

---

---

UNITED STATES DEPARTMENT OF LABOR  
Frances Perkins, *Secretary*  
BUREAU OF LABOR STATISTICS  
Isador Lubin, *Commissioner*

+

# Changes in Retail Prices of Gas

1923-36

Prepared by  
RETAIL PRICE DIVISION  
STELLA STEWART, *Chief*



*Bulletin No. 628*

February 1937

UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1937

---

---

For Sale by the Superintendent of Documents, Washington, D. C. - - - - - Price 10 cents



## CONTENTS

---

	Page
Introduction.....	1
Computation of indexes:	
Cities.....	1
Prices.....	2
City indexes.....	6
Indexes for 50 cities combined.....	7
Subindexes, by kind of gas.....	10
History of collection and publication of retail prices of gas, 1907-36:	
General.....	48
Prices for the first one thousand cubic feet of gas.....	50
Prices of gas based on average family consumption.....	51
Prices of gas for specified domestic services.....	51

### Tables

TABLE 1.—Manufactured and natural gas for domestic use—total sales and revenue, and average consumption and price per customer.....	3
TABLE 2.—British thermal per cubic foot of gas, by cities, arrayed in descending order with kind of gas used and price per therm based upon consumption of 10.6 therms and 30.6 therms as of June 1936.....	4
TABLE 3.—Service charges for 50 cities in March 1923 and June 1926 applicable to consumption of 10.6 therms.....	5
TABLE 4.—Indexes of retail prices of gas for 50 cities combined, March 1923 to June 1936, inclusive.....	8
TABLE 5.—Weighting factors for indexes of retail prices of gas for 50 cities combined.....	9
TABLE 6.—Indexes of retail prices of manufactured gas, March 1923 (40 cities) to June 1936 (25 cities).....	11
TABLE 7.—Weighting factors for indexes of manufactured gas.....	13
TABLE 8.—Indexes of retail prices of natural gas, March 1923 (7 cities) to June 1936 (18 cities).....	14
TABLE 9.—Weighting factors for indexes of natural gas.....	15
TABLE 10.—Indexes of retail prices of natural gas for 6 identical cities.....	16
TABLE 11.—Indexes of retail prices of mixed gas, March 1923 (3 cities) to June 1936 (7 cities).....	17
TABLE 12.—Weighting factors for indexes of mixed gas.....	18
TABLE 13.—Indexes of retail prices of gas by cities, March 1926 to June 1936, inclusive, with explanations of changes beginning with March 1923.....	20
TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923 to June 1936.....	37
TABLE 15.—Frequency of collection of domestic rate schedules for gas, 1907-36.....	48

	Page
<b>TABLE 16.</b> —Total number of reporting cities; number reporting for manufactured, natural, and mixed manufactured gas, and number reporting more than one kind of gas, 1907-36.....	49
<b>TABLE 17.</b> —Record of publication of prices of gas for domestic consumption for each series, 1907-36.....	50

### Charts

Retail prices of gas, 50 cities combined, March 1923 to June 1936, inclusive.....	vi
Distribution of 50 cities according to kind of gas used, 1923-36.....	9
Retail prices of manufactured, natural, and mixed gas, March 1923 to June 1936, inclusive.....	10

## PREFACE

---

Gas is used by most American families primarily for cooking and often for water heating. Its use for house heating is increasing from year to year. In urban communities its use is almost universal. It is an important item in the cost of living of wage earners' families. Consequently, the Bureau of Labor Statistics has been collecting data on the price of gas at retail for many years.

Since domestic gas is not a standardized commodity, one of the tasks of the Bureau of Labor Statistics has been to devise a method for computing prices of gas for residential use in each of the reporting cities upon identical heat requirements. After many years of effort, and in cooperation with utility engineers and qualified experts in the Federal service, such a method was devised and introduced in the Bureau's publications in 1935.

Indexes have been computed for each of the 50 cities reporting to the Bureau and for these cities combined for quarterly periods, from March 1923 to June 1936, inclusive. These indexes cover each of two heat requirements, 10.6 therms, typical of the use of gas for cooking, and 30.6 therms, typical of its use for both cooking and automatic water heating. They will be published quarterly hereafter in the Bureau's pamphlet entitled "Retail Prices."

The Bureau takes this opportunity to express its appreciation of the cooperation which it has received from the utility companies in cities for which it has received domestic rate schedules over a long period of years. Their schedules have provided the primary data for the computation of the indexes.

Plans for the indexes were reviewed by qualified experts in the United States Bureau of Standards, the Bureau of Mines, the Federal Trade Commission and the Central Statistical Board. Special mention should be made of the cooperation of Mr. Paul Ryan, Chief Statistician of the American Gas Association. Comments and suggestions made by these experts have materially increased the usefulness of the data.

This bulletin was prepared in the Retail Price Division, under the direction of Stella Stewart, Chief of the Division. Major contributions to both the statistical and textual material were made by Ruth J. Powers and Ethel D. Hoover. The assistance of Gertrude Craven and Isabel R. Smiley is also acknowledged.

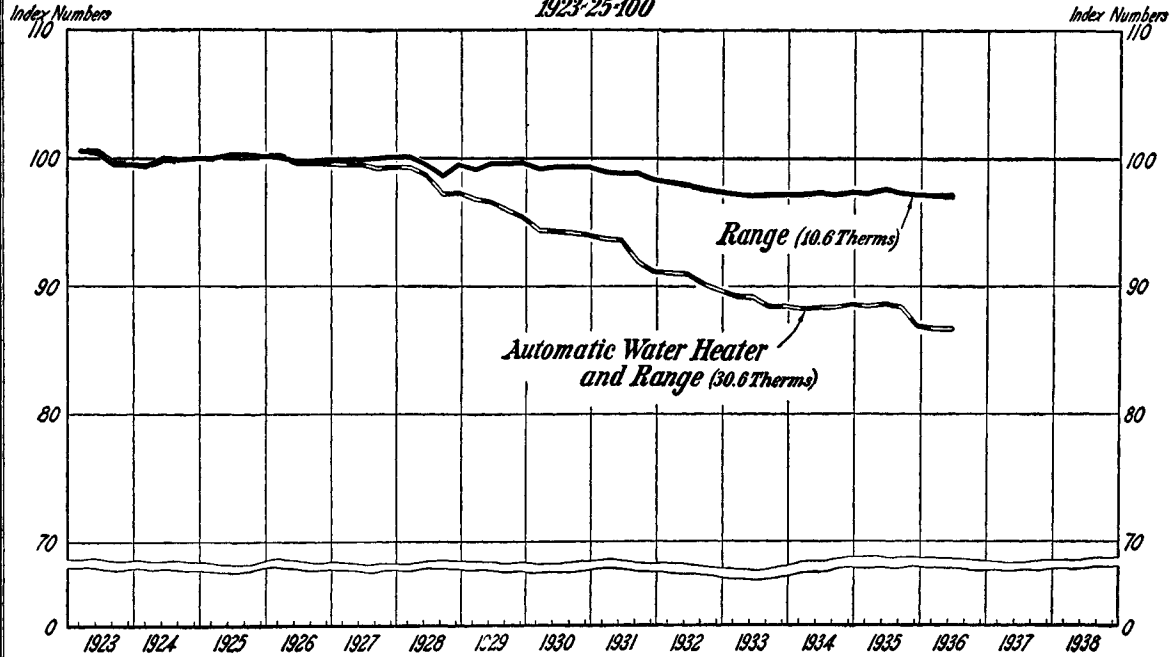
ISADOR LUBIN,  
*Commissioner of Labor Statistics.*

NOVEMBER 1936.

# RETAIL PRICES OF GAS

50 Cities Combined

1923-25=100



U.S. BUREAU OF LABOR STATISTICS

---

---

*Bulletin No. 628 of the*

*United States Bureau of Labor Statistics*

---

---

## Changes in Retail Prices of Gas, 1923-36

### Introduction

Retail prices of gas for residential use have been computed by the Bureau of Labor Statistics for 25 years. These computations have, since 1913, included 50 representative and widely scattered cities. Great changes in the rate schedules have been brought about by the increased use of natural gas, by the introduction of new appliances and improvements in those used in earlier years and also as a result of competition with other sources of light and fuel. These changes have made it advisable for the Bureau to revise, from time to time, its method of computing and publishing prices of gas.

The last revision took place in 1935. In October of that year, prices per therm<sup>1</sup> and per cubic foot were first published for each of four services based upon consumption of gas typical of average heat requirements for the use of domestic appliances. These prices have since appeared quarterly in "Retail Prices."

This work has now been expanded to include the computation of quarterly indexes of prices since March 1923. Heat requirements of 10.6 therms, typical of the use of gas for cooking, and of 30.6 therms, for the use of an automatic water heater and a range, have been selected as representative for this purpose and as illustrative of the present trend toward lower rates for increased consumption. Indexes have been computed for each of these heat requirements for each city and for the 50 cities combined. Subindexes have been computed for manufactured, natural, and mixed gas.

### Computation of the Indexes

#### Cities

In March 1923, 40 of the 50 cities included in the indexes were using manufactured gas, 7 were using straight natural gas and 3 were using mixed manufactured and natural gas. In June 1936, 25 of these cities were still using manufactured gas, but the introduction of straight natural gas or mixed manufactured and natural gas had

<sup>1</sup> 1 therm equals 100,000 British thermal units; 1 B. t. u. equals the amount of heat required to raise the temperature of 1 pound of pure water 1° F.

taken place in many cities, with the result that 18 of the 50 cities were using straight natural gas and 7 were using mixed manufactured and natural gas.

The cities whose rate schedules have been used in the computation of these indexes, arranged by geographical areas, are:

<b>New England:</b>	<b>South Atlantic:</b>
Boston	Atlanta
Fall River	Baltimore
Manchester	Charleston
New Haven	Jacksonville
Portland, Maine	Norfolk
Providence	Richmond
	Savannah
	Washington, D. C.
<b>Middle Atlantic:</b>	<b>East South Central:</b>
Buffalo	Birmingham
Newark	Louisville
New York	Memphis
Philadelphia	Mobile
Pittsburgh	
Rochester	<b>West South Central:</b>
Seranton	Dallas
	Houston
<b>East North Central:</b>	Little Rock
Chicago	New Orleans
Cincinnati	
Cleveland	<b>Mountain:</b>
Columbus	Butte
Detroit	Denver
Indianapolis	Salt Lake City
Milwaukee	
Peoria	<b>Pacific:</b>
Springfield, Ill.	Los Angeles
	Portland, Oreg.
<b>West North Central:</b>	San Francisco
Kansas City	Seattle
Minneapolis	
Omaha	
St. Louis	
St. Paul	

### Prices

Prices of gas were computed for each of the two selected services for all cities on identical standards of heat units expressed in therms, and on the equivalent in cubic feet, the latter varying in inverse ratio to the heating value of the gas in each city. The factor of 10.6 therms for the use of a range and of 30.6 therms for the use of the automatic water heater in addition to the range have been determined from records and estimates received from the gas companies and from laboratory studies of the heat requirements for cooking and for water heating.

Although these standards are typical of the average use of gas for the specified services, they are not equally representative for all of the



cities included in this study. In cities served with manufactured gas generated from fuel shipped from a considerable distance, or in cities using natural gas which has been piped for hundreds of miles, the conservative use of gas tends to a somewhat lower consumption; but in cities located in the natural-gas regions, where proximity to the source of supply combined with attendant lower prices encourage a more liberal use, gas is utilized to a considerable extent for space heating by a majority of the residential customers. In some instances these natural-gas customers are served under more advantageous rate schedules than those used by the Bureau for computing net monthly bills.

Table 1, prepared from annual statistics in 1935 appearing in Bulletins No. 21 and No. 22, published by the American Gas Association, presents a summary of the volume of sales and the cost to the customer of manufactured and natural gas sold for domestic purposes in the years 1929 to 1935 inclusive. In each case, the figures are based upon reports from identical companies throughout the 7 years. Therefore, the statistics for natural gas for the earlier years include companies which subsequently changed from manufactured to natural gas during this period. Sales of gas for house heating are included with domestic sales.

TABLE 1.—*Manufactured and natural gas for domestic use, including house heating*  
 [Total sales and revenue in the United States, and average consumption and price per customer, 1929-35]

Year	Number of customers Dec. 21		Annual sales to customers		Revenue from sales to customers		Average consumption per customer per month		Average price per customer per month			
	Manu- factured	Natural	Manu- factured	Natural	Manu- factured	Natural	Manu- factured	Natural	Manufactured		Natural	
									Total	Per MCF	Total	Per MCF
	<i>Thousands</i>		<i>Millions of cubic feet</i>		<i>Thousands of dollars</i>		<i>Cubic feet</i>					
1929-----	9,758	5,024	289,187	312,598	344,093	203,612	2,470	5,185	\$2.94	\$1.19	\$3.38	\$0.65
1930-----	9,763	5,240	294,493	325,602	348,121	218,118	2,512	5,061	2.97	1.18	3.40	.67
1931-----	9,669	5,268	290,291	319,467	342,697	219,345	2,502	5,034	2.95	1.18	3.46	.69
1932-----	9,239	5,206	276,244	300,869	332,248	211,042	2,492	4,816	3.00	1.20	3.38	.70
1933-----	9,190	5,253	258,565	281,964	306,109	197,958	2,345	4,473	2.78	1.18	3.14	.70
1934-----	9,375	5,427	260,254	284,833	305,829	198,092	2,313	4,374	2.72	1.18	3.04	.70
1935-----	9,550	5,636	258,042	304,255	302,031	210,572	2,252	4,499	2.64	1.17	3.11	.69

Source: Annual Statistics of the Gas Industry, 1935, American Gas Association, Statistical Bulletins Nos. 21 and 22.

The average heating value for manufactured gas for cities reporting to the Bureau in 1935 was 535 B. t. u. per cubic foot. The actual average monthly consumption in 1935 as reported by the American Gas Association was 2,252 cubic feet, equivalent to 12.0 therms, at an average price of 22.0 cents per therm. These statistics include the use of manufactured gas for house heating. The average monthly consumption, exclusive of house heating, is equivalent to 10.5 therms, approximately the same heat requirement used by the Bureau as typical of the use of gas for the range only.

For natural gas, the average heating value was 1,062 B. t. u. per cubic foot. The actual average monthly consumption in 1935 as reported by the American Gas Association was 4,499 cubic feet, equivalent to 47.8 therms at an average price of 6.5 cents per therm. This consumption provides for the use of natural gas for major appliances in addition to the range and water heater, and confirms the statement already made concerning the more extensive use of natural gas at prices considerably below the average paid for manufactured gas.

For purposes of computing prices for cities served under rate schedules which measure consumption by the cubic foot, the equivalent of 10.6 therms and 30.6 therms has been computed to the nearest 10 cubic feet. This partially compensates for any difference which may result in the use of a single month for computing a representative bill, as compared with the general practice of computing monthly bills to the nearest 100 cubic feet, any variation up to this amount being taken care of in the following month.

The following table shows, for June 1936, the kind of gas used in each of the 50 cities, its average heating value for that month, and the price per therm. Changes in the kind and in the heating value of the gas used, and changes in rates and in rate structures were carefully studied in computing the prices shown in this table.

TABLE 2.—British thermal units per cubic foot of gas arranged in descending order for 50 cities with kind of gas used and prices per therm based on consumption of 10.6 therms and 30.6 therms as of June 1936

[M=manufactured; N=natural; X=mixed, manufactured and natural]

City	B. t. u.	Kind of gas	Price per therm based on consumption of—		City	B. t. u.	Kind of gas	Price per therm based on consumption of—	
			10.6 therms	30.6 therms				10.6 therms	30.6 therms
			Cents	Cents				Cents	Cents
San Francisco.....	1,150	N	12.0	8.1	Savannah.....	575	M	21.7	21.7
Pittsburgh.....	1,124	N	9.4	5.3	Indianapolis.....	570	M	15.8	15.8
Cleveland.....	1,100	N	7.1	4.7	Portland, Oreg.....	570	M	22.0	19.5
Los Angeles.....	1,100	N	11.8	8.0	Omaha.....	555	M	14.4	11.5
Columbus.....	1,050	N	7.1	5.0	St. Paul.....	580	M	16.4	16.4
Dallas.....	1,050	N	11.9	8.3	Charleston.....	550	M	25.5	23.5
Peoria.....	1,000	N	20.0	15.3	New York.....	540	M	22.1	19.9
Springfield, Ill.....	1,000	N	18.0	15.2	Rochester.....	537	M	18.6	18.2
Kansas City.....	1,000	N	12.8	10.2	Boston.....	535	M	23.1	18.6
Houston.....	1,000	N	11.2	8.1	Jacksonville.....	535	M	38.0	26.8
Little Rock.....	1,000	N	10.4	7.3	Birmingham.....	534	M	15.0	15.0
Atlanta.....	980	N	16.8	12.3	Philadelphia.....	530	M	17.0	16.4
Memphis.....	980	N	14.3	11.8	Detroit.....	530	M	16.1	16.1
Mobile.....	960	N	21.2	15.5	Norfolk.....	530	M	22.6	21.6
New Orleans.....	950	N	11.9	10.3	Fall River.....	528	M	23.9	19.4
Buffalo.....	900	X	7.2	7.2	New Haven.....	528	M	22.7	20.3
Louisville.....	900	X	8.7	6.7	Manchester.....	525	M	26.8	18.5
Cincinnati.....	885	X	8.6	8.0	Portland, Maine.....	525	M	28.5	21.3
Salt Lake City.....	865	N	20.0	13.6	Newark.....	525	M	25.4	19.8
Butte.....	850	N	10.5	7.1	Richmond.....	525	M	24.8	24.3
Denver.....	845	N	20.2	13.6	Scranton.....	520	M	29.2	23.1
Chicago.....	800	X	18.3	15.3	Milwaukee.....	520	M	16.3	15.1
Minneapolis.....	800	X	17.9	13.9	Providence.....	510	M	24.3	19.9
St. Louis.....	800	X	19.2	15.9	Baltimore.....	500	M	17.0	15.6
Washington.....	600	X	14.4	13.3	Seattle.....	500	M	29.2	17.4

The most significant development in rate structures between March 1923 and June 1936 was the increased use of the fixed monthly service charge which, in most cities, includes the consumption of a small amount of gas. Thirty of the 67 companies in the 50 cities reporting to the Bureau had no service charge at either date. Eleven of them had a service charge at both dates. Twenty-six companies introduced the use of the service charge during this period. Fifteen of these twenty-six companies introduced the service charge when they changed from manufactured to straight natural or to mixed gas; 9 of the 26 companies used manufactured gas and 2 used straight natural gas throughout the entire period. The use of the service charge by each of the reporting companies in March 1923 and in June 1936 is shown in the following table:

TABLE 3.—Service charges for gas for 50 cities in March 1923 and June 1936 applicable to consumption of 10.6 therms

[M=manufactured; N=natural; X=mixed, manufactured and natural]

Region and city	March 1923			June 1936		
	Kind of gas	Service charge		Kind of gas	Service charge	
		Amount	Cubic feet included		Amount	Cubic feet included
<b>New England:</b>						
<b>Boston:</b>						
1 company.....	M			M	\$0.60	100
1 company.....	M			M		
Fall River.....	M			M	.75	300
Manchester.....	M	\$0.25		M	1.00	600
New Haven.....	M	.50	100	M	.50	100
Portland, Maine.....	M			M	1.00	400
Providence.....	M	.50		M	.70	200
<b>Middle Atlantic:</b>						
Buffalo.....	X			X		
Newark.....	M			M	1.00	400
<b>New York:</b>						
3 companies.....	M			M		
1 company.....	M			M	1.02	600
2 companies.....	M			M	1.02	500
1 company.....	M	.75		M	1.02	500
Philadelphia.....	M			M		
<b>Pittsburgh:</b>						
3 companies.....	N			N		
Rochester.....	M			M		
Scranton.....	M			M	.75	
<b>East North Central:</b>						
Chicago.....	M	.60	400	X	.58	250
Cincinnati.....	N			X		
Cleveland.....	N			N		
<b>Columbus:</b>						
2 companies.....	N			N		
Detroit.....	M			M		
Indianapolis.....	M			M		
Milwaukee.....	M	.50	400	M	.50	400
Peoria.....	M			N		
Springfield.....	M			N		
<b>West North Central:</b>						
Kansas City.....	N	.50		N	1.76	400
Minneapolis.....	M			X	1.00	400
Omaha.....	M	.75	500	M	.75	500
St. Louis.....	M			X	1.81	333
St. Paul.....	M			M		

Footnote at end of table.

**TABLE 3.**—Service charges for gas for 50 cities in March 1923 and June 1936 applicable to consumption of 10.6 therms—Continued

[M=manufactured; N=natural; X=mixed, manufactured and natural]

Region and city	March 1923			June 1936		
	Kind of gas	Service charge		Kind of gas	Service charge	
		Amount	Cubic feet included		Amount included	Cubic feet
<b>South Atlantic:</b>						
Atlanta.....	M			N	.60	
Baltimore.....	M			M		
Charleston.....	M			M		
Jacksonville.....	M			M	1.00	200
Norfolk.....	M			M		
Richmond.....	M			M		
Savannah.....	M			M		
Washington: 2 companies.....	M			X	.75	800
<b>East South Central:</b>						
Birmingham.....	M			M		
Louisville.....	N			X	1.62	600
Memphis.....	M			N	.80	400
Mobile.....	M			N	1.25	300
<b>West South Central:</b>						
Dallas.....	N			N	1.17	700
Houston.....	M			N	.50	
Little Rock.....	N			N	.50	
New Orleans.....	M			N	.25	
<b>Mountain:</b>						
Butte.....	M			N	1.00	1,000
Denver.....	M			N	1.92	400
Salt Lake City.....	M	.25		N	1.92	400
<b>Pacific:</b>						
Los Angeles: 2 companies.....	X			N	.80	300
Portland, Oreg.....	M	.71	300	M	.71	300
San Francisco.....	M			N		
Seattle.....	M	.75	500	M	1.77	600

<sup>1</sup> Tax of 2 percent has been included.

<sup>2</sup> Tax of 1 percent has been included.

<sup>3</sup> Tax of 3 percent has been included.

### City Indexes

Using the 3-year average, 1923-25, as a base, city indexes were computed for the two services 10.6 therms (range), and 30.6 therms (range and water heater), for each city at quarterly intervals from March 1923 through June 1936. Weighted indexes were computed for those cities from which reports are received for more than one company, using as weights the number of domestic customers served by each company in 1934. These indexes for March 1926 through June 1936, presented in table 13, are followed by an explanation for each city accounting for changes in the indexes beginning with March 1923 as indicated in the basic data used in computing the prices themselves. In order that these relative changes may be more readily interpreted, the bills for the base period with the equivalent price per therm and similar bills and prices for June 1936 are shown in the table.

The sharp price decreases for the cities changing from manufactured to natural gas are reflected in the marked declines in indexes for these cities between March 1923 and June 1936. In every case, the cost to the consumer was noticeably lower when natural gas was introduced with a higher heating value. This decline was graduated in some cities by the use of mixed gas prior to the introduction of straight natural-gas service. It should be noted that the bills in 1923 were considerably higher for some of these cities than for cities which continued serving manufactured gas throughout the entire period.

The summarized data which were used in the computations of these indexes are presented in table 14 for each of the reporting companies. This table shows the dates at which each company made changes affecting the retail price of gas, together with the kind and heating value of the gas used and the cubic feet equivalent to 10.6 therms and 30.6 therms. Types of rate structures and service charges are also shown. These elements have all entered into the computation of the monthly bills and prices per therm which are the basis of the city indexes and combined indexes presented in this pamphlet.<sup>2</sup>

#### Indexes for 50 Cities Combined

Weighted indexes were computed for 10.6 therms, the range, and for 30.6 therms, the range and automatic water heater, for the 50 cities combined, using for the base period, the 3-year average, 1923-25. The weighting factors used for this purpose were the number of residential customers served by each reporting company as of the nearest date to December 31, 1934, for which such information was available. These constitute the best weighting data now available.

The usefulness of the index for the water heater is somewhat limited by the lack of adequate data for computing a second index for this service weighted by the total number of customers using gas equivalent to 30.6 therms or more per month, sufficient for the use of major appliances in addition to the range. Data from companies reporting on the number of their customers using that quantity of heat each month, indicate that in the case of manufactured gas, a relatively small number of customers use as much as 30.6 therms per month. In cities where straight natural gas is served at prices well below those for manufactured gas, the situation is reversed. These facts are set forth in the discussion of the computation of the prices.

The chart facing page 1 of this pamphlet provides a graphic picture of the price changes of gas for domestic use over a period of more than 13 years, a period which includes marked changes in the industry. The two indexes are shown in table 4.

<sup>2</sup> An explanation of technical terms and a description of types of domestic rate schedules which will serve as a guide to the interpretation of statistical data will be found on page 18.

TABLE 4.—Indexes of retail prices of gas for 50 cities combined, March 1923—June 1936, for 10.6 therms, range, and 30.6 therms, water heater and range

[1923-25 = 100]

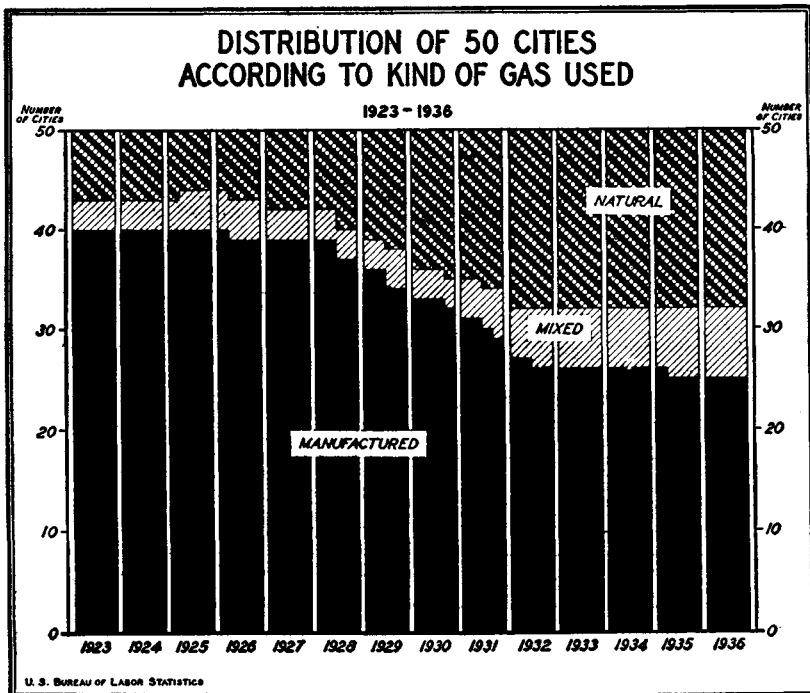
Year and month	10.6 therms	30.6 therms	Year and month	10.6 therms	30.6 therms
	Range	Range and water heater		Range	Range and water heater
<i>1923</i>			<i>1930</i>		
March.....	100.6	100.6	March.....	99.2	94.4
June.....	100.4	100.5	June.....	99.3	94.3
September.....	99.5	99.6	September.....	99.3	94.2
December.....	99.5	99.5	December.....	99.3	94.0
<i>1924</i>			<i>1931</i>		
March.....	99.4	99.4	March.....	98.9	93.7
June.....	100.0	99.9	June.....	98.8	93.6
September.....	99.9	99.9	September.....	98.8	91.9
December.....	100.0	100.0	December.....	98.3	91.1
<i>1925</i>			<i>1932</i>		
March.....	100.0	100.0	March.....	98.1	91.0
June.....	100.3	100.3	June.....	97.9	90.9
September.....	100.3	100.4	September.....	97.6	90.2
December.....	100.2	100.2	December.....	97.4	89.7
<i>1926</i>			<i>1933</i>		
March.....	100.1	100.2	March.....	97.2	89.2
June.....	99.8	99.7	June.....	97.1	89.1
September.....	99.8	99.6	September.....	97.2	88.4
December.....	99.9	99.6	December.....	97.2	88.4
<i>1927</i>			<i>1934</i>		
March.....	99.9	99.5	March.....	97.2	88.2
June.....	99.9	99.5	June.....	97.3	88.3
September.....	100.0	99.2	September.....	97.2	88.3
December.....	100.1	99.3	December.....	97.4	88.5
<i>1928</i>			<i>1935</i>		
March.....	100.1	99.3	March.....	97.3	88.4
June.....	99.5	98.7	June.....	97.6	88.6
September.....	98.6	97.2	September.....	97.3	88.3
December.....	99.5	97.3	December.....	97.2	86.8
<i>1929</i>			<i>1936</i>		
March.....	99.1	96.8	March.....	97.1	86.6
June.....	99.6	96.6	June.....	96.9	86.4
September.....	99.6	96.0			
December.....	99.7	95.4			

No attempt is made in these indexes to measure price changes according to greater or lesser amounts of gas consumed for the same purpose, but only to measure price changes for an identical heat requirement for the same service. Therefore, the prices paid in those cities served by the greatest number of customers are of relatively greater importance in the index. The same weights were used in computing the indexes for the range and the range and water heater in order that the indexes should measure price changes only. The weights used in computing indexes for 50 cities combined are presented in table 5 as percentages of the sum of all customers served by the 67 companies whose rates were the basis for the computations.

TABLE 5.—Weighting factors for indexes of retail prices of gas for 50 cities combined

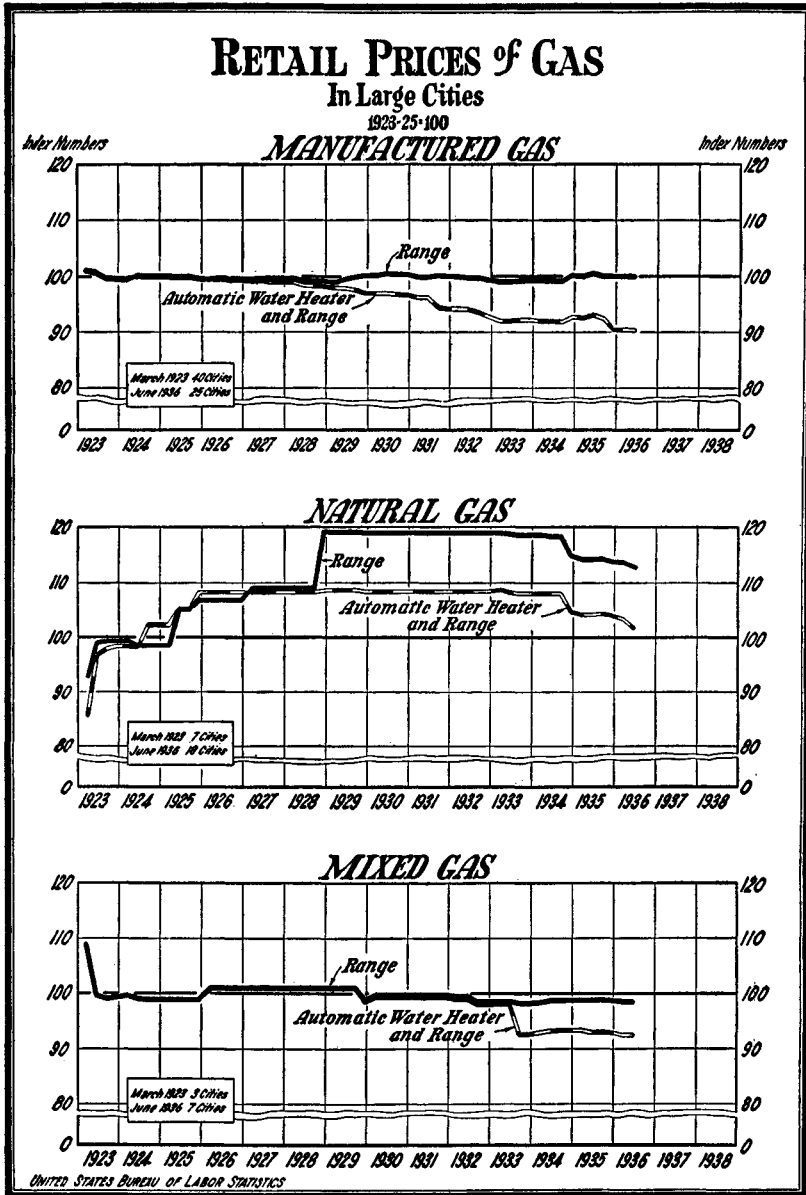
[Based upon number of residential customers as of December 31, 1934]

Region and city	Ratio weights	Region and city	Ratio weights
50 cities combined.....	100.0	West North Central:	
New England:		Kansas City.....	1.2
Boston.....	4.2	Minneapolis.....	1.5
Fall River.....	.4	Omaha.....	.7
Manchester.....	.2	St. Louis.....	2.4
New Haven.....	.8	St. Paul.....	.9
Portland, Maine.....	.2	South Atlantic:	
Providence.....	1.0	Atlanta.....	.7
Middle Atlantic:		Baltimore.....	2.7
Buffalo.....	2.4	Charleston.....	.1
Newark.....	1.9	Jacksonville.....	.2
New York.....	25.5	Norfolk.....	.3
Bronx.....	4.8	Richmond.....	.5
Brooklyn.....	12.2	Savannah.....	.1
Manhattan.....	6.8	Washington, D. C.....	1.7
Queens.....	1.3	East South Central:	
Richmond.....	.4	Birmingham.....	.5
Philadelphia.....	5.9	Louisville.....	1.0
Pittsburgh.....	2.8	Memphis.....	.5
Rochester.....	1.4	Mobile.....	.1
Scranton.....	.4	West South Central:	
East North Central:		Dallas.....	.9
Chicago.....	10.5	Houston.....	.7
Cincinnati.....	1.5	Little Rock.....	.2
Cleveland.....	3.6	New Orleans.....	1.0
Columbus.....	1.1	Mountain:	
Detroit.....	5.1	Butte.....	.1
Indianapolis.....	1.1	Denver.....	1.0
Milwaukee.....	2.1	Salt Lake City.....	.2
Peoria.....	.3	Pacific:	
Springfield, Ill.....	.2	Los Angeles.....	4.3
		Portland, Oregon.....	1.0
		San Francisco.....	2.4
		Seattle.....	.5



Subindexes by Kinds of Gas

The indexes for the 50 cities combined reflect the marked price decreases in cities changing from manufactured to straight natural or



mixed gas. The subindexes, which measure price movements for identical kinds of gas, only, show less decline.



Three subindexes have been computed, one for cities serving manufactured gas, one for natural gas and one for mixed gas. This has been done because of the inherent differences among companies serving these three kinds of gas. It was necessary to use the link relative method for this purpose if the indexes were to account for price changes for each kind of gas used by the 50 cities included in the combined index. When a different kind of gas was introduced into a city, the city was transferred from one subindex to another.

Manufactured Gas

Of the 40 cities selling manufactured gas in March 1923, 15 were using either straight natural gas or mixed manufactured and natural gas in June 1936. Of the 25 cities still serving manufactured gas in 1936, 18 are located in the East and South, chiefly along the Atlantic seaboard; 5 are in the Central area, and 1 of these, Detroit, is now introducing natural gas; 2 are in the Pacific northwest. All are at considerable distances from the natural-gas fields. The indexes for manufactured gas are presented in table 6.

TABLE 6.—Indexes of retail prices of manufactured gas March 1923, 40 cities; June 1936, 25 cities

[1923-25=100]

Year and month	10.6 therms Range	30.6 therms Range and water heater	Year and month	10.6 therms Range	30.6 therms Range and water heater
<i>1923</i>			<i>1930</i>		
March.....	100.9	101.0	March.....	100.1	97.0
June.....	100.5	100.8	June.....	100.4	97.0
September.....	99.6	99.7	September.....	100.3	96.8
December.....	99.5	99.6	December.....	100.3	96.7
<i>1924</i>			<i>1931</i>		
March.....	99.4	99.5	March.....	99.9	96.3
June.....	100.2	100.1	June.....	99.9	96.3
September.....	100.1	100.0	September.....	100.1	94.5
December.....	100.1	100.0	December.....	100.0	94.2
<i>1925</i>			<i>1932</i>		
March.....	100.1	100.0	March.....	99.9	94.2
June.....	100.0	99.9	June.....	99.7	94.1
September.....	100.0	99.9	September.....	99.7	93.5
December.....	99.7	99.6	December.....	99.3	92.8
<i>1926</i>			<i>1933</i>		
March.....	99.5	99.5	March.....	99.1	92.0
June.....	99.7	99.6	June.....	99.0	91.9
September.....	99.6	99.4	September.....	99.2	92.9
December.....	99.6	99.4	December.....	99.2	2.11
<i>1927</i>			<i>1934</i>		
March.....	99.5	99.2	March.....	99.2	91.9
June.....	99.6	99.2	June.....	99.2	91.9
September.....	99.6	98.9	September.....	99.1	91.8
December.....	99.6	99.0	December.....	100.1	92.7
<i>1928</i>			<i>1935</i>		
March.....	99.6	98.9	March.....	100.0	92.6
June.....	99.2	98.4	June.....	100.5	93.1
September.....	99.1	98.3	September.....	100.0	92.5
December.....	99.1	98.3	December.....	100.0	90.4
<i>1929</i>			<i>1936</i>		
March.....	98.9	98.0	March.....	100.0	90.3
June.....	99.5	97.9	June.....	99.9	90.2
September.....	99.9	97.6			
December.....	100.1	97.0			

The cities included in the indexes for manufactured gas for all periods from March 1923 through June 1936 and those transferred to indexes for natural or mixed manufactured and natural gas are shown below.

A.—Cities serving manufactured gas throughout entire period, March 1923–June 1936, inclusive.

**New England:**

Boston  
Fall River  
Manchester  
New Haven  
Portland  
Providence

**Middle Atlantic:**

Newark  
New York  
Philadelphia  
Rochester  
Scranton

**East North Central:**

Detroit  
Indianapolis  
Milwaukee

**West North Central:**

Omaha  
St. Paul

**South Atlantic:**

Baltimore  
Charleston  
Jacksonville  
Norfolk  
Richmond  
Savannah

**East South Central:**

Birmingham

**Pacific:**

Portland, Oreg.  
Seattle

B.—Cities transferred to indexes for natural or mixed gas.

**East North Central:**

Chicago.....Mixed...Dec. 1931  
Peoria.....Natural...Mar. 1932  
Springfield, Ill. Natural...Mar. 1932

**West North Central:**

Minneapolis....Mixed...June 1935  
St. Louis.....Mixed...Sept. 1932

**South Atlantic:**

Atlanta.....Natural...Mar. 1930  
Washington....Mixed...Mar. 1931

**East South Central:**

Memphis.....Natural...Mar. 1929  
Mobile.....Natural...Dec. 1930

**West South Central:**

Houston.....Natural...June 1926  
New Orleans...Natural...Sept. 1928

**Mountain:**

Butte.....Natural...Sept. 1931  
Denver.....Natural...Sept. 1928  
Salt Lake City Natural...Sept. 1929

**Pacific:**

San Francisco..Mixed...Sept. 1929

In table 7 is shown the increasing importance of each city to the total as some cities discontinued the use of manufactured gas.

TABLE 7.—*Weighting factors for indexes of manufactured gas*

[Percentage distribution by cities for March 1923 and June 1936]

City and regional area	March 1923 40 cities	June 1936 25 cities	City and regional area	March 1923 40 cities	June 1936 25 cities
Total for cities included in indexes.....	100.0	100.0			
<b>New England:</b>			<b>South Atlantic:</b>		
Boston.....	5.2	7.3	Atlanta.....	0.8	4.6
Fall River.....	.4	.6	Baltimore.....	3.3	.2
Manchester.....	.2	.3	Charleston, S. C.....	.1	.2
New Haven.....	1.0	1.4	Jacksonville.....	.2	.3
Portland, Maine.....	.3	.4	Norfolk.....	.4	.5
Providence.....	1.3	1.8	Richmond.....	.6	.8
<b>Middle Atlantic:</b>			Savannah.....	.2	.3
Newark.....	2.3	3.3	Washington, D. C.....	2.1	-----
New York.....	31.4	44.3	<b>East South Central:</b>		
Philadelphia.....	7.2	10.2	Birmingham.....	.6	.9
Rochester.....	1.7	2.4	Memphis.....	.6	-----
Scranton.....	.5	.6	Mobile.....	.1	-----
<b>East North Central:</b>			<b>West South Central:</b>		
Chicago.....	13.0	-----	Houston.....	.8	-----
Detroit.....	6.3	8.9	New Orleans.....	1.2	-----
Indianapolis.....	1.3	1.8	<b>Mountain:</b>		
Milwaukee.....	2.6	3.6	Butte.....	.2	-----
Peoria.....	.4	-----	Denver.....	1.3	-----
Springfield, Ill.....	.3	-----	Salt Lake City.....	.3	-----
<b>West North Central:</b>			<b>Pacific:</b>		
Minneapolis.....	1.9	-----	Portland, Oreg.....	1.2	1.7
Omaha.....	.9	1.3	San Francisco.....	3.0	-----
St. Louis.....	3.0	-----	Seattle.....	.7	.9
St. Paul.....	1.1	1.6			

### Natural Gas

Six cities in the North Central and South Central areas and one in the Alleghany region were using natural gas in March 1923. In March 1926, one of these cities had changed to mixed gas. Between June 1926 and March 1932, 12 more of the 50 cities introduced straight natural gas. Their customers received the advantage of gas with a higher heating value than had previously been served to them. In San Francisco, the B.t.u. of the gas served was increased from 610 to 1,150, while in Denver the change was from 335 to 845. In almost every case rate structures were changed with the introduction of natural gas. Since March 1932, 18 cities, more than one-third of the total reporting to the Bureau, have been using straight natural gas.

The use of 30.6 therms is more typical for cities serving straight natural gas than is the limited use of 10.6 therms as is indicated in the price analysis. Therefore, the indexes for 30.6 therms are more representative of price changes for this kind of gas.

The link relative indexes for this group are presented in table 8. Price changes in the cities which account for marked changes in these indexes from time to time are shown in table 13, city indexes by cities.

TABLE 8.—Indexes of retail prices of natural gas, March 1923, 7 cities; June 1936, 18 cities

[1923-25=100]

Year and month	10.6 therms Range	30.6 therms Range and water heater	Year and month	10.6 therms Range	30.6 therms Range and water heater
<i>1923</i>			<i>1930</i>		
March.....	92.9	85.8	March.....	119.2	108.3
June.....	99.1	97.2	June.....	119.2	108.3
September.....	99.3	98.2	September.....	119.2	108.3
December.....	99.3	98.5	December.....	119.2	108.3
<i>1924</i>			<i>1931</i>		
March.....	99.3	98.5	March.....	119.2	108.3
June.....	98.7	98.5	June.....	119.2	108.3
September.....	98.7	102.0	September.....	119.2	108.3
December.....	98.7	102.0	December.....	119.2	108.3
<i>1925</i>			<i>1932</i>		
March.....	98.7	102.0	March.....	119.2	108.3
June.....	105.3	105.3	June.....	119.2	108.3
September.....	105.3	105.3	September.....	119.2	108.3
December.....	107.1	108.1	December.....	119.2	108.3
<i>1926</i>			<i>1933</i>		
March.....	107.1	108.1	March.....	119.2	108.6
June.....	107.1	108.1	June.....	118.9	108.1
September.....	107.1	108.1	September.....	118.8	107.9
December.....	107.1	108.1	December.....	118.8	107.9
<i>1927</i>			<i>1934</i>		
March.....	109.3	108.0	March.....	118.8	107.9
June.....	109.3	108.0	June.....	118.6	107.9
September.....	109.3	108.0	September.....	118.6	107.9
December.....	109.3	108.0	December.....	115.0	104.5
<i>1928</i>			<i>1935</i>		
March.....	109.3	108.0	March.....	114.5	104.1
June.....	109.3	108.0	June.....	114.5	104.1
September.....	109.3	108.0	September.....	114.6	104.2
December.....	119.4	108.5	December.....	114.1	104.0
<i>1929</i>			<i>1936</i>		
March.....	119.3	108.4	March.....	114.0	103.2
June.....	119.3	108.4	June.....	112.9	101.4
September.....	119.3	108.4			
December.....	119.2	108.3			

The cities included in the indexes for natural gas for all periods from March 1923 through June 1936, and a record of cities transferred to or from these indexes are shown below.

A.—Cities serving natural gas throughout entire period March 1923—June 1936, inclusive.

Middle Atlantic:  
Pittsburgh

West North Central:  
Kansas City

East North Central:  
Cleveland  
Columbus

West South Central:  
Dallas  
Little Rock

B.—Cities transferred from manufactured or mixed gas to natural gas, and date of transfer.

East North Central:

Peoria..... Manufactured..... Mar. 1932  
Springfield, Ill..... Manufactured..... Mar. 1932

South Atlantic:

Atlanta..... Manufactured..... Mar. 1930

East South Central:		
Memphis.....	Manufactured.....	Mar. 1929
Mobile.....	Manufactured.....	Dec. 1930
West South Central:		
Houston.....	Manufactured.....	June 1926
New Orleans.....	Manufactured.....	Sept. 1928
Mountain:		
Butte.....	Manufactured.....	Sept. 1931
Denver.....	Manufactured.....	Sept. 1928
Salt Lake City.....	Manufactured.....	Sept. 1929
Pacific:		
Los Angeles.....	Mixed.....	Mar. 1927
San Francisco.....	Mixed.....	Mar. 1930

C.—Cities transferred to mixed gas from natural gas, and date of transfer.

East North Central:		
Cincinnati.....	Mixed.....	June 1925

The decreasing importance of each city in its effect upon the index as more cities are included is shown in table 9.

TABLE 9.—Weighting factors for indexes of natural gas

[Percentage distribution by cities for March 1923 and at dates when cities are linked into the index]

City	Mar. 1923	June 1926	Mar. 1927	Sept. 1928	Mar. 1929	Sept. 1929	Mar. 1930	Dec. 1930	Sept. 1931	Mar. 1932
	7 cities	7 cities	8 cities	10 cities	11 cities	12 cities	14 cities	15 cities	16 cities	18 cities
Total for cities included in indexes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cleveland.....	31.6	34.1	24.3	21.4	20.8	20.6	17.5	17.4	17.2	16.8
Pittsburgh.....	25.0	27.0	19.2	16.9	16.5	16.3	13.9	13.8	13.7	13.2
Cincinnati.....	13.2									
Kansas City.....	10.6	11.5	8.2	7.2	7.0	6.9	5.9	5.8	5.8	5.7
Columbus.....	9.7	10.5	7.5	6.6	6.4	6.3	5.4	5.4	5.3	5.2
Dallas.....	7.7	8.3	5.9	5.2	5.1	5.0	4.2	4.2	4.2	4.1
Little Rock.....	2.2	2.3	1.6	1.4	1.4	1.4	1.2	1.2	1.2	1.1
Houston.....		6.3	4.5	4.0	3.9	3.8	3.2	3.2	3.2	3.1
Los Angeles.....			28.8	25.4	24.6	24.4	20.7	20.6	20.4	20.0
New Orleans.....				5.7	5.6	5.5	4.7	4.6	4.6	4.5
Denver.....				6.2	6.0	5.9	5.0	5.0	5.0	4.8
Memphis.....					2.7	2.7	2.3	2.3	2.3	2.2
Salt Lake City.....						1.2	1.0	1.0	1.0	1.0
Atlanta.....							3.2	3.2	3.2	3.1
San Francisco.....							11.8	11.8	11.7	11.4
Mobile.....								.5	.5	.5
Butte.....									.7	.7
Peoria.....										1.6
Springfield.....										1.0

Additional indexes have been computed for natural gas based upon prices in the six cities which have maintained the use of natural gas throughout the entire period from 1923 to date. These indexes, which measure price changes for cities where price levels have not been affected by the transition from manufactured to natural gas, are shown in table 10.

TABLE 10.—Indexes of retail prices of natural gas, identical cities, March 1923, 6 cities; June 1936, 6 cities

[1923-25=100]

Year and month	10.6 therms Range	30.6 therms Range and water heater	Year and month	10.6 therms Range	30.6 therms Range and water heater
<i>1923</i>			<i>1930</i>		
March.....	92.0	84.2	March.....	109.1	108.1
June.....	99.0	96.9	June.....	109.1	108.1
September.....	99.3	98.0	September.....	109.1	108.1
December.....	99.3	98.4	December.....	109.1	108.1
<i>1924</i>			<i>1931</i>		
March.....	99.3	98.4	March.....	109.1	108.1
June.....	98.5	98.3	June.....	109.1	108.1
September.....	98.5	102.2	September.....	109.1	108.1
December.....	98.5	102.2	December.....	109.1	108.1
<i>1925</i>			<i>1932</i>		
March.....	98.5	102.2	March.....	109.1	108.1
June.....	105.1	105.6	June.....	109.1	108.1
September.....	105.1	105.6	September.....	109.1	108.1
December.....	106.9	108.3	December.....	109.1	108.1
<i>1926</i>			<i>1933</i>		
March.....	106.9	108.3	March.....	109.1	109.0
June.....	106.9	108.3	June.....	109.1	109.0
September.....	106.9	108.3	September.....	109.1	109.0
December.....	106.9	108.3	December.....	109.1	109.0
<i>1927</i>			<i>1934</i>		
March.....	109.2	108.2	March.....	109.1	109.0
June.....	109.2	108.2	June.....	109.1	109.0
September.....	109.2	108.2	September.....	109.1	109.0
December.....	109.2	108.2	December.....	100.3	99.8
<i>1928</i>			<i>1935</i>		
March.....	109.2	108.2	March.....	100.3	99.8
June.....	109.2	108.2	June.....	100.3	99.8
September.....	109.2	108.2	September.....	100.5	100.1
December.....	109.2	108.2	December.....	100.5	100.1
<i>1929</i>			<i>1936</i>		
March.....	109.1	108.1	March.....	100.3	99.8
June.....	109.1	108.1	June.....	100.3	99.8
September.....	109.1	108.1			
December.....	109.1	108.1			

## Mixed Manufactured and Natural Gas

A third subindex has been computed for companies using mixed gas. The opening of large natural gas wells furnishing a supply greatly in excess of the needs of local, sparsely settled communities, has resulted in the piping of the product to markets many miles distant. A number of cities adjacent to these pipe lines are utilizing this natural gas with a high B. t. u. content by mixing it with manufactured gas. For most cities, the use of this mixed gas has provided an increased heating value per cubic foot.

In March 1923, 2 of the 50 cities included in these indexes were using mixed gas. Another, Louisville, used mixed gas for 4 months of the year when the supply of natural gas was insufficient to meet the demand. This city is now using mixed gas altogether. Two cities used mixed gas during the transition from the use of manufactured to that of straight natural gas. In June 1936, seven cities were served with mixed gas. The indexes for mixed gas are shown in table 11.

TABLE 11.—Indexes of retail prices of mixed gas, March 1923, 3 cities; June 1936, 7 cities

[1923-25=100]

Year and month	10.6 therms Range	30.6 therms Range and water heater	Year and month	10.6 therms Range	30.6 therms Range and water heater
<i>1923</i>			<i>1930</i>		
March.....	109.0	109.0	March.....	99.3	98.8
June.....	99.8	99.8	June.....	99.3	98.8
September.....	99.6	99.6	September.....	99.3	98.8
December.....	99.4	99.4	December.....	99.3	98.8
<i>1924</i>			<i>1931</i>		
March.....	99.7	99.7	March.....	99.3	98.8
June.....	99.1	99.1	June.....	99.3	98.8
September.....	98.9	98.9	September.....	99.3	98.8
December.....	98.9	98.9	December.....	99.3	98.8
<i>1925</i>			<i>1932</i>		
March.....	98.9	98.9	March.....	99.0	98.5
June.....	98.9	98.9	June.....	99.0	98.5
September.....	98.9	98.9	September.....	98.1	97.5
December.....	98.9	98.9	December.....	98.1	97.5
<i>1926</i>			<i>1933</i>		
March.....	101.0	101.0	March.....	98.1	97.5
June.....	101.0	101.0	June.....	98.1	97.5
September.....	101.0	101.0	September.....	97.7	92.2
December.....	101.0	101.0	December.....	97.7	92.2
<i>1927</i>			<i>1934</i>		
March.....	101.0	101.0	March.....	97.9	92.5
June.....	101.0	101.0	June.....	98.2	92.8
September.....	101.0	101.0	September.....	98.3	92.9
December.....	101.0	101.0	December.....	98.3	92.9
<i>1928</i>			<i>1935</i>		
March.....	101.0	101.0	March.....	98.3	92.9
June.....	101.0	101.0	June.....	98.3	92.5
September.....	101.0	101.0	September.....	98.4	92.6
December.....	101.0	101.0	December.....	98.3	92.5
<i>1929</i>			<i>1936</i>		
March.....	101.0	101.0	March.....	98.1	92.0
June.....	101.0	101.0	June.....	98.1	92.1
September.....	101.0	101.0			
December.....	98.2	98.1			

<sup>1</sup> From 1923 to December 1933, Louisville was served natural gas during 8 months of the year and mixed gas during the remaining 4 months. This city was not included in the index until December 1933.

A record of the cities included in the indexes for mixed manufactured and natural gas follows:

A.—Cities serving mixed gas throughout entire period, March 1923–June 1936, inclusive.

Middle Atlantic:

Buffalo

B.—Cities transferred from manufactured or natural gas to mixed gas, and date of transfer.

East North Central:

Chicago..... Manufactured..... Dec. 1931

Cincinnati..... Natural..... June 1936

West North Central:

Minneapolis..... Manufactured..... June 1935

St. Louis..... Manufactured..... Sept. 1932

## South Atlantic:

Washington..... Manufactured..... Mar. 1931

## East South Central:

Louisville..... (3)..... Dec. 1933

## Pacific:

San Francisco..... Manufactured..... Sept. 1929

C.—Cities transferred to natural gas from mixed gas, and date of transfer.

## Pacific:

Los Angeles..... Natural..... Mar. 1927

San Francisco..... Natural..... Mar. 1930

The relative importance of each of these cities during the years from 1923 to 1936 is indicated in table 12.

TABLE 12.—Weighting factors for indexes of mixed gas

[Percentage distribution by cities for March 1923 and at dates when cities are transferred to/or from the indexes for mixed gas]

City	Mar. 1923	June 1925	Mar. 1927	Sept. 1929	Mar. 1930	Mar. 1931	Dec. 1931	Sept. 1932	Dec. 1933	June 1935
	2 cities	3 cities	2 cities	3 cities	2 cities	3 cities	4 cities	5 cities	6 cities	7 cities
Total for cities included in indexes.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Buffalo.....	35.9	29.3	61.4	37.7	61.4	42.6	14.8	12.9	12.2	11.3
Los Angeles.....	64.1	62.3								
Cincinnati.....		18.4	38.6	23.7	38.6	26.8	9.3	8.1	7.7	7.1
San Francisco.....				38.6						
Washington, D. C.....						30.6	10.7	9.3	8.8	8.2
Chicago.....							65.2	56.6	53.8	49.9
St. Louis.....								13.1	12.5	11.6
Louisville <sup>1</sup> .....									5.0	4.6
Minneapolis.....										7.3

<sup>1</sup> From 1923 to December 1933 Louisville was served natural gas during 8 months of the year and mixed gas during the remaining 4 months. This city was not included in the index until December 1933.

## Explanation of Terms

*British thermal unit.*—This is the quantity of heat required to raise the temperature of 1 pound of pure water 1° F.

*Heating value.*—The heating value is expressed in numbers of British thermal units (B. t. u.) per cubic foot of gas. The minimum heating value per cubic foot is usually prescribed by public service commissions or city ordinance. Heating value standards for manufactured gas vary between 400 and 600 B. t. u. per cubic foot. For natural gas service, the minimum heating value is prescribed in only a few instances. The heating value of natural gas, in general, is between 900 and 1,200 B. t. u. per cubic foot and usually approximates 1,000.

<sup>2</sup> From 1923 to December 1933, Louisville was served natural gas during 8 months of the year and mixed gas during the remaining 4 months. This city was not included in the index until December 1933.



*Therm.*—A therm is a unit of heating value equivalent to 100,000 B. t. u. The number of cubic feet of gas in a given number of therms is determined by multiplying the given number of therms by 100,000 and dividing this product by the heating value of the gas in B. t. u. per cubic foot. For example: 10 therms is equivalent to 2,000 cubic feet of gas having a heating value of 500 B. t. u. per cubic foot, and of 1,000 cubic feet of gas having a heating value of 1,000 B. t. u. per cubic foot.

*Straight line schedule.*—Under this type of rate schedule, the price of gas per thousand cubic feet or per therm is constant regardless of the amount of consumption.

*Block schedule.*—Under this rate schedule, a constant price per thousand cubic feet or per therm is charged for all gas consumed in the first “block” of a designated number of units and a lower price per thousand cubic feet or per therm is charged for all gas consumed in succeeding blocks of fixed number of units.

In some cities domestic and commercial customers are billed under the same rate schedule, which comprises a succession of comparatively large blocks of consumption for which graduated lower prices are charged. Since, in many instances, these blocks are too large to affect the price of gas used for domestic purposes, the term “block meter schedule” as used in this report has been arbitrarily limited to rates having less than 10,000 cubic feet in the first block. Rates having 10,000 cubic feet or more in the first block have been designated as “straight line schedules.”

*Wright demand schedule.*—This type of block schedule takes into account either the customers load factor or the size or number of rooms in the home. The number of cubic feet or therms in each block is regulated by these conditions and therefore varies accordingly from customer to customer.

*Service charge.*—Many rate schedules include a fixed monthly charge which is either a designated amount to be added to the charge for the gas consumed or which includes the consumption of a limited number of cubic feet. These are called service charges. For the purpose of this study, a fixed charge covering the use of 1,000 cubic feet or less of gas has been designated as a service charge. These service charges are, as a rule, equivalent to minimum bills.

*Rate change.*—The use of this term for explaining changes in city indexes is restricted to indicate an increase or a decrease in the price per unit of 1,000 cubic feet or per therm.

*Change in block.*—This term indicates an increase or a decrease in the number of cubic feet or therms included in one or more of the blocks of a block meter schedule.

The city indexes presented in table 13 and the basic data used in the computation of these indexes as shown in table 14 are discussed on pages 2 and 6.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive

Year and month	New England								
	Boston (2 companies)			Fall River			Manchester		
	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms
		Range	Range and water heater		Range	Range and water heater		Range	Range and water heater
Net bill, average 1923-25	-----	\$2.41	\$6.95	-----	\$2.31	\$6.67	-----	\$2.76	\$7.48
Price per therm, average 1923-25	-----	22.7¢	22.7¢	-----	21.8¢	21.8¢	-----	26.0¢	24.4¢
1926—March	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
June	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
September	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
December	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
1927—March	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
June	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
September	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
December	M	98.2	98.2	M	100.0	100.0	M	97.7	97.6
1928—March	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
June	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
September	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
December	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
1929—March	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
June	M	98.2	98.2	M	100.0	100.0	M	103.2	95.4
September	M	98.2	98.2	M	109.4	89.1	M	103.2	95.4
December	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
1930—March	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
June	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
September	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
December	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
1931—March	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
June	M	101.9	90.2	M	109.4	89.1	M	103.2	95.4
September	M	101.9	90.2	M	109.4	89.1	M	103.2	86.8
December	M	101.9	90.2	M	109.4	89.1	M	103.2	86.8
1932—March	M	101.9	90.2	M	109.4	89.1	M	103.2	86.8
June	M	101.9	90.2	M	109.4	89.1	M	103.2	86.8
September	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
December	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
1933—March	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
June	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
September	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
December	M	101.9	83.7	M	109.4	89.1	M	103.2	86.8
1934—March	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
June	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
September	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
December	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
1935—March	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
June	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
September	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
December	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
1936—March	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
June	M	101.9	81.8	M	109.4	89.1	M	103.2	75.9
Net bill, June 1936	-----	\$2.45	\$5.69	-----	\$2.53	\$5.94	-----	\$2.85	\$5.67
Average price per therm June 1936	-----	23.1¢	18.6¢	-----	23.9¢	19.4¢	-----	26.8¢	18.5¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

(For description of rate schedules and explanation of technical terms, see page 18.)

**Boston (2 companies).—1923-25:** Straight line schedule. Rate decreases (i. e., a decrease in the price per unit of 1,000 cubic feet) lowered the relatives from 102.9 to 98.8 for March 1924; and to 98.2 for June 1925. **December 1929:** Introduction of service charge and change in rate. **September 1932 and March 1934:** Introduction by the two companies at different dates of a separate block meter schedule available to customers using major appliances in addition to a range.

**Fall River.—1923-25:** Block meter schedule. **September 1929:** Introduction of service charge and change in block and rate.

**Manchester.—1923-25:** Block meter schedule with service charge. A rate decrease lowered the relatives for March 1924 from 104.5 to 97.7 for range, and from 104.3 to 97.6 for range and water heater. **March 1928:** Lower B. t. u. and changes in block, rate, and service charge. **September 1931:** Introduction of a separate block-meter schedule available to customers using major appliances in addition to a range. **March 1934:** Change in block and rate.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured]

Year and month	New England								
	New Haven			Portland, Maine			Providence		
	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms
		Range	Range and water heater		Range	Range and water heater		Range	Range and water heater
Net bill, average 1923-25.....		\$2.47	\$6.39		\$3.13	\$8.85		\$2.66	\$6.73
Price per therm, average 1923-25.....		23.3¢	20.9¢		29.5¢	28.9¢		25.1¢	22.0¢
1926—March.....	M	97.4	97.0	M	96.8	96.7	M	97.1	96.7
June.....	M	97.4	97.0	M	96.8	96.7	M	97.1	96.7
September.....	M	97.4	97.0	M	96.8	96.7	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1927—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1928—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1929—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1930—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1931—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1932—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1933—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1934—March.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	88.0	M	96.8	90.7
1935—March.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
September.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
December.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
1936—March.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
June.....	M	97.4	97.0	M	96.6	73.6	M	96.8	90.7
Net bill, June 1936.....		\$2.41	\$6.20		\$3.03	\$6.51		\$2.57	\$6.10
Average price per therm, June 1936.....		22.7¢	20.3¢		28.5¢	21.3¢		24.3¢	19.9¢

EXPLANATION OF CHANGES AFFECTING RELATIONS

**New Haven.**—1923-25: Straight line schedule with service charge. A rate decrease lowered the relatives for March 1925 from 101.3 to 97.4 for range and from 101.5 to 97.0 for range and water heater.

**Portland, Maine.**—1923-25: Block meter schedule. **March 1926:** Rate decrease (i. e., a decrease in the price per unit of 1,000 cubic feet). **December 1926:** Introduction of straight line schedule with service charge.

**March 1935:** Introduction of a separate block meter schedule available to customers using major appliances in addition to a range.

**Providence.**—1923-25: Block meter schedule with service charge. Due to rate decreases in June 1923 and March 1925 (i. e., a decrease in the price per unit of 1,000 cubic feet), the relatives for these dates showed the following downward trends from March 1923: Range, 104.9, 101.0, and 97.1; range and water heater, 105.6, 101.1, and 96.7. **September 1926:** Change in block and rate

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, X=Mixed manufactured and natural]

Year and month	Middle Atlantic								
	Buffalo			Newark			New York (12 companies)		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$0.72	\$2.06		\$2.47	\$7.12		\$2.32	\$6.71
Price per therm, average 1923-25.....		6.7¢	6.7¢		23.3¢	23.3¢		21.9¢	21.9¢
1926—March.....	X	107.1	107.1	M	98.3	98.3	M	100.0	100.0
June.....	X	107.1	107.1	M	98.3	98.3	M	100.0	100.0
September.....	X	107.1	107.1	M	98.3	98.3	M	100.0	100.0
December.....	X	107.1	107.1	M	98.3	98.3	M	100.0	100.0
1927—March.....	X	107.1	107.1	M	98.3	98.3	M	100.0	100.0
June.....	X	107.1	107.1	M	98.3	98.3	M	100.1	100.0
September.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
December.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
1928—March.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
June.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
September.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
December.....	X	107.1	107.1	M	98.3	98.3	M	100.8	99.8
1929—March.....	X	107.1	107.1	M	98.3	98.3	M	100.6	99.6
June.....	X	107.1	107.1	M	98.3	98.3	M	100.6	99.6
September.....	X	107.1	107.1	M	109.0	88.6	M	100.6	99.6
December.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
1930—March.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
June.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
September.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
December.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
1931—March.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
June.....	X	107.1	107.1	M	109.0	88.6	M	100.5	99.5
September.....	X	107.1	107.1	M	109.0	88.6	M	101.1	95.4
December.....	X	107.1	107.1	M	109.0	88.6	M	101.1	95.4
1932—March.....	X	107.1	107.1	M	109.0	88.6	M	100.7	95.4
June.....	X	107.1	107.1	M	109.0	88.6	M	100.7	95.4
September.....	X	107.1	107.1	M	109.0	88.6	M	100.7	95.4
December.....	X	107.1	107.1	M	109.0	88.6	M	100.7	95.4
1933—March.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
June.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
September.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
December.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
1934—March.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
June.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
September.....	X	107.1	107.1	M	109.0	88.6	M	100.3	94.0
December.....	X	107.1	107.1	M	109.0	88.6	M	102.4	95.9
1935—March.....	X	107.1	107.1	M	109.0	88.6	M	102.4	95.9
June.....	X	107.1	107.1	M	109.0	88.6	M	102.4	95.9
September.....	X	107.1	107.1	M	109.0	88.6	M	101.2	94.7
December.....	X	107.1	107.1	M	109.0	85.1	M	101.2	90.6
1936—March.....	X	107.1	107.1	M	109.0	85.1	M	101.2	90.6
June.....	X	107.1	107.1	M	109.0	85.1	M	101.2	90.6
Net bill, June 1936.....		\$0.77	\$2.21		\$2.69	\$6.06		\$2.35	\$6.07
Average price per therm, June 1936.....		7.2¢	7.2¢		25.4¢	19.8¢		22.1¢	19.9¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**Buffalo.**—1923-25: Straight line schedule. Due to an adjustment in price per cubic foot for cost of manufacture the relatives ranged from 102.3 in Mar. 1923 to 99.6 in June 1924. In September 1924 when the adjustment was discontinued the relatives stood at 98.9 **March 1926:** Rate increase (i. e., an increase in the price per unit of 1,000 cubic feet).

**Newark.**—1923-25: Straight line schedule. A rate decrease lowered the relatives for June 1924 from 102.4 to 98.3. **September 1929:** Introduction of block meter schedule with service charge. **December 1935:** Change in block and rate.

**New York (12 companies).**—1923-March 1927: Straight line schedules. **June 1927-September 1935:** Changes in relatives (with the exception of December 1934) were due to the introduction of block meter schedules with service charge, or the introduction of new straight line schedules with service charges. **December 1934:** A sales tax of 2 percent became effective. **December 1935:** Block meter schedule advantages to those customers using major appliances were made available to about 40 percent of the customers.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural]

Year and month	Middle Atlantic								
	Philadelphia			Pittsburgh (3 companies)			Rochester		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$2.00	\$5.77		\$1.00	\$1.51		\$1.99	\$5.75
Price per therm, average 1923-25.....		18.9¢	18.9¢		9.4¢	4.9¢		18.7¢	18.7¢
1926—March.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
June.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
September.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
December.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
1927—March.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
June.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
September.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
December.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
1928—March.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
June.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
September.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
December.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
1929—March.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
June.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
September.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
December.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
1930—March.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
June.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
September.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
December.....	M	100.0	100.0	N	100.0	108.6	M	99.2	99.2
1931—March.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
June.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
September.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
December.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
1932—March.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
June.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
September.....	M	95.0	95.0	N	100.0	108.6	M	99.2	99.2
December.....	M	90.0	86.7	N	100.0	108.6	M	99.2	99.2
1933—March.....	M	90.0	86.7	N	100.0	108.6	M	99.2	99.2
June.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
September.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
December.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
1934—March.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
June.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
September.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
December.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
1935—March.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
June.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
September.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
December.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
1936—March.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
June.....	M	90.0	86.7	N	100.0	108.6	M	99.2	96.7
Net bill, June 1936.....		\$1.80	\$5.01		\$1.00	\$1.64		\$1.97	\$5.56
Average price per therm, June 1936.....		17.0¢	16.4¢		9.4¢	5.3¢		18.6¢	18.2¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

**Philadelphia.**—1923-25: Straight line schedule. **March 1931:** Rate decrease (i. e., a decrease in the price per unit of 1,000 cubic feet). **December 1932:** Introduction of block meter schedule.

**Pittsburgh (3 companies).**—1923-June 1936: Straight line schedules. Relatives for range for the entire period are based on minimum charge. Due to rate increases (i. e., an increase in the price per unit of 1,000 cubic feet), the relatives for range and water heater showed the following: **March 1923,** 90.6; **December 1923,** 92.3; and **September 1924,** 108.6.

**Rochester.**—1923-25: Straight line schedule. A rate decrease lowered the relatives from 104.1 to 99.2 for September 1923. **June 1933:** Introduction of block meter schedule affecting the relative for range and water heater.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

1923-25=100]

[M=Manufactured, X=mixed manufactured and natural]

Year and month	Middle Atlantic			East North Central					
	Scranton			Chicago			Cincinnati		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25		\$3.01	\$7.98		\$2.13	\$5.75		\$0.79	\$1.70
Price per therm, average 1923-25		28.3¢	26.1¢		20.1¢	18.8¢		7.4¢	5.5¢
1926—March	M	99.8	99.8	M	99.4	99.2	X	114.3	154.0
June	M	99.8	99.8	M	99.4	99.2	X	114.3	154.0
September	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
December	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
1927—March	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
June	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
September	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
December	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
1928—March	M	101.5	87.3	M	99.4	99.2	X	114.3	154.0
June	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
September	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
December	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
1929—March	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
June	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
September	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
December	M	101.5	87.3	M	95.6	94.5	X	114.3	154.0
1930—March	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
June	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
September	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
December	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
1931—March	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
June	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
September	M	103.0	88.7	M	95.6	94.5	X	117.1	156.6
December	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
1932—March	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
June	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
September	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
December	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
1933—March	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
June	M	103.0	88.7	X	91.3	89.1	X	117.1	156.6
September	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
December	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
1934—March	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
June	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
September	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
December	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
1935—March	M	103.0	88.7	X	90.8	81.7	X	117.1	156.6
June	M	103.0	88.7	X	90.8	81.7	X	115.7	144.6
September	M	103.0	88.7	X	90.8	81.7	X	115.7	144.6
December	M	103.0	88.7	X	90.8	81.7	X	115.7	144.6
1936—March	M	103.0	88.7	X	90.8	81.7	X	115.7	144.6
June	M	103.0	88.7	X	90.8	81.7	X	115.7	144.6
Net bill, June 1936		\$3.10	\$7.08		\$1.94	\$4.69		\$0.91	\$2.45
Average price per therm, June 1936		29.2¢	23.1¢		18.3¢	15.3¢		8.6¢	8.0¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**Scranton.**—1923-25: Block meter schedule. A rate decrease lowered the relatives for March 1924 from 104.4 to 97.8 for range and from 103.6 to 98.2 for range and water heater. **March 1926:** Lower B. t. u. **September 1926:** Introduction of service charge and change in rate. **December 1929:** Lower B. t. u.

**Chicago.**—1923-25: Block meter schedule with service charge. A rate decrease lowered September 1923 relatives from 103.1 to 99.4 for range and from 103.9 to 99.2 for range and water heater. **June 1928:** Introduction of straight line schedule with service charge. **December 1931:** Change from manufactured to mixed gas with higher B. t. u., introduction of block meter schedule with service charge, and consumption measured on thermal basis. **September 1933:** Change in block and rate, and introduction of separate block meter schedule available to customers using major appliances in addition to a range.

**Cincinnati.**—1923-25: Block meter schedule. Relatives for range are based on minimum charge. Change from natural to mixed gas, rate change, and discontinuance of the use of the minimum charge for computing relatives for range increased the June 1925 relatives from 95.2 to 114.3 for range, and from 82.0 to 154.0 for range and water heater. **March 1930:** Lower B. t. u. **June 1935:** Change in block and rate.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural]

Year and month	East North Central								
	Cleveland			Columbus (2 companies)			Detroit		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....	---	\$0.92	\$1.71	---	\$0.53	\$1.38	---	\$1.56	\$4.40
Price per therm, average 1923-25.....	---	8.7¢	5.6¢	---	5.0¢	4.5¢	---	14.7¢	14.4¢
1926—March.....	N	106.4	110.6	N	141.8	115.8	M	101.1	103.7
June.....	N	103.4	110.6	N	141.8	115.8	M	101.1	103.7
September.....	N	103.4	110.6	N	141.8	115.8	M	101.1	103.7
December.....	N	103.4	110.6	N	141.8	115.8	M	101.1	103.7
1927—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
September.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
December.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
1928—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
September.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
December.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
1929—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
September.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
December.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
1930—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
September.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
December.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
1931—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
September.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
December.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
1932—March.....	N	106.4	110.6	N	141.8	101.0	M	101.1	103.7
June.....	N	106.4	110.6	N	141.8	101.0	M	98.5	101.1
September.....	N	106.4	110.6	N	141.8	101.0	M	98.5	101.1
December.....	N	106.4	110.6	N	141.8	101.0	M	98.5	101.1
1933—March.....	N	106.4	110.6	N	141.8	111.6	M	98.5	101.1
June.....	N	106.4	110.6	N	141.8	111.6	M	98.5	101.1
September.....	N	106.4	110.6	N	141.8	111.6	M	101.5	104.1
December.....	N	106.4	110.6	N	141.8	111.6	M	101.5	104.1
1934—March.....	N	106.4	110.6	N	141.8	111.6	M	101.5	104.1
June.....	N	106.4	110.6	N	141.8	111.6	M	101.5	104.1
September.....	N	106.4	110.6	N	141.8	111.6	M	101.5	104.1
December.....	N	81.4	83.6	N	141.8	111.6	M	101.5	104.1
1935—March.....	N	81.4	83.6	N	141.8	111.6	M	101.5	104.1
June.....	N	81.4	83.6	N	141.8	111.6	M	109.4	112.2
September.....	N	81.4	83.6	N	141.8	111.6	M	109.4	112.2
December.....	N	81.4	83.6	N	141.8	111.6	M	109.4	112.2
1936—March.....	N	81.4	83.6	N	141.8	111.6	M	109.4	112.2
June.....	N	81.4	83.6	N	141.8	111.6	M	109.4	112.2
Net bill June 1936.....	---	\$0.75	\$1.43	---	\$0.75	\$1.54	---	\$1.71	\$4.93
Average price per therm, June 1936.....	---	7.1¢	4.7¢	---	7.1¢	5.0¢	---	16.1¢	16.1¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

**Cleveland.**—1923-25: Block meter schedule. March 1923 relative for range based on minimum charge. Due to discontinuance of the use of minimum charge for computing relatives for range, changes in block and rate, and introduction of a service charge, the June 1923 relatives increased from 81.4 to 101.2 for range, and from 65.1 to 102.5 for range and water heater. Rate increase advanced December 1925 relatives to 106.4 for range and 110.6 for range and water heater. December 1934: Change in block and rate and discontinuance of service charge. Relatives for range again based on minimum charge.

**Columbus (2 companies).**—1923-25: Block meter schedule. A rate increase and the use of the minimum charge for computing relatives for range increased the June 1925 relatives from 86.1 to 141.8 for range and from 94.7 to 115.8 for range and water heater. March 1927: Introduction of straight line schedule with no change in the minimum charge. March 1933: Rate increase affecting approximately 70 percent of total customers.

**Detroit.**—1923-25: Straight line schedule. Lower B.t.u. and introduction of service charge for June 1925 increased the relatives from 89.4 to 107.5 for range and from 91.7 to 106.0 for range and water heater. March 1925: Discontinuance of service charge. June 1932: Rate decrease. September 1933: Sales tax of 3 percent became effective. June 1935: Rate increase.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

(M=Manufactured, N=Natural)

Year and month	East North Central								
	Indianapolis			Milwaukee			Peoria		
	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms
		Range	Range and water heater		Range	Range and water heater		Range	Range and water heater
Net bill, average 1923-25.....		\$2.10	\$6.06		\$1.74	\$4.66		\$2.26	\$6.50
Price per therm, average 1923-25.....		19.8¢	19.8¢		16.5¢	15.2¢		21.3¢	21.3¢
1926—March.....	M	93.0	93.0	M	99.2	99.0	M	100.0	100.0
June.....	M	93.0	93.0	M	99.2	99.0	M	100.0	79.1
September.....	M	93.0	93.0	M	99.2	99.0	M	100.0	79.1
December.....	M	93.0	93.0	M	99.2	99.0	M	100.0	79.1
1927—March.....	M	93.0	93.0	M	99.2	99.0	M	100.0	79.1
June.....	M	93.0	93.0	M	99.2	99.0	M	100.0	79.1
September.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
December.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
1928—March.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
June.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
September.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
December.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
1929—March.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
June.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
September.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
December.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
1930—March.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
June.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
September.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
December.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
1931—March.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
June.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
September.....	M	84.1	84.1	M	99.2	99.0	M	100.0	79.1
December.....	M	84.1	84.1	M	99.2	99.0	M	98.7	77.1
1932—March.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
June.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
September.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
December.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
1933—March.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
June.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
September.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
December.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
1934—March.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
June.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
September.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
December.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
1935—March.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
June.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
September.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
December.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
1936—March.....	M	84.1	84.1	M	99.2	99.0	N	94.0	71.9
June.....	M	79.7	79.7	M	99.2	99.0	N	94.0	71.9
Net bill, June 1936.....		\$1.67	\$4.83		\$1.73	\$4.61		\$2.12	\$4.67
Average price per therm, June 1936.....		15.8¢	15.8¢		16.3¢	15.1¢		20.0¢	15.3¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**Indianapolis.**—1923-25: Straight line schedule. Rate decreases (i. e., decreases in the price per unit of 1,000 cubic feet) lowered the relatives from 106.3 to 101.9 in June 1923 and to 97.4 in September 1924. **March 1926:** Rate decrease. **September 1927:** Introduction of block meter schedule. **June 1936:** Rate decrease.

**Milwaukee.**—1923-25: Block meter schedule with service charge. A rate decrease lowered the indexes or September 1923 from 103.9 to 99.2 for range and from 104.9 to 99.0 for range and water heater.

**Peoria.**—1923-25: Block meter schedule. **June 1926:** Introduction of Wright-demand schedule available to customers using major appliances in addition to a range. **September 1931:** Introduction of measurement on a thermal basis. **March 1932:** Change from manufactured to natural gas with higher B. t. u., and change in block and rate for range, and in rate (i. e., change in price per therm) for range and water heater.



TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural, X=Mixed manufactured and natural]

Year and month	East North Central			West North Central					
	Springfield, Ill.			Kansas City			Minneapolis		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25		\$2.55	\$7.34		\$1.37	\$3.10		\$1.75	\$5.03
Price per therm, average 1923-25		24.0¢	24.0¢		12.9¢	10.1¢		16.4¢	16.4¢
1926—March	M	99.7	99.7	N	98.2	99.9	M	95.3	95.3
June	M	92.3	92.3	N	98.2	99.9	M	107.2	107.2
September	M	92.3	92.3	N	98.2	99.9	M	105.0	105.0
December	M	92.3	92.3	N	98.2	99.9	M	105.0	105.0
1927—March	M	92.3	92.3	N	98.2	99.9	M	102.8	102.8
June	M	92.3	92.3	N	98.2	99.9	M	106.1	106.1
September	M	92.3	92.3	N	98.2	99.9	M	103.9	103.9
December	M	92.3	92.3	N	98.2	99.9	M	103.9	103.9
1928—March	M	92.3	92.3	N	98.2	99.9	M	103.9	103.9
June	M	92.3	92.3	N	98.2	99.9	M	103.9	103.9
September	M	92.3	92.3	N	98.2	99.9	M	99.5	99.5
December	M	92.3	92.3	N	98.2	99.9	M	99.5	99.5
1929—March	M	92.3	92.3	N	98.2	99.9	M	98.4	98.4
June	M	92.3	92.3	N	98.2	99.9	M	98.4	98.4
September	M	92.3	92.3	N	98.2	99.9	M	98.4	98.4
December	M	92.3	92.3	N	98.2	99.9	M	98.4	98.4
1930—March	M	92.3	92.3	N	98.2	99.9	M	98.4	98.4
June	M	92.3	92.3	N	98.2	99.9	M	118.2	96.4
September	M	92.3	92.3	N	98.2	99.9	M	118.2	96.4
December	M	92.3	92.3	N	98.2	99.9	M	118.2	96.4
1931—March	M	92.3	92.3	N	98.2	99.9	M	118.2	96.4
June	M	92.3	92.3	N	98.2	99.9	M	118.2	96.4
September	M	91.6	69.9	N	98.2	99.9	M	118.2	96.4
December	M	91.6	69.9	N	98.2	99.9	M	118.2	96.4
1932—March	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
June	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
September	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
December	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
1933—March	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
June	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
September	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
December	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
1934—March	N	83.3	63.7	N	98.2	99.9	M	118.2	96.4
June	N	75.0	63.5	N	98.2	99.9	M	118.2	96.4
September	N	75.0	63.5	N	98.2	99.9	M	118.2	96.4
December	N	75.0	63.5	N	98.2	99.9	M	118.2	96.4
1935—March	N	75.0	63.5	N	98.2	99.9	M	118.2	96.4
June	N	75.0	63.5	N	98.2	99.9	X	112.1	88.9
September	N	75.0	63.5	N	99.2	100.9	X	110.5	86.8
December	N	75.0	63.5	N	99.2	100.9	X	110.5	86.8
1936—March	N	75.0	63.5	N	99.2	100.9	X	108.9	84.8
June	N	75.0	63.5	N	99.2	100.9	X	108.9	84.8
Net bill, June 1936		\$1.91	\$4.66		\$1.36	\$3.12		\$1.90	\$4.27
Average price per therm, June 1936		18.0¢	15.2¢		12.8¢	10.2¢		17.9¢	13.9¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

**Springfield, Ill.—1923-25:** Block meter schedule. A rate decrease lowered the relatives for June 1923 from 103.4 to 99.7. **June 1926:** Rate decrease. **September 1931:** Introduction of measurement on a thermal basis, and the introduction of a Wright-demand schedule available to customers using major appliances in addition to a range. **March 1932:** Change from manufactured to natural gas with higher B. t. u. and change in block and rate for range and in rate for range and water heater. **June 1934:** Change in block and rate for range, and change to separate block meter schedule available to customers using range and other major appliances.

**Kansas City.—1923-25:** Straight line schedule with service charge. A change to block meter schedule<sup>9</sup> with service charge lowered the relatives for June 1924 from 102.4 to 98.2 for range and from 100.2 to 99.9 for range and water heater. **September 1935:** Sales tax of 1 percent became effective.

**Minneapolis.—1923-25:** Straight line schedule with adjustment for cost of manufacture. Relatives show a general downward trend from 106.4 to 94.3. **June 1926:** Lower B. t. u. **June 1930:** Introduction of block meter schedule with service charge and discontinuance of adjustment for cost of manufacture. **June 1935:** Change from manufactured to mixed gas with higher B. t. u., and change in block, rate, and service charge. **December 1935 and March 1936:** Rate decreases.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, X=Mixed manufactured and natural]

Year and month	West North Central								
	Omaha			St. Louis			St. Paul		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$2.23	\$6.03		\$1.77	\$5.10		\$1.58	\$4.56
Price per therm, average 1923-25.....		21.1¢	19.7¢		16.7¢	16.7¢		14.9¢	14.9¢
1926—March.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
June.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
September.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
December.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
1927—March.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
June.....	M	96.8	95.5	M	100.0	100.0	M	109.8	109.8
September.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
December.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
1928—March.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
June.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
September.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
December.....	M	90.5	87.2	M	100.0	100.0	M	109.8	109.8
1929—March.....	M	88.6	80.5	M	100.0	100.0	M	109.8	109.8
June.....	M	88.6	80.5	M	121.3	103.9	M	109.8	109.8
September.....	M	88.6	80.5	M	121.3	103.9	M	109.8	109.8
December.....	M	88.6	80.5	M	121.3	103.9	M	109.8	109.8
1930—March.....	M	88.6	80.5	M	121.3	103.9	M	109.8	109.8
June.....	M	88.6	80.5	M	121.3	103.9	M	109.8	109.8
September.....	M	81.0	74.7	M	121.3	103.9	M	109.8	109.8
December.....	M	81.0	74.7	M	121.3	103.9	M	109.8	109.8
1931—March.....	M	81.0	74.7	M	121.3	103.9	M	109.8	109.8
June.....	M	81.0	74.7	M	121.5	103.5	M	109.8	109.8
September.....	M	74.7	66.4	M	121.5	103.5	M	109.8	109.8
December.....	M	74.7	66.4	M	121.5	103.5	M	109.8	109.8
1932—March.....	M	74.7	66.4	M	121.5	103.5	M	109.8	109.8
June.....	M	74.7	66.4	M	121.5	103.5	M	109.8	109.8
September.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
December.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
1933—March.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
June.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
September.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
December.....	M	74.7	66.0	X	113.7	94.6	M	109.8	109.8
1934—March.....	M	71.5	62.2	X	113.7	94.6	M	109.8	109.8
June.....	M	71.5	62.2	X	113.7	94.6	M	109.8	109.8
September.....	M	68.4	58.1	X	113.7	94.6	M	109.8	109.8
December.....	M	68.4	58.1	X	113.7	94.6	M	109.8	109.8
1935—March.....	M	68.4	58.1	X	113.7	94.6	M	109.8	109.8
June.....	M	68.4	58.1	X	113.7	94.6	M	109.8	109.8
September.....	M	68.4	58.1	X	114.9	95.5	M	109.8	109.8
December.....	M	68.4	58.1	X	114.9	95.5	M	109.8	109.8
1936—March.....	M	68.4	58.1	X	114.9	95.5	M	109.8	109.8
June.....	M	68.4	58.1	X	114.9	95.5	M	109.8	109.8
Net bill, June 1936.....		\$1.53	\$3.51		\$2.03	\$4.87		\$1.74	\$5.00
Average price per therm, June 1936.....		14.4¢	11.5¢		19.2¢	15.9¢		16.4¢	16.4¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**Omaha.**—1923-25: Straight line schedule with service charge. Lower B. t. u. in September 1924 increased the relatives from 101.1 to 103.1 for range and from 101.8 to 103.8 for water heater. In March 1925 a rate decrease lowered the relatives to 96.8 for range and 95.5 for range and water heater. **September 1927:** Rate decrease (i. e., a decrease in the price per unit of 1,000 cubic feet). **March 1929:** Introduction of block meter schedule with service charge. **September 1930:** Change in block and rate. **September 1931:** Rate decrease. **September 1932 and March 1934:** Changes in block and rate. **September 1934:** Introduction of straight line schedule with service charge.

**St. Louis.**—1923-25: Block meter schedule. **June 1929:** Introduction of service charge and change in block and rate. **June 1931:** Introduction of new block meter schedule with service charge, and consumption measured on thermal basis. **September 1932:** Change from manufactured to mixed gas with higher B. t. u. and rate decrease. **September 1935:** Sales tax of 1 percent became effective.

**St. Paul.**—1923-25: Straight line schedule. Higher B. t. u. and a rate decrease in June 1923 lowered the relatives from 119.5 to 95.1. Lowered B. t. u. in March 1925 increased the relatives to 103.7. **March 1926:** Rate increase.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural]

Year and month	South Atlantic								
	Atlanta			Baltimore			Charleston, S. C.		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....	-----	\$2.90	\$8.38	-----	\$1.83	\$4.84	-----	\$3.02	\$8.73
Price per therm, average 1923-25.....	-----	27.3¢	27.3¢	-----	17.2¢	15.8¢	-----	28.5¢	28.5¢
1926—March.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
June.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
September.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
December.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
1927—March.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
June.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
September.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
December.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
1928—March.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
June.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
September.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
December.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
1929—March.....	M	98.4	98.4	M	98.6	98.7	M	100.5	100.5
June.....	M	108.4	79.0	M	98.6	98.7	M	100.5	100.5
September.....	M	108.4	79.0	M	98.6	98.7	M	99.0	99.0
December.....	M	108.4	79.0	M	98.6	98.7	M	99.0	99.0
1930—March.....	N	70.3	50.7	M	98.6	98.7	M	99.0	99.0
June.....	N	70.3	50.7	M	98.6	98.7	M	99.0	99.0
September.....	N	70.3	50.7	M	98.6	98.7	M	99.0	99.0
December.....	N	70.3	50.5	M	98.6	98.7	M	99.0	99.0
1931—March.....	N	70.3	50.5	M	98.6	98.7	M	99.0	99.0
June.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
September.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
December.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
1932—March.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
June.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
September.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
December.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
1933—March.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
June.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
September.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
December.....	N	70.3	50.5	M	98.6	98.7	M	92.6	92.6
1934—March.....	N	70.3	50.5	M	98.6	98.7	M	89.4	89.4
June.....	N	70.3	50.5	M	98.6	98.7	M	89.4	89.4
September.....	N	70.3	50.5	M	98.6	98.7	M	89.4	89.4
December.....	N	70.3	50.5	M	98.6	98.7	M	89.4	82.3
1935—March.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
June.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
September.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
December.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
1936—March.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
June.....	N	61.4	45.0	M	98.6	98.7	M	89.4	82.3
Net bill, June 1936.....	-----	\$1.78	\$3.77	-----	\$1.80	\$4.78	-----	\$2.70	\$7.19
Average price per therm, June 1936.....	-----	16.8¢	12.3¢	-----	17.0¢	15.6¢	-----	25.5¢	23.5¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

Atlanta.—1923-25: Block meter schedule. A rate decrease in December 1923 lowered the relatives from 104.8 to 98.4. June 1929: Introduction of service charge and change in block and rate. March 1930: Change from manufactured to natural gas with higher B. t. u., change in block and rate, and decrease in service charge. December 1930: Change in block and rate. March 1935: Decrease in rate and service charge.

Baltimore.—1923-25: Wright demand schedule. A rate decrease (i. e., a decrease in the price per unit of 1,000 cubic feet) lowered the relatives for September 1923 from 106.7 to 98.6 for range and from 106.7 to 98.7 for range and water heater. December 1929: Change to block meter schedule did not affect price.

Charleston, S. C.—1923-25: Straight line schedule. Lower B. t. u. for March 1924 increased the relatives from 99.0 to 100.5. September 1929: Higher B. t. u. June 1931 and March 1934: Rate decreases. December 1934: Introduction of block meter schedule with service charge available to customers using major appliances in addition to range.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured]

Year and month	South Atlantic								
	Jacksonville			Norfolk			Richmond		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25	-----	\$3.90	\$10.36	-----	\$2.54	\$7.28	-----	\$2.53	\$7.29
Price per therm, average 1923-25	-----	36.8¢	33.8¢	-----	24.0¢	23.8¢	-----	23.8¢	23.8¢
1926—March	M	105.4	102.9	M	100.9	100.9	M	103.9	102.7
June	M	105.4	102.9	M	106.3	103.4	M	103.9	102.7
September	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
December	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
1927—March	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
June	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
September	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
December	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
1928—March	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
June	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
September	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
December	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
1929—March	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
June	M	103.2	99.6	M	106.3	103.4	M	103.9	102.7
September	M	103.2	99.6	M	106.3	103.4	M	103.9	101.9
December	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
1930—March	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
June	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
September	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
December	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
1931—March	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
June	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
September	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
December	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
1932—March	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
June	M	103.2	99.6	M	106.3	100.8	M	103.9	101.9
September	M	103.2	99.6	M	102.4	97.8	M	103.9	101.9
December	M	103.2	99.6	M	102.4	97.8	M	103.9	101.9
1933—March	M	103.2	79.2	M	102.4	97.8	M	103.9	101.9
June	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
September	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
December	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
1934—March	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
June	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
September	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
December	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
1935—March	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
June	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
September	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
December	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
1936—March	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
June	M	103.2	79.2	M	94.5	90.9	M	103.9	101.9
Net bill, June 1936	-----	\$4.03	\$8.20	-----	\$2.40	\$6.62	-----	\$2.63	\$7.43
Average price per therm, June 1936	-----	38.0¢	26.8¢	-----	22.6¢	21.6¢	-----	24.8¢	24.3¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**Jacksonville.**—1923-25: Block meter schedule. Introduction of service charge and change in block and rate increased the relatives for December 1923 from 83.7 to 105.4 for range, and from 91.1 to 102.9 for range and water heater. September 1926: Change in block and rate. March 1933: Introduction of Wright demand schedule available to customers using major appliances in addition to range.

**Norfolk.**—1923-25: Block meter schedule with price adjustment for cost of manufacture. The relatives were 100.9 for March and June 1923, 97.3 for September 1923, 93.7 for December 1923, and 100.9 beginning with March 1924. June 1926: Lower B. t. u., change in block and rate, and discontinuance of adjustment for cost of manufacture. December 1929 and September 1932: Rate decreases. June 1933: Change in block and rate.

**Richmond.**—1923-25: Straight line schedule. Lower B. t. u. in September 1925 increased the relatives from 99.2 to 103.9. March 1926: Introduction of block meter schedule. September 1929: Change in block and rate.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, X=Mixed manufactured and natural]

Year and month	South Atlantic						Fast South Central		
	Savannah			Washington, D. C.			Birmingham		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$2.67	\$7.71		\$1.79	\$5.16		\$1.60	\$4.62
Price per therm, average 1923-25.....		25.2¢	25.2¢		16.9¢	16.9¢		15.1¢	15.1¢
1926—March.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
June.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
September.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
December.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
1927—March.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
June.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
September.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
December.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
1928—March.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
June.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
September.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
December.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
1929—March.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
June.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
September.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
December.....	M	100.0	100.0	M	98.8	98.8	M	100.0	100.0
1930—March.....	M	100.0	100.0	M	98.8	98.8	M	101.0	101.0
June.....	M	100.0	100.0	M	98.8	98.8	M	101.0	101.0
September.....	M	100.0	100.0	M	98.8	98.8	M	101.0	101.0
December.....	M	100.0	100.0	M	97.3	91.8	M	101.0	101.0
1931—March.....	M	100.0	100.0	X	97.3	91.8	M	101.0	101.0
June.....	M	100.0	100.0	X	97.3	91.8	M	101.0	101.0
September.....	M	100.0	100.0	X	97.3	91.8	M	101.0	101.0
December.....	M	100.0	100.0	X	97.3	91.8	M	101.0	101.0
1932—March.....	M	100.0	100.0	X	94.5	88.8	M	101.0	101.0
June.....	M	100.0	100.0	X	94.5	88.8	M	101.0	101.0
September.....	M	100.0	100.0	X	86.4	81.2	M	101.0	101.0
December.....	M	100.0	100.0	X	86.4	81.2	M	101.0	101.0
1933—March.....	M	100.0	100.0	X	86.4	81.2	M	100.0	100.0
June.....	M	100.0	100.0	X	86.4	81.2	M	100.0	100.0
September.....	M	100.0	100.0	X	86.4	81.2	M	100.0	100.0
December.....	M	100.0	100.0	X	86.4	81.2	M	100.0	100.0
1934—March.....	M	100.0	100.0	X	86.4	81.2	M	99.5	99.5
June.....	M	100.0	100.0	X	86.4	81.2	M	99.5	99.5
September.....	M	100.0	100.0	X	86.4	81.2	M	99.5	99.5
December.....	M	100.0	100.0	X	86.4	81.2	M	99.5	99.5
1935—March.....	M	86.2	86.2	X	86.4	81.2	M	99.3	99.3
June.....	M	86.2	86.2	X	86.4	81.2	M	99.3	99.3
September.....	M	86.2	86.2	X	86.4	81.2	M	99.3	99.3
December.....	M	86.2	86.2	X	86.4	81.2	M	99.3	99.3
1936—March.....	M	86.2	86.2	X	85.2	79.0	M	99.3	99.3
June.....	M	86.2	86.2	X	85.2	79.0	M	99.3	99.3
Net bill, June 1936.....		\$2.30	\$6.65		\$1.53	\$4.08		\$1.59	\$4.58
Average price per therm, June 1936.....		21.7¢	21.7¢		14.4¢	13.3¢		15.0¢	15.0¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

Savannah.—1923-25: Block meter schedule. March 1935: Rate decrease (i. e., decrease in the price per unit of 1,000 cubic feet).

Washington.—1923-25: Straight line schedule. A rate decrease (i. e., a decrease in the price per unit of 1,000 cubic feet) lowered the indexes for Dec. 1923 from 103.7 to 98.8. December 1930: Introduction of block meter schedule. March 1932: Change in block and rate. September 1932: A special discount was allowed on all bills. March 1936: Introduction of service charge, change in block and rate, and discontinuance of special discount.

Birmingham.—1923-25: Block meter schedule. March 1930: Lower B. t. u. March 1933, March 1934, and March 1935: Higher B. t. u.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

M=Manufactured, N=Natural, X=Mixed manufactured and natural

Year and month	East South Central								
	Louisville			Memphis			Mobile		
	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms	Kind of gas	10.6 therms	30.6 therms
		Range	Range and water heater		Range	Range and water heater		Range	Range and water heater
Net bill, average 1923-25		\$0.70	\$1.51		\$2.42	\$7.00		\$3.64	\$10.49
Price per therm, average 1923-25		6.6¢	4.9¢		22.9¢	22.9¢		34.3¢	34.3¢
1926—March	X	121.2	114.1	M	100.0	100.0	M	100.0	100.0
June	N	92.8	95.8	M	100.0	100.0	M	100.0	100.0
September	N	92.8	95.8	M	100.0	100.0	M	100.0	100.0
December	X	121.2	114.1	M	100.0	100.0	M	100.0	100.0
1927—March	X	121.2	114.1	M	100.0	100.0	M	107.5	88.1
June	N	92.8	95.8	M	100.0	100.0	M	107.5	88.1
September	N	92.8	95.8	M	100.0	100.0	M	107.5	88.1
December	X	121.2	114.1	M	100.0	100.0	M	107.5	88.1
1928—March	X	121.2	114.1	M	100.0	100.0	M	107.5	88.1
June	N	92.8	95.8	M	100.0	100.0	M	107.5	88.1
September	N	92.8	95.8	M	100.0	100.0	M	107.5	88.1
December	X	121.2	114.1	M	100.0	100.0	M	107.5	88.1
1929—March	X	121.2	114.1	N	63.9	53.3	M	107.5	88.1
June	N	92.8	95.8	N	63.9	53.3	M	107.5	88.1
September	N	92.8	95.8	N	63.9	53.3	M	107.5	88.1
December	X	121.2	115.0	N	62.5	51.5	M	107.5	88.1
1930—March	X	121.2	115.0	N	62.5	51.5	M	107.5	84.0
June	N	92.8	95.8	N	62.5	51.5	M	107.5	84.0
September	N	92.8	95.8	N	62.5	51.5	M	107.5	84.0
December	X	121.2	115.0	N	62.5	51.5	N	64.1	47.8
1931—March	X	121.2	115.0	N	62.5	51.5	N	64.1	47.8
June	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
September	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
December	X	103.0	97.8	N	62.5	51.5	N	64.1	47.8
1932—March	X	103.0	97.8	N	62.5	51.5	N	64.1	47.8
June	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
September	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
December	X	103.0	97.8	N	62.5	51.5	N	64.1	47.8
1933—March	X	103.0	97.8	N	62.5	51.5	N	64.1	47.8
June	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
September	N	92.8	95.8	N	62.5	51.5	N	64.1	47.8
December	X	103.0	97.8	N	62.5	51.5	N	64.1	47.8
1934—March	X	127.5	132.5	N	62.5	51.5	N	64.1	47.8
June	X	127.5	132.5	N	62.5	51.5	N	64.1	47.8
September	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
December	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
1935—March	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
June	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
September	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
December	X	131.4	136.5	N	62.5	51.5	N	64.1	47.8
1936—March	X	127.5	132.5	N	62.5	51.5	N	61.9	45.3
June	X	131.4	136.5	N	62.5	51.5	N	61.9	45.3
Net bill, June 1936		\$0.92	\$2.06		\$1.51	\$3.60		\$2.25	\$4.75
Average price per therm, June 1936		8.7¢	6.7¢		14.3¢	11.8¢		21.2¢	15.5¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

**Louisville.**—1923-25: Block meter schedule. Natural gas served when supply was adequate; otherwise mixed manufactured and natural gas with a lower B. t. u. Relatives for natural gas were 92.8 for range and 95.8 for range and water heater. For mixed gas they were 107.0 for range and 103.9 for range and water heater up to December 1925, when, due to a lower B. t. u., they advanced to 121.2 for range and 114.1 for range and water heater. **December 1929:** Change in B. t. u. of mixed gas. **December 1931:** Bills for mixed gas were subject to a special discount. **March 1934:** Change to mixed gas with higher B. t. u. for all-year service, introduction of straight line schedule with service charge, and discontinuance of special discount. **September 1931:** Sales tax of 3 percent became effective. **January 1936:** Discontinuance of 3 percent sales tax. **May 1936:** Excise tax of 3 percent became effective.

**Memphis.**—1923-25: Straight line schedule. **March 1929:** Change from manufactured to natural gas with higher B. t. u., and introduction of block meter schedule with service charge. **December 1929:** Rate decrease.

**Mobile.**—1923-25: Block meter schedule. **March 1927:** Introduction of service charge and change in block and rate. **March 1930:** Change in block and rate. **December 1930:** Change from manufactured to natural gas with higher B. t. u., change in block and rate, and decrease in service charge. **March 1936:** Rate decrease.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural]

Year and month	West South Central								
	Dallas			Houston			Little Rock		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$0.80	\$2.15		\$2.16	\$6.23		\$1.07	\$2.05
Price per therm, average 1923-25.....		7.5¢	7.0¢		20.4¢	20.4¢		10.1¢	6.7¢
1926—March.....	N	131.1	111.5	M	97.2	97.2	N	101.3	106.5
June.....	N	131.1	111.5	N	55.1	39.9	N	101.3	106.5
September.....	N	131.1	111.5	N	55.1	39.9	N	101.3	106.5
December.....	N	131.1	111.5	N	55.1	39.9	N	101.3	106.5
1927—March.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
June.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
September.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
December.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
1928—March.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
June.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
September.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
December.....	N	162.0	123.0	N	55.1	39.9	N	101.3	106.5
1929—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1930—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.8	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1931—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1932—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1933—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1934—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
December.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
1935—March.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
June.....	N	160.4	121.5	N	55.1	39.9	N	101.3	106.5
September.....	N	160.4	121.5	N	55.1	39.9	N	103.4	108.7
December.....	N	160.4	121.5	N	55.1	39.9	N	103.4	108.7
1936—March.....	N	157.9	118.3	N	55.1	39.9	N	103.4	108.7
June.....	N	157.9	118.3	N	55.1	39.9	N	103.4	108.7
Net bill, June 1936.....		\$1.26	\$2.54		\$1.19	\$2.49		\$1.11	\$2.23
Average price per therm, June 1936.....		11.9¢	8.3¢		11.2¢	8.1¢		10.4¢	7.3¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

Dallas.—1923-25: Straight line schedule. The introduction of a service charge increased the relative for June 1925 from 89.6 to 131.1 for range, and from 96.1 to 111.5 for range and water heater. March 1927: Increase in service charge. March 1929 and March 1936: Higher B. t. u.

Houston.—1923-25: Straight line schedule. A rate decrease lowered the relatives for June 1925 from 100.9 to 97.2. June 1926: Change from manufactured to natural gas with higher B. t. u., rate decrease (i. e., a decrease in the price per unit of 1,000 cu. ft.), and introduction of a service charge.

Little Rock.—1923-25: Straight line schedule. Relatives for range for March and June 1923, based on the minimum charge were 93.5. The introduction of a service charge and a change in rates in September 1923 increased the relative for range to 101.3 and showed an advance from 67.2 to 106.5 for range and water heater. September 1935: Sales tax of 2 percent became effective.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural]

Year and month	West South Central			Mountain					
	New Orleans			Butte			Denver		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$2.30	\$6.63		\$4.24	\$11.79		\$3.00	\$8.67
Price per therm, average 1923-25.....		21.7¢	21.7¢		40.0¢	38.5¢		28.3¢	28.3¢
1926—March.....	M	100.0	100.0	M	100.0	100.0	M	100.0	100.0
June.....	M	100.0	100.0	M	100.0	100.0	M	100.0	100.0
September.....	M	100.0	100.0	M	100.0	100.0	M	100.0	100.0
December.....	M	100.0	100.0	M	100.0	100.0	M	100.0	100.0
1927—March.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
June.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
September.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
December.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
1928—March.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
June.....	M	100.0	100.0	M	100.0	100.0	M	94.7	94.7
September.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
December.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
1929—March.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
June.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
September.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
December.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
1930—March.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
June.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
September.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
December.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
1931—March.....	N	54.7	47.5	M	100.0	100.0	N	70.0	47.5
June.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
September.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
December.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
1932—March.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
June.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
September.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
December.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
1933—March.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
June.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
September.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
December.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
1934—March.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
June.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
September.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.5
December.....	N	54.7	47.5	N	42.7	24.4	N	70.0	47.0
1934—March.....	N	54.7	47.5	N	42.7	24.4	N	71.4	47.9
June.....	N	54.7	47.5	N	42.7	24.4	N	71.4	47.9
September.....	N	54.7	47.5	N	42.7	24.4	N	71.4	47.9
December.....	N	54.7	47.5	N	26.2	18.4	N	71.4	47.9
1936—March.....	N	54.7	47.5	N	26.2	18.4	N	71.4	47.9
June.....	N	54.7	47.5	N	26.2	18.4	N	71.4	47.9
Net bill, June 1936.....		\$1.26	\$3.15		\$1.11	\$2.17		\$2.14	\$4.15
Average price per therm, June 1936.....		11.9¢	10.3¢		10.5¢	7.1¢		20.2¢	13.6¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

New Orleans.—1923-25: Block meter schedule. September 1928: Change from manufactured to natural gas, with higher B. t. u., and introduction of straight line schedule with service charge.

Butte.—1923-25: Block meter schedule. September 1931: Change from manufactured to natural gas, with higher B. t. u., and introduction of straight line schedule with service charge. December 1935: Reduction in service charge.

Denver.—1923-25: Straight line schedule. March 1927: Rate decrease (i. e., a decrease in the price per unit of 1,000 cu. ft.). September 1928: Change from manufactured to natural gas, with higher B. t. u., and introduction of block meter schedule with service charge. December 1934: Rate decrease. March 1935: Sales tax of 2 percent became effective.



TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural, X=Mixed manufactured and natural]

Year and month	Mountain			Pacific					
	Salt Lake City			Los Angeles (2 companies)			Portland, Oreg.		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25		\$3.68	\$9.56		\$0.86	\$2.48		\$2.31	\$5.92
Price per therm, average 1923-25		34.7¢	31.2¢		8.1¢	8.1¢		21.8¢	19.3¢
1926—March	M	97.8	92.5	X	98.9	98.9	M	102.0	102.4
June	M	97.8	92.5	X	98.9	98.9	M	102.0	102.4
September	M	97.8	92.5	X	98.9	98.9	M	102.0	102.4
December	M	97.8	92.5	X	98.9	98.9	M	102.0	102.4
1927—March	M	97.8	92.5	N	103.2	103.2	M	101.0	101.2
June	M	98.5	93.4	N	103.2	103.2	M	101.0	101.2
September	M	98.5	93.4	N	103.2	103.2	M	101.0	101.2
December	M	102.6	97.2	N	103.2	103.2	M	101.0	101.2
1928—March	M	102.6	97.2	N	103.2	103.2	M	101.0	101.2
June	M	106.7	101.7	N	103.2	103.2	M	101.0	101.2
September	M	106.7	101.7	N	103.2	103.2	M	101.0	101.2
December	M	106.7	101.7	N	148.9	105.0	M	101.0	101.2
1929—March	M	106.7	101.7	N	148.9	105.0	M	101.0	100.7
June	M	106.7	101.7	N	148.9	105.0	M	101.0	100.7
September	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
December	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
1930—March	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
June	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
September	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
December	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
1931—March	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
June	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
September	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
December	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
1932—March	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
June	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
September	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
December	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
1933—March	N	56.4	42.6	N	148.9	105.0	M	101.0	100.7
June	N	56.4	42.6	N	147.0	102.6	M	101.0	100.7
September	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
December	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
1934—March	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
June	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
September	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
December	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
1935—March	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
June	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
September	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
December	N	57.5	43.5	N	146.1	101.4	M	101.0	100.7
1936—March	N	57.5	43.5	N	146.1	98.4	M	101.0	100.7
June	N	57.5	43.5	N	146.1	98.4	M	101.0	100.7
Net bill, June 1936		\$2.12	\$4.16		\$1.26	\$2.43		\$2.34	5.96
Average price per therm, June 1936		20.0¢	13.6¢		11.8¢	8.0¢		22.0¢	19.5¢

EXPLANATION OF CHANGES AFFECTING RELATIVES

**Salt Lake City.**—1923-25: Block meter schedule with service charge. Due to higher B. t. u. for September 1924 the relatives decreased from 101.3 to 100.5 for range and from 104.0 to 102.9 for range and water heater. A further decline in March 1925 to 97.8 for range and 92.5 for range and water heater was due to change in block, rate, and service charge. **June and December 1927 and June 1928:** Lower B. t. u. **September 1929:** Change from manufactured to natural gas with higher B. t. u., change in block and rate, and decrease in service charge. **September 1933:** Sales tax of 2 percent became effective.

**Los Angeles (2 companies).**—1923-25: Block meter schedules. Higher B. t. u. for June 1923 lowered the relatives from 111.6 to 98.9. **March 1927:** Change from mixed to natural gas with higher B. t. u., and change in block and rate. **December 1928:** Introduction of straight line schedule with service charge. **June and September 1933:** Introduction of block meter schedules with service charge at different dates by the two companies. **March 1936:** Introduction of a separate block meter schedule with service charge available to customers using major appliances in addition to a range.

**Portland, Oreg.**—1923-25: Block meter schedule with service charge. **March 1926:** Rate increase. **March 1927:** Rate decrease. **March 1929:** Change in block and rate.

TABLE 13.—Indexes of retail prices of gas, by cities, March 1926 to June 1936, inclusive—Continued

[1923-25=100]

[M=Manufactured, N=Natural, X=Mixed manufactured and natural]

Year and month	Pacific					
	San Francisco			Seattle		
	Kind of gas	10.6 therms Range	30.6 therms Range and water heater	Kind of gas	10.6 therms Range	30.6 therms Range and water heater
Net bill, average 1923-25.....		\$1.89	\$5.46		\$3.16	\$8.08
Price per therm, average 1923-25.....		17.8¢	17.8¢		29.8¢	26.4¢
1926—March.....	M	96.8	96.8	M	100.0	100.0
June.....	M	96.8	96.8	M	100.0	100.0
September.....	M	96.8	96.8	M	100.0	100.0
December.....	M	96.8	96.8	M	100.0	100.0
1927—March.....	M	96.8	96.8	M	100.0	100.0
June.....	M	96.8	96.8	M	100.0	100.0
September.....	M	96.8	96.8	M	100.0	100.0
December.....	M	96.8	96.8	M	100.0	100.0
1928—March.....	M	95.8	95.8	M	100.0	100.0
June.....	M	95.8	95.8	M	100.0	100.0
September.....	M	95.8	95.8	M	100.0	100.0
December.....	M	95.8	95.8	M	100.0	100.0
1929—March.....	M	91.7	91.7	M	100.0	100.0
June.....	M	91.7	91.7	M	100.0	100.0
September.....	X	86.9	86.9	M	100.0	100.0
December.....	X	82.7	82.7	M	100.0	100.0
1930—March.....	N	72.9	52.4	M	100.0	100.0
June.....	N	72.9	52.4	M	100.0	100.0
September.....	N	72.9	52.4	M	100.0	90.3
December.....	N	72.9	52.4	M	100.0	90.3
1931—March.....	N	72.9	52.4	M	100.0	90.3
June.....	N	72.9	52.4	M	100.0	90.3
September.....	N	72.9	52.4	M	100.0	90.3
December.....	N	72.9	52.4	M	95.3	64.0
1932—March.....	N	72.9	52.4	M	95.3	64.0
June.....	N	72.9	52.4	M	95.3	64.0
September.....	N	72.9	52.4	M	98.1	65.9
December.....	N	72.9	52.4	M	98.1	65.9
1933—March.....	N	72.9	52.4	M	98.1	65.9
June.....	N	72.9	52.4	M	98.1	65.9
September.....	N	72.9	52.4	M	98.1	65.9
December.....	N	72.9	52.4	M	98.1	65.9
1934—March.....	N	72.9	52.4	M	98.1	65.9
June.....	N	72.9	52.4	M	98.1	65.9
September.....	N	72.9	52.4	M	98.1	65.9
December.....	N	72.9	52.4	M	98.1	65.9
1935—March.....	N	72.9	52.4	M	98.1	65.9
June.....	N	72.9	52.4	M	98.1	65.9
September.....	N	72.9	52.4	M	98.1	65.9
December.....	N	72.9	52.4	M	98.1	65.9
1936—March.....	N	72.9	52.4	M	98.1	65.9
June.....	N	67.2	45.7	M	98.1	65.9
Net bill, June 1936.....		\$1.27	\$2.40		\$3.10	\$5.32
Average price per therm, June 1936.....		12.0¢	8.1¢		29.2¢	17.4¢

## EXPLANATION OF CHANGES AFFECTING RELATIVES

**San Francisco.**—1923-25: Block meter schedule. Rate increases (i. e., an increase in the price per unit of 1,000 cu. ft.) advanced the relatives from 93.7 in March 1923 to 101.9 for March 1924, and 107.0 for March 1925. A rate decrease in December 1925 lowered the relatives to 96.8. **March 1928** and **March 1929**: Rate decreases. **September 1929**: Change from manufactured to mixed gas with higher B. t. u. **December 1929**: Higher B. t. u. **March 1930**: Change from mixed to natural gas with higher B. t. u., change in block and rate, and introduction of service charge. **June 1936**: Change in block and rate, and discontinuance of service charge.

**Seattle.**—1923-25: Block meter schedule with service charge. **September 1930**: Introduction of separate block meter schedule with service charge, available to customers using major appliances in addition to a range. **December 1931**: Introduction of new block meter schedules with service charge, and measurement of consumption on a thermal basis. **September 1932**: Sales tax of 3 percent became effective.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923—June 1936, inclusive

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate <sup>1</sup>								Net monthly bills		Net price per therm	
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure	Service charge					
			10.6 therms	30.6 therms		Amount	Cubic feet included		Amount	Cubic feet included				
					Range			Range and water heater			10.6 therms	30.6 therms	10.6 therms	30.6 therms
<i>New England</i>													10.6 therms	30.6 therms
<b>Boston:</b>														
<b>Co. 1:</b>														
Mar. 1923 <sup>2</sup> -Jan. 31, 1924.....	M	535	1,980	5,720	Straight line			Straight line			\$2.48	\$7.15	Cents	Cents
Feb. 1, 1924—Sept. 30, 1929.....	M	535	1,980	5,720	do			do			2.38	6.86	23.4	23.4
Oct. 1, 1929—Aug. 31, 1932.....	M	535	1,980	5,720	do	\$0.50		do	\$0.50		2.48	6.22	23.4	20.3
Sept. 1, 1932—Sept. 26, 1934.....	M	535	1,980	5,720	do	.50		Block	1.00	200	2.48	5.70	23.4	18.6
Sept. 27, 1934—June 15, 1936.....	M	535	1,980	5,720	do	.60	100	do	1.00	200	2.48	5.70	23.4	18.6
<b>Co. 2:</b>														
July 1, 1922—Jan. 1, 1924.....	M	535	1,980	5,720	do			Straight line			2.48	7.15	23.4	23.4
Jan. 2, 1924—Mar. 31, 1925.....	M	535	1,980	5,720	do			do			2.38	6.86	22.4	22.4
Apr. 1, 1925—Jan. 31, 1934.....	M	535	1,980	5,720	do			do			2.28	6.58	21.5	21.5
Feb. 1, 1934—June 15, 1936.....	M	535	1,980	5,720	do			Block			2.28	5.63	21.5	18.4
<b>Fall River:</b>														
Sept. 15, 1921 <sup>2</sup> -Aug. 31, 1929.....	M	528	2,010	5,800	Block			do			2.31	6.67	21.8	21.8
Sept. 1, 1929—June 15, 1936.....	M	528	2,010	5,800	do	.75	300	do	.75	300	2.53	5.94	23.9	19.4
<b>Manchester:</b>														
Jan. 1, 1922—Feb. 28, 1924.....	M	565	1,880	5,420	do	.25		do	.25		2.88	7.84	27.2	25.6
Mar. 1, 1924—Feb. 28, 1928.....	M	565	1,880	5,420	do	.25		do	.25		2.69	7.30	25.4	23.8
Mar. 1, 1928—Aug. 31, 1931.....	M	525	2,020	5,830	do	1.00	600	do	1.00	600	2.85	7.13	26.8	23.3
Sept. 1, 1931—Jan. 31, 1934.....	M	525	2,020	5,830	do	1.00	600	do	1.40	600	2.85	6.49	26.8	21.2
Feb. 1, 1934—June 15, 1936.....	M	525	2,020	5,830	do	1.00	600	do	1.40	600	2.85	5.67	26.8	18.5

See footnotes at end of table.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923—June 1936, inclusive—Continued

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate 1								Net monthly bills		Net price per therm	
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure	Service charge					
			10.6 therms	30.6 therms		Amount	Cubic feet included		Amount	Cubic feet included	10.6 therms	30.6 therms	10.6 therms	30.6 therms
			Range	Range and water heater	Range		Range and water heater		Range	Range and water heater				
<i>New England—Continued</i>														
New Haven:														
Mar. 1922 <sup>2</sup> -Dec. 31, 1924.....	M	528	2,010	5,800	Straight line	\$0.50	100	Straight line	\$0.50	100	\$2.51	\$6.49	Cents 23.6	Cents 21.2
Jan. 1, 1925-June 15, 1936.....	M	528	2,010	5,800	do.....	.50	100	do.....	.50	100	2.41	6.20	22.7	20.3
Portland, Maine:														
Nov. 1, 1922-Dec. 31, 1925.....	M	525	2,020	5,830	Block.....			Block.....			3.13	8.85	29.5	28.9
Jan. 1, 1926-Oct. 31, 1926.....	M	525	2,020	5,830	do.....			do.....			3.03	8.56	28.6	28.0
Nov. 1, 1926-Apr. 5, 1933.....	M	525	2,020	5,830	Straight line	.50		Straight line	.50		3.03	7.79	28.5	25.5
Apr. 6, 1933-Jan. 4, 1935.....	M	525	2,020	5,830	do.....	1.00	400	do.....	1.00	400	3.03	7.79	28.5	25.5
Jan. 5, 1935-June 15, 1936.....	M	525	2,020	5,830	do.....	1.00	400	Block.....	1.00	400	3.03	6.51	28.5	21.3
Providence:														
Feb. 1, 1923-May 31, 1923.....	M	510	2,080	6,000	Block.....	.50		do.....	.50		2.79	7.10	26.3	23.2
June 1, 1923-Mar. 1, 1925.....	M	510	2,080	6,000	do.....	.50		do.....	.50		2.68	6.80	25.3	22.2
Mar. 2, 1925-June 30, 1925.....	M	510	2,080	6,000	do.....	.50		do.....	.50		2.57	6.50	24.3	21.2
July 1, 1926-Dec. 31, 1931.....	M	510	2,080	6,000	do.....	.50		do.....	.50		2.58	6.10	24.3	19.9
Jan. 1, 1932-June 15, 1936.....	M	510	2,080	6,000	do.....	.70	200	do.....	.70	200	2.57	6.10	24.3	19.9
<i>Middle Atlantic</i>														
Buffalo:														
Mar. 1923 <sup>3</sup> .....	X	900	1,180	3,400	Straight line			Straight line			.73	2.11	6.9	6.9
June 1923 <sup>3</sup> .....	X	900	1,180	3,400	do.....			do.....			.73	2.10	6.9	6.8
Sept. 1923 <sup>3</sup> .....	X	900	1,180	3,400	do.....			do.....			.72	2.08	6.8	6.8
Dec. 1923 <sup>3</sup> .....	X	900	1,180	3,400	do.....			do.....			.72	2.07	6.8	6.8
Mar. 1924 <sup>3</sup> .....	X	900	1,180	3,400	do.....			do.....			.73	2.09	6.9	6.8
June 1924 <sup>4</sup> .....	X	900	1,180	3,400	do.....			do.....			.71	2.05	6.7	6.7
Sept. 1924-Dec. 17, 1925.....	X	900	1,180	3,400	do.....			do.....			.71	2.04	6.7	6.7
Dec. 18, 1925-June 15, 1936.....	X	900	1,180	3,400	do.....			do.....			.77	2.21	7.2	7.2

Newark:																				
Mar. 27, 1922-Apr. 30, 1924	M	525	2,020	5,830	do			do				2.53	7.29	23.8	23.9					
May 1, 1924-June 30, 1929	M	525	2,020	5,830	do			do				2.42	7.00	22.9	22.9					
July 1, 1929-Sept. 30, 1935	M	525	2,020	5,830	Block	1.00	400	Block	1.00	400		2.69	6.31	25.4	20.6					
Oct. 1, 1935-June 15, 1936	M	525	2,020	5,830	do	1.00	400	do	1.00	400		2.69	6.06	25.4	19.8					
New York:																				
Co. 1, 2, 7, 8, 9, and 10:																				
Oct. 1, 1922-Dec. 9, 1934	M	540	1,960	5,670	Straight line			Straight line				2.25	6.52	21.3	21.3					
Dec. 10, 1934-June 15, 1936	M	540	1,960	5,670	do			do				2.30	6.65	21.7	21.7					
Co. 3:																				
Oct. 1, 1922-Dec. 9, 1934	M	540	1,960	5,670	do			do				2.84	8.22	26.8	26.8					
Dec. 10, 1934-Aug. 31, 1935	M	540	1,960	5,670	do			do				2.90	8.39	27.4	27.4					
Sept. 1, 1935-June 15, 1936	M	540	1,960	5,670	do			do				2.30	6.65	21.7	21.7					
Co. 4:																				
Oct. 1, 1922-Aug. 14, 1931	M	540	1,960	5,670	do			do				2.25	6.52	21.3	21.3					
Aug. 15, 1931-Dec. 9, 1934	M	540	1,960	5,670	do	1.00	600	do	1.00	600		2.29	5.82	21.6	19.0					
Dec. 10, 1934-Dec. 14, 1935	M	540	1,960	5,670	do	1.02	600	do	1.02	600		2.34	5.93	22.1	19.4					
Dec. 15, 1935-June 15, 1936	M	540	1,960	5,670	Block	1.02	600	Block	1.02	600		2.34	5.25	22.1	17.2					
Co. 5:																				
Jan. 1, 1923-Feb. 28, 1933	M	540	1,960	5,670	Straight line			Straight line				2.55	7.37	24.1	24.1					
Mar. 1, 1933-Dec. 9, 1934	M	540	1,960	5,670	do	1.00	500	do	1.00	500		2.39	5.91	22.5	19.3					
Dec. 10, 1934-June 15, 1936	M	540	1,960	5,670	do	1.02	500	do	1.02	500		2.43	6.03	23.0	19.7					
Co. 6:																				
Nov. 1, 1922-July 31, 1927	M	540	1,960	5,670	do			do				2.55	7.37	24.1	24.1					
Aug. 1, 1927-Dec. 31, 1928	M	540	1,960	5,670	do	1.00	200	do	1.00	200		2.94	7.02	27.7	22.9					
Jan. 1, 1929-Sept. 30, 1929	M	540	1,960	5,670	do	1.00	200	do	1.00	200		2.85	6.74	26.9	22.0					
Oct. 1, 1929-Dec. 31, 1931	M	540	1,960	5,670	do	1.00	200	do	1.00	200		2.76	6.47	26.0	21.1					
Jan. 1, 1932-Dec. 9, 1934	M	540	1,960	5,670	do	1.00	500	do	1.00	500		2.53	6.43	23.3	21.0					
Dec. 10, 1934-June 15, 1936	M	540	1,960	5,670	do	1.02	500	do	1.02	500		2.58	6.56	24.4	21.4					
Co. 11:																				
Oct. 1, 1922-Dec. 9, 1934	M	540	1,960	5,670	do			do				2.71	7.83	25.5	25.5					
Dec. 10, 1934-Aug. 31, 1935	M	540	1,960	5,670	do			do				2.76	7.98	26.1	26.1					
Sept. 1, 1935-June 15, 1936	M	540	1,960	5,670	do			do				2.30	6.65	21.7	21.7					
Co. 12:																				
Aug. 30, 1922-June 7, 1923	M	540	1,960	5,670	do	75		do	75			3.10	7.55	29.3	24.7					
June 8, 1923-Apr. 30, 1927	M	540	1,960	5,670	do			do				2.84	8.22	26.8	26.8					
May 1, 1927-Dec. 31, 1932	M	540	1,960	5,670	Block	1.00	500	Block	1.00	500		3.04	8.20	28.7	26.8					
Jan. 1, 1933-Dec. 9, 1934	M	540	1,960	5,670	do	1.00	500	do	1.00	500		3.04	7.70	28.7	25.2					
Dec. 10, 1934-Sept. 30, 1935	M	540	1,960	5,670	do	1.02	500	do	1.02	500		3.10	7.86	29.3	25.7					
Oct. 1, 1935-June 15, 1936	M	540	1,960	5,670	do	1.02	500	do	1.02	500		3.10	7.08	28.3	23.1					
Philadelphia:																				
Jan. 1907 <sup>1</sup> -Dec. 31, 1930	M	530	2,000	5,770	Straight line			Straight line				2.00	5.77	18.9	18.9					
Jan. 1, 1931-Sept. 30, 1932	M	530	2,000	5,770	do			do				1.90	5.48	17.9	17.9					
Oct. 1, 1932-June 15, 1936	M	530	2,000	5,770	Block			Block				1.80	5.01	17.0	16.4					
Pittsburgh:																				
Co. 1:																				
Dec. 1921 <sup>1</sup> -July 14, 1924	N	1,130	940	2,710	Straight line			Straight line				1.00	1.36	9.4	4.4					
July 15, 1924-June 15, 1936	N	1,130	940	2,710	do			do				1.00	1.63	9.4	5.3					
Co. 2:																				
Dec. 1921 <sup>1</sup> -Nov. 14, 1923	N	1,100	960	2,780	do			do				1.00	1.39	9.4	4.5					
Nov. 15, 1923-June 15, 1936	N	1,100	960	2,780	do			do				1.00	1.67	9.4	5.5					

See footnotes at end of table.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923-June 1936, inclusive—Continued

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate <sup>1</sup>								Net monthly bills		Net price per therm	
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure	Service charge					
			10.6 therms	30.6 therms		Amount	Cubic feet included		Amount	Cubic feet included				
			Range	Range and water heater	10.6 therms		30.6 therms		Range	Range and water heater	10.6 therms	30.6 therms		
<b>Middle Atlantic—Continued</b>														
<b>Pittsburgh—Continued.</b>														
Co. 3:														
Dec. 1921-June 1924.....	N	1,100	960	2,780	Straight line.....			Straight line.....		\$ 1.00	\$1.39	Cents 9.4	Cents 4.5	
Sept. 1924-June 1936.....	N	1,100	960	2,780	do.....			do.....		1.00	1.67	9.4	5.5	
<b>Rochester:</b>														
Oct. 15, 1922-Aug. 31, 1923.....	M	537	1,970	5,700	do.....			do.....		2.07	5.99	19.5	19.5	
Sept. 1, 1923-Mar. 31, 1933.....	M	537	1,970	5,700	do.....			do.....		1.97	5.70	18.6	18.6	
Apr. 1, 1933-June 15, 1936.....	M	537	1,970	5,700	Block.....			Block.....		1.97	5.56	18.6	18.2	
<b>Scranton:</b>														
June 1922-Dec. 31, 1923.....	M	540	1,960	5,670	do.....			do.....		3.14	8.27	29.6	27.0	
Jan. 1, 1924-Dec. 1925.....	M	540	1,960	5,670	do.....			do.....		2.94	7.84	27.7	25.6	
Mar. 1926-June 30, 1926.....	M	530	2,000	5,770	do.....			do.....		3.00	7.96	28.3	26.0	
July 1, 1926-Sept. 1929.....	M	530	2,000	5,770	do.....	\$0.75		do.....	\$0.75	3.05	6.97	28.8	22.8	
Dec. 1929-June 15, 1936.....	M	520	2,040	5,880	do.....	.75		do.....	.75	3.10	7.08	29.2	23.1	
<b>East North Central</b>														
<b>Chicago:</b>														
Feb. 1, 1922-July 31, 1923.....	M	530	2,000	5,770	do.....	.60	400	do.....	.60	400	2.20	5.97	20.8	19.5
Aug. 1, 1923-Mar. 31, 1928.....	M	530	2,000	5,770	do.....	.60	400	do.....	.60	400	2.12	5.70	20.0	18.6
Apr. 1, 1928-Oct. 14, 1931.....	M	530	2,000	5,770	Straight line.....	.60	400	Straight line.....	.60	400	2.04	5.43	19.2	17.8
Oct. 15, 1931-June 30, 1933.....	X	800	1,330	3,830	Block.....	.58	\$ 250	Block.....	.58	\$ 250	1.95	5.12	18.4	16.7
July 1, 1933-June 15, 1936.....	X	800	1,330	3,830	do.....	.58	\$ 250	do.....	.58	\$ 250	1.94	4.69	18.3	15.2

Cincinnati:												
Dec. 15, 1921-Mar. 31, 1925	N	1,100	960	2,780	do			do	\$ .75	1.39	7.1	4.5
Apr. 1, 1925-May 31, 1925	X	880	1,200	3,480	do			do	\$ .75	1.74	7.1	5.7
June 1, 1925-December 1929	X	880	1,200	3,480	do			do	.90	2.61	8.5	8.5
March 1930-Apr. 26, 1935	X	865	1,230	3,540	do			do	.92	2.66	8.7	8.7
Apr. 27, 1935-June 15, 1936	X	865	1,230	3,540	do			do	.91	2.45	8.6	8.0
Cleveland:												
Feb. 1, 1922-May 27, 1923	N	1,100	960	2,780	do			do	\$ .75	1.11	7.1	3.6
May 28, 1923-Dec. 10, 1925	N	1,100	960	2,780	do	.50		do	.93	1.75	8.8	5.7
Dec. 11, 1925-Sept. 29, 1934	N	1,100	960	2,780	do	.50		do	.98	1.89	9.2	6.2
Sept. 30, 1934-June 15, 1936	N	1,100	960	2,780	do			do	\$ .75	1.43	7.1	4.7
Columbus:												
Co. 1:												
July 12, 1921-May 15, 1925	N	1,050	1,010	2,910	do			do	.45	1.31	4.3	4.3
May 16, 1925-Feb. 17, 1927	N	1,050	1,010	2,910	do			do	\$ .75	1.60	7.1	5.2
Feb. 18, 1927-Jan. 31, 1933	N	1,050	1,010	2,910	Straight line			Straight line	\$ .75	1.40	7.1	4.6
Feb. 1, 1933-June 15, 1936	N	1,050	1,010	2,910	do			do	\$ .75	1.60	7.1	5.2
Co. 2:												
July 12, 1921-June 10, 1925	N	1,050	1,010	2,910	Block			Block	.45	1.31	4.3	4.3
June 11, 1925-Feb. 17, 1927	N	1,050	1,010	2,910	do			do	\$ .75	1.60	7.1	5.2
Feb. 18, 1927-June 15, 1936	N	1,050	1,010	2,910	Straight line			Straight line	\$ .75	1.40	7.1	4.6
Detroit:												
Feb. 15, 1922-Apr. 30, 1924	M	600	1,770	5,100	do			do	1.40	4.03	13.2	13.2
May 1, 1924-Dec. 30, 1925	M	530	2,000	5,770	do	.10		do	1.68	4.66	15.8	15.2
Dec. 31, 1925-June 8, 1932	M	530	2,000	5,770	do			do	1.58	4.56	14.9	14.9
June 9, 1932-June 30, 1933	M	530	2,000	5,770	do			do	1.54	4.44	14.5	14.5
July 1, 1933-Apr. 7, 1935	M	530	2,000	5,770	do			do	1.59	4.58	15.0	15.0
Apr. 8, 1935-June 15, 1936	M	530	2,000	5,770	do			do	1.71	4.93	16.1	16.1
Indianapolis:												
June 1922-Apr. 30, 1926	M	570	1,860	5,370	do			do	2.23	6.44	21.1	21.1
May 1, 1926-June 30, 1924	M	570	1,860	5,370	do			do	2.14	6.18	20.2	20.2
July 1, 1924-Feb. 28, 1926	M	570	1,860	5,370	do			do	2.05	5.91	19.3	19.3
Mar. 1, 1926-June 30, 1927	M	570	1,860	5,370	do			do	1.95	5.64	18.4	18.4
July 1, 1927-Apr. 30, 1936	M	570	1,860	5,370	Block			Block	1.77	5.10	16.7	16.7
May 1, 1936-June 15, 1936	M	570	1,860	5,370	do			do	1.67	4.83	15.8	15.8
Milwaukee:												
June 19, 1922-July 31, 1923	M	520	2,040	5,880	do	.50	400	do	.50	1.81	17.1	16.0
Aug. 1, 1923-June 15, 1936	M	520	2,040	5,880	do	.50	400	do	1.73	4.61	16.3	15.1
Peoria:												
Nov. 20, 1920-May 10, 1926	M	565	1,880	5,420	do			do	2.26	6.50	21.3	21.3
May 11, 1926-June 30, 1931	M	565	1,880	5,420	do			Demand	2.26	5.14	21.3	16.8
July 1, 1931-Mar. 11, 1932	M	565	1,880	5,420	do			do	2.23	5.01	21.0	16.4
Mar. 12, 1932-June 15, 1936	N	1,000	1,060	3,060	do			do	2.12	4.67	20.0	15.3
Springfield:												
May 15, 1921-May 5, 1923	M	565	1,880	5,420	do			Block	2.63	7.59	24.8	24.8
May 6, 1923-May 31, 1926	M	565	1,880	5,420	do			do	2.54	7.32	23.9	23.9
June 1, 1926-June 24, 1931	M	565	1,880	5,420	do			do	2.35	6.78	22.2	22.2
June 25, 1931-Jan. 21, 1932	M	565	1,880	5,420	do			Demand	2.33	5.13	22.0	16.2
Jan. 22, 1932-June 10, 1934	N	1,000	1,060	3,060	do			do	2.12	4.67	20.0	15.3
June 11, 1934-June 15, 1936	N	1,000	1,060	3,060	do			Block	1.91	4.66	18.0	15.2

See footnotes at end of table.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923—June 1936, inclusive—Continued

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate <sup>1</sup>								Net monthly bills		Net price per therm		
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure	Service charge						
			10.6 therms	30.6 therms		Amount	Cubic feet included		Amount	Cubic feet included					
			Range	Range and water heater	10.6 therms		30.6 therms		10.6 therms	30.6 therms	10.6 therms	30.6 therms			
<i>West North Central</i>															
<i>Kansas City:</i>															
Sept. 15, 1922-Mar. 1924	N	1,000	1,060	3,060	Straight line	\$0.50		Straight line	\$0.50		\$1.40	\$3.10	13.2	10.1	
June 1924-Aug. 26, 1935	N	1,000	1,060	3,060	Block	.75	400	Block	.75	400	1.34	3.09	12.7	10.1	
Aug. 27, 1935-June 15, 1936	N	1,000	1,060	3,060	do	.76	400	do	.76	400	*1.36	*3.12	12.8	10.2	
<i>Minneapolis:</i>															
Jan. 1, 1923-Apr. 30, 1923	M	600	1,770	5,100	Straight line			Straight line			1.82	5.26	17.2	17.2	
May 1, 1923-Aug. 31, 1923	M	600	1,770	5,100	do			do			1.86	5.36	17.5	17.5	
Sept. 1, 1923-Dec. 31, 1923	M	600	1,770	5,100	do			do			1.79	5.15	16.8	16.8	
Jan. 1, 1924-Apr. 30, 1924	M	600	1,770	5,100	do			do			1.77	5.10	16.7	16.7	
May 1, 1924-Aug. 31, 1924	M	600	1,770	5,100	do			do			1.79	5.15	16.8	16.8	
Sept. 1, 1924-Dec. 31, 1924	M	600	1,770	5,100	do			do			1.73	5.00	16.3	16.3	
Jan. 1, 1925-Apr. 30, 1925	M	600	1,770	5,100	do			do			1.70	4.90	16.0	16.0	
May 1, 1925-Aug. 31, 1925	M	600	1,770	5,100	do			do			1.68	4.85	15.8	15.8	
Sept. 1, 1925-Dec. 31, 1925	M	600	1,770	5,100	do			do			1.65	4.74	15.5	15.5	
Jan. 1, 1926-Apr. 30, 1926	M	600	1,770	5,100	do			do			1.66	4.79	15.7	15.7	
May 1, 1926-Aug. 31, 1926	M	550	1,930	5,560	do			do			1.87	5.39	17.6	17.6	
Sept. 1, 1926-Dec. 31, 1926	M	550	1,930	5,560	do			do			1.83	5.28	17.3	17.3	
Jan. 1, 1927-Apr. 30, 1927	M	550	1,930	5,560	do			do			1.79	5.17	16.9	16.9	
May 1, 1927-Aug. 31, 1927	M	550	1,930	5,560	do			do			1.85	5.34	17.4	17.4	
Sept. 1, 1927-Aug. 31, 1928	M	550	1,930	5,560	do			do			1.81	5.23	17.1	17.1	
Sept. 1, 1928-Dec. 31, 1928	M	550	1,920	5,560	do			do			1.74	5.00	16.4	16.4	
Jan. 1, 1929-Apr. 30, 1930	M	550	1,930	5,560	do			do			1.72	4.95	16.2	16.2	
May 1, 1930-May 31, 1935	M	550	1,930	5,560	Block	1.00	600	Block	1.00	600	2.06	4.85	19.5	15.8	
June 1, 1935-Sept. 30, 1935	X	800	1,330	3,830	do	1.00	400	do	1.00	400	1.96	4.47	18.5	14.6	
Oct. 1, 1935-Jan. 31, 1936	X	800	1,330	3,830	do	1.00	400	do	1.00	400	1.93	4.37	18.2	14.3	
Feb. 1, 1936-June 15, 1936	X	800	1,330	3,830	do	1.00	400	do	1.00	400	1.90	4.27	17.9	13.9	



<b>Omaha:</b>														
June 1922-June 1924.....	M	567	1,870	5,400	Straight line	.75	500	Straight line.	.75	500	2.26	6.14	21.3	20.1
Sept. 1924-Jan. 31, 1925.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	2.30	6.26	21.7	20.5
Feb. 1, 1925-Aug. 31, 1927.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	2.16	5.76	20.4	18.8
Sept. 1, 1927-Dec. 31, 1928.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	2.02	5.26	19.0	17.2
Jan. 1, 1929-June 30, 1930.....	M	555	1,910	5,510	Block.....	.75	500	Block.....	.75	500	1.98	4.86	18.7	15.9
July 1, 1930-June 30, 1931.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	1.81	4.51	17.1	14.7
July 1, 1931-Aug. 31, 1932.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	1.67	4.01	15.7	13.1
Sept. 1, 1932-Feb. 28, 1934.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	1.67	3.98	15.7	13.0
Mar. 1, 1934-July 31, 1934.....	M	555	1,910	5,510	do.....	.75	500	do.....	.75	500	1.60	3.76	15.1	12.3
Aug. 1, 1934-June 15, 1936.....	M	555	1,910	5,510	Straight Line.	.75	500	Straight line.	.75	500	1.53	3.51	14.4	11.5
<b>St. Louis:</b>														
Mar. 15, 1923-Apr. 5, 1929.....	M	600	1,770	5,100	Block.....			Block.....			1.77	5.10	16.7	16.7
Apr. 6, 1929-May 31, 1931.....	M	600	1,770	5,100	do.....	.75	300	do.....	.75	300	2.15	5.30	20.3	17.3
June 1, 1931-July 31, 1932.....	M	600	1,770	5,100	do.....	.80	333	do.....	.80	333	2.15	5.28	20.3	17.3
Aug. 1, 1932-Aug. 26, 1935.....	X	800	1,330	3,830	do.....	.80	333	do.....	.80	333	2.01	4.83	19.0	15.8
Aug. 27, 1935-June 15, 1936.....	X	800	1,330	3,830	do.....	\$.81	333	do.....	\$.81	333	2.03	4.87	19.2	15.9
<b>St. Paul:</b>														
Sept. 2, 1922-Mar. 31, 1923.....	M	560	1,890	5,460	Straight line.			Straight line.			1.89	5.46	17.8	17.8
April 1, 1923-Feb. 1925.....	M	600	1,770	5,100	do.....			do.....			1.50	4.34	14.2	14.2
Feb. 1925-Jan. 31, 1926.....	M	550	1,930	5,560	do.....			do.....			1.64	4.73	15.5	15.5
Feb. 1, 1926-June 15, 1936.....	M	550	1,930	5,560	do.....			do.....			1.74	5.00	16.4	16.4
<i>South Atlantic</i>														
<b>Atlanta:</b>														
Sept. 1921-Oct. 31, 1923.....	M	575	1,840	5,320	Block.....			Block.....			3.04	8.78	28.6	28.6
Nov. 1, 1923-May 1929.....	M	575	1,840	5,320	do.....			do.....			2.85	8.25	26.9	26.9
June 1929-Dec. 31, 1929.....	M	575	1,840	5,320	do.....	1.00		do.....	1.00		3.14	6.62	29.6	21.6
Jan. 1, 1930-Sept. 30, 1930.....	N	930	1,080	3,120	do.....	.65		do.....	.65		2.04	4.25	19.2	13.9
Oct. 1, 1930-Jan. 31, 1935.....	N	930	1,080	3,120	do.....	.65		do.....	.65		2.04	4.23	19.2	13.8
Feb. 1, 1935-June 15, 1936.....	N	930	1,080	3,120	do.....	.60		do.....	.60		1.78	3.77	16.8	12.3
<b>Baltimore:</b>														
July 1, 1921-July 15, 1923.....	M	500	2,120	6,120	Demand.....			Demand.....			1.95	5.16	18.4	16.9
July 16, 1923-Oct. 31, 1929.....	M	500	2,120	6,120	do.....			do.....			1.80	4.78	17.0	15.6
Nov. 1, 1929-June 15, 1936.....	M	500	2,120	6,120	Block.....			Block.....			1.80	4.78	17.0	15.6
<b>Charleston:</b>														
May 1921-Dec. 1923.....	M	550	1,930	5,560	Straight line			Straight line			2.99	8.62	28.2	28.2
May 1924-June 1929.....	M	540	1,960	5,670	do.....			do.....			3.04	8.79	28.7	28.7
Sept. 1929-May 31, 1931.....	M	550	1,930	5,560	do.....			do.....			2.99	8.62	28.2	28.2
June 1, 1931-Dec. 31, 1933.....	M	550	1,930	5,560	do.....			do.....			2.80	8.06	26.4	26.4
Jan. 1, 1934-Nov. 25, 1934.....	M	550	1,930	5,560	do.....			do.....			2.70	7.78	25.5	25.5
Nov. 26, 1934-June 15, 1936.....	M	550	1,930	5,560	do.....			Block.....	1.00	300	2.70	7.19	25.5	23.5
<b>Jacksonville:</b>														
Mar. 20, 1922-Sept. 30, 1923.....	M	535	1,980	5,720	Block.....			do.....			3.27	9.44	30.8	30.8
Oct. 1, 1923-July 31, 1926.....	M	535	1,980	5,720	do.....	1.00	200	do.....	1.00	200	4.12	10.66	38.8	34.8
Aug. 1, 1926-Jan. 31, 1933.....	M	535	1,980	5,720	do.....	1.00	200	do.....	1.00	200	4.03	10.31	38.0	33.7
Feb. 1, 1933-June 15, 1936.....	M	535	1,980	5,720	do.....	1.00	200	do.....	2.00	500	4.03	8.20	38.0	28.8

See footnotes at end of table.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923-June 1936, inclusive—Continued

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate <sup>1</sup>						Net monthly bills		Net price per therm	
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure				
			10.6 therms	30.6 therms	Rate structure	Amount	Cubic feet included	Rate structure	Amount	Cubic feet included	10.6 therms	30.6 therms
			Range	Range and water heater		10.6 therms			30.6 therms			
<i>South Atlantic—Continued</i>												
<b>Norfolk:</b>												
Mar. 1923 <sup>1</sup> -June 1923 <sup>2</sup> .....	M	580	1,830	5,280	Block.....			Block.....			<i>Cents</i>	<i>Cents</i>
Sept. 1923 <sup>2</sup> .....	M	580	1,830	5,280	do.....			do.....			24.2	24.0
Dec. 1923 <sup>2</sup> .....	M	580	1,830	5,280	do.....			do.....			23.3	23.1
Mar. 1924-Apr. 30, 1926 <sup>2</sup> .....	M	580	1,830	5,280	do.....			do.....			22.4	22.3
May 1, 1926-Oct. 31, 1929.....	M	530	2,000	5,770	do.....			do.....			24.2	24.0
Nov. 1, 1929-June 30, 1932.....	M	530	2,000	5,770	do.....			do.....			24.6	24.5
July 1, 1932-Apr. 14, 1933.....	M	530	2,000	5,770	do.....			do.....			25.5	25.0
Apr. 15, 1933-June 15, 1936.....	M	530	2,000	5,770	do.....			do.....			24.5	23.3
<b>Richmond:</b>												
May 1921 <sup>1</sup> -June 1925.....	M	550	1,930	5,560	Straight line.....			Straight line.....			23.6	23.6
Sept. 1925-Jan. 31, 1926.....	M	525	2,020	5,830	do.....			do.....			24.8	24.8
Feb. 1, 1926-June 30, 1929.....	M	525	2,020	5,830	Block.....			Block.....			24.8	24.5
July 1, 1929-June 15, 1936.....	M	525	2,020	5,830	do.....			do.....			24.8	24.3
<b>Savannah:</b>												
June 1922 <sup>1</sup> -Jan. 9, 1935.....	M	575	1,840	5,320	do.....			do.....			25.2	25.2
Jan. 10, 1935-June 15, 1936.....	M	575	1,840	5,320	do.....			do.....			21.7	21.7
<b>Washington:</b>												
Mar. 18, 1922-Nov. 17, 1923.....	M	600	1,770	5,100	Straight line.....			Straight line.....			17.5	17.5
Nov. 18, 1923-Sept. 30, 1930.....	M	600	1,770	5,100	do.....			do.....			16.7	16.7
Oct. 1, 1930-Jan. 31, 1931.....	M	600	1,770	5,100	Block.....			Block.....			16.4	15.5
Feb. 1, 1931-Feb. 28, 1932.....	X	600	1,770	5,100	do.....			do.....			16.4	15.5
Mar. 1, 1932-July 31, 1932.....	X	600	1,770	5,100	do.....			do.....			16.0	15.0
Aug. 1, 1932-Dec. 15, 1935.....	X	600	1,770	5,100	do.....			do.....			14.8	13.7
Dec. 16, 1935-June 15, 1936.....	X	600	1,770	5,100	do.....	\$0.75	800	do.....	\$0.75	800	14.4	13.3

CHANGES IN RETAIL PRICES OF GAS, 1922-96

East South Central															
<b>Birmingham:</b>															
Aug. 1, 1922-Feb. 28, 1930	M	530	2,000	5,770	do			do				1.60	4.82	15.1	15.1
March 1, 1930-Feb. 28, 1933	M	525	2,020	5,830	do			do				1.62	4.66	15.2	15.2
Mar. 1, 1933-Feb. 28, 1934	M	530	2,000	5,770	do			do				1.60	4.62	15.1	15.1
Mar. 1, 1934-Dec. 31, 1934	M	532	1,990	5,750	do			do				1.59	4.60	15.0	15.0
Jan. 1, 1935-June 15, 1936	M	534	1,990	5,730	do			do				1.59	4.58	15.0	15.0
<b>Louisville:</b>															
May 20, 1914-Nov. 30, 1923	N	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1923-Feb. 28, 1924	X	1,000	1,060	3,060	do			do				.75	1.57	7.0	5.1
Mar. 1, 1924-Mar. 31, 1924	X	1,000	1,060	3,060	do			do				.75	1.57	7.0	5.1
Apr. 1, 1924-Nov. 30, 1924	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1924-Mar. 31, 1925	X	1,000	1,060	3,060	do			do				.75	1.57	7.0	5.1
Apr. 1, 1925-Nov. 30, 1925	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1925-Mar. 31, 1926	X	875	1,210	3,500	do			do				.85	1.72	8.0	5.6
Apr. 1, 1926-Nov. 30, 1926	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1926-Mar. 31, 1927	X	875	1,210	3,500	do			do				.85	1.72	8.0	5.6
Apr. 1, 1927-Nov. 30, 1927	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1927-Mar. 31, 1928	X	875	1,210	3,500	do			do				.85	1.72	8.0	5.6
Apr. 1, 1928-Nov. 30, 1928	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1928-Mar. 31, 1929	X	875	1,210	3,500	do			do				.85	1.72	8.0	5.6
Apr. 1, 1929-Nov. 30, 1929	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1929-Mar. 31, 1930	X	865	1,230	3,540	do			do				.85	1.74	8.0	5.7
Apr. 1, 1930-Nov. 30, 1930	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1930-Mar. 31, 1931	X	865	1,230	3,540	do			do				.85	1.74	8.0	5.7
Apr. 1, 1931-Nov. 30, 1931	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1931-Mar. 31, 1932	X	865	1,230	3,540	do			do				.72	1.48	6.8	4.8
Apr. 1, 1932-Nov. 30, 1932	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1932-Mar. 31, 1933	X	865	1,230	3,540	do			do				.72	1.48	6.8	4.8
Apr. 1, 1933-Nov. 30, 1933	X	1,130	940	2,710	do			do				.65	1.45	6.1	4.7
Dec. 1, 1933-Feb. 28, 1934	X	865	1,230	3,540	do			do				.72	1.48	6.8	4.8
Mar. 1, 1934-June 30, 1934	X	900	1,180	3,400	Straight line	.60	600	Straight line	.60	600		.59	2.00	8.4	6.5
July 1, 1934-Jan. 14, 1936	X	900	1,180	3,400	do	1.62	600	do	1.62	600		1.92	2.06	8.7	6.7
Jan. 15, 1936-May 12, 1936	X	900	1,180	3,400	do	.60	600	do	.60	600		.59	2.00	8.4	6.5
May 13, 1936-June 15, 1936	X	900	1,180	3,400	do	1.62	600	do	1.62	600		1.92	2.06	8.7	6.7
<b>Memphis:</b>															
June 1922-Dec. 31, 1928	M	525	2,020	5,830	do			do				2.42	7.00	22.9	22.9
Jan. 1, 1929-Nov. 14, 1929	N	980	1,080	3,120	Block	.80	400	Block	.80	400		1.55	3.73	14.6	12.2
Nov. 15, 1929-June 15, 1936	N	980	1,080	3,120	do	.80	400	do	.80	400		1.51	3.60	14.3	11.8
<b>Mobile:</b>															
May 1921-Feb. 28, 1927	M	525	2,020	5,830	do			do				3.64	10.49	34.3	34.3
Mar. 1, 1927-Dec. 31, 1929	M	525	2,020	5,830	do	1.50	300	do	1.50	300		3.91	9.24	36.9	30.2
Jan. 1, 1930-Oct. 12, 1930	M	525	2,020	5,830	do	1.50	300	do	1.50	300		3.91	8.82	36.9	28.8
Oct. 13, 1930-Dec. 31, 1935	N	960	1,109	3,190	do	1.25	300	do	1.25	300		2.33	5.02	22.0	16.4
Jan. 1, 1936-June 15, 1936	N	960	1,100	3,190	do	1.25	300	do	1.25	300		2.25	4.75	21.2	15.5

See footnotes at end of table.

TABLE 14.—Summarized data used in the computation of retail prices of gas, by companies, March 1923—June 1936, inclusive—Continued

[Kinds of gas are indicated as follows: M=manufactured, N=natural, and X=mixed manufactured and natural]

City and period	Kind of gas	Heating value in British thermal units	Typical consumption and type of rate <sup>1</sup>								Net monthly bills		Net price per therm	
			Cubic feet equivalent to—		Rate structure	Service charge		Rate structure	Service charge		10.6 therms	30.6 therms	10.6 therms	30.6 therms
			10.6 therms	30.6 therms		Amount	Cubic feet included		Amount	Cubic feet included				
					Range			Range and water heater			Range	Range and water heater	Range	Range and water heater
<i>West South Central</i>														
<i>Dallas:</i>														
May 1921 <sup>1</sup> —June 8, 1925	N	1,000	1,060	3,060	Straight line			Straight line			\$0.72	\$2.07	6.7	6.7
June 9, 1925—Dec. 31, 1926	NN	1,000	1,060	3,060	do	\$0.67	400	do	\$0.67	400	1.05	2.40	9.9	7.8
Jan. 1, 1927—Jan. 1929	NN	1,000	1,060	3,060	do	1.17	700	do	1.17	700	1.29	2.64	12.2	8.6
Feb. 1929—Dec. 1935	NN	1,015	1,040	3,010	do	1.17	700	do	1.17	700	1.28	2.61	12.1	8.5
Jan. 1936—June 15, 1936	N	1,050	1,010	2,910	do	1.17	700	do	1.17	700	1.26	2.54	11.9	8.3
<i>Houston:</i>														
Apr. 1920 <sup>1</sup> —Apr. 30, 1925	M	530	2,000	5,770	do			do			2.18	6.29	20.6	20.6
May 1, 1925—April 1926	M	530	2,000	5,770	do			do			2.10	6.06	19.8	19.8
May 1926—June 15, 1936	N	1,000	1,060	3,060	do	.50		do	.50		1.19	2.49	11.2	8.1
<i>Little Rock:</i>														
Apr. 1919 <sup>1</sup> —July 14, 1923	NN	1,000	1,060	3,060	do			do			1.00	1.38	9.4	4.5
July 15, 1923—June 30, 1935	NN	1,000	1,060	3,060	do	.50		do	.50		1.03	2.18	10.2	7.1
July 1, 1935—June 15, 1936	N	1,000	1,060	3,060	do	4.51		do	4.51		1.11	2.23	10.4	7.3
<i>New Orleans:</i>														
Sept. 27, 1922—Sept. 5, 1928	M	600	1,770	5,100	Block			Block			2.30	6.63	21.7	21.7
Sept. 6, 1928—June 15, 1936	N	950	1,120	3,220	Straight line	.25		Straight line	.25		1.26	3.15	11.9	10.3
<i>Mountain</i>														
<i>Butte:</i>														
May 1921 <sup>1</sup> —Sept. 3, 1931	M	525	2,020	5,830	Block			Block			4.24	11.79	40.0	38.5
Sept. 4, 1931—Nov. 14, 1935	N	850	1,250	3,600	Straight line	1.25		Straight line	1.25		1.81	2.87	17.1	9.4
Nov. 15, 1935—June 15, 1936	N	850	1,250	3,600	do	1.00	1,000	do	1.00	1,000	1.11	2.17	10.5	7.1
<i>Denver:</i>														
Apr. 1919 <sup>1</sup> —Feb. 10, 1927	M	335	3,160	9,130	do			do			3.00	8.67	28.3	28.3
Feb. 11, 1927—June 30, 1928	M	335	3,160	9,130	do			do			2.84	8.22	26.8	26.8
July 1, 1928—Sept. 24, 1934	N	845	1,250	3,620	Block	.90	400	Block	.90	400	2.10	4.12	19.8	13.5
Sept. 25, 1934—Feb. 28, 1935	N	845	1,250	3,620	do	.90	400	do	.90	400	2.10	4.07	19.8	13.3
Mar. 1, 1935—June 15, 1936	N	845	1,250	3,620	do	4.92	400	do	4.92	400	2.14	4.15	20.2	13.6
<i>Salt Lake City:</i>														
Nov. 26, 1920—June 1924	M	458	2,310	6,680	do	.25		do	.25		3.73	9.94	35.2	32.5
Sept. 1924—Mar. 4, 1925	M	463	2,290	6,610	do	.25		do	.25		3.70	9.84	34.9	32.1

Mar. 5, 1925-Mar. 1927	M	463	2,290	6,610	do	1.00	400	do	1.00	400	3.60	8.84	34.0	28.9
June 1927-Sept. 1927	M	458	2,310	6,680	do	1.00	400	do	1.00	400	3.63	8.92	34.2	29.2
Dec. 1927-Mar. 1928	M	437	2,430	7,000	do	1.00	400	do	1.00	400	3.78	9.29	35.6	30.4
June 1928-Aug. 31, 1929	M	415	2,550	7,370	do	1.00	400	do	1.00	400	3.93	9.72	37.1	31.8
Sept. 1, 1929-Aug. 3, 1933	N	865	1,230	3,540	do	.90	400	do	.90	400	2.08	4.07	19.6	13.3
Aug. 4, 1933-June 15, 1936	N	865	1,230	3,540	do	4.92	400	do	4.92	400	4.212	4.16	20.0	13.6
<i>Pacific</i>														
Los Angeles:														
Co. 1:														
Oct. 1, 1922-March 1923	X	750	1,410	4,080	do			do			.96	2.77	9.0	9.0
June 1923-Feb. 8, 1927	X	850	1,250	3,600	do			do			.85	2.45	8.0	8.0
Feb. 9, 1927-Nov. 30, 1928	N	1,100	960	2,780	do			do			.88	2.56	8.3	8.3
Dec. 1, 1928-June 5, 1933	N	1,100	960	2,780	Straight line	.80	300	Straight line	.80	300	1.28	2.60	12.1	8.5
June 6, 1933-Feb. 14, 1936	N	1,100	960	2,780	Block	.80	300	Block	.80	300	1.26	2.51	11.8	8.2
Feb. 15, 1936-June 15, 1936	N	1,100	960	2,780	do	.80	300	do	.80	300	1.26	2.43	11.8	8.0
Co. 2:														
Mar. 1923 <sup>1</sup>	X	750	1,410	4,080	do			do			.96	2.77	9.0	9.0
April 1923-Feb. 9, 1927	X	850	1,250	3,600	do			do			.85	2.45	8.0	8.0
Feb. 10, 1927-Nov. 30, 1928	N	1,100	960	2,780	do			do			.88	2.56	8.3	8.3
Dec. 1, 1928-June 30, 1933	N	1,100	960	2,780	Straight line	.80	300	Straight line	.80	300	1.28	2.60	12.1	8.5
July 1, 1933-Feb. 14, 1936	N	1,100	960	2,780	Block	.80	300	Block	.80	300	1.26	2.51	11.8	8.2
Feb. 15, 1936-June 15, 1936	N	1,100	960	2,780	do	.80	300	do	.80	300	1.26	2.43	11.8	8.0
Portland, Oreg.:														
Sept. 1, 1922-Jan. 30, 1926	M	570	1,860	5,370	do	.71	300	do	.71	300	2.31	5.92	21.8	19.3
Jan. 31, 1926-Feb. 19, 1927	M	570	1,860	5,370	do	.71	300	do	.71	300	2.36	6.06	22.2	19.8
Feb. 20, 1927-Feb. 14, 1929	M	570	1,860	5,370	do	.71	300	do	.71	300	2.34	5.99	22.0	19.6
Feb. 15, 1929-June 15, 1936	M	570	1,860	5,370	do	.71	300	do	.71	300	2.34	5.96	22.0	19.5
San Francisco:														
Aug. 25, 1922-Mar. 4, 1924	M	550	1,930	5,560	do			do			1.78	5.12	16.7	16.7
Mar. 5, 1924-Mar. 3, 1925	M	550	1,930	5,560	do			do			1.93	5.56	18.2	18.2
Mar. 4, 1925-Nov. 25, 1925	M	550	1,930	5,560	do			do			2.03	5.84	19.1	19.1
Nov. 26, 1925-Feb. 26, 1928	M	550	1,930	5,560	do			do			1.83	5.28	17.3	17.3
Feb. 27, 1928-Feb. 13, 1929	M	550	1,930	5,560	do			do			1.81	5.23	17.1	17.1
Feb. 14, 1929-June 1929	M	550	1,930	5,560	do			do			1.74	5.00	16.4	16.4
Sept. 1929	X	578	1,830	5,290	do			do			1.65	4.76	15.5	15.5
Dec. 1929	X	610	1,740	5,020	do			do			1.57	4.23	14.8	14.8
Mar. 1, 1930-Apr. 30, 1936	N	1,150	920	2,660	do	.60		do	.60		1.88	2.82	13.0	9.3
May 1, 1936-June 15, 1936	N	1,150	920	2,660	do	.77	200	do	.77	200	1.27	2.49	12.0	8.1
Seattle:														
Apr. 1, 1920-Dec. 1929	M	500	2,120	6,120	do	.75	500	do	.75	500	3.16	8.08	29.8	26.4
June 1930-Aug. 11, 1930	M	500	2,120	6,120	do	1.35	900	do	1.35	900	3.16	8.08	29.8	26.4
Aug. 12, 1930-Nov. 15, 1931	M	500	2,120	6,120	do	.75	500	do	1.00	100	3.16	7.29	29.8	23.8
Nov. 16, 1931-June 30, 1932	M	500	2,120	6,120	do	.75	500	do	1.00		3.01	5.17	28.4	16.9
July 1, 1932-June 15, 1936	M	500	2,120	6,120	do	.77	500	do	1.03		3.10	5.32	29.2	17.4

<sup>1</sup> See page 18 for explanation of technical terms and description of types of rate structures and service charges.  
<sup>2</sup> First reported on this data. Record of the exact date on which this rate was effective is not on file in this Bureau.  
<sup>3</sup> Rates for this period were subject to adjustment for cost of manufacture.  
<sup>4</sup> Tax of 2 percent has been included.  
<sup>5</sup> Minimum bill.

<sup>6</sup> Cubic feet equivalent to 2 therms.  
<sup>7</sup> Tax of 3 percent has been included.  
<sup>8</sup> Sales tax of 1 percent has been included.  
<sup>9</sup> Cubic feet equivalent to 2.5 therms.

## History of Collection and Publication of Retail Prices of Gas, 1907-36

### General

Retail prices of gas were first collected by the Bureau of Labor Statistics in 1911. Prices per thousand cubic feet were secured by correspondence for quarterly periods of each year beginning with 1907 from companies serving each of the 39 cities covered for retail prices of food. Rate changes were infrequent during these years and reports for April only were published for the purpose of showing price trends. Eleven cities were added to the reporting service between 1913 and 1918. Rates effective in April of each year, beginning with 1913, were later secured from the companies serving these cities. Table 15 shows the dates and frequency of collections of rate schedules.

TABLE 15.—*Frequency of collection of domestic rate schedules for gas, 1907-36*

Date	Frequency of collection
1907-11.....	Annually: Apr. 15. <sup>1</sup>
1912-15.....	Semiannually: Apr. 15, Oct. 15.
1916-20.....	Annually: Apr. 15.
1921.....	May 15, Sept. 15, Dec. 15.
1922-24.....	Quarterly: Mar. 15, June 15, Sept. 15, Dec. 15.
1925-33.....	Semiannually: June 15, Dec. 15.
1934.....	June 15, Nov. 15.
1935.....	Mar. 15, July 15, Oct. 15.
1936.....	Quarterly: Jan. 15, Apr. 15, July 15.

<sup>1</sup> Prices were collected but not published for January, July, and October of these years.

Since 1907 a majority of the reporting cities have been served with manufactured gas. The number, however, has gradually been decreased by the introduction of straight natural gas or mixed manufactured and natural gas. In some cities two kinds of gas were served, either simultaneously through separate meters or alternately at different seasons of the year through the same meter. A record of the total number of reporting cities and of these served by each kind of gas during the years 1907-36, inclusive, shown in table 16, illustrates the trend toward an increasing use of natural gas.

From 1907 to 1911, rates for practically all of the reporting cities provided either a flat rate for all gas consumed, or a block schedule in which the first block covered a consumption greatly in excess of the requirements for household use. It was therefore unnecessary to ask the companies to file rate schedules with the Bureau. With the introduction, in later years, of domestic rate schedules, which provided a lower price per thousand cubic feet as the consumption increased, it became necessary to collect rate schedules to be used as a basis for computing average prices of gas.

**TABLE 16.**—Total number of reporting cities; number reporting for manufactured, natural, and mixed manufactured and natural gas; and number reporting for more than one kind of gas, 1907-36

Dates of collection	Total reporting cities	Cities reporting—			Cities reporting on two kinds of gas <sup>1</sup>
		Manufactured	Natural	Mixed	
April 1907-April 1911.....	39	35	7	1	4
April 1912.....	40	34	9	1	4
April 1913.....	50	44	9	1	4
April 1914-April 1919.....	50	43	9	2	4
April 1920-June 1922.....	51	43	9	2	3
September 1922-March 1925.....	51	42	8	3	2
June 1925-March 1926.....	51	42	7	4	2
June 1926-December 1926.....	51	41	8	4	2
March 1927-June 1928.....	51	41	9	3	2
September 1928-December 1928.....	51	39	11	3	2
March 1929-June 1929.....	51	38	12	3	2
September 1929-December 1929.....	51	36	13	4	2
March 1930.....	51	35	15	3	2
June 1930.....	50	34	15	3	2
December 1930.....	50	33	16	3	2
March 1931-June 1931.....	50	32	16	4	2
September 1931.....	50	31	17	4	2
December 1931.....	50	30	17	5	2
March 1932-June 1932.....	50	28	19	6	2
September 1932-September 1933.....	50	27	19	6	2
December 1933-March 1935.....	50	27	18	6	1
June 1935-June 1936.....	50	25	18	7	0

<sup>1</sup> The cities which reported two kinds of gas are:

*Buffalo.*—Both natural and manufactured gas were reported for 1907 through June 1922, when reports for manufactured gas were discontinued.

*Pittsburgh.*—Both natural and manufactured gas were reported for 1907 through April 1919. Plants manufacturing artificial gas were discontinued early in 1919.

*Cleveland.*—Both natural and manufactured gas were reported for 1907 through March 1935. Reports for manufactured gas were then discontinued as very little had been used for household purposes for a number of years.

*Louisville.*—From January 1907 through April 1913, manufactured gas for illumination and mixed natural and manufactured gas were served through separate meters. From April 1913 through September 1933, natural gas was served when the supply was sufficient. During the winter months when the demand was heavy, manufactured gas was mixed with the natural gas.

Radical changes in types of domestic rate structures, the use of new and improved household appliances, the introduction of natural gas with a high heating value into cities formerly served with manufactured gas, and the increasing tendency to measure gas in terms of heat units, have resulted in the introduction of new methods of computing average prices of gas for domestic consumption. Explanations of the methods are shown in following paragraphs. For definitions of the technical terms used in these explanations see page 18. Table 17 lists the publications in which prices computed under each method have been presented.

TABLE 17.—*Publication of prices of gas for domestic consumption for each series, April 1907-July 1936*

Bulletin	Periods covered	Bulletin	Periods covered
1907-19, inclusive Prices for the first 1,000 cubic feet, by companies		1907-34, inclusive Prices based on consumption of 3,000 cubic feet for manufactured gas and 5,000 cubic feet for natural and mixed manufactured and natural gas, by cities <sup>1</sup>	
105. ....	Apr. 15-1907-Apr. 15, 1911.	445. ....	Apr. 15, 1913-Dec. 15, 1926.
106, 108. ....	Apr. 15, 1911-Apr. 15, 1912.	464. ....	Apr. 15, 1907-Dec. 15, 1927.
110, 113, 115. ....	Apr. 15, 1912-Oct. 15, 1912.	495. ....	Apr. 15, 1907-Dec. 15, 1928.
125, 132, 136. ....	Oct. 15, 1912-Apr. 15, 1913.	"Retail Prices".... June 1929-Nov. 1934.	
138, 140. ....	Apr. 15, 1913-Oct. 15, 1913.	Prices for March and July 1935 were not published	
156. ....	Oct. 15, 1913-Oct. 15, 1914.	October 1935 to date Net monthly bills and prices per thousand cubic feet and per therm for each of 4 typical residential services, by cities.	
184. ....	Oct. 15, 1914-Apr. 15, 1915.	"Retail Prices" Nov. 1935. .... Oct. 1935. Jan. 1936. .... Jan. 1936. Apr. 1936. .... Apr. 1936. July 1936. .... July 1936.	
197. ....	Apr. 15, 1915-Oct. 15, 1915.		
228. ....	Oct. 15, 1915-Apr. 15, 1916.		
"Retail Prices"....	Prices for Apr. 15, 1917, 1918, and 1919 were published in the June issue for these years.		
1907-25, inclusive Prices for the first 1,000 cubic feet, by cities <sup>1</sup>			
270. ....	Apr. 15, 1913-Apr. 15, 1919.		
300. ....	Apr. 15, 1907-Apr. 15, 1920.		
315. ....	Apr. 15, 1907-Dec. 15, 1921.		
334. ....	Apr. 15, 1907-Dec. 15, 1922.		
366. ....	Apr. 15, 1907-Dec. 15, 1923.		
396. ....	Apr. 15, 1907-Dec. 15, 1924.		
418. ....	Apr. 15, 1907-Dec. 15, 1925.		
"Retail Prices"....	June 1920 and subsequent issues covering periods of collection also presented these data.		

<sup>1</sup> Index numbers (Apr. 1913=100) for manufactured gas were computed from the average price for the reporting cities.

### Prices for the First Thousand Cubic Feet of Gas, 1907-25

Prices for the first 1,000 cubic feet of gas were published for each reporting company for 1907-19, inclusive. Beginning with 1920 prices were published by cities—a simple average was computed for all cities served by two or more companies.

Index numbers (April 1913=100) for manufactured gas were computed from the simple averages of prices by cities.

The types of rate schedules available to residential customers have shown marked changes from the straight-line type generally in effect in 1907. In that year only 1 of the 39 cities was served under a rate whereby the average residential customer was benefited by lower prices for an increased consumption of gas. In Salt Lake City a lower price was paid for gas used in excess of 2,000 cubic feet. Block rates providing for lower prices for gas consumed in excess of 10,000 cubic feet were effective in only 4 cities reporting in 1907. A gradual increase in the use of this type of rate schedule and in the introduction of service charges was shown during the years from 1907 to 1920. During the 6-year period, 1920-25, inclusive, 40 percent of the 51 reporting cities either introduced a service charge or a block-meter schedule having 10,000 or less cubic feet at the primary rate,



or further modified these types already in use. In 1925 rate schedules having initial blocks of 10,000 cubic feet were effective in 11 cities, and from 3,000 to 7,800 cubic feet in 7 cities. Service charges or initial blocks of 2,000 cubic feet or less were applicable for 16 cities.

#### Prices of Gas Based on Average Family Consumption, 1907-34

Due to the more extensive use of the block type and the inclusion of service charges as a feature of domestic rates for gas, by 1926 the price for the first 1,000 cubic feet no longer furnished an equitable method of presenting prices for domestic use.

Accordingly, in 1926 prices were based on the use of 3,000 cubic feet of manufactured gas and 5,000 cubic feet of natural gas or of mixed manufactured and natural gas. These consumption factors represent the average family use of gas as determined from statements received from reporting companies and from records published in trade magazines and governmental reports. On this basis prices were recomputed back through 1907 and carried forward through 1934.

Index numbers (April 1913=100) for manufactured gas were computed from the simple averages of prices by cities.

#### Prices of Gas for Specified Domestic Services, 1923-36

The increased and more widely distributed use of natural gas, the introduction of new appliances, and the improvements in those used for many years, together with the changes in rate structures resulting from these developments, led the Bureau to undertake the computation of prices based upon specifications identical for all cities and better suited to current conditions in the industry.

Under the present method, adopted in 1935, prices are based upon a definite number of heat units (therms) for each of four selected services. The number of therms used for each service is constant for all cities, regardless of the variations in the kind and heating value of the gas served in the different cities.

The heat requirements used as the basis for computing prices were determined from a careful analysis of reports representing conditions in all sections of the United States. They were approved by engineers in the utility field as typical of the average use of gas for each service for a 5-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications now used are:

##### Therms

- 10.6. Range.
- 19.6. Range and manual-type water heater.
- 30.6. Range and automatic-storage or instantaneous-type water heater.
- 40.6. Range, automatic-storage or instantaneous-type water heater, and refrigerator.

A five-room house which has been used to represent an average size home in other studies conducted by this Bureau has been accepted as being well suited to the twofold use required for this specification in the determination of net monthly bills for gas used for domestic purposes. First: The designation of a five-room house on questionnaires requesting records or estimates of the amount of gas required for the use of specified domestic appliances definitely indicated the nature and limitations of the information desired. Second: From the information at hand it has been accepted as a fair standard for computing net monthly bills from rate schedules under which the number of cubic feet in each block was regulated according to the number of rooms in the home. It is recognized, however, that due to variations in customer habits and number of occupants, the net monthly bills may be equally representative for small apartments or for houses with more than five rooms.

The method of determining consumption factors is discussed in the computation of prices, page 2. These consumption factors, are based on standards of heat expressed in therms (1 therm=100,000 B. t. u.). This was deemed advisable because of the differences in the heating value of the gas between cities reporting to the Bureau, as well as of extreme changes within the cities where the kind of gas served was changed from manufactured, with a range of from 335 to 600 B. t. u., to natural or mixed manufactured and natural, of from 800 to 1,150 B. t. u.

For two of the four services, 10.6 therms (range only) and 30.6 therms automatic water heater combined with range), net monthly bills have been computed for quarterly periods beginning with March 1923. These bills have been used as the basis for computing indexes for individual cities, the indexes for 50 cities combined, and subindexes for cities served with manufactured gas, natural gas, and mixed gas which are presented in this pamphlet.

