DEL WEBB'S

Sun City

ARIZONA

GENERAL PLAN

ROY HEAD

352
De1
c.2

SUN CITY, ARIZONA

GENERAL PLAN

PREPARED BY PLANNING & RESEARCH DEPARTMENT DEL E. WEBB CORPORATION


Shopping Center Site
Community Center No. 2
Apartments
Church
Church
Church
Sun City Unit 4 (Under Construction)
Lagoon
Single Family
Church Site
uture ursing Care Units
Apartments
36 Hole Golf Course
Lagoon
Community Center No. 1
Motel
Restaurant
US 60, 70, & 89
Medical Center
Shopping Center
Grand Avenue
Apartments
SUN CITY
MARICOPA COUNTY, ARIZONA
Expansion Area

TABLE OF CONTENTS

SECTION	TITLE	PAGE
I	INTRODUCTION	1
II	ECONOMIC BASE	5
	Population	7
	Potential for Industry	9
	Potential for Retirement	11
III	THE GENERAL PLAN	13
	Sun City Environment	15
	Existing Site Conditions	16
	The Plan	19
	Retirement Community	19
	Working Community	19

LIST OF FIGURES

NUMBER	TITLE	PAGE
Frontispiece	SUN CITY, ARIZONA	ii
1.	VICINITY MAP	2
2.	DEL E. WEBB CORPORATION MAP	4
3.	POPULATION GROWTH 1920-1980	6
4.	COMPARATIVE POPULATION GROWTH 1920-1980	7
5.	BOUNDARIES OF THE STUDY AREA	8
6.	MANUFACTURING EMPLOYMENT PHOENIX METROPOLITAN AREA	9
7.	NORTHWEST SECTOR MANUFACTURING INDUSTRY	10
8.	NATIONAL INCREASE IN POPULATION AGE 65 AND OVER	11
9.	HOME STATES OF AGED OASI RECIPIENTS WHO MOVED TO ARIZONA IN 1960	11
10.	MIGRATION OF ARIZONA'S AGED OASI BENEFICIARIES 1960	12
11.	HOUSEHOLDS THAT MOVED TO MARICOPA COUNTY IN THE 1950-1960 PERIOD	12
12.	DRIVING TIME TO SCENIC AND RECREATIONAL POINTS OF INTEREST	14
13.	PHOENIX CLIMATE DATA	16
14.	ANNUAL RAINFALL IN ARIZONA SINCE 1900	16
15.	AVERAGE MONTHLY HIGH AND LOW TEMPERATURES	16
16.	AVERAGE RELATIVE HUMIDITY	16
17.	LAND USE 1963	18
18.	EXISTING CONDITIONS	18
19.	SCHOOL SITE DESIGN STANDARDS	19
20.	FUTURE LAND USE	20
21.	GENERAL PLAN FOR SUN CITY	21
22.	PLANNING UNIT SCHEDULE	22
23.	SHOPPING CENTER STANDARDS	23

SECTION 1

INTRODUCTION

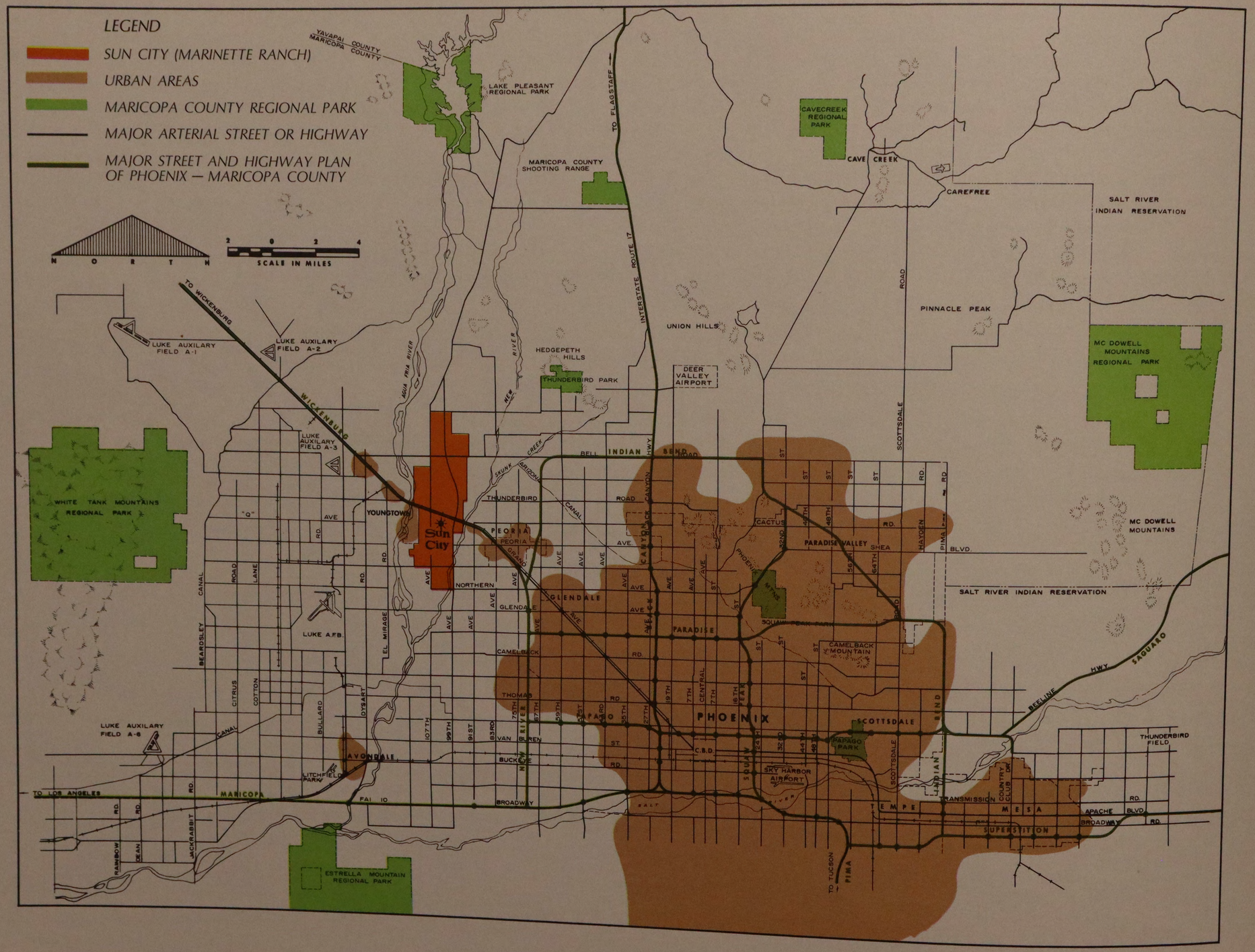


Figure 1. Vicinity Map

INTRODUCTION

A new city and retirement concept was established in January, 1960, when the Del E. Webb Development Company opened its now-famous Sun City, Arizona, 12 miles northwest of Phoenix. The concept embodied the results of many years of research into the wants and needs of retirees, and was planned especially for those senior citizens seeking an active life in a pleasant, small community atmosphere. Recreational and service facilities abound in Sun City, with green fairways and community centers the focal points. Designed for people over 50 years of age who are retired, semi-retired or planning retirement and interested in enjoying the good years ahead, Sun City had attracted over 8,000 citizens by the fall of 1963.

The Sun City site is strategically located on the 8,440-acre Marinette Ranch (see Figure 1). This ideal location offers an unlimited opportunity to develop not only a retirement community, but ultimately a working community free from the frustrations and high cost of close-in urban living, and characterized by the same high development standards already established in Sun City.

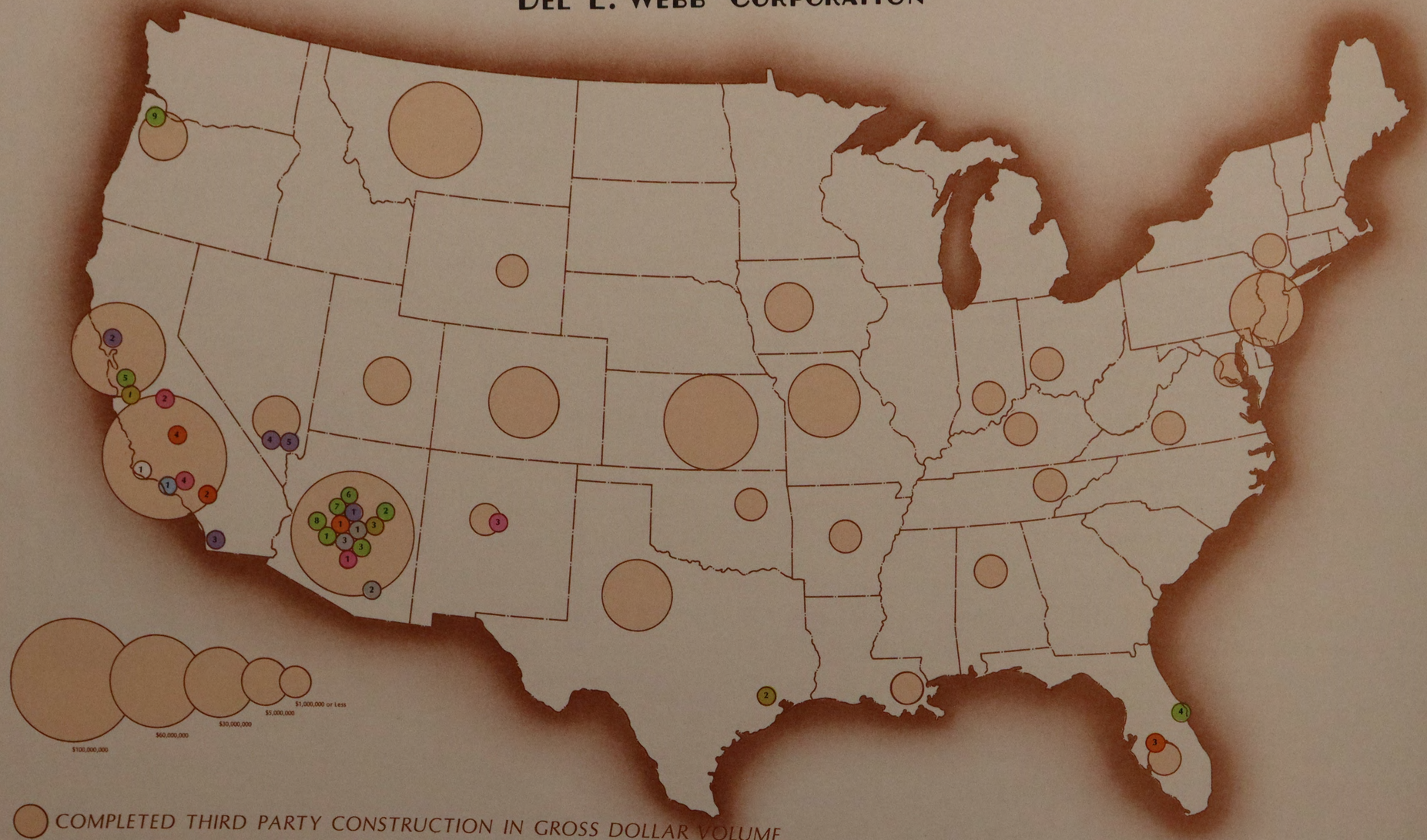
Sun City, Arizona, was the prototype for other successful internationally-known Webb retirement communities located near Tampa, Florida; Bakersfield, California; and the most recent Sun City located south of Riverside, California.

These projects are being developed by the Del E. Webb Corporation — a broad-based construction and development company whose 35-year record of achievement is shown on Figure 2. The Company functions, not as a speculator, but as an investor in sound projects on carefully selected sites. The Company has active major equity or operating properties in six states, including conventional communities, urban renewal, shopping centers, office buildings, motels, and resorts; and has engaged in a wide range of contract construction projects, including hospitals, schools, hotels, motels, industrial plants, military installations, airports, and missile launching facilities. The Del E. Webb Corporation is construction manager for the 1966-67 World's Fair in Long Beach, California; and is constructing the United States Pavilion at the 1964 New York World's Fair.

Section II contains economic support data pertinent to the site, the northwest area of Phoenix, and the State of Arizona.

The General Plan, presented in Section III, contains environmental information concerning the project lands and a corresponding flexible pattern of land use and circulation designed to support ultimately a combined retirement and working population of about 80,000. The Plan, general in character, is intended to serve as a guide for future development, not as a precise scheme to be followed without review and modification.

DEL E. WEBB CORPORATION



COMPLETED THIRD PARTY CONSTRUCTION IN GROSS DOLLAR VOLUME

MAJOR EQUITY OR OPERATING PROPERTIES:

LAND INVENTORY

1. ARROWHEAD VENTURE — MARICOPA COUNTY, ARIZONA
2. CAREFREE RANCH — CAREFREE, ARIZONA
3. DEER VALLEY PROPERTIES — PHOENIX, ARIZONA
4. INDIAN RIVER BEACH — INDIAN RIVER, FLORIDA
5. SAN JOSE VENTURE — SAN JOSE, CALIFORNIA
6. HEADING RANCH — MARICOPA COUNTY, ARIZONA
7. LUKE FIELD RANCH — MARICOPA COUNTY, ARIZONA
8. SANTA FE RANCH — BEARDSLEY, ARIZONA
9. SAUVIE ISLAND — PORTLAND, OREGON

RETIREMENT COMMUNITIES

1. SUN CITY - ARIZONA — MARICOPA COUNTY, ARIZONA
2. SUN CITY - CALIFORNIA — RIVERSIDE, CALIFORNIA
3. SUN CITY - FLORIDA — TAMPA, FLORIDA
4. KERN CITY - CALIFORNIA — BAKERSFIELD, CALIFORNIA

PLANNED COMMUNITIES

1. ALMADEN — ALMADEN, CALIFORNIA
2. CLEAR LAKE CITY — HOUSTON, TEXAS
3. MOON VALLEY — PHOENIX, ARIZONA

OFFICE BUILDINGS

1. DEL WEBB BUILDING — PHOENIX, ARIZONA
2. DEL WEBB BUILDING & HOTEL — FRESNO, CALIFORNIA
3. ALBUQUERQUE CENTER — ALBUQUERQUE, NEW MEXICO
4. DEL WEBB CENTER — LOS ANGELES, CALIFORNIA

HOTELS & RESORTS

1. MOUNTAIN SHADOWS — PARADISE VALLEY, MARICOPA COUNTY, ARIZONA
2. DEL WEBB'S TOWNHOUSE — SAN FRANCISCO, CALIFORNIA
3. DEL WEBB'S OCEANHOUSE — SAN DIEGO, CALIFORNIA
4. SAHARA — LAS VEGAS, NEVADA
5. THE MINT — LAS VEGAS, NEVADA

URBAN RENEWAL

1. SANTA MONICA — SANTA MONICA, CALIFORNIA

SHOPPING CENTERS

1. CHRIS-TOWN — PHOENIX, ARIZONA
2. CAMPBELL PLAZA — TUCSON, ARIZONA
3. CAMELBACK VILLAGE SQUARE — PHOENIX, ARIZONA

MOBILE HOME PARK

1. CONTINENTAL MOBILE HOME PARK — LOMPOC, CALIFORNIA

Figure 2. Del E. Webb Corporation Map

SECTION II

ECONOMIC BASE

Year	USA (millions)	Arizona (thousands)	Maricopa* (thousands)	Phoenix (thousands)	NW Sector	NW Sector as % of County
1920	106	334	90			
1930	123	436	151	48		
1940	132	499	186	65		
1950	151	750	332	107		
1960	178	1302	663	439	92,000	14
1970	209	1800	1000	670	191,000	15
1980	245	2600	1400	1000	290,000	21

*Phoenix Standard Metropolitan Statistical Area

Source: Maricopa County Planning and Zoning Department and Western Management Consultants, Inc.

Figure 3. Population Growth 1920-1980

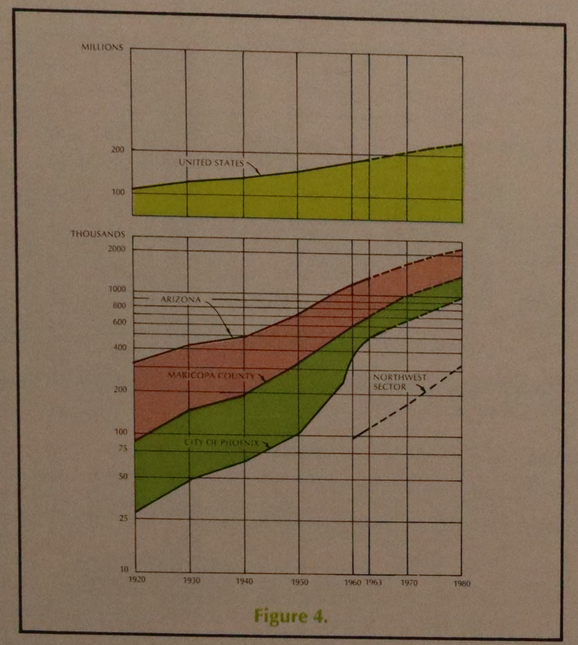


Figure 4.

ECONOMIC BASE

POPULATION

Arizona is the nation's third fastest growing state. Between 1950 and 1960, the state's population jumped 72 per cent to reach a 1960 total of 1,302,200.

The Phoenix metropolitan area (Maricopa County) doubled in population during the past decade by the addition of 332,000 persons. Current estimates place the area's 1963 population at 810,000, and by 1975-1980, it is expected that the population will reach 1,400,000 persons. By the same period, the state-wide population is estimated at 2,600,000 — double the 1960 levels (see Figures 3 and 4).

Arizona has a young population. It is almost evenly divided between the two sexes with the number of male residents having a slight edge over the number of females. In 1960, approximately 36 per cent of the population was below high school age, some 42 per cent was between the ages of 20 and 54. During the next ten years, the total number of men of prime working age — 35 to 44 — is expected to increase by some 32 per cent in Arizona, compared to a national decrease of three per cent in this same age group.

Figure 4. Comparative Population Growth 1920-1980

NORTHWEST SECTOR OF THE PHOENIX METROPOLITAN AREA

While the projected growth of the entire Phoenix area will generate potential for Sun City, the most direct influence will be derived from growth in the Northwest Sector. This region — surrounding Sun City — is bounded by Indian School Road on the south, the Black Canyon Highway on the east, the First Standard Parallel on the north, and the Beardsley Canal on the west (see Figure 5).

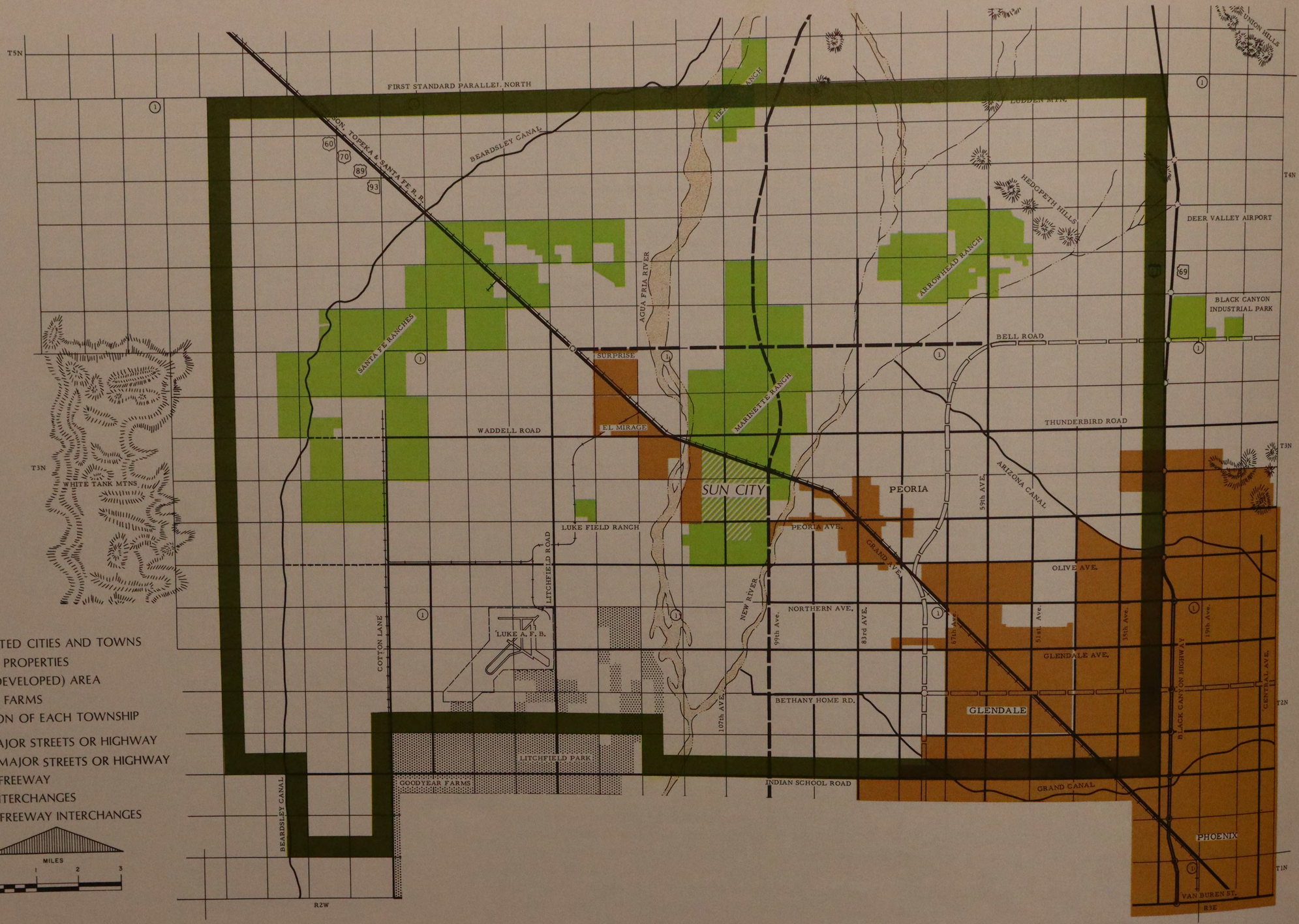
This sector has registered the most substantial population increases of any area in Maricopa County. Between 1960 and 1963, an increase of 28,000 persons occurred, resulting in a 1963 population of 120,000. This gain represents an average annual growth rate of approximately 10 per cent, compared with a county-wide rate of 7 per cent.

By the 1975-80 period, further population increases to 290,000 are anticipated. The sector contained 15 per cent of the total county population in 1963 — a figure that will rise to 21 per cent by 1975-80. These trends are shown on Figures 3 and 4.

FACTORS FAVORING NORTHWEST SECTOR GROWTH

There are a number of sound reasons for anticipating that the Northwest Sector will experience very substantial growth within the next 10 to 15 years.

Growth outward from the City of Phoenix has been largely in three directions — directly north, to the northeast, and to the northwest. There are, however, factors that will limit further growth to the north and northeast. Directly north, residential development has already reached the first range of mountains. To the northeast, the available prime space for the building of tract homes on a large scale is being rapidly developed. As subdivisions are built up to the Salt River Indian Reservation, the only remaining land in this general northeast direction (suitable for tract operation) lies north of the mountains in Paradise Valley. Here, however, zoning and deed restrictions, potential water shortages, and lack of a high speed route to Central Phoenix tend to curtail large scale, popular priced housing developments.



LEGEND

- INCORPORATED CITIES AND TOWNS
- DEL E. WEBB PROPERTIES
- SUN CITY (DEVELOPED) AREA
- GOODYEAR FARMS
- ① FIRST SECTION OF EACH TOWNSHIP
- EXISTING MAJOR STREETS OR HIGHWAY
- PROPOSED MAJOR STREETS OR HIGHWAY
- PROPOSED FREEWAY
- FREEWAY INTERCHANGES
- PROPOSED FREEWAY INTERCHANGES

Figure 5. Boundaries of the Study Area

In contrast, extensive acreage is available in the Northwest Sector for sustaining the building of tract homes on a large scale. Within this sector, it is estimated that available irrigated lands alone (the most favored kind for large scale subdivisions) amount to approximately 115,000 acres. This quantity is sufficient to provide housing for an additional population of nearly 750,000 — at the ratio of 6.5 persons per developed acre. The increase projected for the sector by 1975-80 is only 170,000 persons, or less than 25 per cent of the potential.

This margin between land supply and land use should tend to hold prices down and thereby encourage continued operation of large scale developers.

The Northwest Sector is now served by two major highways: a north-south route — the Black Canyon Highway (Interstate Route 17), connecting Phoenix and Flagstaff; and a diagonal route — the Grand Avenue-Wickenburg-Los Angeles highway (U.S. 60-70-89) traversing this sector from northwest to southeast. These routes provide highway access to Central Phoenix that is superior to any other area surrounding Phoenix (see Figure 5).

The water resources of the Northwest Sector are sufficient to support a substantial increase in population — from five to over eight persons per gross acre, depending on locality within the sector. New City of Phoenix sewage disposal plants at 23rd and 91st Avenues insure the availability of service extensions.

The future for the industrial base of the Northwest Sector is excellent as outlined in the following section. Industrial plants located in this sector are expected to provide more than 10,000 jobs by 1970 and more than 20,000 by 1975-80.

As a result of the successful Sun City development, national attention is being drawn to this sector as an area for retirement homes.

This interest should be an important factor in stimulating further population growth.

In summary, there is substantial evidence that the Northwest Sector will continue to be a focal point of Phoenix growth patterns — providing a positive influence on the future expansion of Sun City, Arizona.

POTENTIAL FOR INDUSTRY

Arizona leads the nation in rate of industrial employment growth. During the past 10 years, manufacturing payrolls have increased by 28,200, a 102 per cent gain, to reach a 1962 level of 55,900.

Over four-fifths (24,000) of these new jobs have been located in the Phoenix metropolitan area — representing the influx of 300 new manufacturing firms during the 1952-62 period. The establishment of these new plants provides concrete evidence of the city's locational advantages for manufacturing facilities: (1) a renowned climate and relaxed way of life which attracts an abundant supply of skilled labor; (2) competitive wage rates; (3) a favorable tax structure; and (4) a community attitude that is highly receptive to new industry.

Industry	1962 Total	Increase Over 1957
Electrical Machinery	8,100	5,800
Food Products	5,500	2,600
Machinery (exc. electrical)	4,500	2,400
Apparel	2,100	1,600
Instruments	1,300	900
Printing and Publication	2,700	800
Fabricated Metals	2,100	800
Transportation Equipment	6,000	600

Figure 6.

An examination of the manufacturing growth trends provides an indication of future potential, and the types of firms which will highlight this growth. The 1962 manufacturing employment totals by major group, compared with the corresponding 1957-62 increases, are shown on Figure 6.

During the 1957-62 period, employment gains in the electrical machinery group accounted for a dominant share of the total increase. This industry is represented primarily by Motorola's semiconductor plant and military electronics facility, as well as several smaller firms.

The outlook for new Phoenix electronics firms, as well as the sustained expansion of existing plants, is excellent.

Figure 6. Manufacturing Employment Phoenix Metropolitan Area

Nationally, the electronics and electrical products industry will have the largest increase in output and employment of any industry over the next 20 years.

Following the growth of these electronics-oriented industries, there will be increasing demands for a number of subcontract services included in the machinery (except electrical) group: close tolerance tool and die work, general machining, light casting, and precision sheet metal processing. A third element of the machinery group slated for expansion is air moving equipment (heating, evaporative cooling, and refrigeration). Increases in demand for these products resulting from population gains will be supplemented by the continuing transition from evaporative coolers to refrigeration units.

In the instruments and transportation equipment categories, three firms with substantial growth potentials are dominant: (1) Sperry Phoenix — a division of Sperry Rand, producing aircraft flight controls and instrumentation; (2) Goodyear Aerospace Corporation — airframe components and electronics systems; and (3) AiResearch — gas turbine engines and aircraft components.

The expansion of fabricated metals output will be primarily in the building materials field (structural steel, hardware) resulting from high level residential and commercial construction activity. The number of food products firms, apparel firms, and printing establishments will show future gains consistent with the sustained growth of the Phoenix area's population and market depth.

The over-all prospects for increased manufacturing employment in existing firms and the addition of new firms appear excellent. Based on past trends, the machinery groups (primarily electronics), apparel, and food products should provide a major share of anticipated future gains.

The Northwest Sector is expected to attract a significant share of the new manufacturing firms coming to the Phoenix area. During the past five years, industrial employment in this sector has doubled to reach a 1962 total of 4,200 (see Figure 7). Contributing factors have been: (1) the increasing preference of industry for suburban locations; (2) rail and highway facilities; (3) access to one of the Phoenix area's largest residential sectors; and (4) the availability of large, competitively priced land parcels suitable for residential, commercial and industrial development.

A wide variety of firms have chosen Northwest Sector locations during the past five years, and this trend is expected to continue. Combined with the extensive manufacturing growth anticipated for the entire Phoenix area, the industrial potential for Sun City, Arizona will be sufficient to insure continuous expansion of the planned working community.

INDUSTRY	Number of Firms	Employment	
		Number	% of Total
MACHINERY (except electrical — computers, machined parts, precision sheet metal)	9	2,350	56.0%
APPAREL (men's dress shirts, underwear)	2	900	21.4%
FOOD PRODUCTS (dairy products, flour, soft drinks)	7	300	7.1%
PAPER PRODUCTS (corrugated containers, paper boxes)	4	200	4.7%
PRINTING and PUBLISHING (job printing and newspapers)	6	100	2.4%
STONE, CLAY and GLASS (plus related concrete products)	2	100	2.4%
FURNITURE and FIXTURES	3	100	2.4%
CHEMICALS (insecticides, fertilizer)	3	50	1.2%
FABRICATED METALS (ornamental and structural steel)	2	50	1.2%
OTHER	3	50	1.2%
TOTAL	41	4,200	100.0%

Figure 7.

Figure 7. Northwest Sector Manufacturing Industry

POTENTIAL FOR RETIREMENT HOUSING

Year	Total Population	Population Age 65 Yrs. and Over	
		Number	% of Total
1900	75,996,000	3,081,000	4.1%
1910	91,972,000	3,950,000	4.3%
1920	105,711,000	4,933,000	4.7%
1930	122,755,000	6,634,000	5.4%
1940	131,669,000	9,019,000	6.8%
1950	150,695,000	12,268,000	8.1%
1960	179,323,000	16,560,000	9.2%
Predicted for year 2000		30,000,000	

Source: U.S. Census 1960

Figure 8.

As of the 1960 Census, there was a total of 16,560,000 persons age 65 and over in the United States. This represents close to nine per cent of the total population — a share that is constantly increasing due to our improved standard of living and advances in geriatric medicine. Projections indicate an age 65 and over population of 21,872,000 by 1975 and 30 million by the year 2000.

Arizona is one of the nation's three leading retirement states — with Florida and California. It is, however, a relatively new major destination for retirees in that the greatest influx has been in the past few years. Parts of Florida and California, in contrast, have been established retirement areas for several decades. Available data on the nationwide migration of retirees suggests that Arizona will receive an ever-increasing share of the total in years to come.

Figure 8. National Increase in Population Age 65 and Over

The mobility of older people throughout the nation is becoming more extensive each year. In 1960, of the 10,880,000 aged 62 and over OASI (Old-Age and Survivors Insurance) recipients in the nation, 160,800 changed their resident address from one state to another. This total represents an increase of 51,400, or 47 per cent, over 1955. By 1970, the annual total is expected to reach 290,000.

As is the case with many other growth indicators, Arizona's rate of increase in the number of OASI migrants is close to double the national average (see Figure 9). In 1960, 4,530 aged OASI beneficiaries moved to Arizona — representing an eight per cent increase over 1955.

The states of origin of these new retirees in 1960 were widespread throughout the United States. California led with 710, followed by Illinois at 480, while no other single state contributed more than seven per cent of the total.

STATE	Number of Recipients	% of Total
1. California	710	15.7%
2. Illinois	480	10.6%
3. Ohio	300	6.6%
4. New York	290	6.4%
5. Michigan	260	5.7%
6. Indiana	190	4.2%
7. Iowa	150	3.3%
All other	2150	47.5%
TOTAL	4530	100.0%

Figure 9.

The origin of all of Arizona's in-migrant retirees in 1960 is shown graphically on Figure 10.

Social Security data are limited to persons age 62 and over and indicate only the total number of recipients — not their social and economic characteristics. Therefore, to determine the market potential for retirement housing at Sun City, Arizona, it is necessary to examine in detail the U.S. Census data related to the past migration trends of retirees to Maricopa County, as well as the characteristics of these persons. The basic method of estimating these trends involves a comparison of persons age 50 and over in the 1960 Census with those age 40 and over in the 1950 Census. The difference between these two totals, plus estimated deaths, represents net in-migration. (Age 50 is used as a base because one member of a Sun City household must be age 50 or older).

Figure 9. Home States of Aged OASI Recipients Who Moved to Arizona in 1960

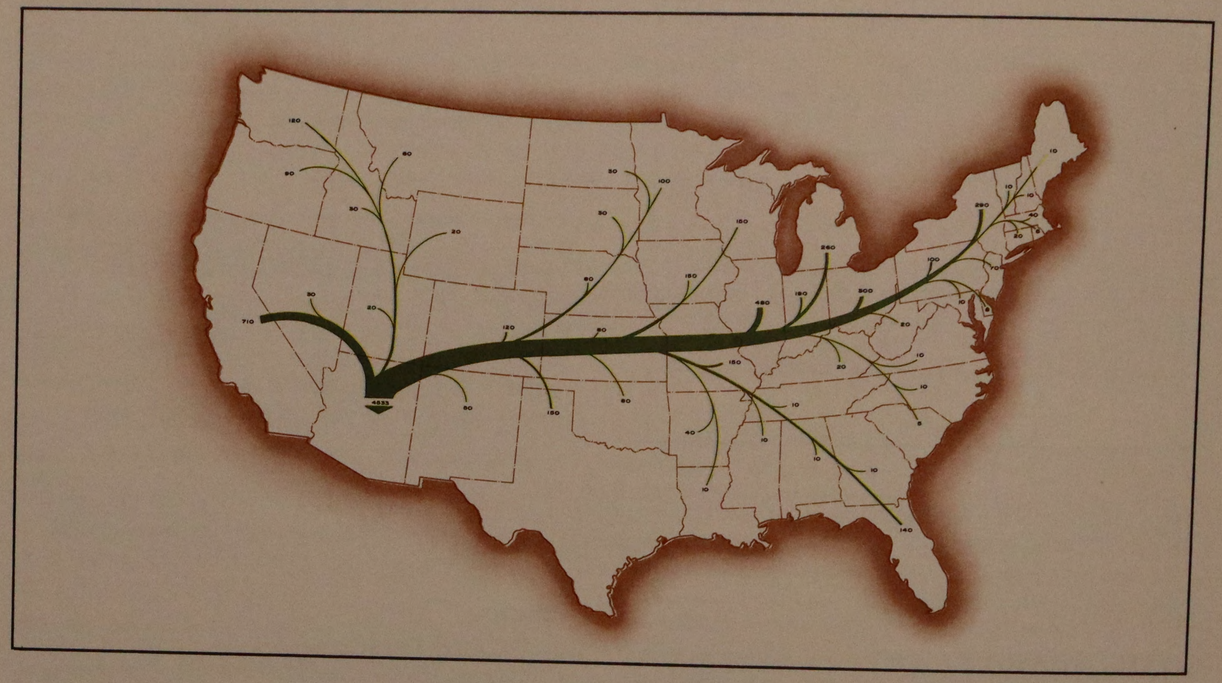


Figure 10. Migration of Arizona's Aged OASI Beneficiaries 1960

During the 1950-60 period, as computed on the above basis, 8,300 households with a retired household head age 50 and up in 1960 moved to Maricopa County — with the age breakdown as shown on Figure 11.

If the annual rate of migration had been constant from 1950 to 1960, each year 830 households with a retired head would have moved to Maricopa County.

However, an analysis of Social Security records indicates that 65 per cent of this growth occurred during the last five years — resulting in an adjusted (recent year) annual average of 1,100.

Therefore, the annual number of potential Sun City buyers entering the Phoenix area is estimated at 1,100. Each year the total number of retired families throughout the nation seeking new homes in the sunshine states continues to rise. This factor, combined with the increasing share received by Arizona, results in a market of sufficient size to insure the continued growth of the retirement portion of Sun City.

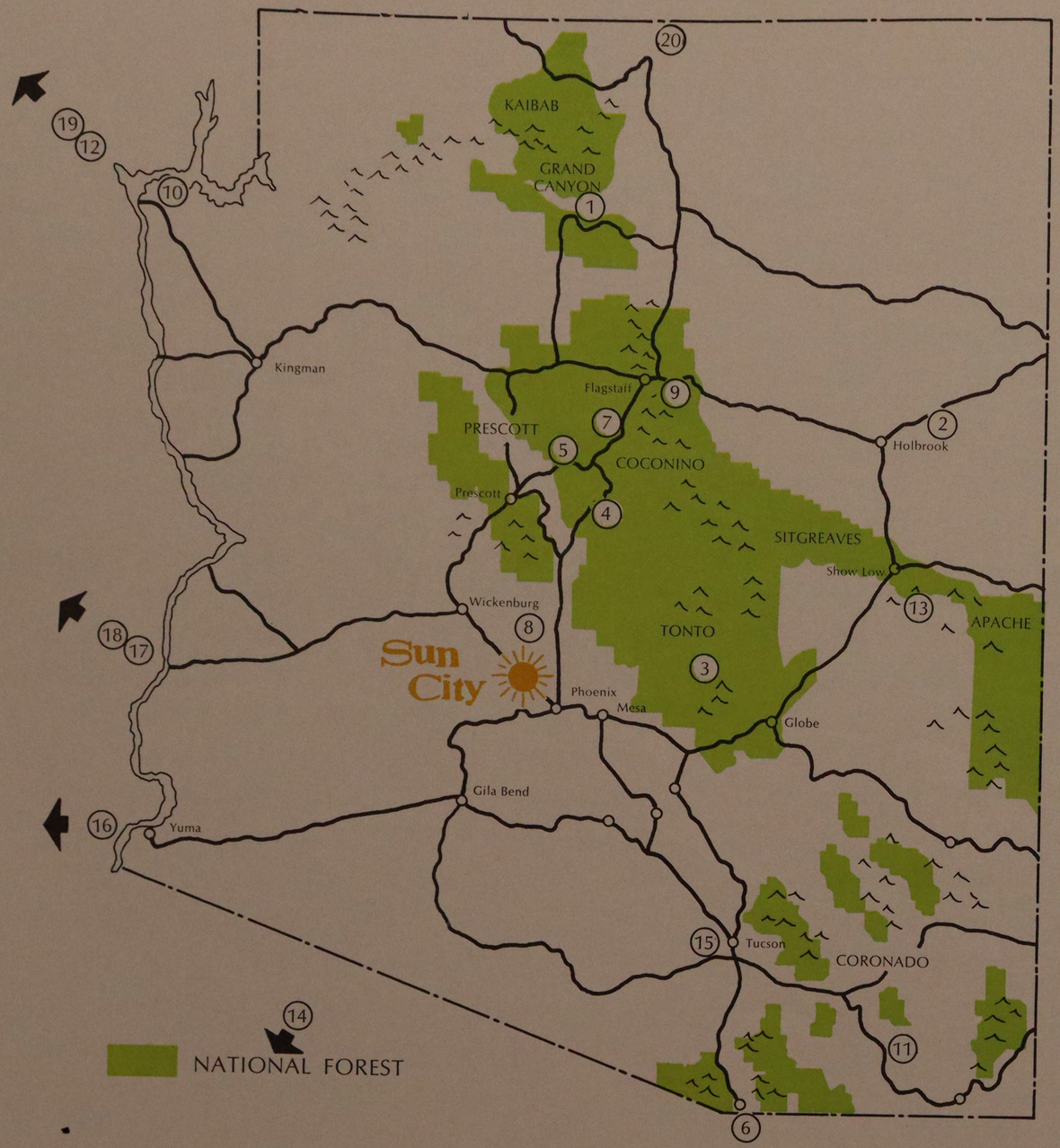
Age of Head in 1960	Total	Number Retired
50-54	5,200	500
55-59	4,300	800
60-64	3,000	1,100
65-69	3,300	2,300
70-74	2,100	1,700
75 and up	2,200	1,900
Total	**20,100**	**8,300**

Figure 11.

Figure 11. Households That Moved to Maricopa County in the 1950-1960 Period

SECTION III

THE GENERAL PLAN



SUN CITY TO ———	MILES	HOURS
1 GRAND CANYON	224	4.5
2 PETRIFIED FOREST	270	6.5
3 ROOSEVELT LAKE	100	3.0
4 MONTEZUMA CASTLE	87	1.5
5 JEROME (GHOST TOWN)	130	2.5
6 NOGALES, MEXICO	185	4.0
7 OAK CREEK CANYON	131	2.5
8 LAKE CARL PLEASANT	20	.5
9 WALNUT CANYON — FLAGSTAFF	146	3.0
10 LAKE MEAD — HOOVER DAM	252	6.0
11 TOMBSTONE	205	4.0
12 LAS VEGAS	283	5.0
13 PINETOP — WHITE MOUNTAINS	200	4.0
14 ROCKY POINT, MEXICO	212	4.5
15 TUCSON	143	3.5
16 SAN DIEGO	360	7.0
17 PALM SPRINGS	287	6.0
18 LOS ANGELES	395	8.0
19 SAN FRANCISCO	790	15.0
20 LAKE POWELL — GLEN CANYON DAM	290	6.5

Figure 12. Driving Time to Scenic and Recreational Points of Interest

GENERAL ENVIRONMENT

The world-renowned Phoenix climate and the natural splendors of Arizona continue to be important factors in attracting new industries, families, tourists, and retirees to the area. Electronic and aerospace industries find these factors especially advantageous to their working operations, and aid in attracting skilled technicians.

SCENIC ATTRACTIONS

Arizona is renowned as a state offering a variety of scenic attractions (see Figure 12). In the north lies the Grand Canyon — deepest and most beautiful of all the river gorges. Canyon de Chelly, Canyon del Muerto, and Oak Creek Canyon are possibly less dramatic, but very popular scenic attractions. The colorful Painted Desert, Petrified Forest, and Monument Valley lie to the northeast. Thousands of acres of pine forests cover the higher plateaus to the northwest. This series of plateaus, making up the entire northern region, end on the south in the Mogollon Rim — a steep rock wall 2,000 feet high extending from Central Arizona to the Mogollon Mountains in Southwestern New Mexico.

Primarily in Northern Arizona, though spread throughout many sectors of the state, are the reservations of 15 different Indian tribes — containing one-seventh of all American Indians. Their varied and colorful festivals attract thousands of tourists each year.

Central and Southern Arizona offer the sharp contrast of wide level valley floors, partitioned by rugged mountain ranges — as the famed Superstition Mountains east of Phoenix and the Santa Catalinas near Tucson.

To complete the spectrum, man-made lakes such as Lake Mead, the world's largest, and Lake Powell, the most recent, are found throughout Arizona.

RECREATIONAL OPPORTUNITIES

The range of Arizona sporting activities is infinite. In the Phoenix area alone, over 19,000 acres of land are devoted to recreation. Golf is a year-round Phoenix sport with 34 public and private courses available. Numerous tennis facilities exist in public parks, school playgrounds, and private clubs. Five lakes, within a two-hour drive from Phoenix (and Lake Mead within six hours) offer extensive opportunities for fishing, swimming, and boating. For the spectator, major league exhibition baseball, championship rodeos, and horse racing fill the winter season.

Destinations for weekend vacations include national parks and forests (over 11 million acres), 17 national monuments, Indian ruins, and old Spanish missions — to name a few.

CLIMATE

Salt River Valley surrounding Phoenix is appropriately named "Valley of the Sun." The average percentage of possible sunshine, ranges from 77 per cent in December and January to 94 per cent in June. Average monthly temperatures reach a peak of 90° in July, and a low of 50° in January. Summers in Phoenix are warm although the high temperatures are offset by the low humidity. The winter climate is mild and sunny, and snow is unknown — except in the higher northern regions of the state (see Figures 13, 14, 15 and 16). Annual rainfall is low with five-to-seven inches as normal.

In summary, these features, in addition to the favorable economic picture, led the Del E. Webb Corporation to initiate the active retirement concept at Sun City, Arizona.

Month	% of Possible Sunshine	Average Monthly Temperature	Average Relative Humidity
January	77%	50	47
February	79%	54	41
March	83%	60	33
April	88%	67	27
May	93%	76	20
June	94%	84	19
July	84%	90	31
August	84%	88	36
September	89%	83	30
October	88%	71	32
November	84%	58	35
December	77%	52	44
Average	**86%**	**69**	**33**

Figure 13.

Figure 13. Phoenix Climate Data

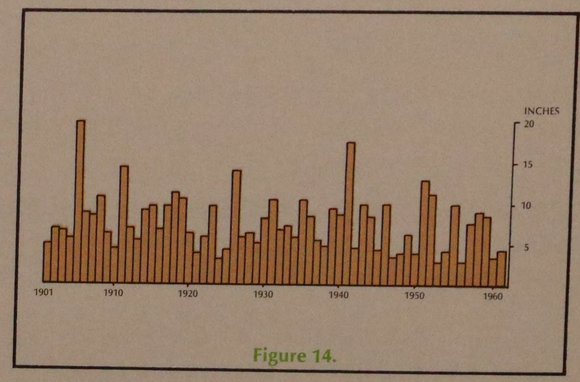


Figure 14.

Figure 14. Annual Rainfall in Arizona Since 1900

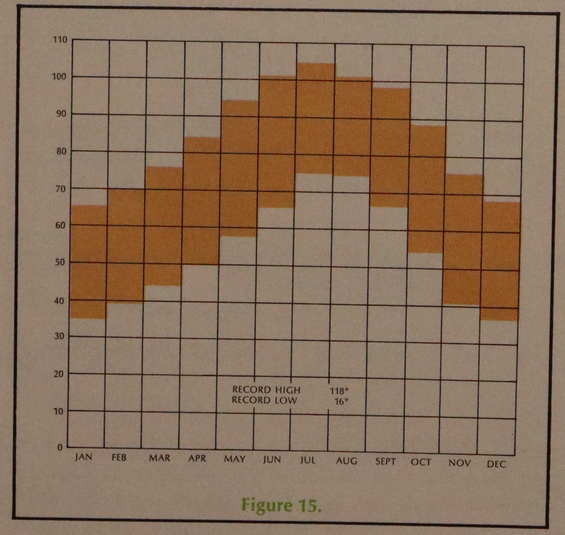


Figure 15.

Figure 15. Average Monthly High and Low Temperatures

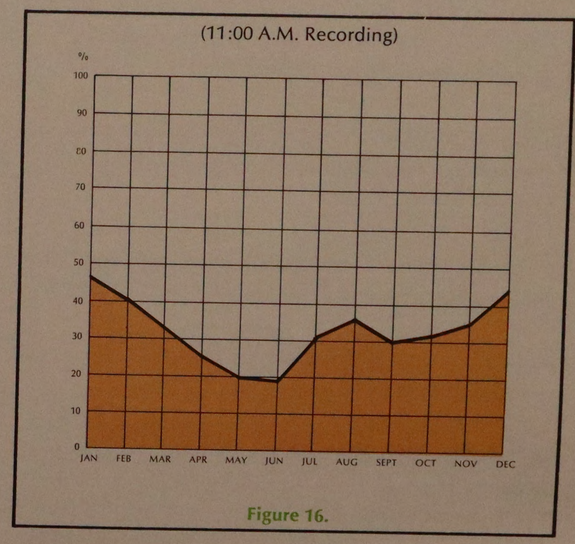


Figure 16.

Figure 16. Average Relative Humidity

SITE ANALYSIS

EXISTING LAND USE

The project lands are situated in a predominantly rich agricultural area, near the edge of the Phoenix urban growth area, between the incorporated communities of Youngtown and Peoria. Figure 18 is a mid-1963 aerial photograph of these lands, showing the topography and completed portions of Sun City; and Figure 17 shows a tabulated list of the major land uses.

Grand Avenue and the Santa Fe railroad tracks bisect the project lands into two parts. The southern part, containing a total of 2,687 acres, is the site of the Sun City retirement community. Of this 1,200 acres are fully developed, an additional 800 acres are being developed, with most of the remaining acreage under cultivation.

The developed portions of Sun City contain a population of 8,000 living in over 3,500 single-family and multi-family housing units. Other improvements include a complete shopping center, 100-room Kings Inn Motor Hotel with adjoining restaurant, five churches, post office, library, fire station, cemetery, medical facilities, riding stable, and two country club-type community centers — each with its own adjoining 18-hole golf course.

The northern part of the project lands contains 5,753 acres now in use for agricultural purposes, except for a small portion on 107th Avenue being used for the first garden of the Sunland Memorial Cemetery.

UTILITIES

Utility systems are available for all portions of the Marinette Ranch at comparatively low service rates to the consumer. Water is supplied by the Sun City Water Company from four deep wells. The quality and supply of potable water is considered excellent and more than sufficient to accommodate the projected population. The sanitary sewage system provides service to the Sun City community. The system is currently connected to a temporary sewage lagoon in the southeast corner of the project lands, and eventually will be connected to the Phoenix metropolitan area sewage system. Electricity and gas are supplied by Arizona Public Service Company.

DRAINAGE

The project lands are relatively level, well drained, and contain no unusual drainage problems, even though they are situated between the confluence of the Agua Fria and New Rivers. The well-defined ridge line and grade differential protects the western portion of the site from storm waters which occasionally flow in the Agua Fria River. Lake Pleasant Dam, located 20 miles to the north, provides flood protection for the eastern portion of the site. Run-off water within the project is readily accommodated by carefully-designed drainage channels adjacent to streets.

TRANSPORTATION

Sun City, Arizona, is an ideal location to benefit from efficient and convenient movement of people and goods, in the Phoenix metropolitan area, the State of Arizona, the United States, and foreign countries. Excellent air, rail, and highway transport facilities are available, and a deep water port at San Diego, California, provides ready access to international ocean freight.

AIR LINES

The Phoenix Municipal Airport, located just 20 miles from Sun City, is rated as one of the nation's finest, most efficient, and well managed air terminals. Six scheduled air lines, including two transcontinental and five regional, serve the facility. Cross-country jet service is provided by American Airlines and TransWorld Airlines. Regional service is provided by Apache Airlines, Bonanza Air Lines, Continental Airlines, Frontier Airlines, and Western Airlines. Convenient daily schedules provide both passenger and cargo capacity to major U.S. cities.

RAILROADS

The State of Arizona and the City of Phoenix are served by two Class I railroads — the Southern Pacific and the Santa Fe, which traverse the state in a general east-to-west direction. The latter directly serves Sun City, offering rapid freight service to all parts of the country.

HIGHWAYS

Six major U.S. Routes, plus excellent State routes, serve Arizona's motoring public. Sun City is served by four of these highways: U.S. 60, 70, 80, and 89. These Federal highways will eventually be supplemented by the national system of Interstate and Defense Highways (FAI 17 and 10) which, when completed, will connect Phoenix with all of the major cities in the United States.

TRUCKING

Some 30 independent trucking lines serve Phoenix, and provide extensive motor freight service to all parts of the country at competitive rates. Back-haul rates are especially attractive because a large percentage of the freight carried by trucks into Arizona originates in California or Texas.

Type of Land Use	Number of Acres	Per Cent of Total Area	Per Cent of Developed Area	Developed Acres per 100 People
Single-family	263	3.10	21.90	3.28
Multi-family	65	.80	5.40	.81
Total Residential	328	3.90	27.30	4.09
Total Commercial	23	.30	1.90	.29
Community Center and Parks	15	.18	1.30	.19
Golf Course	371	4.40	30.90	4.64
Other	56	.66	4.70	.70
Total Public	442	5.24	36.90	5.53
Total Streets	407	4.80	33.90	5.09
Total Platted Land	1200	14.24	100.00	15.00
Undeveloped Land Remainder	7240	85.80		
Total Project Area	**8440**	**100.00%**		

Based on recorded subdivision plats — New Life, New Life Annex, Sun City Units 1-6, Sun City Amended, and Sunland Memorial Park.

Figure 17. Land Use Data Sun City-Maricopa County, Arizona, Dec. 1963



Figure 18. Existing Conditions

THE PLAN

Sun City, Arizona, General Plan is shown in Figure 20. It represents, by color and symbol, the existing developed portions of the retirement community and a diagrammatic future plan of land use and circulation for the remaining and undeveloped areas. The plan is founded on sound planning principles and standards appropriate for the area and the economic data outlined in Section II. Major land uses are shown on Figure 21 on a net land basis, except for the residential land uses which include a 25 per cent allowance for streets and alleys.

The Sun City Plan was largely influenced by the physical features of the site, existing and adjoining land use, drainage problems, location of existing and future utilities, rail and highway facilities, and environmental conditions. Residential land uses (6,487 acres, 77% of project land) were selected for their desirable drainage and soil characteristics. Commercial and industrial lands (775 acres, 9.2%) were located close to major highway and rail facilities giving special attention to their relationships with the adjoining residential areas. The shopping center sites were selected to be near the center of their respective service areas. The remaining 1,178 acres (14%) of public and semi-public land uses (supporting community facilities, i.e. town hall, parks, recreation, school, utilities, etc.) were located, as required, on reasonable standards of community development and on the basis of convenience, utility and economy.

RETIREMENT COMMUNITY

The retirement community is designed specifically for people over 50 years of age, and includes all facilities necessary for active retirement (e.g., community centers, golf courses, churches, shopping centers, etc.), strategically located to serve immediate neighborhoods. The retirement community (see planning units A through F on Figure 22) is planned on 4,280 gross acres (50.7%) of the project lands; and includes 2,974 acres for single family homes; 433 acres for multi-family dwelling units; 210 acres for commercial activities; and 663 acres for public and semi-public areas. On the residential acreage, ultimately there will be about 16,455 dwelling units and an estimated population of 32,000.

WORKING COMMUNITY

The working community (see planning units G through K) is to be located north of Grand Avenue, and contains approximately 4,160 gross acres (49.3%) of the project lands; and includes 2,905 acres for single family homes; 175 acres for multi-family dwelling units; and 165 acres for commercial activities. Ultimately there will be about 14,434 dwelling units and an estimated population of 48,000 on the residential acreage.

Planned school and park sites total 360 acres, and account for the largest amount of the 515 acres designated for public and semi-public land uses. Included are six 15-acre combined elementary school and neighborhood park sites; one 45-acre senior high school site; a 45-acre town park; and 200 acres for a regulation size 18-hole golf course. Figure 19 shows the standards used in arriving at school site allocations.

(Based on Working Population of 48,000)

	Elementary	Senior High
School Plant Design Capacity	800-1,200	2,500
Site Requirements (acres per school)	13-15 acres*	45
Total student enrollment (based on 1960 U.S. Census for Phoenix urban area)	17.7%	5.4%
Number of Required School Sites	6	1
Total Land Requirements (acres)	90	45

*Includes land for a 5-acre park site

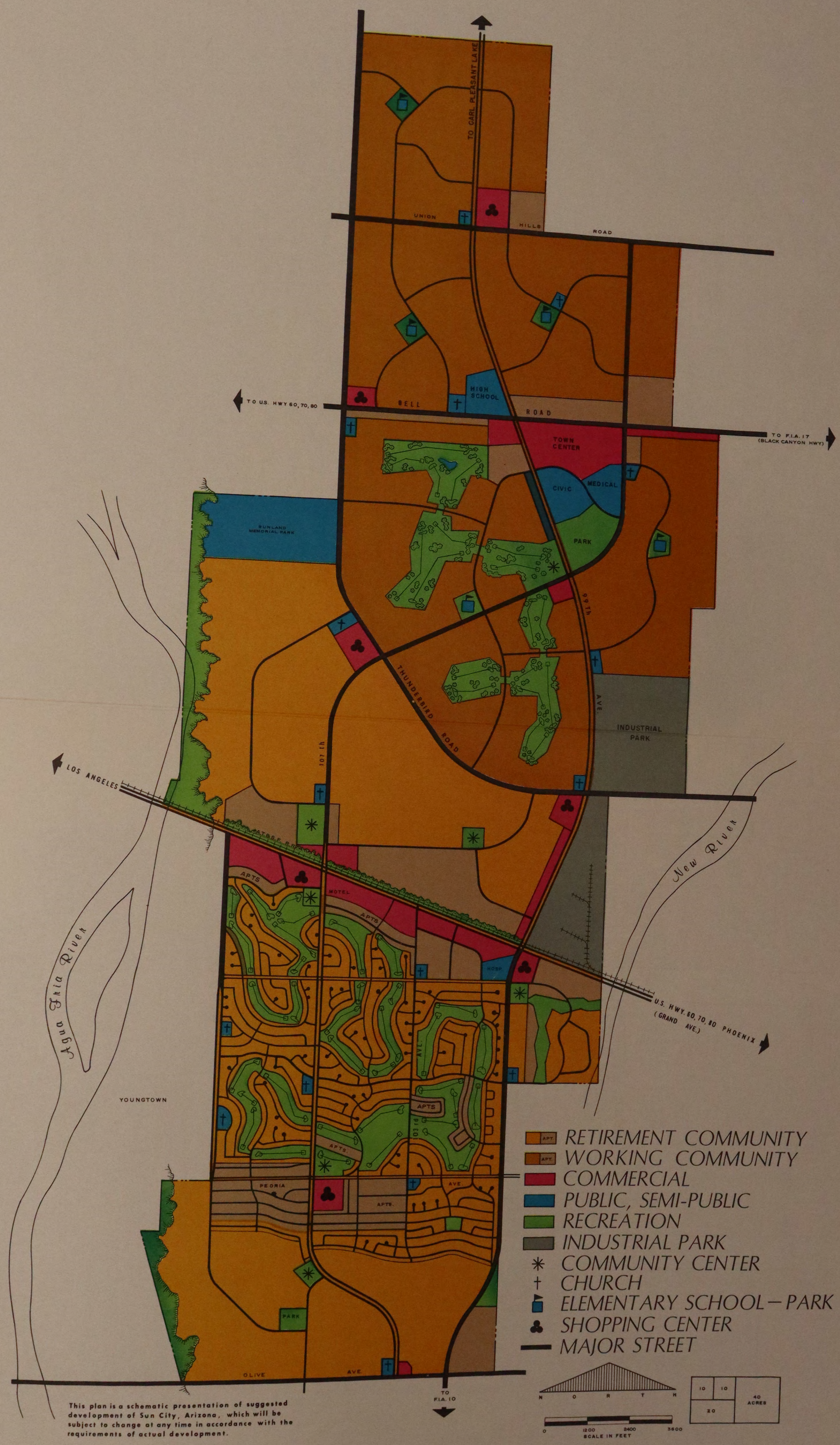
Figure 19.

Figure 19. School Site Design Standards

Figure 20. Future Land Use* Sun City, Arizona

LAND USE CLASSIFICATION		ACRES	PER CENT
RESIDENTIAL			
Working			
	Single-Family	2905	34.4
	Multi-Family	175	2.1
Retirement			
	Single-Family	2974	35.2
	Multi-Family	433	5.1
	Total	6487**	76.8
COMMERCIAL			
	Town Center (regional)	80	.9
	Shopping Centers	120	1.4
	Other	175	2.1
	Total	375	4.4
PUBLIC			
	Parks and Recreation (golf)	735	8.8
	Schools	135	1.6
	Cemetery	160	1.9
	Other	148	1.7
	Total	1178	14.0
INDUSTRY			
	Industrial Park	400	4.8
	GRAND TOTAL	8440*	100.0

*Based on General Plan.
**Includes 25% allowance for streets and alleys.
(Designed Population Capacity — 80,000)



This plan is a schematic presentation of suggested development of Sun City, Arizona, which will be subject to change at any time in accordance with the requirements of actual development.

Figure 21. General Plan for Sun City

RETIREMENT COMMUNITY								
Planning Units	Gross Acres	%	Commercial	Public & Semipublic	Residential		Total Population	%
					Single	Multiple		
A	555	6.6	86	156	269	44	3,000	3.7
B	1,250	14.8	54	242	836	118	8,910	11.1
C	197	2.3	14	30	113	40	1,500	1.9
D	684	8.1	1	30	622	31	5,980	7.5
E	734	8.7	15	10	629	80	6,625	8.3
F	700	8.3	40	35	505	120	5,985	7.5
Cemetery	160	1.9		160				
Total	4,280	50.7	210	663	2,974	433	32,000	40.0

WORKING COMMUNITY								
Planning Units	Gross Acres	%	Commercial	Public & Semipublic	Residential		Total Population	%
					Single	Multiple		
G	527	6.2	15	105	407		6,075	7.6
H	507	6.0	10	25	462	10	7,160	8.9
I	748	8.9	15	125	558	50	9,590	12.0
J	461	5.5	20	60	381		5,690	7.1
K	637	7.6		20	527	90	10,320	12.9
L	640	7.6	25	20	570	25	9,165	11.5
Industry	400	4.7						
Town Center	240	2.8	80	160				
Total	4,160	49.3	165	515	2,905	175	48,000	60.0
GRAND TOTAL	**8,440**	**100.00**	**375**	**1,178**	**5,879**	**608**	**80,000**	**100.0**

	Net Acres	D.U. Yield Per Acre*	No. of D. U.	Average Family Size	Population
RETIREMENT COMMUNITY					
Single-Family	2974	4.5	13,424	2.0	26,848
Multi-Family	433	7.0	3,031	1.7	5,152
Total	3407		16,455		32,000
WORKING COMMUNITY					
Single-Family	2905	4.2	12,334	3.5	43,170
Multi-Family	175	12.0	2,100	2.3	4,830
Total	3080		14,434		48,000
GRAND TOTAL	**6487**		**30,889**		**80,000**

*Includes 25% allowance for streets and alleys.

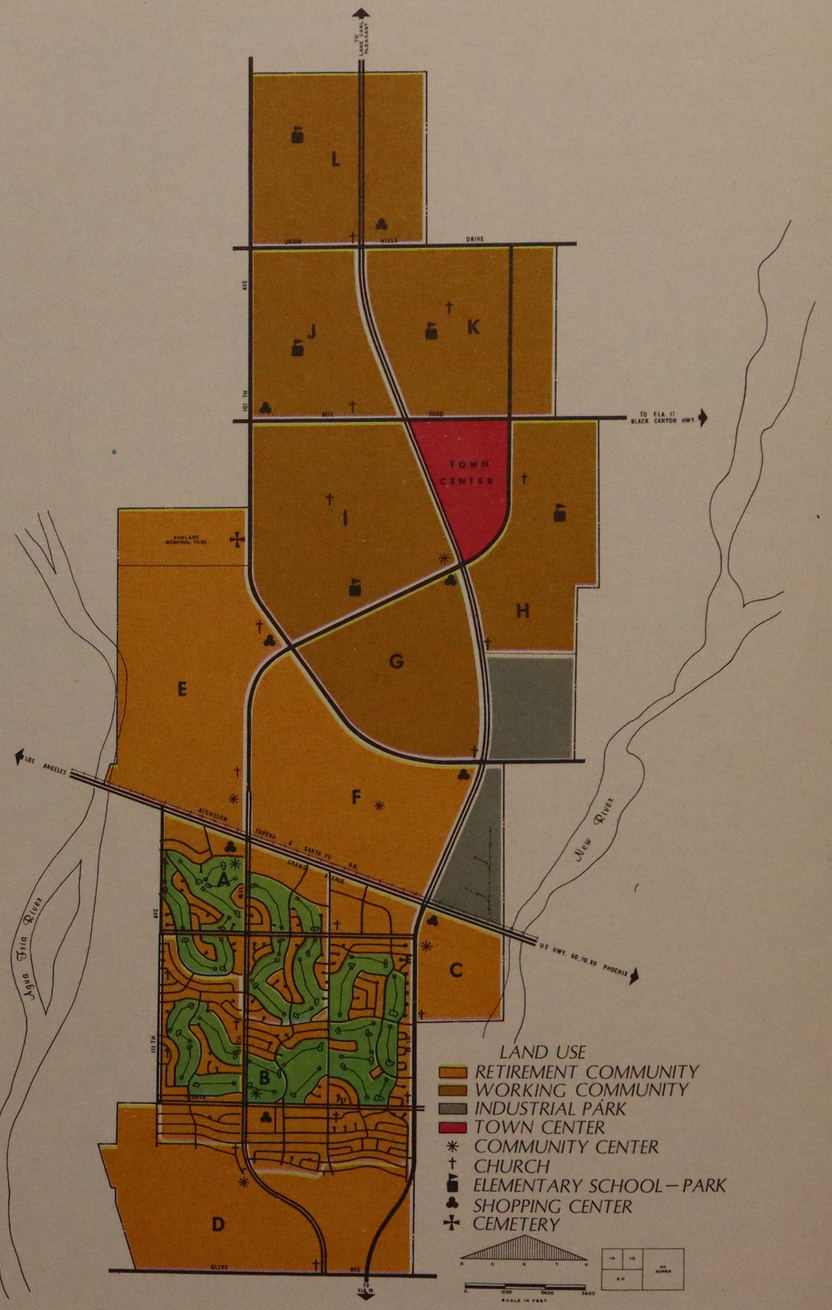


Figure 22. Planning Unit Schedule

SHOPPING CENTERS

The Sun City plan contains a total of 375 acres (4.4%) of commercial land uses, including organized shopping centers and highway commercial strips, distributed between the working and retirement communities. Their location and quantity is based on need and convenience to the residents. The plan includes one 100-acre regional-type shopping center; one 25-acre community shopping center; and ten smaller neighborhood-type shopping centers.

The regional shopping center is in the town center located at the southeast intersection of Bell Road and 99th Avenue (225-acre tract of land). It is intended to become the focus of a highly urbanized complex for Sun City, and the adjoining communities within a radius of five-to-eight miles.

The standards shown in Figure 23 were used as guides in establishing various shopping centers as shown on the plan.



REGIONAL CENTER	
Trade Area (Population)	100,000 and over
Service Radius	5 miles and over
Required Site	50-80 acres
Shops	40-50
COMMUNITY CENTER	
Trade Area (Population)	20,000 to 30,000
Service Radius	1-2 miles
Required Site	10-25 acres
Shops	15-30
NEIGHBORHOOD CENTER	
Trade Area (Population)	4,000 to 18,000
Service Radius	1/2 to 3/4 mile
Required Site	5-7 acres
Shops	5-15

Figure 23. Shopping Center Standards

INDUSTRY

A 400-acre restricted industrial park, a part of the working community, is planned for the east side of 99th Avenue, between Grand Avenue and the east-west line 3400 feet north of Thunderbird Road. This site is especially well suited for industry due to its ready access to Grand Avenue and the Santa Fe railroad tracks and existing utilities. The land will be developed for light, clean industries in accordance with pertinent zoning laws and deed restrictions. A special committee will review the plans of each prospective company to assure adherence to the established standards. The restrictions will set forth permitted industries, maximum building heights, building coverage, parking, and yard requirements. When developed, these lands will provide nearby employment opportunities for the working community and help in establishing a sound economic base for Sun City.

MAJOR STREETS

The major street system is designed to carry the anticipated traffic volume within and through Sun City, and to form the framework for convenient neighborhood planning units. Major streets are spaced about one mile apart and generally provide for the traffic flow beyond the project boundary to other parts of the Phoenix metropolitan area. Bell Road, scheduled for complete improvements by 1965, will be one of the most important east-west Maricopa County thoroughfares extending from Grand Avenue east to Pima Road (Scottsdale), and will provide direct connections to the important Black Canyon Freeway (FAI-17) located nine miles east of Sun City. 107th and 99th Avenues are two of the most important north-south major streets. 99th Avenue is to be a major county highway which will extend north 15 miles to Lake Carl Pleasant Regional Park, and connect 11 miles south of Sun City with the planned Maricopa Freeway (FAI-10).

Collector streets are shown on the plan in smaller lines. These streets are designed to carry traffic between local and major streets and provide access to adjacent property. The continuity is generally confined to the neighborhood planning units to provide easy access to elementary schools, churches, and terminate near shopping facilities at the perimeter of a neighborhood unit.

ULTIMATE DEVELOPMENT GOAL

Maintaining the high standards already established at Sun City, the Del E. Webb Corporation plans to develop an outstanding balanced community containing all those amenities and services that assure value and a continuance of the "good life" for which Sun City is justifiably renowned.

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