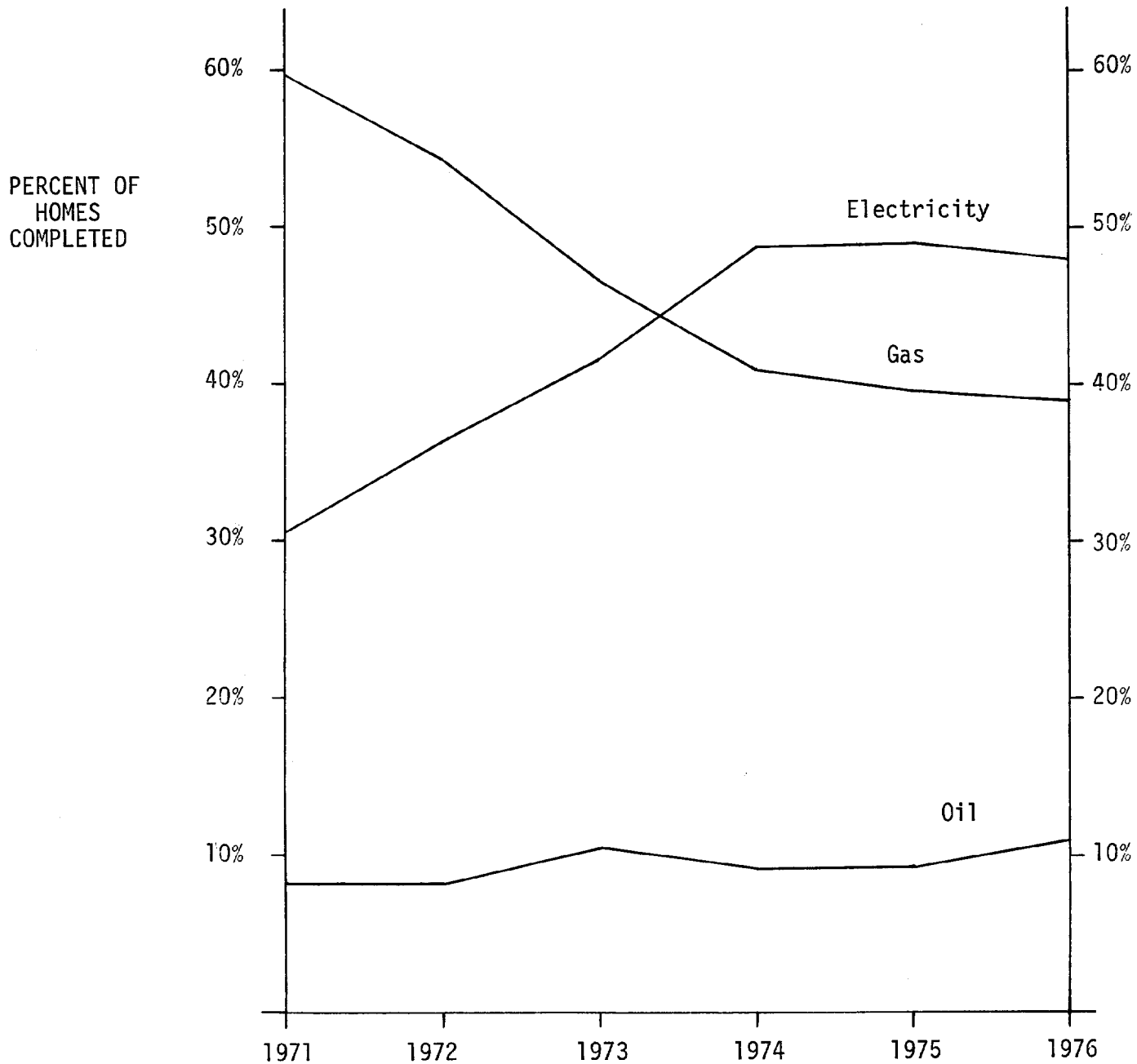


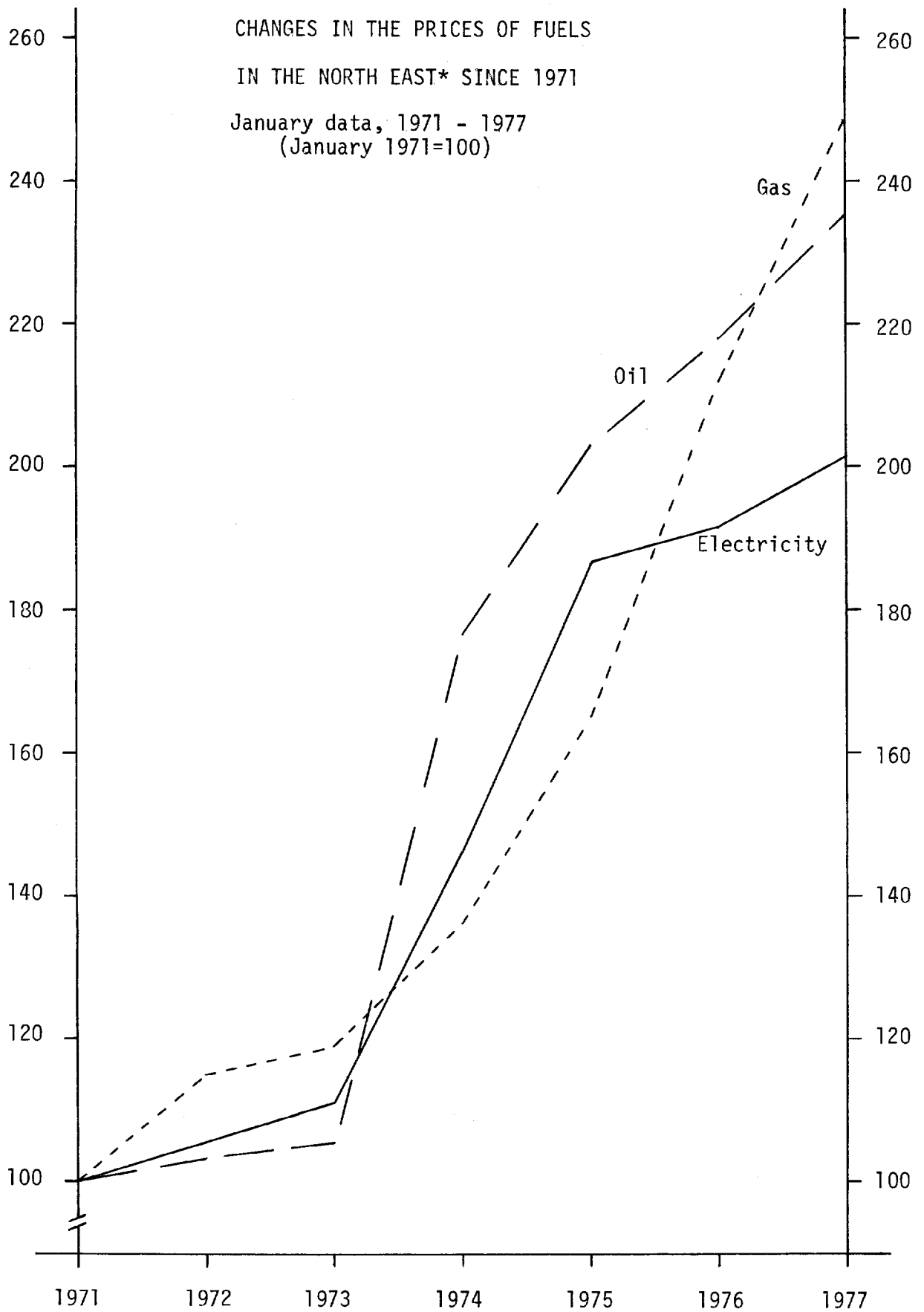
SHARES OF HEATING FUELS IN  
NEW ONE-FAMILY HOMES (TOTAL U.S.)

1971 - 1976



Note: See Table I

April, 1977



\*Average of data for Boston and New York - N.E. New Jersey

See Table II

April, 1977



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SHARES OF HEATING FUELS

IN NEW ONE-FAMILY HOMES

1971-1976

April, 1977

In 1976, electric heat retained the place it has held since 1974 as the fuel most frequently installed in new one-family homes, according to preliminary data from the U.S. Department of Commerce on the more than one million units completed last year. However, since 1974, the electric heat share has remained roughly constant at just under half of all one-family home completions, following a rise between 1971 and 1974 of 18 percentage points.

The slight rise in the electric heat share in the last three years was approximately matched by a decline in the gas heat share. The gas market share has declined in every year since 1971 but since 1974 the decline has been very modest. Last year 39% of the fuel installations in new one-family homes went to gas.

Oil heat's share increased in 1976 to 11% of all new one-family homes, the highest share in the last six years. (See Table I.)

Regionally the major shift occurred in the North East, where oil heat captured 51% of the new one-family home market in 1976. This increase of ten percentage points follows an increase of nine percentage points in 1975. Oil's closest competitor, electricity, was used in 31% of the new homes. Oil heat, however, has not displaced electricity so much as it did gas heat in new homes. In 1971, gas heat held the largest market share, 42%. By 1973 it had fallen to 34%, and in 1976, it was installed in only 15% of new one-family homes. The choice of oil over gas heat has been dictated by both price and supply. Continued curtailments of pipeline supplies to gas utilities in the North East have forced some utilities to refuse further residential gas customers. In addition, gas now holds little or no price advantage over oil in much of the region.

Table II reports Bureau of Labor Statistics fuel price data for SMSA's\* in each region. For the North East, the figures for Boston and New York - N.E. New Jersey show that the price of gas has risen faster than the price of oil between 1971 and 1976. The oil price rises of 1974 and 1975 were more than matched by later increases in the price of gas. The price of electricity, which has been relatively more expensive in the North East than in other regions, has risen slowest of the three fuels. The nationwide effect of these changes in North East market shares was muted by the relatively small size and growth rate of the new home market in the North East; in 1976 completions of one-family homes increased by 18% nationwide but by only 6% in the North East.

In the North Central region, a 26% increase in completions of single-family homes was marked by roughly unchanged heating fuel shares. Gas continued to be the most common fuel, although its share has fallen from 78% in 1971 to 48% in 1976. Electric heat has absorbed most of the gap, rising from 12% in 1971 to 40% in 1976. The experience of the winter of 1976-77, especially in the gas-starved North Central states, may filter through to the home building market both by preference and by regulation as further decreases in new gas hook-ups. However, major infusions of alternative gas supplies, such as liquefied and synthetic natural gas, may help gas utilities to minimize future market share losses.

\*Standard Metropolitan Statistical Areas.

An examination of relative prices also supports a trend away from gas in the North Central region. From January 1976 to January 1977 the price of 100 therms of natural gas rose 34% in each of the North Central SMSA's (Chicago-N.W. Indiana and Minneapolis-St. Paul) for which we have recorded Bureau of Labor Statistics data. By contrast, the oil price rise in the two SMSA's was 10% and 13% respectively and the price of 500 kwh of electricity rose 5% and 6% respectively. The substantial increase in the price of gas in this region may be due both to the higher price for interstate sales of new gas and to the rolling-in of certain shipments of high-priced gas which throughout last winter were allowed to flow to interstate markets by Federal Power Commission exception, as well as Canadian imports and synthetic natural gas.

In the South, the electric heat share declined slightly in 1976, but remained by far the fuel most frequently installed, with 64% of the new single-family home market. It is interesting to note that this fast-growing region is the only one where electricity is the most frequently installed heating fuel. Part of the reason is of course the low operating cost of a heating system in the Sun-Belt, which makes the relatively higher Btu cost of electricity less burdensome. As low-cost gas becomes less prevalent as a fuel for electricity generation, however, its replacement by other fuels will increase the price of electricity. This may offset in part some of electricity's attractiveness as a home heating fuel.

The share of oil heat installations increased in the South for the first time in three years in 1976, but oil remains a distant

third place in the region's heating fuel shares. The gas heat share remained constant, at 29%.

The South, as defined in the Department of Commerce data, includes the states from Maryland, West Virginia, and Kentucky south and from Oklahoma and Texas east, an area encompassing both the largest gas producing states, as well as some states that have no gas production at all. According to the American Gas Association, the utilities in six of the Southern states probably experienced substantial restrictions on the addition of new residential gas customers in 1976.\* It is likely, therefore, that the regionwide maintenance of the gas heat market share has been marked by gains in the producing states and declines in these other areas.

In the West, gas remained the fuel most frequently installed in one-family homes, with 60% of the market. Electricity accounts for the other 40% of the market, as there is very little oil heat utilized in the region. These 1976 shares are essentially unchanged from 1975, although they represent a sizable shift downward for gas heat and upward for electric heat when compared to 1971 figures.

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\*American Gas Association, Househeating Survey: Gas Utility Industry, United States, 1976.

TABLE II

INDEX OF THE PRICE OF FUELS IN SELECTED  
CITIES, JANUARY 1971-1977  
(100=1971)

ELECTRICITY	(\$/500kwh/month) 100=	Indexes					
		1972	1973	1974	1975	1976	1977
North East							
Boston	14.58	105	104	128	163	170	171
New York- N.E. New Jersey	17.42	106	118	164	210	213	232
North Central							
Chicago-N.W. Indiana	14.00	108	110	116	133	149	156
Minneapolis-St. Paul	12.27	109	113	116	152	169	179
South							
Atlanta	9.24	112	114	113	170	191	222
Houston	11.12	107	109	116	129	160	158
West							
Los Angeles-Long Beach	10.93	114	123	154	180	197	199
San Francisco-Oakland	10.11	114	115	133	146	153	182
	(\$/100 gals)						
HEATING OIL (No. 2)	100=						
North East							
Boston	19.76	104	105	166	203	215	228
New York- N.E. New Jersey	19.73	103	106	187	203	221	242
North Central							
Chicago-N.W. Indiana	18.14	102	103	175	187	219	240
Minneapolis-St. Paul	17.84	101	102	195	200	223	252
South							
Washington, D.C.	19.61	100	101	170	195	214	240
West							
Seattle	21.98	101	101	152	186	204	215
	(for GAS(Residential Heating) (\$/100 Therms) 100=						
North East							
Boston	15.68	115	116	134	162	201	230
New York-N.E. New Jersey	13.63	115	122	138	168	221	267
North Central							
Chicago-N.W. Indiana	10.21	108	111	118	140	159	213
Minneapolis-St. Paul	9.13	109	118	123	148	158	212
South							
Atlanta	8.24	122	134	136	148	171	204
Houston	9.28	103	108	122	162	240	305
West							
San Francisco-Oakland	7.14	107	118	129	181	214	237
Seattle	11.59	108	110	132	163	209	246

Source: Derived from Bureau of Labor Statistics data