GROWTH AND URBANIZATION OF THE TEXAS POPULATION, 1940-1950

THESIS

Presented to the Graduate Council of the

North Texas State College in Partial

Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By 193240 Oscar H. Boulter, B. S.

> Tyler, Texas August, 1951

TABLE OF CONTENTS

																				1	Page
LIST	OF	TAE	LES	•		•	•	•			•	• •	•	•	• •	•	•			•	iv
LIST	OF	ILL	UST	RAT:	ION	S .		•				•	•	,				٠			v.i.
Chapt I.		INTR	ODU(OTI(DM	• ,		•	*			•		•				•		•	1
	. 0	ROW PO	TH . PUL.	AND ATI	RA ON,	CIA 18	L 380	COI	MP0 950	SI!	rio •	N ()F	TH	E 7	EX	AS	•	•		9
III.	. [JRBA	NIZ	ATI(ON	TRI	FNB	S I	ĽΝ	TE	KAS	s:	INC	E	188	30					25
IV.	. I	REGI 19	ONA] 40-3	L TH 1950	REN	DS •	IN	UE	RBA	NI:	ZAT •	IOI		N.	rey	AS	,			•	30
V.	. A	SPE SI	OTS ZE-(OF FROU	UR.	BAN NGS	NIZ 3 O	AT] F 7	CON CEX	II AS	V S	ELI TI	MOT	ED	94C) - l	95	0			74
VI.	. P	ROS UR	PEC: BAN:	rs i Izat	FOR FIOI	O O)NT)F	INI THE	JED C T	GI EX <i>I</i>	low RS	TH POI	AN PUL	D AT:	ION		•			١.	102
BIBLI	OGE	A PH	Y.	• •																	7 00 F

LIST OF TABLES

Table		Page
1.	Growth of Texas Population Compared to That of the United States, 1880-1950	. 10
2.	Racial Composition of Texas Population, 1940-1950	. 14
3•	Growth of Texas Population by Regions, 1940-1950	. 19
4.	Urbanization in the Trans-Pecos Region, 1940-1950.	33
5•	Urbanization in the Panhandle Region, 1940-1950.	. 36
6.	Urbanization in the Central Great Plains Region, 1940-1950	. 38
7•	Urbanization in the Edwards Plateau Region, 1940-1950	. 40
8.	Urbanization in the North Central Region, 1940-1950	42
9•	Urbanization in the Central Region, 1940-1950	46
10.	Urbanization in the South Central Region, 1940-1950	49
11.	Urbanization in the South South-Central Region, 1940-1950	51
12.	Urbanization in the Lower Rio Grande Valley Region, 1940-1950	55
13.	Urbanization in the Northeast Region, 1940-1950	60
14.	Urbanization in the Southeast Region, 1940-1950	64
15.	Regional Increases in Urbanization in Texas, 1940-1950	71
16.	Texas Cities Having Less Than 2,500 Population in 1940 but More Than That Number in 1950	76

LIST OF TABLES---Continued

Table		Page
17.	Urbanization of Cities of 2,500-9,999 Population, 1940-1950	. 82
18.	Urbanization in Cities of 10,000-24,999 Population, 1940-1950	90
19.	Urbanization in Cities of 25,000-49,999 Population, 1940-1950	92
20.	Urbanization in Cities of 50,000-99,999 Population, 1940-1950	95
21.	Urbanization in Cities of 100,000 or More, 1940-1950	97
22.	Median and Percentage Increase for Selected Size Groups, Texas Cities, 1940-1950	99

LIST OF ILLUSTRATIONS-

Figur	e	Page
Tokani.	Ropulation Growth in Texas and the United States, 1880-1950].a]-a-
2.	Racial Composition of the Texas Population, 1880-1950	15
3~	A Map Showing Regional Population Changes in Texas, 1940-1950	17
4.	A Map Showing Population Changes in Texas by Counties, 1940-1950	23
5.	Percentage of Texas Population in Urban and Rural Areas, 1880-1950	26
6.	Growth of Total and Urban Population in Texas, 1880-1950	28
7.	A Map Showing Regional Urbanization Growth in Texas, 1940-1950	31

CHAPTER I

INTRODUCTION

Within the last thirty years there has been a very pronounced increase in interest in problems of population-size, aspects of composition, spatiality, growth, urban-ization, and other vital problems. This increased interest has been evidenced by many studies dealing with the population of the United States and other nations, and it has also led to increased attention to population trends in smaller areas, such as regions, states, and cities.

It is the purpose of this thesis to consider the growth and urbanization of the Texas population since 1880, with primary emphasis on changes which took place during the decade from 1940 to 1950.

Within the decennial period 1940-1950 the total Texas population increased by 1,296,176 (20.2 per cent), and the urban population increased by 1,922,611 (approximately 66.0 per cent). Urbanization continues, drawing from rural Texas and from areas outside the state. It is becoming increasingly clear that there will be no reversal

of the rural-to-urban movement which began about 1900 and was greatly accelerated by the two World Wars. During the decade ending in 1950, an estimated 700,000 people moved from the rural areas to the urban centers of Texas. Tractors and other new equipment literally pushed these people off the farms, while industrial technological development pulled them into the cities. According to the 1950 census the state's four largest cities (Houston, Dallas, San Antonio, and Fort Worth) had 22 per cent of the state's total population.

Early records of Texas' population are scarce and indefinite. The population for 1744 was estimated at 1,500 people, and most of these people had settled near San Antonio and Nacogdoches, with a sprinkling along the Rio Grande. The era of colonization brought many people to Texas, and the numbers of new arrivals increased greatly after Texas won independence from Mexico in 1836. By 1850 the population had increased to approximately 213,000.

The Civil War virtually stopped for awhile the west-ward movement of people throughout the country, but following the war, conditions in the Plantation South gave renewed impetus to the westward movement. Many planters, their slaves freed and their agricultural system

¹ Texas Almanac, 1949-1950, p. 91.

revolutionized, and many Civil War veterans turned hopefully westward to Texas, where they expected to make a new start in a new land. Added to the thousands who came from the older states of the North and the South were the many thousands coming from foreign countries. From 1865, the year the Civil War ended, to 1880 people came in such great numbers that the population count in Texas for the latter year showed a total of approximately 1,600,000 people. In those early days Texas was a frontier state with much free land to be had for the mere act of settling on it. was predominantly rural and agricultural, with great expanses still unsettled in the western part of the state, where the "deer and the antelove" still roamed. ern part of Texas was also the home of the lean Texas longhorn. Beef first made Texas rich after the Civil War, when "cattle kings" ruled the open range and cowboys drove millions of steers "up the trail" to northern markets.

This briefly recounts the population growth of Texas up to 1880, at which point the first phase of this study begins. The purpose of the first part of this study is to compare the growth of the Texas population with that of the United States as a whole since 1880, to determine

²<u>Ibid</u>., p. 96.

^{3&}quot;Texas," Compton's Pictured Encyclopedia, Vol. 14. p. 53, 1947 ed.

It is to be noted, however, that this rural and agricultural situation began gradually to change, and by 1880 9.0 percent of the population was urban. Cities grew in size and number. By 1910 the urban population was 24.0 percent of the total population, and by 1930 the percentage had increased to 41.0. The 1950 census revealed the fact that the Texas population had for the first time in the state's history become predominantly urban, with approximately 63.0 percent of the population living in urban areas. This gradual shift from a rural to an urban population is among the more important aspects of Texas' growth.

There have been cities in the world for thousands of years. However, it was not until the coming of the Industrial Revolution and its counterpart, the Agrarian Revolution, about the middle of the eighteenth century, that cities began to grow rapidly. Of course, the effects of these revolutions were not felt all at once and everywhere alike. Rather, it was a gradual process which slowly changed many a tranquil village into a thriving metropolis.

As late as 1850 there were only two cities in the world which had a population of a million or more, London (2,363,341) and Paris (1,053,261). By 1900 there were twelve cities with a million or more people, and by 1940 there were thirty-seven such cities. When later data are available they will almost certainly reveal that still more cities have been added to the list. There are ten other cities in the world which now have populations between 900,000 and 999,999, and eight additional ones which have between 800,000 and 899,999.5

One must not overlook the fact that it was the Industrial Revolution and the Agrarian Revolution acting together which were the main causal factors in the growth of urbanization. Improved means of transportation and communication were also important factors in this growth. As one authority has said:

The mechanical devices of the nineteenth century substituted machines for hand work and differentiated manufacturing from agriculture, thereby producing a cleavage which has influenced all social institutions ... The factory system made necessary concentration of man power and, consequently, the unprecedented growth of urban population. However, concentration of population would have been impossible without the agricultural

⁴warren S. Thompson, <u>Population Problems</u>, p. 312. 5The <u>World Almanac</u>, 1951, p. 355.

revolution to furnish food and raw materials for the workers in the city factories. In other words, it would not be inaccurate to say that machines and factories made the industrial city necessary, while improved agriculture, transportation, and trade have made it possible for large cities to exist with unparalled frequency.

In 1787 the surplus food produced by nineteen farmers was enough to feed only one additional person in the city, but in recent years the food surplus produced by nineteen farmers is enough to feed sixty-six additional persons. 7 This has indeed been a revolution in the field of agriculture. While industrialization acts as an attractive force pulling people to the cities, farm mechanization acts as a compulsive force pushing them from the farms.

The cause of the growth of the modern city is primarily economic, but there are other contributing factors also. The city has certain psychological and cultural lures, better educational opportunities, a greater variety of recreational activities, more and better conveniences, and better churches.8

The effects of the Industrial Revolution were not felt in the United States until about the time of the War of 1812,

⁶Harry Elmer Barnes, Social Institutions, pp. 657-658.

⁷Paul H. Landis, Rural Life in Process, p. 10.

⁸ Barnes, <u>op</u>. <u>cit</u>., p. 658.

which is sometimes called "Our Second War for Independence."
This war hastened industrial independence for the United
States. The factory system, however, really did not get
under way effectively until the latter part of the nineteenth
century, and much of the urban growth in the United States
has resulted from the impetus given industrial development
by World War I and World War II.

The factory system in this country was first established in New England and the Northeast; it spread west and south as population increased. Industrialization arrived in Texas with the coming of the twentieth century, but rapid growth of cities did not come until the advent of the First World War. Perhaps the greatest force fostering industrialization and urbanization in Texas has been the tremendous demand for war materials growing out of the second World War.

The problem involved, therefore, in the second part of this study is to determine the amount of urbanization which took place in Texas during the 1940-1950 decade, to determine the rates of urbanization in the various regions and cities grouped according to size, to compare these rates with those of the state as a whole, to determine the variations among the several regions and "size groups" of cities, and to describe some of the factors related to such increases and variations.

Since the term urban has a special meaning as applied to the taking of the census, and since the 1950 meaning is different from the meaning of urban as applied to the 1940 census, it might be well at this point to define the term as used by the Bureau of the Census in 1950:

The urban population comprises all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, and villages; (b) the densely settled suburban area, or urban fringe, incorporated or unincorporated, around cities of 50,000 or more; (c) unincorporated places of 2,500 inhabitants or more outside of any urban fringe; and (d) places of 2,500 inhabitants or more incorporated as towns.9

This change in definition of the term urban as used by the Eureau of the Census renders the urban population for 1950 not wholly or completely comparable to that of 1940. In other words, if the 1940 definition of urban had been used in the latest census count the 1950 urban population would have been smaller; and conversely, if the 1950 definition had been used when taking the 1940 census, the urban population for 1940 would have been larger. After consultation with the users of census data, urban and certain other terms were given new definitions to improve the statistics, even though it was recognized that comparability with earlier census figures would be adversely affected. 10

⁹U. S. Bureau of the Census, 1950 Census of Population, Series PC-6, No. 10, March 30, 1951, p. 3.

¹⁰ Ibid.

CHAPTER II

GROWTH AND RACIAL COMPOSITION OF THE TEXAS POPULATION, 1880-1950

The purpose of this chapter is to compare the rate of growth of population in Texas with that of the United States as a whole since 1880, to examine changes in the racial composition of the state population, to determine whether in Texas there existed any regional variations in the rate of population growth between 1940 and 1950, and to attempt to account for such variations as may be found to exist.

Comparison of the rate of growth of the Texas population with that of the United States as a whole shows that in 1880 the population of Texas was 3.2 per cent of the total for the United States and that the percentage for the state has increased in each decennium thereafter, reaching 5.1 in 1950 (Table 1). In other words, the rate of population increase in Texas has been greater than that for the United States as a whole (Fig. 1). It is probably safe to assume that this trend will continue, for the foreseeable future at least, since Texas has almost unlimited potentialities for industrial development. The

state has vast areas in which many additional millions of people can find ample living space, the natural resources are vast almost beyond reckoning, the climate affords almost optimum conditions both for industry and people, the facilities for transportation and communication can certainly be expanded to meet any demands, and actual and potential power supply can take care of any requirements which may reasonably be expected to arise in the future.

TABLE 1

GROWTH OF TEXAS POPULATION COMPARED TO THAT OF THE UNITED STATES
1880-1950**

Year	Total Po United States	oulation Texas	Texas Population As Percent of United States Population
1880 1890 1900 1910 1920 1930 1940	50,155,783 62,947,714 75,994,575 91,972,266 105,710,620 122,775,046 131,669,275 150,697,361	1,591,749 2,235,527 3,048,710 3,896,542 4,663,228 5,824,715 6,414,824 7,711,194	3.2 3.6 3.4 4.3 4.8 4.9 5.1

*Sources: World Almanac (1951) and U. S. Bureau of the Census, Series PC-3, No. 10 (March 30, 1951)

As can be seen by reference to Figure 1, not only has the Texas population increased faster on a comparative basis

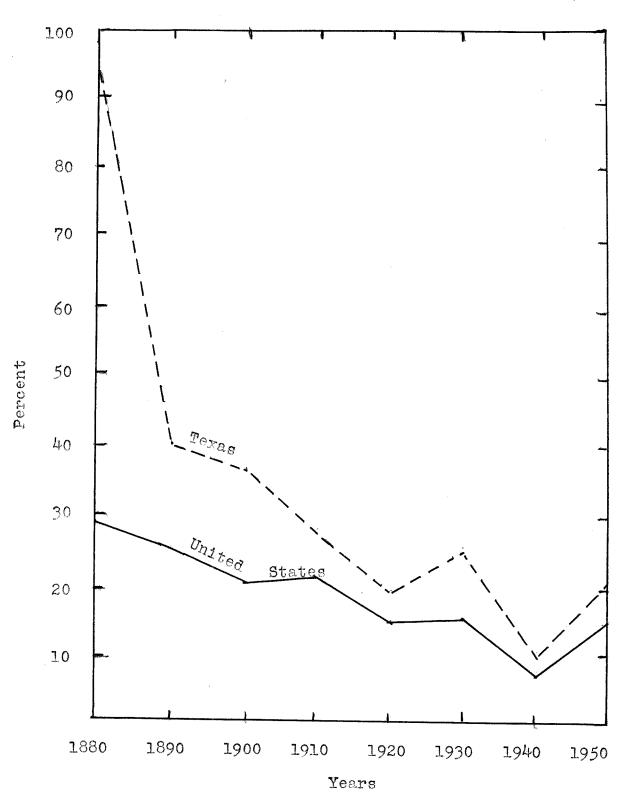


Fig. 1.--Population Growth in Texas and the United States, 1880-1950.

than that of the United States as a whole, but it has also made greater relative increases since 1880. showed a relative percentage increase of 94.4 during the decade ending in 1880, whereas the United States showed a relative percentage increase of only 28.2 for the same period. In 1890 Texas showed a relative increase of 40.4 per cent, and the United States as a whole showed a 26.0 per cent increase. The relative percentages of increase for the state and the nation gradually decreased from decade to decade, showing their lowest relative percentages of increase for the decade 1930-1940. For this decade Texas showed a relative increase of 10.1 per cent, while the United States showed a 7.3 per cent increase. low percentage of increase for the state and the nation was due largely to the adverse effects of the Great Depression of the 1930's. It will be remembered that during this time millions of people were unemployed and on relief. These people were highly mobile, for the most part, traveling widely in search of the then illusive or nonexistent employment. The birth rate fell sharply during this decennium, since unemployment, "relief," and mobility are not jointly or severally conducive to a normal birth rate. It is interesting to note that for the decennium ending in 1950 the relative percentages of increase for the state and the nation were double their respective increases for

the decennium ending in 1940--20.2 per cent for the state and 14.5 for the nation as a whole. This increase can be largely credited to the war-induced prosperity of the 1940's and to reductions in infant mortality.

Texas, like other Southern states, is biracial, and therefore a consideration of the relative growth of its white and nonwhite populations is important. A study of Table 2 and Figure 2 shows that the nonwhite percentage of the Texas population has been steadily decreasing since 1880, dropping from 24.8 to 11.5. However, the nonwhite population is increasing in absolute numbers; the increase in actual numbers was from approximately 395,000 in 1880 to approximately 886,000 in 1950, a percentage increase of approximately 124.0. As shown in the table, the white population increased in absolute numbers from 1,197,000 in 1880 to 6,825,000 in 1950, a percentage increase of almost 470.0. It should be pointed out here that the nonwhite population is largely Negro, since the other races included in the nonwhite category have at no time ever exceeded one-half of one per cent of the total population in Texas. 1 Also the nonwhite population for the United States as a whole is largely Negro, although the percentages differ considerably.

¹ Texas Almanac, 1949-1950, p. 96.

TABLE 2

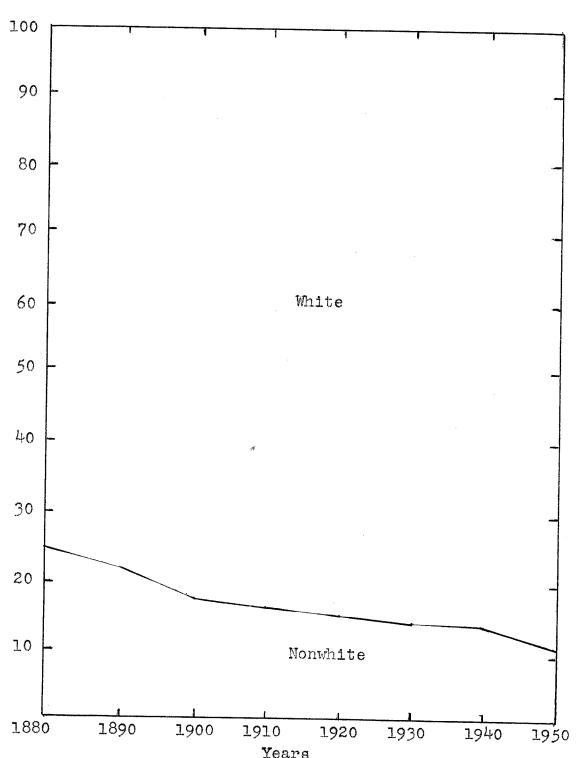
RACIAL COMPOSITION OF TEXAS POPULATION 1940-1950*

Year	R	ace	Percent
	White	Nonwhite	Nonwhite
1880 1890 1900 1910 1920 1930 1940	1,197,237 1,745,935 2,426,669 3,204,848 3,918,165 4,967,172 5,487,545 6,825,000	394,512 489,592 622,041 691,694 745,063 857,543 927,279 886,000	24.8 21.9 20.4 17.8 16.0 14.7 14.5 11.5

*Sources: The Texas Almanac (1949-1950) and the U.S. Bureau of the Census, Series PC-6, No. 10, March 30, 1951.

at the Negro population for Texas in 1880 had increased at the rate maintained by the white population from 1880 to 1950, it would have showed a count of 1,857,000, instead of the 886,000 which it actually showed in 1950. There are several factors which have operated to prevent the maintenance by the Negro population of a rate of increase equal to that of the white population. Chief among these factors have been the following: (1) "Out-migration." Proportionately more Negroes than whites have left the state.

Many of them have been attracted to areas in the North and the Far West where there are wider economic opportunities and greater social acceptance for the Negro; (2) Light



Years
Fig. 2.--Racial Composition of the Texas
population, 1880-1950.

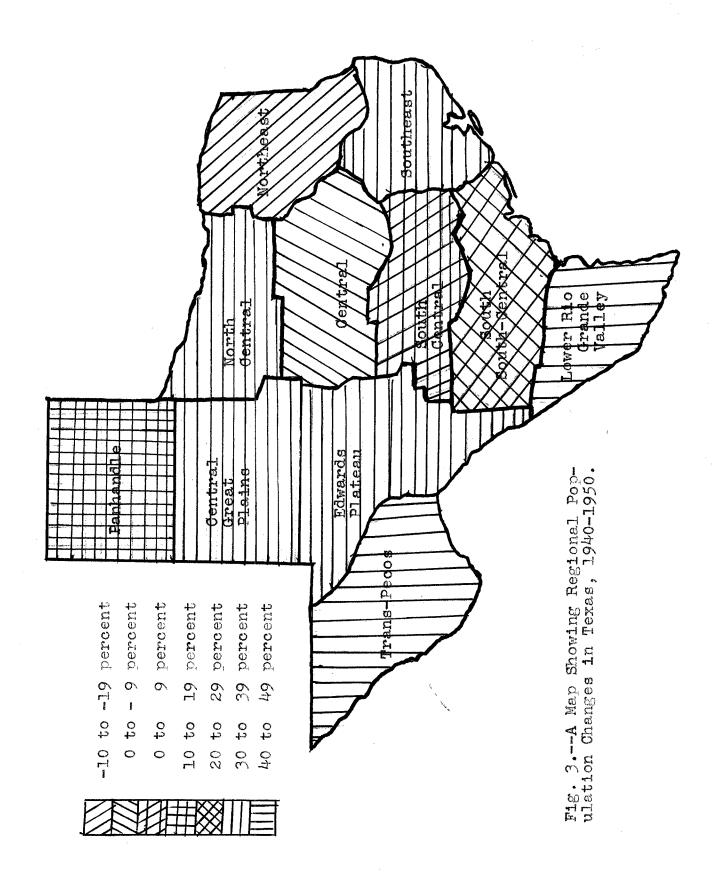
migrants to Texas, while many whites, especially Mexicans, have been added annually to the white segment of the population; (3) High death rate. The death rates for the white and nonwhite were 12.0 and 10.5 per 1,000, respectively, for the United States as a whole in 1945. While figures for Texas are not presently available, it can be safely assumed that the difference in rates equaled, if it did not surpass, that for the nation as a whole. Care must be exercised in interpreting race as a factor in the death rate. One authority has the following to say regarding differences in death rates of whites and nonwhites:

It should not be inferred, however, from these differences in the death rates of the white and the colored populations that these rates are the result of inherent race differences. It is much more likely that they are caused chiefly by the great differences in modes of living of the two racial groups. At least, until the conditions of life in the two groups approximate one another rather closely, the presumption is that differences in death rates arise out of differences in sanitary and medical care and in economic status rather than out of inherent biological differences.

Regional variations in the rate of population growth in Texas between 1940 and 1950 are another aspect of this study of Texas populations. It will be noticed from a

²Maurice R. Davie, <u>Negroes in American Society</u>, p. 237.

 $^{^{3}}$ Ibid., p. 240.



study of Figure 3 and Table 3 that two regions suffered losses in population during the decade ending in 1950, the Central and the Northeast. In absolute numbers they lost, respectively, 60,456 and 109,446. Their respective percentage losses were 8.3 and 11.2. Of the Central Region's twenty-seven counties twenty-two showed losses, and of the Northeast Region's thirty-one counties twenty-seven showed losses. These losses can be explained, largely, by reference to the fact that these regions were, and still are, in a period of transition from farming to dairying and stock raising, both of which require a smaller labor force than does farming. Many of the people who once lived in these regions have been forced to seek a means of livelihood elsewhere. They have gone to such industrial centers as Fort Worth, Dallas, and Houston.

The lowest regional increase in population during the decennium ending in 1950 was the South Central's 6.2 per cent. This South Central Region, like the Northest and Central regions, is an area where ranching is the major industry. It is not to be inferred, however, that there is no farming in the region. Quite the contrary is the case, as farming is important in certain areas, especially in eastern parts of the region.

TABLE 3

GROWTH OF TEXAS POPULATION BY REGIONS, 1940-1950*

cos e Great Plateau ntral ntral uth-	245,480 278,659 480,131 244,825 1,466,595 665,926	70,750 41,461 109,758 59,242	18.0		
a a u		70,750 41,461 109,758 59,242	18.0	•	
au nde		41,461 109,758 59,242 367,385	18.0	9	CV ·
au nde	7(1,00	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		∞	Φ
au		• • • • • • • • • • • • • • • • • • •	30.0	u	٧.
nde	ц Д	67,3	35.0	10-) V
tral th- Grande		1	33.3	- - 1	<u>_</u>
tral th- Grande		60.1	ω, ω,	10	10
th- Grande	`	30,240	6.2	0	0
Grande	,		e e e e e e e e e e e e e e e e e e e		
Grande	916,477	190,435	26.2	m	_
				1	•
	624,942	199,887	47.0		~ -1
Northeast 979,772	870,326	- 109,446	-11.2		
Southeast 1,084,668	1,446,862	362,194	33.4	2	~
		•	•		\
ଷଷ	,				
Whole 6,414,848	7,677,832	1,262,984	19.7		

The Panhandle Region ranked second lowest in percentage increase in population among the nine regions which showed gains during the past decennium. The region's 18.0 per cent gain in population can be accounted for by the huge production of oil and gas, cotton, wheat, small grains, and cattle. Industries associated with these activities are also found in the region.

Looking again at Figure 3, one sees that the TransPecos Region and the Lower Rio Grande Region showed the
greatest gain in population for the decade under consideration. The Trans-Pecos Region owes much of its growth to
increased mining and smelting activities, to increased
farming activities made possible by the extension of
irrigation facilities, and to military camps and hospitals
located there. The Rio Grande Valley Region owes its growth
largely to the production of citrus fruits, winter vegetables,
cattle, cotton, and oil and gas. The unusually long growing
season and extensive irrigation facilities have made the
Rio Grande Valley one of the leading intensive farming areas
in the world.

The remaining five regions of Texas had population increases ranging from 26.2 per cent to 33.4 per cent.

These regions in the order of their percentage gain are:

the Southeast with 33.4; the North Central, 33.3; the Edwards Plateau, 32.0; the Central Great Plains, 30.0; and the South-Central, 26.2. The Edwards Plateau's increase is due largely to the tremendous gain in oil production in areas near the cities of Odessa, Monahans, Kermit, and Midland. The great influx of people into these oil areas was sufficient to give the whole region an overall increase much beyond what normally might be expected. rough terrain which prevails throughout most of this region and the light rainfall, which ranges well below twenty inches, are not factors conducive to great population densities and large urban centers. It is an area given over mostly to sheep and goat ranching, being one of the major sections in the world for the production of these animals. In this arid and semiarid region many acres are needed for pasture for even a few sheep or goats, and only a small labor force is required, much of which is seasonal.

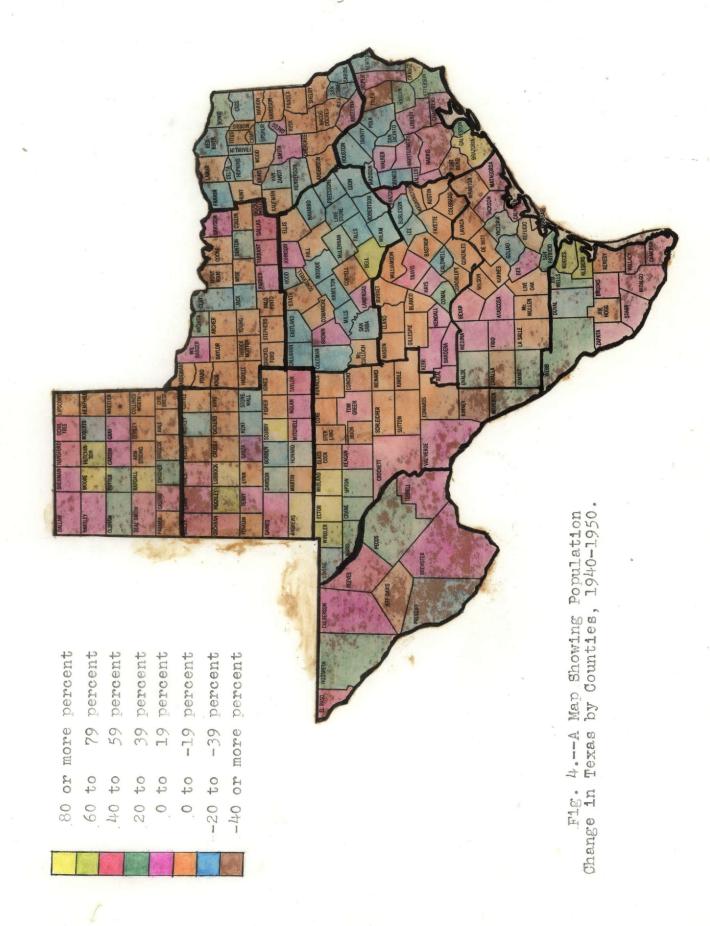
The South South-Central Region owes its population increase for the past decade to the intensive farming found in the "Winter Garden" area near Crystal City, to the industrial and shipping development of its coastal area near Corpus Christi, and to San Antonio's remarkable growth. The latter city's 153,000 increase accounts for about three-fourths of the entire region's gain of 190,000

people. The reasons for San Antonio's growth will be discussed in a later chapter dealing with regional patterns of urbanization.

The 30 per cent population increase for the Central Great Plains during the past decade can be ascribed to the development of such minerals as potash and oil, to increased farming resulting from the development of deepwell irrigation projects, and to the development of allied industries.

The North Central Region's 33.3 per cent increase in population for the decennium is largely accounted for by the outstanding growth of its two leading cities, Dallas and Fort Worth. These two cities alone account for almost two-thirds of the increase for the entire region. Likewise, Houston, Beaumont, and Port Arthur account for a large portion of the regional increase in the Southeast area.

Out of a total of two hundred fifty-four Texas counties, one hundred forty-six showed a population loss for the decennial period ending in 1950. These losses reflect the high degree of mobility which characterizes the Texas population today. This movement of people is toward the industrial, urban centers and away from the mechanized farming areas and areas in transition from farming to dairying and ranching (Fig. 4).



The Texas population is growing, but basically it is the growth of the urban population which is responsible for the overall growth in population. It is for this reason that the remainder of this thesis is devoted to an analysis of patterns and of trends in urban growth in the state.

CHAPTER III

THE URBANIZATION TREND IN TEXAS SINCE 1880

In 1880 less than 10 per cent of the population of Texas was urban, whereas almost 91 per cent of the total was rural. Even as late as 1920 less than one-third of the total population was urban. This situation was to be expected, since the Texas economy was preponderantly agricultural. By 1940 the urban population had reached 45.4 per cent of the total population, and by 1950, 62.7 per cent. As urbanization has increased there has been, of course, a corresponding decline in rural population (Fig. 5).

Both the impact of World War I and the prosperity of the 1920's are clearly discernible in the trend of urbanization, as is the effect of the Great Depression of the 1930's. During World War I people moved to the cities to work in the war plants and stayed on through the 1920's to produce consumer goods, for which there was a tremendous demand. With the coming of the depression late in 1929 a great number of factories closed entirely or operated on a part-time basis. As a consequence millions

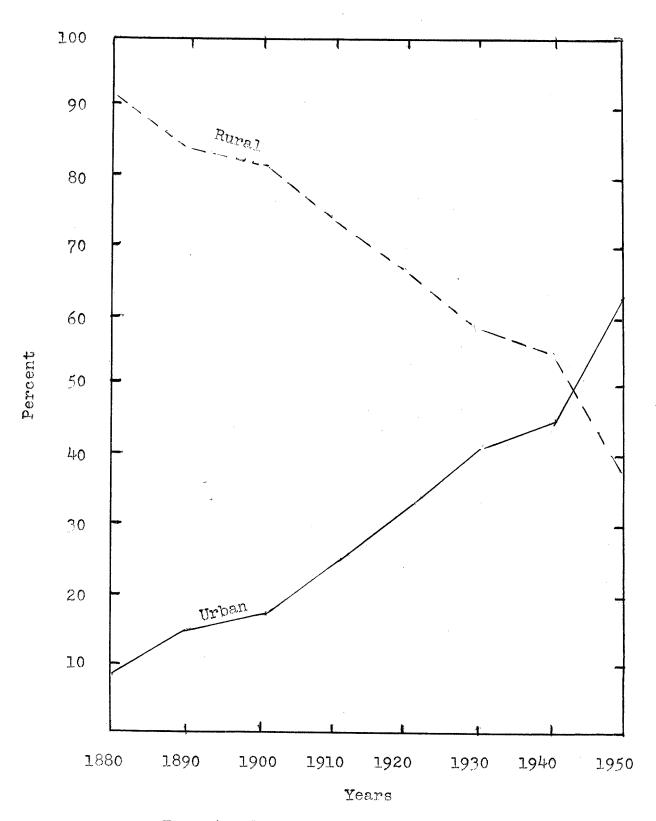


Fig. 5.—Percentage of Texas Population in Urban and Rural Areas, 1880-1950.

of people were idle and an exodus from the cities was stimulated. Although the urban population increased slightly during this period, the rate of urban growth was lower than at any time since 1900.

The steepest climb of the urban trend line was made during the decade ending with 1950. This decade includes the "Arsenal of Democracy" era and the period of stupendous and unprecedented industrial production for World War II. It is also to be noted in Figure 5 that the urban line crossed the rural line during this decade, indicating that urban population exceeded the rural population for the first time in Texas history. As noted above, the percentage of the total population which had become urban by 1950 was 62.7. This means, of course, that only slightly over one-third of the population of the state remained in rural areas.

The total Texas population for 1880 was approximately 1,592,000 persons, of whom only 147,000 lived in urban areas, (Fig. 6). By 1890 the total population had increased to almost 2,236,000, of whom just under 350,000 were urban. The total for the state in 1900 was almost 3,049,000, of whom 521,000 were urban. The census for 1910 revealed a total state population of approximately 3,900,000 persons, of whom 940,000 were classed as urban by the Bureau of the Census. The population count in 1920 gave the state a total

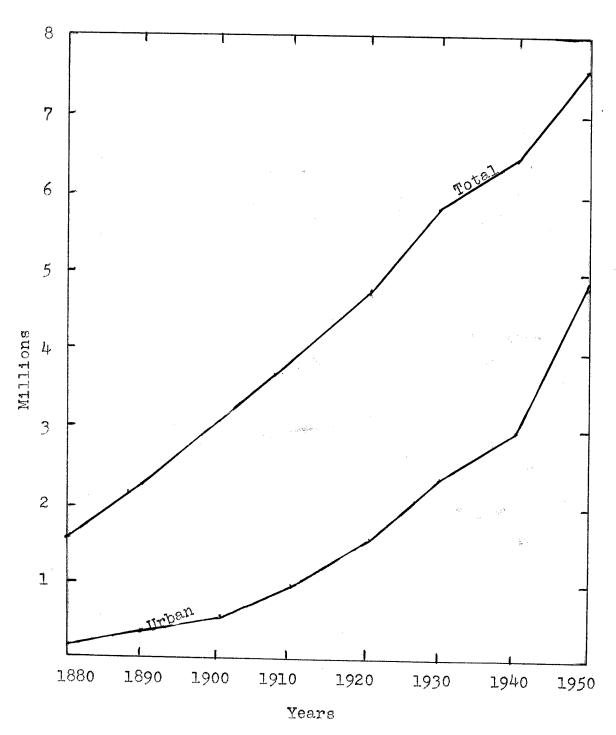


Fig. 6.—Growth of Total and Urban $^{\rm P}$ opulation in Texas, 1880-1950.

of 4,660,000, of which 1,513,000 lived in urban areas. By 1930 there were 2,390,000 urban dwellers out of a total population of 5,825,000. The census of 1940 showed a figure for the state of 6,415,000, of whom 2,911,000 were urban. The most recent census report (1950) revealed a state total of 7,711,000, of whom 4,834,000 were urban dwellers.

A study of the above data and Figure 6 shows the urban trend line inclining ever more sharply upward except during the 1930's (Great Depression). While it has risen steadily from 9.2 per cent in 1880 to 62.7 in 1950, the urbanization of the population can hardly be expected to reach 100 per cent, since that would mean total urbanization. It is probable, however, that another two decades will find at least three-fourths of the Texas population living in cities.

It must be remembered that the Industrial Revolution and the Agrarian Revolution are actually still in process and that the forces set in motion by them are still operative in urbanizing the population. A constantly increasing and improving industrialization acts as an attractive force drawing people to the cities, while an ever increasing mechanization of farming acts as a compulsive force pushing people off the farms. More and more people are needed in industry, and fewer and fewer are needed for farming.

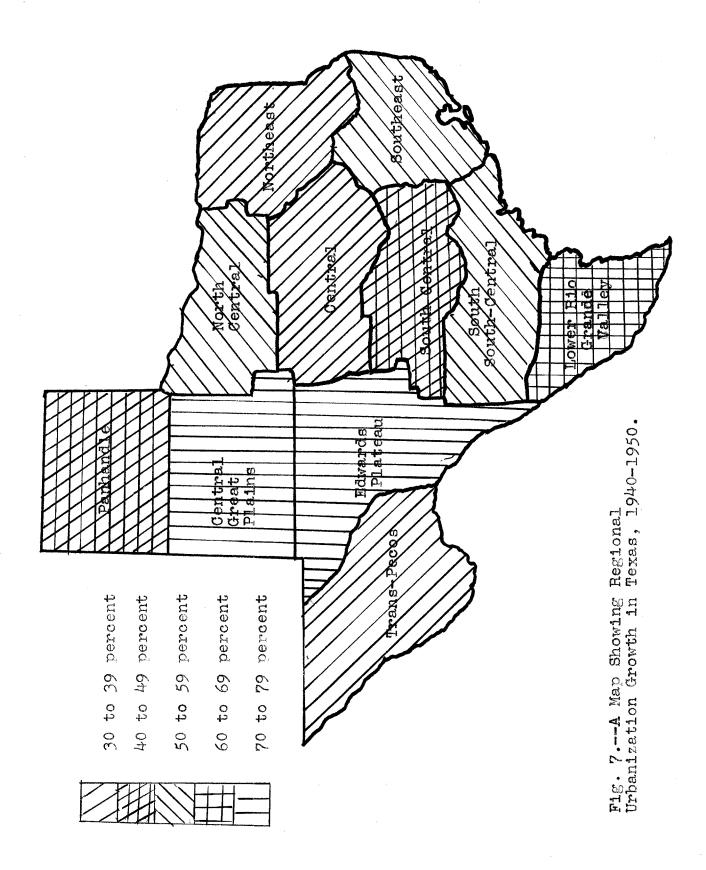
CHAPTER IV

REGIONAL TRENDS IN URBANIZATION IN TEXAS, 1940-1950

In this chapter of the present study the regional aspects of urbanization will be examined. As an aid in the matter of examining the demographic aspects of urbanization, the state has been divided into the regional areas indicated in Figure 7. These regional divisions have been made for the purpose of determining whether differences exist in rates of urbanization in various sections of the state. Geographic factors largely determined the locations and boundaries of these various regions.

There are eleven of these regional areas, as can be seen by consulting Figure 7: the Trans-Pecos, the Panhandle, the Central Great Plains, the Edwards Plateau, the North Central, the Central, the South Central, the South South-Central, the Lower Rio Grande Valley, the Northeast, and the Southeast. Some of these regional names were arbitrarily chosen, but as far as possible names in common use were selected.

The various shadings used in Figure 7 show the relative percentage of urban increase for these regions from 1940 to 1950. A region was shaded according to the percentage



bracket into which it fell. The grouping used was as follows: 30 to 39 per cent, 40 to 49 per cent, 50 to 59 per cent, 60 to 69 per cent, and 70 to 79 per cent.

One can see at a glance that there are three regions which fall within the lowest bracket, the Trans-Pecos, the Central, and the Northeast. In the next lowest bracket there are two regions, the Panhandle and the South Central. In the 50-59 percent bracket there are three regions: the Southeast, the South South-Central, and the North Central. The Lower Rio Grande Valley is the only one in the 60-69 per cent bracket. The two regions in the highest bracket are the Central Great Plains and the Edwards Plateau. The exact percentage increases for these various regional areas are shown in Table 15. These percentage differences will be treated in later pages of this thesis.

The urban population of the Trans-Pecos Region (Table 4) increased 36.8 per cent during the decade 1940-1950. This is considerably below the percentage increase of 51.1 for the state as a whole. By reference to Table 15 one can determine the median percentage gain among the cities of this region to be 36.0. This compares favorably with the state's median of 38.4 per cent (Table 15). The median numerical increase for the cities in this region is 3,178, which is more than double the state's 1,450.

TABLE 4
URBANIZATION IN THE TRANS-PECOS REGION, 1940-1950*

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
El Paso Pecos Alpine	96,810 4,855 3,866	130,003 8,054 5,256	34.0 36.0 0.0	V0.1	33,193	100
Fabens Marfa Fort Stockton Ysleta	2,805,400 2,805,400 4,005,400 4,000	44.50 44.50 74.50 74.50	4- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6- 6-	- W ケ- バン L-1	1,120	1/0 K-IV-
Totals	116,330	159,223			n n	:
Regional Percentage Increase:			36•8			
Source:	U. S. Bureau	of the Census.	Series	PG-3. No. 8 R	8 Rev. (January 11, 1051)	וואסר רר

One city in the Trans-Pecos Region showed a loss in population for the decade emding in 1950. Marfa had a loss of 5.5 per cent. Ysleta, in 1940 the smallest city in the region (Table 4), had a percentage increase of 198.6; El Paso, the largest city in the region, had a percentage increase of 34.3.

Conditions in the Trans-Pecos Region are not favorable to great population densities nor to the development of large urban centers. Arid and semiarid conditions prevail throughout the region, and farming is carried on only where irrigation has been developed or where "dry farming" is practiced. Most of the region is given over to the raising of cattle, sheep, and goats. Grass is so scarce that even one goat requires many acres for grazing. Ranching of any type requires the work of only a few people and the services of only a few cities.

One might ask how, under these adverse conditions, a city the size of El Paso (130,000) developed. This city's growth has been due to a number of factors: the momentum of an early start (1827); its location at a mountain pass; its being port of entry into Mexico, a crossroads of north-south and east-west transcontinental highways and rail lines, and a center of huge irrigation district as well as vast mining and smelting activities. In addition to all these causes for growth, El Paso is also famous as a health resort and as a tourist, educational, and military center.

The urban population of the Panhandle Region increased by 41.1 per cent during the 1940-1950 decade (Table 5). This was 10 per cent below the state's increase of 51.1 (Table 15). The median per cent of increase (28.8) was almost 10 per cent below the state's 38.4, and the numerical median increase of 1,217 is 10 per cent below the state's 1,450. These differences may be accounted for by the fact that industrialization and urbanization have only recently begun in the Panhandle. In fact, settlement itself came much later for the Panhandle than for the regions in the eastern half of the state. This is no less true of other regions lying west of the one-hundredth meridian. The movement of settlers has been east to west since the days of Jamestown and Plymouth. So it was with Texas, the eastern part being settled much earlier than the western part.

The Panhandle has three fairly large cities, as Texas cities go: Amarillo, with approximately 74,000 inhabitants; Borger, with approximately 18,000; and Pampa, with approximately 16,000. The growth of these cities may be explained by the fact that there are certain resources in the Panhandle which tend to offset the disadvantages of a late start. The area is rich in oil, natural gas, helium, potash, and fine soils which lend themselves to the production of huge crops of wheat, grain sorghums, and cottom. Great herds of Hereford cattle are a common sight in the Panhandle area.

TABLE 5 URBANIZATION IN THE PANHANDLE REGION, 1940-1950*

City	1940	1950	Percent	Percent.	Vimentogl	Loopannin
			Change	Rank	Change	Rank
Canadian	2,151	2,671		O.E.	500	רר
Clarendon	2,431	2,572		i	2/1	1=
Dumas	2,117	6,108			3.991	†~
Perryton	2,325	4,399	•	8	2,074	10
Tulla	7,027 7,027	3, 107		Οì	1,112	10
Childress	770,7	7.87 7.87	V.V.	ν۲	1,727	~
Dalhart	4,682	5,899		10	710.1	λα
Hereford	2,984	1, 808		\m	2,221	o tr
Memphis	3,829	3,803		17.	99	ر ابر
Shamrock	3,123	3,326	-	13,	203	\ ~
Wellington	3,308	3,069		12	361	12
Borger	10,118	5	_		7,931	1 -
Amarillo	51,686	73,737			22,051	コ
Pampa	12,895	Ō.	_	•	3,627	-~
Phillips	4,250	7,096	_		- 154	16
F	000 25					
Torals	000.11	Tot, 002			78,082	
Regional					es de manda	
Percentage					-	
Increase:			41.1			

U. S. Bureau of the Census, Series PC-3, No. 8 Rev. (January 11, 1951) *Source:

Inspection and interpolation show that the median percentage of increase for the Central Great Plains Region (Table 6) was 53.5 and that the median of numerical growth was 1,935. The percentage of urban growth (77.6) for the region as a whole was considerably above the state's 51.1 (Table 15). The fact that the Central Great Plains Region is considerably ahead of the state's urban increase while the Panhandle is considerably below it may be explained by the more rapid development of the natural resources of oil, potash, and soil. A milder climate also favors the Central Great Plains area.

In this region most rapid urbanization was found in Andrews, which had only 611 people in 1940 but 2,698 in 1950, an increase of 441.6 per cent. Lubbock, another fast-growing city in this region, had a numerical increase of more than 39,000, or 124.1 per cent, among the highest for the larger cities of the state. Abilene increased by more than 20,000, or 77.0 per cent. Lamesa, Plainview, Snyder, Big Spring, and Sweetwater also experienced large increases during the 1940-1950 decennium. These cities have large farming and ranching areas on which to draw, as well as oil and other mineral resources in generous amounts. They have industries which are related to the above activities, such as oil refining and oil supply companies; and meat, hide, and grain processing plants.

TABLE 6

URBANIZATION IN THE CENTRAL GREAT PLAINS REGION, 1940-1950*

The median per cent of urban gain for the Edwards Plateau Region was 19.6, and the median numerical growth was 848 (Table 7). These increases are only slightly more than one-half those for the state. However, the percentage of urban increase for the region as a whole, 79.3, is considerably above the state's 51.1 (Table 15). The region's generally adverse conditions, such as rugged terrain and semiaridity, explain the low median, but the discovery of oil in areas around such towns as Kermit, McCamey, Midland, Monahans, and Odessa has meant a rapid growth for them, so rapid and large as to raise the percentage increase for the region above that for the state.

As stated above, conditions in the Edwards Plateau Region are not generally conducive to great population densities nor to the development of large urban centers. This is an area of arid to semiarid climate and rugged terrain suitable, for the most part, for the raising of cattle, sheep, and goats. Ranching of any type requires few people and few cities. In this connection, it might be pointed out that in all this vast region, embracing twenty-four counties, there are only thirteen areas which were classed as urban in 1950, and four of these have fewer than 3,000 people each.

In the North Central Region (Table 8) the percentage of urban growth amounted to 33.6 and the median numerical

URBANIZATION IN THE EDWARDS PLATEAU REGION, 1940-1950* TABLE 7

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Menard Ballinger	2,375	2,674 5,293	12.6 18.4	10	299 821	12
Eagle Pass Kermit	6,459 2,584	7,227	12.2	117	768	-ω
McCamey Midland	2,595 9,352	3,104	132.6	164	500 500 1001	10°
Monahans Odessa	· · · · · · · · · · · · · · · · · · ·	6,260	200-	<i>)</i>	20,000 0,000	ንኒሳኒር
Sonora Del Dio	, 0, c,	10. 10. 10.	+-+4	12,	107	A W
San Angelo	3,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00	51,889	101.1	7,7	26,047	0 H (
Winters	2,335	2,671	25.0 14.4	00	727 336	911
Totals	87,515	156,893			69,381	
Regional Percentage			7000			
Tirer ease:			٧٠٧)			
*Source:	U. S. Bureau	au of the Census,	Series	PC-3, No. 8	Rev. (January	y 11, 1951)
						•

increase was 1,782. The percentage of urban increase for the region as a whole was 51.4. These figures compare favorably with the state's corresponding 38.4 per cent, 1,450, and 51.1 per cent.

Percentage changes in urbanization range all the way from a loss of 11.7 (Electra) to an increase of 1,460.0 (Eagle Ford). This large percentage increase for Eagle Ford can be accounted for by the tremendous influx of people into the Dallas-Fort Worth area to work in the war plants and by their staying on to produce peacetime consumer goods. It is largely residential. Electra's loss can be explained by the drying up of the oil wells which put Electra "on the map" in the first place.

It is interesting to note that this region has two of the seven Texas cities which had populations of 100,000 or more in 1950, Dallas and Fort Worth. In 1950 the former city had 433,000 persons and the latter, 277,000. These two cities alone have more people than all the other cities (34) in the region combined.

The North Central Region contains some of the state's best farming and grazing lands. The rolling plains in the Wichita Falls area have long been known for their Hereford cattle and small-grains fields. The "Black Waxy" area ranks with the world's best farming lands. The area west of Fort Worth is a noted cattle and grain section.

TABLE 8

URBANIZATION IN THE NORTH CENTRAL REGION, 1940-1950*

AND THE PROPERTY OF THE PROPER						
City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Garland Henrietta Irving Jacksboro Lancaster Bowie Breckenridge Burkburnett Decatur Electra Gainesville Graham Haskell McKinney Mineral Wells Nocona Olney Quanah River Oaks Seymour Vernon Weatherford White		10,000 10,000 10,000 10,000 11	- 6 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	2 11222 22 22 22 22 22 22 22 22 22 22 22
	1			<u> </u>	70,	_

TABLE 8---Continued

There are a number of factors which help to account for the impressive growth of Dallas and Fort Worth. These cities have had the advantage of an early start; they are located in one of the richest agricultural sections in the world; and they became rail centers very early.

Dallas is the state's second largest city, having many large financial institutions, wholesale and retail businesses, and light industries. Dallas is one of the most important cotton markets of the South, and it has benefited from the location at nearby Grand Prairie of one of the nation's largest aircraft plants. It is in the geographic center of midcontinent oil and gas fields and serves as headquarters for major oil companies and oil well machinery concerns. Dallas is a distributing point for farm machinery and equipment. Manufacturing industries produce cotton gin machinery, wearing apparel, machine shop products, automobiles, textiles, furniture, cement, foods, leather goods and saddles, cotton- ' seed products, bakery goods, flour, bottled drinks, roofing materials, paints, electric appliances, and kitchen utensils. Further, Dallas is an important air, rail and motor transportation center. 1 Many national concerns have branch offices and branch stores in the city of Dallas.

¹ Texas Almanac, 1949-1950, p. 517.

Fort Worth is the fourth largest city in Texas. It was founded in 1848, but most of its growth has been in relatively recent years. Fort Worth has one of the largest aircraft plants in the United States and several smaller ones. Other industries include meat packing, flour milling, cottonseed processing, garment making, candy making, food processing, furniture making, boot and shoe manufacturing, oil refining, soap making, cement making, bottling of soft drinks, woodworking, and paper bag and box making. Fort Worth is the principal meat packing and flour milling city of Texas, and it is an outstanding national grain and livestock market.²

In the Central Texas Region (Table 9) the median percentage increase in urban growth was 18.4 and the median numerical increase was 623. In each case this was about half what they were for the state as a whole (Table 15). The percentage of urban growth for the region as a whole was 33.8. This was about 17 per cent below the state's 51.1 per cent. The comparatively low increase in this region was due largely to the fact that it is in transition from a farming section to a ranching section and is consequently losing farm population and service centers. In this region of twenty-seven counties there were only twenty-nine areas classed as urban in 1950. Only three of these cities showed a population of 20,000

²<u>Ibid.</u>, p. 591.

TABLE 9
URBANIZATION IN THE CENTRAL REGION, 1940-1950*

	STATE OF THE PERSON NAMED IN THE PERSON NAMED		Sent through the state of the sent terms and ter			
C1 ty	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Calvert Killeen McGregor Brady	2,366 2,263 5,062 002	2,561 7,110 2,664 5,923	8.2 469.9 29.2 18.4	101 101 17	195 5,847 602 921	25425 27464
Cameron Cisco	7, 040 868 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9	222	W	22. 22.	187	55 55 57 57 57 57 57 57 57 57 57 57 57 5
Joreman Jommanche Joublin	3,209 2,5146	7.65	19.4 7.9	24Z	459 823 803	572 572 572
Rastland Annis	3,849 7,087	% च	10.3	27 18	- 243 730	27.
gatesville Hamilton	3,177	<u>taa</u>	13.4	133	671 364	77.5
learne Hillsboro	3,511	~10	36.1	5 8	1,267	11
Lampasas	3,426	4,872	12.2	· C	1.[丘6]	10

TABLE 9---Continued

city	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Marlin Mexia Ranger San Saba Stephenville Teague Waxachachie Brownwood Cleburne Corsicana Temple Waco	7,4,4,4,6,6,7,7,7,6,6,7,7,7,7,7,7,7,7,7,	25,006 20	なるのではないません。	4882088 7211 w4a	2899,200,200,200,200,200,200,200,200,200,2	2789087-4070410
Totals	215,070	287,892			72,819	
Regional Percentage Increase:			33.8	,		

*Source; U. S. Bureau of the Census, Series PC-3, No. 8 Rev. (January 11, 1951)

or more in 1950, while fifteen of them showed less than 6,000 people each. Three cities showed a loss: Ranger, 13.2; Teague, 7.9; and Eastland, 6.3. Ranger and Eastland are former oil-boom towns whose oil is becoming depleted and whose people of necessity are moving elsewhere. Teague is in an area where people are shifting from farming to cattle raising, and thus farm population is diminishing and service centers are becoming smaller.

Waco, the "big city" of the Central Region, showed remarkable growth during this ten-year period. Its percentage increase was 50.6 and its numerical gain was 28,318.

Waco benefited tremendously from the "war effort," and it is the site of a large Veterans' Hospital and the venerable Baylor University. Waco has lumber and textile mills and is a trading and shopping center for a large area in central Texas. It is surrounded by one of the best farming and ranching sections in the entire state.

The median per cent of increase for the South Central Region was 24.9; the numerical median, 1,024; and the regional per cent of gain was 45.1 (Table 10). The medians for this region are about two-thirds as large as the medians for the state as a whole, while the regional percentage of increase is slightly under the state's 51.1. The low degree of urbanization in this region is primarily due to its being largely a grazing section.

TABLE 10

URBANIZATION IN THE SOUTH CENTRAL REGION, 1940-1950*

Gity	0†/61	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Bastrop College Station Columbus Eagle Lake Elgin Giddings Brenham Fredericksburg George town Gonzales Kerrville La Grange Llano Lockhart Luling New Braunfels San Marcos Sequin Smithville Taylor Bryan Austin Totals Regional Percentage Increase: *Source: U	179, 1490 179, 1437 179, 1437 179, 1437 179, 1437 179, 1490 179, 1490 179, 1490	261,211 261,211 261,211 261,211 261,211 261,211 261,211 261,211 261,211	j .	1. No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
)	1	7 207 100 6	O • O × • C	٠ •	・インン

There was one city in the South Central Region which lost population during the 1940-1950 decade, Luling. However, the loss was small, being only 3.2 per cent, or a mere 152 numerically. Luling is another oil town whose oil wells are showing signs of depletion. Out of the twenty-two towns in this region there were only three with more than 10,000 persons: New Braunfels, with 12,195; Bryan, 17,949; and Austin, 131,964. Thirteen of the twenty-two cities in this region had less than 5,000 persons each in 1950. It is interesting to note that there are twenty-four counties in this area, but only twenty-two centers classed as urban. This means that at least two counties had no trading centers large enough to be classed as urban.

With the possible exception of New Braunfels, the larger cities in this region owe much of their growth to the fact that they are educational or political centers. Austin, the "big city" of this region, is both an educational and political center. New Braunfels's 74.8 per cent increase can be explained by the fact that there are textile mills, hosiery mills, garment factories, and many other industries located there. The region furnishes the raw materials, the labor, and, in some part, the markets for these industries.

In the South-Central Region (Table 11) the median percentage of increase was 39.2, while the median

TABLE 11

URBANIZATION IN THE SOUTH SOUTH-CENTRAL REGION, 1940-1950*

C1ty	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Carrizo Springs Karnes City Mathis Olmos Park Palacios Pleasanton Port Lavaca Terrell Hills Aransas Pass Bay City Beeville Cotulla Crystal City Cuero	27.03.95.00.00.00.00.00.00.00.00.00.00.00.00.00		さいないないないないでは、大人のないないないないないないないないないないないないないないないないないないない	17.00 15.00	4,000 0 1,000 1,000 0,00	18822222222222222222222222222222222222

TABLE 11---Continued

City	07/61	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
で の な な の し	900 6	7:0 7	1			
Hondo	3,200	0,410		<u>, or</u>	•	0 6
Kenedy	100	4,177	 元	10	1,286	- I'd
rearsall Refugio	3,104	4,401 1,680		2 	•	
Sinton	3,770	1,270		2.5		52
Uvalde Wharton	0,079	\$ 050 1.70		20	1,980	10
Yoakum	4,733	7,225		27	1,92	~~ ~~
Victoria	11,566	16,102		- J.V.	•	-62
San Antonio	253,854	400,811	-	04	152,957	HO
Yorktown	2,081	2,500		5 Z Z	ハ シ ナ ブ	2 K
Totals	364,135	557,123			193,088	
Regional						
rercentage Increase:			53.0			
					-	
*Source	U. S. Bureau	of the Census,	s, Series PC-3,	No. 8	Rev. (January	11, 1951)

numerical gain was 1,286. This compares favorably with the state's median percentage gain of 38.4 and numerical median gain of 1,450. The percentage gain in urban population for the region as a whole was 53.0, which is very close to the state's 51.1 per cent (Table 15).

The cities in the South South-Central Region varied in per cent of increase in population from a low of 1.6 (Wharton) to a high of 144.7 (Port Lavaca). The least gain in population was Wharton's 70 and the largest was San Antonio's 153,000. Wharton's small increase can perhaps be explained by the fact that the area which this city services is shifting from farming to dairying and ranching, which require a smaller labor force. San Antonio, the third largest city in the state, owes its growth to the fact that it is the center of a large trading and shipping area. In addition several army camps and aviation schools are located there. Among the city's industries are garment factories, meat packing plants, furniture factories, metal working plants, pecan shelling plants, railroad shops, plasticizing plants, and Mexican-food processing plants.

The South South-Central Region is an area of small urban centers. From San Antonio's high of 407,000 there is a drop of 391,000 to Victoria's 16,000, which is the

³Ibid., p. 499.

second highest. All the other cities of the twenty-nine in the region range in size from Bay City's 9,518 down to Karnes City's 2,584, twenty of them having populations of less than 6,000. This situation is due to the fact that the region is largely a cattle, sheep, and goat raising area. However, some sections are noted for their intensive farming and high farm production. The "Winter Garden" section is a good example of this. However, except for the possibility of boom conditions following the discovery of oil or other minerals, there is not likely to be any large urban growth in this region. The farming mentioned above is the type requiring only seasonal employment of large numbers of workers, who are drawn from a migrant population rather than from the permanent population.

In the Lower Rio Grande Valley Region (Table 12) the median per cent of urban increase was 64.0, which was almost 26 per cent above the state's 38.4. The median numerical gain was 2,314, which was 864 above the state's 1,450. The regional per cent of urban growth was 66.9, while that for the state was 51.1.

The percentage change by city for this region ranges from a loss of 2.3 to the tremendous gain of 31,884.0. Benavides lost seventy-two persons during the ten years ending in 1950; San Pedro, the town with the greatest percentage gain, grew from a lowly twenty-five to a sizeable

TABLE 12

URBANIZATION IN THE LOWER RIO GRANDE VALLEY REGION, 1940-1950*

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Alamo Bishop Edcouch Elsa La Feria Premont San Juan Alice Donna Edinburg Falfurrias Hebbronville Kingsville	1,944 1,329 1,329 1,066 1,738 1,712 1,500 1,500 1,624 1,624	2,026 2,026 2,732 1,026 1,026 1,026 1,055	7,000 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5	56-491410004380000	10000000000000000000000000000000000000	%445%8%%45%8%%5
Pharr	1,784	ώ		0		2 -

TABLE 12---Continued

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
E 02	4,050 2,500 6,780	0,0,0		18 29	5,085 1,182 1,68	9,00
San Benito San Diego San Pedro	2,501 2,674 2,574			21 777	3,763 1,720 7,971	0857 117
Weslaco Harlingen McAllen	6,883 11,877	23,202 20,002	8 4 4 4 8 9	28 12 13 13	604 9,896 8,128	28 7 7
Laredo Corpus Christi Brownsville	39,274 22,301 22,083	⊣တ်လ်		27 8 16	12,420 50,752 12,093	MH (V
Benavides Ramona	3,081			30	1,070	30
Totals	246,982	412,416			165,434	
Regional Percentage Increase:	******************************		6•99			
*Source: U	J. S. Bureau	of the Census,	Series	PC-3, No. 8 R	Rev. (January 11,	11, 1951)

7,487. This growth resulted largely from oil development in the area. 4 This is a typical boom situation which follows the discovery of oil and causes mushroom growth, making roaring cities out of slumbering villages.

Out of the thirty cities listed as urban for the Lower Rio Grande Valley Region, seven showed increases of more than 100 per cent for the 1940-1950 decade, and four-teen others showed increases of more than fifty per cent. An additional six showed increases above thirty per cent. This indicates a uniformly high urban rate of growth throughout the region and helps to explain the region's overall urban increase of 66.9 per cent.

This region has long been referred to as the "garden spot" of Texas. It is a region of contrasts, with large-scale cattle raising and modernized, intensive agricultural production being found side by side. The great King Ranch is just across the fence from the citrus groves and winter truck farms in the Lower Rio Grande Valley. Fronting Mexico on one side and the sea on another, the region has its economy sustained in material degree by international commerce.5

Corpus Christi, with a population of 108,000 in 1950, is the largest city in this region. Since 1920 this city

^{4&}lt;u>Ibid.</u>, p. 607.

^{5&}lt;u>Ibid</u>., p. 155.

has more than doubled in population during each decennial period except for the one ending in 1950, during which the increase was 88.6 per cent. This is one of the best records of growth among Texas cities or among American cities generally, for that matter. Corpus Christi is an industrial, shipping, and recreational center. Some of the largest of the new chemical industries have been established in and around this city. It has a deep-water harbor and connects with the Intracoastal Canal. It has excellent beaches, boating and fishing facilities, excellent hotels, highly rated schools, and beautiful churches. Among the many industries are such important ones as oil refineries, an alkali plant, food processing plants, creameries, fertilizer plants, and chemical plants. A Naval Air Training Station, costing \$100,000,000 is also located there.6

The second largest city in this region is Laredo, whose 1950 population was approximately 52,000. This city is the principal border gateway for overland traffic between the United States and Mexico and carries a larger volume of passenger and freight traffic than any other port of entry into Mexico. A wide territory of retail trade is served by Laredo. Laredo industries manufacture hats, bricks, tile, clothing, canned goods, and antimony. There is oil production in the vicinity of Laredo, also.7

^{6&}lt;u>Ibid.</u>, p. 572.

^{7&}lt;sub>Ibid</sub>., p. 601.

Brownsville, with 36,000 population, is the third city in size in the Lower Rio Grande Valley Region. It is a land and sea port of entry, Valley trade and shipping center, deep-water harbor, and international airport. It has brick and tile plants, clothing factories, and food processing plants. Being on the Mexican border gives Brownsville a distinctive international atmosphere.

Before discussion of this region is concluded, it might be well to point out the increasing importance of cotton production in the area. Preliminary reports set the production for 1948 at 383,000 standard sized bales (500 pounds). Many of the citrus groves which were killed by the severe freezes of the 1950-1951 winter have been replaced by cotton fields. It takes five years to bring a citrus grove to production, whereas it takes only five months to receive a return from the planting of cotton.

The median percentage of urban increase for the North-east Region was 20.9, and the numerical median growth was 1,167. The percentage of gain for the region as a whole was 30.0 (Table 13). The respective figures for the state as a whole were 38.4, 1,450 and 51.1 per cent. It can be seen that the region was below the state in all three points

^{8&}lt;u>Ibid</u>., p. 507.

^{9&}lt;u>Ibid.</u>, pp. 217, 220.

TABLE 13

URBANIZATION IN THE NORTHEAST REGION, 1940-1950*

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Atlanta Carthage New Boston San Augustine Athens Bonham Canter Clarksville Commerce Gilmer Gladewater Henderson Jacksonville Jefferson Kaufman Kilgore Lufkin Mineola Mount Pleasant	74.000000000000000000000000000000000000		では、これでは、これでは、これでは、これでは、これできる。 はいい はい	とこののといれた。 ののといれた。 ののといれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 のののなれた。 ののののののののののの。 のののののののののののののののの。 のののののののの	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	4028487828787877

TABLE 13---Continued

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Pittsburg Rusk Sulphur Springs Greevnille Longview Marshall Palestine Paris Terrell Texarkana	*	22122 22222 22222 222222 222222 222222 2222	33 17 20 23 24 1.05 20 20 20 20 20 20 20 20 20 20 20 20 20	%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	241 2,018 3,018 3,022 10,072 10,588	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Totals	236,559	307,583			71,024	
Regional Percentage Increase:			30.0		,	
*Source:	U. S. Bureau	of the Census.	Series	PC-3. No. 8 Re	Rev. (January	11, 1951)

of comparison, and the differences were considerable. haps the major cause underlying these differences is that this area of the state is in process of shifting from a farming economy to one of dairying and ranching. farms remaining are becoming more and more mechanized and thus need a smaller labor force than formerly. However, the hilly terrain of the East Texas area does not lend itself to large scale farming, for the most part, since the fields are comparatively small. It is a well known fact that dairying and ranching do not require as many "hands" as does farming. Especially was this so for the type of farming which prevailed in East Texas, where the "Georgia stock," the "bull-tongue," and the "one gray mule" constituted the operational assets of most of the farmers. Ιt is usually referred to as a "one-horse" system of farming. At any rate, the return on the labor, time, and capital outlay (small as it was) could not support the farmer and his family. Added to this, there were the problems of erosion and insect infestation to harass him further. within the last twenty years have the farmers been persuaded that farming is a poor business in East Texas.

On the other hand, the region is almost ideally suited for dairying and ranching. The climate is not too severe, the fertility of the soil and the ample rainfall insure grass in generous amounts for grazing and for hay, and water

for the cattle is usually no problem at all. Because of mild climate, housing for the cattle is comparatively simple and inexpensive. One wonders why this change from farming to dairying and ranching did not occur much sooner. Traveling through East Texas, one sees many a former farm given over to grass and cattle, with the farm houses standing vacant or stuffed with hay for winter feeding.

It is interesting to contrast the urban situation in the Northeast Region with that in the Rio Grande Region. The latter region had twenty-seven cities out of its total of thirty which showed a population increase of 30 per cent or better during the past decade. The Northeast Region, on the other hand, had only fourteen out of a total of thirty-one cities showing that rate of increase.

The median per cent of growth for cities of the Southeast Region was 73.4, and the numerical median increase was 2,460 (Table 15). The percentage of urban increase for the region as a whole was 55.0 (Table 14). These medians were almost double those of the state (Table 15), while the percentage increase was slightly above that of the state.

The Southeast Region is one of the fastest growing and most highly industrialized sections in the state. This region probably has more of the factors required for industrialization than any other part of the state. It might be well at this point to enumerate some of the elements considered most

TABLE 14

URBANIZATION IN THE SOUTHEAST REGION, 1940-1950*

Numerical Rank	のなったようののではいいののでした。
Numerical Change	1,9,2,9, 9, 9, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Percent Rank	24 - 40 42 25 82 25 82 82 82 82 82 82 82 82 82 82 82 82 82
Percent Change	2001 2001 200 200 200 200 200 200 200 20
1950	いった。 のが、 でいたがいないない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたがいない。 でいたいないない。 でいたいないないない。 でいたいないないないないない。 でいたいないないないないないない。 でいたいないないないないないないないないないないないないないないないないないない
0η6τ	
City	Angleton Bellaire Cleveland Galena Park Lakeview Livingston Port Neches South Houston Alvin Conroe Crockett Huntsville La Porte Liberty Navasota Orange Pasadena Rosenberg

TABLE 14---Continued

C1 ty	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Texas City Port Arthur Beaumont Galveston Houston Dickinson Highland Jacinto City Lake Jackson Lamarque Nederland Red Cut Heights West Orange Baytown Freeport West University Place Totals Regional Percentage	25, 275 23, 200 38, 514 33, 500 33, 500 34, 514 34, 51	16,577 20,577 20,577 20,042,021 20,042,021 20,042,021 20,042,021 20,042,021 20,042,021 20,043,001 20,043,001	188 72 - 8 28 28 28 28 28 28 28 28 28 28 28 28 2	S SULLE WELVER BUT & BUT BE BUT BE BUT	10, 829 34, 654 3, 654 3, 654 3, 656 1, 277 2, 101 1, 276 3, 429 3, 429 3, 429	oralique a gasas a
*Source: U	U. S. Bureau	of the Census	us, Series PC	-3, No. 8	Rev. (January	11, 1951)

conducive to urban and industrial growth: (1) Transportation facilities. A city must have railway or waterway transportation facilities to develop industrially, but the city which has both rail and sea ways has a double advantage. Having both sea and rail transportation implies that the city is located at a "break" in transportation, which in itself is an advantage. (2) Location. The city located at the farthest reach of the navigable sea into the land, at the point where transportation lines cross, or at mountain passes where highways and railways must converge to cross the mountains has a distinct advantage over other cities not so located. Goods bound by sea to interior sections of a country will be taken to that port nearest those sections. Conversely, goods from the interior sections to be shipped by sea will be carried to the nearest port. These facts explain, in large part, why Houston has outstripped Galveston as Texas! leading seaport. hinterland rich in natural resources. The Southeast Region is one of the richest sections in the world in natural resources. Fine timber, an almost inexhaustible water supply, an ideal climate, oil, gas, sulphur, sea water (magnesium), rich soils, ample rainfall, fine pasture lands, gypsum, deep sea ports, and navigable rivers are among the many resources in this region. (4) Availability of markets and raw materials. Cities in the Southeast Region have readily

available all the natural resources mentioned and can readily obtain any other raw materials which might be needed. The industrial products of this region are shipped throughout the United States and to many foreign countries by sea, land, and air. 10

In one decade, 1920-1930, Houston doubled its population and became the largest city in the state as well as one of the busiest seaports in the United States. Exploitation of the rich Gulf oil fields and the completion in 1914 of the Houston Ship Channel to the Gulf of Mexico were the chief factors in the city's growth in population and trade. The ship channel makes it possible for the largest cargo ships and oil tankers to go from Houston's busy wharves to ports in all parts of the world. Houston also has a heavy coastwise trade. Railway lines bring in freight for these ships from Mexico, the Mississippi Valley, and the West, as well as from the rich lands around Houston; and long pipe lines bring to the Houston refineries petroleum from fields as far away as Wyoming.11

Everything is big in Texas, but nothing has been quite as spectacular as the industrial rise of Houston since 1939.

pp. 61-77. Geography for the Businessman,

^{11 &}quot;Houston," Compton's Pictured Encyclopedia, Vol. 6, p. 346, 1947 ed.

But this rise has been no accident. Farsighted leaders in Houston had great dreams for the "Bayou City," and they took a big step in making those dreams come true when they planned and dug the Houston Ship Channel, fifty-eight miles long, thirty-four feet deep (minimum), at a cost of \$50,000,000. The city is today one of the major ports in the United States. The Houston oil area of fourteen counties has fifteen refineries with a daily capacity of nearly 600,000 barrels. Eight of these refineries are in Harris County, of which Houston is the county seat. World War II accelerated expansion of oil and chemical plants, with the United States Government investing the colossal sum of \$220,000,000 in hundred-octane gasoline and synthetic rubber plants.

The Houston area produces well over 87 per cent of the Texas rice crop, and a major portion of this rice is milled in Houston. Flour milling is also important there. Great herds of cattle feed in the luxuriant pastures of Gulf Coast areas, giving Houston another thriving industry, meat packing.

Houston and its throbbing industries would be impossible without adequate transportation facilities. Houston has these: the famous Snip Channel, eight major airlines, and many railroads. One KPRC radio announcer, in the course

of his daily work, says repeatedly, "This is Houston, where seventeen railroads meet the sea."12

Beaumont is another rapidly developing industrial and shipping center in the Southeast Region. The city is a major port with large foreign, coastwise, and Intracoastal Canal commerce. It is connected with the Gulf of Mexico by the Sabine-Neches Waterway. Beaumont has oil refineries, chemical plants; and petro-chemical industries; ship building and repairing facilities; rice milling, box and crate factories; iron and steel plants; lumber mills, and mill works.

Port Arthur (57,000) is another important port in this region. The city is located on the Sabine-Neches Waterway and is a major oil refining and shipping center, with foreign and coastwise trade. Cotton, lumber, wheat, and oil are commodities shipped in large quanities. Port Arthur's industries include oil refining, ship building, brass making, barrel making, container manufacturing, carbon making, chemical making, welding, and steel processing. The city is on the Intracoastal Canal, which gives it water connections with Houston and New Orleans. 13

Galveston (66,000), another city in the Southeast Region, is one of the state's leading ports. It had

¹² The World Almanac, 1951, pp. 117-118.

^{13&}lt;sub>Texas</sub> Almanac, 1949-1950, p. 528.

approximately 7,000,000 tons of foreign, coastwise, and internal shipping in 1947. The city has tourist trade attracted annually by fishing, boating, and swimming. Galveston exports cotton, sulphur, grain, flour, metals, sugar, and other products. The city's industries include grain elevators, machine shops, flour mills, cotton compresses, ship yards and dry docks, rice mills, breweries, and food processing plants. The city is the center of one of the nation's largest customs districts.

Now that the regional trends in urbanization for the past decade in Texas have been traced, it is desirable at this point to summarize the findings of this chapter. To facilitate this summarization, Table 15 was prepared. The medians and percentages of increase of the eleven regions set up for this study and for the state as a whole are given in this table. The regions are ranked on the basis of their medians of percentage increase (column 2). Quite obviously then, columns 3 and 4 are not ranked.

A glance at column 2 shows that the Southeast, the Lower Rio Grande Valley, and the Central Great Plains regions, in the order named, hold the first three places. In other words, these three regions had the highest medians of percentage increase. It is interesting to

¹⁴Ibid., p. 528.

TABLE 15

REGIONAL INCREASES IN URBANIZATION

IN TEXAS, 1940-1950

Region	Medians of		Percentage
	Percentage	Numerical	Increase
Southeast	(2) 73•4	(3) 2,460	(4) 55•0
Lower Rio Grande Valley	64.0	2,319	66.9
Central Great Plains	53•5	1,935	77.6
South South- Central	39•2	1,286	53•0
Trans-Pecos	36.0	3,178	36.8
North Central	33.6	1,782	51.4
Panhandle	28.8	1,217	41.1
South Central	24.9	1,024	45.1
Northeast	20.9	1,167	30.0
Edwards Plateau	19.6	848	79•3
Central Texas	18.4	623	33.8
State as Whole	38.4	1,450	51.1

note that the difference between the first place and the second, and between the second place and the third place is approximately 10 per cent, while the difference between third and fourth rankings is over 14 per cent. It should be noted, also, that the difference between the highest median percentage increase and the lowest one is considerable, 55.0. However, it should be pointed out that even the lowest median percentage increase (18.4) in urbanization is significant. Even in this region, Central Texas, urbanization moved forward rapidly during the decade ending in 1950.

The medians of numerical increases are given in column 3, and, again, it is to be noted that the same regions held their respective places at the top, if the Trans-Pecos Region is excepted. In terms of percentage increases, it can be seen in column 4 that the three top ranking regions are the Edwards Plateau (79.3), the Central Great Plains (77.6), and the Lower Rio Grande Valley (66.9). However, it should be noted that the Southeast, the South South-Central, and the North Central regions showed percentage increases in the fifties. It should be further noted that no region in the entire state failed to increase its urban population by at least 30.0 percent and that the percentage increase for the state as a whole for the decade under consideration was 51.1.

The urban population in 1950 for the state as a whole was one and one-half times greater than it was in 1940. The rate of increase in urbanization for the decade 1940-1950, according to the final figures of the 1950 census, is three times as great as the rate for the decade from 1930 to 1940.

The low rank of the North Central Region in column 2 needs an explanation. This low rank is due to the fact that there are many urban centers in the region which made small increases. Thus in counting down to the median or mid-point, one arrives at a number which is necessarily small. The fact that several cities made big gains is offset by the fact that all the cities making such gains are passed before the median is reached. Thus the sixteen cities which made 50.0 or more percentage increase are passed before the median for the total of thirty-six cities in the list is reached. It is to be noted that the North Central Region made a good showing in column 4 (51.4 per cent). Here the big gains made by the sixteen cities mentioned above are more than enough to overcome the small gains of the others.

This high rate of urbanization has certain implications and poses certain problems which will be treated in the final chapter of this thesis.

CHAPTER V

ASPECTS OF URBANIZATION IN SELECTED SIZE-GROUPINGS OF TEXAS CITIES 1940-1950

It is the purpose of this chapter to examine the relationship which existed in Texas in the past decade between city size and the rate of urbanization. Cities were grouped as follows on the basis of their 1940 population: under 2,500; 2,500 to 9,999; 10,000 to 24,999; 25,000 to 49,999; 50,000 to 99,999; and 100,000 or more. Cities were assigned to each group on the basis of their 1940 populations, as stated above, but to be included these cities must have reached urban status, or maintained it, in the 1950 census. This procedure introduces an element of bias into the "under 2,500" group, which will be discussed within the next few pages.

At this point it might be of interest to note that there are eight Texas cities which fell from urban status during the decade closing in 1950; these cities were Mart, Brackettville, Bridge City, Bunavista, Cooper, Handley, Seagraves, and Velasco.l South San Antonio lost its urban

¹ Texas Almanac, 1949-1950, pp. 108-121.

identification through annexation to the city of San Antonio in 1944 and does not appear in the present listing of Texas urban centers.

There are seventy-one cities in the "under 2,500" group (Table 16). This category has the second largest number of cities; the one with the largest number of cities is the 2,500 to 9,999 group, which has 156 cities (Table 17).

Out of the seventy-one cities in Table 12, thirty-two had a percentage increase of more than 100.0. One of these. San Pedro, had the remarkable gain of 31.884.0 per cent. This increase indicates a definite boom situation, with a growth far beyond anything which may be normally expected. The cause of the San Pedro boom was the discovery of oil in the vicinity. Andrews! 441.6 per cent increase was also due to an oil boom situation. Bellaire's 802.8 per cent increase was due largely to the influx of people seeking work in the great industrial area in and around Houston. Grand Prairie owed her big increase of 822.1 per cent to the location of huge airplane production plants there and to the proximity of Dallas and Fort Worth. Killeen's outstanding increase of 462.9 per cent was due mainly to the location there of Camp Hood, which is the home of the Second Armored (Hell on Wheels) Division and the scene of National Guard and Organized Reserve training during the summer months.

TABLE 16

TEXAS CITIES HAVING LESS THAN 2500 POPULATION IN 1940 BUT MORE THAN THAT NUMBER IN 1950*

			,		
0†/61	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
1 100,11,00,00,10,00,00,00,00,00,00,00,00,		250 25 25 1 25 25 25 25 25 25 25 25 25 25 25 25 25	なっていいようののの後はこれならりかは	191 191 19 868890 191 191 191 191 191 191 191 191 191 1	## 15 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
	11 ON 1 * * * * * * * * * * * * * * * * * *	9to 00883178417873333175 00883178417873333175 00883178417873333737333373733337373333737333737333737	940 611 763 763 763 776 124 125 124 125 125 126 127 128 128 129 129 129 129 129 129 129 129 129 129	940 1950 Percent Rank Rank 763 3.226 445.6 124 2.708 15.6 67.7 124 2.728 802.8 3.309 15.6 5.72 1	940 1950 Percent Rank Ghange (Change 1950 Change (Change 1953) 2.708 (Change 1955) 2.7

TABLE 16---Continued

City	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Elsa Fabens Galena Park Garland Giddings Grand Prairie Hamlin Henrietta Irving Jacksboro Karnes City Killeen Lamarque Lamarque Lamarque La Feria Livingston McGregor		1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0	23,500 25	\$\$\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	w wa uu u uwwuu uu a u oo o wu u u u u u oo o wu u u u u u oo o wu u u u u u u oo o wu u u u u u u u oo o o o o o o o o o o o o o o o o o o	2000 we named of the second

TABLE 16---Continued

City	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Menard Nederland New Boston Olmos Park Palacios Ozona Perryton Pleasanton Port Lavaca Port Neches Post Rotan San Augustine San Juan San Juan Seminole South Houston Tahoka	10 10 00 00 00 00 00 00 00 00 00 00 00 0		12 12 12 12 12 12 12 12 12 12 12 12 12 1	2714774877887474768	81, 8 99,11, 7,11, 7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	るとのでなるないないないないのののののののののののののののののののののののののののの

TABLE 16---Continued

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Tulia West Orange Winters Yorktown Ysleta White Settlement Haltom Oak Knoll Village Hillcrest Ramona Red Cut Heights Totals Group Percentage Increase:	2055 2055 2050 2050 2050 2050 2050 2050	278,52 27,52 16,552 16,736 27,738 27,823 278,54 278,54 278,54	124 124 124 124 126 126 126 126 126 126 126 126 126 126	35396 35398 35398 35398	1,276 1,276 3,178 3,178 3,700 1,070 1,278 1,278	345% CL1223%
*Source: U.	U. S. Bureau	of the Gensus,	Series	PC-3, No. 8 Re	Rev. (January 11,	11, 1951)

Carthage, deep in the East Texas "Piney Woods," owed its 118.1 per cent gain to the discovery of oil in Panola County, of which Carthage is the county seat. Bishop, Cleveland, Dumas, Mathis, and Seminole owed most of their growth to oil also. Many of the others in the high percentage increase brackets benefited from an overflow of both industries and people from nearby industrial centers, such as Houston, San Antonio, El Paso, Beaumont, Port Arthur, Orange, Dallas, and Fort Worth.

The percentage increases ranged all the way from a low of 5.8 to a high of 31,884.0, with a median of 84.2 for all the cities of this group. The numerical gains ranged from a low of 141 to a high of 9,023, with a median of 1,317. per cent of urban increase for the group as a whole was 124.0. The median increase for all the urban centers in the state as a whole was 38.4, which was less than one-half that for the cities in this group. The state's numerical increase of 1,450 was a little larger than the 1,317 which was the median numerical increase of the cities in this group. The percentage increase for the group (124.0) was almost two and one-half the state's percentage increase of 51.1. However, comparisons with this group were misleading, since the group included only "selected" cities. Actually the median and percentage increase shown above for the group were not comparable to those shown for the other groups or for the state as a whole.

The term "selected" as used in this context requires an explanation. Out of approximately 3,400 towns and villages, incorporated and not incorporated, in Texas, which might conceivably have gained sufficient numbers to give them urban status, only seventy-one actually did so. It should be clear from this fact that the cities included in the "under 2,500" group are a chosen few indeed. Comparing cities "under 2,500" with the other size groupings requires information not presently available for the remaining 3,329 towns.

In the 2,500 to 9,999 group there are 156 cities (Table 17). As may be noted from the table, there are thirteen cities in this category which lost population during the 1940-1950 period. These are, in order of their appearance in the table, Benavides, 2.3 per cent; Dickinson, 24.6 per cent; Eastland, 6.3 per cent; Electra, 11.7 per cent; Highlands, 9.5 per cent; Lake Jackson, 3.5 per cent; Luling, 3.4 per cent; Marfa, 5.5 per cent; Memphis, 1.7 per cent; Navasota, 18.9 per cent; Phillips, 3.6 per cent; Ranger, 13.2 per cent; and Teague, 7.9 per cent. percentage gains for the remainder of the cities in this group run from a low of 1.6 to a high of 553.2. with the median falling at 27.3 for all the cities in the group. The numerical gains run from a low of sixty-one to a high of 19,859, with the median at 1,204. The percentage increase for the group as a whole is 43.0.

TABLE 17

URBANIZATION OF CITIES OF 2,500-9,999 POPULATION, 1940-1950*

City	1940	1950	Percent Change	Per cen t Rank	Numerical Change	Numerical Rank
Alamo Heights Alice Alpine Alpine Aransas Pass Arlington Ballinger Bay City Beeville Belton Benavides Bonham Bowie Breckenridge Breckenridge Breckenridge Breckenridge Breckenridge Cameron Canyon Canyon	のできるようなできるできるからなっている。 をしなったのでものできるなっているのののようなしなった。 なっているでものできるいできるのでものできる。 なっているできるできるできるできる。 なっているできるできる。 なっているできる。 なっているできる。 なってい。 なってい。 なってい。 なってい。 なってい。 なってい。 なってい。 なってい。 なって、 なってい。 なってい。 なってい。 なってい。 なってい。 なってい。	しているのかできるののできるとうない。 かれるがあるできるできるのできる。 かれるできるできるできる。 かれるよるできる。 かれるようできる。 かれるようできる。 かれるようできる。 かったいからの。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいからい。 かったいがい。 かったい。 はったい。	これできるとは、ころのできたののがはになっている。 でんしい できまる はいまる いる きょう でん ういい できまる はいい はいいい はいいい はいいい はいいい はいいい はいいい はいい	があるない。これではいるはないでのであるようとなった。	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	ネー名 し

TABLE 17---Continued

City	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Cisco Clarksville Coleman Colorado City Commanche Commerce Conroe Cotulla Crockett Cyrstal City Cuero Dalhart Decatur Decatur Decatur Decatur Eagle Pass Eagle Pass Eastland Edinburg Edna El Campo	してるとのなけるですがいればいるできるのでした。 ののでしたでしたできるできるのでいるのののできるできたがののでしたができませるのできまるのできまるのできまるのできまるのできまるのできまる。	2年のようない。 2年のようない。 20年ののでは、 20年の	10000000000000000000000000000000000000	117 88 88 77 77 77 77 77 77 77 77 77 77 77	1 19 1 11 19 1 19 1 19 1 19 1 19 1 19	251255475075887555 8515557750255555555 851555775025555 8515557555 851555

TABLE 17---Continued

City	1940	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Falfurias Flovdada	4,500		48.8 17.9	14. 00	2,197	47
Fort Stockton	33,00			्रेड इ	1,150	196 190 190
Freeport	100 100 100 100 100 100 100 100 100 100	186	133.0	0 20	الم م م م م م م م م	\% C
Gatesville	3,177	3,0	21.12	710	10	100
Georgetown Gilmer	3,082	7,7	34.2	0,0 833	1,201	86,57
Gladewater Gonzales	4,454	7, 310 630	19.2	86 87	856 908 908	80 80 80
Graham	5,175	1500	30.6	70	1,581	, Q,
Hamilton	2,716	Θ α	13.	102	364 787	124
назкетт Невтое	3.511	رد. درد	36.	-7. V	- CA	之
Hebbronville	000	:87	43.0	丰	1,290	72
Henderson	6,434	8	70,000 C	130	സ	123
Hereford	2,584 2,000	8 2	-1 u	L L L	7,824 2,824	140 140
nightands Hillsboro	7,799	- W	7.7	14 120, 170,	ırv	10,00
Hondo	3,200	200	37.5	29	0,4	†β.
Huntsville	2,108	3	0,0°	27.	4,004	29
Jacksonville	7,218	, N	18.	8)	, (1)	68
Jasper	3,497	5,	2, c	76 76	361	о о о л
Kaufman	2,654	17.) m 1 M	241	61	143

TABLE 17---Continued

Numerical Rank	でもなる。 これでは、 ではいいないないない しゃん でんしょう でんしょう かんしょう かんしょう かんしょう かんしょう でんしょう でんしょう しょう しょう しょう しょう しょう しょう しょう しょう しょう
Numerical Change	11040 - 4117710
Percent Rank	なるのでは、これは、これをは、これののでは、これののでは、これののでは、これのでは、これをは、これをは、これをは、これをは、これをは、これをは、これをは、これを
Percent Change	するとする。これはないまたははなって、これが、これであるないのからいからいらいるできるいろうできょうできょうできょうできょうできょう。
1950	すってめる。 できれる まん ったがす まっしょう でって でって でって でって でって でった
1940	
City	Kenedy Kermit Kerrille Kilgore Kilgore Kingsville Lake Jackson La Grange Lamesa Lamesa Lamesa Lamesa Lamesa Lamesa Lumesa Lumesa Lumesa Lufkin Lufkin Lufkin Lufkin Kerney Marfa Marfa Marfa Midland Midland Mineola Minesal Wells Mission Monahans Mount Pleasant

TABLE 17---Continued

Gity	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Nacogdoches	•	6.7	9	(1)	5	(1-1
Navasota New Brannfals	•	O\r		155	-1,102 7,220	150
10 1111		$\frac{1}{2}$	177		/ 	
Odessa	•	7	•		19,859	
Orange	•		• •	Ó.	13,628	
Paducah	. •	0,0	0,5	121	COLO	133
Pasadena Pearsall	3,430 3,104 104 104	101.1	255. 11.0	- Z	1,297	V 0.
Pecos	1,00 1,00 1,00 1,00	, ,	rŲ.	28	<u>`</u>	28
Phillips	4,764		<u>.</u> "	ᆛᆜ	્રન	21 149
Pittsburg	2,916	, 6	ıω	126	C) I	135
Plainview	8,263	O, L	٠, c	O a	5,760	010
Quanah	7, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	4, 0, 4, 0, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	3 10	15.5	οc	153
Raymondville	十. ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・	, m	ית.	\~l	5,085	\ri
Refugio	4,077	9	<u>+</u>	103	نـ ٥	107 707
Rio Grande City	•	7	20	124	3,827	22
Robstown	• •	, ,	0	135	<u>,</u>	2,13
Rosenberg	•	7,758 6,758	٥٠٥	 0 0 	2,301	2 1 80
Rusk San Renito	•	, CI	0	斌	15	(2)
Dieg	2,674	410		0 0 0 0	1,720 2,055	57 20
San Marcos San Saba	2,927	2,927	Jrv	100	, T	115

TABLE 17 --- Continued

Sequin 7,006 Seymour 3,328		2//-	Change	Rank	Change	Rank
	90	Ø,	ω	56		33
_	2 8	3,778	υ Μ	106	1,50	118
	1.0 し	ر 1 - ا) L	abla		70°C
	12	N	•	109		100
	87	ਰੂੰ	o.	N		†j9
1110	0 0 0	پٽرو	مَ	123	χ,	132
Sonors 2, 5	7.65 	26		30 6		פרוב
rd	10	<u>β</u>	łO	∞		8 7 7
111e	88.	8	ထံ	75	, cy	<u>(5)</u>
ngs	12	9		V	S	雪
	- <u> </u>	S	'n	Q1	200	2.2
Teague 3,15		9	٠,	151		151
		, , , , , ,	- - -	-	27.	131
City	ار الح	5	ည်း	m¦	φ Ω	יַּע
	<u>~</u>	$\hat{\mathbf{v}}_{0}$		27		200
		S (o d	ر ا ا	1,	TV.
V.	<u>ئ</u> ر	1, 10 2, 10	o, i	23	47.	رب 0 رو
		چ	ż	0 ,	, L.	· 全
ton	ည်ကို	ο Ο α	ં α	011		126
100	<u></u>	5	•	4		tor
West University		S L	81.0	-	83	o
	36		7.0		,,,,	11, 2,11
1	733	5,225	•	111	1,92	110
Totals 742,45	57 <u>L</u>	,061,865			319,408	
Group	#*************************************	**************************************			Washagangan	
Increase:	1		43.0			
*Source: U. S. Bu	Bureau	of the Census	, Series PC	-3, No. 8 Re	ev. (January	11, 1951)

The medians and percentage increase for this group are not strictly comparable to the corresponding figures for the group just discussed, because the cities in the first group are, as pointed out above, "selected" cities, while those in the second group are not.

The error must not be made of concluding that smaller cities make greater percentage gains and that the larger cities make larger numerical gains. In fact, data found in the Tables 16 to 21, inclusive, and Table 22 show that in both relative and absolute terms the rate of urbanization depends primarily upon the previous size of the city.

Pasadena, the city in this group with the greatest percentage growth (553.2), is a suburb of Houston and has caught the overflow, in part at least, of both industry and people from Houston. Kaufman, the city having the smallest growth in the group, is in an area which is shifting from cotton farming to cattle raising. Alice, Kermit, Levelland, Midland, Odessa, and Snyder owe their growth largely to oil. Texas City, virtually destroyed by a series of devastating explosions in 1947, has been practically restored and is growing rapidly.²

Freeport gained 133.0 per cent during the decennium, largely because of the location there of the Dow and Company

²Ibid., p. 529.

Chemical Plant for the processing of magnesium from sea water. Orange, at the head of deep-water navigation on Sabine Lake, has grown rapidly because of its great increase in shipping, its shipbuilding, oil refining, a Du Pont nylon plant, a Consolidated steel fabricating plant, lumbering, and rice milling.3

There are only twenty-six cities ranging in size from 10,000 to 24,999. All of these cities gained in population during the decade ending in 1950 (Table 18). The lowest per cent of increase was Palestine's 2.6 and the highest was Denton's 90.7. The median percent of gain was 33.9, and the numerical median was 4,211 (Table 22). The percentage increase for the group as a whole was 38.7. Ranging next below Denton, whose remarkable increase was due, in large part, to the new system of counting college students, 4 is Borger's 79.2 per cent (oil), Harlingen's 74.4 per cent (Rio Grande Valley), and Longview's 77.7 per cent (Le Tourneau interests and the huge East Texas oil field).

In the "sixties" are found Brownsville's 63.8 per cent, McAllen's 68.4 per cent (both in the Rio Grande Valley), Temple's 62.7 per cent (railroad shops, veterans' hospital, the famous Scott-White Hospital, and nearby Camp Hood), and University Park's 64.8 per cent (largely a residential area

³ Texas Almanac, 1949-1950, p. 573.

The 1950 census counted college students as part of the population of the town where the college was located.

TABLE 18

URBANIZATION IN CITIES OF 10,000-24,999 POPULATION, 1940-1950*

1	०गै6ा	1950	arg.	Percent Rank	Numerical Change	Numerical Rank
Big Spring Borger	12,60µ 10,018	17,258	36.9 79.9	13	4,654	27 8
Brownsville Brownwood	0, c	6,17	20	10	Q/	10
Bryan	100	800	8	0	-0	
leburne orginal	E) C	β, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	٠ . ۲	- T- Z-	2, cc	20
Del Rio	16. 16. 16. 16.		<i>70</i> 0	; 	<u>_</u>	tata
Den ton	راسا	1,1		ન (ન V	, SH	7 K
Greenville	0,0	\$6 -t-	M-	20 27	200	ለ ሊ-
Highland Park	J. G.	1,30	10t	23	10,01	53 53
Longview McAllen	<u>,</u> ω	±0.	7.7.7.	₩.M	ON.	20
Marshall Dolostine	7	0,0 0,0 10,0 10,0	00	18 26	ָאַלרָגּ ברָגָ	752
	100 4	100	lωr) H (10 C	16
Faris Sherman) H	0,00	√ 1	760	ググ	16
Sweetwater	رس رس ر	3,78		7	22	다 건
Temple Terrell	400	+'' ''' -'''	10	22	0,	22/
ದ -	17,019	7,000 10,000			\mathcal{Q}_{λ}	0\4
University rark Victoria	11,556	, , , , ,	39.50	12	(1,5%	13.
Totals	357,583	Н	· · · · · · · · · · · · · · · · · · ·		138,227	
Group Percentage						
Increase:		trings in	38.7			

for Dallasites). In the 40 to 60 per cent bracket there are only three cities: Brownwood with 50.3 (Camp Bowie, the manufacturing of woolen and worsted materials, and garment making), Bryan with 52.6 (Agricultural and Mechanical College), and Texarkana with 44.9 (Lone Star and Red River Ordnance Plants).

By now it can be observed that the number of cities grows smaller as the size of the cities increases. There are only seven in the 25,000 to 49,999 group (Table 19). In this group Baytown is the only city which lost population, 8.3 per cent. This loss is, perhaps, the most difficult to explain of all the losses shown by the fourteen urban centers at the time of the 1950 census. Baytown is in the rapidly growing industrial area of which Houston is the center. The city is on the Houston Ship Channel and has oil refineries and a synthetic rubber plant.

There were two cities in this group which more than doubled in size during the decennium ending in 1950: Lubbock's population increased 124.1 per cent and San Angelo's increased 101.1 per cent. The former owes its growth partly to the new system of counting college students, but in larger part to industries related to farming and poultry. The city ships

⁵Texas Almanac, 1949-1950, p. 536.

URBANIZATION IN CITIES OF 25,000-49,999 POPULATION, 1940-1950* TABLE 19

City	οή6ι	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Abilene Laredo Lubbock Port Arthur San Angelo Tyler Wichita Falls Baytown	26,612 39,274 31,853 46,140 25,802 25,802 45,112 25,000	47,102 51,694 71,390 57,377 51,889 38,864 67,709 22,927 109,052	77.0 31.6 124.1 24.4 101.1 37.4 50.1	のけんごろ T O/M	20,490 12,420 39,537 11,237 26,087 10,585 22,597 - 2,073	はそ10272分
Group Percentage Increase:			52•6			
*Source:	U. S. Bureau	of the Census	us, Series PC-3	-3, No. 8 Rev	ov. (January 11,	11, 1951)

4,500,000 pounds of eggs and 3,000,000 pounds of dressed fowls, 8,000,000 pounds of butter, and great quantities of cheese. Industrial products include farm implements, cottonseed oil and feed stuffs. Lubbock is one of the largest primary cotton markets in the South.

The next highest in percentage gain were Abilene (77.0) and Wichita Falls (50.1). Abilene is a trade and marketing center for an extensive farming and ranching area. It is also an educational center where three colleges are located: Abilene Christian College, McMurry College, and Hardin-Simmons University. Like all college and university towns, the city benefited from the new system of counting college students. Wichita Falls is the center of a large and rich oil, cattle, and farming section and supports industries related to these activities.

Tyler is next in rank in percentage gain. This city owes its rapid growth largely to its location in an oil area. Tyler is located in the midst of eight distinct fields: the Rice Field, the Gresham Field, the Mount Sylvan Field, the Red Springs Field, the Sand Flat Field, the Chapel Hill Field, the Hawkins Field, and the huge and world-renowned East Texas Field. Tyler is the center of a

^{6&}lt;u>Ibid.</u>, p. 561.

fast growing rose industry, which has thousands of acres of rose bushes under cultivation. The rose growers ship millions of rose bushes annually to all parts of the United States and to many foreign countries.

The cities in this group (Table 19) range in per cent of change from a loss of 8.3 to a gain of 124.1, the median being at 50.0. The median numerical gain was 20,490. The percentage increase for the group as a whole was 52.6. Except for the median numerical increase, these figures are fairly close to the corresponding figures for the state as a whole (Table 22). In considering the median numerical gain for this group, it must be remembered that the relative increase for the cities is high. If Baytown's loss is disregarded, the lowest numerical gain made by any city in the group was 10,585 (Tyler).

There are seven cities in the 50,000 to 99,999 bracket (Table 20). They range in per cent gain from a low of 8.3 (Galveston) to a high of 88.6 (Corpus Christi). The median per cent of increase is 50.1, which is considerably above the state's 38.4, but the percentage increase, 46.4, for the group is fairly close to the state's 51.1. The median numerical increase for the group is 33,193. This is many times the state's median numerical increase of 1,450, as is to be expected, since this group includes only

URBANIZATION IN CITIES OF 50,000-99,999 POPULATION, 1940-1950* TABLE 20

Gity	0461	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Amarillo Austin Beaumont Corpus Christi El Paso Galveston Waco	5,000 5,000	73,737 131,964 93,715 108,153 130,003 65,898 84,300	42 25 38 38 50 50 50 50 50 50	どしのてでけら	22,051 44,034 34,654 50,752 33,193 28,318	クロをよりて
Totals	469,632	687,670			218,038	
Group Percentage Increase:			† • 9†			
*Source:	U. S. Bureau	of the Census	Series,	PC-3, No. 8 R	8 Rev. (January	(January 11, 1951)

cities which made gains ranging upward from 22,051, with the single exception of Galveston, which gained only 5,036. However, even Galveston's low is much higher than the state's median.

In 1940 Texas had only four cities with populations of 100,000 or more: Houston, with 594,321; Dallas, 432,734; San Antonio, 406,811; and Fort Worth, 277,047 (Table 21). The figures given here, however, are those of the 1950 census. The basis for grouping the cities, it must be remembered, is the 1940 population count. If the 1950 count had been used as the basis for these groupings, three other cities would appear in this bracket: Austin, with a population of 131,964; El Paso, with 130,003; and Corpus Christi, with 108,053.

For the past decade San Antonio ranked first among these cities in percentage gain, and Houston ranked first in numerical gain. The range of increase for these four cities was, quite interestingly, less than fourteen per cent; but the numerical increases ranged from Fort Worth's low of 99,385 to Houston's high of 209,095--a difference of a little over 110,000.

These four cities accounted for 31.0 per cent of the urban increase for the entire state for the decade ending in 1950, though they comprised only 1.5 per cent of the total numer of urban places. This is true, perhaps,

URBANIZATION IN CITIES OF 100,000 OR MORE, 1940-1950* TABLE 21

City	οη6ι	1950	Percent Change	Percent Rank	Numerical Change	Numerical Rank
Dallas Fort Worth Houston San Antonio	294,734 177,662 384,514 253,854	432,927 277,047 594,321 406,811	0,275 0,575 0,000	ተወይተ	138,195 99,385 209,807 152,957	W#H0
Totals	1,119,764	1,711,106			600,342	
Group Percentage Increase:			0.475			
3					+	

U. S. Bureau of the Census, Series PC-3, No. 8 Rev. (January 11, 1951) Source:

because the factors which were conducive to their becoming big in the first place continued to be operative in making them larger. There are definite factors which determine the best location for a city and whether it will grow. of these factors were mentioned in earlier pages of this study, but it might be well to recount them at this point. Factors of importance (not necessarily in the order of their importance) are as follows: (1) transportation facilities, (2) a hinterland furnishing raw materials, a labor supply, and markets, (3) communication facilities. (4) an adequate source of power, providing coal, oil, gas, or waterpower, and (5) a favorable climate. 7 There are, perhaps, other factors which should be considered in the location of a city, but these are the principal ones. The more of these factors concentrated at any given place the greater is the likelihood that in the course of time a city located at that place will develop into a large and important city.

In Table 22 medians and percentage increases for the several groups of cities and for the state as a whole are given. The purpose of this table is to give a clearer picture of the amount of urbanization growth for each size group and to simplify the matter of comparing one group with another and each group with the state as a whole.

⁷ Eugene Van Cleef, Geography for the Businessman, pp. 61-77.

TABLE 22

MEDIAN AND PERCENTAGE INCREASE FOR SELECTED SIZE GROUPS, TEXAS CITIES, 1940-1950

Size Group	Median Percent Increase	Percentage Increase	Median of Numerical Increase
Cities Under 2,500 (1940)	84.2	124.0	1,295
Cities From 2,500-10,000 (1940)	27.3	43.0	1,208
Cities From 10,000-25,000 (1940)	33.9	38.7	4,211
Cities From 25,000 to 50,000 (1940)	43.7	52.6	20,490
Cities From 50,000 to 100,000 (1940)	50.1	9.94	33,193
Cities of 100,000 or More (1940)	55.2	54.0	575,541
State As a Whole	38.4	51.1	1,450

It is to be remembered that the cities in the lowest bracket (under 2,500) are a "selected group" and are not strictly comparable to the other groups of cities. Leaving out the cities in the lowest bracket makes the cities in the highest one the leading group of the six appearing in This group of cities (100,000 or more) shows the the list. highest median percentage increase (55.2), the highest percentage increase (54.0), and the highest median numerical increase (145,575). As previously pointed out it is noteworthy that the medians of the groups are progressive from low to high, if the "slected group" is disregarded. is, the larger the size group the larger the median. group with the smallest median per cent of increase (27.3) is the 2,500 to 9,999 group. This is about one-half the median percentage increase for the cities of the highest bracket, which is 55.2.

The eighteen cities in the three groups composed of cities which had 25,000 or more people in 1940 accounted for almost 50.0 per cent of the urban growth of the decade ending in 1950; and the seven Texas cities which had populations of 100,000 or more in 1950 accounted for more than 37.0 per cent of the urban increase for the decade. In the first instance this leaves 254 urban centers to account for approximately 50.0 per cent of the urban increase for the

decade; or, in the second instance, 265 cities to account for approximately 63.0 per cent of it.

This is a significant contribution by these eighteen cities to urban growth during the 1940-1950 decennium. These eighteen cities include most of those which have become well established and are most likely to continue to thrive and grow. Their growth has extended over a long enough period of time to make it possible to regard it as a more or less normal, permanent thing. This is to say, their growth is not caused by a "boom" situation which is likely to be comparatively short lived, but to factors which have been operative for a long period of time and which can be expected to continue in force.

This being the case, it is to be expected that these larger cities (25,000 people or more) will continue to account for a large per cent of whatever urban increase the state of Texas may experience in the decades to come.

CHAPTER VI

PROSPECTS FOR CONTINUED GROWTH AND URBANIZATION OF THE TEXAS POPULATION

In the first part of this study the growth of the Texas population since 1880 was compared with that of the nation as a whole, and it was found that the rate of increase for Texas has been faster than that for the rest of the United States during this period. There are a number of factors which enter into an explanation of this relationship. For one thing, Texas is among the younger sections of the country and, therefore, is expected to continue growing rapidly when growth in the older sections of the nation has begun to slow down. other factor in the rate differential is the matter of migration, and again, Texas, being a comparatively new and unsettled state, has attracted many people from the older and more crowded sections of the nation. Further, Texas is the recipient of a significant number of immigrants from Mexico. By 1940 there were 159,000 Mexicans in Texas out of a total foreign-born white population of 234,000. Another factor, and a major one, has been the natural increase due to the excess of births over deaths. Until 1950 Texas was a predominantly rural and agricultural state with the high birth rate characteristic of such areas. The birth rate for the

nation as a whole has been materially reduced by the low birth rate in the highly urbanized and industrialized sections of the nation. However, as Texas becomes more and more urbanized, it is probable that the birth rate will decrease, since birth rates in urban areas are always lower than those in rural areas. A declining birth rate can, therefore, be expected in Texas. A fourth factor which helps to account for population increase in Texas, certainly since 1915, is the growth of industrialization. Belatedly industrialists came to see the potentialities of the Texas resources and began to develop them. It seems safe to predict that the Texas population will continue to increase, perhaps into the 1980's, reaching by that time, according to some authorities, a figure approximating 9.500.000.1 The chief basis for this prediction is the fact that Texas is still in the early stages of industrialization and development of natural resources.

Another aspect of the Texas population considered in this study is that of racial composition. Whites and Negroes make up practically the whole population in Texas, since all other races combined have never exceeded one-half of one per cent of the total population. In 1880 the nonwhites made up nearly 25 per cent of the population, but by 1950 the percentage had decreased to 11.5. However, nonwhites have

lJoe R. Motheral and Carl M. Rosenquist, An Experiment in Research Planning, p. 7.

increased in absolute numbers in each decennial period since 1880 (the beginning date for the study) except for the decade ending in 1950. The number of nonwhites decreased from 927,000 in 1940 to 886,000 in 1950. This was a decrease of 11,000, a very significant loss. Not only did Texas lose these 41,000 but it also lost an additional number of Negroes equivalent to their natural increase for the decade. Although exact figures are not available it is obvious that Texas lost a large number of Negro citizens through migration from the state between 1940 and 1950. They were attracted to the North, East, and Far West because of wider social acceptance and greater employment opportunities to be found there in industry and the professions. The nonwhite population has never been able to maintain an equal rate of increase with that of the white population. At least three causes can be sighted for this fact: heavy migration from the state, light migration into the state, and a high death rate among Negroes. On the basis of past trends in the growth of the nonwhite population it seems safe to predict that the Negro element will compose less than ten per cent of the total population by 1970.

Not only is the population of the state growing rapidly, but it is also shifting from region to region and from rural areas to urban centers within the state. One hundred forty-six of Texas' two hundred fifty-four counties showed population losses for the decennium ending in 1950. These represent

57.5 per cent of all the Texas counties. The losses ranged from a low of 0.5 per cent to a high of 41.9 per cent. One hundred thirteen of the counties which showed losses in the 1950 census are east of the one-hundredth meridian, and sixty-seven of them lie, roughly, within the northeast quarter of the state. This loss of population in so many counties of Texas has resulted from farm mechanization on the one hand and urban industrialization on the other. of these processes have been moving forward rapidly since the early 1920's. Extensive areas of the northeast quarter of the state are being given over more and more to ranching, dairying, and mechanized farming. This means that many farm workers have had to look elsewhere for a livelihood, and it is estimated that during the years from 1940 to 1950 between 600,000 and 800,000 people left the rural areas to work at jobs in the industrial centers of the state.

This great mobility of the Texas population creates social, health, and educational problems. The growth of some urban centers has been so rapid that it has far exceeded the facilities for housing, for water, for sewer service, for garbage disposal, for police protection, for education, and for recreation. In many instances the poor quality of housing, the overcrowding, and the inadequate sanitary facilities have produced hazards to health and social welfare. Then, too, there is the problem of social orientation and adjustment which these people who have so recently come

from a rural situation must solve with the help of those in charge of city and social welfare administration. the problems are so large they will have to be handled by the state and the nation: among these are social security, pensions, and old age and social welfare benefits. must be provisions made to prevent suffering in the case of recurring depressions which cause widespread closing of factories and laying off of workers. People "on the land" can manage to sustain themselves during a depression, though, of course, they do not prosper; but people in the cities dependent on their daily wage really suffer unless they have been able to save something for "the rainy day." With sixtythree per cent of the Texas population, as of 1950, residing in urban centers and depending solely, in most cases, on industry for a living, this problem assumes broader significance and greater urgency than ever before in Texas history.

The Texas population is not only becoming predominantly urban for the state as a whole, but also certain regional areas are urbanizing at a much faster rate than other regions and faster than the state as a whole. The Southeast, the Lower Rio Grande Valley, the Central Great Plains, and the North Central regions are among those which showed the highest median percentage increases of urban population for the decade ending in 1950.

The Southeast Region, the Gulf Coast area, and the North Central Region have a concentration of the greatest number of factors which are conducive to a large and continued industrial and urban growth. It is safe to assume that these areas will continue to increase in urban growth, but the rate will likely not be as fast as it was during the past decade.

The state not only made its greatest gain in urban growth during the aforementioned decennium but it also made its greatest overall population increase, with an all-time high of approximately 1,300,000. Only in the 1930 census, when the increase was 1,161,000, has Texas even approximated this latest record in the state's population growth. The percentage of increase in total population during the decade ending in 1950 was 20.2, while the rate of urban increase was 63.0. Thus it can be seen that the urban rate of increase was more than three times as great as was the rate for the total population increase.

It is to be expected that the urban population and the total population will continue to increase into the 1970's and possibly into the 1980's. The continual increase in number of new machines and in technological skills, both in the industrial and the agricultural fields, will operate to encourage the further growth of the total population and of the urban population. Mechanization of agriculture has brought large scale farming to Texas and has forced hundreds of thousands of rural people off the farms and into industrial

occupations in the urban centers of Texas. Though the urban and the total population can be expected to increase for the next two or three decades, it is not to be expected that the rate of increase for either of them will be at as fast a rate as it was for the decennial period ending in 1950.

BIBLIOGRAPHY

- Baker, O. E., Borsodi, Ralph, and Wilson, M. L., Agriculture in Modern Life, New York, Harper and Brothers, 1939.
- Barnes, Harry Elmer, Social Institutions, New York, Prentice-Hall Inc., 1942.
- Compton's Pictured Encyclopedia, 1947 Edition, Volume XIV, Article: "Texas."
- Davie, Maurice R., Negroes in American Society, New York, McGraw-Hill Book Company, 1949.
- Florant, Lyonel C., "Negro Internal Migration," American Sociological Review, 7 (1942), 782-791.
- Hamilton, Horace C., "The Social Effects of Recent Trends in the Mechanization of Agriculture," Rural Sociology, 4 (1939), 3-19.
- Kuczynski, R. R., "Population: History of Statistics,"

 Encyclopedia of the Social Sciences, 12 (1934), 240-248,

 253-254.
- Landis, Paul H., <u>Population Problems</u>: <u>History and Statistics</u>, New York, American Book Company, 1943.
- Lee, Alfred McClung, and Lee, Elizabeth Briant, Social Problems in America, New York, Henry Holt and Company, 1949.
- Lorimer, Frank and others, Foundations of American Population Policy, New York, Harper and Brothers, 1940.
- Marshall, D. G., "Hamlets and Villages in the United States: Their Place in the American Way of Life," American Sociological Review, 11 (1946), 159-165.
- Motheral, Joe R., and Rosenquist, Carl M., An Experiment in Research Planning, Abstract of the Texas Conference on Population Research, College Station, Texas, Texas Agricultural Experiment Station, Miscellaneous Publication No. 12, November 1947.

- Odum, Howard W., Southern Regions of the United States, Chapel Hill, University of North Carolina Press, 1936.
- Roterus, Victor, "Effects of Population Growth and Non-Growth on the Well-Being of Cities," American Sociological Review, 11 (1946), 90-97.
- Smith, William C., Americans in the Making, New York, D. Appleton-Century Company, 1939.
- Texas Almanac, The Dallas Morning News, Dallas, Texas, 1949-1950.
- Thomas, Dorothy S., Migration Differentials, New York, Social Science Research Council, 1938.
- Thompson, Warren S., Population Problems, New York, McGraw-Hill Book Company, 1942.
- U. S. Bureau of the Census, 1950 Census of Population, (Preliminary Reports) Series PC-6, No. 10, March 30, 1951; Series PC-3, No. 8, Rev., January 11, 1951; Series PC-3, No. 4, November 5, 1950, U. S. Department of Commerce, Washington, D. C.
- Van Cleef, Eugene, Geography for the Businessman, New York, Harper and Brothers, 1943.
- Wolfe, A. B., "Population: Theory," Encyclopedia of the Social Sciences, 12 (1934), 248-254.
- World Almanac, New York World-Telegram and The Sun, New York, 1951.