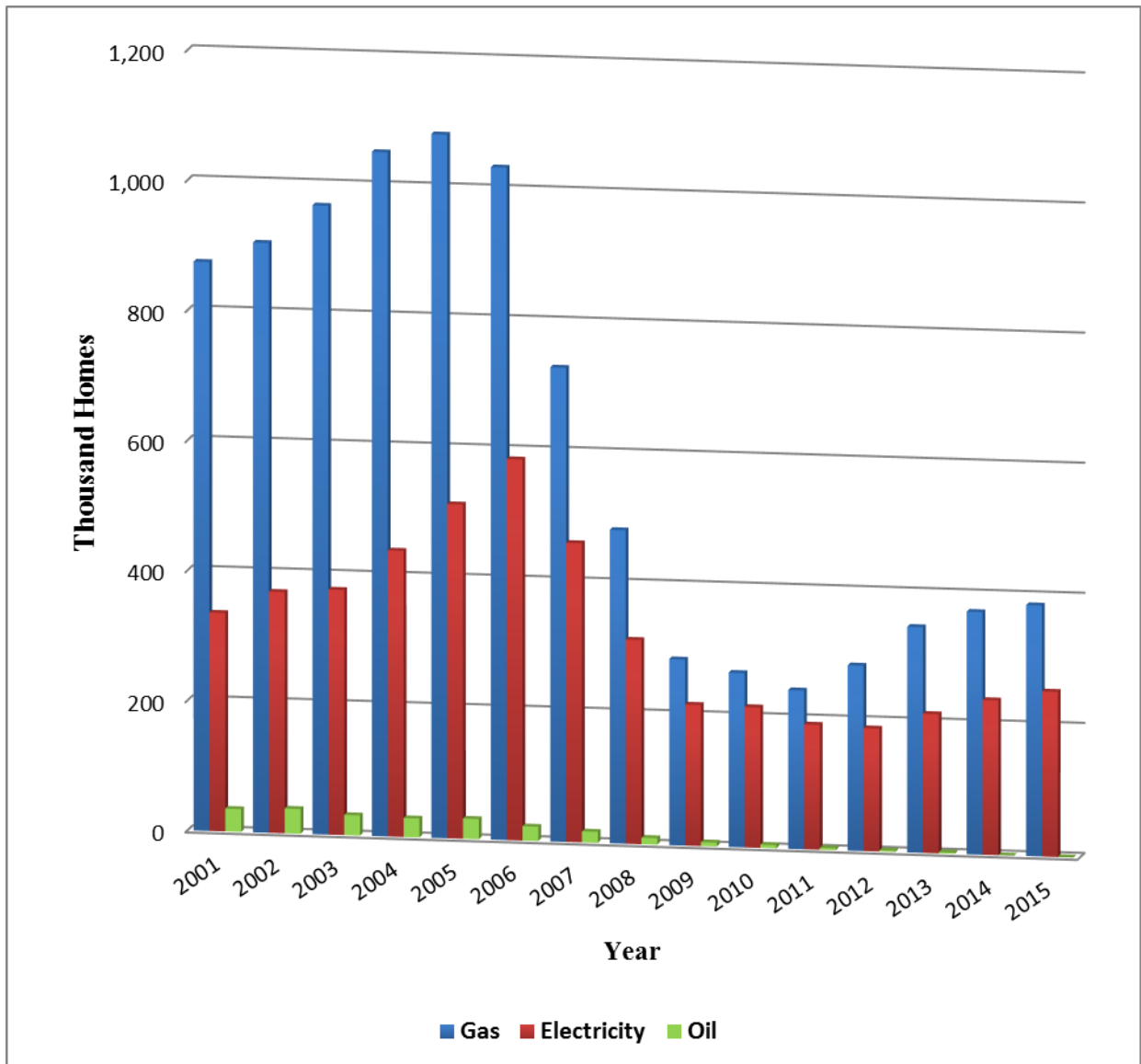
Our thanks go to those companies participating in this *Residential Natural Gas Market Survey* information-gathering effort. Their cooperation and support are essential to making this publication a primary source of natural gas utility industry data and an important industry reference.

Executive Summary

In the United States, 58 percent of households, or 67.9 million customers, have natural gas service. Eighty-four percent of these customers used natural gas for house heating.

- Natural gas remained the United States' most popular energy source for home heating, with a 47 percent residential market share. Put another way, natural gas heated more homes in this country than all other major energy sources combined – electricity was 38 percent, heating oil six percent, and propane five percent.
- In 2015, the majority of newly built single-family homes (60 percent) featured gas heat. The gas space-heating share of new single-family housing completions exceeded the electric share in all but the southern region of the country. New gas single-family home completions have exceeded all other energy sources for at least fifteen years (see Figure 1).
- In the new multi-family housing arena, gas market share for space heating increased to 37 percent in 2015 compared to 33 percent in 2014. When both single- and multi-family units are considered, the gas heating share of new housing completions continued at 52 percent, compared to the previous year. The overall electric share remained the same at 47 percent.
- Net additions to the number of residential natural gas customers totaled 646,201 in 2015. This represents a 0.6 percent increase in total customers compared to 2014.
- The 2015 survey results show that roughly 23 percent of all new natural gas customers came from homes converted from another energy source. In fact, survey respondents were asked to provide a breakdown of conversions by fuel type. Based on these data, fuel oil conversions to natural gas accounted for 26 percent of all conversions. Approximately 9 percent of conversion customers had previously heated with electricity. The respondents were unable to identify the previous heating fuel for 65 percent of the homes.
- In 2015, natural gas water heaters had a 48 percent market share, while shares for gas cooking remained at 35 percent and clothes drying 16 percent.
- During 2014, at least \$7.96 billion went to assist low-income households pay their energy bills or weatherize their homes. Most of the funding came from the federal Low-Income Home Energy Assistance Program (LIHEAP), with \$3.4 billion in funds. Utilities, both electric and natural gas, accounted for 43 percent (\$3.5 billion) of the total in the form of discounts, waivers, forgiveness of arrearages, and weatherization programs.

Figure 1
Gas Heat is Preferred in New Homes over Electricity and Oil
Single-Family Home Completions (2001-2015)



Source: U.S. Bureau of the Census, *Annual 2015 Characteristics of New Housing*
 NOTE: Gas includes both propane and natural gas.

United States Housing Market in 2015

New Housing Completions

Home-building increased significantly in 2015, with 968,000 homes being built, a 10 percent increase from 2014.

Gas heat continued to dominate the new single-family home market. According to the U.S. Bureau of the Census, new single-family completions heated by gas totaled 386,000 in 2015, up 3 percent from 373,000 in 2014. Gas heating market share remained at 60 percent in 2015, compared to 60 percent in 2014 and 61 percent in 2013. The 2015 electric heating market share of new home completions was 39 percent. Single-family home completions heated by gas exceeded electric completions for the 28th consecutive year.

In the 2015 new multi-family housing arena, gas market share for space heating increased to 37 percent, compared to 33 percent in 2014. The total number of multi-family units completed in 2015 increased to 320,000 compared to 261,000 in 2014. Market share for electric heat stayed the same compared to 2014. Gas-heated multi-family units numbered 117,000 compared with 85,000 electric units in 2014.

When both single and multi-family units are considered, the market share of new housing heated by gas in 2015 was 52 percent. The overall 2015 electric house heating market share remained the same at 47 percent.

Tables 1 and 2 present the regional breakdown of units completed by type of fuel. Single-family home completions heated by gas outnumbered electric completions in all regions except the South. The gas market shares in the Northeast, Midwest, South and West regions were 87 percent, 81 percent, 39 percent and 85 percent, respectively. In the multi-family sector, gas completions exceeded electric in the Northeast and West regions.

Table 3 shows new housing market share data from 2004 to 2015. The Census data show that in recent years, electric market share has increased at the expense of gas, from 65 percent gas and 33 percent electric in 2004 to 52 percent for gas and 47 percent for electric in 2015.

Table 1

2015 Housing Completions by Heating Fuel

	Share	Units (Thousands)				
Single-Family		U.S.	Northeast	Midwest	South	West
Gas ¹	60%	386	40	83	139	124
Electricity	39%	254	4	18	212	20
Oil	0%	<u>0</u>	(Z)	(Z)	(Z)	(Z)
Other ²	1%	8	2	2	1	2
Subtotal	100%	648	46	103	352	146
Multi-Family						
Gas ¹	37%	117	39	24	5	49
Electricity	63%	203	7	27	133	36
Oil	Z	(Z)	(Z)	(Z)	(Z)	(Z)
Other ²	NA	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Subtotal	100%	320	46	51	138	85
Combined						
Gas ¹	52%	503	79	107	144	173
Electricity	47%	457	11	45	345	56
Oil	0%	0	0	0	0	0
Other ²	1%	8	2	2	1	2
TOTAL	100%	968	92	154	490	231
Heat Pump ³						
Single-Family	79%	200	4	20	221	20
Multi-Family	55%	112	5	17	102	22
Combined	68%	312	9	37	323	42
Manufactured Homes ⁴						
		46	3	7	29	8

¹Includes propane.

²Includes wood, coal, solar, and other fuels.

³Subset of electricity. Share information reflects total market.

⁴Not included in the totals for Single-Family, Multi-Family, or Combined. Heating fuel information not available for manufactured homes. Source: U.S. Bureau of the Census Website.

Z = Less than 500 units or less than 0.5 percent.

NA = Not available

Note: Components may not add to totals due to rounding and withheld data

Source: U.S. Bureau of the Census, *Characteristics of New Housing: 2015*

Table 2

A Comparison of 2014 and 2015 Private Housing Completions
(Percent of Home Energy Market)

	<u>U.S. Total</u>		<u>Northeast</u>		<u>Midwest</u>		<u>South</u>		<u>West</u>	
	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>
Single-Family										
Gas ¹	60%	60%	86%	87%	81%	81%	39%	39%	86%	85%
Electricity	38%	39%	10%	9%	17%	17%	60%	60%	12%	14%
Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	1%	1%	4%	4%	2%	2%	1%	0%	1%	1%
Multi-Family										
Gas ¹	33%	37%	82%	85%	30%	47%	4%	4%	55%	58%
Electricity	67%	63%	18%	15%	70%	53%	96%	96%	45%	42%
Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Combined										
Gas ¹	52%	52%	84%	86%	66%	69%	30%	29%	76%	75%
Electricity	47%	47%	14%	12%	33%	29%	69%	70%	23%	24%
Oil	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	1%	1%	2%	2%	1%	1%	0%	0%	1%	1%

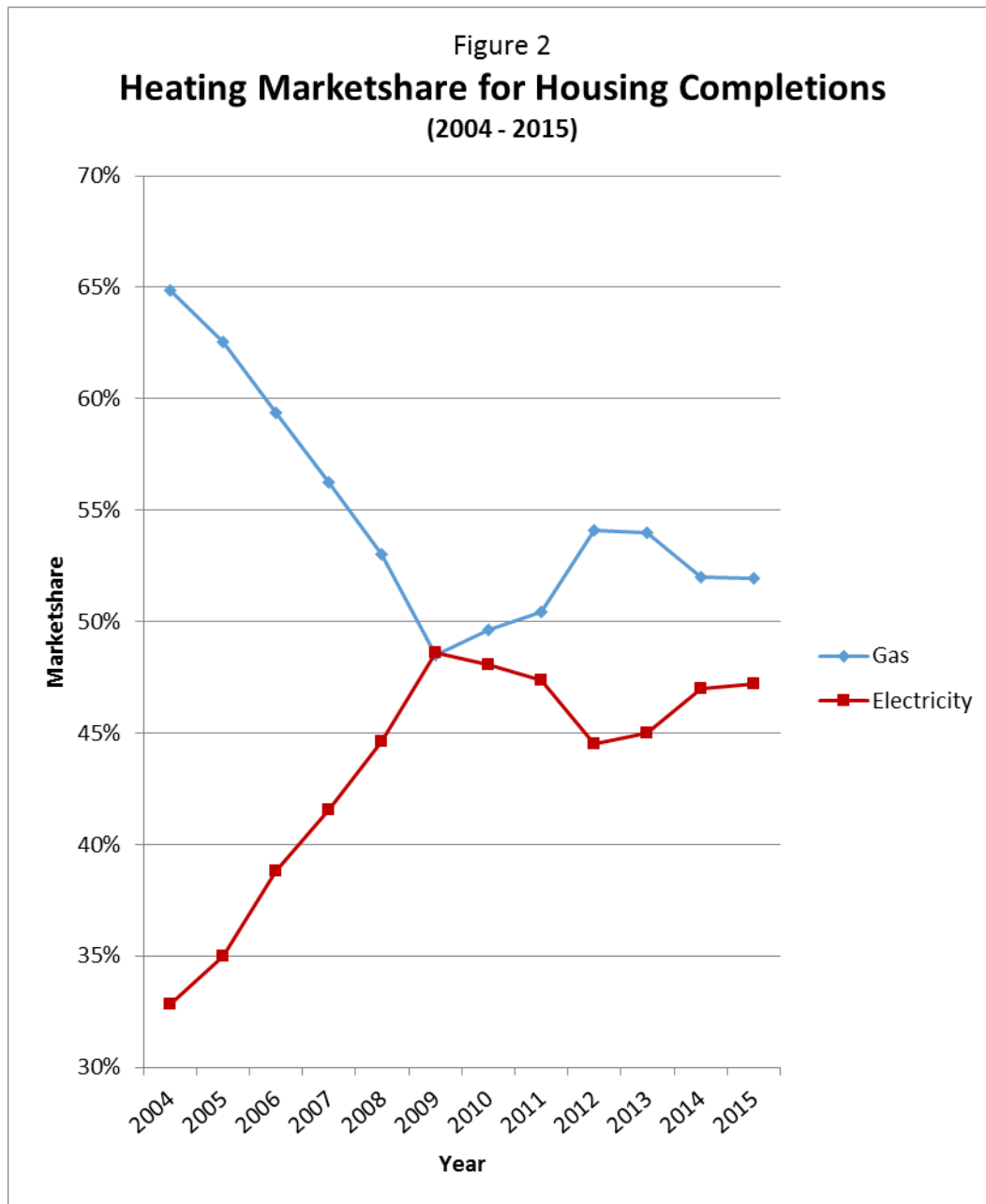
¹Includes propane.

Z = Less than 500 units or less than 0.5 percent.

NA = Not available

Note: Percentages may not add up to 100% due to rounding

Source: U.S. Bureau of the Census, *Characteristics of New Housing: 2015*



Source: See Table 3 on the next page.
Note: Gas includes natural gas and propane.

Table 3

**Market Share of Private Housing Completions by Heating Fuel
(2004-2014)**

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Single-Family												
Gas ¹	69%	66%	62%	60%	59%	55%	54%	55%	59%	61%	60%	60%
Electricity	29%	31%	35%	38%	38%	42%	43%	43%	39%	38%	38%	39%
Oil	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%
Other	1%	1%	1%	1%	2%	2%	2%	2%	1%	1%	1%	1%
Multi-Family												
Gas ¹	53%	55%	56%	58%	62%	62%	62%	62%	40%	33%	33%	37%
Electricity	46%	43%	43%	41%	37%	36%	35%	37%	60%	66%	67%	63%
Oil	Z	2%	Z	1%	Z	Z	Z	Z	0%	0%	0%	0%
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Combined												
Gas ¹	65%	63%	59%	56%	53%	48%	50%	50%	54%	54%	52%	52%
Electricity	33%	35%	39%	42%	45%	49%	48%	47%	45%	45%	47%	47%
Oil	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%
Other	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

¹Includes propane.

S = Data withheld because they did not meet publication standards on the basis of response rate, associated standard error or consistency review.

Z = Less than 500 units or less than 0.5 percent.

NA = Not available

Note: Percentages may not add up to 100% due to rounding

Source: U.S. Bureau of the Census, *Characteristics of New Housing: 2015*

Existing Housing

According to the U.S. Census Bureau, nearly half of the existing housing units in 2015 used natural gas to heat their homes, accounting for approximately 57 million (or 49 percent) of the 117 million occupied housing units in the United States (see Table 4).

Gas holds the largest market share in the Midwest, where 68 percent of the homes in that region have gas-heating systems. Gas heating beats out the competition in the Northeast and West regions of the country. Natural gas house-heating market share in the Northeast was 54 percent, while the natural gas share was 58 percent in the West. Gas has the lowest market share in the warmer climate of the South. About 30 percent of the houses in the South used natural gas space heating in 2015.

Table 4
2015 Household Space-Heating Market Share

	<u>NATURAL GAS</u>	<u>ELECTRICITY</u>	<u>FUEL OIL</u>	<u>PROPANE</u>	<u>OTHER</u>
NORTHEAST	54%	15%	23%	4%	4%
<i>NEW ENGLAND</i>	39%	13%	37%	6%	5%
Connecticut	35%	16%	42%	4%	3%
Maine	7%	6%	62%	9%	15%
Massachusetts	51%	16%	27%	3%	3%
New Hampshire	20%	9%	45%	15%	10%
Rhode Island	53%	11%	31%	3%	3%
Vermont	18%	5%	43%	16%	19%
<i>MIDDLE ATLANTIC</i>	60%	15%	18%	3%	3%
New Jersey	76%	12%	9%	2%	1%
New York	59%	11%	23%	4%	3%
Pennsylvania	52%	22%	17%	4%	5%
MIDWEST	67%	21%	1%	8%	3%
<i>EAST NORTH CENTRAL</i>	71%	18%	1%	7%	3%
Illinois	79%	16%	0%	4%	1%
Indiana	61%	29%	1%	7%	3%
Michigan	77%	9%	1%	8%	4%
Ohio	66%	23%	2%	5%	3%
Wisconsin	66%	16%	2%	11%	5%
<i>WEST NORTH CENTRAL</i>	59%	27%	1%	10%	3%
Iowa	61%	23%	1%	13%	2%
Kansas	66%	24%	0%	8%	2%
Minnesota	67%	17%	2%	11%	4%
Missouri	51%	35%	0%	9%	4%
Nebraska	59%	30%	0%	8%	2%
North Dakota	42%	40%	3%	13%	2%
South Dakota	48%	30%	2%	16%	4%
SOUTH	30%	63%	1%	4%	1%
<i>SOUTH ATLANTIC</i>	25%	68%	3%	4%	2%
Delaware	41%	33%	13%	10%	2%
District of Columbia	55%	41%	2%	1%	1%
Florida	4%	94%	0%	1%	0%
Georgia	40%	54%	0%	5%	1%
Maryland	45%	41%	9%	3%	2%
North Carolina	24%	63%	4%	7%	2%
South Carolina	22%	71%	1%	4%	1%
Virginia	33%	55%	5%	4%	3%
West Virginia	42%	44%	3%	5%	7%
<i>EAST SOUTH CENTRAL</i>	32%	59%	0%	6%	2%
Alabama	28%	65%	0%	6%	1%
Kentucky	38%	52%	1%	6%	3%
Mississippi	31%	56%	0%	12%	1%
Tennessee	33%	61%	0%	4%	2%
<i>WEST SOUTH CENTRAL</i>	38%	57%	0%	4%	1%
Arkansas	39%	50%	0%	7%	4%
Louisiana	35%	62%	0%	2%	1%
Oklahoma	53%	38%	0%	7%	3%
Texas	36%	60%	0%	3%	1%
WEST	58%	34%	1%	3%	4%
<i>MOUNTAIN</i>	57%	35%	0%	4%	4%
Arizona	33%	61%	0%	3%	3%
Colorado	70%	23%	0%	5%	3%
Idaho	52%	34%	1%	5%	9%
Montana	54%	24%	1%	12%	9%
Nevada	60%	35%	1%	2%	2%
New Mexico	67%	18%	0%	8%	8%
Utah	84%	12%	0%	2%	2%
Wyoming	59%	24%	0%	10%	7%
<i>PACIFIC</i>	58%	34%	1%	3%	3%
Alaska	50%	13%	29%	1%	7%
California	66%	28%	0%	3%	2%
Hawaii	5%	82%	0%	3%	10%
Oregon	39%	50%	2%	2%	8%
Washington	35%	55%	2%	3%	5%
UNITED STATES	49%	39%	5%	5%	3%

Source: U.S. CENSUS BUREAU, 2015 American Community Survey

Table 5 illustrates the changing nature of household space-heating energy. In the 1940s and 1950s, coal or coke was the dominant fuel, with wood accounting for a large market share. Since then, use of those fuels in homes has dropped dramatically. Fuel oil gained its largest market share in the 1960s, but its popularity has declined since. Propane has gained in market share somewhat over the time period. Electricity increased significantly since 1950, particularly after 1970 when the heat pump became popular. Natural gas' popularity increased substantially over the time period – the advent of the interstate pipeline system and the expansion of local distribution networks increased the availability of this fuel.

Natural gas has been the preferred home-heating energy source since 1960.

Table 5

Historic Household Space-Heating Market Shares

<u>Year</u>	<u>Utility Gas</u>	<u>Bottled, Tank, or LP Gas</u>	<u>Electricity</u>	<u>Fuel Oil, Kerosene, Etc.</u>	<u>Coal or Coke</u>	<u>Wood</u>	<u>Other Fuel</u>	<u>No Heat</u>
1940	11.3%	NA	NA	10.0%	54.7%	22.8%	0.4%	0.8%
1950	26.6%	2.3%	0.7%	22.6%	34.6%	10.0%	1.8%	1.4%
1960	43.1%	5.1%	1.8%	32.4%	12.2%	4.2%	0.4%	0.9%
1970	55.2%	6.0%	7.7%	26.0%	2.9%	1.3%	0.4%	0.6%
1980	53.1%	5.6%	18.4%	18.2%	0.6%	3.2%	0.2%	0.7%
1990	51.0%	5.7%	25.8%	12.2%	0.4%	3.9%	0.4%	0.6%
2000	51.2%	6.5%	30.3%	9.0%	0.1%	1.7%	0.4%	0.7%
2010	49.9%	5.1%	35.7%	6.5%	0.1%	2.1%	0.5%	0.9%

Source: U.S. Bureau of the Census

Table 6: 2015 Gas Customers and Unit Additions

Region, Division and State	GAS CUSTOMERS			NET GAS UNIT ADDITIONS	
	Total(1)	House Heating(2)	Percent Heating(2)	Total(1)	Est. Share of Additions from Conversions(3)
NORTHEAST					
NEW ENGLAND	2,422,620	1,594,095	65.8%	36,402	
Connecticut	531,380	373,560	70.3%	8,722	
Maine	31,011	21,367	68.9%	3,964	95%
Massachusetts	1,478,072	934,142	63.2%	16,722	49%
New Hampshire	102,567	70,771	69.0%	3,421	
Rhode Island	236,323	163,536	69.2%	2,537	
Vermont	43,267	30,720	71.0%	1,036	78%
MIDDLE ATLANTIC	9,903,237	7,462,610	75.4%	82,112	
New Jersey	2,728,340	2,130,834	78.1%	23,066	49%
New York	4,439,101	3,200,592	72.1%	33,062	47%
Pennsylvania	2,735,796	2,131,185	77.9%	25,984	61%
MIDWEST					
EAST NORTH CENTRAL	13,810,165	13,002,286	94.2%	65,814	
Illinois	3,876,362	3,574,006	92.2%	7,861	5%
Indiana	1,704,243	1,567,904	92.0%	10,976	2%
Michigan	3,213,910	3,053,215	95.0%	21,103	
Ohio	3,294,010	3,145,780	95.5%	10,141	35%
Wisconsin	1,721,640	1,661,383	96.5%	15,733	7%
WEST NORTH CENTRAL	5,484,669	5,077,556	92.6%	47,841	
Iowa	908,058	844,494	93.0%	7,638	
Kansas	861,419	770,970	89.5%	327	
Minnesota	1,496,790	1,429,434	95.5%	24,127	
Missouri	1,369,204	1,225,438	89.5%	5,918	
Nebraska	525,165	504,158	96.0%	2,757	2%
North Dakota	141,465	135,099	95.5%	3,548	
South Dakota	182,568	167,963	92.0%	3,526	
SOUTH					
SOUTH ATLANTIC	7,261,789	5,583,557	76.9%	84,295	
Delaware	161,607	133,326	82.5%	3,105	
District of Columbia	147,895	125,711	85.0%	18	20%
Florida	701,981	420,487	59.9%	(1,554)	44%
Georgia	1,777,558	1,482,483	83.4%	21,711	3%
Maryland	1,113,342	886,220	79.6%	12,050	13%
North Carolina	1,206,870	884,636	73.3%	23,718	21%
South Carolina	620,555	468,519	75.5%	15,812	18%
Virginia	1,194,338	905,308	75.8%	10,444	22%
West Virginia	337,643	276,867	82.0%	(1,009)	
EAST SOUTH CENTRAL	3,097,445	2,602,237	84.0%	16,792	
Alabama	768,568	624,077	81.2%	(850)	17%
Kentucky	764,946	653,264	85.4%	4,815	43%
Mississippi	439,359	371,258	84.5%	(5,064)	
Tennessee	1,124,572	953,637	84.8%	17,891	22%
WEST SOUTH CENTRAL	6,903,245	5,484,965	79.5%	48,355	
Arkansas	550,108	463,741	84.3%	1,074	
Louisiana	888,023	705,978	79.5%	(11,355)	
Oklahoma	941,137	827,259	87.9%	3,941	11%
Texas	4,523,977	3,487,986	77.1%	54,695	
WEST					
MOUNTAIN	6,011,909	5,071,906	84.4%	48,066	
Arizona	1,200,783	706,060	58.8%	13,989	
Colorado	1,712,153	1,641,955	95.9%	21,572	91%
Idaho	374,557	310,882	83.0%	7,163	
Montana	269,766	236,045	87.5%	3,917	
Nevada	824,039	718,562	87.2%	15,069	
New Mexico	578,769	480,957	83.1%	(35,544)	
Utah	891,917	837,510	93.9%	22,865	
Wyoming	159,925	139,934	87.5%	(971)	
PACIFIC	12,978,782	11,108,928	85.6%	216,524	
Alaska	128,605	118,960	92.5%	2,189	
California	10,969,597	9,389,975	85.6%	187,877	
Hawaii	28,952	-	0.0%	33	
Oregon	717,999	580,861	80.9%	10,989	42%
Washington	1,133,629	1,019,132	89.9%	15,436	25%
UNITED STATES	67,873,861	57,014,043	84.0%	646,201	26%

¹Derived from Energy Administration Form 176 Database (see Appendix C)²Derived from survey responses and Census information³Based on survey responses only: Does not reflect entire population.

Based on 2000 and 2010 Census information, AGA released a recent energy analysis that indicates approximately four million homes in the past decade had an alternative to the original home heating appliance installed (See Table 7). This analysis calculated that most of these conversions (2.4 million, or 61 percent) switched to electric appliances. Fuel oil lost the most customers (1.5 million) during that decade, followed closely by natural gas (1.2 million). However, the loss of those gas customers to other fuels was offset somewhat by the number of housing units that switched to natural gas (0.8 million). On a net basis, natural gas lost 400,000 customers that had previously used natural gas as their primary heating fuel.

Table 7

Changes in U. S. Primary Home Heating Energy Sources 2000 – 2010
(000 Homes)

Energy Source	Homes Heated in 2000	+	New Homes, 2000-2010	+	Additions from Conversions 2000-2010	-	Losses From Conversions 2000-2010	+	Other Changes 2000-2010	=	Homes Heated In 2010
Natural Gas	54,028		3,753		837		1,211		(388)		57,018
Propane	6,880		229		92		937		(117)		6,146
Electricity	32,010		4,771		2,409		100		(24)		39,066
Fuel Oil	9,458		42		128		1,453		(102)		8,073
All Other	3,104		644		460		224		(52)		3,932
Total	105,480		9,438		3,926		3,926		(682)		114,236

Source: U.S. Bureau of the Census

Source: AGA Energy Analysis 2013: [An Overview of the Competitive Environment for Home Heating Fuels 2000-2010](#)