University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, & Professional Papers

Graduate School

1967

Las Vegas Nevada: A demographic and ecological analysis

Thomas Leslie Burns
The University of Montana

Follow this and additional works at: https://scholarworks.umt.edu/etd

Let us know how access to this document benefits you.

Recommended Citation

Burns, Thomas Leslie, "Las Vegas Nevada: A demographic and ecological analysis" (1967). *Graduate Student Theses, Dissertations, & Professional Papers.* 5344.

https://scholarworks.umt.edu/etd/5344

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

LAS VEGAS, NEVADA: A DEMOGRAPHIC AND ECOLOGICAL ANALYSIS

Ву

Thomas Leslie Burns

B. A. College of Great Falls, 1963

Presented in partial fulfillment of the requirements for the degree of

Master of Arts

UNIVERSITY OF MONTANA

1967

Approved by:

Horda Burla Chairman, Board of Examiners

Dear, Graduate School

JUN 1 1967

Date

UMI Number: EP40808

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP40808

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

ACKNOWLEDGMENTS

While the interest and concern of many people has been of immense help in the completion of this study, two people deserve special mention. They are my wife, Marlene May Burns, and Professor Gordon Browder. Without the willingness of Marlene to make an otherwise busy schedule free for study and writing, as well as to carry a major portion of the financial burden of family living during graduate school, all that this represents would not have been possible. Professor Browder's constant encouragement, critical evaluation, and patient teaching in introducing a neophyte to the mysteries of logical and rigorous thinking have also been paramount. While his instruction and advice have been immensely helpful, the omissions, errors, and lapses from the high standard he set are mine.

TABLE OF CONTENTS

LIST OF	TABLES	v
LIST OF	FIGURES	vi
CHAPTER	1	PAGE
I	INTRODUCTION	1
,	The Problem	3
	Statement of the problem	3
	The Burgess zonal hypothesis	4
	Additional objectives of the study	5
	Methodology	6
	Importance of the study	7.
	Limitations of the study	8
	Organization of remainder of the thesis	9
II	A BRIEF HISTORY OF LAS VEGAS, NEVADA	,10
	Introduction	10
	Las Vegas before the turn of the century	11
	Las Vegas after the turn of the century	13
III	POPULATION CHARACTERISTICS	22
. *	Introduction	22
	Population under fifteen	23
	Population 15 to 59 years of age and over	25
	Sex ratios	28
	Marital status	30
	Fertility ratios	32

CHAPTER		PAGE
	Foreign-born white population	. 34
	Non-white population	. 34
	Interpretative summary	• 37
IV	SOCIO-ECONOMIC CHARACTERISTICS	. 41
	Introduction	. 41
	Female employment status	. 41
	Male employment status	. 42
	Male - professional, technical, and	
	kindred workers	. 44
	Male - managers, officials, and	
	proprietors	. 44
	Male - clerical and kindred workers	. 47
	Male - sales workers	. 48
	Male - craftsmen, foremen and kindred	
	workers	. 48
	Male - operatives and kindred workers	. 51
	Male - private household workers	• 53
	Male - service workers, except private	<i>-</i>
	household	• 53
	Male - laborers, except mining	. 54
	Income in 1959	• 54
	Educational status	. 61
	Interpretative summary	. 62
Λ	CHARACTERISTICS OF HOUSING IN LAS VEGAS	64

iv	7
HAPTER	Æ
Introduction 64	ł
Type of structure64	Ļ
Year built	3
Occupancy	ł
Value and rent 77	7
Gross monthly rent	i
Interpretative summary	2
VI SUMMARY MATRIX	5
Introduction85	5
Conclusions85	5
Suggestions for further research90)

 BIBLIOGRAPHY
 92

 APPENDIX
 94

LIST OF TABLES

TABLE		PAGE
I.	Population Trends 1920 to 1960, City of Las Vegas, State	
	of Nevada, and Selected Cities	. 18
II.	Country of Birth of Foreign-Born White, Las Vegas,	
	Nevada: 1960	. 36
III.	Major Occupational Group, Employed Females in the Labor	
** * *	Force, Las Vegas, Nevada: 1960	. 43
IV.	Income in 1959, Families and Unrelated Individuals Living	
	Together, Las Vegas, Nevada: 1960	• <i>5</i> 7
٧.	Income in 1959, Families and Unrelated Individuals Living	
	Together, by Census Tracts, Las Vegas, Nevada: 1960	. 60
.IV	Years of School Completed, Persons 25 Years Old and	
	Over, Las Vegas, Nevada: 1960	. 61
VII.	Housing Unit by Type of Structure, Las Vegas,	
	Nevada: 1960	. 65
VIII.	Value of Owner Occupied, One Housing Unit Structures,	
	Las Vegas, Nevada: 1960	• 77
IX.	Value of Owner Occupied, One Housing Unit Structures,	-
	by Census Tracts, Las Vegas, Nevada: 1960	. 80
X.	Gross Monthly Rental, Renter Occupied Units, Las Vegas,	
	Nevada: 1960	. 81
XI.	Gross Monthly Rent, Renter Occupied Units, by Census	
	Tracts Inc Vogas Novada, 1960	Ωlι

LIST OF FIGURES

I. T.GOI	KE .	PAGE
i.	Population Trends: 1920-1960 City of Las Vegas, State of	
	Nevada, and Selected Cities	17
2.	Age Composition, Population Under 15 Years of Age, Las	
	Vegas, Nevada: 1960	24
3•	Age Composition, Population 15 to 59 Years of Age, Las	
	Vegas, Nevada: 1960	26
4.	Age Composition, Population 60 Years of Age and Over,	•
	Las Vegas, Nevada: 1960	27
5.	Sex Composition of Population, Las Vegas,	
	Nevada: 1960	29
6.	Marital Status, Proportion of Persons Married, Las	
	Vegas, Nevada: 1960	31
7•	Fertility Ratios, Las Vegas, Nevada:	
	1960	33
8.	Foreign-Born White Population, Las Vegas,	
	Nevada: 1960	35
9•	Non-White Population, Las Vegas,	
	Nevada: 1960	38
10.	Occupational Status, Male Professional, Technical, and	
	Kindred Workers, Las Vegas, Nevada: 1960	45
11.	Occupational Status, Male Managers, Officials, and	
	Proprietors, Las Vegas, Nevada: 1960	46
12.	Occupational Status, Male Sales Workers, Las Vegas,	
	Nevada: 1960	49

FIGU	RE	PAGE
13.	Occupational Status, Male Craftsmen, Foremen, and	
	Kindred Workers, Las Vegas, Nevada: 1960	. 50
14.	Occupational Status, Male Operatives and Kindred	
	Workers, Las Vegas, Nevada: 1960	. 52
15.	Occupational Status, Male Service Workers, Las Vegas	
	Nevada: 1960	• 55
16.	Occupational Status, Male Laborers, Las Vegas	•
	Nevada: 1960	. 56
17.	Median Income in 1959, Las Vegas,	
	Nevada: 1960	. 59
18.	Type of Structure, One Housing Unit, Las Vegas,	
	Nevada: 1960	. 66
19.	Type of Structure, Five Housing Unit or More, Las Vegas,	
	Nevada: 1960	. 69
20.	Age of Housing Units, Proportion Built Prior to 1939,	
	Las Vegas, Nevada: 1960	. 71
21.	Age of Housing Units, Proportion Built 1950 to 1960,	
	Las Vegas, Nevada: 1960	· 73
22.	Owner Occupied Housing Units, Las Vegas,	
	Nevada: 1960	• 75
23.	Median Value, One Housing Unit Structures, Las Vegas,	
	Nevada: 1960	. 79
24.	Median Rent, Renter Occupied Housing Units, Las Vegas,	
	Nevada: 1960	83
25.	Summary - Census Tract Variables, Las Vegas,	
	Nevada: 1060	87

LAS VEGAS, NEVADA: A DEMOGRAPHIC AND ECOLOGICAL ANALYSIS

CHAPTER I

INTRODUCTION

Early community studies were largely directed by a desire to assess the condition and effectiveness of community institutions. Their objective was to arouse the community to better the conditions which they investigated. Although these early works were not scientifically rigorous, they were instrumental in developing interest in urban research. The work done in Springfield¹ and Pittsburg² are examples of this type of endeavor.

_ Steiner writes of this movement and says:

The shift in emphasis in American sociology a generation ago from the realm of philosophy to an analysis of concrete social data was a logical outgrowth of the application of scientific method to the study of urban and rural communities. The importance of the local community as a field of study was first demonstrated by the muckraking descriptions of urban slums by journalistic writers. It was not until the period of the First World War that professional sociologists devoted serious attention to community studies and sought through objective analyses of various aspects of community life to throw light on the processes of social interaction.

Several types of analyses of urban areas using census materials have been employed by investigators in the past. One such analysis

¹Shelby M. Harrison, Social Conditions in An American City, The Springfield Survey (New York: The Russell Sage Foundation, 1920)

²Paul U. Kellogg, <u>The Pittsburg Survey</u> (New York: The Russell Sage Foundation, 1909-1914)

³Jesse F. Steiner in Calvin F. Schmid, Social Trends in Seattle (Seattle: University of Washington Press, 1944), p. V.

consists of comparing summary data for one city with summary data for other cities. This kind of approach, such as used in McMahan's
The People of Atlanta, is concerned with studying differences between cities viewed primarily as statistical units. The orientation is concerned with differences between cities in terms of ecological and demographic characteristics and does not usually consider intra-city variations that may exist.

Another orientation to the study of the urban community, views the city as a mosaic of quite different ecological and demographic areas. Roderick McKenzie has given direction to the descriptive analysis of such areas in his pioneer community study of Columbus, Ohio. McKenzie began his study of local life within the city of Columbus, Ohio, by analyzing the city structure as a whole. He writes of his findings in the following manner:

Cities are usually classified according to size. They may be also classified according to the nature and organization of their leading industries. Land valuations in the forms of business, industrial, and residential utilities, largely determine the structure of the modern city. Every city has its central business district, located near the geographical center of the city. Subbusiness districts tend to form at street-car crossings and around neighborhood institutions. The basic industries are usually located around the outskirts of the city's corporation, while manufacturing establishments employing women are usually located near the center of the city. Real estate values distribute a city's population into various residential sections of different economic and social status. Racial and nationality bonds tend to subgroup the population within the various economic areas:0

⁴C. A. McMahan, The People of Atlanta (Athens: University of Georgia Press, 1950).

⁵Roderick D. McKenzie, "The Neighborhood: A Study of Local Life in the City of Columbus, Ohio," The American Journal of Sociology, September, 1921, Vol. XXVII. 6Did., p. 145.

Since these early community studies, a large amount of empirical research has been done. The result of all this work has led to the emergence of Social Ecology as a well defined field of study concerned with explaining the territorial arrangements that social activities assume. Its main task is to discover and to explain the regularities which appear in man's adaptations to space.

A. Explanation of the Problem:

The research in this field can be divided into a number of distinct theories, each of which has tried to bring a conceptual order out of man's relationships with physical space. It is in the light of one of these theories that the present study emerges.

The research problem is to test the zonal hypothesis put forth by Ernest W. Burgess in his study of the City of Chicago, by applying it to the study of Las Vegas, Nevada. The Concentric Zone Theory of Burgess has been selected for empirical evaluation, rather than one of several others related to urban development, since there is a lack of concensus among students of urban research as to its functional utility in explaining observed regularities in the distribution of people, services, and facilities in space and time. This fact, however, is not the major impetus behind the present study. Rather, it is the paradox surrounding the fact that stimulates one to research.

While criticized by some, Firey, for example, as being limited in application and oversimplified in generalizations about cities it

⁷Walter Firey, Land Use in Central Boston (Cambridge: Harvard University Press, 1947), p. 3.

⁸Ernest W. Burgess, "The Growth of the City," in R. E. Park, ed., The City, (Chicago: University of Chicago Press, 1925)

does apply to, it is nonetheless considered by others to be one of the best-known and most widely accepted theories of urban development yet advanced. A paradox thus exists. It is felt that an empirical evaluation of Burgess's theory as it applies to the city of Las Vegas, Nevada will be one more step toward confirming or repudiating its validity as a social reality, and thus, the paradox surrounding it. The city of Las Vegas was selected over others for analysis because of its relatively small size, its natural topography, and the availability of data concerning its growth and distribution.

In approaching the study of this particular problem, an outline of Burgess's zonal hypothesis logically precedes an analysis of it.

The first task then must be to present such an hypothesis. Following that a brief outline of the nature of the research and the data upon which the case shall rest will be presented.

B. The Burgess zonal hypothesis may be stated as follows: 10

The theory posits a typical patterning of social and economic types which appear as a series of concentric circles surrounding a central point. This central point is formed by the conjunction of two or more communicative routes.

In the circular plane that surrounds this junction point there is supposed to be a segregation of social and economic types into five concentric zones. The first zone, lying athwart the intersection of communicative routes, is occupied by the business district of the city.

⁹Kimball Young and Raymond W. Mack, Sociology and Social Life (New York: The American Book Company, 1965), p. 282.

¹⁰Firey, op. cit., pp. 6-7.

Surrounding the business district there is a second zone, known as the area of transition. In this circular band are supposedly located the main tenement and rooming-house districts of the city, as well as light manufacturing plants and scattered businesses that have ventured out of the retail center. This is the area of immigrants, transients, bohemians, and criminals. Beyond the zone of transition is placed the working-class district of single-family or two- and three-decker dwellings. The fourth concentric zone, lying at the edge of the city, consists of high-class apartment dwellings and exclusive restricted districts of single-family residences. Beyond this, in the suburban area, are the commuters' homes, comprising thus a fifth zone in the scheme.

The total configuration is envisioned as a self-regulating mechanism whereby a process of distribution takes place which sifts and sorts and relocates individuals and groups by residence and occupation. Each increment of population gravitates naturally to its predestined zone, so that the city's growth consists of an outward extension of each zone into the one lying just beyond it. 11

C. Additional Objectives of the Study:

While the basic research problem remains one of critically evaluating ecological theory in terms of factual data, a secondary research problem of this study is to analyze a number of variables and their interrelationships for the city of Las Vegas, Nevada. Specifically, the present study will be directed towards three other objectives. First, the city will be described by census tracts in terms of a number

:,

¹¹ Ibid.

of housing and population variables treated individually. Second, the intercorrelations of some these variables will be presented. Third, each census tract area in the city will be summarized in terms of all the variables presented in the analysis.

D. Methodology:

The present study has as its methodological frame of reference Burgess's zonal hypothesis as well as that of providing analysis which conforms to the rigor of the scientific method.

Schmid writes, "The most distinctive characteristics of the ecological approach is its emphasis on the spatial or distributive relationships of human beings and social forms and the principles and factors that determine these relationships." This statement clearly points out the general framework within which the analysis will be carried out: namely, a spatial unit. The basic unit of analysis to be used is the census tract. The United States Bureau of the Census defines census tracts as:

Small, permanently established, geographical areas into which large cities and their environs have been devided for statistical purposes. Tract boundaries are selected by a local committee and approved by the Bureau of the Census. They remain the same for a long time, so that statistical comparisons can be made from year to year and from census to census.

The average tract has over 4,000 people and is originally laid out with attention to achieving some uniformity of population characteristics, economic status, and living conditions. 13

¹²Calvin F. Schmid in Pauline V. Young, <u>Scientific Social Surveys</u> and Research (New York: Prentice-Hall, 1949), p. 429.

¹³U. S. Bureau of the Census, Census Tract Manual, Fifth Edition, Washington, D. C., 1966. p. 1.

In a study of this type it is essential to ascertain detail as well as more general observations. To this end the census tract is a very highly efficient unit of analysis. As Schmid points out, "In scientific research an object is studied not as a whole but by breaking it up into its parts, which are then described and analyzed in their interrelationships. Census tracts are not only relatively small in size by they are comparable, homogeneous, and permanent." 14

It has been said that a study is no better than the reliability of its data. This study employs data which are accurate and reliable. The sources of the data, unless otherwise noted, are the reports of the United States Bureau of the Census for Las Vegas, Nevada. All these data are taken from reports and photostats of the Eighteenth Decennial Census of 1960. 15

E. Importance of the Study:

Basic to serious scientific research is the selection of a subject or problem that is of significance; that is in itself meritorious and worthy of the very considerable labor, time, and perhaps money which most research seems to require. 16 This writer feels that the selection of Las Vegas, Nevada as a subject for serious scientific investigation meets this requirement of significance for the following reasons:

¹⁴Calvin F. Schmid., in Pauline V. Young. op. cit., p. 440.

¹⁵U. S. Bureau of the Census. <u>U. S. Censuses of Population and Housing: 1960 Census Tracts</u>. Final Report PHC(1)-75. U. S. Government Printing Office, Washington, D. C., 1961.

¹⁶Robert P. Bullock, "Basic Obligations in Research" (unpublished miniograph copy, Department of Sociology and Anthropology, Ohio State University.)

First, it is felt that the results of this study could be of interest and value to future students of demography and ecology. To the student interested in the urban community, this study will provide information which he may use in illustrating many generalizations concerning the character of the contemporary American city. As already has been noted, an empirical evaluation of the zonal hypothesis will be one more step toward confirming or repudiating its validity as a social reality. Second, it is felt that the results of this study could be of interest and walue to the people of Las Vegas. To the layman, the work offers information which will show graphically the spatial character and the interrelationships of social variables as they are found in this community. Third, it is felt that the results of this study could be of interest and value to governmental officials. The governmental official, especially members of the City Planning Commission, may use the results of this study in planning and administering programs of public policy.

F. Limitations of the Study:

Any city, as a political unit, must necessarily be recognized as an arbitrary delimitation. This political unit is seldom identical to the social and economic metropolitan district. It is more often only a part of this larger community. The famed Las Vegas "Strip," for example, which lies outside the city limits would yield many different social and economic variables than those found in the city proper. This necessarily restricts the nature of the conclusions which can be made on the basis of studying the political unit. It would, therefore,

۲.,

be preferable to study the entire metropolitan district of which Las Vegas is a part. However, time and data make a study of the larger and more comprehensive area impossible.

G. Organization of the Thesis:

This thesis is divided into six chapters. Chapters one and two are introductory chapters. Chapter one contains the "Design" of the study, while chapter two introduces the reader to the Early History and Growth of Las Vegas; knowledge of which is used to provide background for the analysis of the data to be presented. Beginning with chapter three the major report of the study commences with an investigation into the Population Characteristics of the people of Las Vegas. This chapter analyzes certain statistical material as it bears on the question of the age of the population, sex ratios, fertility ratios, foreign-born white population, non-white population, and marital status. Chapter four, Socio-Economic Characteristics, discusses three variables as they are related to employment, income, and education of the population. Chapter five, Housing Characteristics, concludes the major report of the study. The data presented in this chapter illustrates the ecological structure of the city. Chapter six, Summary Matrix, contains the conclusions and suggestions for further research.

CHAPTER II

A BRIEF HISTORY OF LAS VEGAS, NEVADA

Introduction

Las Vegas, a unique desert community, lies in the southeastern corner of the state of Nevada. It is situated at an altitude of 2,016 feet, 225 miles northeast of Los Angeles, California and 25 miles west-northwest of well known Hoover Dam. The total area of the city is twenty-three square miles. 1

The Twelfth Decennial Census of 1900 has no report for the city of Las Vegas, for in that year the area was practically uninhabitated. The 1940 Census reports a population of 8,422. Today it is the largest city in the state, with a population of 64,405. It is the county seat of Clark County (127,016) and contains 50.7 percent of the total county population.²

Unlike most cities in the state, where historically, economic interests were directed toward mining and agriculture, particularly the raising of livestock, Las Vegas was founded as a division point on the present-day Union Pacific Railroad by promoters who were backed by western capital. Today the main business center is close to a new and very modern Union Pacific station at the head of Fremont Street. Though the railroad industry is still of considerable importance, legalized

¹Las Vegas, Nevada, Chamber of Commerce, Las Vegas Report: A Decade of Progress, (Research & Statistical Bureau, Las Vegas, Nevada Chamber of Commerce, May 1966), p. 5.

^{2&}lt;u>Tbid.</u>, p. 16.

gambling and the development of resort areas have given tourism the major role in the economy of the city.

Las Vegas Before the Turn of the Century

As early as 1830 Las Vegas, one of the fertile and desirable sections in southern Nevada, was a camping site for the New Mexicans on their trading expeditions from Santa Fe to Monterey, California by way of the Old Spanish Trail. This trail took them through the valley which the Mexicans called Las Vegas (The Meadows) because of the grassy stretches surrounding a spring of water.

Captain John C. Fremont in reporting his visit to the camp site in 1844 wrote of "a camping ground called Las Vegas...Two narrow streams of water, four or five feet deep, gush suddenly, with a quick current, from two singularly large springs...the taste of the water is good but rather too warm to be agreeable."

Jefferson Hunt, sent late in 1847 from Salt Lake by the Church of Jesus Christ of Latter Day Saints to obtain seed and foodstuffs in California, camped at this spot and reported favorably on it when he returned. Soon the springs were a stopping-place for people traveling from Salt Lake City to California by the southern route. The springs today are in a basin from 20 to 30 feet in diameter; the powerful upward rush of water flowing from them makes a stream from 6 to 8 feet

³The Nevada State Historical Society, Inc., Nevada: The American Guide Series, (Portland, Oregon: Binfords & Mort, 1940), p. 184.

in width. They are slightly northwest of the city and a resort has been established near by.4

Originally, then, a watering and resting place on the trail to California, the site of Las Vegas was first settled in 1855, when William Bringhurst of the City of Great Salt Lake, was called by the Mormon Church to take thirty men to Las Vegas. Here a town was started as a mission to Christianize the Indians in the vicinity as well as to establish a station on the Salt Lake-Los Angeles trail to protect immigrants and the United States mail from the Indians.

These settlers, too, had to protect themselves and their livestock from Indian attacks. Thus, the settlers cleared the mesquite shrubs away; built an adobe stockade 14 feet high and 150 feet long; hauled logs from the Charleston Mountains to the west; built cabins, fences, a dam and bridges; and planted crops. The enclosure was referred to as the Fort. On January 10, 1856, a post office was opened and named Bringhurst for the president of the mission. The mission now began to take on an appearance of permanence. The Fort was completed and several missionaries brought their families to the valley, and a school was built inside The Fort. Meetings were also held in this building. The Mormon gospel was preached, and while Mormon records show that many Indians were converted and baptized, the Paiute (Pi-oot) Indian Tribe proved to be particularly unadaptable to the white man's civilization, and after a number of costly raids had

⁴Ibid., p. 184.

⁵Tbid.

decimated the buildings and crops, the fort was abandoned.

Following the Mormon evacuation, the site of the old mission was acquired by a rancher named O. D. Gass, and for a brief time during the Civil War, three companies of cavalry and one company of infantry were stationed there to protect the mail and travel route to southern California from the Indians, and the post was called Fort Baker.

Although O. D. Gass sold the ranch and water rights in 1882 to Archibald Stewart, Las Vegas was, for the forty-five years between 1858 and 1903, only a ranch and had little part in shaping the destiny of present-day Las Vegas.

Las Vegas After the Turn of the Century

When the twentieth century opened, there was little activity on the Stewart Ranch, the site of the old Mormon Mission. Then, in 1903 when the San Pedro, Los Angeles and Salt Lake Railroad was projected, the ranch was bought for a townsite and division point by W. A. Clark, former senator from Montana, acting for the company. Before the railroad's townsite was opened another townsite beside it—now Old Town—was acquired by J. T. McWilliams. People flooded in, in part because of the mining boom in the newly discovered Bullfrog and Greenwater Districts. Known as McWilliamstown then, the camp was prosperous and busy by reason of the immense freighting business to the mines.

⁶ James W. Hulse, The Nevada Adventure: A History (Reno: University of Nevada Press, 1965), p. 76.

⁷The Nevada State Historical Society, ep. cit., p. 186.

On May 15, 1905, Las Vegas was really born. Around a platform erected near the present freight depot, nearly 3,000 people gathered to hear C. O. Wittemore, representing the railroad company, explain guarantees of future development contained in the bills of sales for lots. These included a water system that would place water under pressure on every lot, the improvement of all streets, the building of a handsome depot and other railroad structures, and, finally the erection of railroad shops to employ several hundred men. The sale of lots lasted two days, and during that time 1,200 were sold at a total price of \$265,000. The promises of the company were taken seriously—and they were all fulfilled.

On the morning of the 17th, tents and lumber and other building materials were being enthusiastically hauled to the site. Because the streets had not yet been cleared, eager men and women had to search among the greasewood for the stakes marking their lot corners. Before darkness came the town had appeared——a grotesque assortment of buildings in all possible stages of completion. In tents were a post office, saloons, and gambling houses, as well as a hotel and a bank. The hotel was a huge canvas structure 140 feet long, with large additions for a dining room and kitchen. Until the following winter this great tent was the center of all social activities.9

But within 30 days Las Vegas was more than a tent town. Stores and houses were taking shape everywhere. During the summer, the Las Vegas Land and Water Company, a subsidiary of the railroad company,

^{8&}lt;u>Tbid.</u>, p. 187.

⁹Tbid.

graded and oiled 10 miles of city streets, built concrete or wooden curbs throughout the town, and brought water to every lot.

With the completion of the railroad from Salt Lake in June, 1905, and the construction of the Las Vegas & Tonopah Railroad in 1906, Las Vegas rode into commercial and political importance. In 1908 more substantial buildings were erected; and to protect them a volunteer fire department was organized. 10

Although Las Vegas began with a flourish, its early years were marred by bad luck. In January, 1907, a phenomenal rainstorm wrecked 110 miles of railroad track in the Muddy Valley Wash, and for six weeks no trains arrived from Salt Lake City. In October of the same year, a fire destroyed the school and many other buildings. 11 But these early misfortunes meant only a temporary setback and the town revived.

In 1909 Las Vegas passed beyond the stage of infancy. As a result of the population growth and the demands for governmental service, the legislature created the new county of Clark---named for the railroad financier---and designated Las Vegas as the county seat. In 1911 the legislature acted again and passed a bill creating the City of Las Vegas.

The first census which reported population figures for Las Vegas was the census of 1920. Las Vegas' population at this time was 2,304 and was the second largest city in the state. In 1920, of the seven principal cities in Nevada that this writer has chosen to

¹⁰ Tbid.

¹¹ Hulse, op. cit., p. 207.

illustrate the phenomenal growth of Las Vegas, Reno was the largest city and North Las Vegas and Henderson City the smallest, listing no population. Figure 1 shows the growth in population from 1920 to 1960 for the seven principle cities and the State of Nevada. This. graph shows that Las Vegas grew most rapidly during the period from 1940 to 1950 with a 192.4 percent increase. Sparks, Nevada showed a population increase of 54.2 percent, while Reno, the financial and wholesale distributing center of western Nevada, was increasing at a somewhat slower rate of 52.4 percent. From the years 1950 to 1960, Las Vegas added another 39,781 persons to its population which was a slight decrease from the preceding ten years, but was still a net increase of 161.6 percent for the ten year period. During this same period of time, Sparks and Reno continued to grow at a significantly slower rate of 102.6 percent and 58.4 percent respectively. It was at this point that Las Vegas passed Reno in growth, and thus became the largest city in the state.

Table I gives the population figures taken from the United States Census for each ten year interval between 1920 and 1960 for the seven principle cities and the State of Nevada. The table shows that Las Vegas has become the largest city in the state of Nevada, followed by Reno, North Las Vegas, Sparks, Henderson City, Eldo, and Carson City. Of these seven cities, North Las Vegas had the largest percentage growth for a ten year interval with a 375.4 percent increase between the years 1950 to 1960

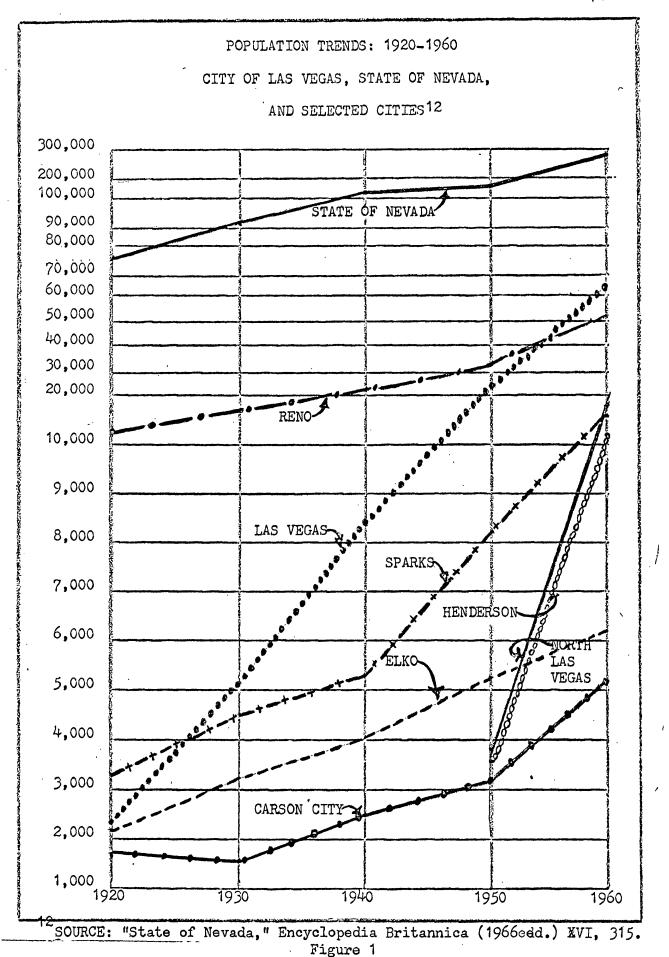


Table I Population Trends 1920 to 1960 City of Las Vegas, State of Nevada, and Selected Cities 13

Year	C arson City	Elko	Henderson City	Las Vegas	North Las Vegas	Reno	Sparks	State of Nevada
	:		·					
1920	1,685	2,173	·	2,304		12,016	3,238	77,407
1930	1,596	3,217		5,165		18,529	4,508	91,058
1940	2,478	4,094 وبل		8,422		21,317	5,318	110,247
1950	3,082	5 ,3 93	3,643	24,624	3,875	32,497	8,203	160,083
1960	5,163	6,298	12,525	64,405	18,422	51,470	16,618	285,278
						•		

¹³SOURCE: "State of Nevada," Encyclopedia Britannica (1966 ed.), XVI, 315.

There are several factors which account for the phenomenal growth that has taken place in the city of Las Vegas and the surrounding area. One factor which benefited Las Vegas in the early years after its settlement was the prosperity of Goldfield and Tonopah. At first, most of the freight for these mining camps had come from the direction of Reno, improving the business climate in that end of the state. Later it occurred to Senator Clark that Las Vegas could profit from the mining boom, so he decided to build a railroad from that city to Rhyolite, Goldfield, and Tonopah. Locomotives began to haul passengers to and from Goldfield just at the time when, that camp was entering its greatest period of prosperity, and for a few years picture postcards boasted that Las Vegas was the "gateway to Goldfield."

In addition to the benefits it received from the mining towns to the northwest, Las Vegas profited from smaller rushes in Clark County. Prospectors combed the mountains in the southernmost corner of the state during the early 1900's, and this meant dollars in the pockets of Las Vegas merchants. The most important of the towns to grow up in the area was Searchlight, seventy-five miles south of Las Vegas——near the extreme tip of the state. This district produced a few million dollars worth of gold during the period of Las Vegas' youth. 15

Another asset that helped Las Vegas to prosper---and this was far more important than any mineral wealth in the region---was a large

¹⁴ Effie Mona Mack & Byrd Wall Sawyer, Our State: Nevada (Caldwell, Idaho: The Caxton Printers, Ltd., 1940), p. 128.

¹⁵Hulse, op. cit., p. 208.

supply of underground water from artesian wells. This gave the community a potential which many other older Nevada towns did not have.

Even though geographical advantages served Las Vegas well, the town did not grow rapidly during its first few years as figure 1 and table I showed. Although it was prosperous, it continued to be a small city. As late as 1930, Las Vegas' population was no more than 5,165; much smaller than several of Nevada's present cities. Then a strange thing happened. The construction of Hoover (Boulder) Dam some thirty-two miles southeast of Las Vegas in 1931 and the impetus of legalized gambling on the tourist industry began to transform the town. During all the construction period, Las Vegas, as the closest point where connection could be made with a main-line railroad, was transformed from a sleepy desert village into a high-rolling boom town. Population skyrocketed as vast stores of supplies and building materials flowed in for transshipment to the dam site, and for many months workmen and their families completely swamped the town's facilities for taking care of them.

Even after direct railroad connections were made and the Reclamation Service built Boulder City to house its thousands of employees, the Las Vegas boom continued unabated. The government town forbade the sale of liquor or the operation of gambling houses, and the result was that each weekend saw hundreds of carloads of workmen hurrying northward, eager to empty their bulging pockets at the Las

Wegas bars and casinos and to patronize its notorious Block 16, the town's wide-open red-light district. 16

It was Hoover Dam, then, that gave Las Vegas gambling its first real impetus toward bigger and better things, making it one of the fastest growing communities in America. It is difficult to realize, in view of the cosmopolitan reputation of Las Vegas today, that it was a small railroad city just thirty years ago.

¹⁶⁰scar Lewis, Sagebrush Casinos: The Story of Legal Gambling in Nevada (New York: Doubleday & Company, Inc., 1953), p. 191.

CHAPTER III

POPULATION CHARACTERISTICS

The study thus far has been mainly concerned with the historical analysis of the city of Las Vegas. This chapter deals with a
discussion of a number of variables dealing with demographic characteristics of the population. More specifically, trends in age data, sex
ratios, fertility ratios, marital status, and foreign-born white population, non-white population will be discussed.

These variables have been selected for analysis for a number of reasons. First, to test the zonal hypothesis one must know something about the people: who they are (male or female, young or old) how many there are in each social category, and especially where they are distributed in space. The variables selected here will answer these pertinent questions. Second, the rate at which the population of Las Vegas may be expected to increase or decline is important in planning for housing, communication, educational, and recreational facilities, Third, a community consisting mostly of old people will have different needs from a community with a large proportion of children and young people. Fourth, a community consisting primarily of unmarried males will have important social and cultural differences from a community consisting of males and females in equal numbers. In short, these vital statistics are prime indexes of a communities resources and of its degree of stability or instability, 1 and could, therefore, be of considerable value to community planners. real estate firms and other interested persons.

٠,.

¹George A. Lundgerg and others, <u>Sociology</u> (New York: Harper & Row Publishers, 1958), p. 399.

Population Under Fifteen

For the entire city, 18,925 persons, or 29.4 percent, are under 15 years of age.² For the 14 census tracts, the percentage of individuals under 15 years of age varies from a low of .9 percent to a high of 21.8 percent. Figure 2 indicates that the percentage of individuals under 15 years of age is lowest at the center of the city and increases toward the periphery of the city.

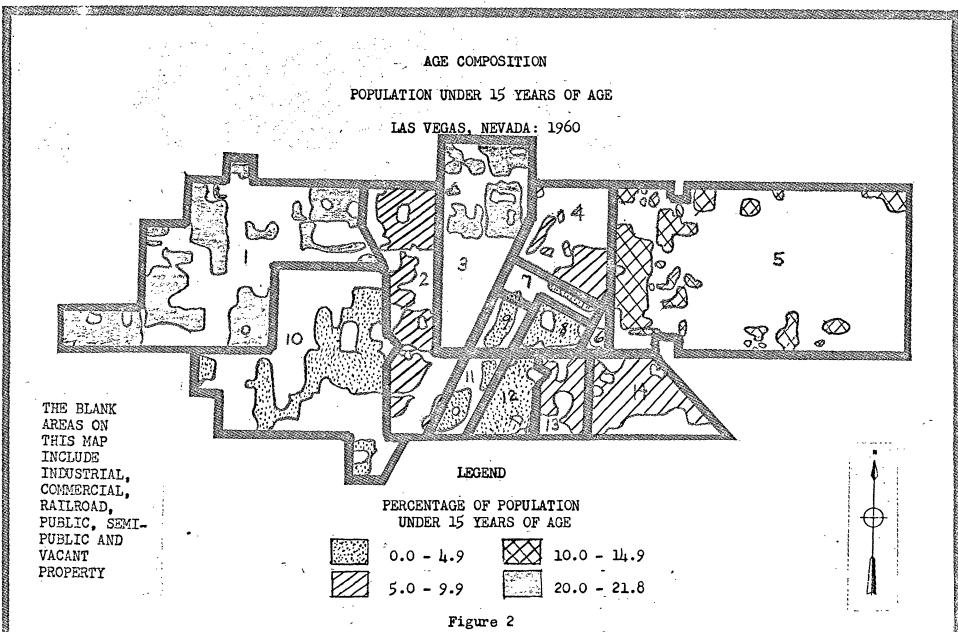
The smallest proportion of persons under 15 years of age is found in census tract 7 with .9 percent. Census tracts 6, 8, 9, and 11 have small proportions of individuals under 15 years of age with 1.9, 1.4, 1.3, and 1.8 percent respectively. Tract 7 contains the central business district and the other tracts with low percentages of persons under 15 years of age are adjacent to the central business district, with the exception of census tract 11.

The largest proportions of persons under 15 years of age are found in census tracts at the periphery of the city. The highest proportion of individuals under 15 years of age is found in tract 3, with 21.8 percent, while tract 1 is a close second with 21.3 percent. It then falls off sharply to a high of 10.3 percent in tract 5 and 9.3 percent in tract 14.

Population 15 to 59 Years of Age

For the entire city, 39,974 persons, or 62.1 percent, are in the age category 15 to 59 years of age. For the 14 census tracts, the

²The age classification is based on the age of the person in completed years as of April 1, 1960, as determined from the reply to a question on month and year of birth.



*SOURCE: The information on this map was computed by the author on the basis of the information provided by the U.S. Bureau of the Census. U.S. Censuses of Population and Housing: 1960. Census Tracts. Final Report PHC (1)-75. U.S. Government Printing Office, Washington D.C., 1961

ţ

j

percentage of individuals between 15 and 59 years of age varies from a low of 2.5 percent to a high of 15.0 percent. Figure 3 indicates that the percentage of individuals between 15 and 59 years of age is lowest at the center of the city and increases toward the periphery of the city, much in the same pattern as for the population under 15 years of age.

The smallest proportion of persons between 15 and 59 years of age is found in census tract 7 with 2.5 percent. Census tracts 6, 8, and 9 also have small proportions of individuals between 15 and 59 years of age with 2.9, 3.7, and 4.6 percent respectively. Again it will be observed that these tracts are in or near the central business district.

The largest proportions of persons between 15 and 59 years of age are found in census tracts at the periphery of the city. The highest proportion of individuals in this age category is found in tract 1, with 15.0 percent, while tract 3 is close behind with 14.1 percent.

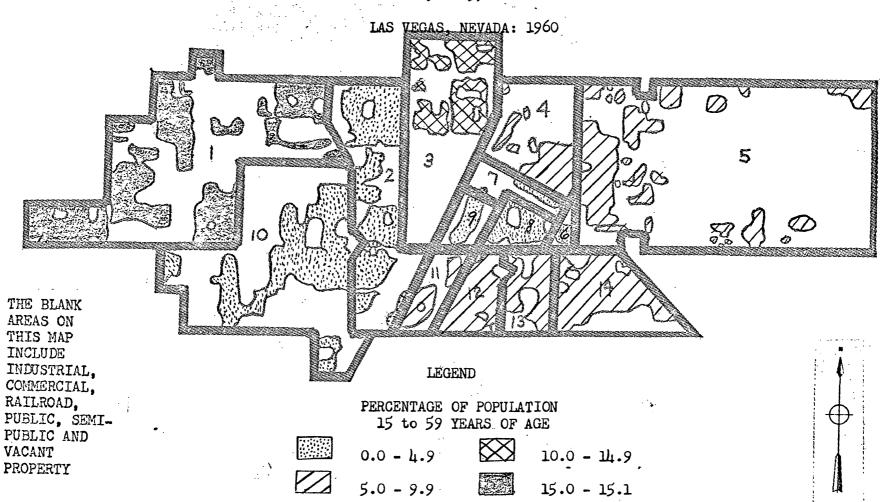
Again, it falls off sharply to a high of 9.8 percent in tract 4.

Population Sixty Years of Age and Over

An examination of Figure 4 discloses that the distribution of people 60 years of age and over assumes an inverse pattern as compared to the distribution of individuals under 15 years of age. For the entire city, 5,506 or 8.5 percent of the population is dixty years of age or older. By census tracts the percentages are found to vary from a high of 11.8 to a low of 3.3 percent. The census tracts with the highest proportions of people 60 years of age and over are found around the

AGE COMPOSITION

POPULATION 15 to 59 YEARS OF AGE



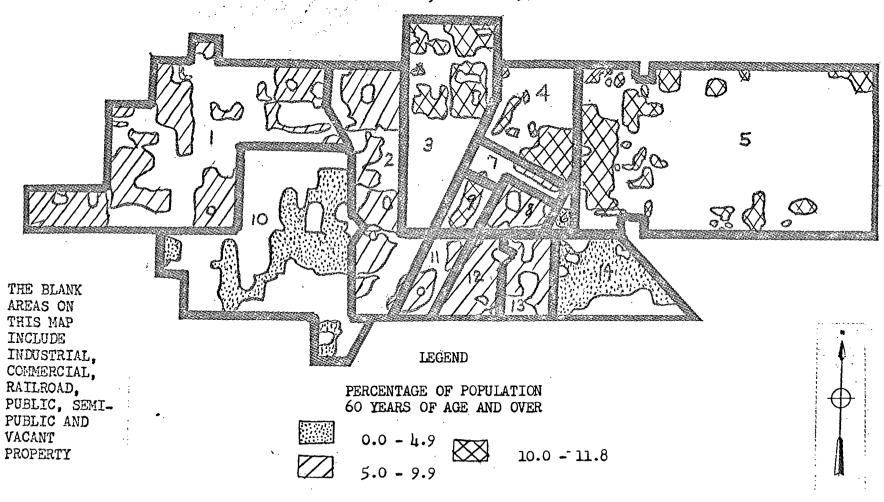
SOURCE: Ibid.

Figure 3

AGE COMPOSITION

POPULATION 60 YEARS OF AGE AND OVER

LAS VEGAS, NEVADA: 1960



SOURCE: Ibid.

Figure 4

center of the city in tracts 3, 4, 8, and 9. The percentage of persons 60 years of age and over in these tracts is 10.4, 11.8, 8.4, and 11.5 respectively.

The lowest percentage of individuals classified in this category is found in census tract 10, with 3.3 percent. Other areas with a low percentage of persons 60 years or older are found in census tracts 2, 6, and 14. The percentage of persons 60 years of age and over in these tracts is 5.2, 3.7, and 4.0 respectively. In general, it will be observed that the highest numbers of persons sixty years of age and over are found in the city center, and the lowest percentage of persons sixty years of age and older are found near the city periphery.

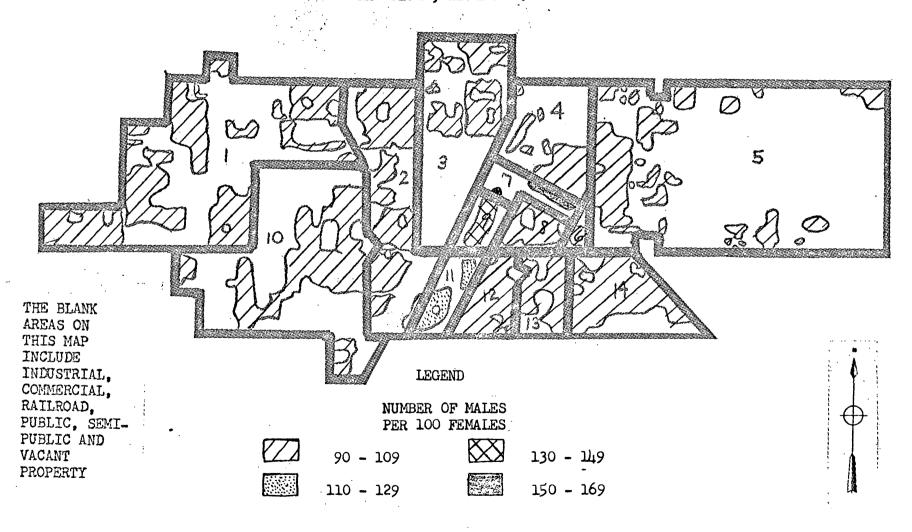
Sex Ratios

In the city as a whole, there are 32,745 males and 31,651 females. The sex ratio is 103 males per 100 females. In general, the proportion of males to females is approximately equal. However, when the ratios are taken by census tracts, wide variation is observed.

It will be observed from Figure 5 that tracts 7, 9, and 11, in ornnear the central business area, have large excesses of males per female. Tract 7, the central business district, with 163 males per 100 females, has the highest sex ratio of any tract in the city. Tracts 9 and 11 have 142 and 119 males per 100 females respectively. As will be recalled from Figures 4 and 5, tract 9 also has an extremely low proportion of persons under fifteen years of age and a relatively high percentage of persons sixty years of age and over. It will be



LAS VEGAS, NEVADA: 1960



SOURCE: Toid.

--- Figure 5

noted in a later section that tract 9 also has an extremely low proportion of persons fourteen years of age and over who are married.

It seems clear that this area may be defined as the "skid road" or area of homeless men.

Census tract 6 with 91.9 males per 100 females has the lowest sex ratio. For the remainder of the city, Figure 6 indicates that sex ratios vary between 94 males per 100 females and 106 males per 100 females.

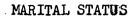
Marital Status

Of the 46,321 persons who are 14 years of age or older, 7,711 or 16.7 percent are single, 32,520 or 70.2 percent are married, and 6,090 or 13.1 percent are widowed or divorced.³

Figure 6 indicates that the proportion of persons fourteen years of age or older who are married is lowest near the central business district and increases as the distance from the central business district increases. Census tracts 7, 8, 9, and 11, with 52.6 percent, 65.5 percent, 55.0 percent, and 56.6 percent respectively, have the lowest percentages of persons per tract married.

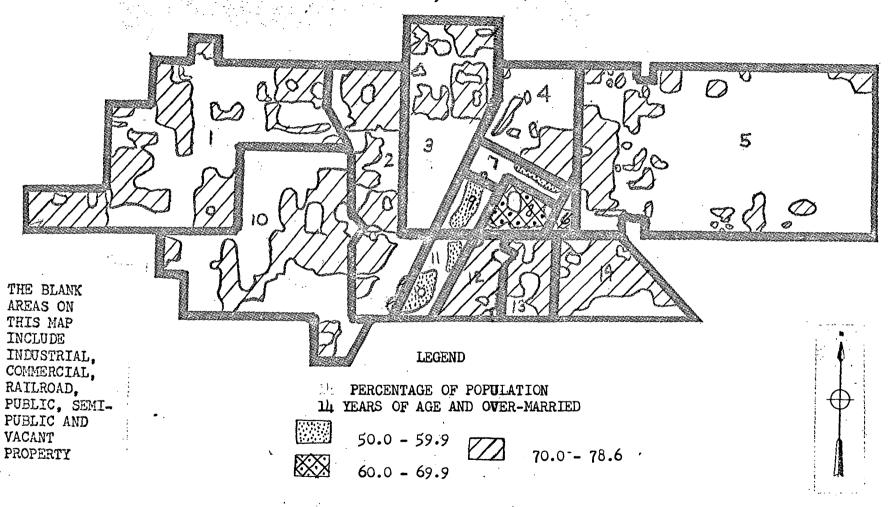
Census tract 1 has the highest proportion of married individuals who are 14 years of age and over, with 78.6 percent, followed by tracts 5, 10, and 14, with 75.4 percent, 77.0 percent, and 74.3 percent respectively. All other census tracts have proportions between 70 and 74 percent.

³This classification of persons fourteen years old and over relates to marital status at the time of enumeration. Persons classified as "married" comprise, therefore, both those who have been married only once and those who have remarried after having been widowed or divorced. Persons reported as separated or in common-law marriages are classified as married.



PROPORTION OF PERSONS MARRIED

LAS VEGAS, NEVADA: 1960



SOURCE: Ibid.

Figure 6

Fertility Ratios

The fertility ratio is derived by dividing the number of children under five by the number of women in the childbearing ages (usually 15 to 44). The result is usually multiplied by 1,000 to derive an expression of the number of children per 1,000 women in the childbearing ages. This fertility ratio provides a rough index to the relative fertility of the population.

The fertility ratio for the city as a whole is 499.6. This indicates that there are 499.6 children under 5 years of age per 1,000 women ages 15 to 44 inclusive. Wide variations from this figure exist in individual tracts, however. Fertility ratios by census tract vary from a low of 184.6 to a high of 852.4.

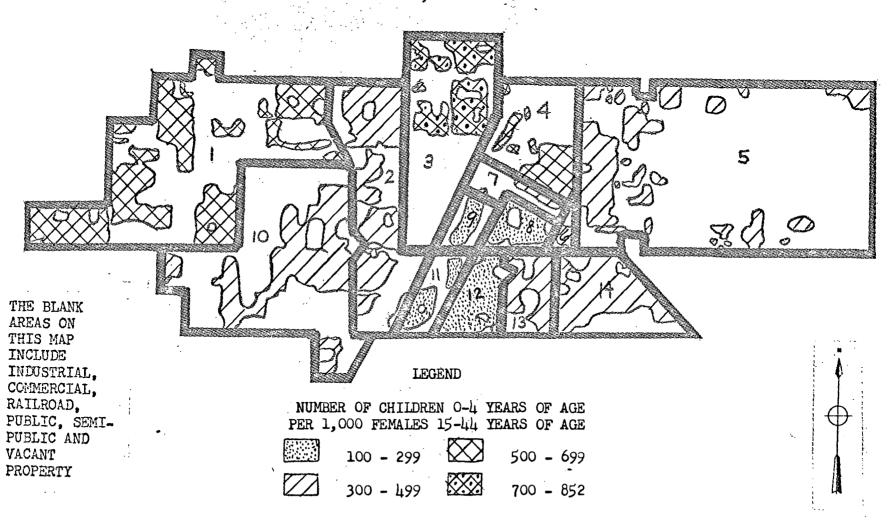
Figure 7 indicates that the highest fertility ratio is found in census tract 3. The fertility ratio for this tract is 852.4. It will be remembered that this tract had exactly 21 percent of its population in the age group under 15 years of age.

The lowest fertility ratios are found in the tract which contains the central business district and the tracts adjacent to it.

The lowest fertility ratio is found in tract 11 which has 184.6 children under 5 years of age per 1,000 women 15 to 44. It has been indicated previously that his tract has a low proportion of the population 14 years of age and over who are married. In general, fertility ratios are lowest at the center of the city and steadily increase toward the periphery of the city.



LAS VEGAS, NEVADA: 1960



SOURCE: Ioid.

- Figure 7

Foreign-Born White Population4

For the entire city, 11,467 persons or 17.8 percent of the total population of 64,405 are classified as foreign-born white.

Figure 8 indicates that the largest proportions of persons who are foreign-born white are found in census tracts 7, 8, 9, and 11, in or near the downtown area of the city. These tracts have 29.2, 28.1, 29.3, and 32.3 percent of their total population who are foreign-born white. Nine census tracts have between 15 and 25 percent of their population who are foreign-born white.

Census tract 3 has the lowest percentage of foreign-born white with 2.3 percent.

The data indicate that there is no predominantly foreign-born white area in Las Vegas. The number and percentage of persons born in foreign countries is given in Table II.

Table II indicates that the largest number of foreign-born white persons are of Italian descent. Almost as important numerically are the foreign-born white persons of Canadian descent. Persons born in the United Kingdom and Germany constitute groups which are also important.

Non-White Population5

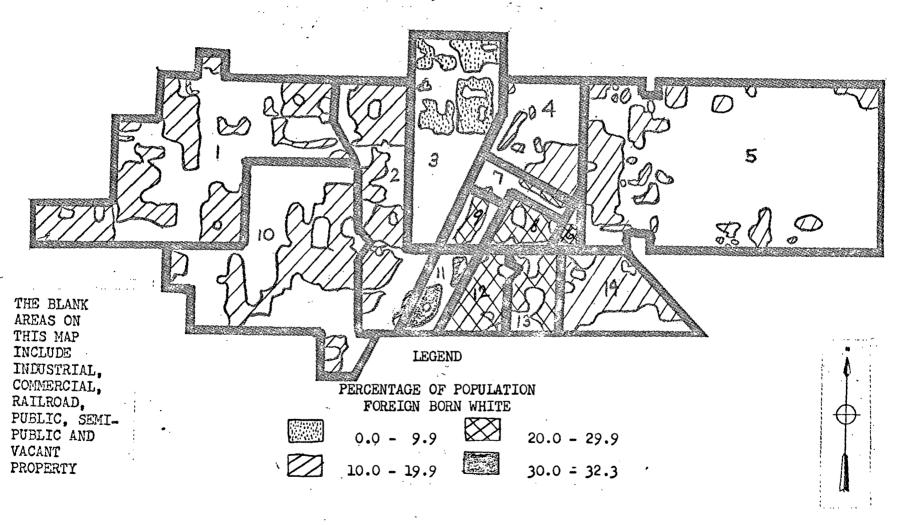
For the entire city, 10,144 persons or 15.8 percent of the

⁴A person born in the United States or any of its territories or possessions, or born in a foreign country of parents who are American citizens, is considered native. The classification by country of birth is based on international boundries as formally recognized by the United States in April, 1960.

⁵Two major race categories are distinguished, namely, white and non-white. Negroes and persons of "other races" taken together constitute "non-white" persons. Persons of Mexican birth or descent who are not definitely of Indian or other non-white race are classified as white.

FOREIGN BORN WHITE POPULATION

LAS VEGAS, NEVADA: 1960



SOURCE: Ibid.

Figure 8

TABLE II

COUNTRY OF BIRTH OF FOREIGN-BORN WHITE
LAS VEGAS, NEVADA: 1960

Country of Birth	$ exttt{Number}$	Percentage
Italy Canada United Kingdom Germany U. S. S. R.	1,517 1,313 1,241 1,006 924	13.2 11.5 10.8 8.7 8.1
Mexico Poland Austria Ireland (Erie) Sweden	523 483 467 387 379	4.5 4.2 4.1 3.4 3.3
Hungary Norway Czechoslovakia	321 235 127	2.8 2.0 1.1
All other and not reported	2,544	22.3
Total	11,467	100.0

*SOURCE: <u>Ibid</u>.

į

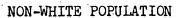
total population of 64,405 are classified as non-white. Of the non-white population, Negroes compose 95.1 percent of the total with 9,649.

Figure 9 shows that the largest proportion of non-white people are found in census tract 3. Census tract 3 has 94.9 percent of its total population classified as non-white. Of the 10,144 non-white people in the city, 9,623 of them live in this tract. Of the 9,623 non-white people in this tract, 9,549 of them are Negroes. From these figures it is clear that census tract 3 is a predominately non-white area, inhabited mainly by Negroes. It is of significant value to remember, as it has been indicated previously in Figure 8, that census tract 3 has the highest fertility ratio in the city, with 852.4 children under 5 years of age per 1,000 women ages 15 to 44.

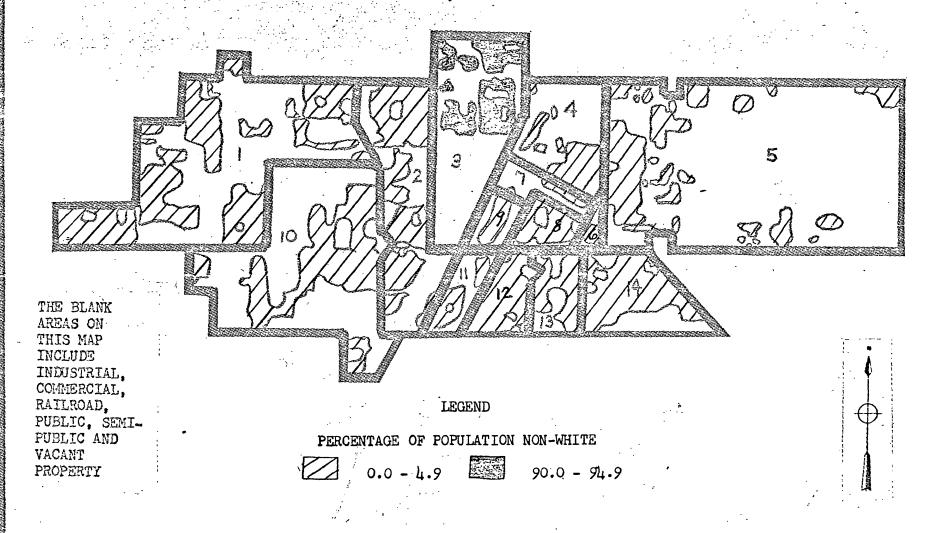
Interpretative Summary

The analysis presented in this chapter indicates that Las Vegas is, at least in terms of demographic characteristics, a mosaic of diverse areas, each with its own type of people. Though not conclusive, this finding is in keeping with the zonal hypothesis regarding the homogeneity of different areas.

The data show that Las Vegas is a young city in terms of the chronological age of the population, having 29.4 percent of the total population under 15 years of age and 62.1 percent between 15 and 59 years of age. The percentage of individuals in these age categories is lowest at the center of the city and increases toward the periphery of the city. A sociological implication of this finding might be the need for an increase in recreational and educational facilities to



LAS VEGAS, NEVADA: 1960



meet the needs of the expanding young population in these specific areas. Another implication might be the need for an increase in public transportation to and from these areas. This finding has sociological implications for the utility representative, the businessman, the investor, and the local government agencies in terms of planning for the future.

To recapitulate further, the data discloses that the distribution of people 60 years of age and over (8.5 percent of the total population) assumes an inverse pattern as compared to the distribution of individuals in the above named categories. In general, it was observed that the highest numbers of persons 60 years of age and over are found in the city center, and the lowest percentage of persons in this category are found near the city periphery. This finding also has many sociological implications. First, it could be of value to the investor in helping to determine if he should build a new shopping center, office building, or department store in this area composed mostly of people 60 years of age and over. Secon, a day cneter for the aged should be placed where people in those age groups are numerous and unable to avail themselves of other facilities. The data presented here may help in determining the best location. Third, these areas composed mostly of older people will have different housing needs than an area composed of young married couples. Last, although all the sociological implications have not been covered, these older residents living close to the city center will not require the same transportation facilities as the younger residents living near the city

periphery.

The analysis presented in this chapter also indicates that Las Vegas is a relatively stable community, that is, if marital status can be used as an index of stability, since 70.2 percent of all persons in the city who are 14 years of age or older are married. It was found that the proportion of persons fourteen years of age or older who are married is lowest near the central business district and increases as the distance from the central business district increases.

Last, the data indicate that there is no predominantly foreign-born white area in Las Vegas. However, while lacking a predominantly foreign-born white area, it was demonstrated that Las Vegas ha one predominately non-white area, inhabited mainly by Negroes, namely, census tract 3. This finding also has many sociological implications. These implications are clarified in the analysis concerning socioeconomic characteristics (presented in chapter four), and the analysis concerning housing characteristics (presented in chapter five).

1

)

CHAPTER IV

SOCIO-ECONOMIC CHARACTERISTICS

Three variables are considered in this chapter which describe the general socie-economic characteristics of the city. The variables which will be discussed deal with employment, income, and education. Specifically, the variables are male and female employment status, male occupational status, income in 1959, and educational attainment.

For many purposes (social, academic, and business) it is necessary to be able to distinguish the areas where the professionally and technically employed live from the areas of the unskilled, the high income residents from the low income residents, and the collegededucated group from the poorly educated. In between the extremes are many gradations and within census tracts many different mixtures of these characteristics. This chapter hopes to describe and identify these extremes and gradations as they are related to the zonal hypothesis. Thus, one would expect to find high income, college-educated, professional people located near the periphery of the city, while the low income, poorly educated, unskilled workers would reside closer to the core of the city.

Female Employment Status 1

For the entire city, of the 22,909 females fourteen years of age or older, 10,222 or 44.6 percent are in the labor force. Of these 10,222 females in the labor force, 9,412 or 92.1 percent are employed and 810 or 7.9 percent are unemployed.

¹See appendix for definition of employment and occupational categories.

The percentage of females in the civilian labor force varies when considered by census tracts. Eight census tracts have less than 45 percent of the females 14 years of age and over who are in the labor force. The 6 tracts with more than 45 percent of the females 14 years of age and over who are in the labor force are tracts 3, 4, 5, 7, 9, and 11. The percentages of these tracts vary from 45.5 percent to 58.2 percent. Census tract 11 has the highest percentage of females 14 years of age and over in the labor force with 58.2 percent.

The number and percentage of employed females in each of the major occupational categories are given in Table III for the city of Las Vegas as a whole.

Male Employment Status

For the entire city, of the 23,412 males 14 years of age and over, 20,079, or 85.8 percent, agre in the labor force. Of these males in the labor force, 18,593 or 93.9 percent are employed and 1,204 or 6.1 percent are unemployed.

Unlike the distribution of females in the labor force, when the percentage of males 14 years of age and over who are in the labor force is considered by census tracts, wide variations are not found. All census tracts except one, have at least 80 percent of the males of this age in the labor force and none have over 93 percent of the males in this age group in the labor force. Two census tracts have over 90 percent of the males 14 years of age and older in the labor force. They are tract 1 with 91.1 percent, and tract 11, which has the highest proportion of males in the labor force, with 92.8 percent. The census

tract with the lowest percentage of males in the labor force is tract 7 with 75.5 percent. As will be remembered, this tract has been designated as the "Central Business District".

TABLE III

MAJOR OCCUPATIONAL GROUP
EMPLOYED FEMALES IN THE LABOR FORCE
LAS VEGAS, NEVADA: 1960

Major Occupational Group	Number	Percentage
Professional, Technical, and Kindred Workers	1,089	11.6
Managers, Officials, and Proprietors	679	7.2
Clerical and Kindred Workers	2,675	28.4
Sales Workers	687	7.3
Craftsmen, Foremen, and Kindred Workers	<i>5</i> 7	. 6
Operatives and Kindred Workers	401	4.3
Private Household Workers	519	5•5
Service Workers, Except Private Household	2,625	27.9
Laborers	11	.1
Not Reported	669	7.1
Total	9,412	100.0

^{*}Source: Ibid.

Males - Major Occupational Group

Professional, Technical and Kindred Workers2

There are 2,024 persons, or 10.9 percent of the total number of employed males, who are classified as professional, technical and kindred workers. Figure 10 indicates, however, that when the proportions are observed by census tracts a wide variation is found.

It will be noticed that 5 of the 14 census tracts in the city have less than four percent of the employed males classified in this way. The lowest percentage is in tract 7 with 0.9. Census tract 3, the Negro section of town, has the next lowest percentage with 2.6. The highest proportion of employed males classified as professional, technical, and kindred workers are found in tracts 1, 5, 11, and 13. Census tract 1 has the highest percentage with 21.2 percent. The percentages for tracts 5, 11, and 13 are 9.3, 9.6, and 10.9 respectively.

Male - Managers, Officials, and Proprietors³

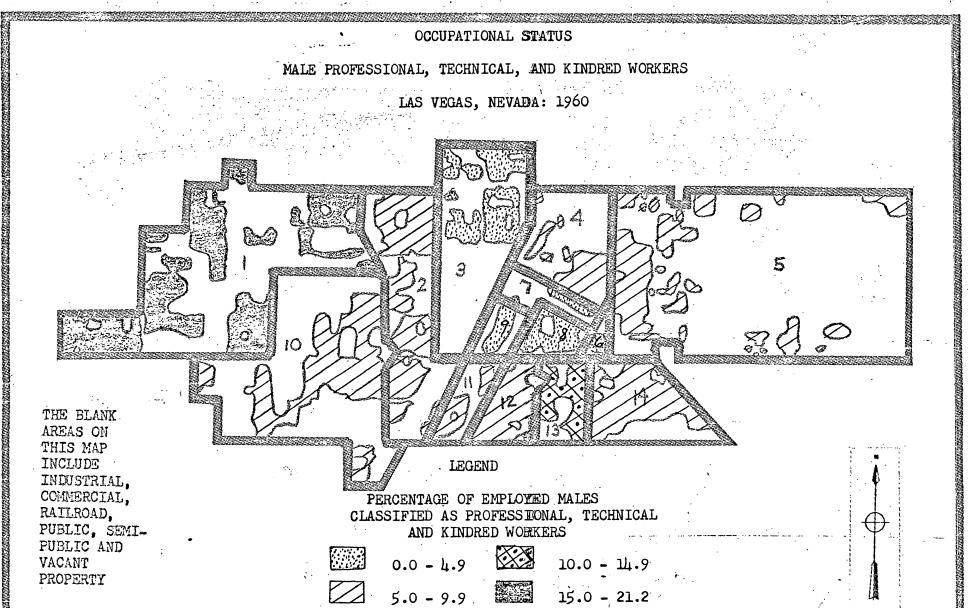
For the entire city, 2,860 or 15.4 percent of the total employed male population are classed as managers, officials and proprietors.

Percentages of employed males so classed by individual tracts range from 0.8 percent to 19.1 percent.

Figure 11 indicates that four tracts on the south side of the city, and one tract on the northwest side of town, have the highest proportions of workers in this category. These five tracts are 1, 10, 12, 13, and 14. Of these five tracts, 1 and 13 also have the highest proportions of persons classed as professional, technical and kindred workers.

²See appendix for definition.

³See appendix for definition.



*SOURCE: Ibid.

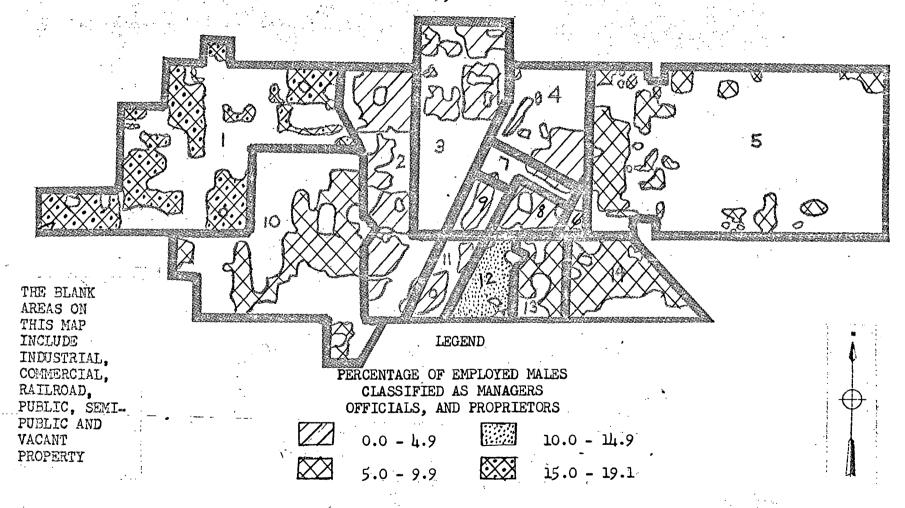
Figure 10

ţ



MALE MANAGERS, OFFICIALS, AND PROPRIETORS

LAS VEGAS, NEVADA: 1960



*SOURCE: Ibid.

Figure 11

Tracts 3, 6, 7, 8, and 9 have relatively low percentages of managers, officials and proprietors. These tracts also have low percentages of professional, technical, and kindred workers. It will be observed, then, that there is a positive correlation between the distribution of professional, technical and kindred workers and the distribution of managers, officials and proprietors. The coefficient of correlation between these two variables is +.92.

Male - Clerical and Kindred Workers4

For the entire city, 940 or 5.1 percent of the total number of employed males are classified as clerical and kindred workers. There is considerably less variation among census tracts in terms of the distribution of this variable than has been observed for other variables considered. Percentages of clerical and kindred workers per tract range from 2.7 percent to 18.9 percent.

Because of the very slight variation and the small number of employed males involved, no chart has been prepared showing the distribution of clerical and kindred workers. The largest percentages of clerks and kindred workers are found in tracts 1, 5, and 13, with 18.9 percent, 12.4 percent, and 10.7 percent of the employed males within these tracts classed as clerical and kindred workers. Low percentages are found in tracts 2, 3, 6, 7, 8, 9, 10, 12, and 14, with from 2.7 percent to 7.1 percent of the workers in these tracts so classified.

⁴See appendix for definition.

Male - Sales Workers5

For the entire city, of the total employed males, 1,118 or 6.0 percent are classed as sales workers. For individual census tracts, proportions of sales workers vary between 1.6 percent and 20.8 percent.

From reference to Figure 12 it can be seen that the lowest percentages of male sales workers per tract are found in tracts 3, 7, and 9. The percentages for these tracts are 2.8, 1.6, and 3.2 percent respectively.

The highest proportion of sales workers is found in census tract 1 with 20.8 percent. Census tracts 4, 5, and 14 also have a high proportion of sales workers with 11.3, 12.3, and 10.1 percent respectively. In general, the highest proportions of sales workers are found in those tracts which also have high proportions of managers, officials, and proprietors.

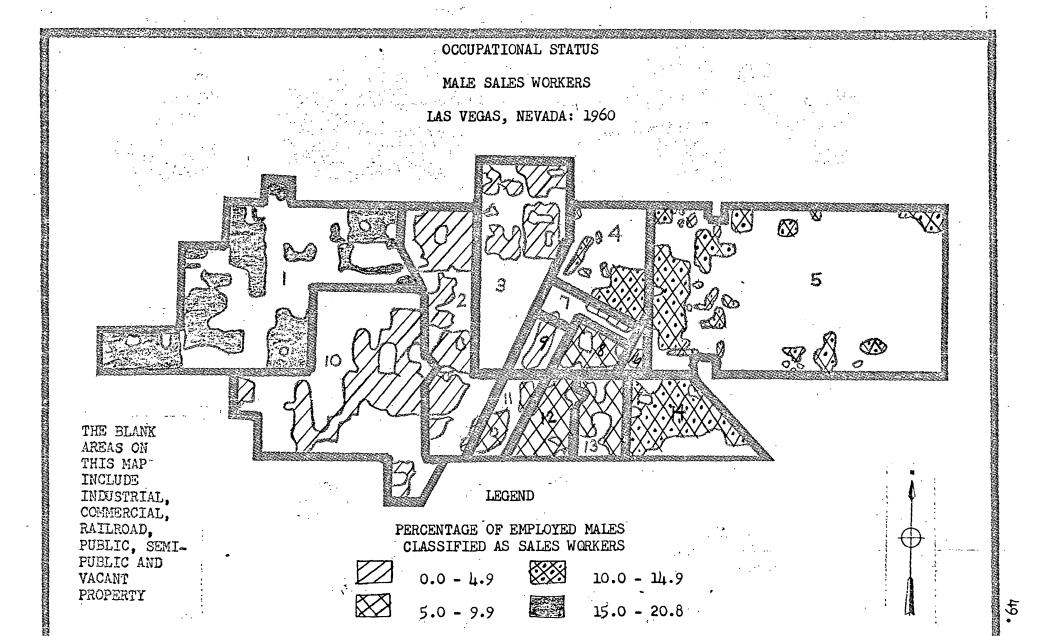
Male - Craftsmen, Foremen and Kindred Workers⁶

Las Vegas has 2,521 males who are employed as craftsmen, foremen and kindred workers. Of the total employed population this is 13.6 percent.

It can be seen from Figure 13 that wide variations exist among census tracts in the percentage of employed persons per tract in this classification. The highest proportions of employed males who are classified as craftsmen, foremen, and kindred workers are in census tracts 1, 4, and 5. The proportions of employed males who are classified in this group for these census tracts are 16.5 percent, 13.3

⁵See appendix for definition.

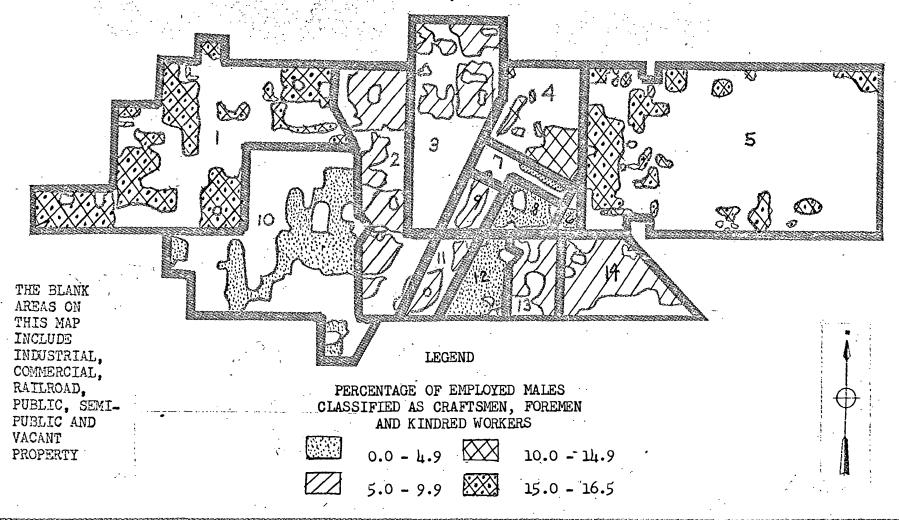
⁶See appendix for definition.





MALE CRAFTSMEN, FOREMEN, AND KINDRED WORKERS

LAS VEGAS, NEVADA: 1960



*SOURCE: Toid.

Figure 13

percent, and 15.2 percent respectively.

The lowest percentage of employed males who are classified as craftsmen, foremen, and kindred workers is found in tract 6. The percentage of employed males in this tract who are so classified is 2.7. Ten tracts have between 2.8 percent and 7.5 percent of the employed males classified in this way.

Male - Operatives and Kindred Workers 7

Las Vegas has 1,556 employed males classified as operatives and kindred workers. This represents 8.4 percent of the total number of employed males 14 years of age and over. For the individual census tracts the percentages of employed males who are so classified vary from a high of 17.5 percent to a low of 2.2 percent.

Figure 14 indicates that census tracts 3 and 4 have over 15 percent of the employed males in these tracts classified as operatives and kindred workers. The proportions for these tracts are 17.5 percent and 16.5 percent respectively. Nine census tracts have between 2.3 and 6.8 percent of the employed males falling into this category. The smallest proportion is found in tract 12 with 2.2 percent.

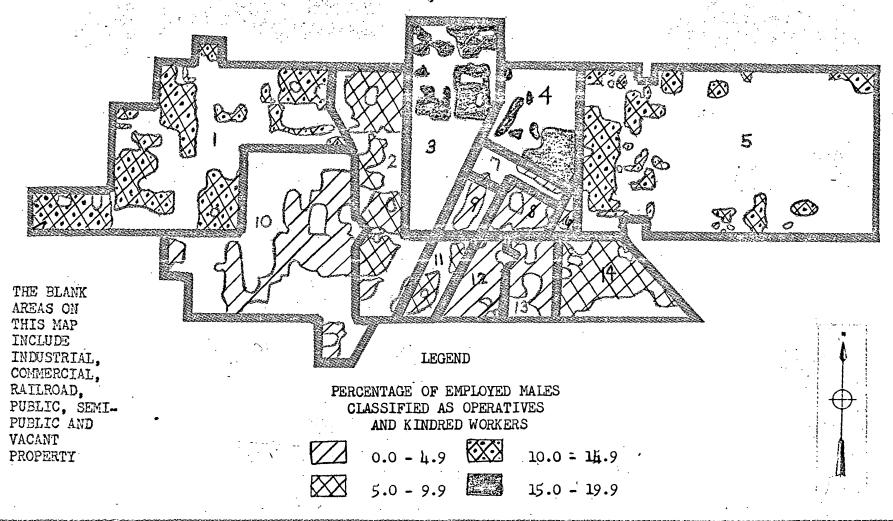
In general, the distribution of proportions of operatives and kindred workers per census tract is the reverse of the distribution of professional, technical and kindred workers, and of managers, officials and proprietors. The coefficient of correlation between the percentage of operatives and kindred workers and the percentage of

⁷See appendix for definition.

OCCUPATIONAL STATUS

MALE OPERATIVES AND KINDRED WORKERS

LAS VEGAS, NEVADA: 1960



*SOURCE: Ibid.

Figure 14

managers, officials and proprietors per tract is -.85. The coefficient of correlation between the distribution of operatives and the distribution of professional, technical and kindred workers is -.84.

Male - Private Household Workers8

For the entire city, only 26 males are employed as private household workers. This represents less than 0.1 percent of the total employed males. The largest concentration is found in tract 5 which has 10 males who fall into this category. No detailed analysis of this variable will be presented.

Male - Service Workers, Except Private Household9

For the entire city, 5,564 or 29.9 percent of the total number of employed males are classified as service workers. Of all the major occupational categories, service workers constitute the largest single group. The very nature of Las Vegas, being primarily a resort city, depending heavily upon tourism as its main industry, probably best accounts for the large number of persons so classified as service workers.

By individual census tracts, the percentage of service workers varies from a low of 2.2 percent in tract 10 to a high of 19.4 percent in tract 3, the Negro section of Las Vegas. Tract 1 also has a relatively high proportion of persons classified as service workers with 11.5 percent. The remaining 69.1 percent of the employed males classified as service workers, except private household, are found dispersed

⁸See appendix for definition.

⁹See appendix for definition.

throughout the city from a high of 9.8 percent in tract 11 to a low of 2.3 percent in tract 2. Figure 15 shows this distribution.

Male - Laborers, Except Mining 10

For the entire city, 726 or 3.9 percent of the total number of employed males are classified as laborers. Variations by individual census tracts range from 0.4 percent to 49.6 percent of the total employed males per tract so classified.

Figure 16 indicates that the highest percentage of laborers is found in census tract 3, the Negro section of town, with a whooping 49.6 percent. The remaining 13 census tracts have from 0.4 percent to 10.3 percent of the total employed males per tract so classified.

The distribution of high numbers of laborers is in general the reverse of that for professional and technical workers, with high percentages of laborers per tract associated with low percentages of professional and technical workers. The correlation coefficient between the two variables is -.73. The same observation is in general true for the distribution of laborers as opposed to the distribution of managers, officials, and proprietors. The coefficient of correlation in this case is -.51.

Income in 195911

For the entire city, income in 1959 is reported for 16,792 families and unrelated individuals. The number and percentage of persons in each income category are given in Table IV for the city.

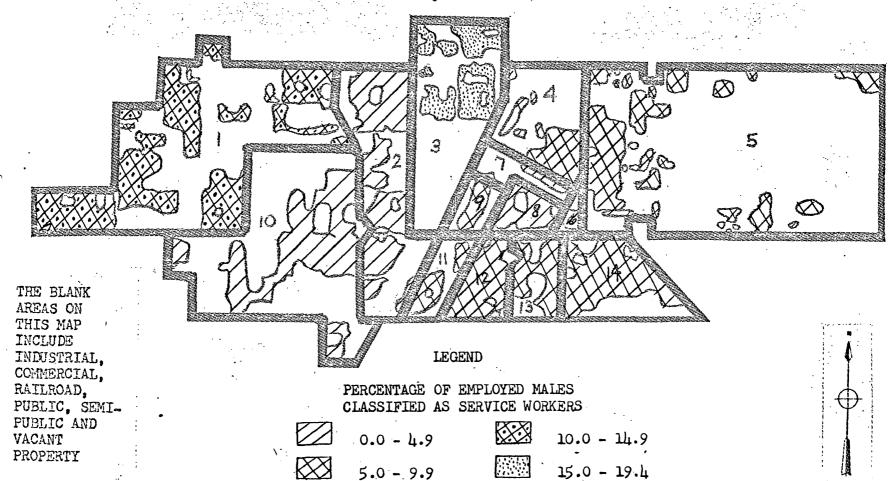
¹⁰ See appendix for definition.

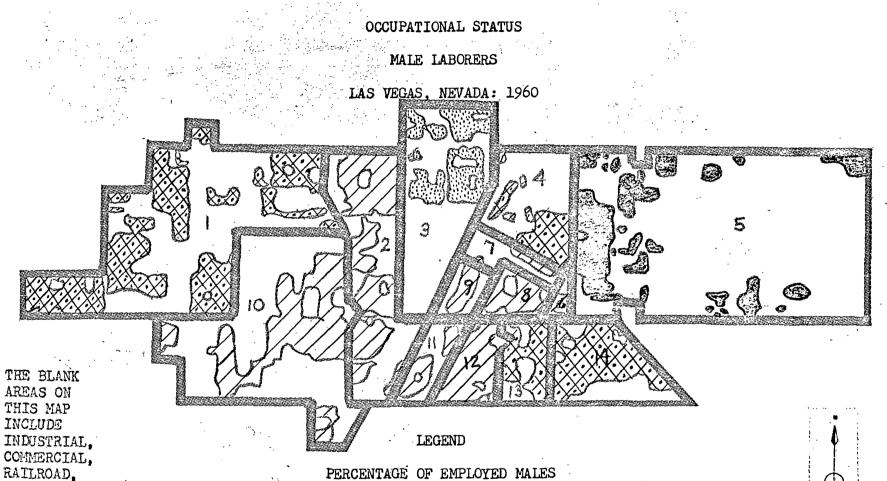
¹¹ Income in 1959 is given for families and unrelated individuals living together. These data are based upon a twenty five percent expanded sample.



MALE SERVICE WORKERS

LAS VEGAS, NEVADA: 1960





PERCENTAGE OF EMPLOYED MALES CLASSIFIED AS LABORERS



10.0 - 10.3

5.0 - 9.9



*SOURCE: Ibid.

PUBLIC, SEMI-

PUBLIC AND

VACANT PROPERTY

Figure 16

TABLE IV

INCOME IN 1959

FAMILIES AND UNRELATED INDIVIDUALS LIVING TOGETHER
LAS VEGAS, NEVADA: 1960

Income in 1959	Number of Families	Percentage
Under \$1,000	462	. 2.8
\$1,000 to \$1,999	540	3.2
\$2,000 to \$2,999	781	4.7
\$3,000 to \$3,999	1,061	6.3
\$4,000 to \$4,999	1,352	8.1
\$5,000 to \$5,999	1,496	8.9
\$6,000 to \$6,999	1,665	9•9
\$7,000 to \$7,999	1,569	9.3
\$8,000 to \$8,999	1,564	9.3
\$9,000 to \$9,999	1,272	7.6
\$10,000 to \$14,999	3,460	20.6
\$15,000 to \$24,999	1,177	7.0
\$25,000 and over	393	2.3
Total	16,792	100.0

*SOURCE: Ibid.

The median income in 1959 for the entire city was \$6,294.

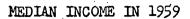
The median income for each census tract is shown on Figure 17. The highest median incomes are in census tracts 1, 2, 10, 12, and 13.

The median income for these census tracts is \$8,363, \$8,803, \$9,791, \$8,349, and \$8,023 respectively. The lowest median incomes are in census tracts 3, 7, and 9. The median income of each of these tracts is \$4,004, \$3,804, and \$3,810 respectively.

From comparison of Figures 10, 11, 14, 16, and 17, it will be seen that correlations exist between median income in 1959 and professional and technical workers, managers, officials and proprietors, operatives and kindred workers, and laborers. These correlations are shown below:

Median income in 1959 and Professional and technical workers per tract +.73
 Median income in 1959 and Managers, officials and proprietors per tract +.75
 Median income in 1959 and Operatives and kindred workers per tract -.55
 Median income in 1959 and Laborers per tract -.78

Data concerning the number and percentages of families and unrelated individuals living together per census tract in each income category are given in Table V. The number of families reported is shown, along with the percentage of persons in each income group and the median income for each tract.



LAS VEGAS, NEVADA: 1960

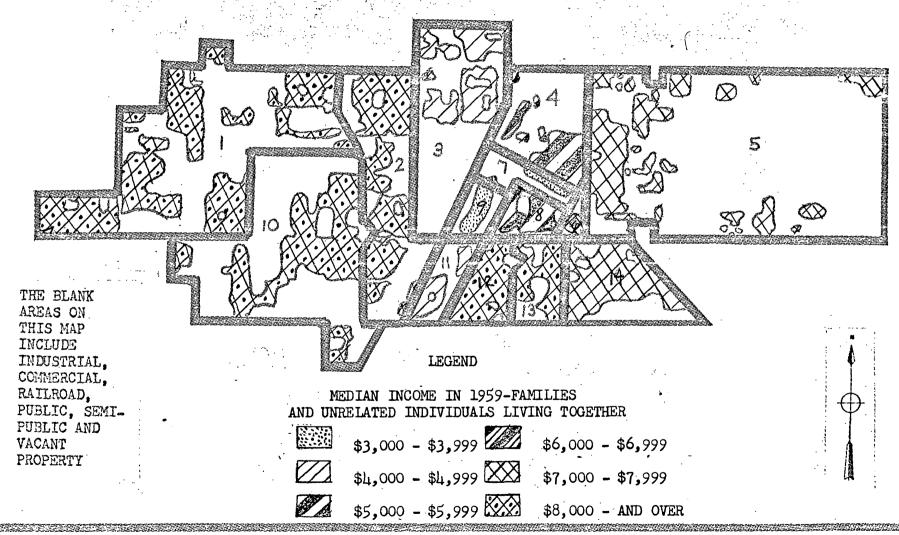


Figure 17

*SOURCE: Ibid.

TABLE V

INCOME IN 1959 FAMILIES AND UNRELATED INDIVIDUALS LIVING TOGETHER
BY CENSUS TRACTS LAS VEGAS, NEVADA: 1960

							Inc	come in	1959,							
Census Tract	No. of Families	Less Than 31,000										\$10,000 14,999			Median	
1	2,643	1.5	1.2	1.4	3.1	4.3	7.1	11.4	11.5	10.6	10.5	28.7	7.8	1.1	-\$8 , 363	
2	859	220	2.7	0.5	6.1	3.3	6.1	6.6	8.7	8.3	8.0	25.1	15.5	7.2	8,803	
3	2,146	3.3	6.0	10.8	15.5	13.7	13.1	10.7	6.1	5.8	5.6	8.1	1.1	0.3	4,004	
4	1,682	2.7	5.4	7.0	8.1	11.6	12.2	11.2	8.7	8.3	3.9	14.3	5.4	1.1	5,633	
5	1,625	0.7	2.4	3.4	4.4	7.0	8.8	9.8	13.4	10.5	8.6	25.5	4.8	0.7	7,261	
6	514	2.9	1.6	3.5	2.3	6.4	10.1	9.9	12.3	14.8	10.9	17.9	6.6	0.8	7,037	
7	340	3.8	4.7	7.1	8.8	14.4	6.8	18.8	6.6	7.1	10.3	7.9	1.5	3.5	3,804	
8	722	2.4	7.1	5.1	7.1	12.5	11.5	8.6	4.3	9.6	7.3	16.1	6.8	1.8	5,452	
. 9	6 90	6.7	4.2	10.3	9.0	10.9	12.9	11.7	5.9	5.4	5.9	12.8	1.7	2.6	3,810	
10	737	2.4	1.1	0.5	1.6	2.8	4.5	6.0	7.9	10.6	6.9	29.0	14.8	12.0	9,791	
11	978	4.8	3.4	8.6	9.5	16.3	10.6	9.5	8.3	7.5	4.7	14.1	1.7	1.0	4,822	
12	1,186	3.2	2.0	4.0	2,4	3.5	5.0	6.2	8.2	9.8	6.1	27.2	15.6	7.0	8,349	
13	1,361	2.6	2.2	2.2	4.1	5.0	6.3	6.5	9.7	12.0	9.2	28.9	9.1	2.1	8,023	
14	1,309	3.7	2.2	1.6	3.4	5.3	7.6	13.3	13.1	10.8	9.1	20.6	8.6	0.8	7,564	

*Source: Ibid.

Educational Status 12

The data concerning the number of school years completed for fersons 25 years of age and over was obtained from a twenty five percent sample. The data for the entire city are given in Table VI.

YEARS OF SCHOOL COMPLETED, PERSONS TWENTY-FIVE YEARS
OLD AND OVER LAS VEGAS, NEVADA: 1960

Years of School Completed	Number	Percentage
No school years completed	250	0.7
Elementary		
1 to 4 years	1,187	3.1
5 to 7 years	2,813	7.4
8 years	4,610	12.1
High School		
1 to 3 years	8,547	22.4
4 years	12,401	32.5
College		
1 to 3 years	5,239	13.7
4 years or more	3,102	. 8.1
Total	38,149	100.0

^{*}SOURCE: Ibid.

¹²See appendix for definition.

The median school year completed for the entire city is 12.1.

The median school year completed is given for each census tract in

Figure 19. Census tract 13 has the highest median school year completed with a value of 12.5. This tract also ranks high in most of the variables previously discussed. The census tracts which rank low in terms of median school grade completed, on the other hand, tracts 3, 7, and 9, also are tracts which rank low on most of the other variables studied. The median school year completed for these tracts are 8.6, 10.8, and 11.0 respectively.

Coefficients of correlation have been computed between median school grade completed and the percentage of managers, officials, and proprietors per tract, the percentage of laborers per tract, the percentage of professional and technical workers, and median income per tract. These correlations are as follows:

1.	Median school grade Managers, officials	and proprietors per tract		+.83
2.	Median school grade Laborers per tract	completed and	/	 83

- 3. Median school grade completed and Professional and technical workers per tract +.73
- 4, Median school grade completed and
 Median income in 1959 per tract +.78

Interpretative Summary

The evidence presented in this chapter, again, while not conclusive, tends to support Burgess's theory of urban patterning. The coefficients of correlation show that there is a significant relationship

regarding one's occupational status, income, and educational attainment. In general, the distribution of these variables increases as one moves from the core of the city (census tract 7) to the periphery.

CHAPTER V

CHARACTERISTICS OF HOUSING IN LAS VEGAS

This chapter will deal with the variables in the United States
Bureau of the Census reports for 1960 under the title "Characteristics
of Housing Units by Census Tracts." Housing units will be discussed
in terms of type of structure, year built, occupancy, and finally in
terms of value and rent.

These variables have been selected for analysis for a number of reasons. First, the data presented in this chapter clarify more explicitly the ecological structure of the city. To fully test the zonal hypothesis as it is stated on pages four and five of this study, one must know where the areas of "low", "medium", and "high" quality residences are distributed in space. The variables selected here will answer these pertinent questions. Second, studies have shown that housing conditions are related to problems of health, crime, delinquency, and family disorganization. Thus, these data may help to clarify some of the social conditions and problems of the city. Analysis of this kind could be of considerable value to planners, real estate firms and other interested persons.

Type of Structure 1

There are 22,858 housing units² in the city of Las Vegas. The majority of these housing units are in the category "one housing unit" structures. There are 15,769 "one housing unit" structures which

¹See appendix for definition of structure.

²See appendix for definition of housing unit.

represent 69.0 percent of all the housing units. The "five housing units or more" structures represent the second largest category with 13.7 percent of all the housing units, or 3,136. The categories "two housing unit" and "three and four housing unit" have 2,036 and 1,917 structures respectively and represent 8.9 and 8.4 percent of all the housing units. The majority of housing units in Las Vegas fall into two classes, "one housing unit" structures and "five housing units or more" structures. See Table VII.

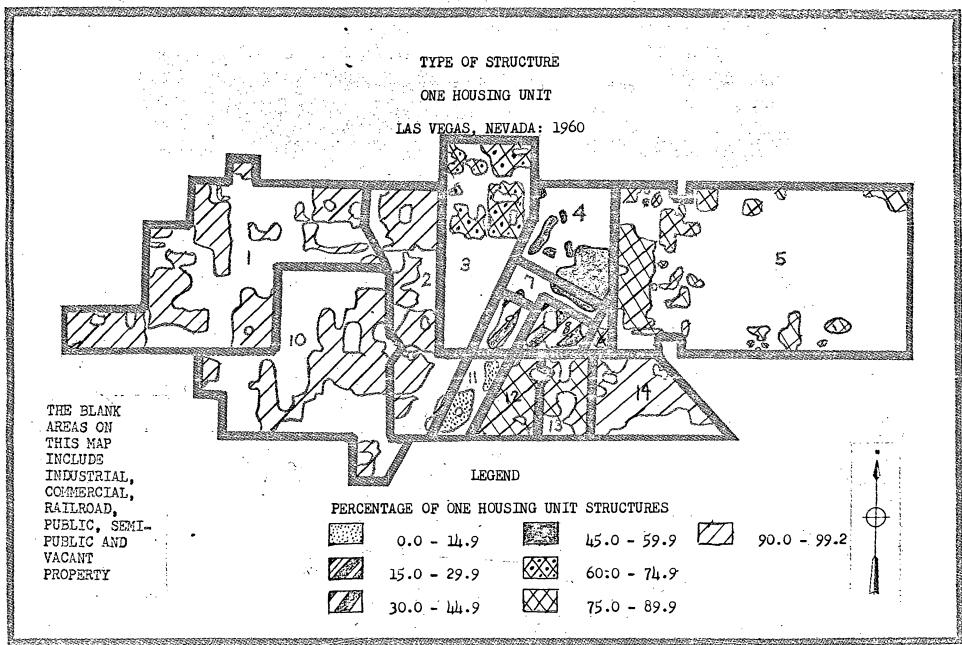
TABLE VII

HOUSING UNIT BY TYPE OF STRUCTURE
LAS VEGAS; 1960

Type of Structure	Number	Percent
1 housing unit	15,769	69.0
2 housing unit	2,036	. 8 . 9
3 and 4 housing unit	1,917	8.4
5 housing unit or more	3,136	13.7
Total housing units	22,858	100.0

^{*}This table was computed by the author on the basis of the information provided by the U. S. Bureau of the Census. U. S. Censuses of Population and Housing: 1960. Census Tracts. Final Report PHC (1)-75. U. S. Government Printing Office, Washington, D. C., 1961.

From an examination of Figure 18, it will be observed that the spatial distribution of "one housing unit" structures presents a rather



*SOURCE: Ibid.

Figure 18

consistent pattern. There is an increase in proportion of "one housing unit" structures as one proceeds from the center to the periphery of the city. With but one exception, the census tracts at the edge of the city have 84.6 percent of the housing units classified as "one housing unit" structures. On the other hand, the area surrounding the central business district contains less than 36.0 percent housing units falling into this category.

The proportion of housing units classified as "one housing unit" structures ranges from 12.1 to 99.2 percent. Census tracts 7, 8, 9, and 11 have the smallest proportion of this type housing unit with 50.5, 29.0, 35.0, and 12.1 percent respectively. Census tracts 1, 2, 10, and 14 have the highest proportion of "one housing unit" structures with 99.2, 94.5, 98.3, and 97.3 percent respectively.

of the 2,036 "two housing unit" structures, the largest numbers are found in tract 8, with 246 or 20.8 percent of all units in the tract within this category, in tract 13 with 303 or 18.8 percent of the units in this category, in tract 9 with 268 or 17.7 percent of its units so classified, in tract 4 with 325 or 14.8 percent in this category, and in census tract 3 with 402 or 14.0 percent in this category. All of these areas with the exception of tract 13 are adjacent to the central business district. The remainder of the tracts in the city have from 0.0 percent to 9.1 percent of all the units within the tract in this category.

The largest numbers of "three and four housing unit" structures in the city are found in tracts 4, 7, 8, 9, and 11. Census tract 4 has

415 or 18.9 percent of its units in this class, tract 7 has 91 or 12.2 percent, tract 8 has 375 or 31.6 percent, tract 9 has 240 or 15.9 percent and tract 11 has 294 or 13.2 percent of all units within the tract in this category. For the remainder of the city, between 0.0 percent and 8.9 percent of all units in the various tracts are classified as "three and four housing unit" structures.

Figure 19 shows that the housing units classified as "five housing unit or more" are found largely in the tracts in or near the central
business district. In general, the spatial distribution of housing
units of this type decreases from the center of the city to the periphery.
The four census tracts containing the highest proportion of "five housing unit or more" structures are census tracts 7, 8, 9, and 11. The
highest proportion of housing units of this type is found in census
tract 11 with 67.7 percent. Census tract 7, 8, and 9 have 28.9, 18.6,
and 31.4 percent respectively of the housing units classified as "five
housing unit or more" structures. A number of census tracts have 0.0 to
0.8 percent of the structures classified in this manner. Census tracts
1, 2, 13, and 14 have 0.2, 0.8, 0.6, and 0.0 percent respectively of the
housing units classified as "five housing unit or more" structures, and
tracts 3, 4, 5, 6, and 10 have less than eight percent of all housing
units classified into this type of structure.

Year Built3

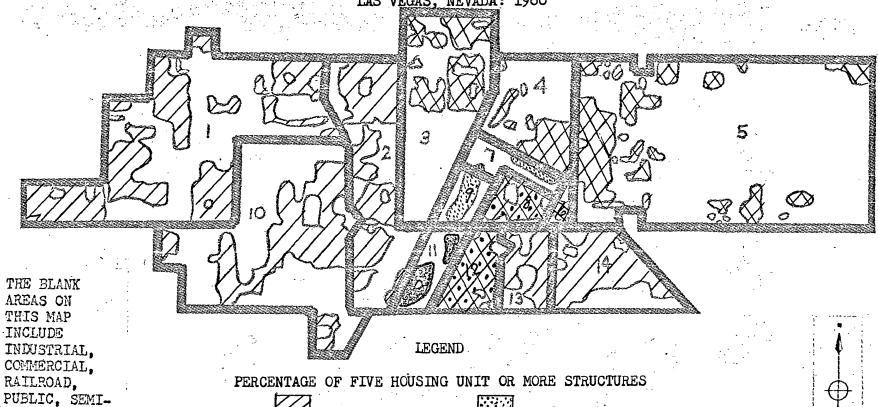
For the entire city, 22,858 housing units are reported. Of these housing units 12.4 percent were built in 1939 or earlier, 22.2

³See appendix for definition of year built.



FIVE HOUSING UNIT OR MORE

LAS VEGAS, NEVADA: 1960



0.0 - 4.9

25.0 - 49.9

5.0 - 9.9

50.0 - 67.7

10.0 -24.9

*SOURCE: Ibid.

PUBLIC AND VACANT

PROPERTY :

Figure 19

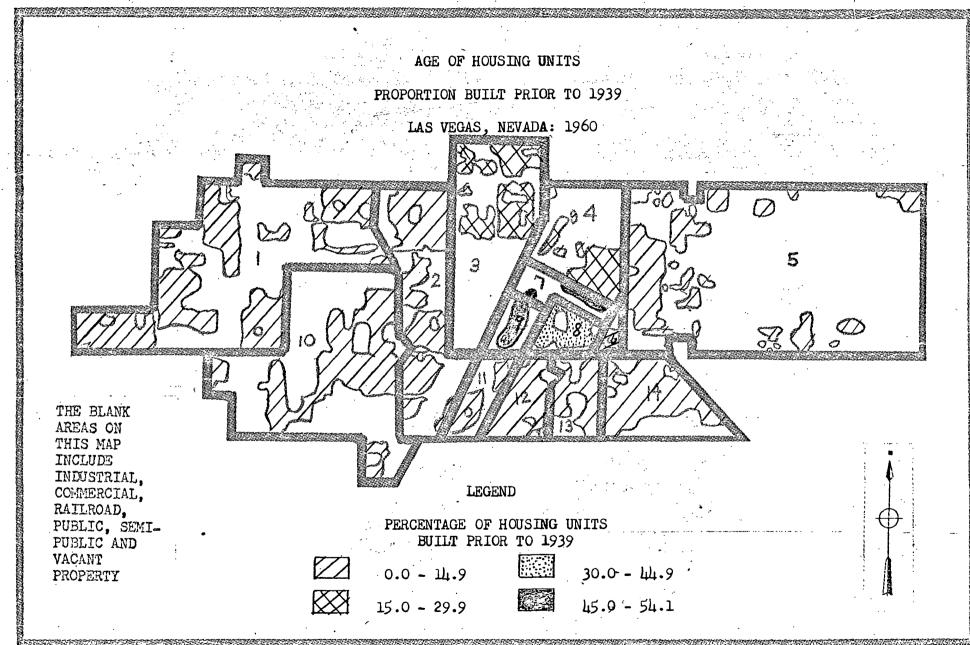
percent were constructed between 1940 and 1949, and 65.4 percent were constructed between 1950 and 1960. These data on the year of construction of housing units for each census tract provide a rough index to the spatial expansion of the city, i.e., these data bring attention to the times in which various areas of the city had their maximum growth.

It will be observed from Figure 20 that the largest proportion of older housing units is found in the area surrounding the center of the city. It will be seen that there is a general inverse relationship between the percent of housing units constructed in 1939 or earlier and the distance from the center of the city.

The proportion of housing units built in 1939 or earlier varies from 54.1 to 0.0 percent. Tract 7, which has been designated as the central business district, has the highest proportion of housing units constructed in 1939 or earlier with 54.1 percent while tracts 3, 4, 8, and 9, all immediately adjacent to the central business district, have 20.1, 15.3, 31.4, and 53.4 percent of the housing units reported as being built during this period.

The lowest proportion of housing units constructed during this period is found in tracts 1, 10, and 14. The percentage of housing units in this tract that are so classified is 0.0, 0.0, and 0.3 respectively. Six tracts have between 1.4 percent and 8.9 percent of the housing units classified in this way.

During the years 1940 to 1949 the city enjoyed a relatively large growth in terms of housing units constructed. There were a total of 5,067 housing units constructed during this period. Of this total,



*SOURCE: Toid.

Figure 20

2,513 or 49.6 percent were constructed in four census tracts in or near the central business district. These tracts are 4, 6, 8, and 13 with 43.9, 61.2, 36.6, and 43.6 percent respectively of all units in the tract within this age category. Tracts 2, 3, 5, 7, 9, 11, and 12 have over 15 percent of their housing units falling in this category. Only tracts 1, 10, and 14 had less than 15 percent of the housing units built during this period 1940 to 1949.

In sharp contrast to Figure 20, Figure 21 gives a graphic representation of the directions of growth as portrayed by building. The proportion of housing units built in 1950 to March of 1960 varies from 99.0 to 23.6 percent. As compared to Figure 21, it will be noticed that there is an inverse relationship between the two charts and that the highest proportions largely are found in the tracts at the periphery of the city and the smallest proportions in the tracts around the center of the city.

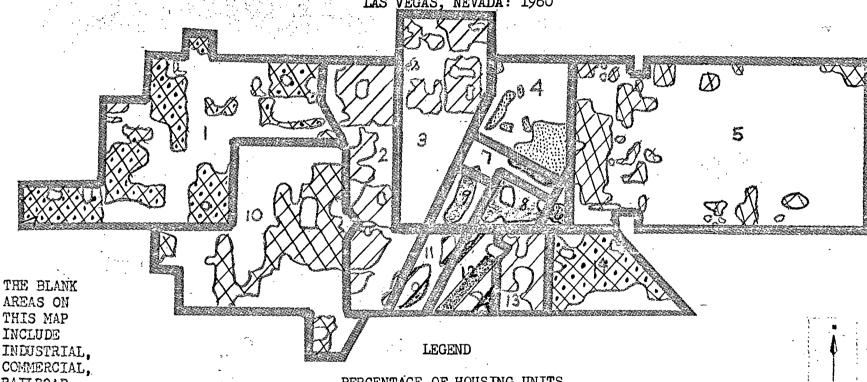
The highest proportion of newer housing units is found in census tracts 1, 5, 10, and 14. In tract 1, 99.0 percent of the housing units were constructed in 1950 or later. In census tracts 5, 10, and 14 the percentages vary from 81.3 in tract 5, to 93.3 in tract 10 and 96.4 percent in tract 14.

The lowest proportion of newer housing units is found in the census tracts around the center of the city. Census tract 7, the tract containing the central business district, has the lowest proportion of housing units constructed during this period with 23.6 percent. Tracts 6, 8, and 9 all have less than 37.0 percent of housing units constructed during this period with 37.0, 32.0, and 25.4 percent respectively.



PROPORTION BUILT 1950 TO 1960

LAS VEGAS, NEVADA: 1960



INCLUDE INDUSTRIAL. COMMERCIAL, RAILROAD. PUBLIC, SEMI-

PUBLIC AND VACANT PROPERTY

PERCENTAGE OF HOUSING UNITS BUILT 1950 TO 1960



20.0 - 34.9





35.0 - 49.9



80.0 - 94.9



50.0 - 64.9



95.0 - 99.0

*SOURCE: Ibid.

Figure 21

Occupancy

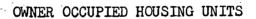
Of the 22,858 housing units in Las Vegas, 11,494 or 50.3 percent were reported to be "owner occupied," 9,942 or 43.5 percent "renter occupied," 874 or 3.8 percent "available vacant," and 548 or 2.4 percent were classified as "other vacant."

The distribution of "owner occupied" housing units, which represents 50.3 percent of all the housing units in the city, is presented in Figure 23. Owner occupancy can be seen to follow in general the same pattern observed for "one housing unit" structures, that is the proportion offunits so classified increases, in general, as one progresses from the city center to the outlying areas of the city.

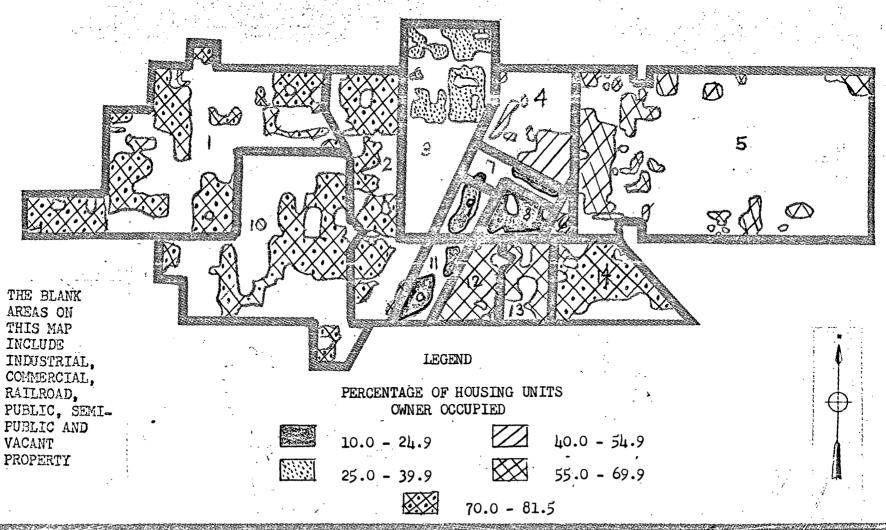
An examination of Figure 22 indicates that of the 14 census tracts only four tracts have proportions of owner occupancy which is less than 40 percent. These four tracts, 7, 8, 9, and 11, are in or near the central business district. Also, 7 of the census tracts have proportions of "owner occupied" housing units which exceed the city average of 50.3 percent. Tract 1 has the highest proportion of "owner occupied"

³A housing unit is classified as "owner occupied" if the owner or co-owner lives in the unit, even if it is mortaged or not fully paid for. All other occupied units are classified as "renter occupied", whether or not cash rent is paid. Examples of units for whichmno cash rent is paid include units occupied in exchange for services rendered, units owned by relatives and occupied without payment of rent, and units occupied by sharecroppers.

A housing unit is considered "vacant" if no persons were living in it at the time of enumeration. "Available vacant" units are those which are on the market for year-round occupancy, are in either sound or deteriorating condition, and are offered for rent or for sale. "other vacant" units comprise the remaining vacant housing units. They include dilapidated units, seasonal units, units rented or sold and awaiting occupancy, units held for occasional use, and units held off the market for other reasons.



LAS VEGAS, NEVADA: 1960



*SOURCE: Ibid.

Figure 22

housing units with 81.5 percent while tracts 2, 5, 10, 12, 13, and 14 have 74.7, 66.2, 79.5, 56.8, 66.3, and 80.9 percent respectively of the housing units which fall into this classification.

In tract 11 only 12.8 percent of the housing units are classified as "owner occupied." It has been indicated previously that this tract contains 67.8 percent "five housing unit or more" structures, corresponding roughly to apartment house units. Also, tracts 7, 8, and 9 have comparatively low proportions with 20.4, 21.2, and 13.7 percent respectively so classified as "owner occupied." Again, these tracts are in or near the central business district.

"Renter occupancy" accounts for 43.5 percent of all housing units in the city. The census tracts having the largest proportion of renter occupants are 7, 8, 9, and 11, those census tracts with very low owner occupancy. Tract 9 has the highest proportion classified in this manner with 78.4 percent of all the housing units being "renter occupied." Tract 7 has 76.7 percent of its housing units classified as "renter occupied," tract 8 has 68.8 percent, while 75.6 percent of the housing units in tract 11 are classified as "renter occupied."

Occupancy of housing units by racial characteristics indicates that there is only one clear-cut non-white occupied section of the community. Thirteen census tracts have less than two percent of the "owner occupied" housing units occupied by non-white owners. Only 3, with 93.5 percent, has more than 2 percent of its housing units occupied by non-white owners. "Renter occupancy" of non-whites is little different than the pattern of "owner occupied." Again, tract 3 has 86.5 percent of its housing units "renter occupied" by non-white persons. The

remaining thirteen census tracts have less than 2 percent of their housing units occupied by non-white renters.

Value 4 and Rent

For the entire city, 10,420 owner occupied one housing unit structures are reported. The number and percentage of structures in each value category are given for the entire city in Table VIII

TABLE VIII

VALUE OF OWNER OCCUPIED ONE HOUSING UNIT STRUCTURES
LAS VEGAS, NEVADA: 1960

Value of Structures	Number	Percentage
Total	10,420	100.0
Less THAN \$5,000	222	2.1
\$5,000 to \$9,900	289	2.8
\$10,000 to \$14,900	2,572	24.7
\$15,000 to \$19,900	4,398	42.2
\$20,000 to \$24,900	1,448	13.9
\$25,000 or MORE	1,491	14.3

*This table was computed by the author on the basis of the information provided by the U. S. Bureau of the Census. U. S. Censuses of Population and Housing: 1960. Census Tracts, Page 23. Final Report PHC (1)-75. U. S. Government Printing Office, Washington, D. C., 1961.

⁴Value is the respondent's estimate of how much the property would sell for on today's market (April 1960). Value data are restricted to owner-occupied units having only one housing unit in the property and no business. Units in multi-unit structures and trailers were excluded from the tabulations.

Figure 23 indicates that census tract 12 ranks highest in the city in value of owner occupied structures, with a median value of \$25,000. Census tracts 2, 7, 8, and 10 also rank high in median value, with values of \$21,100, \$21,100, \$21,500, and \$22,300 respectively. Tracts 3 and 4, on the other hand, rank lowest with median values of \$12,300 and \$14,500 respectively. As it has been indicated earlier, census tract 3 is a predominately non-white area, inhabited mainly by Negroes. Three other census tracts rank low with median values of between \$14,600 and \$14,900. Of these three tracts (6, 9, and 11) it has been noted previously that tract 9 contains a relatively high proportion of units constructed prior to 1939 which would tend to account for its low ranking on this variable. Tract 9, it will be recalled, has been defined as the "skid road" or area of homeless men. These data concerning median value of owner-occupied one housing unit structures are seen to reflect other data concerning occupancy, age of structure, etcetera.

These data concerning the value of owner occupied one housing unit structures have been summarized in Table IX. The number of one housing unit structures classified as owner-occupied is given for each tract. The percentage of housing units per tract in each valuation category is presented, along with the median value for each tract and its rank in terms of median values.

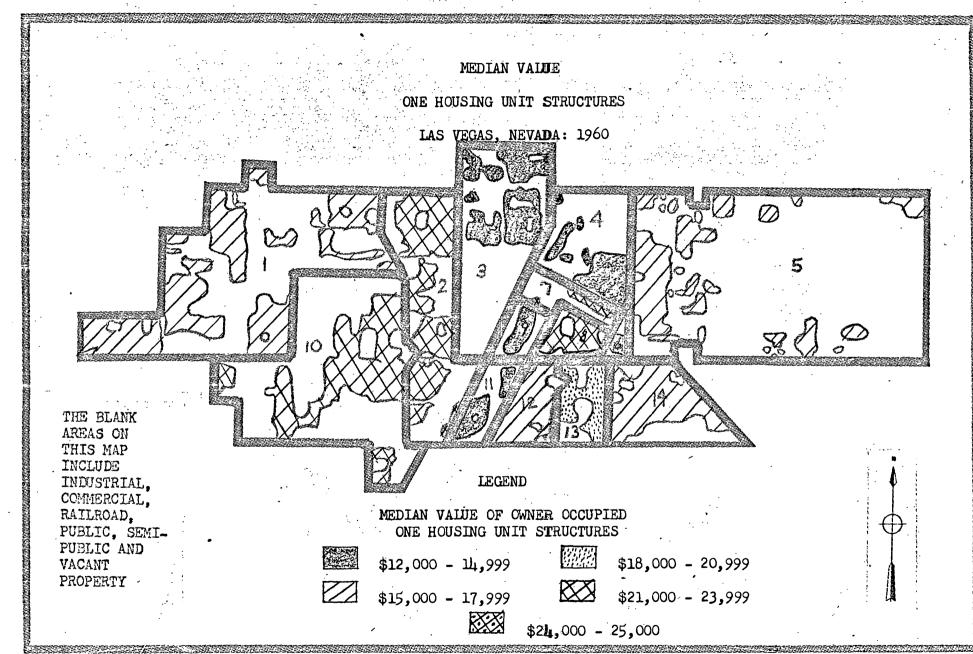


Figure 23

TABLE IX

VALUE OF OWNER OCCUPIED ONE HOUSING UNIT STRUCTURES
BY CENSUS TRACTS LAS VEGAS, NEVADA: 1960

	No. of Units		Value of Structures						
Census Tract		Less Than \$5,000	\$5,000 9,900	\$10,000 14,900	\$15,000 19,900	\$20,000 24,900	\$25,000 or more	Median Value	Rank
1	2;471		0.5	21.4	59.0	15.4	3.7	\$17,400	6
2	706	1.0	2.0	9.6	34.7	11.8	40.9	\$21,100	4
3	792	5.3	15.3	63.5	9.3	3.0	3.5	\$12,300	12
4	632	15.4	5.4	33.4	32.4	9.3	4.1	\$14,500	11
5	1,252	1.4	5.0	35.7	49.8	6.2	1.9	\$15,800	8
6	305	• • • • •	2.1	48.5	37.0	9.8	2.6	\$14,900	9
7	72	8.3	6.9	12.6	18.1	19.4	34.7	\$21,100	4
8	223	• • • • •	1.3	8.5	32.3	26.5	31.4	\$21,500	3
9	101	1.0	11.9	37.6	31.7	310 0,	14.8	\$14,900	9
10	723	• • • • •	0.3	7.5	36.4	12.7	43.1	\$22,300	2
11	161	• • • • •	13.7	39.7	26.1	13.7	6.8	\$14,600	10
12	821	0.1	0.1	5.5	24.5	19.2	50.5	\$25,000	1
13	1,019		0.1	20.3	46.6	20.7	12.3	\$18,200	5
14	1,176	0.3	1.3	27.8	50.3	16.3	4.0	\$17,000	7
			-	*	•				

*SOURCE: Ioid.

Gross Monthly Rent5

Gross monthly rental is reported for 9,942 renter occupied units. The number and percentage of units in each rent category are given in Table X.

GROSS MONTHLY RENTAL, RENTER OCCUPIED UNITS
LAS VEGAS, NEVADA: 1960

Gross Monthly Rental	Number	Percentage
Less THAN \$20	00 to ga	
\$20 to \$39	183	1.8
\$40 to \$59	746	37.5
\$60 to \$79	1,606	16.2
\$80 to \$99	1,626	16.4
\$100 to \$149	4,231	42.5
\$150 or MORE	1,176	11.8
NO CASH RENT	374	3.8
Total	9,942	100.0

*This table was computed by the author on the basis of the information provided by the U. S. Bureau of the Census. U. S. Censuses of Population and Housing: 1960. Census Tracts, Page 23. Final Report PHC (1)-75. U. S. Government Printing Office, Washington, D. C., 1961.

⁵The computed rent termed "gross rent" is the contract rent plus the average monthly cost of utilities (water, electricity, gas) and fuels such as wood, coal, and oil if these items are paid for by the renter in addition to contract rent. Thus, gross rent eliminates rent differentials which result from varying practices with respect to the inclusion of heat and utilities as part of the rental payment.

It will be observed from Figure 24 that median gross monthly rent follows the rather orderly pattern that many of the variables previously considered have demonstrated. The median monthly-rental value varies from a high of \$150.00 to a low of \$75.00. Six census tracts have a median monthly rental value of \$120.00 or more. Census tracts 1 and 13, with a value of \$150.00 respectively, have the highest median value; while tracts 5, 6, 12, and 14 have median values which are slightly less, or \$122.00, \$123.00, \$139.00, and \$136.00 respectively.

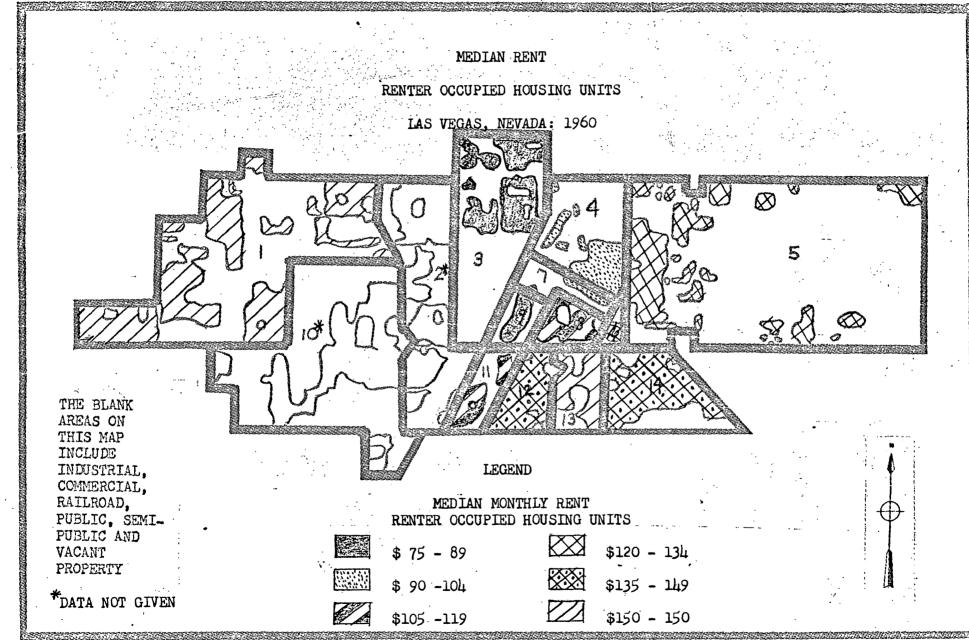
Tracts 3 and 9 exhibit the lowest median monthly rental. Tract 3, which contains the non-white area of town, has a median rental of \$75.00 while tract 9, the "skid row" or area of homeless men, has a slightly larger median of \$88.00.

Table XI gives a summary of the gross monthly rent of renteroccupied units for each census tract. The number of renter-occupied
housing units is indicated as well as the percentage of units falling
into each category and the median rent.

Interpretative Summary

In retrospect, the analysis presented in this chapter indicates that Las Vegas is, at least in terms of housing characteristics, patterned somewhat as Burgess suggests. That is, the influence of the city center radiates in all directions, but the degree of influence generally decreases as distance increases.

⁶Lundberg, op. cit., p. 451.



*SOURCE: Toid.

Figure 24

TABLE XI

GROSS MONTHLY RENT RENTER-OCCUPIED UNITS
BY CENSUS TRACTS LAS VEGAS, NEVADA: 1960

Gross Monthly Rent										-
Census Tract	No. of Units	Less than \$20	\$20-39	\$40-59	\$60-79	\$80-99	\$100-149	\$150 or more	No cash Rent	Median Rent
1	305	• • • •	1.3	1.3	1.6	1.3	41.3	53.1	• • • •	\$150.00
2	212	••••	• • • •	6.6	16.0	23.1	28.8	17.0	8.5	• • • • • •
3	1,710	• • • • •	6.1	17.8	31.3	19.1	21.2	1.0	3.5	\$ 75.00
4	1,237	• • • •	1.0	10.1	22.5	22.6	37.2	3.4	3.1	\$ 93.00
. 5	568	• • • • •	• • • •	2.1	9.1	15.3	55.6	14.6	3.2	\$122.00
6	317	• • • •	• • • •	6.0	3.8	9.5	67.2	11.0	2.5	\$123.00
7	575	• • • •	1.4	11.3	24.7	21.9	25.0	3.6	12.0	\$ 90.00
8	814	• • • •	0.5	1.6	7.0	18.8	65.0	447	2.4	\$113.00
9	1,186	• • • •	3.1	12.6	20.4	29.2	27.8	4.1	2.8	\$ 88.00
10	70 ⁻	••••	••••	11.4	11.4	5.7	12.8	41.4	17.1	• • • • • •
11	1,685	• • • •	0.7	1.4	12.8	10.0	61.0	11.5	2.5	\$116.00
12	562	* • • • •	• • • •	0.7	• • • •	6.6	56.9	27.9	7.8	\$139.00
13	473		••••	• • • •	5.1	2.3	37.4	52.6	2.5	\$150.00
14	228	• • • •	•••••	1.7	• • • •	1.7	68.4	28.1	• • • •	\$136.00

*SOURCE: Ioid.

CHAPTER VI

SUMMARY MATRIX

There are many techniques that could be used to summarize a large number of variables such as presented here. One simple graphic summary has been constructed for purposes of this report, but no claims are made for the superiority of this device over others.

The summary presented in this chapter involves the construction of a matrix on which the position of each census tract on each variable is specified. This matrix has twenty-seven columns, one column for each variable, and fourteen rows, one row for each tract.

In order to give a relative picture of the census tracts, only three categories have been used. These categories are "high," "average," and "low." The number of tracts placed in each of these categories is arbitrary. For each variable, the four census tracts which ranked "highest" and the four census tracts which rank "lowest" were chosen to be designated graphically. Quartiles could have been used, but since the number four gives a rough approximation of a quartile, it has been used. (A few cases are presented in which two tracts have the same value for the fourth highest or lowest tract. In this case five tracts are shown as "high" or "low.")

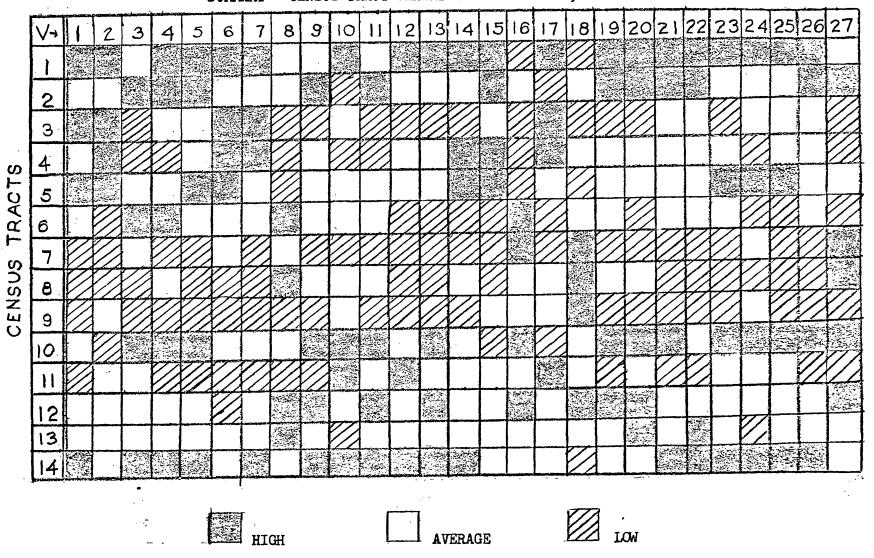
The designation of "high" or "low" on each variable does not always refer to the ranking in terms of the actual value obtained on the variable. In general, "high" and "low" refer to an assumed socioeconomic relationship between the variables. For example, a high percentage of one housing unit structures represents a high position on

a socio-economic continuum, while a high percentage of five housing unit or more structures represents a low position in terms of a socio-economic continuum. When increasing values on a variable designate a lower position on this assumed continuum, they are designated as being reversed.

The summary matrix is shown in Figure 25. The variables are designated by the numbers at the top of each column. The variables represented by these numbers are listed below.

- 1. Population under 15 years of age.
- 2. Population 15 to 59 years of age.
- 3. Population 60 years of age and older. Reversed.
- 4. Sex ratios. Reversed.
- 5. Marital status.
- 6. Fertility ratios.
- 7. Foreign-born white population. Reversed.
- 8. Non-white population. Reversed.
- 9. Females in the labor force. Reversed.
- 10. Males in the labor force.
 - 11. Employed males.
 - 12. Male professional, technical and kindred workers.
 - 13. Male managers, officials, and proprietors.
 - 14. Male sales workers.
 - 15. Male craftsmen, foremen and kindred workers.
 - 16. Male operatives and kindred workers. Reversed.
 - 17. Male service workers.
 - 18. Male laborers. Reversed.
 - 19. Median income in 1959

SUMMARY - CENSUS TRACT VARIABLES - LAS VEGAS, NEVADA: 1960



SOURCE: Ibid.

Figure 25

- 20. Median school year completed.
- 21. One housing unit structures.
- 22. Five housing unit or more structures. Reversed.
- 23. Housing units constructed prior to 1939. Reversed.
- 24, Housing units constructed between 1940 and 1949. Reversed.
- 25. Housing units constructed between 1950 and March of 1960
- 26. Owner occupied housing units.
- 27. Median value of one housing unit structures.

Only a few of the more obvious observations from Figure 25 will be discussed here.

First, it will be readily observed that there are concentrations of "high" designations near the city periphery, both in the northwest and southwest sections of the city, as well as in tract 14 on the southeast side of the city. Census tract 1 o the northwest side of the city, has the largest concentration of "high" designations with 20, followed by 17 "high" designations in tract 14, and 16 "high" designations in census tract 10 in the southwest section of the city. Since these three tracts are designated as "high" on a majority of the variables, they can be considered as comprising the "high class" residential area of Las Vegas.

It will also be readily observed that, in general, the largest concentrations of "low" variables are found in the tracts in or near the central business district, tract 7. Those tracts which have a rather consistent low pattern are census tracts 3, 7, 8, and 9. The inadequacies and relative "undesirable" nature of living in or near the city center is clearly demonstrated by the matrix.

The tract which can be clearly designated as "average" is census tract 13. It will be observed that tract 13 falls into the "high" and "low" designations on only five of the twenty-seven variables.

Finally, a number of tracts are designated as "high" in some cases, "low" in others, and "average" in still other cases, and thus display a somewhat ambivalent pattern. Perhaps the most interesting of these is census tract 4. This tract has 6 "high" designations, 13 "average" designations, and 8 "low" designations.

This matrix has shown that as the distance from the center of the city, census tract 7, increases, the areas become more "desirable" or occupy a higher position on a socio-economic continuum.

Conclusions

From the analysis it can be seen that the characteristics vary in the expected directions from the central business area toward the periphery of the city. Although the rates do vary fairly consistently, it would appear that there is no conclusive evidence that the city of Las Vegas fits exclusively into the "ideal type" described by Burgess. Las Vegas does have a central business district, as do all American cities, partly surrounded by a slum area. This surrounding zone does contain the oldest building in the city as was illustrated in Figure 20. Housing quality did tend to improve as one moved outward from this zone, and much of the choice residential areas are located near the periphery of the city. However, these zones are not unbroken bands surrounding the city, nor are they circular in shape. Instead, the evidence presented show that the various grades of residences are rather irregularly distributed and concentrated on one side of the city.

Suggestions for Further Research

Walter Firey, in his study of Boston, has attempted to show that sentiment and symbolism play major roles in determining the ecological patterning of a city. Although this has been put forth by Firey as an ecological theory, it has yet to be empirically tested in another city.

Another type of city growth has been suggested by Homer Hoyt. He states that high-rent residential neighborhoods must necessarily move out toward the periphery, but on each side of these neighborhoods there is usually an intermediate rental area, so they cannot move horizontally. Therefore, the natural trend of the high-rent area is outward toward the periphery in the very <u>sector</u> in which it started. He has made empirical studies of six American cities in which this type of expansion has taken place.²

It is now suggested, due to the inconclusive evidence presented in support of Burgess's zonal hypothesis, that either Hoyt's or Firey's hypothesis might be more applicable in explaining the observed regularities that appear in the distribution of people and facilities in the city of Las Vegas. Of the two, it is felt that Homer Hoyt's would be the most applicable. This is mere speculation, however, and can be validated only through further empirical research.

Another possible avenue of further research would be a comparative study utilizing the available data for cities of the same approximate size of Las Vegas. This type of study might be confined to the State of

¹Firey, op. cit., p. 30.

²Homer Hoyt, The Structure and Growth of Residential Neighbor-hoods in American Cities, Federal Housing Administration (Washington, D. C., Government Printing Office, 1939).

Nevada, and include such cities as Reno, Sparks, and North Las Vegas. It could be expanded to include cities of comparable size throughout the country.

A delimitation of the substantive boundaries of the metropolitan community of Las Vegas should be made. An alysis of this area, plus the present analysis, will give a more nearly complete picture of the community upon which Las Vegas exerts its social, political, and economic influence. Should such a study be contemplated, the data are available by census tracts so that once the area is delimited, this data may be combined with the data in this report.

This study has been concerned with trends in the population over a period of years, as well as with the ecological distribution of the demographic characteristics as they pertain to the zonal hypothesis constructed by Ernest W. Burgess. A follow-up study using the same variables which were used in this study could be made utilizing data from future censuses. This type of analysis would indicate the ecological changes which have taken place within the city of Las Yegas.

BIBLIOGRAPHY

- Bullock, Robert P. "Basic Obligations in Research." Unpublished mimeographed copy, Department of Sociology and Anthropology, Ohio State University.
- Burgess, Ernest W. The Growth of the City. In The City, ed. R. E. Park. Chicago: University of Chicago Press, 1925.
- Firey, Walter. Land Use in Central Boston. Cambridge: Harvard University Press, 1947.
- Harrison, Shelby M. Social Conditions in An American City, The Springfield Survey. New York: The Russell Sage Foundation, 1920.
- Hoyt, Homer. "Forces of Urban Centralization and Decentralization," American Journal of Sociology, 46:843-852, May 1941.
- Hulse, James W. The Nevada Adventure: A History. Reno: University of Nevada Press, 1965.
- Kellogg, Paul U. The Pittsburg Survey. New York: The Russell Sage Foundation, 1909-1914.
- Las Vegas Chamber of Commerce. Las Vegas Report: A Decade of Progress. Research & Statistical Bureau, Las Vegas, Nevada Chamber of Commerce, May 1966.
- Lewis, Oscar. Sagebrush Casinos: <u>The Story of Legal Gambling in Nevada</u>. New York: Doubleday & Company, Inc., 1953.
- Lundberg, George A., and others. Sociology. New York: Harper & Row Publishers, 1958.
- Mack, Mona E. and Byrd Wall Sawyer. Our State: Nevada. Caldwell, Idaho: The Caxton Printers, Ltd., 1940.
- McKenzie, Roderick D. "The Neighborhood: A Study of Local Life in the City of Columbus, Ohio," <u>American Journal of Sociology</u>, XXVII, September, 1921.
- McMahan, C. A. The People of Atlanta. Athens: University of Georgia Press, 1950.
- Nevada State Historical Society, Inc. "Nevada." The American Guide Series. Portland, Oregon: Binfords and Mort, 1940.

1

- Schmid, Calvin F. Social Trends in Seattle: University of Washington Press, 1944.
- "State of Nevada," Encyclopedia Britannica (1966 ed.), XVI, 315.
- United States Bureau of the Census. <u>Census Tract Manual</u>, Fifth Edition. Washington: Government Printing Office, 1966.
- United States Bureau of the Census. <u>Eighteenth Census of the United</u>
 States: 1960. <u>United States Censuses of Population and Housing:</u>
 1960 Census Tracts. Washington: Government Printing Office, 1961.
- Young, Kimble and Raymond W. Mack. Sociology and Social Life. Third edition. New York: American Book Company, 1965.
- Young, Pauline V. Scientific Social Surveys and Research. New York: Prentice-Hall Publishers, 1949.

APPENDIX

This appendix presents definitions and explanations for a number of variables which could not be presented in the body of this report because of their length. The definitions could not be abridged without the loss of important details.

The definitions and explanations appear in the following order:

- 1. Definitions of employment status.
- 2. Definitions of occupation, industry, and class of workers.
- 3. Definitions of income in 1959.
- 4. Definitions of years of school completed.
- 5. Definitions of types of structures.
- 6. Definitions of housing units.

1. Definitions of employment status:

Employed - Employed persons comprise all civilians lh years old and over who were either (a) "at work" - those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or in a family business; or (b) were "with a job but not at work" - those who did not work and were not looking for work but had a job or business from which they were temporarily absent because of bad weather, industrial dispute, vacation, illness, or other personal reasons.

<u>Unemployed</u> - Persons are classified as unemployed if they were liptopears old and over and not "at work" but looking for work. A person is considered as looking for work not only if he actually tried to find work but also if he had made such efforts recently (i.e., within the past 60 days) and was awaiting the results of these efforts. Persons waiting to be called back to a job from which they had been laid off or furloughed are also counted as unemployed.

Labor force - The "civilian labor force" includes all persons classified as employed or unemployed, as described above. The "labor force" also includes members of the Armed Forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Not in labor force - Persons "not in the labor force" comprise all those 14 years old and over who are not classified as members of the labor force, including persons doing only incidental unpaid family work (less than 15 hours during the week).

2. Definitions of occupation, industry and class of worker:

The data on these three subjects in this report are for employed persons and refer to the job held during the week for which employment status was reported. For persons employed at two or more jobs, the data refer to the job at which the person worked the greatest number of hours.

Classification system - The occupation and industry statistics presented here are based on the detailed systems developed for the 1960 Census; see 1960 Classified Index of Occupations and Industries, Government Printing Office, Washington 25, D.C.

Professional, technical and kindred workers - Includes Accountants; Actors; Airplane pilots and navigators; Architects; Artists; Athletes; Auditors; Authors; Chemists; Chiropractors; Clergymen; College presidents, professors, and instructors; Conservationists; Dancers; Dentists; Designers; Dieticians; Draftsmen, Editors; Embalmers; Entertainers; Farm management advisors; Foresters; Funeral directors; Healers; Home management advisors; Judges; Lawyers; Librarians; Musicians; Natural scientists; Nutritionists; Optometrists; Osteopaths; Personnel workers; Pharmacists; Photographers; Physicians; Professional nurses; Radio operators; Recreation workers; Religious workers; Reporters; Social Scientists; Social workers; Sports instructors and officials; Student professional nurses; Surgeons; Surveyors; Teachers; Technical engineers; Therapists; Veterinarians.

Farmers and farm managers - Includes tenant farmers and share croppers.

Managers, officials, and proprietors, except farm - Includes Buyers; Building superintendents; Credit men; Lodge officials; Postmasters; Public Administration officials; Purchasing agents; Railroad Conductors; Ship officers; pilots, pursers, and engineers; Shippers of farm products; Union officials.

Clerical and kindred workers - Includes Bank tellers; Bill and account collectors; Bookkeepers; Cashiers; Dentist's office attendants; Mail carriers; Messengers; Office boys; Office machine operators; Physician's office attendants; Railway mail clerks; Receiving clerks; Secretaries; Shipping clerks; Station agents; Stenographers; Telegraph messengers; Telegraph operators; Telephone operators; Ticket agents; Typists.

Sales workers - Includes Advertising agents and salesmen; Auctioneers; Demonstrators; Hucksters; Insurance agents and brokers; Newsboys; Peddlers; Real estate agents and brokers; Stock and bond salesmen.

Craftsmen, foremen and kindred workers - Includes Annealers; Bakers; Blacksmiths; Boilermakers; Bookbinders; Brickmasons; Cabinetmakers; Cement finishers; Compositors; Concrete finishers; Coppersmiths; Cranemen: Derrickmen; Die makers; Die setters; Electricians; Electrotypers; Engravers; Excavation machinery operators; Forgemen; Glaziers; Goldsmiths: Grading machinery operators: Heat treaters: Hoistmen: Lens grinders and polishers; Lithographers; Locomotive engineers; Locomotive firemen; Log and lumber scalers and graders; Loom fixers; Machinists; Mechanics; Metal molders; Metal rollers; Metal roll hands Millers; Millwrights; Motion picture projectionists; opticians; Organ tuners; Painters; Paperhangers; Photoengravers; Piano tuners; Pipe fitters; Plasterers; Plate printers; Plumbers; Power linemen and servicemen; Printing pressmen; Road machinery operators; Roofers; Sheet metal workers; Shoemakers, except in factories; Silversmiths; Slaters; Stationary engineers; Stereotypers; Stone carvers; Stone cutters; Stonemasons; Structural metal workers; Tailors; Telegraph and telephone linemen and servicemen; Tile setters; Tinsmiths; Tool makers; Typesetters; Upholsterers; Watchmakers; Window dressers.

Operatives and kindred workers - Includes Apprentices; Asbestos workers; Auto service attendants; Blasters; Boatmen; Bus conductors; and drivers; Canalmen; Chauffeurs; Deck hands; Deliverymen; Dressmakers; Dry cleaning operatives; Dyers, Fruit, nut and vegetable graders and packers; Furnace men; Insulation workers; Laundry operatives; Meat cutters; Metal filers; grinders, and polishers; Metal heaters; Milliners; Mine operatives and laborers; Motormen; Painters (except construction and maintenance); Parking lot attendants; Photographic process workers; Powdermen; Power station operators; Railroad brakemen and switchmen; Routemen; Sailors; Sawyers; Seamstresses; Smeltermen; Stationary firemen; Street railway conductors; Surveying chainmen, rodmen, and axemen; Taxcab drivers; Welders.

Private household workers - Includes housekeepers and laundresses in private households.

Service workers, except private household - Includes Attendants and ushers in amusement places; Bailiffs; Barbers; Bartenders; Beauticians; Boarding house keepers; Bootblacks; Bridge tenders; Charwomen; Cooks, except in private households; Detectives; Doorkeepers; Elevator operators; Firemen (fire protection); Fountain workers; Guards; Hospital attendants; Janitors; Lodginghouse keepers; Manicurists; Marshals; Midwives; Policemen; Porters; Practical nurses; Sextons; Sheriffs; Stewards; Waiters; Watchmen.

<u>Laborers</u>, <u>except</u> <u>farm</u> <u>and mine</u> - Includes Car washers; Fishermen; Garage laborers; Groundskeepers; Longshoremen; Cystermen; Raftsmen; Stevedores; Teamsters; Woodchoppers.

3. <u>Definitions of Income in 1959</u>:

Components of income - "Total income" is the sum of amounts reported separately for wage or salary income, self-employment income, and

other income. Wage or salary income is defined as the total money earnings received for work performed as an employee. It represents the amount received before deductions for personal income taxes, Social Security, bond purchases, union dues, etc. Self-employment income is defined as net money income (gross receipts minus operating expenses) from a business, farm, or professional enterprise in which the person was engaged on his own account. Other income includes money income received from such sources as net rents, interest, dividends, Social Security benefits, pensions, veterans' payments, unemployment insurance, and public assistance or other governmental payments, and periodic receipts from insurance policies or annuities.

Not included as income are money received from the sale of property (unless the recipient was engaged in the business of selling such property), the value of income "in kind," withdrawals of bank deposits, money borrowed, tax refunds, and gifts and lump-sum-in-heritances or insurance payments.

4. Definitions of years of school completed:

The data on years of school completed were obtained from the answers to two questions: (1) "What is the highest grade of school that you have attended?" and (2) "Did you finish this grade?" Although these questions were asked of persons of all ages, the data used in the analysis was for the population 25 years of age and over. These questions applied only to progress in "regular" schools, as defined by the Bureau of the Census.

Highest grade of school completed: The question called for the highest grade attended, regardless of "skipped" or "repeated" grades, rather than the number of full school years which the person has spent in school.

In some areas in the United States, the school system has, or used to have, 7 years of elementary school rather than the more conventional 8 years. For the sake of comparability, persons who had progressed beyond a 7-year elementary school system were treated as though they had progressed beyond the usual 8-year system.

In the case of persons whose highest grade of attendance was in a foreign school system, the instructions were to obtain the approximate equivalent grade in the American school system or, if that were too difficult, to determine the number of years the person had attended school. Persons whose highest level of attendance was in an ungraded school were treated in similar fashion to those from foreign school systems. Persons whose highest level of training was by a tutor and whose training was regarded as qualifying under the "regular" school definition were also given the approximate equivalent in the regular school system.

The second question on educational attainment referred to the entry on the highest grade attended. It was to be answered "yes" if the person had completed the full grade. If the person was still attending school in that grade, had completed only a half grade, or had dropped out or failed to pass the last grade attended, the required answer was "No." Persons of compulsory school age who failed to report on completion of the grade were assumed not to have finished it, but all others not reporting on completion were assumed to have finished the grade.

Median school years completed: The median number of school years completed is expressed in terms of a continuous series of numbers representing years completed. For example, the completion of the first year of high school is indicated by 9 and of the last year of college by 16. For the sake of comparability, the first year of high school is uniformly represented by 9, although, as previously noted, there are some areas with only 7 years of elementary school.

5. Definitions of types of structures:

A structure is defined as a separate building that either has open space on all four sides, or is separated from other structures by dividing walls that extend from ground to roof.

Statistics are presented in terms of the number of housing units rather than the number of residential structures. However, the number of structures for the first two categories may be derived. For l-unit structures (which include trailers), the number of housing units and the number of structures are the same. For 2-unit structures, the number of housing units is twice the number of structures. For the remaining categories, the number of structures cannot be derived from the data as tabulated.

6. <u>Definitions</u> of housing units:

A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters, that is, when the occupants do not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall or (2) a kitchen or cooking equipment for the exclusive use of the occupants of the unit.

Exception: Separate living quarters consisting of one room with direct access but without separate cooking equipment qualify as a housing unit whether in an apartment house, rooming house, or house converted to apartment use; in hotels, a single room qualifies as a housing unit if occupied by a person whose usual residence is the hotel or a person who has no usual residence elsewhere.

Occupied quarters which do not qualify as housing units are classified as group quarters. They are located most frequently in institutions, hospitals, nurses' homes, rooming and boarding houses, military and other types of barracks, college dormitories, fraternity and sorority houses, convents, and monasteries. Group quarters are also located in a house or apartment in which the living quarters are shared by the person in charge and five or more persons unrelated to him. Group quarters are not included in the housing inventory, although the count of persons living in them is included in the population figures.

The inventory of housing units includes both vacant and occupied units. Newly constructed vacant units were included in the inventory if construction had reached the point that all the exterior windows and doors were installed and the final usable floors were in place. Dilapidated vacant units were included provided they were still usable as living quarters; they were excluded if they were being demolished or if there was positive evidence that they were to be demolished.

Trailers, tents, boats, and railroad cars were included in the housing inventory if they were occupied as housing units. They were excluded if they were vacant, used only for extra sleeping space or vacations, or used only for business.

Transmitting these definitions of housing units and of structures to a more "common sense" type of description, "one housing unit" structures may be considered as single family residences. "One or two housing unit" structures can be considered as duplex, triplex, and fourplex residences with two, three or four families residing therein. This category includes only two structures, both of which are residential. "Three and four housing unit" structures and "five housing unit or more" structures may be considered, for our purposes, as apartment house types. "Three and four housing unit" structures could also be considered as triplex and fourplex types.