

BUSINESS REVIEW

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THE TRANSMISSION OF NATURAL GAS

The strength and vitality of the natural gas industry are largely a function of the efficiency of its transportation system. In various parts of the world, a substantial amount of natural gas is wasted because of the lack of transmission facilities necessary to serve distant markets. According to a recent survey, about two-thirds of all natural gas produced in Venezuela and the Middle East today is lost, contrasted with only 5 percent in the United States.

At the present time, liquid fuels can be moved efficiently by many modes of transportation; however, natural gas in large volume can be transported economically only by pipeline. Efforts have been made to ship liquefied natural gas by water transportation, but this method of conveyance is not competitive with pipeline movement because of the liquefaction and subsequent vaporization costs and the investment required to provide ships of special construction. This plan is especially impractical for large-volume transmission of natural gas in the United States, where 125 firms effectively operate an intricate network of pipelines.

All other modes of transportation move and sometimes store commodities for their customers and are compensated for carriage and related services only. Natural gas transmission firms, however, usually take title to the commodity they move. Generally, they buy or produce natural gas, transport it to the consuming area, and sell the natural gas to distributing companies.

FEDERAL RESERVE BANK OF DALLAS
DALLAS, TEXAS

Growth of Natural Gas Transmission

Seasonal and weather influences play an important role in determining the volume of gas that the pipelines must deliver. An optimum pipeline operation would call for mains large enough to satisfy only average monthly requirements, but a plant of this size would be unable to meet peak winter demand. Industrial sales, which may be interrupted during periods of heavy residential and commercial winter demands, help smooth out the pipelines' load factor. Surface storage facilities near the point of consumption would facilitate a smooth, continuous flow of natural gas at or near the main's capacity and would provide sufficient supplies throughout the year. Unfortunately, large quantities of gas cannot be stored aboveground economically. Efforts have been made to establish subsurface facilities; however, since this rapidly developing element of the industry is only in its growth stage, production is still primarily guided by seasonal factors.

While the problem of transmission system design and delivery capacity is of basic importance to the pipeline industry, additional technological and economic problems also exist, such as the construction of more efficient facilities, acquisition of sufficient supplies of gas, and determination of a reasonable price for the salable gas. Nevertheless, natural gas transmission firms have learned to cope with most of the difficulties and have grown rapidly. The industry has developed to such an extent that natural gas pipelines now connect all important producing regions in the Nation with almost all important consuming areas.

The growth of natural gas pipelines has stimulated economic growth throughout the Nation, but especially in the Southwest. Natural gas producers in the region have expanded their markets. State tax revenues have risen directly from ad valorem taxes paid by the pipeline firms and indirectly from severance taxes levied on petroleum and natural gas production. Transmission firms have encouraged employment and generated income in closely related industries, in addition to utilizing a portion of the labor force in the transmission and production of natural gas. Pipeline construction has increased dramatically during the past 10 years, resulting in greater demand for such southwestern products as pipe, fittings, tools, and equipment. Finally, capital markets have developed in the area to provide a portion of the financing necessary to find and develop oil and natural gas and to construct and operate transmission facilities, and earnings have accrued to the many southwesterners entering the various phases of the oil and natural gas business.

In 1865, natural gas was discovered at West Bloomfield, New York. Five years later, a 25-mile 8-inch wooden pipeline was constructed to provide natural gas service to Rochester; and in 1872, a 2-inch iron pipeline was built, extending 5 miles from Newton to Titusville, Pennsylvania. Natural gas pipelines built from 1872 through 1890 usually had low pressures of about 80 pounds per square inch. High-pressure transmission was first used in 1891 to transport natural gas from producing areas in northern Indiana to Chicago, Illinois. By 1925, natural gas pipelines had been built in lengths extending 300 miles to service about 3.5 million consumers in 23 states with more than 1 trillion cubic feet of natural gas a year.

Pipeline construction began in the Southwest (Arizona, Louisiana, New Mexico, Oklahoma, and Texas) soon after the discovery of natural gas in the area, or shortly after the turn of the 20th century. Long-distance transmission lines were constructed to carry southwestern gas to distant markets after gathering mains were laid to collect gas from the prolific producing fields of the Southwest. These led to the construction of distribution lines in areas of dense population to service the residential, commercial, or industrial customers. After the Monroe Field in Louisiana and the Amarillo Field in the Texas Panhandle were discovered, transmission facilities to move southwestern gas developed rapidly. Technological improvements aided in making large-volume transmission economical, and several large transmission firms began moving significant amounts of natural gas from the Southwest, primarily to the heavily populated Eastern States, Middle Western States, and California. Thus, natural gas became available for industrial, commercial, and home-heating uses throughout most of the Nation as a result of rapid pipeline expansion.

TOTAL INTERSTATE EXPORTS OF NATURAL GAS, 1950-59

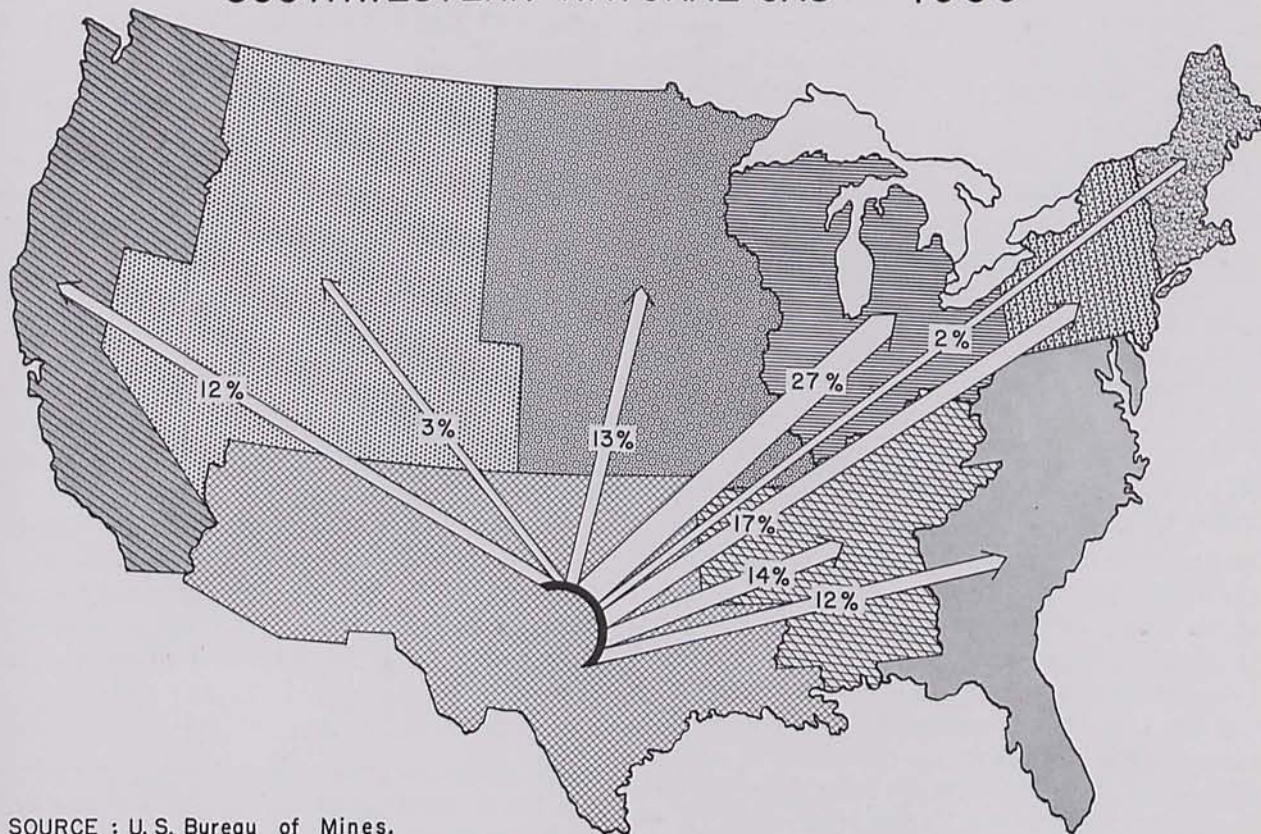
Four Southwestern States and United States

(In billions of cubic feet)

Year	Louisiana	New Mexico	Oklahoma	Texas	SOUTHWEST	United States
1950.....	396	87	200	1,311	1,994	2,544
1951.....	541	156	221	1,686	2,603	3,243
1952.....	694	203	228	1,998	3,122	3,795
1953.....	773	234	262	2,243	3,512	4,201
1954.....	860	325	288	2,420	3,892	4,662
1955.....	999	373	285	2,540	4,197	5,073
1956.....	1,150	448	316	2,752	4,666	5,639
1957.....	1,347	594	333	2,743	5,017	6,089
1958.....	1,625	573	355	2,700	5,253	6,478
1959.....	1,911	555	434	2,965	5,865	7,042

SOURCE: American Gas Association.

ESTIMATED INTERSTATE EXPORTS OF SOUTHWESTERN NATURAL GAS - 1959



SOURCE : U. S. Bureau of Mines.

INTERSTATE SHIPMENTS

Marketed production of natural gas in the United States doubled between 1950 and 1959, and interstate shipments throughout the Nation accounted for an increasingly larger portion of all natural gas sold. The proportion of marketed production moved interstate rose from 40 percent in 1950 to 60 percent in 1959. This fact is understandable in view of rapid population growth, extensive market developments in all parts of the Nation, and the creation of new markets for natural gas in the post-World War II period.

About 80 percent of the natural gas shipped between states in 1959 originated in the Southwest, and Texas exported almost one-half of the national total. In that year, the southwestern states moved 60 percent of their marketed production across state lines.

Natural gas produced in Louisiana, Oklahoma, and eastern and southern Texas, including the Gulf Coast,

generally has been moved to eastern and midwestern markets. Most gas produced in New Mexico and west Texas has been transmitted to the Northwest and the densely populated areas of the Pacific Coast. Interstate sales of southwestern natural gas have become increasingly more important in spite of the significant industrial developments within the region.

Over the past decade, the most significant rates of increase in interstate shipments from the Southwest have occurred in New Mexico and Louisiana. While Texas exports still accounted for slightly more than 50 percent of the southwest total in 1959, the State's share had declined from about 66 percent in 1950. Conversely, the Louisiana portion of this total rose from almost one-fifth in 1950 to nearly one-third in 1959. This trend generally follows the substantial additions to natural gas reserves which have been discovered in Louisiana over the last 10 years, including the prolific offshore fields.

PIPELINE CAPACITY

Pipeline capacity has expanded to accommodate market requirements and to connect the large southwestern producing fields with the major consuming areas. Transport capacity has been expanded by increasing the size and strength of the pipe and extending the geographic coverage of the pipeline network. The size of pipe used has increased significantly during the past few years, with 30-, 32-, and 34-inch diameters becoming more common in the newer main lines. Maximum pressure used for the transmission of gas rose from an average of 400 pounds to about 1,100 pounds per square inch, and the total number of miles of gas main in the United States advanced 6 percent annually from 1950 through 1959. Natural gas pipeline mileage increased 6 percent in the Nation during 1959, and the industry has estimated that the network was expanded an additional 29,000 miles in 1960. A total of more than 600,000 miles is in operation today.

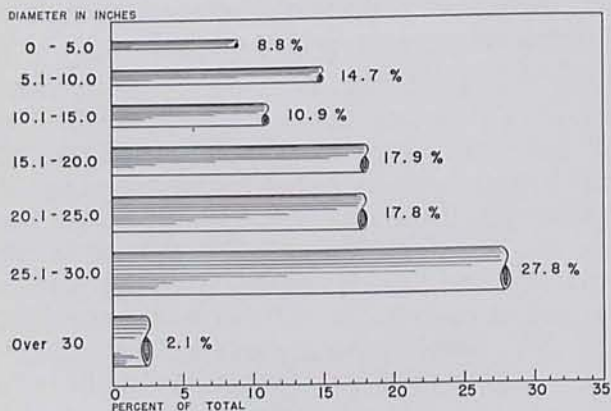
Pipeline systems grew rapidly in the Southwest during the 1950-59 decade. Pipeline mileage in the region expanded almost twofold to a total of 131,500 miles at the end of 1959, accounting for about one-fourth of total pipeline mileage in the Nation. The distribution of total pipeline mileage among the three major types of mains — field and gathering, transmission, and distribution — in the Southwest deviates from the proportions established in the Nation. During 1959, 15 percent of all mains in the Southwest were used for gathering; 40 percent, for transmission; and the remaining 45 percent, for distribution. In the Nation,

more than 60 percent of all pipelines were used in distribution operations designed to carry natural gas to the ultimate consumer, and only about 10 percent were field and gathering mains. Major transmission lines comprised the other 30 percent of the total mileage.

The growth of field and gathering line mileage has been rapid in the entire Nation, as well as in the Southwest. However, the total number of miles of line used to gather southwestern natural gas increased about 10 percent annually between 1950 and 1959, or nearly twice the national growth rate. This significantly higher rate of expansion in the Southwest reflects the rapid growth of new supply areas in the region. As an example, field and gathering pipeline mileage increased 24 percent annually in New Mexico between 1950 and 1959 to collect natural gas from the newly opened, prolific fields found in the southeastern and northwestern portions of that State. Pipeline gathering mileage in both Louisiana and Texas advanced about 8 percent annually, but the growth rate established in Oklahoma was only comparable with the national figure. Thus, the growth pattern of gathering main in the Southwest reflects the degree of geographical diversity of recently committed natural gas reserves in the area.

Transmission lines also developed more rapidly in the Southwest than in the Nation during the 1950's, with significant growth rates being recorded in Arizona, Louisiana, and Texas. Distribution facilities increased 5 percent annually in the Southwest during the period, but because of the introduction of natural gas as a fuel in other parts of the country and the growth of existing markets, the national annual rate of gain was about 7 percent. There were significant advancements in rapidly developing Arizona and New Mexico, and distribution line mileage in Texas rose from 20,000 miles to 32,000 miles between 1950 and 1959. In terms of the total pipeline mileage of the Southwest, the distribution by state over the 1950's generally reveals smaller proportions in Texas and Oklahoma and rising shares in Arizona, Louisiana, and New Mexico. Nevertheless, Texas still accounted for almost 52 percent in 1959, followed by Louisiana, 18 percent; Oklahoma, 14 percent; New Mexico, 9 percent; and Arizona, nearly 7 percent.

INTERSTATE NATURAL GAS PIPELINES CLASS A and B - 1959



SOURCE: Federal Power Commission.

INTERSTATE PIPELINE CAPACITY

A significant part of total transmission line mileage was constructed to accommodate interstate movement.

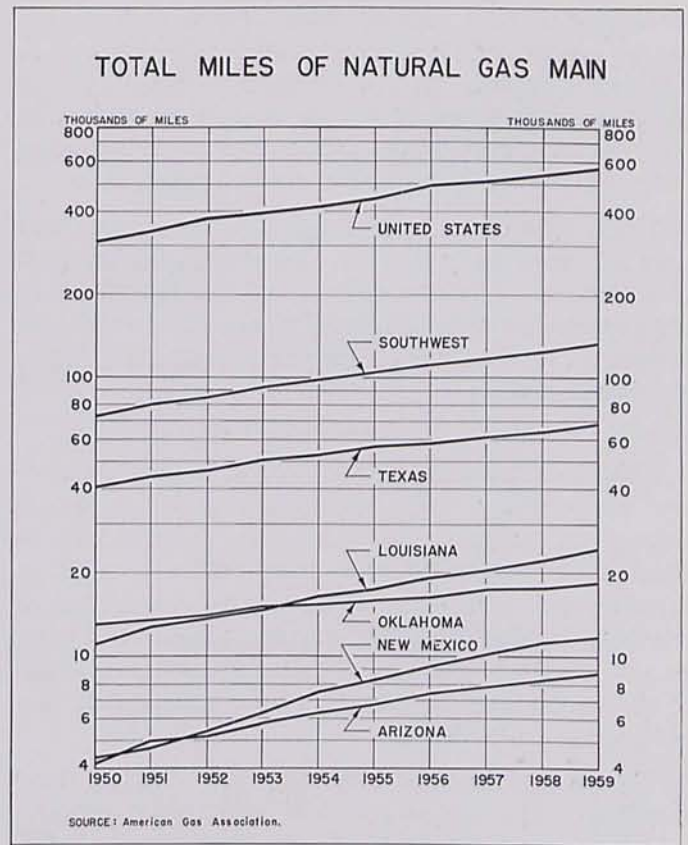
All expansion of interstate facilities in the Nation since February 7, 1942, has been authorized by the Federal Power Commission. During the fiscal year ended June 30, 1960, a record expansion of 9,400 miles of interstate lines was sanctioned, bringing the total for the 18-year period to almost 100,000 miles. In addition, about 6.5 million horsepower in compressor units to sustain high-pressure transmission also received approval since 1942. These facilities cost natural gas transmission firms about \$8 billion and added approximately 37 billion cubic feet of delivery capacity daily for the systems involved.

Pipeline mains are, by their physical nature, fixed investments. At the beginning of 1960, gas utility plant accounts of Class A and B interstate pipelines (those with annual gas operating revenues of \$250,000 or more) totaled \$7 billion net. Internal financing has contributed a portion of the funds necessary for construction; however, outside financing has provided substantial amounts of additional capital, with a significant portion of pipeline financing centering in long-term borrowing. Long-term debt accounted for 55 percent of all liabilities and net worth of Class A and B pipeline concerns in 1959.

Certain transmission companies perform other activities related to the movement of natural gas, including production, storage, and distribution. Nevertheless, three-fourths of the total plant investment of the pipeline companies has been used for transportation facilities. Production outlays have accounted for an additional 17 percent, and storage facility expenditures have utilized 4 percent. Expenditures for distribution lines have been relatively minor since most major pipeline companies sell mainly to distributing companies. Only about 17 percent of total revenues are derived from sales to ultimate consumers, and most of these are industrial plants.

TECHNOLOGY

One major factor stimulating pipeline expansion in the past has been the rapidly developing technology associated with natural gas transmission. Several major innovations have been adopted by the industry, and other new techniques and equipment are under active consideration. Thin-wall alloy steel pipe of great tensile strength was developed to withstand high transmission pressures, and improved welding techniques have reduced leakage. External and internal pipe coatings and cathodic protection are used to minimize corrosion, while a cleaning operation called "pigging"



free the pipeline from rust and other foreign elements which might impede the flow of natural gas. Because of their noncorrosive character and ease of handling, plastics and nonferrous metal pipe have been substituted for steel lines by some firms, but difficulties have been encountered in joining the steel and non-steel pipe.

Aerial survey has become routine in selecting the best route, anticipating construction problems, and maintaining a close watch for erosion, washouts, and terrain changes which might cause leakages. Improved mechanized equipment is being used to install mains, and electronic computers have been used successfully to control all or part of a pipeline, especially when only a limited number of variables are encountered in the operation of the system.

Pre-World War II compression equipment was of the slow-speed piston variety. Today, high-speed reciprocating or gas turbine engines, as well as electrically powered compressors, are used to maintain appropriate line pressure. Jet engines are currently under consideration as a new type of compressor engine power. One of the primary advantages of the

jet engine is that, during maintenance periods, the engine can be withdrawn and temporarily replaced in lieu of a complete shutdown, which is necessary with the permanently installed equipment in use today. In addition, new installation, maintenance, and operating costs are reportedly lower for the jet engine.

These significant technological advancements are only a few of many that have occurred over the past two decades. Concentrated research efforts under way are expected to yield additional information which will permit more economical operation and, thus, foster pipeline growth.

STORAGE FACILITIES

Most industries facing seasonal demands use storage to permit a more uniform rate of operation throughout the year. The managerial decision to produce smaller amounts continuously and utilize storage facilities to meet seasonal needs, in opposition to changing production levels during peak and off-peak periods, is partly conditioned by the physical properties of the commodity produced and the costs of the two production methods.

The storage facilities necessary for different commodities vary, and storage of a gaseous product inherently causes several distinct problems. Above-ground storage vessels are expensive to construct and maintain and are a constant fire hazard. Natural subsurface storage facilities that do not require costly modification are not always located at just the right spot in relation to the major markets. A potential subsurface storage structure must meet several important tests. The storage reservoir should be tight to prevent substantial leakage, must be able to withstand high pressure to avoid the cost of additional compression facilities, must be free of water and foreign substances to eliminate the necessity of reprocessing the gas after storage, and must be large enough to be economically usable. Storage areas have included abandoned natural gas reservoirs and other subsurface structures which had, or were modified to obtain, the appropriate physical qualities. In addition, a small amount of gas may be stored in the transmission line. Recent thoughts by some industry observers have been directed toward liquefaction of natural gas at the point of consumption and storage of the condensed liquid when other storage facilities are unavailable.

Several factors have motivated efforts to develop extensive natural gas storage facilities. Storage tends to assure sufficient supplies during peak consumption

periods and helps to stabilize the transmission load factor. As a result, storage capacity rose substantially during the 1950-59 period, and the total amount of natural gas in storage in the Nation increased at an average rate of 16 percent annually. Natural gas in storage averaged approximately 1.5 trillion cubic feet during 1959.

The location of most storage facilities near consumption areas has been due to the heavy expense of laying transmission main over long distances. Today, about one-half of total storage capacity is located in Pennsylvania, Ohio, Michigan, and West Virginia to serve the densely populated East Coast and Midwest. Efforts also have been made to provide facilities in the rapidly developing Rocky Mountain and Pacific Coast areas.

Storage of natural gas is not as necessary in the Southwest as in other areas of the country because of the close proximity of regional markets to producing wells, which can be opened or closed in, as needed, in response to consumer needs. In addition, the growth of air conditioning in the region has created a demand for gas during off-peak seasons. Storage areas did not exist in Louisiana in 1959, but capacity available in the other southwestern states totaled about 300 billion cubic feet. The amount of natural gas in storage in the Southwest rose approximately 13 percent annually between 1950 and 1959.

The number of underground storage reservoirs in the United States nearly doubled during the 1950-59 period (209 at the end of 1959), and reservoir capacity advanced from an estimated 135 billion cubic feet in 1941 to 2.5 trillion cubic feet in 1959. Storage facility investment totaled \$620 million through 1959, according to the American Gas Association.

A mid-1960 survey indicates that estimated reservoir capacity will reach 3 trillion cubic feet as soon as all planned construction has been completed and 217 storage areas will be available. Moreover, rapid expansion most likely will continue in the foreseeable future.

Operating Characteristics of Interstate Natural Gas Transmission Companies

Interstate transmission companies are subject to governmental regulation under the same general economic and legislative principles as electric utilities, airlines, motor carriers, railroads, and water carriers. Interstate natural gas pipelines are regulated today

by the Federal Power Commission in accordance with the provisions of the Natural Gas Act of 1938. FPC regulation has been extended to include control over certification, new plant construction, abandonment of service, and determination of price. The operating characteristics of an interstate pipeline are strongly influenced by such regulation.

PERMISSION TO OPERATE

A transmission firm can acquire FPC permission to buy, transport, and sell gas in interstate commerce by showing that its operations will be in the public interest and that it is financially competent to provide adequate service. The firm must prove that it has sufficient natural gas supplies now and for the future. In addition, the transmission firm must show that it has customers for the gas and that fair prices have been established for both suppliers and customers.

The many FPC and Supreme Court cases point up numerous problems associated with the certification of new service and the abandonment of existing service. In general, however, the public interest, including resource conservation, appears to be paramount among the factors considered by the FPC in issuing or terminating operating certificates.

ACQUISITION OF NATURAL GAS

Most of the natural gas that is sold by interstate pipelines has been purchased from producing companies, although many pipeline companies also own some producing properties, have producing affiliates, or are stockholders in producing companies. In 1959, almost 80 percent of the total operating expense incurred by interstate pipelines was spent to acquire natural gas from producers.

Long-term contractual agreements exist between natural gas producers and interstate transmission firms to satisfy the FPC certification requirement of sufficient reserves. Many of the agreements are for 20 years, but in mid-1960 the Supreme Court held that, unless the FPC permits service abandonment, natural gas purchase agreements extend until those reserves specified in the agreement are depleted.

Several common stipulations to allow price increases are often incorporated in the natural gas contracts. These escalation clauses were written into the contracts to anticipate cost and other changes that could occur during the life of the agreement. Both "definite" and "indefinite" escalator clauses exist in many contracts today, and both have many ramifications.

One type of definite escalation involves a provision that calls for a specific increase of natural gas prices periodically. Another form calls for the sharing of any increase in severance or resource taxes. Indefinite escalation includes "favored-nation pricing provisions" and "price redetermination clauses." The FPC has ruled, however, that indefinite escalation incorporated in contracts filed after April 3, 1961, "shall be inoperative and have no effect at law." The FPC felt that such provisions produce uncertainty and are contrary to the public interest. A recent ruling modified this FPC order to permit the inclusion of price redetermination provisions, invocable not more than every 5 years.

PRICING

Encouraging adequate service at a reasonable cost is a basic objective of the FPC. Service by private concerns is obtainable in a free-enterprise economy only if sufficient incentive exists to attract investors into the industry. The price that interstate pipelines charge should be sufficient to cover total cost, including an equitable return. Two basic questions thus arise in the determination of a just price: What return is sufficient to induce capital to remain in the industry and to attract new capital? What is a reasonable price as far as the public is concerned? The FPC and the courts have generally settled each case on its own merits, considering the utility's revenue needs and the consumer's resistance to higher prices.

Outlook

Transmission firms developed to meet the Nation's requirements for an economical, readily available supply of natural gas. As the pipeline network grew, natural gas became a more valuable product and an important energy source throughout the Nation. Technology aided in the development of pipeline systems, but advancements in other industries called for additional gas and increased pipeline capacity. In addition, pipeline growth has especially helped in the development of southwestern natural gas production and has aided the southwestern economy directly by providing employment, state tax revenue, and capital investment.

The transmission firms have faced both technological and economic difficulties. Problem areas include economical plant construction and maintenance; sufficient storage to facilitate a smooth, continuous flow of gas through optimum-size mains throughout the year; plant expansion and availability of capital neces-

sary for this expansion; and prices high enough to satisfy the needs of natural gas producers, pipeline investors, and natural gas distributors, yet not so high as to be burdensome to the consuming public.

The demand for natural gas undoubtedly will increase in the rapidly developing industrial and commercial markets of the Nation, and pipeline capacity will need to expand in order to accommodate the enlarged demand. According to recently released surveys, approximately 13,000 miles of all types of natural gas pipeline construction are under way, have been approved by the FPC, are pending FPC approval, or were in the planning stages at the end of January 1961. Over \$1 billion was spent on the construction of new transmission facilities in 1960, and the American Gas Association foresees continued rapid capacity expansion during the coming decade. Around \$650 million will be spent for new transmission facilities in 1961, and outlays are expected to rise continuously to \$1.7 billion by 1970. Predicted transmission construction expenditures from 1961 through 1970, excluding outlays for certain gathering and distribution facilities, total about \$12.5 billion.

Capacity expansion in the Southwest, especially, should continue for both interstate and intrastate lines. Several primary factors underlie this forecast. First, the Southwest is likely to continue its development into the foreseeable future, though the rate of growth may vary. Secondly, facilities should be required to move feedstock material (derived from natural gas) to the growing southwestern petrochemical complexes. Finally, a significant amount of total proved natural gas reserves is contractually uncommitted. Moreover, proved reserves in the Southwest probably will continue to increase, despite the slight downturn in Texas during 1960. When these reserves are developed and put under contract, gathering mains will be required to move the gas to the major transmission lines, and more transmission lines will be needed to carry this gas to large consumption areas.

Provided technology improves further and sufficient economic incentive exists, it appears likely that the transmission segment of the natural gas industry will continue its marked advance.

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This is the second in a series of articles about the three sectors of the natural gas industry — production, transmission, and distribution. Additional copies of this article may be obtained by addressing a request to:

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BUSINESS REVIEW

BUSINESS, AGRICULTURAL, AND FINANCIAL CONDITIONS



March sales at Eleventh District department stores, reflecting the earlier date of Easter, rose 9 percent above March 1960 and exceeded the previous

March record set in 1959, when Easter fell on March 29. Even on an adjusted basis, there was a moderate year-to-year gain. Sales during the first half of April were reported to be considerably below those in the comparable period last year, again reflecting the earlier Easter date.

New car registrations in four major markets in Texas rose in March, but total registrations in the first quarter of this year were less than in the same period in 1960.

All major sectors of the Texas industrial production index showed increases in March over both a month ago and a year ago. March nonfarm employment in the District states rose moderately, as manufacturing and construction employment made significant gains. Total construction in the District states declined during February, primarily as a result of reductions in contracts for public works and utilities; residential building decreased slightly. Nonresidential building provided sustained, but not offsetting, strength.



Reflecting the early date of Easter, the volume of department store sales in the Eleventh Federal Reserve District in March rose sharply over the

same month last year — approximately 9 percent — and exceeded the previous March record set in 1959, when Easter fell on March 29. The seasonally adjusted index of March sales (including adjustment for the varying dates of Easter), at 168 percent of the 1947-49 average, was 5 points above March 1960 but 2 points below February 1961.

The year-to-year strength in March sales at the District department stores was concentrated in wearing

Daily average crude oil production in the District increased moderately during March but declined in April, primarily because the Texas allowable schedule was reduced to 9 producing days. District crude oil production is expected to decline further, in view of the 8-day production schedule in Texas for May. Crude oil runs to refinery stills in the Nation decreased in March and early April, and national crude oil inventories rose. Refined product demand declined less than seasonally during March and remained at the month-earlier level in early April. Refined product stocks at mid-April were below a month ago.

Planting and cultivating continued active in the District during April; however, high winds rapidly depleted topsoil moisture supplies, and rain is needed throughout a large part of the Southwest. Winter wheat production in the District states is indicated to be second only to the 1947 record outturn. Pastures in many sections need moisture.

In the 5 weeks ended April 19, the District's weekly reporting member banks increased their investments and time deposits but reduced their loans and demand deposits. Member bank reserves declined somewhat in the 5 weeks ended April 5, but reserve positions remain comfortable.

apparel and jewelry and watches. Sales of jewelry and watches, including costume jewelry, were 20 percent

DEPARTMENT STORE SALES

(Percentage change in retail value)

Area	March 1961 from		3 months, 1961 from 1960
	February 1961	March 1960	
Total Eleventh District	37	9	2
Corpus Christi	47	4	-3
Dallas	29	7	1
El Paso	37	-4	-8
Fort Worth	35	10	1
Houston	37	13	4
San Antonio	44	11	5
Shreveport, La.	52	20	6
Waco	43	9	4
Other cities	40	10	4

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

Eleventh Federal Reserve District

(1947-49=100)

Date	SALES (Daily average)		STOCKS (End of month)	
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1960: March.....	142r	163r	191	182
1961: January.....	130	165	160	181
February.....	127	170	172	178
March.....	155	168	184p	176p

r — Revised.
p — Preliminary.

above a year earlier; and sales of men's clothing increased 15 percent. Women's and misses' accessories and dresses showed sales gains of 14 percent and 3 percent, respectively. On the other hand, sales of floor coverings, major appliances, and radios and television sets were substantially under those in March 1960.

In view of the earlier date of Easter this year, an increase of about 6 percent in District department store sales for March should be discounted by a corresponding shift in the opposite direction for April. Thus, as might be expected, sales during the first half of April were reported to be considerably below those in the comparable period last year. On an unadjusted basis, cumulative sales through April 15 were 1 percent under a year ago.

New car registrations in March in four major Texas markets combined, as well as in the individual markets, were higher than in either January or February this year but were substantially under March last year. Compared with March 1960, registrations were down 32 percent in San Antonio, 23 percent in Dallas, 19 percent in Houston, and 13 percent in Fort Worth. Registrations during the first quarter of 1961 were one-third lower in San Antonio than in the same period in 1960; one-fourth smaller in Fort Worth; and around one-fifth less in both Dallas and Houston.



Farming activities in the District generally continued to advance during April, although planting and growth of crops progressed slowly in some areas. High winds

have dissipated topsoil moisture and curtailed seeding in the Low Rolling Plains, and cool soils in east Texas and upper coastal areas in the first part of the month slowed planting and germination. Precipitation is urgently needed in south-central and Edwards Plateau areas of Texas.

Mid-April rains were very beneficial to cotton in the Lower Rio Grande Valley of Texas, and cultivating and chopping are active. Cotton is up to stands as far north as the central Blacklands, but moisture is needed; early planting has moved northward into the Texas Low Rolling Plains. Planting of the crop is under way in the irrigated sections of southern New Mexico.

Drilling of grain sorghums was hampered during April by the generally wet conditions in eastern areas and dry topsoils in the dry-land western sections of the District. Only about one-third of the District's crop had been planted by mid-April. Virtually all of the sorghums have been seeded in the Lower Valley and Coastal Bend of Texas. Around two-thirds of the Blacklands sorghum crop has been seeded, and drilling is under way in the Southern High Plains.

The major part of the Texas corn crop has been planted, and uniform stands are up as far north as the Red River. Rice seeding is well ahead of a year ago, while progress in planting of peanuts has about paralleled that of last year. Broomcorn planting is nearing completion in early areas, with most fields up to a stand.

Oats are heading in most sections of the District. Wheat continues to make excellent growth in the Northern High Plains of New Mexico and Texas and is jointing. Aerial spraying for green bugs has proceeded as weather permits. Wheat production in the District states is estimated, as of April 1, at 213.9 million bushels. A crop of this size would be about 1 percent above the 1960 output and second only to the bumper outturn in 1947. Compared with a year ago, the lower indicated output for Oklahoma is offset by gains in the other four states, especially Texas. The 1961 winter wheat crop in the Nation is estimated to be 2 percent below a year ago but would still be the third largest of record.

WINTER WHEAT PRODUCTION

(In thousands of bushels)

Area	1961, indicated April 1	1960	Average 1950-59
Arizona.....	962	858	1,522
Louisiana.....	1,320	1,218	1,858
New Mexico.....	4,862	4,480	1,525
Oklahoma.....	115,782	121,278	67,192
Texas.....	90,930	84,645	33,752
Total.....	213,856	212,479	104,849

¹ Short-time average.
SOURCE: United States Department of Agriculture.

Harvesting operations have been active in south Texas commercial vegetable areas, with cabbage, carrots, and onions moving in good volume. Spring crops in this region responded well to early-April rains; and supplies of snap beans, cucumbers, tomatoes, and squash are available from the Lower Valley. Harvest of onions has begun in all early spring areas, and the crop is making satisfactory progress in north Texas. Setting of tomato plants to fields and land preparation for sweet potatoes are under way in northeast Texas.

In east Texas, along the Gulf Coast, and in Louisiana, recurring spring rains have kept pastures green, and livestock continue to make good gains. On the other hand, pastures in western and south-central parts of the District have deteriorated slightly from the moisture-sapping winds, and precipitation is needed.

In the 5 weeks ended April 19, the weekly reporting member banks in the District experienced increases in investments and time deposits but reductions in loans and demand deposits. Cash accounts moved to a higher level, while total assets declined.

Gross loans (excluding interbank loans) fell \$19.2 million, as decreases of \$21.6 million in loans for purchasing or carrying securities and \$21.3 million in commercial and industrial loans were only partially offset by increases of \$14.6 million in consumer-type

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In thousands of dollars)

Item	5 weeks ended April 5, 1961	4 weeks ended March 1, 1961	5 weeks ended April 6, 1960
RESERVE CITY BANKS			
Total reserves held.....	568,412	564,481	520,202
With Federal Reserve Bank....	529,945	526,085	518,272
Currency and coin.....	38,467	38,396	1,930
Required reserves.....	560,667	556,312	514,769
Excess reserves.....	7,745	8,169	5,433
Borrowings.....	543	786	37,183
Free reserves.....	7,202	7,383	-31,750
COUNTRY BANKS			
Total reserves held.....	516,437	522,297	452,575
With Federal Reserve Bank....	420,388	424,702	446,766
Currency and coin.....	96,049	97,595	5,809
Required reserves.....	447,576	447,824	408,401
Excess reserves.....	68,861	74,473	44,174
Borrowings.....	173	344	7,754
Free reserves.....	68,688	74,129	36,420
ALL MEMBER BANKS			
Total reserves held.....	1,084,849	1,086,778	972,777
With Federal Reserve Bank....	950,333	950,787	965,038
Currency and coin.....	134,516	135,991	7,739
Required reserves.....	1,008,243	1,004,136	923,170
Excess reserves.....	76,606	82,642	49,607
Borrowings.....	716	1,130	44,937
Free reserves.....	75,890	81,512	4,670

NOTE.—Beginning November 24, 1960, all currency and coin held by member banks allowed as reserves; during the period December 1, 1959-November 23, 1960, only part of such holdings was allowed.

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES

Eleventh Federal Reserve District

(In thousands of dollars)

Item	April 19, 1961	March 15, 1961	April 20, 1960
ASSETS			
Commercial and industrial loans.....	1,539,829	1,561,149	1,474,297
Agricultural loans.....	36,379	35,169	32,051
Loans to brokers and dealers for purchasing or carrying:			
U. S. Government securities.....	22,274	51,276	291
Other securities.....	32,305	26,783	25,350
Other loans for purchasing or carrying:			
U. S. Government securities.....	7,190	7,161	6,113
Other securities.....	203,870	202,019	181,232
Loans to nonbank financial institutions:			
Sales finance, personal finance, etc.....	84,927	92,469	111,897
Savings banks, mtge. cos., ins. cos., etc.....	139,632	127,679	120,271
Loans to foreign banks.....	25	28	730
Loans to domestic commercial banks.....	36,182	83,890	15,215
Real-estate loans.....	217,712	214,207	215,211
All other loans.....	811,456	796,861	761,859
Gross loans.....	3,131,781	3,198,691	2,944,517
Less reserves and unallocated charge-offs..	57,724	57,756	54,265
Net loans.....	3,074,057	3,140,935	2,890,252
Treasury bills.....	136,125	92,471	38,085
Treasury certificates of indebtedness.....	29,666	27,083	18,604
Treasury notes and U. S. Government bonds, including guaranteed obligations, maturing:			
Within 1 year.....	200,108	177,015	73,499
After 1 but within 5 years.....	615,446	778,341	809,108
After 5 years.....	498,154	370,082	315,641
Other securities.....	414,646	403,726	368,737
Total investments.....	1,894,145	1,848,718	1,623,674
Cash items in process of collection.....	549,062	546,139	488,141
Balances with banks in the United States.....	541,742	531,315	464,268
Balances with banks in foreign countries.....	2,197	2,100	1,827
Currency and coin.....	53,324	53,099	50,544
Reserves with Federal Reserve Bank.....	572,162	573,656	555,469
Other assets.....	186,496	189,996	194,862
TOTAL ASSETS.....	6,873,185	6,885,958	6,269,037
LIABILITIES AND CAPITAL ACCOUNTS			
Demand deposits			
Individuals, partnerships, and corporations....	2,995,924	2,988,334	2,913,943
United States Government.....	52,468	87,140	118,466
States and political subdivisions.....	259,343	244,668	231,768
Banks in the United States.....	1,109,503	1,121,504	848,503
Banks in foreign countries.....	15,632	13,821	16,954
Certified and officers' checks, etc.....	61,233	74,655	43,998
Total demand deposits.....	4,494,103	4,530,122	4,173,632
Time deposits			
Individuals, partnerships, and corporations....	1,316,431	1,306,681	1,032,945
United States Government.....	14,513	14,513	12,255
Postal savings.....	394	394	394
States and political subdivisions.....	284,249	274,567	247,236
Banks in the U. S. and foreign countries.....	9,560	9,326	3,397
Total time deposits.....	1,625,147	1,605,481	1,296,227
Total deposits.....	6,119,250	6,135,603	5,469,859
Bills payable, rediscounts, etc.....	79,350	87,000	128,731
All other liabilities.....	96,416	90,058	122,233
Capital accounts.....	578,169	573,297	548,214
TOTAL LIABILITIES AND CAPITAL ACCOUNTS.....	6,873,185	6,885,958	6,269,037

loans, \$4.4 million in loans to nonbank financial institutions, and \$3.5 million in real-estate loans. During the corresponding period of 1960, gross loans rose \$27.8 million.

Total investments at the District weekly reporting banks advanced \$45.4 million between March 15 and April 19, compared with \$24.4 million a year earlier. Government security holdings rose \$34.5 million. In-

NEW MEMBER BANK

The Citizens National Bank of San Antonio, San Antonio, Texas, a newly organized institution located in the territory served by the San Antonio Branch of the Federal Reserve Bank of Dallas, opened for business April 17, 1961, as a member of the Federal Reserve System. The new member bank has capital of \$250,000, surplus of \$250,000, and undivided profits of \$100,000. The officers are: Bruce B. Bunting, Chairman of the Board; Liston Zander, Vice Chairman of the Board; Henry P. James, President; and Alton R. Hays, Cashier.

NEW PAR BANK

The First State Bank of Wichita Falls, Wichita Falls, Texas, an insured nonmember bank located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, April 24, 1961. The officers are: Tom C. Foley, Chairman of the Board; Hiram Jordan, President; Ray Hudson, Vice President; J. R. Cummings, Cashier; and Donald E. Havins, Assistant Vice President.

creases of \$43.7 million in Treasury bills, \$2.6 million in Treasury certificates, \$23.1 million in Treasury notes and Government bonds due within 1 year, and \$128.1 million in Government securities maturing after 5 years more than offset a \$162.9 million reduction in holdings of Treasury notes and Government bonds maturing in 1 to 5 years. The changes in the last two maturity classifications primarily reflected the participation by District banks in the recent advance refunding. Non-Government security holdings increased \$10.9 million.

During the 5 weeks ended April 19, total deposits at the weekly reporting banks in the District declined \$16.3 million. Demand deposits fell \$36.0 million as a result of decreases of \$34.7 million in United States Government deposits; \$13.4 million in certified and officers' checks, etc.; and \$12.0 million in deposits of banks in the United States. A \$7.6 million increase was recorded in deposits of individuals, partnerships, and corporations, and a \$14.7 million expansion occurred in deposits of states and political subdivisions. Time deposits advanced \$19.7 million on increases of \$9.8 million in deposits of individuals, partnerships, and corporations; \$9.7 million in deposits of states and political subdivisions; and \$200,000 in interbank deposits.

Total reserves of the District member banks were reduced somewhat in the 5 weeks ended April 5. Bor-

rowings and excess reserves moved to lower levels at both reserve city banks and country banks. Free reserves declined, but reserve positions remain comfortable.

Between March 15 and April 19, total earning assets of the Federal Reserve Bank of Dallas decreased \$13.0 million. United States Government security holdings were reduced, but discounts and advances for member banks increased. Federal Reserve notes in circulation rose \$2.5 million to a level \$31.5 million above a year earlier. Gold certificate reserves declined \$19.8 million during the 5 weeks and were \$41.4 million below a year ago.



New supplies of crude oil in the Nation during March more than offset refinery consumption, resulting in a moderate increase in crude oil inventories. Crude oil production in the District, averaging 3,132,000 barrels daily, advanced 5 percent in March, and national output rose 2 percent. In early April, new supplies of domestic crude were less plentiful, primarily because the Texas allowable schedule was reduced to 9 producing days, and crude oil imports decreased about one-fourth. Nevertheless, with refinery activity curtailed somewhat, crude oil inventories continued to advance.

District crude oil production is expected to show a further decline during May, in view of the 8-day production schedule in Texas for the month. The May allowable schedule for southeastern New Mexico has been reduced, but the New Mexico Oil Conservation Commission estimates that an increase of about 2,917 barrels of crude oil daily may be expected as a result of new well completions.

Crude oil runs to refinery stills in the Nation declined to approximately 8 million barrels daily in March from the high level established in February. Most of the decrease occurred during the latter part of the month, and national runs in early April remained below a month earlier.

With warmer weather invading most of the Nation, the demand for heating oils declined, bringing a reduction in total demand for the four major petroleum products in March. The decrease was less than seasonal, however, and product stocks at the end of March remained at the February level. Kerosene and distillate fuel oil markets were inactive in March, and

heating oil prices generally weakened. Gasoline demand rose less than seasonally. Wholesale motor fuel prices firmed somewhat in late March and early April, but price reductions occurred at the retail level in a few areas of the country. During the second week in April, below-normal temperatures in certain parts of the Nation tended to stimulate the demand for heating oils, and gasoline demand early in the month rose more than seasonally. As a result, the demand for the four major refined products was virtually unchanged during early April. Total refined product stocks at mid-April were 3 percent below a month ago.

Drilling operations in the District advanced during March. The average number of rigs in use rose about one-fourth, and the total footage drilled increased slightly. However, the total number of well completions declined. The upward trend in exploration continued during the early part of April.

Industry estimates place proved crude oil reserves in the four producing southwestern states at the end of 1960 at 22.4 billion barrels, or 7 million barrels above the 1959 estimate. Higher estimated reserves in Louisiana and New Mexico offset reduced reserves in Oklahoma and Texas. Proved reserves of all liquid hydrocarbons in the Southwest are estimated to be 28.3 billion barrels, and natural gas reserves at the end of last year are placed at 215.8 trillion cubic feet. For the Nation, estimated proved natural gas reserves have been increased, while estimated proved crude oil reserves have been lowered.

A survey by *The Oil and Gas Journal* indicates that petroleum refinery capacity in the Nation expanded about 1.5 percent during 1960 to 9,933,725 barrels per calendar day. About 30 percent of the refineries and almost 40 percent of refinery capacity in the Nation were located in Louisiana, New Mexico, Oklahoma, and Texas. The survey reveals that refineries in the Nation operated at 81.8 percent of rated capacity in 1960, compared with 82.4 percent in the previous year. An additional 1-percent increase in capacity is expected during 1961.

The seasonally adjusted Texas industrial production index increased to 175 in March, or 5 points above the previous month and 2 points above a year earlier.

Mining output and durable and nondurable manufacturing all expanded. The mining sector, composed

INDUSTRIAL PRODUCTION

(Seasonally adjusted indexes, 1947-49=100)

Area and type of index	March 1961p	February 1961	January 1961	March 1960
TEXAS				
Total industrial production.....	175	170	172r	173
Total manufactures.....	217	213	216r	216
Durable manufactures.....	251	248	248	249
Nondurable manufactures.....	202	196	201r	200
Mining.....	135	129	130r	132
UNITED STATES				
Total industrial production.....	155	155	155	166
Total manufactures.....	153	152	152r	165
Durable manufactures.....	154	153	154r	175
Nondurable manufactures.....	156	155	155	158
Mining.....	126	126	129	126r
Utilities.....	294	294	294r	288

p — Preliminary.

r — Revised.

SOURCES: Board of Governors of the Federal Reserve System.
Federal Reserve Bank of Dallas.

principally of crude petroleum production, accounted for one-half of the month-to-month increase in the total index. While partly attributable to the longer month, the rise in mining activity was mostly due to the higher Texas allowables. Nondurable manufactures also accounted for a significant share of the gain in industrial production during March, with all major components showing advances. Of particular importance were the advances in petroleum refining and food, chemical, apparel, textile, and printing products. The production of durable goods rose as gains in the output of machinery, primary metals, electrical machinery, furniture, and stone, clay, and glass products offset slight reductions in other durables sectors.

Nonfarm employment in the District states increased 13,500 during March, which offset much of the decline in the previous 2 months. Manufacturing employment in the District states advanced on a month-

NONAGRICULTURAL EMPLOYMENT

Five Southwestern States¹

Type of employment	Number of persons			Percent change Mar. 1961 from	
	March 1961e	February 1961	March 1960r	Feb. 1961	Mar. 1960
Total nonagricultural					
wage and salary workers..	4,399,800	4,386,300	4,373,300	0.3	0.6
Manufacturing.....	760,400	758,600	780,800	.2	-2.6
Nonmanufacturing.....	3,639,400	3,627,700	3,592,500	.3	1.3
Mining.....	240,500	241,400	246,700	-.4	-2.5
Construction.....	294,600	286,300	291,500	2.9	1.1
Transportation and public utilities.....	392,100	393,000	405,400	-.2	3.3
Trade.....	1,083,000	1,076,000	1,076,700	.7	.6
Finance.....	207,900	208,400	199,000	-.2	4.5
Service.....	560,300	563,000	539,900	-.5	3.8
Government.....	861,000	859,600	833,300	.2	3.3

¹ Arizona, Louisiana, New Mexico, Oklahoma, and Texas.

e — Estimated.

r — Revised.

SOURCES: State employment agencies.
Federal Reserve Bank of Dallas.

VALUE OF CONSTRUCTION CONTRACTS

(In millions of dollars)

Area and type	February 1961p	January 1961	February 1960	January—February	
				1961p	1960
FIVE SOUTHWESTERN STATES¹					
STATES ¹	292	350	274	641	533
Residential building.....	119	125	126	244	238
Nonresidential building....	115	92	71	206	143
Public works and utilities...	58	133	76	191	151
UNITED STATES.....					
.....	2,235	2,479	2,240	4,715	4,429
Residential building.....	870	972	988	1,842	1,913
Nonresidential building....	804	812	698	1,616	1,497
Public works and utilities...	561	696	554	1,257	1,019

¹ Arizona, Louisiana, New Mexico, Oklahoma, and Texas.
p — Preliminary.

NOTE. — Details may not add to totals because of rounding.

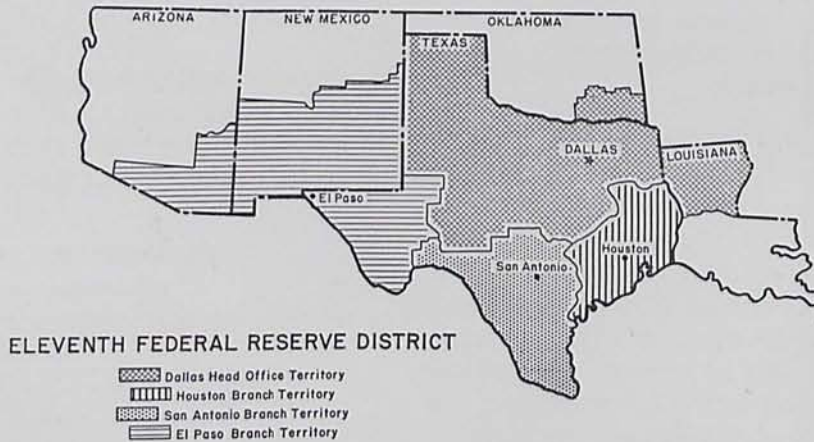
SOURCE: F. W. Dodge Corporation.

to-month basis for the first time in 9 months. The March rise in manufacturing employment — together with increases in construction, trade, and government employment — offset slight declines in the mining, finance, service, and transportation and public utilities sectors. In comparison with a year ago, nonfarm employment in the five states was 26,500 higher; all sec-

tors showed gains over March 1960 except manufacturing and mining, which declined 20,400 and 6,200, respectively.

In Texas the number of workers making initial claims for unemployment insurance benefits, as well as the number of continuing claims, declined steadily through March. Texas total unemployment, at 211,800, decreased 12 percent from the February high to 5.9 percent of the State's labor force, reflecting improvement in a broad range of farm and nonfarm activities.

The total value of construction contracts extended during February in the District states declined 17 percent from January to \$292 million but was 7 percent higher than a year ago. Residential contracts decreased slightly, while those for public works and utilities were substantially below both the preceding month and February 1960. Nonresidential building continued to exhibit strength. For the first 2 months of this year, all construction sectors in the District states showed major gains over the year-earlier levels.



**BANK DEBITS, END-OF-MONTH DEPOSITS
AND ANNUAL RATE OF TURNOVER OF DEPOSITS**

(Dollar amounts in thousands)

Area	Debits to demand deposit accounts ¹			Demand deposits ¹			Annual rate of turnover	
	March 1961	Percent change from		March 31, 1961	Mar. 1961	Feb. 1961		Mar. 1960
		Feb. 1961	Mar. 1960					
ARIZONA								
Tucson.....	\$ 260,077	22	5	\$ 135,303	22.9	18.6	21.5	
LOUISIANA								
Monroe.....	84,396	18	-5	51,281	19.1	16.3	20.0	
Shreveport.....	350,200	12	2	179,577	22.7	19.8	21.1	
NEW MEXICO								
Roswell.....	48,873	19	19	34,325	16.1	13.2	15.8	
TEXAS								
Abilene.....	104,403	15	6	68,620	18.7	16.6	19.3	
Amarillo.....	227,143	16	0	116,324	23.4	19.9	24.0	
Austin.....	235,292	11	11	159,012	18.4	17.2	17.9	
Beaumont.....	174,256	18	6	100,354	20.6	17.2	20.3	
Corpus Christi.....	193,852	7	4	105,875	22.0	20.2	20.6	
Corsicana.....	15,871	10	4	19,431	9.7	8.8	9.4	
Dallas.....	3,230,950	17	7	1,181,687	34.2	29.3	32.4	
El Paso.....	389,866	33	3	175,020	25.2	19.0	26.6	
Fort Worth.....	814,191	16	0	365,642	26.4	22.6	27.0	
Galveston.....	97,352	17	7	62,259	18.6	16.1	16.9	
Houston.....	2,825,700	19	4	1,298,787	26.0	21.7	26.0	
Laredo.....	30,310	22	2	21,837	16.6	13.7	15.6	
Lubbock.....	208,551	0	-2	115,503	21.6	20.8	21.5	
Port Arthur.....	69,220	9	6	41,766	19.6	17.3	18.4	
San Angelo.....	51,292	5	-2	46,290	13.3	12.6	13.8	
San Antonio.....	658,741	16	8	380,222	21.0	18.0	20.2	
Texarkana ²	21,959	11	4	17,300	15.0	13.3	15.5	
Tyler.....	88,139	14	2	59,992	17.5	15.4	17.5	
Waco.....	114,582	20	-1	69,195	20.0	16.4	20.8	
Wichita Falls.....	120,404	12	0	96,631	15.0	13.2	14.5	
Total—24 cities.....	\$10,415,620	17	5	\$4,902,233	25.6	21.7	25.1	

¹ Deposits of individuals, partnerships, and corporations and of states and political subdivisions.

² These figures include only two banks in Texarkana, Texas. Total debits for all banks in Texarkana, Texas-Arkansas, including one bank located in the Eighth District, amounted to \$49,160,000 for the month of March 1961.

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(In thousands of dollars)

Item	April 19, 1961	March 15, 1961	April 20, 1960
Total gold certificate reserves.....	676,697	696,485	718,126
Discounts for member banks.....	2,125	200	8,860
Other discounts and advances.....	406	522	0
U. S. Government securities.....	1,073,764	1,088,617	1,023,738
Total earning assets.....	1,076,295	1,089,339	1,032,598
Member bank reserve deposits.....	937,042	936,191	949,299
Federal Reserve notes in actual circulation.....	812,569	810,082	781,030

DAILY AVERAGE PRODUCTION OF CRUDE OIL

(In thousands of barrels)

Area	March 1961p	February 1961p	March 1960	Change from	
				February 1961	March 1960
ELEVENTH DISTRICT.....	3,131.6	2,994.6	3,069.3	4.6	2.0
Texas.....	2,753.1	2,617.1	2,690.7	5.2	2.3
Gulf Coast.....	493.8	475.8	486.5	3.8	1.5
West Texas.....	1,263.9	1,192.6	1,216.9	6.0	3.9
East Texas (proper).....	141.4	132.7	144.5	6.6	-2.2
Panhandle.....	108.3	104.3	110.5	3.8	-2.0
Rest of State.....	745.7	711.7	732.3	4.8	1.8
Southeastern New Mexico.....	269.4	265.7	254.9	1.4	5.7
Northern Louisiana.....	109.1	111.8	123.7	-2.4	-11.8
OUTSIDE ELEVENTH DISTRICT.....	4,213.1	4,191.6	4,059.0	.5	3.8
UNITED STATES.....	7,344.7	7,186.2	7,128.3	2.2	3.0

p — Preliminary.
SOURCES: American Petroleum Institute.
United States Bureau of Mines.
Federal Reserve Bank of Dallas.

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(In millions of dollars)

Item	March 29, 1961	March 1, 1961	March 30, 1960
ASSETS			
Loans and discounts.....	5,098	5,024	4,718
United States Government obligations.....	2,629	2,691	2,457
Other securities.....	917	897	856
Reserves with Federal Reserve Bank.....	916	915	933
Cash in vault.....	156	142	143
Balances with banks in the United States.....	1,094	1,131	945
Balances with banks in foreign countries.....	2	2	2
Cash items in process of collection.....	524	624	475
Other assets.....	270	278	281
TOTAL ASSETS.....	11,606	11,704	10,810
LIABILITIES AND CAPITAL ACCOUNTS			
Demand deposits of banks.....	1,222	1,221	1,014
Other demand deposits.....	6,530	6,676	6,385
Time deposits.....	2,723	2,678	2,186
Total deposits.....	10,475	10,575	9,585
Borrowings.....	48	36	138
Other liabilities.....	107	118	165
Total capital accounts.....	976	975	922
TOTAL LIABILITIES AND CAPITAL ACCOUNTS.....	11,606	11,704	10,810

e — Estimated.

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In millions of dollars)

Date	GROSS DEMAND DEPOSITS			TIME DEPOSITS		
	Total	Reserve city banks	Country banks	Total	Reserve city banks	Country banks
1959: March.....	7,794	3,827	3,967	2,129	1,119	1,010
1960: March.....	7,539	3,661	3,878	2,171	1,097	1,074
November.....	7,879	3,933	3,946	2,426	1,229	1,197
December.....	8,044	4,030	4,014	2,482	1,263	1,219
1961: January... ..	8,135	4,032	4,103	2,564	1,308	1,256
February... ..	7,828	3,805	4,023	2,670	1,366	1,304
March.....	7,846	3,877	3,969	2,700	1,376	1,324

BUILDING PERMITS

VALUATION (Dollar amounts in thousands)

Area	PERCENT CHANGE					
	NUMBER			March 1961 from		
	Mar. 1961	3 mos. 1961	Mar. 1961	3 mos. 1961	Feb. 1961	Mar. 1960
ARIZONA						
Tucson.....	1,054	2,457	\$ 3,491	\$ 13,154	-31	23
LOUISIANA						
Shreveport....	461	1,072	3,782	12,630	103	44
TEXAS						
Abilene.....	129	335	1,214	3,507	47	-21
Amarillo.....	303	891	2,907	8,227	-4	-33
Austin.....	403	990	4,766	13,166	25	3
Beaumont.....	335	835	1,644	3,580	78	-2
Corpus Christi..	412	917	2,617	5,401	123	91
Dallas.....	2,431	5,505	23,324	58,555	76	100
El Paso.....	633	1,708	5,022	21,524	-54	-10
Fort Worth.....	680	1,627	4,849	9,994	59	-5
Galveston.....	143	334	1,566	2,187	474	542
Houston.....	1,595	3,750	23,840	52,754	73	2
Lubbock.....	234	644	6,972	14,234	67	52
Port Arthur....	206	499	704	2,003	-5	-3
San Antonio... .	1,439	3,453	4,857	13,046	12	-12
Waco.....	284	727	3,490	5,460	325	-7
Wichita Falls..	248	515	1,965	6,864	34	-8
Total—17 cities..	10,990	26,259	\$97,010	\$246,286	39	19

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