

Residential Natural Gas Market Survey



**February 2014
(2012 Data)**



RESIDENTIAL NATURAL GAS MARKET SURVEY

2012 DATA

65th Annual Survey of the U.S. Natural Gas Utility Industry

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

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AGA Catalog No. F00014

CONTENTS

Introduction.....	1
Executive Summary	2
United States Housing Market in 2012	4
New Housing Completions	4
Existing Housing.....	8
Residential Natural Gas Customers in 2012.....	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.....	134
Market Share of Natural Gas Appliances in Residences	145
Natural Gas Consumption per Appliance	178
Gas Hearth Shipments.....	189
Residential Bill Payment Assistance Programs.....	189
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

LIST OF TABLES

	<u>Page</u>
1. 2012 Private Housing Completions by Heating Fuel.....	5
2. Comparison of 2011 and 2012 Private Housing Completions.....	6
3. Market Share of Private Housing Completions by Heating Fuel (2000-2012)	8
4. 2012 Household Space Heating Market Share.....	9
5. Historic Household Space Heating Market Shares.....	10
6. 2012 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 1987-2011.....	14
9. Market Share of Natural Gas Cooking 1987-2011.....	14
10. Market Share of Natural Gas Water Heating 1987-2011.....	15
11. Market Share of Natural Gas Clothes Drying 1987-2011.....	15
12. Market Share of Natural Gas, 2011.....	16
13. Natural Gas Market Share by Sector, 2011.....	16
14. U.S. Natural Gas Customer Appliance Profile.....	17
15. 2012 Annual Gas Consumption per Appliance by Region.....	17
16. Hearth Industry Unit Shipments.....	18
17. Energy Assistance and Energy Efficiency Contributions.....	19
18. 2012 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 2000-2012.....	3
2. Heating Market Share of All Private Housing Completions 2000-2012.....	7

Introduction

This year's report is the 65th annual *Residential Natural Gas Market Survey* conducted by the American Gas Association (AGA). The data collected for 2012 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 71 natural gas utility companies responded to this year's survey, representing 70 percent of the total U.S. residential customers. These responses are a decrease from the 74 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.

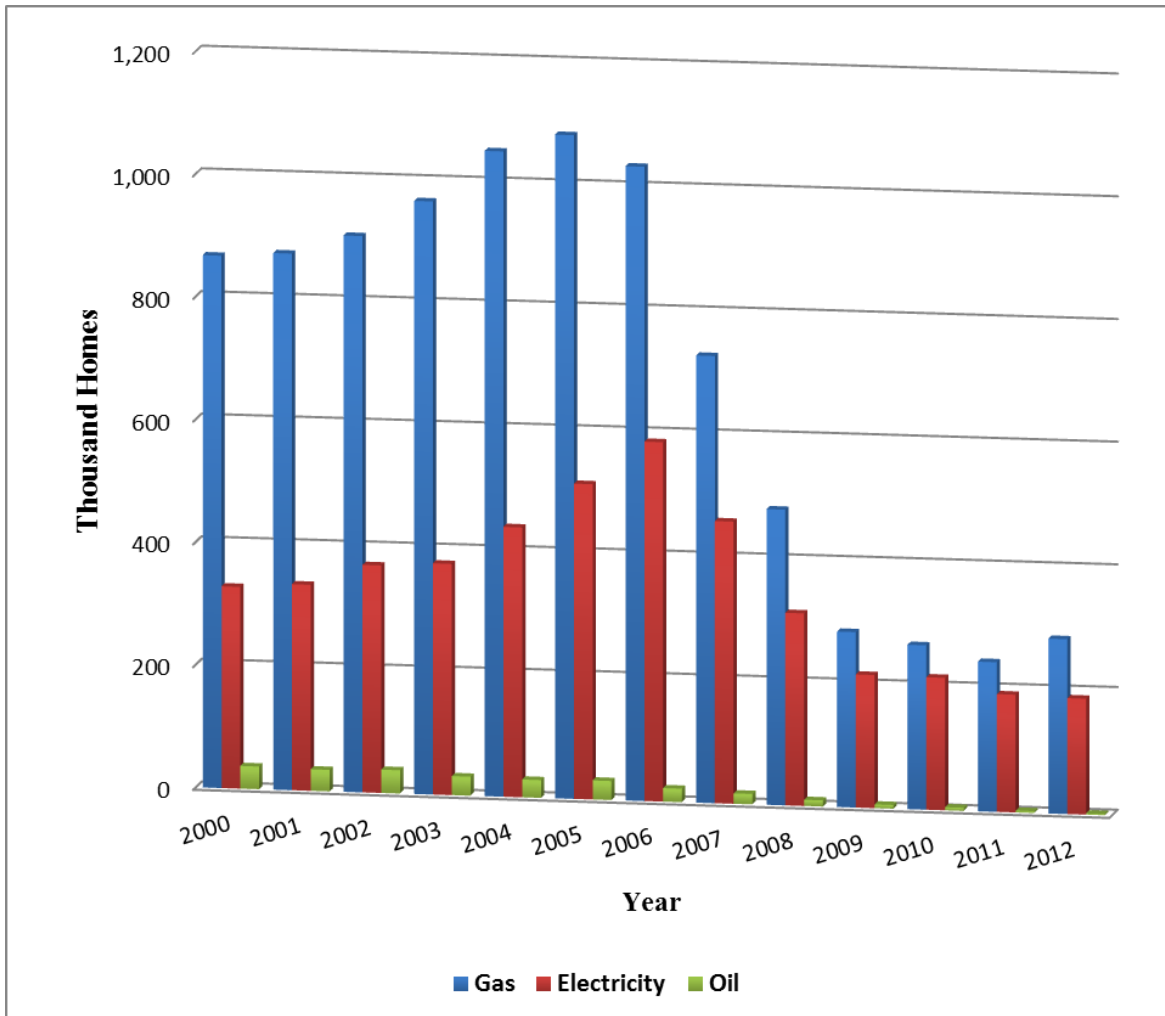
Our thanks go to those companies participating in this *Residential Natural Gas Market Survey* information-gathering effort. Their cooperation and support are essential to making this publication a primary source of natural gas utility industry data and an important industry reference.

Executive Summary

In the United States, 61 percent of households, or 66 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 49 percent residential market share. Put another way, natural gas heated more homes in this country than all other major energy sources combined – electricity was 37 percent, heating oil six percent, and propane five percent.
- In 2012, the majority of newly built single-family homes (59 percent) featured gas heat, up from a 55 percent gas-heat share in 2011. 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 thirteen years (see Figure 1).
- In the new multi-family housing arena, gas market share for space heating rose to 39 percent in 2012 from 37 percent in 2011. When both single- and multi-family units are considered, the gas heating share of new housing completions rose to 53 percent, compared to 51 percent the previous year. The overall electric share declined to 44 percent in 2012.
- Net additions to the number of residential natural gas customers totaled 649,686 in 2012. This represents a 1.0 percent increase in total customers compared to 2011.
- The 2012 survey results show that roughly 43 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 21 percent of all conversions. Approximately seven percent of conversion customers had previously heated with electricity. The respondents were unable to identify the previous heating fuel for 73 percent of the homes.
- Natural gas water heaters have a 50 percent market share, while shares for gas cooking rose to 36 percent and clothes drying fell to 20 percent.
- During 2011, at least \$5.8 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 \$4.5 billion in funds. Utilities, both electric and natural gas, accounted for 19 percent (\$1.1 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 (2000-2012)



Source: U.S. Bureau of the Census, *Annual 2012 Characteristics of New Housing*
 NOTE: Gas includes both propane and natural gas.

United States Housing Market in 2012

New Housing Completions

Home-building increased significantly in 2012, with 649,000 homes being built, a 12 percent increase from 2011.

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 285,000 in 2012, up nine percent from 244,000 in 2011. Gas heating market share rose to 59 percent in 2012, compared to 55 percent in 2011. The 2012 electric heating market share of new home completions declined to 39 percent. Single-family home completions heated by gas exceeded electric completions for the 26th consecutive year.

In the 2012 new multi-family housing arena, gas market share for space heating increased to 39 percent, compared to the 2011 level of 37 percent. The total number of multi-family units completed in 2012 increased to 166,000 compared to 138,000 in 2011. Market share for electric heat stayed the same compared to 2011. Gas-heated multi-family units numbered 65,000 compared with 51,000 electric units in 2011.

When both single and multi-family units are considered, the market share of new housing heated by gas in 2012 was 53 percent. The overall 2012 electric house heating market share decreased three percentage points to reach 44 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 81 percent, 76 percent, 37 percent and 87 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 2000 to 2012. The Census data show that in recent years, electric market share has increased at the expense of gas, from 65 percent gas and 32 percent electric in 2000 to 59 percent for gas and 39 percent for electric in 2012.

Table 1

2012 Housing Completions by Heating Fuel

	Share	Units (Thousands)				
Single-Family		U.S.	Northeast	Midwest	South	West
Gas ¹	59%	285	38	65	94	87
Electricity	39%	189	5	18	155	11
Oil	0%	2	2	(Z)	(Z)	(Z)
Other ²	1%	7	2	2	2	2
Subtotal	100%	483	47	85	251	100
Multi-Family						
Gas ¹	40%	65	24	13	4	24
Electricity	60%	99	3	11	70	14
Oil	Z	(Z)	<u>Z</u>	<u>Z</u>	<u>Z</u>	<u>Z</u>
Other ²	NA	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Subtotal	100%	164	27	24	74	38
Combined						
Gas ¹	54%	350	62	78	98	111
Electricity	45%	288	8	29	225	25
Oil	0%	2	2	0	0	0
Other ²	1%	7	2	2	2	2
TOTAL	100%	647	74	109	325	138
Heat Pump ³						
Single-Family	97%	183	4	16	154	9
Multi-Family	82%	81	7	11	53	11
Combined	92%	264	11	27	207	20
Manufactured Homes ⁴		52	4	8	34	7

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: 2012*

Table 2

A Comparison of 2011 and 2012 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>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>
Single-Family										
Gas ¹	55%	59%	75%	81%	73%	76%	35%	37%	81%	87%
Electricity	43%	39%	17%	11%	25%	21%	64%	62%	16%	11%
Oil	1%	0%	6%	4%	Z	0%	Z	0%	Z	0%
Other	2%	1%	2%	4%	3%	2%	1%	1%	3%	2%
Multi-Family										
Gas ¹	37%	40%	91%	89%	35%	54%	5%	5%	56%	63%
Electricity	62%	60%	6%	11%	63%	46%	95%	95%	42%	37%
Oil	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Combined										
Gas ¹	50%	54%	81%	84%	63%	72%	29%	30%	76%	80%
Electricity	47%	45%	14%	11%	35%	27%	71%	69%	22%	18%
Oil	1%	0%	4%	3%	0%	0%	0%	0%	0%	0%
Other	1%	1%	1%	3%	2%	2%	1%	1%	2%	1%

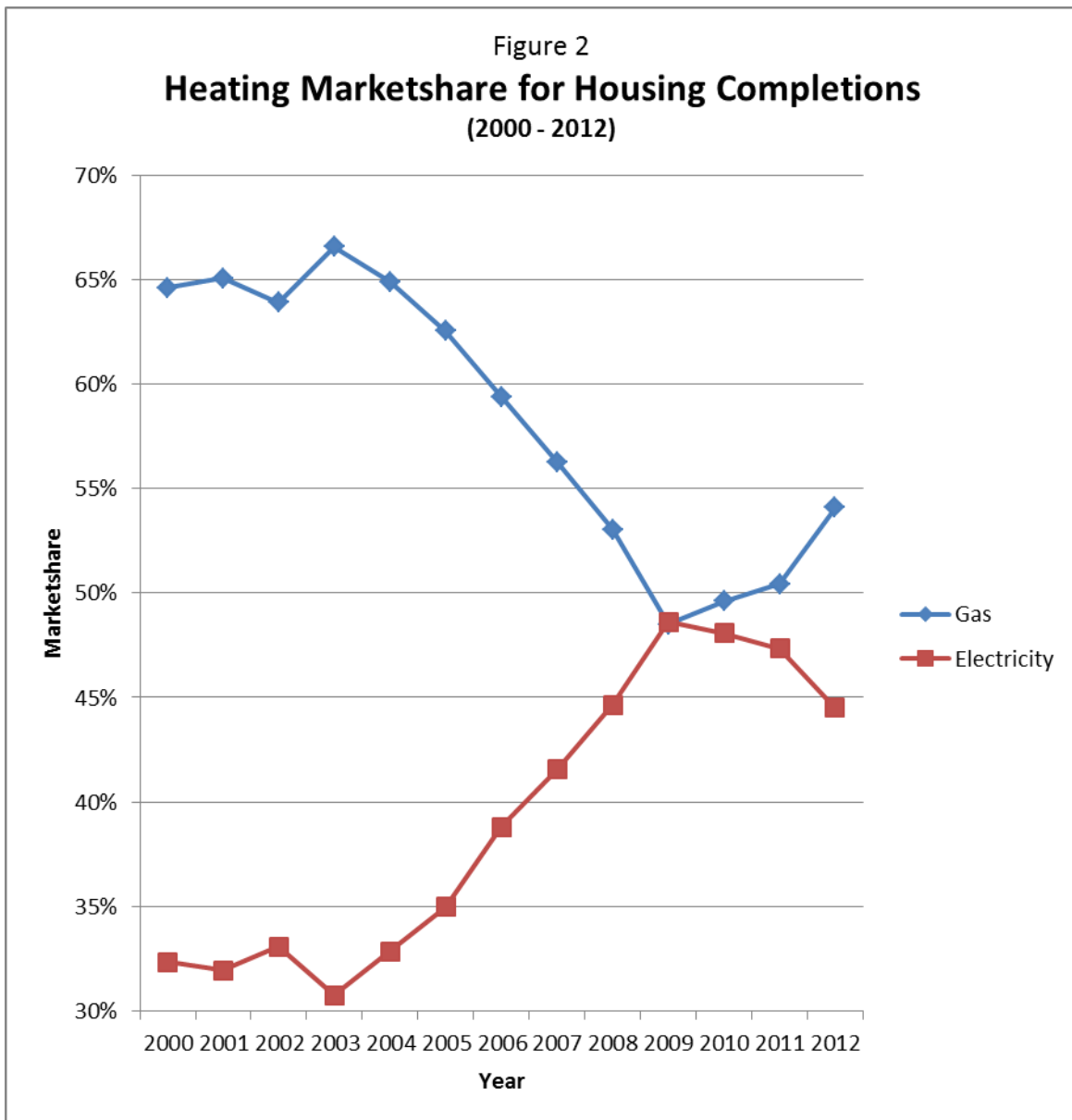
¹Includes propane.

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: 2012*



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
(2000-2012)**

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<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>
Single-Family													
Gas ¹	70%	70%	68%	70%	69%	66%	62%	60%	59%	55%	54%	55%	59%
Electricity	27%	27%	28%	27%	29%	31%	35%	38%	38%	42%	43%	43%	39%
Oil	3%	3%	3%	2%	2%	2%	1%	1%	1%	1%	1%	1%	0%
Other	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	1%
Multi-Family													
Gas ¹	54%	53%	54%	48%	53%	55%	56%	58%	62%	62%	62%	62%	60%
Electricity	45%	47%	45%	51%	46%	43%	43%	41%	37%	36%	35%	37%	40%
Oil	Z	Z	Z	Z	Z	2%	Z	1%	Z	Z	Z	Z	0%
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Combined													
Gas ¹	65%	65%	64%	67%	65%	63%	59%	56%	53%	48%	50%	50%	54%
Electricity	32%	32%	33%	31%	33%	35%	39%	42%	45%	49%	48%	47%	45%
Oil	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	0%
Other	1%	1%	1%	1%	1%	0%	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: 2012*

Existing Housing

According to the U.S. Census Bureau, nearly half of the existing housing units in 2012 used natural gas to heat their homes, accounting for more than 56 million (or 49 percent) of the 115 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 53 percent, while the natural gas share was 59 percent in the West. Gas has the lowest market share in the warmer climate of the South. About 31 percent of the houses in the South used natural gas space heating in 2012.

Table 4
2012 Household Space-Heating Market Share

	<u>NATURAL GAS</u>	<u>ELECTRICITY</u>	<u>FUEL OIL</u>	<u>PROPANE</u>	<u>OTHER</u>
NORTHEAST	53%	14%	26%	4%	4%
<i>NEW ENGLAND</i>	<i>37%</i>	<i>12%</i>	<i>40%</i>	<i>5%</i>	<i>5%</i>
Connecticut	33%	16%	45%	3%	3%
Maine	5%	4%	68%	7%	16%
Massachusetts	50%	15%	31%	3%	2%
New Hampshire	20%	8%	48%	14%	10%
Rhode Island	51%	9%	35%	3%	3%
Vermont	16%	5%	44%	15%	20%
<i>MIDDLE ATLANTIC</i>	<i>58%</i>	<i>14%</i>	<i>21%</i>	<i>3%</i>	<i>3%</i>
New Jersey	74%	12%	11%	2%	1%
New York	56%	11%	26%	3%	3%
Pennsylvania	51%	21%	19%	4%	5%
MIDWEST	68%	20%	1%	8%	3%
<i>EAST NORTH CENTRAL</i>	<i>72%</i>	<i>17%</i>	<i>2%</i>	<i>7%</i>	<i>3%</i>
Illinois	80%	15%	0%	4%	1%
Indiana	61%	28%	1%	7%	3%
Michigan	77%	8%	1%	8%	4%
Ohio	67%	22%	3%	5%	3%
Wisconsin	66%	15%	3%	11%	6%
<i>WEST NORTH CENTRAL</i>	<i>60%</i>	<i>25%</i>	<i>1%</i>	<i>10%</i>	<i>3%</i>
Iowa	64%	19%	1%	13%	3%
Kansas	68%	22%	0%	7%	2%
Minnesota	67%	17%	3%	10%	4%
Missouri	52%	34%	0%	9%	4%
Nebraska	63%	26%	1%	8%	2%
North Dakota	41%	39%	4%	13%	3%
South Dakota	49%	29%	2%	17%	3%
SOUTH	31%	62%	2%	4%	2%
<i>SOUTH ATLANTIC</i>	<i>25%</i>	<i>66%</i>	<i>3%</i>	<i>4%</i>	<i>2%</i>
Delaware	41%	32%	15%	10%	2%
District of Columbia	60%	36%	3%	1%	1%
Florida	4%	94%	0%	1%	0%
Georgia	40%	53%	0%	5%	1%
Maryland	45%	40%	10%	3%	2%
North Carolina	25%	61%	4%	8%	2%
South Carolina	23%	70%	1%	4%	1%
Virginia	34%	53%	6%	5%	3%
West Virginia	41%	44%	3%	4%	8%
<i>EAST SOUTH CENTRAL</i>	<i>33%</i>	<i>58%</i>	<i>0%</i>	<i>7%</i>	<i>2%</i>
Alabama	28%	63%	0%	7%	1%
Kentucky	39%	51%	1%	7%	3%
Mississippi	30%	55%	0%	12%	2%
Tennessee	33%	60%	0%	4%	2%
<i>WEST SOUTH CENTRAL</i>	<i>39%</i>	<i>56%</i>	<i>0%</i>	<i>4%</i>	<i>1%</i>
Arkansas	40%	48%	0%	7%	5%
Louisiana	35%	62%	0%	2%	1%
Oklahoma	54%	36%	0%	7%	3%
Texas	37%	59%	0%	3%	1%
WEST	59%	33%	1%	3%	3%
<i>MOUNTAIN</i>	<i>58%</i>	<i>33%</i>	<i>0%</i>	<i>4%</i>	<i>4%</i>
Arizona	35%	60%	0%	3%	2%
Colorado	72%	20%	0%	5%	3%
Idaho	52%	33%	2%	5%	9%
Montana	54%	21%	1%	12%	11%
Nevada	63%	32%	1%	3%	2%
New Mexico	67%	16%	0%	8%	9%
Utah	84%	12%	0%	2%	2%
Wyoming	60%	23%	0%	10%	7%
<i>PACIFIC</i>	<i>59%</i>	<i>34%</i>	<i>1%</i>	<i>3%</i>	<i>3%</i>
Alaska	48%	12%	31%	2%	8%
California	67%	27%	0%	3%	2%
Hawaii	5%	87%	0%	3%	5%
Oregon	39%	49%	3%	2%	8%
Washington	35%	55%	2%	3%	5%
UNITED STATES	49%	37%	6%	5%	3%

Source: U.S. CENSUS BUREAU, 2012 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

Residential Natural Gas Customers in 2012

Total Residential Customers

Based on the Energy Information Administration's Form 176 database, the total number of residential natural gas customers totaled more than 66 million in 2012 a 1.0 percent increase from 2011.

House-Heating Customers

Based on AGA survey responses and Census information, approximately 84 percent of all residential natural gas customers used gas to heat their homes (see Table 6). The East North Central region of the country had the highest penetration, in excess of 94 percent in 2012, while the New England region had the lowest penetration, around 66 percent.

Natural Gas Customer and Unit Additions

The number of natural gas customers increased 649,686 in 2012. The East North Central region had the highest percentage increase in customers (almost two percent), while the East South Central region registered a decline in customers.

Most of the additions were estimated to be from new construction. Of the total additions reported by the survey respondents, 43 percent were from conversions of customers from another fuel. Other factors that should be considered include reductions in the number of customers (demolition, conversion to another fuel, etc.) and reclassification of customers from master-metered apartments to individual meters.

House-Heating Conversions

In 2012, companies responding to the survey reported that 42,535 new customers came from homes converted from another fuel to natural gas. The respondents were asked to provide a breakdown of conversions by fuel type. Based on these data, fuel oil conversions to natural gas accounted for six percent of all conversions. Approximately 21 percent of conversion customers had previously heated with electricity. The respondents were unable to identify the previous heating fuel for 73 percent of the homes.

Table 6: 2012 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	2,343,782	1,541,014	65.7%	18,188	
Connecticut	504,138	354,409	70.3%	9,168	
Maine	23,555	16,229	68.9%	1,094	
Massachusetts	1,447,947	915,103	63.2%	1,851	82%
New Hampshire	99,738	68,819	69.0%	2,338	
Rhode Island	228,487	158,113	69.2%	2,659	93%
Vermont	39,917	28,341	71.0%	1,078	80%
MIDDLE ATLANTIC	9,714,024	7,319,446	75.3%	33,759	
New Jersey	2,671,308	2,086,292	78.1%	12,103	54%
New York	4,364,169	3,146,566	72.1%	10,501	60%
Pennsylvania	2,678,547	2,086,588	77.9%	11,155	70%
MIDWEST					
EAST NORTH CENTRAL	13,880,157	13,068,806	94.2%	255,123	
Illinois	3,878,056	3,575,568	92.2%	22,059	8%
Indiana	1,673,132	1,539,281	92.0%	(34,016)	2%
Michigan	3,403,694	3,233,509	95.0%	249,799	
Ohio	3,244,274	3,098,282	95.5%	8,114	
Wisconsin	1,681,001	1,622,166	96.5%	9,167	25%
WEST NORTH CENTRAL	5,401,371	4,997,852	92.5%	73,044	
Iowa	892,123	829,674	93.0%	8,390	
Kansas	853,527	763,907	89.5%	(1,203)	
Minnesota	1,445,905	1,380,839	95.5%	9,842	
Missouri	1,390,580	1,244,569	89.5%	47,660	57%
Nebraska	515,336	494,723	96.0%	855	
North Dakota	130,044	124,192	95.5%	4,708	
South Dakota	173,856	159,948	92.0%	2,792	
SOUTH					
SOUTH ATLANTIC	7,027,306	5,405,140	76.9%	42,785	
Delaware	153,307	126,478	82.5%	1,302	
District of Columbia	145,938	124,047	85.0%	1,787	21%
Florida	687,021	411,526	59.9%	8,505	24%
Georgia	1,739,543	1,450,779	83.4%	(463)	4%
Maryland	1,078,978	858,866	79.6%	1,810	7%
North Carolina	1,142,947	837,780	73.3%	13,984	38%
South Carolina	583,633	440,643	75.5%	7,039	19%
Virginia	1,155,636	875,972	75.8%	10,587	13%
West Virginia	340,303	279,048	82.0%	(1,766)	
EAST SOUTH CENTRAL	3,061,472	2,571,723	84.0%	(1,141)	
Alabama	767,412	623,139	81.2%	(4,836)	
Kentucky	757,790	647,153	85.4%	(1,087)	49%
Mississippi	441,859	373,371	84.5%	(620)	
Tennessee	1,094,411	928,061	84.8%	5,402	25%
WEST SOUTH CENTRAL	6,810,192	5,413,495	79.5%	112,508	
Arkansas	549,959	463,615	84.3%	(1,836)	
Louisiana	963,082	765,650	79.5%	65,568	
Oklahoma	927,094	814,916	87.9%	4,854	15%
Texas	4,370,057	3,369,314	77.1%	43,922	
WEST					
MOUNTAIN	5,773,801	4,870,055	84.3%	42,971	
Arizona	1,157,688	680,721	58.8%	11,408	
Colorado	1,659,808	1,591,756	95.9%	14,092	94%
Idaho	353,963	293,789	83.0%	3,092	
Montana	259,957	227,462	87.5%	911	
Nevada	782,759	682,566	87.2%	9,879	
New Mexico	561,713	466,784	83.1%	(8,924)	29%
Utah	840,687	789,405	93.9%	10,468	0%
Wyoming	157,226	137,573	87.5%	2,045	0%
PACIFIC	12,612,352	10,797,324	85.6%	72,449	
Alaska	122,983	113,759	92.5%	1,247	
California	10,681,916	9,143,720	85.6%	57,012	
Hawaii	25,184	-	0.0%	(121)	
Oregon	693,507	561,047	80.9%	4,826	49%
Washington	1,088,762	978,797	89.9%	9,485	26%
UNITED STATES	66,624,457	55,964,544	84.0%	649,686	43%

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](#)

Natural Gas Appliance Market Share and Consumption

Market Share of Natural Gas Appliances in Residences

The Department of Commerce's Bureau of the Census reports the number of residences in the United States by region, along with type of fuels in various applications. This report, American Housing Survey, is released every two years and reflects the number of existing households at a particular time. Therefore, the data does not represent the beginning or end of a year. The tables below represent the most recent Census data from that report.

According to the U.S. Department of Commerce's Census Bureau, the market share of natural gas in the residential space heating sector has remained at 50 - 52 percent over the last 24 years (Table 8). The largest gain in market share for natural gas furnaces was in the Northeast region, where gas grew by nine percentage points. The South exhibited a loss in market share, where gas dropped six percentage points.

Table 8

Market Share of Natural Gas Space Heating from 1987- 2011

	<u>1987</u>	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>	<u>1999</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2009</u>	<u>2011</u>
Northeast	40%	40%	42%	43%	43%	45%	45%	46%	47%	48%	47%	49%	49%
Midwest	70%	71%	70%	70%	70%	70%	70%	71%	72%	71%	71%	70%	70%
South	38%	37%	36%	36%	35%	36%	35%	35%	35%	34%	33%	32%	32%
West	62%	61%	60%	61%	62%	62%	63%	64%	65%	65%	65%	66%	63%
U.S.	51%	51%	50%	51%	51%	51%	51%	52%	52%	52%	51%	51%	50%

Despite the fact that the West region increased its market share seven percentage points for natural gas cooking, the overall market share for gas cooking has decreased from 37 percent in 1987 to 36 percent by 2011. The largest losses were in the South and the Midwest regions, where gas fell by four percentage points.

Table 9

Market Share of Natural Gas Cooking from 1987- 2011

	<u>1987</u>	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>	<u>1999</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2009</u>	<u>2011</u>
Northeast	50%	49%	48%	48%	49%	48%	48%	48%	49%	49%	48%	49%	49%
Midwest	40%	41%	40%	40%	39%	39%	39%	38%	38%	37%	38%	36%	37%
South	26%	25%	24%	24%	23%	23%	22%	22%	22%	21%	22%	22%	22%
West	39%	39%	40%	40%	41%	41%	41%	42%	44%	44%	45%	47%	46%
U.S.	37%	37%	36%	36%	36%	36%	35%	35%	36%	35%	35%	35%	36%

The largest gain in market share for natural gas water heaters was in the Northeast, where gas grew by six percentage points. However, natural gas has the lowest market share of water heating in the South region, where gas fell by six percentage points. The Midwest has seen a slight decline in market share as well. Overall, the natural gas share for water heating has remained steady over the last 20 years.

Table 10

Market Share of Natural Gas Water Heating from 1987- 2011													
	<u>1987</u>	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>	<u>1999</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2009</u>	<u>2011</u>
Northeast	44%	46%	47%	47%	47%	49%	49%	49%	50%	50%	50%	51%	49%
Midwest	67%	68%	67%	67%	66%	65%	65%	66%	66%	66%	66%	65%	70%
South	38%	36%	36%	36%	35%	34%	33%	33%	33%	33%	32%	32%	32%
West	66%	66%	67%	66%	67%	67%	67%	68%	69%	69%	70%	70%	63%
U.S.	52%	52%	52%	52%	52%	51%	51%	51%	52%	52%	51%	51%	50%

Approximately 20 percent (19 million) of all residences use natural gas to dry their clothing. The market share for clothes dryers has declined slightly from 1987 to 2011. The largest gain in market share was in the West region, where natural gas grew by four percentage points.

Table 11

Market Share of Natural Gas Clothes Drying from 1987- 2011													
	<u>1987</u>	<u>1989</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1997</u>	<u>1999</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2009</u>	<u>2011</u>
Northeast	27%	27%	28%	27%	27%	28%	28%	28%	28%	29%	28%	29%	28%
Midwest	33%	33%	32%	32%	32%	32%	31%	31%	31%	30%	30%	29%	29%
South	10%	10%	9%	9%	9%	9%	9%	8%	8%	7%	7%	7%	7%
West	27%	28%	28%	28%	29%	31%	31%	31%	32%	32%	33%	33%	31%
U.S.	23%	22%	22%	22%	23%	23%	22%	22%	22%	21%	21%	21%	20%

Roughly 61 percent of United States households had natural gas service in 2011, with greatest penetration in the Midwest and West, and with the South exhibiting the lowest penetration. For households with natural gas service, the gas space heaters and water heaters had an 84 percent market share, with gas cooking in 58 percent and gas clothes dryers in only 28 percent. This may present marketing opportunities for gas utilities to increase load to existing customers.