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THE PORTS OF TEXAS—A RESOURCE OF THE SOUTHWEST

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The seaboard which stretches nearly 400 miles from the Mexican border to the Sabine River is one of the busiest in the world. The rich southwestern hinterland ascending from the Texas coast produces from its abundant reserves of minerals and fine soils a great excess of products above the needs of its population. These surplus raw materials, foodstuffs, and finished products move in part through Texas ports to the Atlantic seaboard, to the Middle West via the Mississippi and its tributaries, and to the nations east and south. Transport of goods to tidewater, processing of materials adjacent to the ports, warehousing, brokering, and other trade and service operations attending coastal and foreign shipments create large demands for workers and provide sources of income which have contributed to the development of busy, populous, and wealthy centers of activity in the Texas coastal area.

The Texas port and waterway system is thus an important factor in the economy of the Southwest. The excellent dispersal of the harbors along the coastline provides the region's agriculture and industry with cheap and easy access to the markets of this country and of the world; the network of inland channels permits industrial plants along the seaboard to benefit from low-cost local and coastal barge shipments; and the inflow of capital to finance the development of port facilities and the building of plants and warehouses to utilize them fosters the growth of coastal communities. The extent of the contributions of the ports to the economy is not easily measured, but it is clear that the growth of industrial and trading centers in north coastal and southwest coastal Texas and the development of the resources of the southwestern region would have been less rapid had it not been for the services the ports have offered. Moreover, future operations of the region's heavy industries and continuation of the rapid growth of coastal cities depend in part upon effective use of the port system.

Despite the significant position which the ports occupy in the Southwest, no organized body of information concerning their development, operations, or problems is generally available. This article, which is perhaps only a first small step toward wider circulation of the more pertinent facts regarding the Texas ports, undertakes to present a concise description of the development of the ports, their structure and organization, their importance in the southwestern regional economy, together with a brief analysis of their prospects and problems.

The Development of Texas Ports

Texas ports are largely man-made. Those which carry the greatest traffic lie inland on the coastal plain and were developed by dredging and widening bayous and rivers. Even those fronting the coast did not provide adequate channels for large ships until jetties were extended into the Gulf and inlets and bays had been dredged. Before 1896, Port Galveston was the only harbor capable of handling a significant volume of traffic, and large ships could not safely use its facilities. The rivers flowed irregularly and silted heavily, so that navigation was feasible only for short distances inland, and the

bays and inlets were too shallow to be easily or safely used. Produce moved coastwise and short distances inland via Buffalo Bayou, on Sabine Lake, and up the Brazos, Neches, Sabine, and other rivers; but this traffic was small, seasonal, and confined principally to lighters, barges, and small craft.

The Texas seaboard, nevertheless, was an important contributor to the early development of the State. During the period of the Republic and the first years of statehood, the port cities dominated the economic and social life of the southwestern community and were the channels through which a large portion of all trade moved. The then shallow harbors of Galveston, Velasco, Indianola, and Sabine Pass were points of vigorous, although small, two-way traffic and of debarkation for many colonists who brought their meager equipment and more important skills for use along the coast, in central Texas, and on the Great Plains of the Southwest.

Although the early leaders of Texas recognized that an adequate port system would greatly facilitate the growth of commerce and widen the opportunity for development of southwestern resources, few harbor developments were undertaken until the 1880's, when extensive federally supported improvement programs were initiated at Galveston and in the river channels of the north coastal area. Discovery of the famous Spindletop oil field near Beaumont in 1901 and subsequent extension of oil producing areas along the coast increased the need and demand for ports and waterways to expedite movement of crude oil to the Atlantic seaboard, and between 1905 and 1915 many improvements were initiated. Houston secured deep water in 1915; Beaumont, about one year later. Development of these and other ports continued rapidly during the First World War, when traffic was diverted from the eastern seaboard to Gulf ports to lighten the heavy burden being borne by eastern ports and railroads.

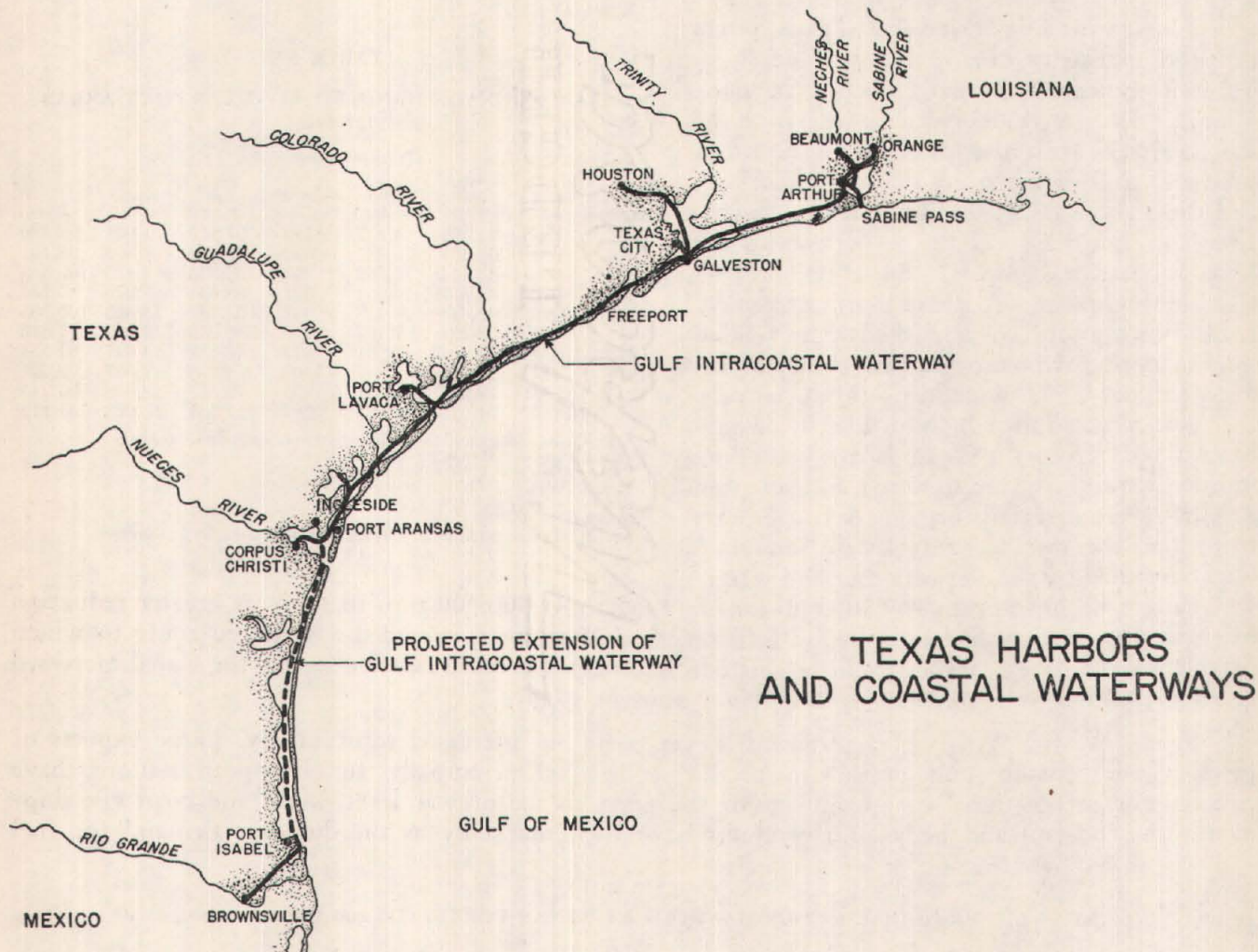
Extension of the port system continued during the next two decades. The Port of Corpus Christi was opened in September 1926; the Port of Brownsville began operating about ten years later. Channels were deepened and basins were enlarged in the older ports, and during the 1930's, the unconnected inland channel systems along the coast were joined, thus providing an intracoastal waterway from Corpus Christi to Florida. These harbor and channel improvements, which were financed with local-government and federal funds in varying proportions, were accompanied by heavy investments by local governments and private interests in terminal and other facilities along the waterways and at the turning basins. By 1940, the intracoastal waterway and the ports along the Texas coast formed one of the most efficient water-traffic systems of the nation. Since then, dry docks, shipyards, and a few terminal facilities have been built in the ports, but no major additions to the harbor and channel system have been completed, though dredging is now in progress for the extension of the Gulf Intracoastal Waterway from Corpus Christi to Brownsville.

The Structure and Organization of the Ports

The Texas harbor and coastal waterway system now serving the Southwest includes 13 deep-water harbors, numerous shallow-draft loading points, and the Intracoastal Waterway. The harbors are concentrated in four port areas. At the Texas-Louisiana border Sabine Pass, Sabine Lake, the mouths of the Sabine and Neches Rivers and Taylor Bayou, and the Port Arthur and Sabine-Neches canals provide channels, dock frontage, turning basins and ways for the ports of Beaumont, Orange, Port Arthur, and Sabine Pass. Galveston Bay and the rivers and bayous which extend from it provide the waterways for Ports Galveston, Houston, Texas City, and a number of small loading points. Freeport to the south, although not in Galveston Bay, may be considered part of that port area. Corpus Christi, Ingleside, and Port Aransas are closely associated harbors in the central coastal area. On the Mexican border, Ports Brownsville and Isabel provide ocean outlets for the highly productive Rio Grande Valley and for northern Mexico. The Corpus Christi port area and the two port areas of the north coastal section are connected by the Gulf Intracoastal Waterway, which also provides a sheltered route for barges and small craft around the Gulf coastal circle from Corpus Christi to Apalachee Bay, Florida.

The needs of the petroleum industry have influenced greatly the type of facility installed in the port areas. All the ports have extensive installations to serve the petroleum traffic, and Port Aransas, Ingleside, and Isabel, are "special purpose" ports, primarily designed to receive and dispatch crude oil and liquid petroleum products. Similarly, Freeport is especially equipped for handling shipments of sulphur as well as petroleum. Each of the port areas also has one or more "general purpose" ports

equipped to handle shipments of diversified dry cargoes as well as liquid petroleum. Beaumont, Port Arthur, Houston, Texas City, Galveston, Corpus Christi, and Brownsville handle the principal dry cargo movements in their areas. Ports Houston and Galveston are particularly well equipped to serve a widely diversified traffic. Their "general purpose" facilities include extensive rail terminals, industrial wharves and docks, capacious warehouse and grain elevators, and specialized loading and unloading equipment to simplify storing and to expedite movement of agricultural produce, ores, and manufactured goods.



TEXAS HARBORS AND COASTAL WATERWAYS

General responsibility for port operations is usually vested in a local port authority. The administrative organization of Port Houston, although more complex than that of the smaller ports, illustrates the area of responsibility and the character of functions assumed by a port administration. The port of Houston is operated by a Navigation and Canal Commission of five members, serving without pay, who are appointed by the commissioners of the city and county governments. This Board of Commissioners appoints a full-time salaried general manager of the port to supervise all activities of the navigation district, including management of the docks, loading equipment, rail terminals, and other facilities and equipment owned by the district. The Board does not exercise control over channel industries or privately owned terminals. However, all construction on the navigable waters of the district is subject to its jurisdiction and, before being undertaken, must be authorized by the Board and by the United States Engineers. The Board has general responsibility over port traffic, including tariffs applicable to use of its own facilities, appointment of pilots, and fixing of rules and regulations under which they operate. It also supports jointly with private interests a port and traffic bureau to further the interests of the port. Development and maintenance of the harbor and its channels are supported largely with federal funds under the supervision of the United States Engineers. However, the port authority may submit recommendations for such improvements and may undertake projects to supplement them.

The Volume and Character of the Cargo Handled at Texas Ports

A significant portion of the total cargo on the seaboard of the United States originates on the Texas coast. In 1945, Texas ports handled 14 per cent of the cargo tonnage at United States ocean ports and about 19 per cent of the tonnage on the Atlantic and Gulf coasts. Last year, Houston ranked third among United States ports in cargo tonnage handled, being exceeded only by New York and Philadelphia; while Beaumont, Port Arthur, Texas City, Port Aransas, Corpus Christi, and Galveston were among the top 35 ports in the nation.

The tonnage carried by Texas ports dropped markedly during the war years, as Table I indicates. A sharp decline in non-military foreign trade required diversion of southwestern cotton and other agricultural produce from foreign to domestic markets, and these goods ceased to move in large quantities through the ports. Early successes of the Nazi submarine campaign made tanker passage along Gulf and Atlantic shores extremely hazardous and forced a marked reduction in shipments of petroleum via that route. Moreover, cargoes which were being produced near the port areas and which ordinarily would have moved from the Texas coast, including military equipment, munitions, and aviation gasoline, were diverted through Atlantic ports to reduce the distance traveled by convoys. Cargo handled by the Texas harbor and waterway system declined from 109,300,000 tons in 1941 to 61,600,000 tons in 1943. A greater reduction might have occurred had not the Gulf Intracoastal Waterway provided a sheltered route to which petroleum and other cargoes could be shifted. Shipments on the Texas section of the Canal increased from 11,500,000 tons in 1941 to 17,500,000 tons in 1944.

Since the end of the war, traffic at Texas ports has increased substantially. Large exports of grains, flour, cotton, and petroleum products, destined principally for European nations, have restored the international cargo tonnage of the ports to the prewar level. Local and coastwise shipments of crude oil and petroleum products have risen markedly as the domestic demand for fuel

TABLE I
CARGO TONNAGE HANDLED AT TEXAS PORT AREAS
1937-1946*

Year	(Thousands of short tons)						Total
	Sabine-Neches Port Area ¹	Galveston Bay Port Area ²	Corpus Christi Port Area ³	Brownsville Port Area ⁴	Total, Four Port Areas	Intra-coastal Waterway ⁵	
1937	41,253	41,599	14,151	412	97,415	1,021	98,436
1938	38,400	42,407	14,581	394	95,782	2,369	98,151
1939	40,360	45,544	15,782	547	102,233	3,125	105,358
1940	38,619	45,357	14,181	524	98,681	7,073	105,754
1941	40,313	42,644	14,418	357	97,732	11,523	109,255
1942	20,996	28,224	7,157	239	56,616	14,997	71,613
1943	15,075	23,694	7,691	177	46,637	14,917	61,554
1944	17,029	27,515	9,847	403	54,794	17,527	72,321
1945	26,594	37,977	13,411	855	78,837	15,908	94,745
1946	43,746	51,615	20,187	1,587	117,135	13,978	131,112

*All tonnage handled, including exports, imports, coastwise, internal, and local.

¹Beaumont, Orange, Port Arthur, and Sabine Pass.

²Freeport, Galveston, Houston, and Texas City.

³Corpus Christi, Ingleside, Port Aransas, and Port Lavaca.

⁴Brownsville and Port Isabel.

⁵Sabine River to Corpus Christi.

SOURCE: Commercial Statistics (of Ports), War Department, Corps of Engineers.

TABLE II
PRINCIPAL GOODS HANDLED AT TEXAS PORTS, 1939 and 1946

Commodity	(Thousands of short tons)									
	Total Traffic		Foreign				Coastwise		Internal and Intraport	
	1946	1939	1946	1939	1946	1939	1946	1939	1946	1939
Total all commodities	117,135	102,233	18,937	18,497	592	1,135	73,631	72,143	23,976	10,457
Refined petroleum products	59,264	49,372	10,978	9,428	67	12	41,101	37,711	7,118	2,221
Crude oil and asphalt	42,647	41,966	873	5,816	..	612	31,372	30,733	10,402	4,805
Sea Shells	4,539	2,117	3	2	..	..	..	13	4,537	2,103
Wheat	2,497	666	2,481	666	..	..	9	..	8	..
Sulphur	1,938	1,725	1,016	645	..	..	527	976	395	104
Flour	584	190	546	69	..	..	38	121	..	..
Cotton	575	890	575	750	..	..	..	140	..	..
Corn, oats, and rice	416	194	394	84	..	..	19	95	3	15
Iron and steel and their products	373	1,304	85	480	2	19	40	520	246	357
Nonferrous metal ores	207	84	123	8	84	5	..	71	..	..
Phosphate rock	181	9	..	..	5	..	176	9	..	..
Bananas, other fruit and coffee	177	221	1	7	175	116	56	38	1	4
Fertilizers	151	251	110	44	9	3	26	200	6	3
Raw cane sugar	136	121	..	..	101	121	35	..	..	..
Paper and wood pulp	50	199	..	..	18	94	..	98	32	7
All other commodities	3,399	2,924	1,752	579	129	154	288	1,363	1,229	838

SOURCE: Commercial Statistics (of Ports), War Department, Corps of Engineers.

oils and gasoline has increased and as tankers have been shifted from transocean military service to the Gulf-Atlantic seaboard run. The tonnage handled in the four Texas port areas in 1946 was at an all-time high, 151 per cent greater than in 1943 and 13 per cent above 1939; and, though the

gross tonnage handled on the Texas section of the Gulf Intracoastal Waterway was smaller than at the 1944 peak, it was still 10,850,000 tons above 1939. The increased cargo at the ports in 1946 as compared with the prewar period was largely attributable to a very marked increase in traffic within the port areas which accompanied expansion of refining, chemicals manufacture, and other industrial activity in the Texas coastal region. The cargo tonnage handled in internal and intraport movements* was approximately 13,500,000 tons larger in 1946 than in 1939, whereas the volume of coastwise cargo was not significantly greater, and total export-import tonnage was fractionally smaller.

As has been indicated, servicing the petroleum traffic is an important function in all Texas ports and the principal operation in many. In 1946, petroleum liquids accounted for 102,000,000 tons of the 117,000,000 tons of cargo handled by the Texas port system, or about 87 per cent of the total. Crude oil and its products constituted 98 per cent of the coastwise tonnage handled at the ports, 73 per cent of the internal and intraport movement, and 61 per cent of the export-import cargo. The traffic in petroleum probably will be larger this year, since production from Texas oil fields is being raised to new peaks and refineries in the coastal area are expanding and operating more intensively in response to rising domestic demand for petroleum products.

Other minerals and raw materials used by the heavy industries of the coastal area also are important cargoes at the ports. During 1946, the movement of seashell, sulphur, and nonferrous metal ores totaled 6,684,000 tons and accounted for about six per cent of all cargo tonnage handled. Seashell (often called "mudshell") is moved in internal and intraport traffic to supply needs of cement plants, chemical plants, and large construction projects. Sulphur also enters local port traffic when shipped to coastal chemical plants and to other loading points; but the bulk of the movement consists of coastwise and internal shipments and exports originating at Galveston and Freeport. Metallic ores are important items in the export-import traffic handled primarily by the Galveston Bay port area.

Agricultural produce comprises a large part of the remaining tonnage and a significant part of the export traffic. In 1946, exports of wheat, other grains, flour, and cotton totaled 3,996,000 tons, or about three per cent of all tonnage handled and 20 per cent of total export tonnage. The import tonnage, which has declined as compared with 1939 and in 1946 constituted less than one per cent of total cargo, consists primarily of tropical fruits, coffee, and sugar cane.

Diverse raw materials and finished goods other than those mentioned move through the ports, principally as items of export or import. They accounted for only four per cent of cargo tonnage handled in 1946; but they are important constituents of the port traffic, nevertheless, because they create demands for various brokering and other trading services, and they supply industries and businesses with essential materials for processing and with valuable goods for distribution.

TABLE III
TRAFFIC AT TEXAS PORTS, 1946, CLASSIFIED BY DESTINATION OR ORIGIN

Port and Port Area	(Thousands of short tons)				Local and Intraport	Total Traffic
	Foreign		Coastwise			
	Imports	Exports	Receipts	Shipments		
Sabine-Neches Port Area..	4.4	4,105.4	1,997.7	30,348.9	7,289.9	43,746.3
Beaumont.....	4.4	629.1	869.0	16,926.6	4,622.9	23,052.0
Orange.....	..	..	..	..	148.7	148.7
Port Arthur.....	.0	3,476.3	1,128.7	13,111.8	2,460.5	20,177.3
Sabine Pass.....	..	..	..	310.5	57.8	368.3
Galveston Bay Port Area..	399.4	12,767.3	1,435.9	23,509.4	13,502.4	51,614.3
Freeport.....	..	..	..	109.9	556.9	666.8
Galveston.....	105.8	4,195.2	55.7	607.4	996.9	5,960.9
Houston.....	205.3	7,058.1	621.8	14,956.0	8,996.3	31,837.5
Texas City.....	88.3	1,514.0	758.4	7,836.1	2,952.3	13,149.1
Corpus Christi Port Area..	5.0	1,840.6	104.5	15,073.3	3,164.0	20,187.4
Corpus Christi.....	1.4	1,656.7	33.5	5,133.2	1,692.7	8,517.5
Ingleside.....	..	88.8	4.4	415.1	678.1	1,186.4
Port Aransas.....	..	95.0	66.6	9,525.0	512.5	10,199.1
Port Lavaca.....	3.6	.1	..	..	280.7	284.4
Brownsville Port Area....	183.0	223.1	23.1	1,137.9	19.3	1,586.5
Brownsville.....	183.0	118.7	23.1	233.9	7.5	566.8
Port Isabel.....	..	104.4	..	904.0	11.8	1,020.2
Grand total ports.....	591.8	18,936.4	3,561.2	70,069.5	23,975.6	117,134.5

SOURCE: Commercial Statistics (of Ports), 1946, War Department, Corps of Engineers.

*Internal traffic is traffic between a port and its tributary waterways; intraport traffic is traffic between various channels within a port.

The Ports in the Regional Economy

Exact measurement of the contributions of the Texas harbor and waterway system to the regional economy obviously is not possible. The significance of the ports is indicated, however, by the large volume of southwestern products which flows through them; by the number of persons for whom they provide employment and the pay rolls they support; and by the commerce, industry, and capital they have attracted to the region.

The Texas harbor and coastal waterway system carries a very large part of all freight moved in the Southwest. The 131,000,000 tons of cargo handled by the system last year exceeded by nearly 35,000,000 tons the revenue freight originated or terminated in Texas by Class I steam railways. Pipe lines to the ports collect oil from fields as far west as New Mexico; rail and truck shipments bring wheat from the Texas Panhandle, Oklahoma, Kansas, and other states west of the Mississippi; while cotton and other produce move to Texas tidewater from the entire southwestern region. The major portions of the output of several basic products of the region find their way to foreign and domestic markets through the ports. In 1946, petroleum shipments from the Texas seaboard were equivalent to about 70 per cent of the crude oil production of the State; shipments of wheat equaled 75 per cent of the State's output; shipments of crude sulphur equaled 53 per cent of production; and exports of cotton exceeded the entire crop produced in the State.

In performing their traffic services, the ports employ a large labor force and create a sizable pay roll. In 1940, approximately 18,650 workers were engaged in Texas in activities closely related to port operations, as follows:

Ship and boat building and repair	2,600
Stevedoring	6,900
Water transportation	9,150

Since that time, employment has increased in shipyards, in local water transportation, and in cargo handling. Moreover, "white collar" activities relating to cargo financing and traffic management and to operation of various port facilities, such as rail terminals and warehouses, require a substantial number of workers. Conservative estimates place current employment in direct port operation at 30,000 to 35,000 persons, with a total pay roll of perhaps \$90,000,000 annually. Thus the ports of the State in the role of employer appear almost as important as petroleum refining, in which about 38,000 workers are engaged, and more important than any other single industry division except inland transportation, construction, and food processing.

The ports also are important "investors," thereby providing a stimulating inflow of capital to coastal communities. The expenditures on harbor and channel improvement and maintenance along the Texas coast, mainly for dredging channels and building jetties, amounted to about \$135,000,000 through 1946, of which \$55,000,000 was for maintenance. During the decade of the 1930's, expenditures for improvement and maintenance averaged about \$5,000,000 annually. Information concerning outlays on construction and maintenance of docks, terminals, elevators, and other essential port facilities, which usually are financed by private organizations or by local government instrumentalities, is not available. Such data as can be obtained indicate, however, that the total investment is very large, and that it has influenced considerably the magnitude and character of construction activity in the port cities. The Port of Houston estimates that the investments in private and public industrial wharves and docks, terminals, warehouses, dry docks, and other facilities along its ship channel amount to approximately \$116,000,000. The assessed valuation of the land and other taxable properties located within the principal navigation districts in Texas is approximately \$1,125,000,000, and their actual value probably exceeds \$2,000,000,000.

The indirect contributions which the ports have made to the economy by attracting industries are far greater, however, than the contributions to community income and wealth arising directly from transportation services rendered by the ports, or from port development and maintenance.

The nearness of the ports to abundant reserves of natural gas, crude oil, sulphur, limestone, and timber has led heavy industries to locate strategically along the tidewater from Orange and Port Arthur on the north to Brownsville on the south, in order to combine the advantages of ready access to raw materials and fuel with cheap water transportation. In the selection of sites for chemical plants, refineries, and other industrial facilities which have been built on the Texas coast, the total advantages of a location have usually determined the choice; but access to water transportation undoubtedly has been one of the decisive factors.

Plants which process large quantities of bulk or liquid materials, or which ship bulk dry cargo and large volumes of liquids, find location on tidewater an important asset, since such cargoes are usually shipped at less cost by water than by rail or truck. Refineries, chemical plants, cement mills, nonferrous metal processing plants, and iron and steel plants have been established on the Texas seaboard in part to benefit from coastwise or transocean movement of their raw materials and products. The interconnecting channels between harbors and within port areas also attract plants, since they permit "traffic liaison" between coastal industries. Heavy freight movements between factories, warehouses, and shipping points have been facilitated by the network of channels along the coast and near populous areas. Movements between private docks, often by company-owned barges, are accomplished at low cost; and since they usually need not be completed on a fixed schedule, may simplify handling by providing storage space on the carrier. Organizations which rely upon other plants along Texas coastal channels to supply them with bulky materials, therefore, seek channel-side locations. In addition, the port areas are logical sites for plants to fabricate or process materials before export or after import. Refining of metal ores, processing of foreign fruits and other foods, and fabrication of foreign and domestic products before trans-shipment are important port-area activities.

TABLE IV

EMPLOYMENT, INDUSTRIAL ACTIVITY, AND POPULATION
IN PRINCIPAL TEXAS PORT COUNTIES

(Dollar amounts in thousands)

Port Area and County	Population 1940	Mfg. Wage Earners 1939	Value Added by Manufacture 1939	War Industry Facility Awards
Sabine-Neches: Jefferson...	145,329	12,208	\$ 69,177.7	\$ 201,432
Orange....	17,382	527	\$ 1,009.8	\$ 12,936
Galveston: Brazoria...	27,069	106	N.A.	\$ 160,345
Chambers..	7,511	73	\$ 76.1	\$ 2,661
Galveston..	81,173	3,131	\$ 13,696.3	\$ 104,598
Harris....	528,961	22,765	\$107,138.3	\$ 345,196
Corpus Christi: Nueces...	92,661	1,232	\$ 9,570.2	\$ 50,121
Brownsville: Cameron..	83,202	853	\$ 2,514.8	\$ 823
Total, Eight Counties.....	983,288	40,895	\$203,183.2	\$ 878,112
Total, Texas.....	6,414,824	126,992	\$453,105.4	\$1,376,482
Eight Counties as per cent of Texas.....	15.33	32.20	44.84	63.79

N.A. = Not available.

SOURCE: United States Department of Commerce and War Production Board.

Although a few of these facilities are closed and several are operating on reduced schedules, many have been expanded since the end of the war and probably will continue to grow.

The area along the Texas coast is now one of the important industrial regions of the nation. About 25 per cent of the refining capacity of the United States is located on the Texas seaboard. Extensive chemical industry developments have established the central and north Texas coast as heavy chemical basins, and chemical plants which are planned for the Brownsville port area will extend the industry to the Mexican border. Magnesium plants have been located on the coast at Freeport to use salt water as a primary "raw material," while steel plants have been established at Houston to be near a large local market and close to ocean transportation. Agricultural produce of the Southwest also is processed on the coast in part to benefit from water transport; wheat milling and rice refining are conducted on a large scale in the north coastal area, while the largest grain sorghum processing plant in the nation is being built at Corpus Christi. In addition, sugar refineries, coffee-roasting plants, pineapple quick-freeze plants, and a tin ore reduction plant are located in the Galveston Bay region, and processing of foreign products is conducted on a smaller scale in the other port areas.

The extent of the industrialization of the Texas port areas is indicated by Table IV. The eight coastal counties which are served by large ports accounted for 45 per cent of the value added by manufacture in Texas in 1939, the latest year for which such information is available. The relative significance of these counties probably has increased considerably since that year. It will be observed from the table that awards for industrial war facilities in the eight counties totaled \$878,112,000 and accounted for about 64 per cent of the total awards for such facilities in Texas. Among the war plants built in the coastal area were high octane gasoline refineries, synthetic rubber, nonferrous metal processing, chemical and steel plants, shipyards, and dry docks.

Port Prospects

From the foregoing, it is apparent that important advantages have accrued to the Southwest from the port system on the Texas seaboard. The coastal cities, naturally, are the principal beneficiaries of the ports' services; but nearly all of the Southwest shares directly or indirectly in the benefits arising from development of the ports and expansion of their functions. Consequently, future development and utilization of the ports and port areas should be matters of general interest in the region.

The large volume of cargo tonnage carried by the harbor and coastal waterway system since the end of the war almost certainly will continue for several years and may increase considerably if coastal industries grow and the national economy continues at a high level of activity. Expansion of the chemical industry, paper manufacturing, steel fabrication, and cement production in the Texas seaboard area, if continued, will create additional tonnage for local and coastwise carriers. Moreover, should the unprecedented demand for petroleum products which has developed during the first eight months of this year become greater, as is generally expected, more intensive use of ocean tankers and coastal barges will be required in the local traffic between refineries and loading points and on the long haul from Texas to the East coast. The prospects for expansion of intraport, internal, and coastwise traffic, therefore, are particularly encouraging.

TABLE V
VALUE OF EXPORTS AND IMPORTS
TEXAS PORTS*

(Thousands of dollars)		
	Exports	Imports
1938	\$ 361,100	\$27,500
1939	338,300	28,800
1940	242,800	30,700
1941	118,500	50,600
1942	152,900	74,000
1943	191,500	41,800
1944	291,700	66,000
1945	473,800	46,900
1946	838,000	62,900
Jan.-Mar. 1947 (annual rate)	1,162,400	78,400

*Sabine (Port Arthur) and Galveston Customs Districts.

SOURCE: United States Department of Commerce.

The outlook for the export and import traffic perhaps is less optimistic. Since the end of the war, the international traffic at the ports has reflected the crucial needs of European nations for basic foods for their people and primary raw materials and machinery for their industries. As Table V indicates, the dollar value of exports from the Sabine and Galveston customs districts totaled \$838,000,000 in 1946, and thus far this year exports have been maintained at an annual rate in excess of \$1,000,000,000, which is about three times the annual value of exports from the Texas coast in the years just before the war. The cargo tonnage exported during 1946, however, was only a little greater than in 1939. Available data indicate that large shipments of wheat, flour, and cotton may raise export tonnage in 1947 above the 1946 level, and that

imports may be expanding slightly as foreign economies restore their agriculture and industry and as shipping routes are extended. But, after the first stages of rehabilitation abroad, a substantial increase in the export-import volume of Texas ports above prewar levels probably will be sustained only if a healthy commercial intercourse among nations develops. The magnitude and composition of the international cargoes handled by Texas ports depend, therefore, upon such complex and, at this time, unpredictable influences as the rapidity with which the productivity of foreign agriculture is restored; whether dollar balances of foreign nations are depleted; the liberality with which foreign credits are advanced by the world financial institutions and the United States; the character and success of trade agreements among nations; and the tariff structures and exchange regulations which are adopted. If an environment favorable to foreign trade is established, a more vigorous and diversified international traffic probably will develop on the Texas seaboard.

More varied as well as larger tonnage at the ports seems likely to develop. Texas ports are engaged essentially in one-way traffics, as has been indicated, shipping petroleum and agricultural products abroad and up the coast, and handling only small imports and coastal receipts in return. The multiple-cargo traffic handled in such ports as New York and Philadelphia, which supports vigorous commercial activities in those areas, has not been duplicated in Texas ports, except on a limited scale at Galveston and Houston. Movement of most dry cargoes requires a greater variety of services and a larger number of workers per ton than transportation of liquid petroleum, particularly when

the cargoes enter into foreign commerce. A more varied cargo tonnage would be desirable, therefore, since it would increase business and employment opportunities in the coastal region. It seems reasonable to expect that as diversification of Texas industry proceeds, port cargo also will become more diverse. The growth of the chemical and refining industries will not contribute significantly to diversification of port traffic, since the major portion of their products will be liquids similar to those which constitute nearly 90 per cent of the tonnage now handled. However, expansion of oil well supply and other metal products industries, nonferrous metals processing, paper manufacture, and various fabricating industries in the coastal area and the Southwest will result in a more varied and perhaps more valuable cargo movement through the ports.

The character of the ports' activities also may be diversified by redevelopment of their passenger services. As Table VI indicates, 210,000 persons debarked or embarked at Galveston and Houston in 1930; only 2,500 in 1946. The decay of this traffic during the 1930's and the following war period deprived the ports of a lucrative commerce. As ocean travel increases, Texas ports can share in the traffic if they are equipped to serve it and will take the necessary steps to attract it.

Further development of Texas harbors, waterways, port facilities, and port services will be necessary if traffic is to be expanded greatly. Ports attract cargo when equipped to handle it more satisfactorily than alternative carriers. Adequate rail terminals, multipurpose loading devices, modern docks, capacious storage facilities, and efficient traffic management may be more important in attracting business than the size of the harbor or the distance from point of discharge. World War II interrupted the growth of the Texas harbor and waterway system. Harbor and channel improvements were delayed, and development programs which might have been undertaken during a period of peace were not initiated. Construction of shipyards during the early war years in the Galveston Bay and Sabine-Neches port areas provided facilities which will be valuable port assets if ocean traffic expands greatly, but construction of many other facilities, such as rail terminals, docks, and warehouses, was deferred, and the total additions to port structures and equipment during the 1941-1945 period were small. The harbors and facilities on the Texas coast apparently have handled their postwar loads efficiently, but additional improvements will be necessary if the ports are to expand their services significantly. Channels in many of the ports must be deepened before the faster, larger tankers and merchant ships can use them. Additional specialized equipment is needed in the port areas to handle diversified dry cargoes and to counteract the rising labor costs of loading and unloading. Moreover, additional piers, docks, rail terminals, and other installations will be required to serve plants which are to be built in the region.

Plans to develop the port and waterway system are being programmed and initiated. Facilities at Brownsville will be expanded to enlarge its functions as a multipurpose port and to serve new chemical plants in the area; extensive channel and facility improvement programs are planned at Houston, Galveston, and Beaumont; and modern facilities will be built at Texas City to replace those destroyed this year. Expenditures on facilities at the larger ports during 1947-1948 probably will approach \$10,000,000. The projected extension of the Gulf Intracoastal Waterway from Corpus Christi to Brownsville and Harlingen will provide the intracoastal connection between southwest Texas ports. A more extensive program than that planned may be required, however, if a large volume of general cargo is attracted to the ports. Fortunately, the port authorities appear in excellent positions to finance improvement programs; for in 1946, the bonded indebtedness of the principal navigation districts in Texas was somewhat less than \$13,000,000, as compared with an assessed valuation of taxable properties within the districts totaling about \$1,125,000,000.

TABLE VI

PASSENGER TRAFFIC AT TEXAS PORTS*

Year	Total	Number of Passengers		
		Galveston	Houston	Other Ports
1930†	221,820	71,161	139,233	11,426
1931	99,575	54,738	44,618	219
1932	70,112	45,935	23,964	213
1933	42,441	23,493	18,716	232
1934	64,085	39,383	24,463	239
1935	52,510	44,062	8,194	254
1936	24,929	10,296	14,437	196
1937	29,744	8,579	20,823	342
1938	26,138	8,863	16,996	279
1939	9,572	9,112	82	378
1940	7,070	1,431	5,271	368
1941	465	411	39	15
1942	164	129	15	20
1943	27	9	18	..
1944	48	35	9	4
1945	233	123	68	42
1946	2,565	1,343	710	512

*Excludes ferry traffic within the ports.

†Includes large numbers of passengers on "excursions."

SOURCE: Commercial Statistics (of Ports), War Department, Corps of Engineers.

Review of Business, Industrial, Agricultural, and Financial Conditions

DISTRICT SUMMARY

Dry, open weather during most of July and August was favorable for harvesting operations and for the cultivation of growing crops. Drought throughout most of the district and a series of heat waves, however, caused sharp deterioration in the condition of the ranges and of late planted corn and other growing crops. The yield of cotton harvested in the Rio Grande Valley and south Texas during July and the first part of August was generally good, but the condition and prospective yield of the crop in most other sections were being affected in varying degree at mid-August by drought and intense heat.

The dollar volume of sales of district department stores during July was slightly lower than for the same month a year ago. The decline from the total for June, however, was no more than seasonal, and the outlook for the fall of this year is described by executives of several of these stores as favorable for a steady volume of business even though total sales may not exceed the high level achieved during the corresponding season of last year. Consumer spending continues at a high rate, with an increased ratio of expenditures going for automobiles, home furnishings, other durable goods, and food.

Activity and output of representative manufacturing establishments in the district are holding generally steady, despite shortages in the supply of sheet steel, some small tooled products, and high-grade cotton fabrics. Moderate expansion of employment in apparel plants is forecast for the fall, along with a seasonal increase in the activity of food processing establishments. The value of construction contracts awarded showed a moderate increase in July, and the production of crude oil and the demand for oil and its products continued at near record levels.

BUSINESS

Sales of department stores in this district during July fell slightly below those for the corresponding month a year ago, reflecting, in part at least, the effect of the increase in dollar sales volume in relation to unit sales which occurred in July 1946 as the result of sharp price increases following the suspension of price controls. The trend of sales in weekly reporting stores during the first two weeks of August suggests that dollar sales month by month for the remainder of this year may suffer somewhat by comparison with those of the corresponding months of last year, when sharp rises in the prices of nearly all commodities pushed dollar volume up at a rapid rate. Compared with June, however, sales in July declined no more than seasonally, the unadjusted index dropping only three per cent. The cumulative gain in sales for the year through July over the first seven months of last year was five per cent, down one point from the figure for the first six months. January-July sales in 1946 exceeded those of the same period in 1945 by 30 per cent.

From the foregoing developments in department store sales volume, it is obvious, when today's high price level is taken into consideration, that unit sales have decreased significantly and that the physical volume of goods passing from producers to consumers through department store trade channels is considerably smaller, though doubtless more diversified and of better quality, than it was a year ago. However, most department store executives recently interviewed regard the slowing down which has occurred in the rate of spending for the soft and semi-durable goods which constitute the bulk of their merchandise as a natural consequence of high food prices and of the increase in supply of automobiles and major household appliances, for

which there is still a strong demand. For the most part, they feel that conditions in their line of trade have now achieved a stability which, with the supporting influence of good fall and Christmas buying, will endure at least till the end of 1947.

A moderate increase of eight per cent in total stocks of department stores at the end of July as compared with a year ago and a decrease of 44 per cent in the volume of orders outstanding during the same period indicate the success of store executives generally in controlling and balancing their inventories. In fact, nearly all the executives of department and apparel stores recently interviewed described the present condition of their merchandise stocks as very satisfactory, especially from the

WHOLESALE AND RETAIL TRADE STATISTICS

	Number of reporting firms	Percentage change in			
		July 1947 from July 1946	June 1947 from July 1946	Jan. 1 to July 31, 1947 from 1946	Stocks † July 1947 from July 1946
Retail trade:					
Department stores:					
Total 11th Dist.	48	-1	-3	+5	+8
Corpus Christi.	4	+7	+12	+7	+23
Dallas.	7	-2	-4	+1	+2
Fort Worth.	4	+7	-1	+7	+30
Houston.	7	+7	-3	+8	+4
San Antonio.	5	-8	-2	+6	+1
Shreveport, La.	3	+5	-12	+8	...
Other cities.	18	-1	-3	+5	+14
Retail furniture:					
Total 11th Dist.	45	+3	-3	....	+51
Dallas.	4	+4	+5	....	+40
Houston.	4	+11	-6	....	....
Port Arthur.	3	+30	+11	....	....
San Antonio.	4	-3	-1	....	....
Wholesale trade:*					
Automotive supplies	3	+8	+10	-3	....
Drugs.	3	No chg.	+18	....	....
Groceries.	21	+20	+7	+16	+40
Hardware.	8	+8	-11	+24	+68
Tobacco & products.	6	-12	+24	....	-31

*Compiled by United States Bureau of Census. Wholesale trade figures preliminary.

†Stocks at end of month.

‡Change less than one-half of one per cent.

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

	Daily average sales—(1935-1939=100)							
	Unadjusted*				Adjusted			
	July 1947	June 1947	May 1947	July 1946	July 1947	June 1947	May 1947	July 1946
District.	288	307r	356	291r	378	361r	379	383r
Dallas.	267	289	343	273	371	352	365	379
Houston.	305	329r	370	305r	377	378r	386	377r

	Stocks—(1935-1939=100)							
	Unadjusted*				Adjusted			
	July 1947	June 1947	May 1947	July 1946	July 1947	June 1947	May 1947	July 1946
District.	299	298	316r	272	276	308	333r	252

*Unadjusted for seasonal variation.

r-Revised.

standpoint of their achievements in cleaning out practically all wartime substitute merchandise or other slow-moving goods. To accomplish this, they had resorted to clearance sales and mark-downs of prices ranging from moderate to drastic. As for present buying policies, most of these executives indicated that they are buying on shorter commitment and ordering in smaller volume than during the war, when it was customary to order much more than the merchant expected to receive by delivery date. It is now possible, they report, in many soft-goods lines to supplement pre-season orders with fill-ins of merchandise which becomes depleted during the season. Compared with a year ago, the number of scarce items has declined sharply. Among soft goods high-grade men's suits and shirts, some types of women's apparel, and such household staples as muslin and sheeting are the principal items currently reported as hard to get. An increase of 17 per cent from June to July in department store orders outstanding, the second largest month-to-month increase in more than a year, apparently reflects both the moderate level of present inventories and a normal program of stock enlargement in anticipation of good autumn sales.

Net sales of reporting furniture stores in the district during July showed a slight increase over those of the same month last year but declined by the same percentage in comparison with June of this year. Ratios of cash and credit sales to total sales were 18 and 82 per cent, respectively, as compared with 23 and 77 per cent in July 1946. End-of-month inventories of these stores exceeded those of the same date last year by 51 per cent but were down five per cent from the end of June.

Furniture store executives contacted in recent interviews anticipate fair to good business for the remainder of the year. Sales of furniture alone may fall somewhat below those of last year, but stores with full stocks of household appliances expect to equal if not exceed the total sales of last fall.

Ratios of collections to accounts receivable at furniture and department stores indicate that the growth in volume of credit sales is being accompanied by a gradual lengthening of the average collection period on both charge accounts and installment contracts. The collection ratio for both types of accounts, however, is still much higher than in prewar years.

AGRICULTURE

Hot, dry weather over most of the district during July and early August was favorable for harvesting operations but unfavorable for ranges and pastures, and caused deterioration of late planted and other growing crops. Scattered showers in early August checked drought damage in some areas of Texas, while minor crop losses resulted from storms in the Coastal Bend and Lower Valley areas. Due to sharply reduced acreage as compared with last year, a low production of grain sorghums in Texas was indicated by the crop forecast of August 1. The forecast of the corn crop was reduced considerably from that of a month earlier, and wheat production estimates were lowered somewhat when yields were found to have been slightly below expectations. Range feeds were dry and cured throughout most of the grazing areas of the district at the beginning of August, but subsequent showers revived grasses in scattered localities. In spite of supplemental feeding, livestock in many dry areas have lost some weight.

CROP PRODUCTION—(Thousands of bushels)

	Texas		States in Eleventh District*	
	Average 1936-45	1946	Average 1936-45	1946
Winter wheat.....	41,287	62,916	129,420	102,467
Corn.....	71,963	55,012	50,193	124,624
Oats.....	33,236	36,366	31,248	63,484
Barley.....	3,913	2,610	2,572	11,617†
Cotton§.....	3,021	1,669	3,200	4,529‡
Tame hay||.....	1,149	1,263	1,137	3,467
Potatoes, Irish.....	4,009	5,883	4,488	9,576
Potatoes, sweet.....	4,828	6,570	5,270	13,753®
Rice.....	14,877	17,716	19,404	36,120^

*Figures are combined totals for five states lying wholly or partly in the Eleventh Federal Reserve District: Texas, Arizona, Louisiana, New Mexico, and Oklahoma. §In thousands of bales. †In thousands of tons. ‡Arizona, New Mexico, Oklahoma, and Texas. ®Louisiana, Oklahoma, and Texas. ^Louisiana and Texas.

SOURCE: United States Department of Agriculture.

As harvest of the record Texas wheat crop was completed, yields were found to average about 18 bushels per acre, or a bushel below earlier expectations. The result was that production estimates were reduced to 129,420,000 bushels, compared with a July 1 estimate of 136,610,000 bushels and a production last year of 62,916,000 bushels.

The August 1 report of the United States Department of Agriculture estimates the United States 1947 cotton crop at 11,844,000 bales, compared with a crop of 8,640,000 bales in 1946 and a 10-year (1936-45) average of 12,390,000 bales.

Anticipated production in Texas is placed at 3,200,000 bales, or almost double the 1946 crop of 1,669,000 bales and slightly above the 10-year average of 3,021,000 bales. The estimate of 8,156,000 acres of cotton for harvest in Texas this year is 36 per cent above last year's acreage and greater than in any other year since 1940. The indicated yield of 188 pounds of lint per acre this year may be compared with 134 pounds last year and with a 10-year average of 168 pounds per acre. A Louisiana crop of 525,000 bales, forecast on August 1, although 18 per cent below average, more than doubles the crop produced last year, due largely to an increased yield estimated at 293 pounds of lint per acre, compared with 148 pounds per acre harvested last year. In Oklahoma the crop was estimated at 300,000 bales, compared with 262,000 bales produced last year and with a 10-year average of 568,000 bales. Both the acreage and the indicated yield per acre in Oklahoma are somewhat above those of last year.

CASH FARM INCOME BY MAJOR INCOME GROUPS FOR THE STATES OF THE ELEVENTH FEDERAL RESERVE DISTRICT, 1946 COMPARED WITH 1945

(Thousands of dollars)

		Crops	Livestock and livestock products	Government payments	Total farm income
	1945.....	89,648	51,310	2,675	143,633
Louisiana	—1946.....	168,732	82,116	12,329	263,167
	1945.....	186,582	72,454	12,796	271,832
New Mexico	—1946.....	53,888	92,530	4,136	150,554
	1945.....	41,054	78,694	4,336	124,084
Oklahoma	—1946.....	208,666	276,128	17,741	502,535
	1945.....	197,775	260,722	18,569	477,066
Texas	—1946.....	707,839	679,765	40,318	1,427,922
	1945.....	636,288	637,721	41,428	1,315,437
Five states	—1946.....	1,250,568	1,188,637	77,771	2,516,976
	1945.....	1,151,347	1,100,901	79,804	2,332,052

SOURCE: United States Department of Agriculture, Bureau of Agricultural Economics.

Cotton in most areas of Texas suffered from lack of moisture during July, except in the High Plains and the Low Rolling Plains. Harvesting proceeded satisfactorily in southern Texas during the month but was interrupted in the Coastal Bend and Lower Valley counties in early August by heavy rains, which also caused considerable loss in quality and some loss in quantity of open cotton in the fields. In most other areas of Texas the need for moisture increased during the first half of August, and early cotton matured rapidly, with excessive shedding of young bolls and premature opening of grown bolls. Infestations of insects remained comparatively light in the State as a whole.

Prospective yields of late planted corn were seriously reduced by dry weather during July, and the August 1 production forecast of the Texas corn crop was 50,193,000 bushels, compared with a forecast of 53,235,000 bushels on July 1. The estimated production this year may be compared with a harvest of 55,012,000 bushels last year and a 10-year average production of 71,963,000 bushels. The estimated yield of 16.5 bushels per acre is slightly below last year's yield, but above average.

This year's acreage of sorghum for grain, estimated at 3,506,000 acres, is 24 per cent below that of last year, due principally to increased plantings of wheat and cotton, particularly in northwest areas. The August 1 forecast of production was placed at 61,355,000 bushels, which, although above average, is far below the 73,742,000 bushels produced last year. Growing conditions for grain sorghums were generally unfavorable during the first part of August, and the late crop was in need of rain. Harvesting was about completed in the southern counties of Texas by the first of August and was under way in northcentral and some northwest counties.

Production of hay this year, estimated at 1,310,000 tons on August 1, is about three per cent below average. Broomcorn production, estimated at 4,000 tons, is only about two-thirds as

large as last year's crop and is 1,000 tons less than the 10-year average. Harvest in all important producing areas was practically completed by August 1.

The Texas peanut crop for 1947 was estimated on August 1 at 338,400,000 pounds, and the acreage for harvest at 752,000 acres. The production expected this year is below that of last year but far above the 10-year average. The indicated 450-pound yield per acre, though slightly above average, is considerably below the yield of 515 pounds per acre last year. Harvest was under way in southern counties on August 1, and early August rains were helpful to the late crop in these counties, but in all other areas, the crop was deteriorating, and rains were badly needed. The year's pecan crop in Texas, which on August 1 was expected to aggregate 21,000,000 pounds, is seven per cent below the 1946 crop and 18 per cent below the 10-year average.

The forecast of the 1947 Texas rice crop was for 19,404,000 bushels, compared with 17,716,000 bushels last year and a 10-year average production of 14,877,000 bushels. The indicated yield of 44 bushels per acre is a bushel above that of last year, but four bushels below average. There has been a lack of irrigation water in some areas, but apparently this has not had serious consequences. Harvest of early varieties was under way at the first of August.

During August harvesting of potatoes, cantaloupes, and watermelons progressed rapidly. The Texas Irish potato crop, estimated at 4,488,000 bushels, is only about three-fourths as large as the crop produced last year, but about 12 per cent above the 10-year average. The August 1 forecast of Texas sweet potato production for 1947 was lowered to 5,270,000 bushels from 5,580,000 bushels forecast a month earlier, as lack of rainfall reduced July 1 prospects. This estimate is above average production, but is 20 per cent below last year's crop. Texas grapefruit and oranges held up well during the critically dry period in July, and since the heavy rains in the Lower Valley early in August, conditions have been favorable for the development of the 1947-48 citrus crop.

Ranges over most of Texas deteriorated rapidly during July and the first part of August. Dry conditions were reported as centered in the southcentral counties at the beginning of July, but during the month, with rainfall generally far below normal, they spread over most of the state, excepting some northern Panhandle counties. In south Texas, however, range grass was revived by rains early in August, and range feed in northern Panhandle counties was generally plentiful. In most other parts of the state, cured range feed was critically short on all heavily stocked ranges. The dry range conditions extended into the southern parts of Oklahoma, New Mexico, and Arizona. Under these conditions cattle and calves have held up only fairly well throughout the district. Supplemental feeding has been necessary in many areas, and considerable shrinkage in the weight of cattle was reported from New Mexico, Texas, and Arizona during July and early August. There appear to have been no forced marketings of cattle because of the dry conditions during July, but it was expected that ranchers would market earlier than usual if drought continued. Sheep and lambs on dry range feeds in the Edwards Plateau and eastern Trans-Pecos areas were in only fair condition at the end of July, but early August rains were expected to relieve the situation in those areas.

Reduction in the number of breeding ewes during last year and unfavorable weather conditions, including two winter storms, are reflected in the small lamb crop in Texas, estimated by the United States Department of Agriculture at 3,752,000

lambs. This year's crop is 17 per cent below that of last year and is 15 per cent below the 1936-45 average. The 1947 Texas wool clip is estimated at 63,691,000 pounds, compared with 70,695,000 pounds in 1946. The number of sheep shorn, estimated at 8,272,000, is about 10 per cent below the number shorn in 1946 and about 16 per cent below the 10-year average.

LIVESTOCK RECEIPTS—(Number)

	Fort Worth			San Antonio		
	July 1947	July 1946	June 1947	July 1947	July 1946	June 1947
Cattle.....	111,675	121,904	112,923	47,564	52,820	42,408
Calves.....	35,228	53,699	33,840	26,961	27,988	21,983
Hogs.....	34,306	33,141	38,188	6,222	10,645	5,475
Sheep.....	198,532	276,672	401,016	52,706	78,262	72,834

COMPARATIVE TOP LIVESTOCK PRICES
(Dollars per hundred weight)

	Fort Worth			San Antonio		
	July 1947	July 1946	June 1947	July 1947	July 1946	June 1947
Beef steers.....	\$25.50	\$19.00	\$25.50	\$24.50	\$19.00	\$24.00
Stocker steers.....	22.50	16.50	22.50	.....	.....	.....
Heifers and yearlings.....	25.50	18.00	25.50	20.40	18.50	22.50
Butcher cows.....	19.00	15.50	19.50	18.00	14.00	18.00
Calves.....	24.50	18.35	25.00	23.00	18.50	23.50
Hogs.....	27.75	24.50	25.00	27.00	21.00	24.75
Lambs.....	24.00	19.00	25.75	21.75	17.50	21.50

Total livestock receipts at Fort Worth and San Antonio markets during July were about 30 per cent below those of the previous month, due largely to seasonal declines in receipts of sheep and hogs, and were 22 per cent below the receipts of July 1946, when marketings were especially heavy following the suspension of price controls.

Prices of most Texas farm products advanced during the month ending July 15, according to the Mid-Month Local Price Report of the United States Department of Agriculture. Notable advances occurred in prices received for wheat, corn, rice, barley, cotton, chickens, eggs, dairy products, and all meat animals except lambs. There were significant declines in prices received for grain sorghums and cottonseed. Reports from central commodity markets around mid-August indicated that prices of corn and grain sorghums had made moderate gains since July 15, while the price of cotton had shown a marked decline and wheat prices remained near the level of a month earlier.

FINANCE

Reports of earnings and dividends of member banks in the Eleventh Federal Reserve District as of June 30, 1947, show that net profits of all member banks in the district amounted to \$17,533,000 during the first six months of 1947, as contrasted with \$20,033,000 for the same period in 1946. Reserve city banks of the district reported net profits for the period amounting to \$6,925,000, or \$2,510,000 less than were reported for the comparable months of 1946. On the other hand, net profits of country banks reflected a slight increase, rising by \$10,000 to \$10,608,000.

Perhaps the most significant change reflected by these most recent reports is the shift which has been taking place in the relative importance of earnings derived from interest and discount on loans and from interest and dividends on securities. During the first six months of 1947, interest and discount on loans rose to \$29,165,000, or \$6,771,000 more than was earned from that source during the comparable period in 1946. In contrast, earnings from securities were reported to total \$18,823,000, or \$2,338,000 less than in the comparable period of last year. As a consequence of these changes, interest and discount on loans accounted for approximately 51 per cent of total current operating earnings during the first six months of 1947 for

both country banks and reserve city banks in this district, whereas earnings from securities represented about 32 per cent of total current operating earnings of the country banks in the district and about 34 per cent of such earnings of the reserve city banks. These movements, of course, reflect the substantial rise which has occurred in total loans, as member banks have met the increasing requirements of business and other borrowers, and the decline in the volume of United States Government securities held by member banks resulting from the Government's debt retirement program.

During the five-week period from July 9 to August 13, principal changes in the condition of member banks in the leading cities in the district, as reflected by weekly reports, show an increase of \$39,825,000 in total investments, a substantial increase of \$54,735,000 in demand deposits adjusted, and an increase of \$15,051,000 in total loans, of which more than two-thirds was accounted for by an expansion of commercial, industrial, and agricultural loans.

The increase in total investments of the member banks in the leading cities of the district during the past five-week period was accounted for largely by an increase in holdings of Government securities of all types. Although during this period member banks added to their holdings of Treasury bills, certificates, and notes in moderate amounts, the principal increase occurred in holdings of United States Government bonds, which rose by \$22,912,000.

Gross demand deposits of the member banks of the district were expanded during July by \$109,415,000, to bring the district's total to \$4,758,677,000. The increase during July represented the second monthly gain since the declining trend which had been in effect for more than a year was reversed during June. Time deposits of the district's member banks continued their upward movement to total \$542,083,000. The increases in gross demand deposits and in time deposits were experienced by both reserve city banks and country banks, with the latest increments being distributed about equally between the two types of institutions.

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS
Eleventh Federal Reserve District
(Average of daily figures in thousands of dollars)

	Combined total		Reserve city banks		Country banks	
	Gross demand	Time	Gross demand	Time	Gross demand	Time
July 1945	\$4,481,169	\$398,157	\$2,306,773	\$249,764	\$2,174,396	\$148,393
July 1946	4,942,638	494,265	2,437,422	313,893	2,505,216	180,372
March 1947	4,654,452	517,295	2,225,418	326,693	2,429,034	190,602
April 1947	4,617,549	524,355	2,208,463	330,604	2,409,086	193,751
May 1947	4,600,179	533,254	2,207,446	335,549	2,392,733	197,705
June 1947	4,649,262	540,000 ^r	2,234,857	338,684 ^r	2,414,405	201,316
July 1947	4,758,677	542,083	2,288,215	339,590	2,470,462	202,493

^r-Revised.

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS
IN LEADING CITIES—Eleventh Federal Reserve District
(Thousands of dollars)

	August 13, 1947	August 14, 1946	July 9, 1947
Total loans and investments	\$2,142,228	\$2,282,671	\$2,087,352
Total loans	837,430	760,641	822,379
Commercial, industrial, and agricultural loans	557,226	462,135	547,007
Loans to brokers and dealers in securities	6,805	10,003	6,027
Other loans for purchasing or carrying securities	69,158	127,783	66,624
Real estate loans	75,645	53,453	73,288
Loans to banks	148	378	149
All other loans	128,448	106,889	129,284
Total investments	1,304,798	1,522,030	1,264,973
U. S. Treasury bills	25,984	54,695	20,805
U. S. Treasury certificates of indebtedness	229,083	406,158	227,821
U. S. Treasury notes	127,391	205,725	122,488
U. S. Government bonds (incl. gtd. obl.)	820,602	773,502	797,690
Other securities	101,738	81,950	98,169
Reserves with Federal Reserve Bank	479,250	458,857	470,840
Balances with domestic banks	304,546	264,514	283,447
Demand deposits—adjusted*	1,797,207	1,706,284	1,742,472
Time deposits	378,539	353,379	380,152
United States Government deposits	21,011	215,580	13,964
Interbank deposits	601,808	618,403	584,348
Borrowings from Federal Reserve Bank	7,000	None	2,000

*Includes all demand deposits other than interbank and United States Government, less cash items reported as on hand or in process of collection.

Federal Reserve notes of this bank in actual circulation increased by \$4,799,000 during the month ending August 15, thus continuing to reflect the rising trend which has been in evidence during the past three months. Despite this recent increase, however, actual circulation outstanding on August 15, 1947, was \$13,914,000 less than on the same date of last year. Total

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS
(Thousands of dollars)

	August 15, 1947	August 15, 1946	July 15, 1947
Total gold certificate reserve	\$481,491	\$495,614	\$484,256
Discounts for member banks	2,200	1,000	2,200
Foreign loans on gold	974	3,840	908
U. S. Government securities	953,480	911,463	920,030
Total earning assets	956,654	916,303	923,138
Member banks reserve deposits	801,152	763,642	776,444
Federal Reserve Notes in actual circulation	588,949	602,863	584,150

earning assets of this Federal Reserve Bank increased during the month ending August 15 by \$33,516,000, all of which was accounted for by an increase in holdings of United States Government securities.

Debits to individual accounts during July, as reported by banks in 24 cities throughout the district, continued to show substantial increases over the corresponding month of last year in most instances. Reports from banks in 10 of the cities, however, showed a decline in bank debits during July as compared with the preceding month, with the rate of decline ranging from 10 per cent in Austin to less than one per cent in El Paso and Port Arthur. The largest increases in bank debits during July were experienced by the banks in Amarillo and Lubbock, which reported increases of 32 and 13 per cent, respectively. The table of bank debits published in this *Review* has been revised with this issue to show, in addition to debits, the end-of-month deposits and annual rate of turnover of deposits of banks in 24 cities in the district. Back data of this series were published in

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

City	Debits— Pctg. change from			End-of month deposits July 1947	Annual rate of turnover		
	July 1947	June 1947	July 1946		July 1947	June 1947	July 1946
Tucson, Ariz.	48,114	-1	+10	77,520	7.4	7.4	7.2
Roswell, N. M.	12,603	+9	+10	17,308	8.9	8.3	7.4
Monroe, La.	27,268	+3	+8	37,893	8.5	8.5	7.7
Shreveport, La.	103,986	-6	-13	143,684	8.8	9.2	7.4
Ablene	27,480	-2	-15	38,623	8.5	8.8	7.0
Amarillo	96,805	+32	+35	78,832	14.9	11.5	11.8
Austin	84,544	-10	+6	95,608	10.6	11.8	9.6
Beaumont	70,111	-4	-12	81,490	10.3	10.8	9.4
Corpus Christi	71,351	+9	-10	67,848	13.1	12.2	11.4
Corsicana	8,488	-1	-25	18,793	5.4	5.4	4.3
Dallas	851,215	-6	-13	668,697	15.4	14.8	13.1
El Paso	89,121	+1	+5	104,036	10.3	10.3	9.5
Fort Worth	340,468	+4	-11	271,830	15.0	14.3	13.0
Galveston	59,461	+1	+4	89,420	8.0	7.9	8.2
Houston	338,117	+6	-23	773,834	13.1	12.5	10.6
Laredo	15,357	+5	+4	20,640	9.0	8.5	8.2
Lubbock	52,570	+13	-37	54,676	11.4	10.1	8.4
Port Arthur	29,775	+1	-15	39,248	9.2	9.4	7.7
San Angelo	25,437	-4	-3	37,098	8.4	9.0	8.0
San Antonio	220,312	+1	+1	313,627	8.4	8.4	7.9
Texarkana*	12,702	+3	+3	22,037	7.0	6.7	6.1
Tyler	33,715	+7	-11	47,845	8.5	8.0	7.7
Waco	44,245	+3	+4	61,229	8.8	8.4	7.3
Wichita Falls	47,687	-2	-28	71,484	8.3	8.9	6.2
Total—24 cities	3,210,932	+4	+11	3,233,300	12.0	11.5	10.2

*This figure includes only one bank in Texarkana, Texas. Total debits for all banks in Texarkana, Texas-Arkansas, including two banks located in the Eighth District amounted to \$21,453,000.

[†]Change less than one-half of one per cent.

"Bank Debits, End-of-Month Deposits, and Annual Rate of Turnover of Deposits in Twenty-Four Reporting Cities—Eleventh Federal Reserve District" as a supplement to the August 1 *Monthly Business Review* of this bank and may be obtained from the Research Department.

SAVINGS DEPOSITS					
Reporting Banks—Eleventh Federal Reserve Bank					
July 31, 1947					
Number reporting banks	Number of savings depositors	Amount of savings deposits	Percentage change in savings deposits from		
			July 31, 1946	June 30, 1947	
Beaumont.....	3	12,227	\$ 6,909,099	-11.7	-1.4
Dallas.....	8	133,843	78,154,784	+ 6.4	-1.2
El Paso.....	2	33,858	23,772,090	+ 4.0	-2.2
Fort Worth.....	3	42,368	34,706,064	+ 4.8	-1.0
Galveston.....	4	22,728	21,796,430	+ 5.9	+ 1.9
Houston.....	8	106,089	70,475,989	- 0.8	- 0.6
Lubbock.....	2	1,139	1,727,193	-28.9	- 6.3
Port Arthur.....	2	6,541	5,255,039	- 4.0	- 0.9
San Antonio.....	5	38,821	47,047,450	+ 7.1	- 0.2
Shreveport, La.....	3	32,892	26,306,442	+ 0.4	- 0.3
Waco.....	3	9,752	9,616,733	+ 5.1	- 1.3
Wichita Falls.....	3	6,960	4,655,838	- 4.1	+ 0.2
All other.....	56	63,522	54,269,677	+ 5.7	- 0.6
Total.....	102	510,740	\$384,692,828	+ 3.3	- 0.7

MEMBER BANK RESERVES AND RELATED FACTORS

Eleventh Federal Reserve District
(Millions of dollars)

	Changes in weeks ended					Cumulative changes	
	Aug. 13, 1947	Aug. 6, 1947	July 30, 1947	July 23, 1947	July 16, 1947	5 weeks ended Aug. 13, 1947	Jan. 1 to Aug. 13, 1947
Federal Reserve Credit—							
local.....	+ 7.3	- 8.8	+ 4.9	- 8.1	- 0.6	- 5.3	- 5.6
Interdistrict commercial & financial transactions....	- 2.3	+ 3.3	- 5.5	-15.8	+ 3.0	-17.3	-375.1
Treasury operations.....	+ 4.5	+21.8	+11.5	+10.3	+ 4.2	+52.3	+363.2
Currency transactions.....	+ 2.2	- 6.3	- 1.6	- 0.7	+ 2.2	- 4.2	+ 29.5
Other deposits at the							
Federal Reserve Bank..	+ 0.2	+ 0.7	- 1.0	+ 0.1	+ 0.1	+ 0.1	+ 0.5
Other Federal Reserve							
Accounts.....		+ 0.5	- 0.2	+ 0.1	+ 0.2	+ 0.6	+ 1.6
Member Bank reserve balances.....	+11.9	+11.2	+ 8.1	-14.1	+ 9.1	+26.2	+ 14.1

Note: Amounts preceded by a minus sign reduce reserves; those with a plus sign preceding add to reserves.

New Par Banks

On July 19, 1947, the West Side State Bank, Fort Worth, Texas, a newly organized nonmember bank located in the Eleventh Federal Reserve District, opened for business and was added to the Federal Reserve Par List on that date. This bank has capital of \$150,000 and surplus and profits of \$150,000. Its officers are: E. E. Bewley, President; C. F. Fry, Vice President; and Phil A. Tillery, Cashier.

On August 2, 1947, the First State Bank, Frisco, Texas, a newly organized nonmember bank, located in the Eleventh Federal Reserve District, opened for business and was added to the Federal Reserve Par List on the same date. This bank has capital of \$35,000 and surplus and undivided profits of \$17,500. Its president is Mr. C. B. Johnson.

On August 16, 1947, the First State Bank, LaMarque, Texas, a newly organized nonmember bank located in the Eleventh Federal Reserve District, opened for business and was added to the Federal Reserve Par List on that date. This bank has capital of \$50,000 and surplus and undivided profits of \$20,000. Its president is Mr. W. F. Remschel, Jr.

INDUSTRY

Executives of representative manufacturing organizations in this district who were interviewed during August expect operations in their plants and respective industries to be maintained at current levels or to be increased slightly during the remaining

months of this year. Readjustments in the women's apparel industry which accompanied changes in styling apparently were completed from May to July, and some expansion of employment is anticipated in apparel plants during the fall season. Activity in food processing is expected to increase seasonally, and wood processing establishments probably will continue operations near present levels. Manufacturers of iron and steel products report that demands for their output cannot be fully met because of continuing shortages of sheet steel, tubular goods, screws, nuts, bolts, and other small tooled products. The supply situation in other industries has eased slightly. Textiles are obtained more readily than last spring or at this time in 1946, al-

DOMESTIC CONSUMPTION AND STOCKS OF COTTON—(Bales)

Consumption at:	July 1947	July 1946	June 1947	Aug. 1 to July 31—	
	This season	Last season	This season	Last season	
Texas mills.....	12,985	17,567	11,696	201,130	200,205
United States Mills.....	677,489	729,808	788,251	10,035,304	9,163,207
U. S. stocks—end of month:					
In consuming establm'ts....	1,400,077	2,282,384	.....	.....	.....
Public stg. & compresses..	900,510	4,463,577	.....	.....	.....

though higher-quality cotton fabrics still are scarce. Hardwoods used in furniture manufacture, pigments, oils, and many other industrial supplies also have become more readily available.

COTTONSEED AND COTTONSEED PRODUCTS

	Texas		United States	
	August 1 to July 31 This season	Last season	August 1 to July 31 This season	Last season
Cottonseed received at mills (tons).....	627,357	674,898	3,068,968	3,162,939
Cottonseed crushed (tons).....	631,378	701,843	3,088,335	3,261,915
Cottonseed on hand July 31 (tons).....	53,233	57,254	98,339	117,806
Production of products:				
Crude oil (thousand lbs.)....	191,334	211,784	972,617	1,017,546
Cake and meal (tons).....	297,221	325,123	1,361,638	1,434,326
Hulls (tons).....	140,393	153,306	726,594	783,480
Linters (running bales)....	214,526	221,803	991,195	988,800
Stocks on hand July 31:				
Crude oil (thousand lbs.)....	2,772	1,514	7,040	10,389
Cake and meal (tons).....	8,305	6,474	46,916	31,628
Hulls (tons).....	8,304	3,806	35,484	25,925
Linters (running bales)....	14,901	7,647	79,431	35,054

SOURCE: United States Bureau of Census.

Manufacturers' inventories in this area are reported to be much higher dollarwise than a year ago, and generally somewhat larger on a volume basis. Raw-material inventories still are unbalanced in many plants, reflecting inability to obtain all materials in the quantities and on the delivery schedules which are desired. The executives indicate, however, that total stocks are not excessive as compared with present and anticipated sales volume.

The value of construction contracts awarded in the Eleventh District increased moderately in July, primarily reflecting larger awards for utility construction and nonresidential buildings. The removal of restrictions from all categories of construction

VALUE OF CONSTRUCTION CONTRACTS AWARDED

	(Thousands of dollars)			
	July 1947	July 1946	June 1947	January 1 to July 31 1947
Eleventh District—total..	\$ 54,087p	\$ 34,162	\$ 45,524	\$ 383,772p
Residential.....	18,577p	11,816	20,175	146,282p
All other.....	35,510p	22,346	25,349	237,490p
United States*—total....	660,254	717,991	605,070	4,152,899
Residential.....	240,885	281,227	209,458	1,709,787
All other.....	419,369	436,764	395,612	2,443,112

*37 states east of the Rocky Mountains.

SOURCE: F. W. Dodge Corporation.

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other than amusement and recreational building, which was effective June 30, and liberalization of rent controls apparently have halted the decline in awards in this district which charac-

terized the first six months of 1947. Numerous smaller projects which were prohibited under earlier regulations are being started, and the number of rental dwellings being constructed is reported to have increased. Moreover, there are forecasts of some large-scale utility programs, public works, and commercial projects to be initiated soon.

BUILDING PERMITS

	July 1947		* Percentage change		Jan. 1 to July 31, 1947		Percentage change	
	No.	Valuation	July 1946	June 1947	No.	Valuation	valuation from 1946	valuation from 1946
Abilene.....	84	\$ 290,700	+ 81	+ 27	648	\$ 2,648,243	-11	
Amarillo.....	189	678,493	- 2	- 29	1,201	4,430,016	-13	
Austin.....	387	2,608,724	+ 39	+117	3,496	11,541,134	+ 3	
Beaumont.....	407	1,495,778	+366	+183	2,347	8,372,503	+91	
Corpus Christi.....	341	1,392,554	+ 73	+ 5	2,547	8,675,606	+43	
Dallas.....	1,425	5,238,508	+ 81	+ 23	9,444	29,455,378	- 1	
El Paso.....	149	399,450	+ 73	+ 22	887	3,713,070	+39	
Fort Worth.....	605	1,773,231	+ 24	- 9	4,191	13,314,146	-19	
Galveston.....	255	182,825	- 39	- 13	1,001	1,375,139	- 6	
Houston.....	758	6,130,952	+426	+ 31	4,719	39,078,954	- 3	
Lubbock.....	211	1,169,869	+ 48	- 11	1,346	7,075,101	+ 3	
Port Arthur.....	213	195,172	+ 24	- 19	1,094	1,364,254	- 7	
San Antonio.....	1,104	2,514,232	+ 80	+ 10	3,144	14,635,580	+ 1	
Shreveport, La.....	389	773,734	- 4	- 17	2,435	6,184,565	+ 1	
Waco.....	156	1,064,575	+ 16	- 1	972	4,915,219	+57	
Wichita Falls.....	61	277,290	+ 36	- 37	471	1,420,045	+ 5	
Total.....	6,734	\$26,180,687	+ 85	+ 1	44,943	\$153,899,153	+ 1	

*Change less than one-half of one per cent.

Daily average production of crude oil in this district during July was maintained near the all-time peak of 2,490,000 barrels attained the preceding month, and production outside the district reached a new high of 2,618,000 barrels. Despite record production since April, stocks of crude oil in the United States have declined slightly, and total stocks of petroleum products have increased only moderately. Demand for crude oil and its products continues undiminished. In those fields in this district in which output can be expanded without reducing ultimate recovery from underground reservoirs, production is being increased where transportation facilities can be provided to carry an increased flow of oil.

CRUDE OIL PRODUCTION—(Barrels)

	July 1947		Increase or decrease in daily average production from	
	Total production	Daily avg. production	June 1947	July 1946
District 1.....	689,850	22,253	+ 576	+ 2,747
2.....	4,806,100	155,035	-11,395	- 2,942
3.....	14,987,400	483,464	-10,469	-26,952
4.....	7,156,700	230,861	-16,609	+ 3,003
5.....	1,215,900	39,223	- 697	- 4,882
6.....	10,065,500	324,694	- 8,926	+ 9,617
Other 6.....	3,514,250	113,363	-2,634	+ 5,647
7b.....	1,157,850	37,350	-2,057	+ 5,331
7c.....	1,209,050	39,002	+ 9	+11,033
8.....	18,179,500	586,435	+25,895	+20,181
9.....	3,909,250	126,105	-14,785	- 3,298
10.....	2,609,900	84,181	- 3,419	- 956
Total Texas.....	69,500,950	2,241,966	-44,511	+18,529
New Mexico.....	3,361,500	108,439	+ 1,944	+10,044
North Louisiana.....	3,009,550	97,082	+ 289	+14,097
Total District.....	75,872,100	2,447,487	-42,278	+42,670
Outside District.....	81,143,850	2,617,543	+ 9,395	+101,678
United States.....	157,015,950	5,065,030	-32,883	+144,348

SOURCE: Estimated from American Petroleum Institute weekly reports.

Despite shortages of drill pipe and casing, a somewhat greater number of oil wells was completed in the United States and in this district during the first six months of 1947 than during the comparable period of any year since 1941. The footage drilled thus far this year has exceeded that in any comparable period since 1937, when an all-time record was established. Exploratory drilling during the first half of 1947 was more intensive than at any prior time in the history of the industry and, in many Texas sections of the Eleventh District, apparently was unusually successful. During the period 839 wildcats were completed in the district, of which 113, or 13.5 per cent, were productive; whereas, during the ten years, 1937-1946, prod-

NEW WELLS COMPLETED

	Number wells completed		Total footage drilled (Thousands of feet)	
	Jan.-June 1947	Jan.-June 1946	Jan.-June 1947	Jan.-June 1946
United States.....	14,546	13,920	50,389	46,760
Eleventh District.....	4,777	4,465	20,810	19,140
New Mexico.....	260	195	1,138	703
North Louisiana.....	323	334	1,083	1,530
Texas.....	4,194	3,936	18,589	16,907
Districts 1, 2, and 4..... (Southwest Texas)	975	807	5,275	4,389
District 3..... (Upper Coastal Texas)	374	335	2,421	2,404
Districts 5 and 6..... (East Texas)	285	344	1,468	1,882
Districts 7-B and 9..... (North Texas)	1,345	1,470	3,802	3,740
Districts 7-C and 8..... (West Texas)	993	800	4,854	3,938
District 10..... (Panhandle Texas)	222	180	769	554

SOURCE: World Oil.

uctive wells amounted to only 10.8 per cent of all wildcat completions in the district. Drilling tests seeking new pay zones or extensions of known fields also have been more successful than usual, and it may be that additions to proven reserves are offsetting the heavy production currently required to meet the peak demands for petroleum products. Continuation of high levels of developmental drilling and further expansion of exploratory drilling seem likely to occur in response to the growing demand for crude oil. The number of drilling rigs in operation has increased in most sections of the Eleventh District and in the United States as a whole in recent months, and at the end of June, far exceeded the number active a year earlier.

WILDCAT WELL COMPLETIONS*

	1937-1946		January-June 1947	
	Number of wells	Productive Number % of Total	Number of wells	Productive Number % of Total
United States.....	32,097	3,459 10.8	2,084	249 11.9
Eleventh District.....	13,271	1,432 10.8	839	113 13.5
New Mexico.....	511	60 11.7	29	3 10.3
North Louisiana.....	822	64 7.8	65	5 7.7
Texas.....	11,938	1,308 11.0	745	105 14.1
Districts 1, 2, and 4..... (Southwest Texas)	4,409	423 9.6	267	42 15.7
District 3..... (Upper Coastal Texas)	1,250	154 12.2	86	17 19.8
Districts 5 and 6..... (East Texas)	1,086	68 6.3	52	3 5.8
Districts 7-B and 9..... (North Texas)	3,764	490 13.0	254	31 12.2
Districts 7-C and 8..... (West Texas)	1,348	168 12.5	78	11 14.1
District 10..... (Panhandle Texas)	72	5 6.9	8	1 12.5

*Exclusive of all tests seeking new pay zones or outposts attempting to extend known fields.

SOURCE: World Oil.

Activity at cottonseed oil mills in Texas and in the United States was limited during the 1946-47 season by shortages of cottonseed which were only partly offset by moderate increases in supplies of such alternative raw materials for crushing as soybeans and copra. During the twelve months ended July 31, 1947, cottonseed receipts at United States mills were smaller than in any prior season since 1921-1922, and receipts at Texas mills were the smallest of record. Moreover, stocks of seed and its products already had been depleted during the 1945-1946 season and could not be drawn upon further to meet the heavy domestic and foreign demands for vegetable oils and livestock feeds which developed.

The August 1 carry-over of cottonseed and its products from last season in United States and in Texas mills was near the very low level of a year earlier. Prospective supplies of cottonseed are substantially larger than at this time last year, however, particularly in Texas, where a considerably larger cotton acreage and an even greater increase in the forecast of cotton production may yield 75 to 100 per cent more seed than in 1946-1947. Larger quantities of copra, soybeans, and other oil-bearing seeds also may be available to those mills equipped to process them.