



AREA PLAN APPENDICES



Southeast Chandler Area Plan

ACKNOWLEDGMENTS

Acknowledgments

City Council

Jay Tibshraeny, Mayor
Bob Robson, Vice Mayor
Patti Bruno
Boyd Dunn
Martin Sepulveda
Donna Wallace
Phillip Westbrooks

Planning and Zoning Commission

Mark Farmer, Chairman
Mike Perry, Vice Chairman
Clifford Frey
Lon Miller
Diane Ortiz-Parsons
Thomas Padilla
Phil Ryan

Southeast Chandler Land Use Task Force

Dean Brennan, Chair
Donna Bolen
John McNelis
Diane Ortiz-Parsons
Michelle Otero

Southeast Chandler Stakeholders Coordinating Committee

Bill Adkins
Dean Brennan
Donna Bolen
Diane Burke
Ed Bull
Mark Farmer
Clifford Frey
Brian Hanger
Mike Leonard
John McNelis
Norm Nichols
Diane Ortiz-Parsons, Meeting Facilitator
Bob Pazera
Hank Pluster
Jeanette Polvani
Phil Ryan

City of Chandler Staff

Lloyd Harrell, City Manager
Pat McDermott, Assistant City Manager
Doug Ballard, Planning & Development Director
Hank Pluster, Planning Services Manager
Bob Pazera, General Plan Coordinator & Area
Plan Project Manager

Consultant Team

RBF & Associates, Project Lead
Bruce Larson, Project Director
Al Zelinka, Project Manager
John Shetland, Assistant Project Manager
Ron Menguita
Robert Klekner
Ron Pflugrath
Faye Stroud
Joy Cha
Bill Wilkinson

Sunregion Associates

Brian Aby
Ron Hood

Greater Agricultural Land Alliance

Steve Urie



Appendices: Southeast Chandler Area Plan

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— City of Chandler Land Use Element

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Under Separate Cover

VOLUME TWO: APPENDICES FOR THE SOUTHEAST CHANDLER AREA PLAN

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APPENDIX I - SOUTHEAST CHANDLER TODAY



"Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness."

— City of Chandler Land Use Element

With a contextual understanding of the urbanization-related dynamics taking place within Southeast Chandler, it is important to provide more in-depth supplemental information about the area. The following section provides a summarized profile of the population of Southeast Chandler, including data regarding households, income, employment, labor force, and educational attainment. To the extent possible, this snapshot profile of Southeast Chandler is accompanied by data on the development trends of Maricopa County, the City of Chandler, and Census Tract 5227.03. (The Southeast Chandler planning area lies entirely within Census Tract 5227.03; land in Gilbert, Mesa, Queen Creek, and unincorporated Maricopa County are also included in this Census Tract.)

The data and analysis provided in this report have been prepared by Sunregion Associates, Inc.TM (Sunregion). To the extent that specific area data are available, we have presented key socioeconomic, demographic, and housing trends details for Maricopa County, Chandler, Census Tract 5227.03, and Southeast Chandler.

The analysis clearly shows a pattern of accelerating population, employment, and housing growth in Maricopa County, Chandler and Southeast Chandler. From 1990 to 1998, growth has been very rapid not only in the areas identified above, but throughout Arizona.

Although we have experienced 7 years of rapid growth, there is some concern nationally and locally that the economy may slow later this year, and slow still further in 2000. Although population, housing, and employment growth will continue, it will likely be at a more moderate pace after the year 2000.

Section A — Planning Area

Southeast Chandler (the planning area), in the southeastern portion of the Phoenix metro area, includes land within the City of Chandler and outside the city in Maricopa County. This planning area is generally bounded by Highway 87 (Arizona Avenue) on the west, Val Vista Drive on the east, Ocotillo Road on the north, and the Hunt Highway on the south.

Major developments in the south central portion of Southeast Chandler include the Springfield and Sunbird Golf Resort projects. These developments are located between McQueen and Cooper Roads on the west and east, and Riggs Road and the Hunt Highway on the north and south. Centex and Horton Homes also have subdivisions under development in the area north of Chandler Heights Road and east of McQueen Road.

In addition to Maricopa County and City of Chandler data, Census Tract 5227.03 has also been identified to illustrate selected trends in the area. The planning area lies entirely within Census Tract 5227.03. However, this Tract is very expansive and also includes other East Valley land in Gilbert, Mesa, Queen Creek, and unincorporated Maricopa County.



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Section B — Data Sources

The primary data sources used for this analysis are the 1990 U.S. Census of Population and Housing, and the 1995 Special Census for Maricopa County. More current data, although limited, was derived from the Arizona Department of Economic Security, the Maricopa Association of Governments (MAG), Arizona State University, the City of Chandler, and proprietary sources. Although data is limited, especially for Southeast Chandler, it is clear that this area is growing rapidly and is presently a major focal point for retirees.

Section C — Population Trends

From 1990-1998, Southeast Chandler's population increased from 966 to a total of 3,718 year-round and seasonal residents, with a year-round resident population of 2,790 (see Table 1). Southeast Chandler's share of City of Chandler population increased from 1.1 percent in 1990 to approximately 1.7 percent in 1998 (see Table 2). Interestingly, Southeast Chandler's share of seasonal population within occupied seasonal housing units represented 32 percent of all of Chandler's seasonal population in October, 1995 (see Table 3). The following summarizes the residential profile of Southeast Chandler (as of 1995):

- ❖ Over half of the residents were 65 and older.
- ❖ Only 29.6 percent of the residents worked, compared with 48.2 percent for the City of Chandler as a whole.
- ❖ Some 41.9 percent of the residents were retired.
- ❖ Some 12.6 were students, compared to the Chandler average of 22.3 percent. (See Table 4).

Section D — Household Trends

The average household size in Southeast Chandler was 2.2 persons per occupied dwelling unit, compared to 2.87 for the City of Chandler as a whole, and 2.62 in Maricopa County (see Table 5).

From 1980-1998, an average of 30,223 homes (occupied housing units) were absorbed annually in Maricopa County, 2,472 per year in the City of Chandler, and 118 units per year in Southeast Chandler (see Table 6). Sunregion estimates that an average of 198 housing units were developed per year in Southeast Chandler from 1990-1998. Projections, which will be prepared for inclusion elsewhere in the *Southeast Chandler Area Plan/Development Policy*, will clearly show that Southeast Chandler is poised for considerable growth.

From 1990-1995, as a result of strong market conditions, the housing vacancy rate declined from 11.5 percent in Maricopa County to 5.9 percent. In the City of Chandler the vacancy rate declined from 8.8 percent to 5.4 percent. Within Southeast Chandler, however, the vacancy rate, excluding seasonal units, increased from 7.5 percent to 13.5 percent. We attribute this increase to speculative building, vacant units awaiting occupancy, and the like. As the market matures in Southeast Chandler the vacancy rate will decline (see Table 8).

In 1995, nearly 93 percent of the housing units in Southeast Chandler were single-family detached units. This compares to 71.1 percent within the City of Chandler, and 57.9 percent in Maricopa County (see Table 9).



Appendices: Southeast Chandler Area Plan

APPENDIX I - SOUTHEAST CHANDLER TODAY

Section E — Income

In 1998, median household income in Southeast Chandler was \$45,650, less than the City of Chandler median, but more than the County median (see Table 10). Per capita income was \$23,200 in Southeast Chandler in 1998. While this was less than in both the City and County, it is not unexpected among a population which has a substantial number of retirees (see Table 10).

Section F — Educational Attainment

Current educational attainment data is not available for Southeast Chandler. However, the data which is available for Census Tract 5227.03, of which Southeast Chandler is a part, suggests that the population had somewhat lower education attainment than in the City of Chandler and the County (see Table 11).

Section G — Employment and Labor Force

In 1998, there were an estimated 995 jobs within the boundaries of the Southeast Chandler area (see Table 12). As noted previously, 29.6 percent of the residents in Southeast Chandler were employed in 1995. This level of employment represented about 648 workers. Based on the same level of employment participation we estimate that 832 residents were employed in 1998 (see Table 13). In Census Tract 5227.03, within which Southeast Chandler is located, the largest numbers of working residents were employed in agriculture (14.1%), manufacturing (14.2%), retail trade (14.0%), and services (27.4%) (see Table 14).

Development activity has been brisk in Southeast Chandler. As of February, 1999 within the active subdivisions for which we have data, 2,020 lots had been sold, and 1,488 remain to be sold (see Table 15). In planned projects not yet under construction, an estimated 7,327 residential units are scheduled for development, at an average density of 3.38 units per acre (see Table 16).

Section H — Existing, Planned & Proposed Residential Development Projects

Historic building permit data is not available for Southeast Chandler. This area lies within both the City of Chandler as well as unincorporated areas in Maricopa County. However, as reported previously, the area experienced residential development (both occupied and vacant units) of 198 units per year from 1990-1998.

Section I — Planned and Proposed Apartment, Hotel, Industrial, Office & Shopping Center Projects

At this time, we have not identified any planned apartment, hotels/motel, industrial, office, or shopping center projects within Southeast Chandler. However, the City of Chandler has plans to construct a municipal golf course on land east of the Southern Pacific Railroad line between Chandler Heights Road and Riggs Road.



Appendices: Southeast Chandler Area Plan

APPENDIX I - SOUTHEAST CHANDLER TODAY

Section J — Tables

TABLE A/I-1
Resident Population

(MARICOPA COUNTY, CHANDLER CENSUS TRACT 5227.03, AND SOUTHEAST CHANDLER)

| Year | Maricopa County | Chandler | Census Tract 5227.03 | Southeast Chandler |
|--------------------------|-----------------|----------|----------------------|--------------------|
| 1990 | 2,122,101 | 89,862 | 12,446 | 966 |
| 1995 | 2,551,765 | 132,360 | 18,107 | 2,186 |
| 1998 | 2,806,100 | 160,165 | 31,360 | 2,790 |
| 1990-98 Average Annually | 82,908 | 8,522 | 2,293 | 221 |

Source: U.S. Bureau of the Census, Census of Population and Housing, 1990; Special Census for Maricopa County, October, 1995; Arizona Department of Economic Security, December, 1998; Maricopa Association of Governments, Socio-Economic Projections, June, 1997; and Sunregion Associates, Inc.

Table 2 clearly portrays Chandler's increasing share of the County's population; and, Southeast Chandler's increasing share of Chandler's population from 1990-1998.

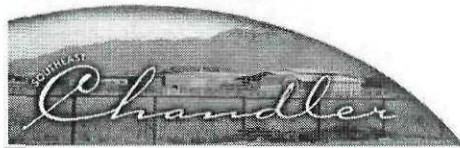
TABLE A/I-2
Resident Population Growth

| Year | Maricopa County | Chandler's Share of County Population | Southeast Chandler's Share of Chandler Population |
|------|-----------------|---------------------------------------|---|
| 1990 | 100.0% | 4.23% | 1.07% |
| 1995 | 100.0% | 5.19% | 1.65% |
| 1998 | 100.0% | 5.71% | 1.74% |

Source: Sunregion Associates, Inc., derived from Table 1.

As reported in Table 3, the 1995 Special Census, Southeast Chandler was home to a large percentage of Chandler's seasonal population. However, the counts do not reflect peak seasonal visitation or provide an accurate indication of the number of seasonal housing units.

Historically, February is the peak month for seasonal visitation, consequently the October Special Census figures understate seasonal population. Seasonal housing units are housing units intended primarily for seasonal use. Consequently, the seasonal population estimates in Table 3 do not include seasonal visitors who stay in transient lodging places, or with friends and relatives.



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Later in this report, in Table 8, data is provided on the number of seasonal units in October, 1995. In addition, Sunregion provides a seasonal housing unit estimate for 1998.

TABLE A/I-3
Seasonal Population
(AS OF OCTOBER, 1995*)

| Year | Maricopa County | Chandler | Census Tract 5227.03 | Southeast Chandler |
|------|-----------------|----------|----------------------|--------------------|
| 1995 | 31,743 | 654 | 221 | 209 |

Source: Special Census for Maricopa County, October, 1995. * Excludes population in hotels/motels and other transient lodging places. Includes only those in occupied seasonal units. In October, the majority of seasonal units are unoccupied.

Table 4 provides some summary information regarding comparative resident population characteristics in Maricopa County, Chandler, Census Tract 5227.03, and Southeast Chandler. The most notable points are that:

- ❖ Southeast Chandler has a substantially older population than the other areas.
- ❖ With its older population base, Southeast Chandler, as expected, has a larger share of retired residents, and smaller shares of working residents and students than in Census Tract 5227.03, Chandler, and Maricopa County.

TABLE A/I-4
Resident Population Profile
(OCTOBER, 1995)

| Profile | Maricopa County | Chandler | Census Tract 5227.03 | Southeast Chandler |
|--------------------------|--------------------|-----------------|----------------------|--------------------|
| Total Population | 2,551,765 | 132,360 | 18,107 | 2,186 |
| Population 18 + % | 1,865,647 73.1% | 91,055 68.8% | 12,109 66.9% | 1,832 83.8% |
| Population 65+ % | 510,018 20.0% | 14,002 10.6% | 2,888 16.0% | 1,140 52.2% |
| Median Age | 33.2 | 30.6 | 29.8 | 66.0 |
| Working % | 1,067,134 41.8% | 63,735 48.2% | 7,406 40.9% | 648 29.6% |
| Student % | 522,053 20.5% | 29,547 22.3% | 4,501 24.9% | 276 12.6% |
| Retired % | 355,714 13.9% | 8,346 6.3% | 1,795 9.9% | 916 41.9% |
| Live in Group Quarters % | 43,899 1.7% | 992 .8% | 516 2.9% | 0 0% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Special Census for Maricopa County, October, 1995.



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After many years of declining household size during the 1970s, the 1980s and into the early 1990s, it now appears that household size is stabilizing within the County and Chandler. Nevertheless, as noted in Table 5, average household size in Census Tract 5227.03, and especially in Southeast Chandler, declined sharply from 1990-1995. Sunregion believes that the decline noted in Southeast Chandler results from a substantial increase in the number of year-round resident retired persons who migrated into the area; primarily into the Sunbird and Springfield developments.

TABLE A/I-5
Average Resident Household Size Trends
(1985-1995)

| Year | Maricopa County | Chandler | Census Tract 5227.03 | Southeast Chandler |
|------|-----------------|----------|----------------------|--------------------|
| 1985 | 2.62 | 2.92 | -- | -- |
| 1990 | 2.59 | 2.86 | 3.44 | 3.44 |
| 1995 | 2.62 | 2.87 | 3.22 | 2.20 |

Source: U.S. Bureau of the Census, Census of Population and Housing, 1990; and, Special Census for Maricopa County, October, 1985 and 1995.

In Table 6 below, strong construction and in-migration trends are clearly reflected in the increase in occupied resident housing units in each geographic area. It should be noted that occupied resident housing unit figures do not include housing units occupied by seasonal residents.

TABLE A/I-6
Resident Occupied Housing Unit Trends
(1995-1998)

| Year | Maricopa County (# of Units) | Chandler (# of Units) | Census Tract 5227.03 (# of Units) | Southeast Chandler (# of Units) |
|-------------------------|---------------------------------|--------------------------|--------------------------------------|------------------------------------|
| 1990 | 807,560 | 34,967 | 3,475 | 296 |
| 1995 | 957,730 | 45,727 | 5,619 | 993 |
| 1998 | 1,056,900 | 55,360 | 10,944 | 1,268 |
| 1990-95 Increase | 150,170 | 10,760 | 2,144 | 697 |
| 1990-95 Average Annual* | 26,896 | 1,927 | 384 | 125 |
| 1990-98 Increase | 249,340 | 20,393 | 7,469 | 972 |
| 1990-98 Average Annual* | 30,223 | 2,472 | 905 | 118 |

Source: U.S. Bureau of the Census, U.S. Census of Population and Housing, April, 1990; and Special Census for Maricopa County, October, 1995; Arizona State University, Arizona Business, January, 1999; Maricopa Association of Governments, Socio-Economic Projections, June, 1997; and, Sunregion Associates, Inc. *Annual average number of units, based on average monthly increase from April, 1990-October, 1995 (67 months); and, April, 1990 to July, 1998 (99 months).



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Like Table 6, Table 7 does not reflect seasonal housing unit counts. Table 7 shows the number of non-seasonal vacant housing units and vacancy rates in Maricopa County, Chandler, Census Tract 5227.03 and Southeast Chandler, in 1990 and 1995. Vacant units include those units for sale or rent, units vacant but awaiting occupancy, and other types of vacant units.

TABLE A/I-7
Year-Round Non-Seasonal Vacant Housing Units
(1990-1995)

| Year | Maricopa County | | Chandler | | Census Tract 5227.03 | | Southeast Chandler | |
|-------------------------------|-----------------|------|----------|-----|----------------------|-----|--------------------|------|
| | # | % | # | % | # | % | # | % |
| 1990 | 105,204 | 11.5 | 3,024 | 8.8 | 300 | 7.9 | 24 | 7.5 |
| 1995 | 59,617 | 5.9 | 2,480 | 5.4 | 469 | 7.7 | 152 | 13.3 |
| 1990-95 Average Annual* | -7982 | | -95 | | +29 | | +22 | |

Source: U.S. Bureau of the Census, U.S. Census of Population and Housing, April, 1990; and, Special Census for Maricopa County, October, 1995. *Annual average number of units.

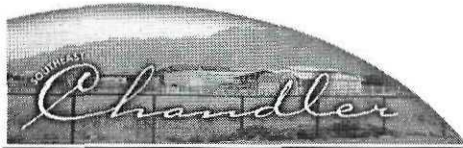
The number of seasonal housing units is on the rise in each geographic area. Within the City of Chandler, Southeast Chandler accounted for 42.3 percent of its seasonal housing units in 1995. As of mid-year 1998, Sunregion estimates that there are 488 seasonal units in

Southeast Chandler. Overall, we estimate that an average of 198 housing units per year have been developed in Southeast Chandler since 1990. Sunregion's total housing stock estimate for Southeast Chandler as of July, 1998 is 1,950 units.

TABLE A/I-8
Total Seasonal Housing Units
(1990-1998)

| Year | Maricopa County # | Chandler # | Census Tract 5227.03 # | Southeast Chandler # |
|-------------------------------|-------------------|------------|------------------------|----------------------|
| 1990 | 39,277 | 466 | 39 | na |
| 1995 | 51,248 | 892 | 436 | 377 |
| 1990-95 Average Annual* | 2,082 | 74 | 69 | na |
| 1998 | 5,655 | 1,080 | 849 | 488 |

Source: U.S. Bureau of the Census, U.S. Census of Population and Housing, April, 1990; and, Special Census for Maricopa County, October, 1995.



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APPENDIX I - SOUTHEAST CHANDLER TODAY

The mix of housing in Southeast Chandler is shown in Table 9. At present the area consists primarily of single-family detached units. In fact, Southeast Chandler has a substantially higher percentage of single-family detached units than the other comparative areas.

TABLE A/I-9
Total Housing Units By Type
(1995)

| Type of Unit | Maricopa County | | Chandler | | Census Tract 5227.03 | | Southeast Chandler | |
|-----------------|-----------------|------|----------|------|----------------------|------|--------------------|------|
| | # of HU | % | # of HU | % | # of HU | % | # of HU | % |
| Total | 1,068,610 | 100 | 49,099 | 100 | 6,524 | 100 | 1,522 | 100 |
| Single Detached | 619,270 | 57.9 | 34,929 | 71.1 | 5,599 | 85.8 | 1,411 | 92.7 |
| Multi-Family | 367,040 | 34.4 | 12,474 | 25.4 | 214 | 3.3 | 12 | .8 |
| Mobile Home | 79,710 | 7.5 | 1,597 | 3.3 | 707 | 10.8 | 99 | 6.5 |
| Other | 2,590 | .2 | 99 | .2 | 4 | .1 | 0 | 0 |

Source: Special Census for Maricopa County, October, 1995.

Limited income data is available for smaller areas such as Southeast Chandler. However, the data that is available indicates that per capita income in the area is less than in the City of Chandler and the County. This is not necessarily unexpected in an area dominated by retiree households. However, Sunregion's *median household income* estimate indicates that this measure in Southeast Chandler is higher than in the County, but lower than in the City of Chandler.

TABLE A/I-10
Median Household And Per Capita Income

| Year | Maricopa County | Chandler | Southeast Chandler |
|-------------------------|-----------------|----------|--------------------|
| Median Household Income | | | |
| 1990 | \$30,797 | \$38,124 | -- |
| 1995 | \$35,623 | \$46,096 | -- |
| 1998 | \$41,595 | \$53,824 | \$45,650 |
| Per Capita Income | | | |
| 1990 | \$14,970 | \$14,720 | -- |
| 1995 | \$22,571 | \$22,194 | -- |
| 1998 | \$26,355 | \$25,915 | \$23,200 |

Source: U.S. Bureau of the Census, Census of Population and Housing, 1990; Special Census for Maricopa County, October, 1995; Arizona Department of Economic Security, State Data Center Newsletter, Summer, 1998; Arizona's Economy, The University of Arizona; ABC Demographic Consultants, Inc.; and, Sunregion Associates, Inc.

Unfortunately, current educational attainment information is not available. Furthermore, specific education information which is available does not exist for Southeast Chandler. However, a rough idea of the educational attainment in the area is provided by both the Census Tract 5227.03 information and the City of Chandler information.



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TABLE A/I-11

Educational Attainment Trends
(POPULATION 25 YEARS AND OLDER)

| Year | Maricopa | | Census Tract |
|-----------------------|----------|----------|--------------|
| | County | Chandler | 5227.03 |
| 1990: | | | |
| High School Graduates | 81.5% | 85.8% | 75.2% |
| Bachelors or Higher | 22.1% | 26.2% | 16.8% |

Source: U.S. Bureau of the Census, Census of Population and Housing, 1990.

Table 12 provides employment estimates for Maricopa County, the Chandler Planning Area, and Southeast Chandler for 1995 and 1998. The Chandler Planning Area includes the incorporated limits of the City, plus additional geography which is within the City's planning sphere of influence. The absolute size of the employment base in Southeast Chandler is modest. Since 1995, employment growth has also been modest.

TABLE A/I-12

Employment In Maricopa County, Chandler, And
Southeast Chandler
(IN 1995 AND 1998)

| Year | Maricopa | Chandler | Southeast |
|---------------------|-----------|---------------|-----------|
| | County | Planning Area | Chandler |
| 1995 | 1,264,800 | 47,288 | 928 |
| 1998 | 1,466,959 | 63,489 | 995 |
| 1995-98 % Change | +16.0% | +34.3% | 7.2% |

Source: Maricopa Association of Governments, Socio-Economic Projections, June, 1997; Arizona Department of Economic Security, Special Monthly Labor Market Report, Prefinal, January thru December, 1998; and, Sunregion Associates, Inc.

Although Sunregion has limited labor force data for Southeast Chandler, we do know that at the time of the 1995 Special Census for Maricopa County, some 29.6 percent of the residents of Southeast Chandler were employed, compared to 48.2 percent in Chandler. This is not unexpected given the large retirement age population (41.9 percent retired). Table 13 provides employed resident estimates for the City of Chandler and Southeast Chandler.



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TABLE A/I-13

Employed Residents In Chandler And Southeast Chandler

| Year | Chandler | Southeast Chandler |
|------|----------|-----------------------|
| 1995 | 63,735 | 648 |
| 1998 | 77,190 | 832 |

Source: Maricopa Association of Governments, Socio-Economic Projections, June, 1997; and, Sunregion Associates, Inc.

Although specific current employment data is not available for Southeast Chandler, Sunregion believes that in 1990, and even today, it would be reasonable to conclude that its residents are generally employed in a manner consistent with the residents of Census Tract 5227.03, as reported in Table 14.

TABLE A/I-14

Percentage Distribution Of Employment By Industry
(1990)

| Industry | Maricopa County | Chandler | Census Tract 5227.03 |
|--------------------------|--------------------|----------|-------------------------|
| Agr. | | | |
| Forestry/Fisheries | 2.0% | 2.4% | 14.1% |
| Mining | .1% | .1% | .5% |
| Construction | 6.4% | 5.8% | 9.9% |
| Manufacturing | 15.1% | 22.9% | 14.2% |
| T.C.P.U | 7.8% | 8.1% | 5.9% |
| Wholesale Trade | 4.4% | 4.8% | 3.2% |
| Retail Trade | 17.7% | 15.8% | 14.0% |
| F.I.R.E | 9.0% | 7.3% | 5.9% |
| Services | 33.0% | 28.8% | 27.4% |
| Public Administration | 4.5% | 4.0% | 4.9% |
| Total | 100.0% | 100.0% | 100.0% |

Source: U.S. Bureau of the Census, 1990.

As shown in Table 15, as of February of this year, some 2,020 lots have been sold in the subdivisions which are presently active or recently sold out, and 1,488 lots remain to be sold in Southeast Chandler.



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APPENDIX I - SOUTHEAST CHANDLER TODAY

TABLE A/I-15
Existing Active Residential Development Projects in
Southeast Chandler

| Principals | Project Name | Location | Lots That Remain | Total Lots |
|-----------------------|------------------------------|--|------------------|------------|
| 1. Centex Homes | Chandler Heights Est. 1 | SWC Riggs Road & 132nd Street | 298 | 298 |
| 2. Robson Communities | Sunbird Golf Resort | SWC Cooper & Riggs Roads | 0 | 1,621 |
| 3. Pulte Homes | Springfield | SEC of McQueen & Riggs Roads | 525 | 740 |
| 4. Pulte Homes | Springfield - Holidays | " | 40 | 137 |
| 5. Pulte Homes | Springfield - Traditions | " | 50 | 120 |
| 6. Pulte Homes | Springfield - Vistas | " | 40 | 86 |
| 7. Alexander & Sons | Circle G @ Riggs Homestead 3 | Circle G Ranch - N. of Riggs Rd. W. of Eastern Canal | -- | -- |
| 8. Armour Constr | Circle G @ Riggs Homestead | " | -- | -- |
| 9. Landmark Constr | Circle G @ Riggs Homestead 3 | " | -- | -- |
| 10. Love Development | Circle G @ Riggs Homestead 3 | " | -- | -- |

| Principals | Project Name | Location | Lots That Remain | Total Lots |
|----------------------------|------------------------------|---------------------------------------|------------------|------------|
| 11. Misc. Custom | Circle G @ Riggs Homestead 1 | " | -- | -- |
| 12. Nu-Vista Homes | Circle G @ Riggs Homestead 3 | " | -- | -- |
| 13. Wall & Sons | Circle G Riggs Ranch 2 | " | -- | -- |
| 14. Western Development | Circle G Riggs Homestead 3 | " | -- | -- |
| 15. Hancock Homes | Chandler Heights Est. 1 | NEC 124th St. & Chandler Heights Road | 131 | 135 |
| 16. Shea Homes | Cooper Commons 3 | NWC Riggs & Cooper Roads | 119 | 126 |
| 17. Standard Pacific Homes | Cooper Commons 1 | SEC Riggs & Cooper Roads | 245 | 245 |
| Total Lots Remaining & | | | 1,488 | 3,508 |

Source: The Property Book, Rupp Aerial Photography, Kamrath & Associates, et al, as of February, 1999.

As reported in Table 16, as of February, 1999, in Southeast Chandler an estimated 7,327 units are planned for construction in subdivisions not currently under development. These 7,327 units are planned on approximately 2,169 acres at an average density of 3.38 units per acre.



Appendices: Southeast Chandler Area Plan

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TABLE A/I-16
Planned Residential Development Projects in Southeast Chandler

| Principals | Project Name | Location | Acreage/ Proposed Lots | Average Density |
|--------------------------------------|---------------------------|-------------------------------------|---|----------------------|
| 1. Carefree Partners/ Stitler Cos | Cooper Commons MPC | SEC Cooper & Riggs Roads | 478 Acres - 1,628 Units | 3.40 units per acre |
| 2. Circle Development | Riggs Homestead Ranch III | NW Gilbert & Riggs Roads | 53 Acres - 51 Custom | .96 units per acre |
| 3. Hogan & Associates | | NWC Cooper & Riggs Roads | 31 Acres* - 105 Lots (8,500-20,000 square feet) | 3.38 units per acre* |
| 4. Circle G Development | Riggs Homestead Ranch IV | SEC Cooper & Chandler Heights Roads | 30 Acres - 32 Lots | 1.1 units per acre |
| 5. US Development | Cooper Heights | NE of Cooper and Riggs Roads | 40 Acres - 88 Lots | 2.2 units per acre |
| 6. Vanderbilt Farms | Sun Groves | SEC Lindsay & Riggs Roads | 640 Acres - 2,225 Lots | 3.48 units per acre |
| 7. Vanderbilt Farms | Sun Groves | SEC Lindsay & Riggs Roads | 124 Acres - 720 Cluster Lots | 5.81 units per acre |
| 8. Vanderbilt Farms | Sun Groves | SEC Lindsay & Riggs Roads | 263 Acres 933 SF Lots | 3.54 units per acre |
| 9. Vanderbilt Farms | Sun Groves | SEC Lindsay & Riggs Roads | 220 Acres - 602 SF Lots | 2.74 units per acre |

| Principals | Project Name | Location | Acreage/ Proposed Lots | Average Density |
|----------------------------|--------------|---|---------------------------|---------------------|
| 10. Trend Homes | -- | NEC SPRR Tracks & Chandler Heights Road | 160 Acres - 540 units* | 3.38* |
| 11. Fulton Homes | | SE of McQueen & Ocotillo Road | 40 Acres - 135 units* | 3.38* |
| 12. Fulton Homes | | NWC Cooper & Chandler Heights Road | 50 Acres 133 Lots | 2.66 units per acre |
| 13. Del Webb Coventry | | McQueen Road & Hunt Highway | 40 Acres - 135 units* | 3.38* |
| 14. Monterey Homes | | NWC McQueen & Riggs Roads | NA | NA |
| Total Acreage & Units/Lots | | | 2,169 Acres - 7,327 | 3.38 units per acre |

Source: The Property Book, Rupp Aerial Photography, Kammrath & Associates, et al, as of February, 1999. NA means not available. *Estimate by Sunregion Associates, Inc. based on 3.38 units per acre.

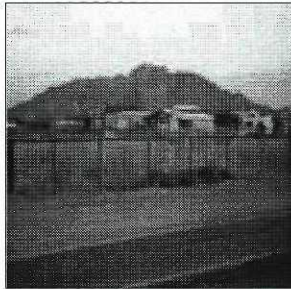


Appendix II — Southeast Chandler Tomorrow



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW



"Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness."

— City of Chandler Land Use Element

Section A — Southeast Chandler Tomorrow

In Maricopa County, the Maricopa Association of Governments (MAG) projects slower resident population and housing growth between 2000-2005; then a gradual rise in each 5-year period thereafter to 2020. For the entire period from 1995-2020, MAG projects average annual resident population growth of 79,496 and average housing unit growth of 32,707 units per year.

MAG's Chandler Planning Area encompasses an area larger than the City's corporate boundaries and includes Southeast Chandler. Within the Chandler Planning Area, during the 1995-2020 period, MAG projects that average annual resident population growth will be 4,941 persons, and housing unit growth will be 2,031 units per year.

Sunregion has prepared three growth projection scenarios for Southeast Chandler, and they are provided below. These are identified as the *trends*, *moderate*, and *aggressive* scenarios. As the name implies, the trends scenario is based on the assumption that past growth trends will continue in the future. The moderate scenario is keyed to MAG's resident population projections for the Chandler Planning Area

(Sunregion has supplemented these projections with seasonal resident projections, as well as housing unit projections). The aggressive projections are those which we believe provide a ceiling which will not be pierced during the projection horizon.

Section B — Trends Population and Housing Unit Projection

The trends population and housing scenario is the most conservative of the three sets of projections. Given the subdivision development in the area, and what is planned, Sunregion cannot foresee any situation over the 22-year projection horizon where average annual growth will be less than that reflected in the trends scenario.

Subsection B₁ — Assumptions

The following assumptions have been utilized in making these projections.

- ❖ Consistent with trends from 1980-1998, 180 resident and seasonal occupied units will be developed each year from 1998-2020. From 1990-1998, the average annual increase in occupied resident and seasonal units was 177 units. We have simply rounded up to 180 in the projections.
- ❖ In the projections, seasonal units are viewed as occupied units rather than classified as vacant units as in done in the U.S. Census.
- ❖ A 10 percent housing unit vacancy rate is assumed. Consequently, under the trends scenario, 200 housing units



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

will be developed in the study area each year. This is also consistent with trends from 1990-1998 when 198 units were developed each year.

- ❖ Average household size is held constant at 2.2 persons per household for resident occupied housing units, and 1.9 persons per unit for seasonal housing units.
- ❖ Consistent with the resident seasonal housing unit mix in Southeast Chandler in 1998, we have assumed that 27.8 percent of the occupied units during the projection horizon will be seasonal units, and 72.2 percent year-round resident units.

As shown in Table 1, population rises by 8,380, from 3,718 to 12,098 during the period from 1998 to 2020. During the same period, the number of housing units increases by 4,401, from 1,950 to 6,351.

TABLE A/II-1
Trends Population And Housing Unit Projections For
Southeast Chandler

| Year | Total Population* | Total Housing Units** | Total Resident & Seasonal Occupancy (HU) | Total Resident Population | Total Seasonal Population |
|------|-------------------|-----------------------|--|---------------------------|---------------------------|
| 1998 | 3,718 | 1,950 | 1,756 | 2,790 | 928 |
| 2005 | 6,384 | 3,351 | 3,016 | 4,792 | 1,592 |
| 2010 | 8,288 | 4,351 | 3,916 | 6,219 | 2,069 |
| 2015 | 10,193 | 5,351 | 4,816 | 7,649 | 2,544 |
| 2020 | 12,098 | 6,351 | 5,716 | 9,079 | 3,019 |

Source: Previous Tables; and, Sunregion Associates, Inc.

*Includes resident and seasonal population.

**Includes resident and seasonal occupied units as well as vacant units.

Subsection B₂ — Trends Housing Unit Acreage Needs Assumptions

The following assumptions have been utilized in making these projections.

- ❖ Table 2 is based on the total housing unit projections identified in Table 1.
- ❖ Table 2 reflects the projected total increase in the number of housing units developed from 1998-2005 and 2005-2020, as well as the total increase in units and acreage.
- ❖ Three different density assumptions have been utilized when making these projections; 2.5, 3.0, and 3.5 units per acre.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

TABLE A/II-2
Trends Housing Unit Acreage Projections for Southeast Chandler

| Year | Total Housing Units* | 2.5 Net Housing Units Per Acre | 3.0 Net Housing Units Per Acre | 3.5 Net Housing Units Per Acre |
|-----------|----------------------|--------------------------------|--------------------------------|--------------------------------|
| 1998-2005 | 1,401 | 560 Acres | 467 Acres | 400 Acres |
| 2005-2020 | 3,000 | 1,200 Acres | 1,000 Acres | 857 Acres |
| Totals | 4,401 | 1,760 Acres | 1,467 Acres | 1,257 Acres |

Source: Previous Tables, and, Sunregion Associates, Inc.

*Includes resident and seasonal occupied units as well as vacant units.

Section C — Moderate Population & Housing Unit Projection

As noted previously, the moderate population and housing unit projections are keyed to MAG's June, 1997 population projections for Southeast Chandler. MAG's projections are for resident population growth. We have also incorporated seasonal residents into the moderate projection scenario. We believe that it is quite possible that the moderate projection scenario could be realized over the projection horizon. As of October, 1998, there were 8,815 lots available either within active subdivisions or in planned subdivisions. If all these lots

are developed within the next 22 years, the average annual pace of development would be about 400 units per year.

Subsection C₁ — Assumptions

The following assumptions have been utilized in making these projections.

- ❖ In the projections, seasonal units are viewed as occupied units rather than classified as vacant units as in done in the U.S. Census.
- ❖ Resident housing units will account for an increasing share of total housing units as more families move to the planning area. In addition, resident units occupied by retirees will continue to account for a substantial share of the market. By 2005, 77.5 percent of the units will be year-round resident-occupied units, in contrast to 72.2 percent now. About 80 percent of the units will be year-round resident units in 2010, 82.5 percent in 2015, and 85 percent in 2020.
- ❖ Average household size is held constant at 2.2 persons per household for resident-occupied housing units, and 1.9 persons per unit for seasonal housing units.
- ❖ The housing unit vacancy rate is 10 percent in each projection period.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

As shown in Table 3, in the moderate projection scenario population rises by nearly 18,000 from 3,718 to 21,515 during the period from 1998 to 2020. During the same period, the number of housing units increases by nearly 9,800 units; from 1,950 to 11,746 units. This represents an average annual increase of 445 units.

TABLE A/II-3
Moderate Population and Housing Unit Projections for
Southeast Chandler

| Year | Total Population* | Total Housing Units** | Total Resident & Seasonal Occupancy (HU) | Total Resident Population | Total Seasonal Population |
|------|----------------------|-----------------------------|--|---------------------------------|---------------------------------|
| 1998 | 3,718 | 1,950 | 1,756 | 2,790 | 928 |
| 2005 | 9,192 | 4,788 | 4,310 | 7,351 | 1,841 |
| 2010 | 10,873 | 5,646 | 5,081 | 8,943 | 1,930 |
| 2015 | 14,305 | 8,074 | 6,661 | 12,090 | 2,215 |
| 2020 | 21,515 | 11,746 | 9,984 | 18,671 | 2,844 |

Source: Previous Tables, Maricopa Association of Governments, Socio-Economic Projections, June, 1997; and, Sunregion Associates, Inc.

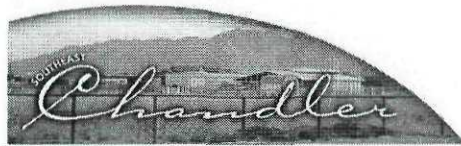
*Includes resident and seasonal population. Total resident population projections are those of the Maricopa Association of Governments.

**Includes resident and seasonal occupied units as well as vacant units.

Subsection C₂ — Moderate Housing Unit Acreage Needs Assumptions

The following assumptions have been utilized in making these projections.

- ❖ Table 4 is based on the total housing unit projections identified in Table 3.
- ❖ Table 4 reflects the projected total increase in the number of housing units developed from 1998-2005 and 2005-2020, as well as the total increase in units and acreage.
- ❖ Three different density assumptions have been utilized when making these projections; 2.5, 3.0, and 3.5 units per acre.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

TABLE A/II-4

Moderate Housing Unit Acreage Projections for Southeast Chandler

| Year | Total Housing Units* | 2.5 Net Housing Units Per Acre | 3.0 Net Housing Units Per Acre | 3.5 Net Housing Units Per Acre |
|-----------|----------------------|--------------------------------|--------------------------------|--------------------------------|
| 1998-2005 | 2,838 | 1,135 Acres | 946 Acres | 811 Acres |
| 2005-2020 | 6,958 | 2,783 Acres | 2,319 Acres | 1,988 Acres |
| Totals | 9,796 | 3,918 Acres | 3,265 Acres | 2,799 Acres |

Source: Previous Tables, and, Sunregion Associates, Inc.

*Includes resident and seasonal occupied units and vacant units.

Section D — Aggressive Population & Housing Unit Projection

Subsection D₁ — Assumptions

The following assumptions have been utilized in making these projections.

- ❖ In the projections, seasonal units are viewed as occupied units rather than classified as vacant units as in done in the U.S. Census.

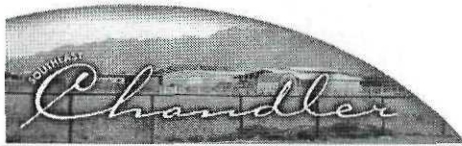
- ❖ Resident housing units will account for an increasing share of total housing units as more families move to the planning area. In addition, resident units occupied by retirees will continue to account for a substantial share of the market. By 2005, 77.5 percent of the units will be year-round resident occupied units, in contrast to 72.2 percent now. About 80 percent of the units will be year-round resident units in 2010, 82.5 percent in 2015, and 85 percent in 2020.

- ❖ Average household size is held constant at 2.2 persons per household for resident occupied housing units to 2005 and increased to 2.3 persons per unit from 2010-2020. Household size in seasonal units is 1.9 persons per unit.

- ❖ The housing unit vacancy rate is 10 percent in each projection period.

- ❖ Beginning with the 1998-2005 period we have increased the moderate housing unit projections by 20 percent, and in each 5-year period thereafter between 2005-2020 by 35 percent. We believe this will be sufficient to incorporate an unusually large burst of development activity during the present 1998-2005 period.

As shown in Table 5, in the aggressive projection scenario population rises by 26,016 during the period from 1998 to 2020, from 3,718 to 29,734. During the same period, the number of housing units increases by nearly 12,800, from 1,950 units in 1998 to 14,749 units in 2020. The latter increase represents an average annual housing unit increase of 582 units.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

TABLE A/II-5

Aggressive Population and Housing Unit Projections for Southeast Chandler

| Year | Total Population* | Total Housing Units** | Total Resident & Seasonal Occupancy (HU) | Total Resident Population | Total Seasonal Population |
|------|-------------------|-----------------------|--|---------------------------|---------------------------|
| 1998 | 3,718 | 1,950 | 1,756 | 2,790 | 928 |
| 2005 | 10,279 | 5,356 | 4,820 | 8,219 | 2,060 |
| 2010 | 13,016 | 6,514 | 5,863 | 10,787 | 2,229 |
| 2015 | 19,653 | 9,792 | 8,813 | 16,723 | 2,930 |
| 2020 | 29,734 | 14,749 | 13,274 | 25,951 | 3,783 |

Source: Previous Tables, Maricopa Association of Governments, Socio-Economic Projections, June, 1997; and, Sunregion Associates, Inc.

*Includes resident and seasonal population. Total resident population projections are those of the Maricopa Association of Governments.

**Includes resident and seasonal occupied units as well as vacant units.

Subsection D₂ — Aggressive Housing Unit Acreage Needs Assumptions

The following assumptions have been utilized in making these projections.

- ❖ Table 6 is based on the total housing unit projections identified in Table 5.

- ❖ Table 6 reflects the projected total increase in the number of housing units developed from 1998-2005 and 2005-2020, as well as the total increase in units and acreage.
- ❖ Three different density assumptions have been utilized when making these projections; 2.5, 3.0, and 3.5 units per acre.

TABLE A/II-6

Aggressive Housing Unit Acreage Projections for Southeast Chandler

| Year | Total Housing Units* | 2.5 Net Housing Units Per Acre | 3.0 Net Housing Units Per Acre | 3.5 Net Housing Units Per Acre |
|-----------|----------------------|--------------------------------|--------------------------------|--------------------------------|
| 1998-2005 | 3406 | 1,362 Acres | 1,135 Acres | 973 Acres |
| 2005-2020 | 9,393 | 3,757 Acres | 3,131 Acres | 2,684 Acres |
| Totals | 12,799 | 5,119 Acres | 4,266 Acres | 3,657 Acres |

Source: Previous Tables, and, Sunregion Associates, Inc.

*Includes resident and seasonal occupied units and vacant units.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

Section E — Commercial (Retail) Land Use Projections

Subsection E₁ — Assumptions

The following assumptions underpin the commercial retail land use need projections presented below in Table 7.

- ❖ Sunregion's trends, moderate, and aggressive population projections in each time period from 1998-2020 form the basis for these commercial land use need projections.
- ❖ We have chosen to use an average per capita allocation of retail space of about 30 square feet. This factor is slightly less than the 31.2 average per capita figure in the Phoenix metroplex. Sunregion calculated the latter figure based on square footage data identified in the Property Book Directory of Shopping Centers, Kammrath & Associates, 1998. It has been Sunregion's experience that retail space per capita typically ranges between 15-40 square feet, depending on the locality.
- ❖ Based on the projected population under each scenario, the increase in population in each period is multiplied by 30 square feet of retail space per capita yielding gross building area demand. We then divided the total projected square footage by a lot coverage which typically ranges between 15 and 25 percent. In the computations below we have utilized a lot coverage factor of 15 percent.

- ❖ Finally, for planning purposes we usually expand the projected acreage by from 25 to 50 percent. The latter factor allows for freestanding commercial development which may locate outside of shopping centers as well as provides for holding zone acreage in the event that unanticipated development occurs. In the computations below we have built in an expansion factor of 25 percent.

Table 7 below provides summary data for each of the three projection scenarios as well as for a maximum build-out population.

TABLE A/II-7

Commercial Retail Acreage Projections for Southeast Chandler

| Year | Trends Population Acreage | Moderate Population Acreage | Aggressive Population Acreage |
|-----------|---------------------------|-----------------------------|-------------------------------|
| 1998-2005 | 17 Acres | 31 Acres | 38 Acres |
| 2005-2020 | 35 Acres | 71 Acres | 112 Acres |
| Totals | 48 Acres | 102 Acres | 150 Acres |

Source: Previous Tables; and, Sunregion Associates, Inc.

*Includes resident and seasonal occupied units and vacant units.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

Section F — Commercial Office Land Use Projections

It may be anticipated that a considerable amount of the office demand which will materialize in the planning area over the projection horizon will locate within neighborhood and community shopping centers. However, there will be demand for freestanding office space especially as the area matures. Table 8 below provides summary data for each of the three projection scenarios.

Subsection F₁ — Assumptions

The following assumptions underpin the commercial office land use need projections presented below in Table 8.

- ❖ Past research by Sunregion indicates that 7.5 square feet of gross office square feet per capita is a reasonable planning figure in developing areas. We typically find that a significant amount of such square footage is absorbed by medical office facilities, as well as by law offices, accounting firms, other financial services firms, and the like.
- ❖ It is assumed that lot coverage will be 25 percent.
- ❖ An expansion factor of 50 percent (1.50) will be utilized.

TABLE A/II-8
Commercial Office Acreage Projections for Southeast Chandler

| Year | Trends Population Acreage | Moderate Population Acreage | Aggressive Population Acreage |
|-----------|---------------------------|-----------------------------|-------------------------------|
| 1998-2005 | 3 Acres | 6 Acres | 7 Acres |
| 2005-2020 | 6 Acres | 18 Acres | 20 Acres |
| Totals | 9 Acres | 24 Acres | 27 Acres |

Source: Previous Tables, and, Sunregion Associates, Inc.

*Includes resident and seasonal occupied units and vacant units.

Section G — Industrial Acreage Projections

Although there is some industrial development on the northern portion of the 160 acres between Arizona Avenue and the Southern Pacific Railroad Tracks, Chandler Heights Road to Riggs Road, Sunregion believes that this land is ideally situated for high quality industrial/business park development. Its location, next to the SPRR and reasonably adjacent to the future municipal golf course further enhances its attractiveness for quality industrial development. Moreover, survey respondents strongly believed that quality industrial development belonged in this area.

It is Sunregion's sense that this land would not begin to be developed before the year 2007, or until infrastructure is available.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

Thereafter, it is believed that the land would be absorbed within 3-8 years. To a significant extent, the timetable depends on the development of a commercially desirable access to I-10.

Section H — SUPPORTING DATA

TABLE A/II-9

Mag Population and Housing Unit Projections for Maricopa County and the Chandler Planning Area

| Year | Maricopa County Resident Population | Maricopa County Total Resident Housing Units | Chandler Planning Area Resident Population | Chandler Planning Area Resident Housing Units |
|------|-------------------------------------|--|--|---|
| 1995 | 2,528,700 | 1,007,307 | 135,382 | 49,484 |
| 2000 | 2,954,150 | 1,178,160 | 169,395 | 63,116 |
| 2005 | 3,329,550 | 1,335,687 | 198,252 | 74,970 |
| 2010 | 3,709,575 | 1,490,212 | 221,664 | 84,638 |
| 2015 | 4,101,775 | 1,648,569 | 240,787 | 92,008 |
| 2020 | 4,516,100 | 1,824,979 | 258,915 | 100,253 |

Source: Previous Tables, Maricopa Association of Governments, Socio-Economic Projections, June, 1997.

TABLE A/II-10

Mag Population and Housing Unit Projections for Maricopa County and the Chandler Planning Area

| Year | Maricopa County Resident Population | Maricopa County Total Resident Housing Units | Chandler Planning Area Resident Population | Chandler Planning Area Resident Housing Units |
|-----------|-------------------------------------|--|--|---|
| 1995-2000 | 425,450 | 170,853 | 34,013 | 13,632 |
| 2000-2005 | 375,400 | 157,527 | 28,857 | 11,854 |
| 2005-2010 | 380,025 | 154,525 | 23,214 | 9,668 |
| 2010-2015 | 392,200 | 158,357 | 19,123 | 7,370 |
| 2015-2020 | 414,325 | 176,410 | 18,128 | 8,245 |

Source: Previous Tables, Maricopa Association of Governments, Socio-Economic Projections, June, 1997.



Appendices: Southeast Chandler Area Plan

APPENDIX II - SOUTHEAST CHANDLER TOMORROW

TABLE A/II-11

Gross Commercial Retail Projections for Southeast Chandler

| Year | Population Increase | Retail Sq. Ft. Per Capita | Building Sq. Feet | Lot Coverage Factor | Lot Square Feet | Expansion | Acreage |
|-------------------|---------------------|---------------------------|-------------------|---------------------|-----------------|------------|------------|
| | Trends | Trends | Trends | Trends | Trends | Trends | Trends |
| 1998-2005 | 2,666 | 30 | 79,980 | .15 | 533,200 | 1.25 | 15 |
| 2005-2020 | 5,714 | 30 | 171,420 | .15 | 1,142,800 | 1.25 | 33 |
| Totals | 8,380 | | 251,400 | | 1,676,000 | | 48 |
| | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate |
| 1998-2005 | 5,474 | 30 | 164,220 | .15 | 1,094,800 | 1.25 | 31 |
| 2005-2020 | 12,323 | 30 | 369,690 | .15 | 2,464,600 | 1.25 | 71 |
| Totals | 17,797 | | 533,910 | | 4,152,364 | | 102 |
| | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive |
| 1998-2005 | 6,561 | 30 | 196,830 | .15 | 1,312,200 | 1.25 | 38 |
| 2005-2020 | 19,455 | 30 | 583,650 | .15 | 3,891,000 | 1.25 | 112 |
| Totals | 26,016 | | 780,480 | | 4,152,364 | | 150 |
| | Build Out* | Build Out | Build Out | Build Out | Build Out | Build Out | Build Out |
| 1998-to Build Out | 41,300* | 30 | 1,239,000 | .15 | 8,260,000 | 1.25 | 237 |

*The maximum build-out population is assumed to be 45,000, increasing from approximately 3,700 persons at present.

TABLE A/II-12

Gross Commercial Office Projections for Southeast Chandler

| Year | Population Increase | Retail Sq. Ft. Per Capita | Building Sq. Feet | Lot Coverage Factor | Lot Square Feet | Expansion | Acreage |
|-------------------|---------------------|---------------------------|-------------------|---------------------|-----------------|------------|------------|
| | Trends | Trends | Trends | Trends | Trends | Trends | Trends |
| 1998-2005 | 2,666 | 7.5 | 19,995 | .25 | 79,980 | 1.50 | 2.8 |
| 2005-2020 | 5,714 | 7.5 | 42,855 | .25 | 171,420 | 1.50 | 5.9 |
| Totals | 8,380 | | 62,850 | | 251,400 | | 8.7 |
| | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate |
| 1998-2005 | 5,474 | 7.5 | 41,055 | .25 | 164,220 | 1.50 | 5.7 |
| 2005-2020 | 12,323 | 7.5 | 92,423 | .25 | 369,692 | 1.50 | 12.7 |
| Totals | 17,797 | | 133,478 | | 444,927 | | 18.4 |
| | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive | Aggressive |
| 1998-2005 | 6,561 | 7.5 | 49,208 | .25 | 196,832 | 1.50 | 6.8 |
| 2005-2020 | 19,455 | 7.5 | 145,913 | .25 | 583,652 | 1.50 | 20.1 |
| Totals | 26,016 | | | | | | 26.9 |
| | Build Out* | Build Out | Build Out | Build Out | Build Out | Build Out | Build Out |
| 1998-to Build Out | 41,300* | 7.5 | 309,750 | .25 | 1,239,000 | 1.50 | 42.7 |

*The maximum build-out population is assumed to be 45,000 increasing from approximately 3,700 persons at present.

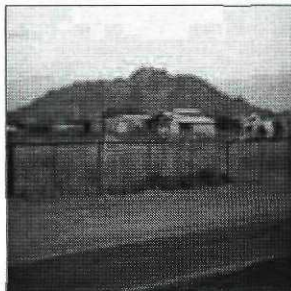


Appendix III — Community Consensus-Building Process



Appendices: Southeast Chandler Area Plan

APPENDIX III - COMMUNITY CONSENSUS BUILDING PROCESS



"Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness."

— City of Chandler Land Use Element

Section A — Introduction

The conversion from agricultural uses and rural lifestyles does not come easy. Suffice it to say, it is a difficult and often painful process for all involved. Fortunately, the City of Chandler General Plan Land Use Element establishes the parameters of the development character and quality of life envisioned by the community for Southeast Chandler. To more fully define a vision for the area, an intensive public outreach process was developed to maximize the input received from the community. Equally important, was the need to develop a public involvement process that did not restrict the free flow of ideas and public expectations — it was important that all involved had opportunities to not only be heard, but to be listened to.



Public participation provides the foundation for the Southeast Chandler Area Plan.

A far-reaching public participation process was developed for this planning effort, one that provides the foundation for all the Area Plan's policy recommendations. The process entailed: interviewing citizens, public officials, agency staff, developers, land owners, farmers, and many other stakeholders; holding public workshops; holding bi-weekly Citizens Task Force meetings; distributing an area-wide survey; making observations through several planning area tours; conducting a land use charette; collaborating with the development community to prepare workable development criteria and incentives; providing a briefing for the Planning Commission; and having public hearings with the Planning Commission and City Council. Indeed, the public participation process for the Southeast Chandler Area Plan was comprehensive. A summary of the elements of the community building process is provided below.

Section B — Four-Day Charette

The Southeast Chandler Area Plan effort was initiated by a four-day intensive process (March 1-4, 1999) that focused on information gathering. The objectives of this process were to:

- ❖ Assess Southeast Chandler's strengths and weaknesses, and opportunities and constraints;
- ❖ Receive input from and develop consensus among community groups and leaders, business and property owners, residents and neighborhood representatives, and the public at-large;
- ❖ Identify rural and agricultural elements and characteristics that are important to retain and, if appropriate, replicate to sustain the sense of place and quality of life desired by the Chandler community for the Southeast Area;



Appendices: Southeast Chandler Area Plan

APPENDIX III - COMMUNITY CONSENSUS BUILDING PROCESS

- ❖ Develop an understanding of the architectural and urban/environmental form design guidance needed in the Southeast Area;
- ❖ Collect baseline materials from the City and other sources, including but not limited to aerials, base maps, plans, zoning ordinance, subdivision ordinance, design guidelines, and other documentation; and,
- ❖ Educate and motivate the community at-large on the short- and long-term benefits of supporting quality development that respects heritage, environment, solid economic principles, and true community desires.

The four-day charette proved to be a strong start to a valuable planning process. All told, the Area Plan team received input from approximately 100 individuals/sources during this four day process.

Section C — Workshops & Interviews

Community involvement involved a number of meetings, workshops, and interviews that started on March 1, 1999, as part of the four day charette, and concluded on INSERT DATE OF ADOPTION, with the adoption of this Area Plan. Community involvement included:

- 1) March 1, 1999: Kick-Off Meeting with City staff and members of the Southeast Area Study Citizens Task Force to discuss the Southeast Area project and generally discuss what the City and the community would like to see come about as part of this project.
- 2) March 1, 1999: Southeast Chandler Field Outing with City staff and members of the Southeast Area Study Citizens Task

Force to survey the overall conditions of the entire Southeast area.



Sharing observations from an afternoon field outing in Southeast Chandler.

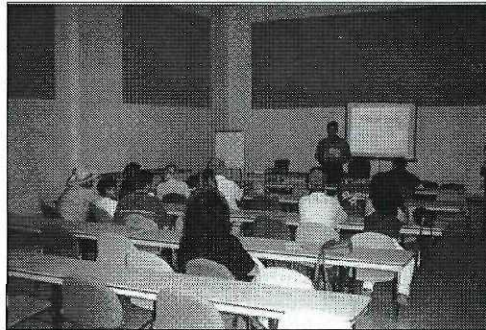
- 3) March 1, 1999: Dinner meeting with citizens, city staff, public officials, and others to provide an additional opportunity to discuss visions for the area in a more personal atmosphere.
- 4) March 2-3, 1999: From early morning (8:00am) until late afternoon (5:00pm) on March 2 and early morning (8:00am) until noon on March 3, approximately 55, ½-hour confidential personal interviews were conducted with:
 - ❖ City and other public agency officials;
 - ❖ Non-profit organization representatives;
 - ❖ Property owners;
 - ❖ Developers and real estate interests;
 - ❖ Residents;
 - ❖ Maricopa County and neighboring community representatives;
 - ❖ Agricultural operators; and,
 - ❖ Other representatives in the area.



Appendices: Southeast Chandler Area Plan

APPENDIX III - COMMUNITY CONSENSUS BUILDING PROCESS

- 5) March 3, 1999: An afternoon workshop and an evening workshop were held to conduct Community Image and Identity Surveys, provide Small-Scale Farming Presentations, and receive public input. Twenty-four community image surveys were completed and scored.
- 6) March 4, 1999: Two public workshops (morning and evening) were held to outline the results of the interviews, identify the major opportunities and constraints in Southeast Chandler, and serve as a focus for reaching general levels of agreement on strategies for future development character and design features.



Community workshops like this provided opportunities for the public to ask questions, voice concerns, and express ideas pertaining to Southeast Chandler.

- 7) April 5, 1999: A public workshop was held at Weinberg Elementary School on April 5, 1999, that focused on two basic purposes: 1) to inform the community about the intent and composition of the planning process for Southeast Chandler; and 2) most importantly, to answer questions, generate ideas, receive input, address concerns, etc. The meeting was attended by more than 60 members of the public, most of whom

actively participated in one of five breakout groups (each led by a member of the Citizens' Task Force).

- 8) April 23, 1999: An all day charette was held to serve as the basis for refining an overall community design, agricultural and rural character, preservation, and development strategy. Several City staff members, members of the Citizens Task Force, a County representative, a member of the development community, and the consultant team met to discuss four specific issues which pertain to the development character and quality desired for Southeast Chandler:

- ❖ Roadway Character
- ❖ Residential Land Use Character, Compatibility and Development Transitions
- ❖ Commercial Land Use Character, Compatibility and Development Transitions
- ❖ Open Space, Agricultural Preserve, & Water Recharge Opportunities

- 9) May 10, 1999: A public workshop was held at Weinberg Elementary School provide focused discussions on community amenities and transitions between existing and new development. The meeting also provided participants with opportunities for questions and comments. More than 50 people were in attendance, of which citizens, city staff, representatives from the development community and land owners were present.

- 10) June 12, 1999: On Saturday, June 12, 1999, as a method of soliciting further community input and building consensus, a one-day, "drop-in" workshop was held at the City of Chandler Community Center from 9:00am until 5:00pm. This provided



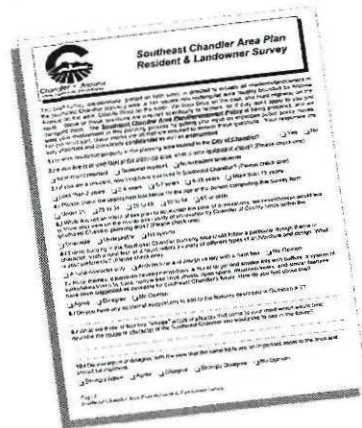
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an opportunity for community members to participate in reviewing the Draft Area Plan/Development Policy Document for Southeast Chandler and Southeast Chandler Vision Plan Poster in an informal way, and "on their own terms". Consultants, City staff and representatives of the Southeast Area Study Citizens Task Force were on hand to discuss the planning products and exchange ideas. Appropriate maps and graphics were also on display.

Section D — Resident & Landowner Survey

In addition to the above, a resident and landowner survey was prepared and distributed throughout Southeast Chandler. Names and addresses for the surveys were acquired through two sources: 1) State Department of Revenue, via the Maricopa County Tax Assessor (for property owners); and 2) U.S. West in Denver (for residential listings with a 95% accuracy).



Extensive input was received for the Southeast Chandler Area Plan through a resident and landowner survey.

Approximately 2,100 surveys were distributed via first class mail on March 26, 1999. As of April 30, 1999, the final cutoff day for survey processing, 718 survey questionnaires were returned to the City. Of these, 713 were usable. Although a 20% response rate was needed to ensure statistical validity, approximately 34% of the resident and landowner surveys were returned — which not only produced valid and useful information, but also signals the importance of this area to the community. With 713 responses the survey has a margin of error of $\pm 2.983\%$ at the 95% confidence level. Copies of the survey and the survey results may be obtained from the City of Chandler Planning Department.

Section E — Citizens Task Force Meetings

On February 1, 1999, the Citizens Task Force began holding meetings (open to the public) at 7:00pm in the City of Chandler Community Center. Since that time, the following dates have been identified for Citizens Task Force meetings: 2/22; 3/8; 3/22; 4/5; 4/19; 5/3; 5/17; 6/7; & 6/28. These meetings have been used by the Task Force to explore specific issues pertaining to and track the progress of the Southeast Chandler Area Plan.

Section F — Partnering Charter

Change is difficult for most people. In Southeast Chandler, this is specially true for those who feel a sense of ownership in the area and for those who tangibly have ownership in the area. Throughout the Southeast Area Plan process, as well as the General Plan Land Use Element Update process (adopted in 1998), the challenge between public goals (such as preserving a rural/agrarian character) and the private right (in property) has been ever-present. This issue, and related issues, have been and will continue to be debated in



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communities throughout this country. They will not be solved, nor were they ever intended to be resolved, by the Southeast Chandler Area Plan. However, issues which prompt difference and cause division can be overcome through partnership.

On Friday, April 16, 1999, 21 stakeholders were sent a request (via U.S. mail) to participate in the authoring of a partnering charter for Southeast Chandler to help overcome the divisions and differences that exist between four key stakeholder groups who are vital to the success of this Area Plan: Development Community; Landowners; Local Government; and Citizens. (For informational purposes, stakeholders asked to participate anonymously in the authoring of this charter, include: 2 members of City staff, 1 appointed City decision maker, 1 elected City decision maker, 1 elected County decision maker, 1 County staff member, 3 residents of Southeast Chandler, 2 Chandler citizens living outside Southeast Chandler, 5 members of the development community, and 5 property owners of land within Southeast Chandler.) The following partnering charter resulted from input received from a balanced set of responses from each of the stakeholder groups.

Section G — Development Community Input

The Area Plan has included a multi-dimensional collaborative effort by builders, land owners, master developers, consultants, and attorneys. In addition to their participation in the above-listed interviews, workshops, and meetings, these stakeholders have organized independent meetings and have worked with the Task Force, staff, and consultant to provide consensus-based input to development standards and incentives. As a result of the significant input and participation provided by the development community, this Area Plan embodies a spirit of partnership and collaboration that will prove to benefit Southeast Chandler.

Section H — Stakeholder Coordinating Committee

At the June 30, 1999, Planning Commission Hearing, the Southeast Chandler Land Use Task Force requested that a committee be formed comprised of stakeholders to review and develop consensus on the Public Review Draft of the Southeast Chandler Area Plan. A committee of 16 people from a range of stakeholder groups met several times over a 5 week period to develop consensus on the Area Plan and its contents. The committee's work resulted in a revised Area Plan that embodies consensus and a common vision for Southeast Chandler.

Section I — Public Hearings

In addition to the above, three public forums were held which involved either the Planning Commission or City Council.

- 1) June 16, 1999: Planning Commission briefing on the Southeast Area Plan. The Planning Commission hearing included a briefing on the Southeast Chandler Area Plan. The purpose of the briefing was to provide an overview of the Area Plan's components and to allow the Planning Commission and the public to make comments and ask questions.
- 2) June 30, 1999: Planning Commission Hearing on the Southeast Area Plan. The hearing resulted in the continuance of the Area Plan to the August 18, 1999, Planning Commission Hearing. The hearing also concluded with the need for a stakeholder committee to review and develop consensus on the Public Review Draft and its provisions.



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- 3) August 18, 1999: Planning Commission Hearing on the Southeast Area Plan. The hearing resulted in the continuance of the Area Plan to September 1, 1999, to allow one final Planning Commission Study Session on Plan details.
- 4) September 1, 1999: Planning Commission Hearing on the Southeast Area Plan. The hearing resulted in a recommendation of approval.
- 5) September 16, 1999: City Council Hearing on the Southeast Area Plan. The hearing resulted in adoption of the Area Plan.



Appendix IV — Southeast Chandler Survey Results



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APPENDIX IV - SOUTHEAST CHANDLER SURVEY RESULTS



“Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness.”

— City of Chandler Land Use Element

Section A — Introduction

Sunregion Associates processed and tabulated the resident and landowner survey. As of April 30th, the final cutoff day for survey processing, 718 survey questionnaires had been returned to the City. Of these, 713 were usable. Approximately 2,100 were mailed, and so this represents a response rate of 34 percent.

With 713 responses, the survey has a margin of error of ± 2.983 percent at the 95 percent confidence level. The margin of error is greatest when the mean response percentage is 50 percent. This level of confidence applies to questions where Sunregion Associates received 712 responses.

Sunregion Associates must caution that in questions 26 and 27, responses were sought specifically from farmers. In fact, recipients were alerted to this at the top of the survey instrument. However, many respondents to these questions were clearly not farmers. They were primarily seasonal residents, relatively new permanent residents, and a few longer-term permanent residents.

Consequently, Sunregion Associates had to review each questionnaire, check the address if available on the survey form, check envelopes, check the major landowner survey list, etc., to determine if the respondent was a farmer. After this processing, it was determined that 19 responses were received from households who farmed, the majority of whom were on the large landowner mailing list. Another 7 responses were received from absentee land owners. Thus, with approximately 26 of 84 possible respondents from the major landowner survey list (31 percent), the reliability of the responses to Questions 26 and 27 is open to question because of the small universe number.

As a final note, totals may not sum to 100 percent due to rounding, or because of questions which allowed for multiple responses. A copy of the original survey form may be obtained from the City of Chandler Planning Department.

Section B — Response Summary

1. Location of residence/property: 90.5% City, 9.5% County
2. Residential status: 68.6% Year-round, 30.0% Seasonal, 1.4% Non-resident landowner
3. How long have you lived in SE Chandler?
 - 28.9% 2-4 years
 - 26.4% less than 2 years
 - 22.9% 5-7 years
 - 15.6 % 8-15 years
 - 6.2% 15+



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APPENDIX IV - SOUTHEAST CHANDLER SURVEY RESULTS

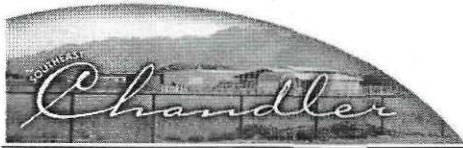
4. Age of person completing survey:
52.0%, 65 or older
36.1%, 50-64
9.2%, 35-49
2.3%, 25-34
.4%, <25
5. Desirability of annexation:
48.1% desirable, 29.9% no opinion, 22.0% undesirable
6. Future building theme or character:
58.9% architectural and design variety with rural feel,
35.4% rural character only,
5.7% no opinion.
7. Feeling about rural planning themes: 84.6% agree
8. Wide variety of rural-related low density oriented responses
9. Same as # 8
10. Canals are an important asset to the area and should be improved.
44.0% agree,
30.9% strongly agree,
17.7% no opinion,
4.7% disagree,
2.7% strongly disagree.
11. Support for a system of lakes utilizing treated effluent:
84.4% yes, 15.6% no
12. Support for well-planned industrial/business park west of SPRR corridor along Arizona Avenue: 70.3% yes, 29.7% no
13. Should the SE Chandler area be restricted to single family homes or are other types of residential development acceptable:
95.5% Single family,
35.6% Townhomes,
33.5% Patio homes,
21.5% Condominiums,
7.5% Apartments,
4.5% Mobile Homes
14. Where should commercial retail and office development be located:
70.1% at focal points,
20.3% at major arterial intersections,
11.5% along major arterial corridors,
3.8% balance other responses
15. What kinds of shopping facilities would best serve SE Chandler:
54.3% Neighborhood,
42.7% Community,
23.2% Small shops,
8.4% Other responses.
16. Support for neighborhoods linked through a regional trail system:
42.6% agree, 16.3% strongly agree



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17. Schools located within walking or bicycling distance of your residence:
27.4% strongly disagree,
23.0% disagree,
27.0% agree,
18.2% no opinion,
4.4% strongly agree.
18. Types of recreational facilities needed in SE Chandler:
57.7% Neighborhood parks,
34.6% Regional parks,
32.9% Community gardens,
26.0% Multi-purpose community center,
19.5% Athletic fields,
12.2% Community riding stables,
13.8% Other.
19. In addition to the automobile, what other modes of travel are important to you:
Pedestrian sidewalks/trails - 58.8% important, 24.7% somewhat important
Bicycle lanes/paths - 46.9% important, 30.9% somewhat important
Equestrian trails - 65.7% unimportant, 34.3% important plus somewhat important
Commuter rail - 50.2% unimportant, 49.9% important plus somewhat important
Public transit - 38.0% important, 31.9% somewhat important
20. Would it help to preserve farming activity with a few 5-15 acre produce farms:
90.3% yes
21. Support for City-sponsored program related to small scale farming:
79.7% yes
22. How likely are you to buy:
Produce at special event - 34.3% have, 14.9% most likely
Roadside produce - 61.5% have, 14.6% most likely
Farmers market - 51.4% have, 23.1% most likely
Grocery store - 72.3% have, 23.8% most likely
23. Last time purchased:
Produce at special event - 39.4% never, 40.7% within past week to 6 months
Roadside produce - 5.8% never, 79.9% within past week to 6 months
Farmers market produce - 19.7% never, 60.3% within past week to 6 months
Grocery store - 90.7% last week
24. Would you pre-pay farmers to grow fruits and vegetables:
78.3% would not pre-pay a farmer
25. What is your most important criteria when purchasing produce;
55.0% flavor, 32.1% price, 29.8% appearance, 12.6% convenience



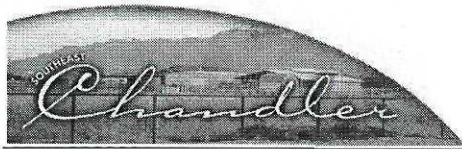
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26. If fairly compensated to continue farming rather than sell:
69.6% yes
27. Selling development rights:
60.9% no
28. If preservation of rural or agricultural character is desirable, what might be done to protect same:
65.5% lower density
65.5% preserve open space
53.0% establish design standards
29.3% buy development rights
7.4% other
29. Support for property tax increase to purchase farmland development rights:
52.5% yes
30. Of those saying yes to #29, amount of annual tax increase which is acceptable:
35.0%, \$0-\$25
31.5%, \$26-\$50
13.6%, \$76-\$100
13.4%, \$51-\$75
6.5% \$100+

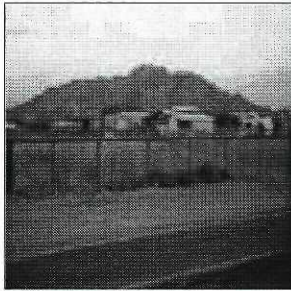


Appendix V — Potential for Urban Agriculture: An Overview



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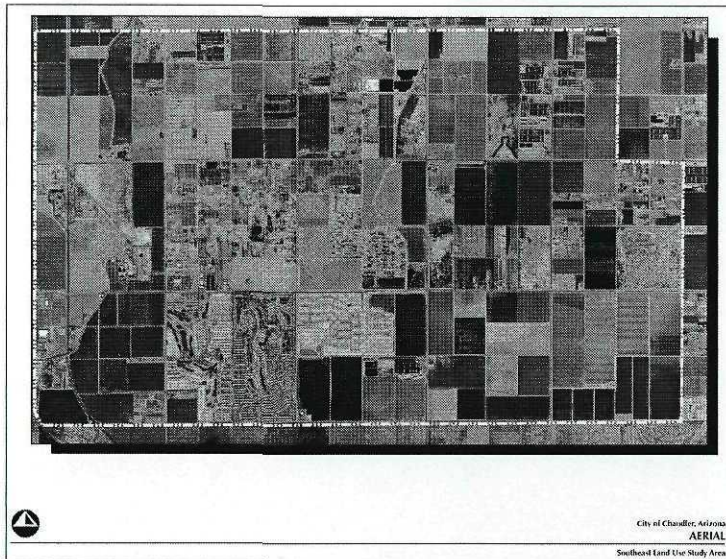
APPENDIX V - POTENTIAL FOR URBAN AGRICULTURE: AN OVERVIEW



“Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness.”

— City of Chandler Land Use Element

For many years, the Dobsons, Riggs, Hangers, and other families have been farming the fertile lands in the Southeast Valley. Like so many metropolitan areas in the United States, agricultural lands at the edge of an urbanizing region are being lost to development caused by a growing population.



Southeast Chandler, as it exists today, is a patchwork of land uses comprised of agriculture, established rural residential, and new suburban subdivisions. (Date of aerial: January 1999.)

Unfortunately, areas like Southeast Chandler — located at the urbanizing edge — also contain most of the unique and prime farmlands in the country. These lands, while productive for agricultural purposes are also well-suited for development: they are relatively flat and have well-drained and loamy soils. Besides attractiveness for development, many other factors (economic, political, environmental, etc.) affect the viability of agriculture urban edge agriculture.

This conversion from agriculture to urbanization in Southeast Chandler is a difficult event for many of the people who have lived, worked, or owned land in the area for a long time. This area of Chandler invokes an emotional response in the multitude of people who have grown attached to it. Given the challenges facing agricultural land in Southeast Chandler, a question that must be asked pertaining to the remaining agricultural lands is: *Can we continue farming those agricultural lands that remain?*



The Farmhouse in Gilbert is an outgrowth of agriculture in the Southeast Valley. Here, old farm buildings (mostly homes) are relocated from agricultural lands converted to urban uses. The farm buildings are then converted for other uses, such as a restaurant. This re-use of old farm buildings could also occur in Southeast Chandler to help support a market for urban agricultural products and to create community focal points.

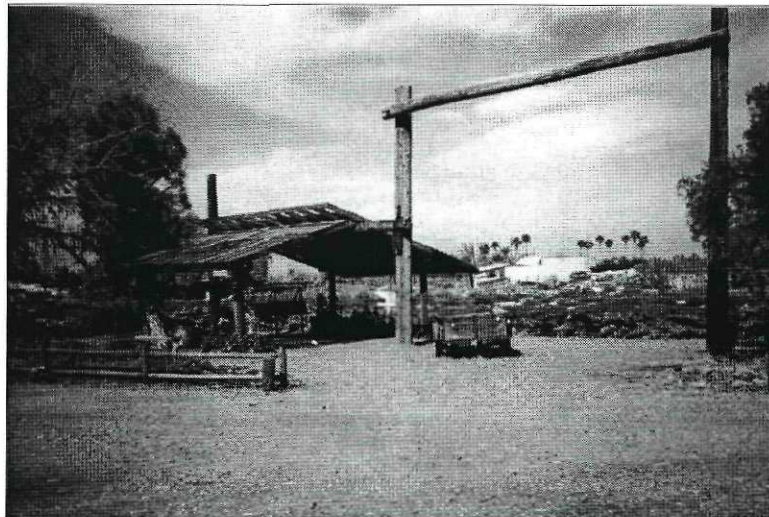


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The answer to this question is both “yes” and “no.” To begin with “no,” much of the acreage in Southeast Chandler is committed for development. Farmers who still maintain agricultural operations on their land in Southeast Chandler generally believe that it is a matter of time until their operations will cease. Based on this perspective, the future of agricultural lands in Southeast Chandler appears grim.

In terms of “yes,” great opportunity exists to continue agricultural operations in Southeast Chandler, but at a smaller scale. Certainly, Southeast Chandler is well-positioned in terms of direct marketing to a large, responsive public in the region who desire locally grown produce. And, Southeast Chandler contains a significant resident population who seek to live a rural lifestyle.



The Farm at South Mountain in Phoenix is an example of very successful urban agriculture.

Residents of urbanizing regions throughout the country, as well as those in highly urban centers, persist in being successful in urban agriculture for reasons such as food security, income production, taste, and health concerns and lifestyle. As we reach the end of the 20th century, however, there is a clear resurgence of interest in urban agriculture. Planning processes like that undertaken to prepare the Southeast Area Plan are representative of this growing importance of retaining some level of agriculture in the urban environment.

Urban agriculture in Southeast Chandler cannot be viewed as a panacea. It is highly unlikely that backyard gardens will replace agribusinesses, and — for reasons of climate as well as of space — it is in many cases highly unlikely that a significant amount of food crops will be grown in Southeast Chandler. There is strong and growing evidence that urban agriculture in Southeast Chandler can have many community-wide benefits, including:

1. Urban agriculture can enhance household food supply.
2. Urban agriculture can continue to embrace the heritage on which Chandler is built.
3. Urban agriculture can provide households with additional income and can be a small source of employment.
4. Urban agriculture can enhance the sense of community and identity for the residents of Southeast Chandler.
5. Urban agriculture can provide youth with an educational opportunities through hands-on experiences.
6. Properly managed, urban agriculture can play an import role in turning the urban waste stream and urban wastewater into resources, rather than sources of serious pollution.



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Section A — Overview

The scope of work for potential farmland preservation was initially conducted with a focus towards discovering if there was support for a rural agricultural district. An agricultural district is a land use designation designed to restrict non-agricultural uses from penetrating and establishing themselves in a given area. The scope of work was intended included identification of soil types, agricultural infrastructure support services and compatible non-agricultural businesses or agritourism.

However, upon completion of Task 1.0, it was discovered that farmers had no desire to continue to farm in the Southeast Chandler Area. In fact, an investment strategy employed by many farmers was and is to sell their existing farm to developers, purchase farmland that will be developed in about 10 to 15 years and wait to repeat the process again. Every farmer interviewed that owned land in Chandler's Southeast Area also had farmland in Pinal County.

Also during Task 1.0, it was discovered that the current rural residents did not express the interest in farmland preservation but in preservation of a rural life style. They were interested in preserving agricultural elements or "soft edges" such as tree lined roads, white board or rail fences, green pastures, and/or trails for horses. Another observation that was perceived during interviews was the sense of community that the residents enjoyed. Elements that helped create that sense of community was a resident's ability to see one's neighbors through fences, neighborly kindness, helping each other, and a perceived lack of government restraints. At no time did any ranchette owner or rural resident consider their property slum, blight or undesirable.

Rural residents expressed little or no concern for the loss of dairies, citrus groves, cotton or alfalfa fields. No one mentioned the attributes of agriculture or its preservation. No mention was made of the fragrance of citrus blossoms, the smell of freshly cut alfalfa, or the symmetry of corn. In fact, agriculture land was viewed as an extension of the rural resident's open space and available for leisure or recreational pursuits.

With this new information gleaned from the interviews, survey questions were able to be tailored to confirm or refute these initial findings and to determine if there was public support for small-scale urban farms in the planning area.

Section B — Density

Developers expressed several concerns about the Area's target density of 2.5 dwelling units per acre. The first concern was the current cost of land and infrastructure and the affordability of a new home. For example, in straight zoning, the average new home would at today's land prices and sub-division improvements cost \$186,000. This would be the entry level home or lowest priced house. At this price level, a prospective home buyer would need an annual income of \$58,280 in order to qualify for a mortgage.

Other developers felt that the 2.5 dwelling units per acre was achievable provided there was a diversity of lot sizes and relief from some of the City's residential development guidelines. For example, in a 160 acre parcel, lot sizes would include an R1-5, R1-7, R1-20, and R1-43. Each lot category would be 25% of the total development or 40 acres each. A developer would initially develop the smaller lots first in order to subsidize the infrastructure of the large lots. The feeling was



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expressed that more R1-7 lots could be enlarged to an R1-20 if the vertical curb cut and sidewalk were to be replaced with a rural ribbon curb and the elimination of the retention basin through the use of on-lot water retention.

In addition, the task force determined that it would support a higher density (3.5 dua) based upon the amount and types of amenities that a developer was willing to provide in a PAD. However, the amount and types amenities have not been determined. Hence, the higher density could not be granted at this time because the value added to the PAD had not been determined.

If the lower target density of 2.5 dua is used instead of 3.5, the City would need to recalculate the impact fees charged for each new home built to reflect the lower density. In addition, the city would need to re-calculate its infrastructure replacement projects based upon the lower density.

Section C — Schools

A final issue discovered during the interviews of Task 1.0, that is not under the jurisdiction of the City but a concern to the community at large, was the issue of schools. Discussions with representatives of the Chandler Unified School District indicate that when the Southeast Chandler Area reaches build-out, it will be necessary for the school district to build another high school, two or three junior high schools and 11 to 13 elementary schools. This represents a potential capital improvement of between \$150 to \$200 million.

Section D — Survey Questions and Results

With a greater understanding of the type and scope of agriculture and agricultural elements that the current residents in the Southeast Area desired, questions were developed to test and determine the accuracy of the interviews, the concepts of small-scale urban farms, and determine the level of support for urban agricultural. Survey questions 20 through 30 related directly toward urban agriculture, economic viability, and sustainability of farms in the urban environment.

Survey questions 20 and 21 were designed to determine if there was any support for agriculture in the urban environment. Question 20 asked if the respondent felt that a few small farms of 5 to 15 acres that grew fruits and vegetables for consumers could prove helpful in achieving a goal of preserving farming activity in Southeast Chandler. An overwhelming 90.3% of those responding said “yes!”

Question 21 then asked the survey respondent if he/she could support a City-sponsored program related to small-scale farming, wherein small farm plots adjacent to city parks and flood plains could be used for farming and educational or small scale employment opportunities? This question had a strong showing of 79.7% in favor of such a plan.

Questions 22 through 25 determined the amount of public support for the economic sustainability and the potential long term viability of farms in the Southeast Chandler area. It is one thing to say that preservation of small-scale farming is desirable but unless the residents of the area support small-scale farming via their economic dollars, farms will fail. These questions were then compared for consistency of the respondents to known market research.



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Questions 22 and 23 identified the most common methods that a small-scale farmer would most likely use to sell his/her farm production. These methods are roadside stands farmer's markets, special events (such as a pumpkin festival or a corn and melon festival), or to independent or specialty grocery stores. When a farmer sells direct to the consumer, the farmer is able to eliminate the food broker and the retailer and capture 90% of the consumer's dollar rather than a paltry 10 cents on the dollar using a broker. Hence, by increasing the amount of revenue received directly from the consumer, a farmer is able to produce less on smaller acreage but receive more in revenue for his/her production. With an increase in revenues and a reduction in expenses, small-scale urban farmers can be financially successful in the urban environment where larger acreage mono-crop farms cannot be successful.

Questions 22 and 23 indicated that the survey respondents have purchased produce at special events (34.3% have, 14.9% most likely), at roadside produce stands (61.5% have 14.6% most likely), and farmer's markets (51.4% have, 23.1% most likely). Question 23 is a verified information gathered in question 22. Rather than asking the respondent "how likely are you to buy fresh produce at the following locations or events," it asked "when was the last time you purchased produce at" one of the following locations. The responses were even stronger (special events 39.4%, roadside stands 79.9%, and farmer's markets 60.3%).

Question 24 was focused towards a concept that is new in the western United States but is fairly well established in the Eastern States and especially in Europe and Japan. The concept is called community supported agriculture (CSA) or subscription farming. Basically, a group of consumers pre-pay a farmer for his/her crop. The crop typically contains between 12 and 20 different fruits, vegetables, and

some flowers. The farmer receives the revenue prior to the growing season rather than at the end while the "shareholder" receives fresh produce in quantities greater than what their money would have purchased at the grocery chain store. It is not uncommon for a "share" to provide sufficient produce to feed a family of five for a week or feed one (1) vegetarian for a week. A typical share costs between \$450 to \$500 for produce from April to early November. A successful CSA program represents 35% to 65% of a small-scale farmer's revenue. The respondents to question 24 either did not understand the concept or were unwilling to take the risk. Over seventy-eight percent (78.3%) said that they were unwilling to pre-pay a farmer for produce.

Question 25 addressed the consumer's primary consideration when purchasing produce. The category of price was deliberately placed first to determine if the respondents to the survey would confirm an emerging trend. They did. Consumers are overwhelming in favor of flavor over price (Flavor 55.0%, Price 32.1%, Appearance 29.8%, and Convenience 12.6%. Totals exceed 100% because of multiple responses.) A tomato grown locally has a tremendous flavor advantage over a tomato that has spent 3 to 5 days on a truck traveling to its destination. In addition, shrinkage and spoilage of produce lost from harvest to consumption is estimated to be 50% of production while shrinkage and spoilage of produce grown locally is only 5%. Consequently, retailers who buy local produce grown by local farmers actually increase their profit because there is less shrinkage and spoilage.

Survey questions 26 and 27 were designed to test the hypothesis that there was support among the farming community to continue farming on the urban edge. These two questions explored the amount of support for purchasing development rights (PDR) from farmers. PDR compensates a farmer for not selling his land for development. Instead,



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a farmer is compensated the difference in price between the development value and the farm value. Typically, a land trust or government entity holds the development rights in perpetuity. Hence, the land is kept in production as a farm while compensating the owner for not developing his/her land. Both of these questions were intended for farmers who own land in the Southeast Chandler Area and their willingness to sell the development rights to a third party, yet still own the land and continue farming. However, the number of respondents who answered these questions far exceed the number of known farmers in the area. Consequently, the data is suspect at best and should be disregarded.

Question 28 was a composite question that permitted the survey respondents to express their opinion as to how a rural or agricultural character in the Southeast Chandler area could be achieved. Of particular note and perhaps with greater accuracy than questions 26 and 27 is the number of respondents (29.3%) who expressed an interest in purchasing the development rights.

Questions 29 and 30 were designed to determine if there would be public financial support for the establishment of small-scale urban farms throughout the Southeast Chandler area and if so how much financial support. These questions were a greater explanation of PDR's and were intended for all respondents of the survey. Of those who responded, 52.5% supported an increase in property taxes to purchase PDR's. This number compares favorably to a survey conducted by Gilbert in January of 1999 wherein 59% of those surveyed stated that preservation of farmland was important and 52% of the 59% (an aggregate of 30% of the respondents) stated that they were willing to raise their property taxes to preserve farmland.

In this survey, question 30 asked the respondents how much would they be willing to raise they taxes. Thirty-five percent (35%) were willing to raise their taxes 0-\$25, 31.5% were willing to raise them \$26 to \$50, 13.4% were willing to raise them \$51-75, 13.6% were willing to raise them \$76-\$100, and 6.5% were willing to raise their taxes more than \$100. In short, 66.6% were willing to raise their taxes \$0 to \$50. Unfortunately, Gilbert's survey failed to ask how much the respondents were willing to raise their taxes. However, Chandler's survey response is consistent with surveys conducted by the American Farmland Trust (AFT). In AFT's surveys, most respondents indicated that they were willing to raise their taxes \$50 a year.

Section E — Summary of Survey & Interviews

There appears to be no support for preservation of large acreage farmland by either the farmers or the current non-farmer residents. However, it is apparent from the data of the survey that there is a strong indication to preserve small-scale urban farming on parcels of land between 5 to 15 acres. Respondents feel that this type of urban farming would help give the Southeast Chandler area an agricultural identity. There appears to be a strong consumer support from residence in the area to patronize farm roadside stands, farmer's markets and special events. In addition, there is a willingness to consider raising property taxes if the increase would be used to purchase development rights to permit the continuance of small-scale farming in the area.

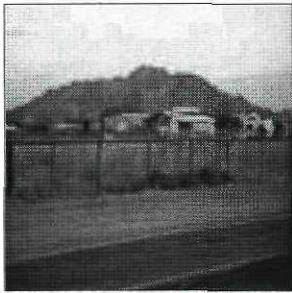


Appendix VI — Small-Scale Farm Preservation Strategies



Appendices: Southeast Chandler Area Plan

APPENDIX VI - SMALL-SCALE FARM PRESERVATION STRATEGIES



“Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness.”

— City of Chandler Land Use Element

Section A — Overview

The Southeast Chandler Area study has confirmed the same findings that the Greater Agriculture Land Alliance (GALA) has discovered in the Phoenix Metropolitan area. Research has shown that 40% to 60% of land currently being farmed (depending upon location) is leased land. The owner of the farmland is LLC's, partnerships, corporations and non-farming owners. The non-farmers expectations are to develop the land into residential, commercial and industrial uses. Those farmers who are farming their own land have no desire to continue farming in the urban environment. In fact, many farmers have used growth as an investment strategy to increase their net worth. There is no support at this time for large acreage preservation of mono-crop agriculture from either farmers or the community.

However, there is a trend toward small-scale agriculture production in the urban environment or urban edge. The profile of these urban farmers are:

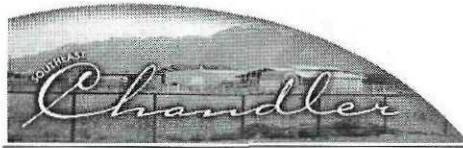
- ❖ From non-agricultural backgrounds
- ❖ Farm 2 to 15 acres of land, with 5 to 8 being an average
- ❖ Two person operations with seasonal help
- ❖ Sell direct to the consumer

An urban farmer's primary venues for selling direct to the consumer are:

- ❖ Farmer's markets
- ❖ Roadside fruit and vegetable stand
- ❖ “Pick-your-own” vegetables and flowers
- ❖ Special events or festivals
- ❖ Specialty or ethnic retailers

There are two market advantages that a small-scale urban farmer has over a retail grocery store. The first is the control of vertical integration of grower to consumer. This vertical integration eliminates the middlemen. Typically, a grower receives only 10 cents of the consumer's dollar when the farmer uses a food broker and the broker's distribution channel. If the grower sells direct to the consumer, he/she is able to receive the balance of the 90 cents. This is known as “growing for market.”

The second advantage that a growing for market farmer has over the grocery store is the customer loyalty. There is a loyalty that develops between a consumer and a grower when the consumer is able to meet the person who grows the food. This relationship often develops into a social friendship. Hence, market day becomes a social event as well as a shopping event. Each visit strengthens, the grower-consumer relationship as the farmer shares the struggles and challenges that he/she has had in order to bring a crop to market against great odds of failure. The consumer begins to trust his/her grower to provide high quality, flavor rich, fresh and wholesome produce. This social relationship develops into a high level of trust when the consumer discovers that the farmer is a walking encyclopedia of horticultural knowledge. Consumers are willing to pay a slight premium in price for product in order to enjoy this social-trust relationship.



Appendices: Southeast Chandler Area Plan

APPENDIX VI - SMALL-SCALE FARM PRESERVATION STRATEGIES

In addition, small-scale urban farmers are involved with education through schools, summer camps and leisure learning classes. They communicate often and frequently with their non-farm neighbors and customers via newsletters and the internet in order to inform them of farming operations, production and events. Research conducted by GALA has shown that with a diversity of produce and production (cash crops and flowers), the small-scale acreage farm is economically viable and financially successful.

However, urban farming remains very much a slow growth cottage industry. The primary hurdle to become an urban farmer is the price of the land. The number of growers that could purchase 5 acres at \$50,000 an acre and place his/her residence and auxiliary buildings are few. There are even fewer mortgage companies that would lend money where the land is worth more than the improvements.

However, there is great support from the residents of the Southeast area for preservation of small-scale urban farms as a way to maintain the agricultural identity of the area. The survey also shows that there is public support economically for the urban farmer who would be selling direct to the consumer. In addition, there is public support for funding the purchase of development rights to preserve and encourage this agricultural heritage. If the City of Chandler found it prudent and in the public interest to preserve, facilitate and establish small-scale urban farms in the Southeast Chandler Area, it would do well to establish a small-scale farmland preservation program.

Small-scale Farmland Preservation Program

The purpose of a small-scale farmland preservation program in the Southeast Chandler area would be to preserve an agricultural identity in the area, as well as to create an economically viable, sustainable and renewable land use. Preservation of agriculture in any form is easily

defeated if the acreage involved is not a self-sustaining economically and self-perpetuating. If a land use is not economically self-sustaining, the land use will naturally transition to a different land use zoning in the future.

Establishing A Small-scale Farmland Protection Program

The first step in establishing a small-scale farmland protection program is to create a committee for that purpose. The purpose of this committee is to establish a blueprint that would aid Chandler in farmland preservation and to build upon the consensus within the City to protect small-scale agricultural land. The committee need not be large but should have well known and respected citizens who believe that small-scale urban farms are a part of the Southeast Chandler Area heritage. Membership should include but not be limited to:

- ❖ Local Urban Farmer(s)
- ❖ Planning and Zoning Commission Members
- ❖ Economic Development Commission Members
- ❖ Preservation Minded Citizens
- ❖ Realtors
- ❖ Bankers
- ❖ Developers

The purpose of this committee is to determine:

- ❖ Objectives: Determine the importance of small-scale farms to the community. Identify and recommend locations for small-scale farms. Develop a land use classification for small-scale farms.
- ❖ Strategy: Determine land preservation techniques and tools that will be used to preserve and protect small-scale farms.



Appendices: Southeast Chandler Area Plan

APPENDIX VI - SMALL-SCALE FARM PRESERVATION STRATEGIES

- ❖ Finance: Determine the financial resources the City will need to accomplish its goals.
- ❖ Preservation: An objective of the committee is to evaluate farmland and identify areas worthy of preservation.
- ❖ Open Space Plan: Small-scale farm preservation should be integrated into the City's open space plan which includes paths, parks and trails.
- ❖ Mapping: Identify farmers who want to continue farming in the Southeast Area and plot them on the general plan map.
- ❖ Identify Farming Activity: Identify the types of farming activities that are compatible with other land uses, those farming activities that would require buffering, and those farming activities that would be prohibited.
- ❖ Prioritize Farmland: Select a method to evaluate and rank farmland (soils). Preserve the best. Let the worst go first for other land uses.
- ❖ Define Farming: What farming activities are considered consistent with the agricultural heritage of the Southeast Chandler Area and which are not.
- ❖ Right to Farm Ordinance: Review City ordinances or policies that would limit or restrict farming activity, grower to consumer sales or create nuisance civil law suits.
- ❖ Collaboration: Coordinate collaborative efforts with Agriculture in the Classroom, City Sprouts Program, Leisure

Learning Classes, Youth Offender Programs, High School FFA and Youth 4-H Programs, Boys and Girls Club, YMCA, etc.

- ❖ Public Meetings: Hold public meetings to allow public input.
- ❖ Present Findings: Recommend to commissions, advisory boards and the city council suggested policies and ordinances, and report the committee's progress.

Permanently Protecting Farmland

Agriculture zoning is not recommended as a method for farmland preservation. In other states, agricultural zones have been created to prevent farmers from selling land for development. However, this prevents owners from realizing a profit from the development of the land. This techniques is paramount to a regulatory taking without compensation and is therefore not recommended.

Purchasing Farmland in Fee Simple

The most straight forward preservation of farmland that gives the City the greatest control would be to purchase the land in fee simple. This would transfer title to the municipality and remove the property from the tax rolls. However, this method would require the City to operate the farmland or lease it to a third party. This method has been used when a municipality does not have the financial resources or the expertise to operate an agricultural park.

The City of Weston, Massachusetts holds title to a 36 acre parcel of land that is leased for a dollar a year to a non-profit organization called "For Land Sake." The land contains farmland and woodlands. The non-profit organization provides leisure learning classes, youth



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APPENDIX VI - SMALL-SCALE FARM PRESERVATION STRATEGIES

internships, education tours, and pick-your-own flowers and vegetables. The non-profit organization generates sufficient revenues to cover 80% of its operating budget. The balance comes from donations and grants. The land is nestled in a residential area of homes that start at \$250,000.

Purchase and Leaseback to a For-Profit Entity

Like the Purchase in Fee Simple, the Purchase and Leaseback to a for-profit entity allows for the City to purchase farmland and lease it for continued agricultural use. This permits the municipality to recover a small portion of the purchase price through annual lease payments. Leased land in the East Valley runs at \$50.00 to \$150.00 per acre per year depending on the water rights. A lease period of five to eight years allows farmers to make improvements on the land and affords them the opportunity of more stable long-term planning. The disadvantage of this method is that any nuisance civil law suits filed against the farmer will include the landowner or the municipality as a defendant.

Purchase and Resale With Covenants

In this method of preservation, the municipality buys the land and resells it with deed restrictions requiring the buyer to maintain the parcel for agricultural use. It is important to already have defined the objective of the City for small-scale urban farms so the buyer has a clear understanding of what is expected. Otherwise, the municipality may have created a large lot residential home or a mini-ranch.

Purchase Development Rights or Conservation Easements

This land protection method operates on the premise that the right to develop a parcel of land is one of the bundle of rights of land ownership (like mineral rights) and separable from the ownership of that land.

The City can purchase the development rights or conservation easement to the land and thus prevent its development.

The municipality pays the owner the difference between the agricultural value of the land (\$2,500 to \$3,000 an acre) and its appraised commercial, residential or industrial market value. Once the development rights have been sold/purchased, the owner continues to retain title to the property. However, the owner cannot develop the land. The owner continues to pay property taxes. The owner retains the right to use the land as private property. The owner may fence or otherwise prevent the public from entering the land. The property is not public land. It is private land that cannot be developed by the current or future owner(s).

In studies conducted by AFT, farmers who have restricted their property through a PDR do one of three things upon receipt of the proceeds:

- ❖ They invest in capital improvements on the farm.
- ❖ They retire outstanding debt.
- ❖ They use the funds for retirement.

In follow-up studies by AFT, sellers of farmland restricted by PDR's indicate that the deed restrictions did not impede the sale of the property. Many of the "new" owner/farmers were able to purchase their first farm. In fact, purchasers of PDR restricted farmland could not have purchased the land had they to compete with and against development interests.

Unlike an agriculture zoning that has the potential of creating a regulatory taking, PDR's have been upheld by the courts as a contractual obligation or deed restriction running with the land. Sometimes, a new owner of PDR restricted land seeks to change the



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terms and conditions of the PDR agreement. The buyer may force the issue by building an unauthorized structure or by changing the land use from agriculture. In all cases to date, the courts have upheld the contractual obligations or deed restrictions established by the PDR, even to the extent of requiring the offending party to remove the breach and to restore the land to its original condition at their own expense.

Leasing of PDR's or Conservation Easements

An interim tool used to determine the viability of preservation of agriculture in a given area is leased development rights. This method prevents the land owner from developing the land for a contractually stated time period. This method is currently being considered in the area surrounding Luke Air Force Base. Leasing PDR's provides the element of time for a community to assess its preservation needs.

Bargain and Sale of Development Rights

A bargain and sale is the sale of property for less than its full market value. This results in a sale and part charitable contribution. The amount deductible for income tax purposes is the difference between the fair market value of the property and the actual sale price. A bargain and sale to a qualified organization provides the landowner with some attractive financial benefits:

- ❖ Actual cash from the sale
- ❖ Capital gains tax reduction
- ❖ Avoidance of brokerage fees
- ❖ A charitable contribution deduction

Summary

The limitations of any type of preservation program comes in the deed restrictions placed upon the land regardless of the type of method used to create the conservation or preservation restriction. The deed restrictions must be sufficiently flexible to permit the continuance of agriculture, but sufficiently restrictive to prevent non-agricultural uses. The deed restrictions often are negotiated with the original land owner but imposed upon subsequent owners who purchase the land. In a farmland preservation program, financial consideration must be given to the need of monitoring and enforcing the deed restrictions against those who thought they were buying "cheap" land, or attempt to use the defense that "no one told me."

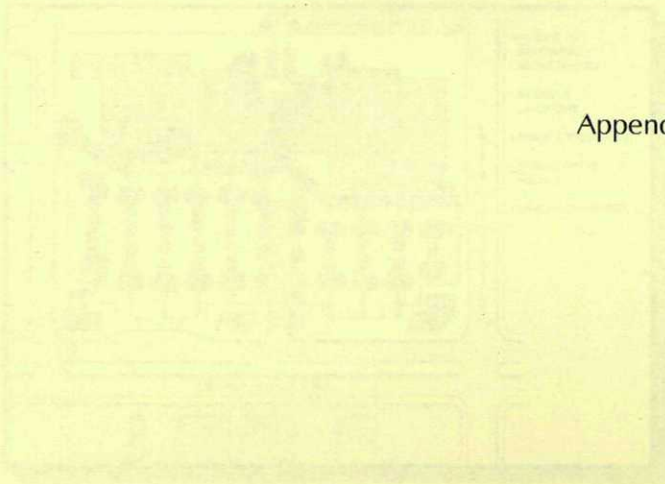
It is for this reason that the preservation committee becomes critically important in its function. Creation of this committee would give a strong message to the Southeast Chandler Area of the City's commitment to preservation of its agricultural heritage in the form of small-scale urban agriculture.

Appendices: Southeast Chandler Area Plan

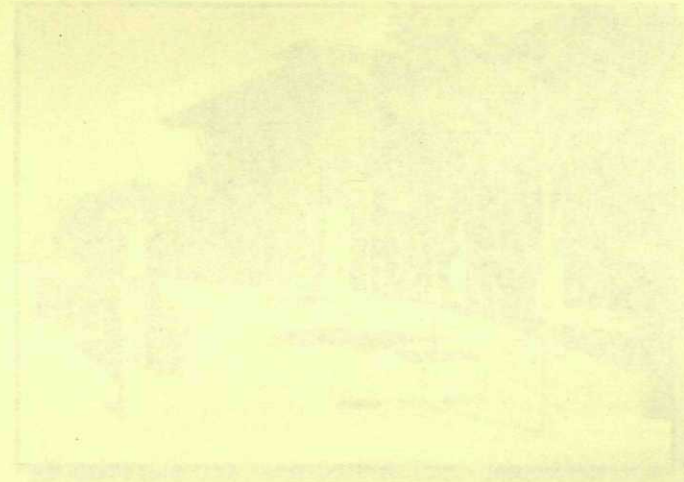
APPENDIX VI - COMMERCIAL DESIGN ILLUSTRATIONS



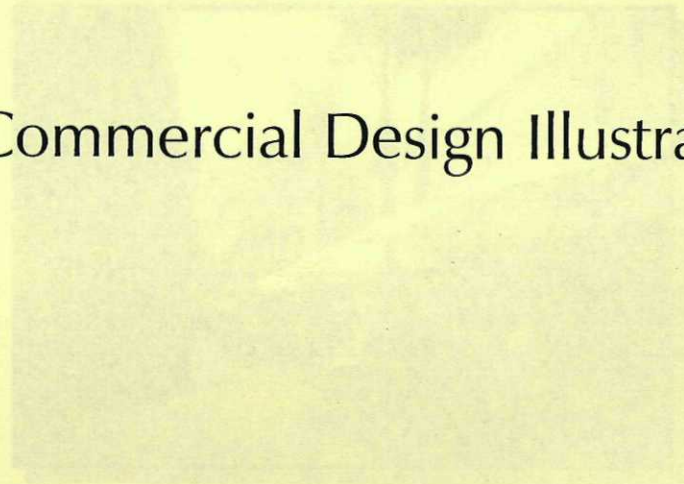
Even small details can make a difference in commercial buildings.



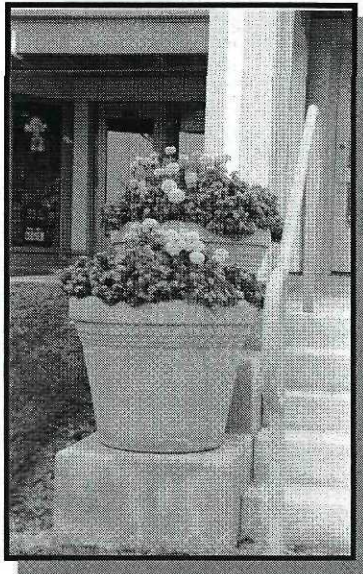
Commercial buildings should be designed to fit neighborhoods.



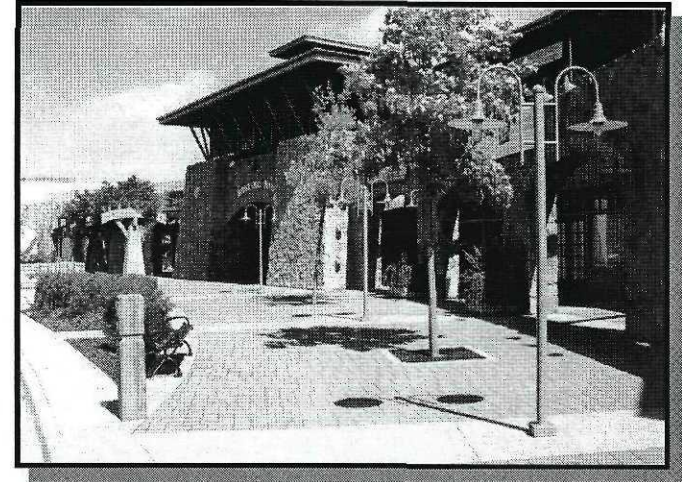
Appendix VII — Commercial Design Illustrations



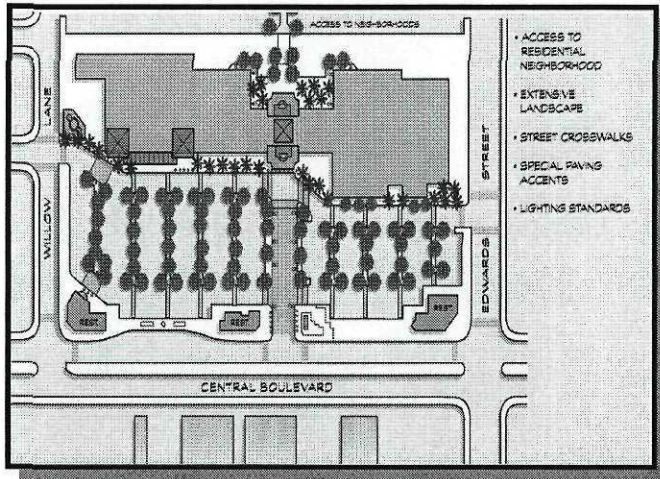
Spaces between buildings should be usable spaces.



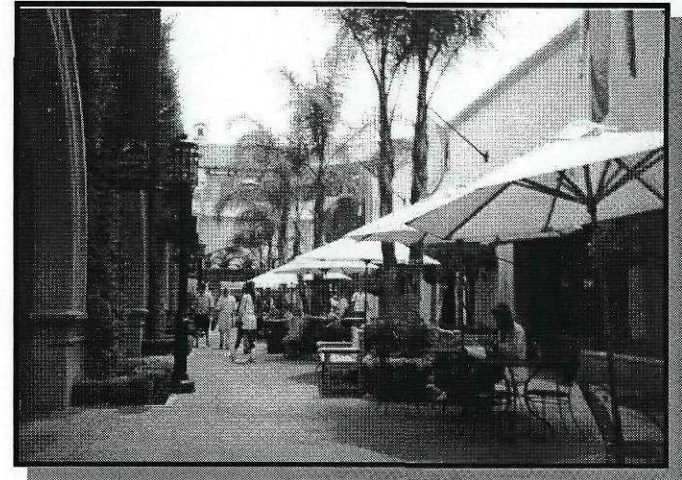
Even small details can enhance the commercial environment.



Theme treatments are essential to provide uniqueness.



Vehicular and pedestrian access from within neighborhoods reduces arterial traffic.

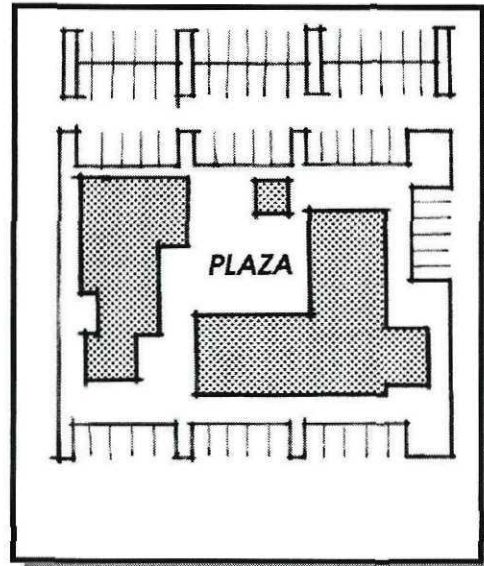


Spaces between buildings should be useable spaces.

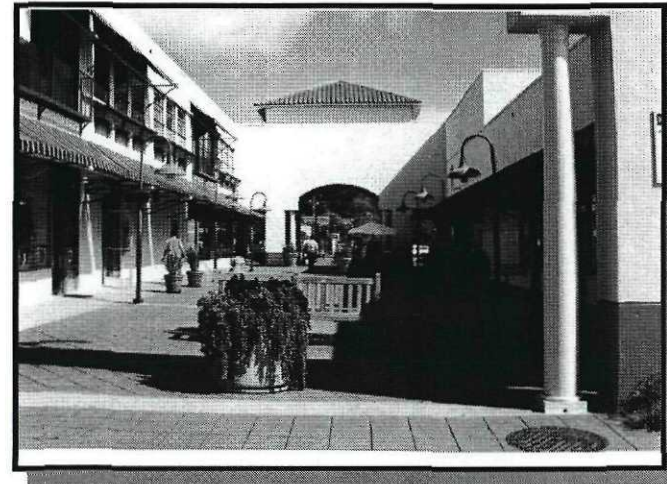


Appendices: Southeast Chandler Area Plan

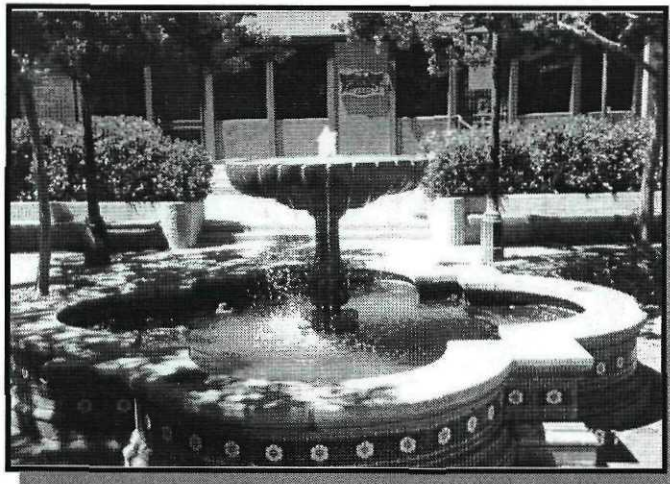
APPENDIX VII - COMMERCIAL DESIGN ILLUSTRATIONS



Small commercial sites can accommodate a village concept.



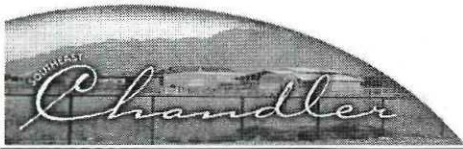
This provides a functional courtyard which breaks up building mass



Generous use of water features is encouraged.

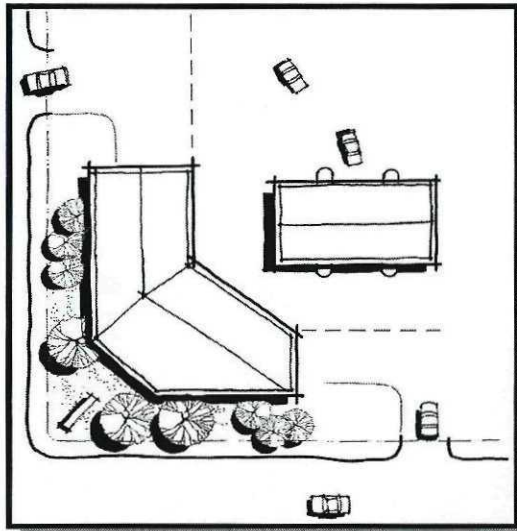


Visual interest features are essential for promoting the character of Southeast Chandler

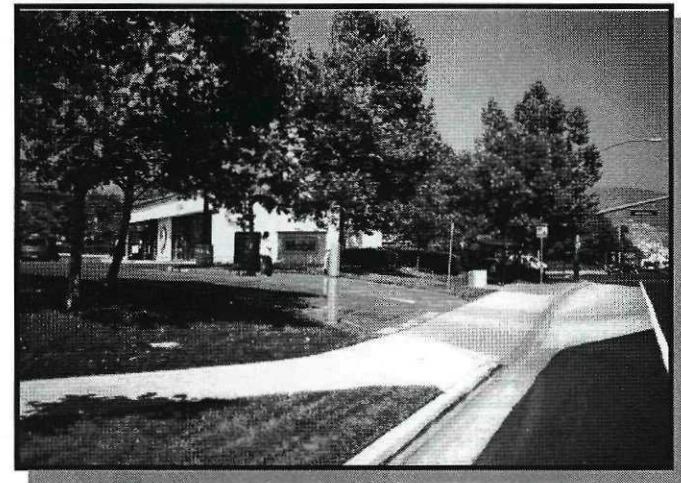


Appendices: Southeast Chandler Area Plan

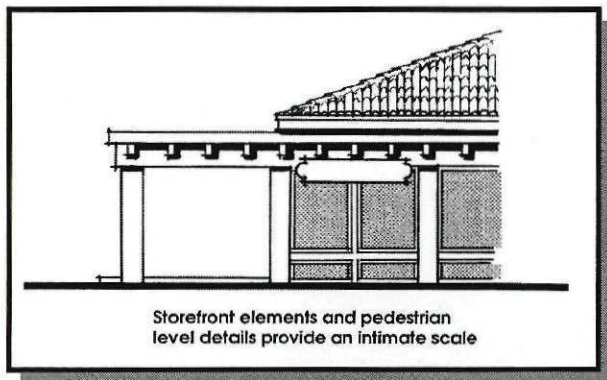
APPENDIX VII - COMMERCIAL DESIGN ILLUSTRATIONS



Reverse orientation of service stations optimize the landscape frontage while screening automobiles and gas pumps.

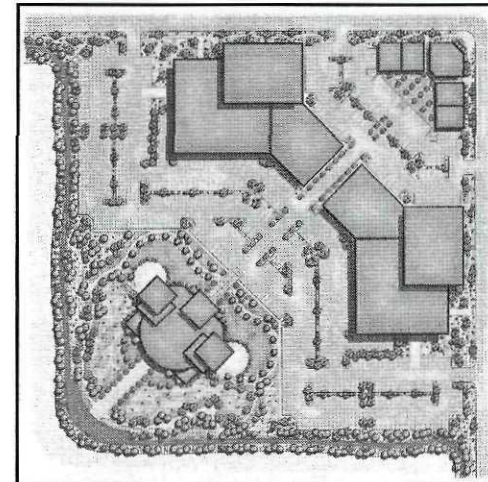


Provide wider landscaping along commercial perimeters.



Storefront elements and pedestrian level details provide an intimate scale

This design provides a pedestrian scale setting.

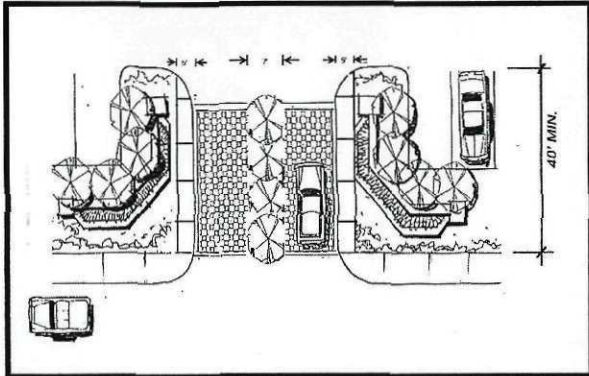


This provides a multi-dimensional commercial concept while enhancing the intersection and providing a nonconventional building orientation.

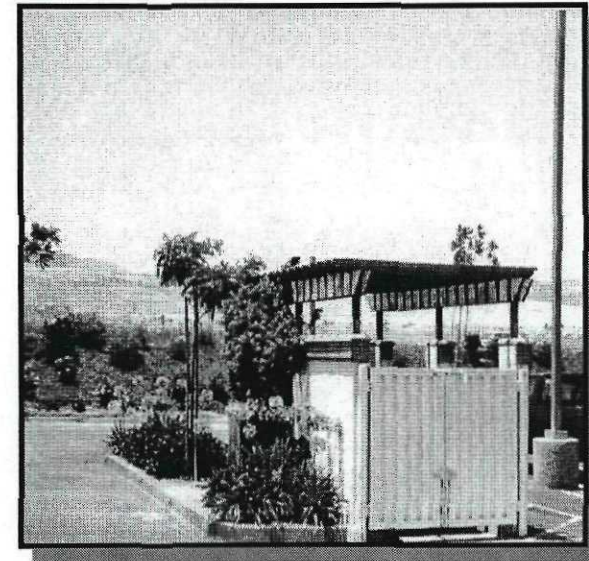


Appendices: Southeast Chandler Area Plan

APPENDIX VII - COMMERCIAL DESIGN ILLUSTRATIONS



Enhance project entries with significantly pronounced landscaped setbacks and decorative planter features.



Appurtenances such as trash enclosures, outdoor vending areas, etc. should be architecturally compatible with buildings.

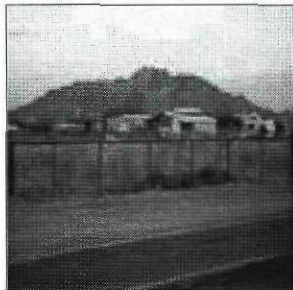


Appendix VIII — Economic Development Analysis



Appendices: Southeast Chandler Area Plan

APPENDIX VIII - ECONOMIC DEVELOPMENT ANALYSIS



"Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness."

— City of Chandler Land Use Element

Section A — Economic Development

The views and analysis provided in this report have been prepared by Sunregion Associates, Inc. (Sunregion). Based on public input during the 4-day charrette process, extensive interviewing, the results of a census survey of residents and landowners in the 14½-square-mile planning area, and Sunregion's research and professional judgment, this analysis has been developed.

As a general observation, Sunregion has concluded that the views of the area's residents on economic development could be generally characterized as not enthusiastic concerning economic development in the Southeast Chandler planning area. Nevertheless, this report contains two elements that relate to economic development issues in the planning area.

The first is a strengths and weaknesses (opportunities and threats/constraints) analysis of Southeast Chandler's economic (commercial) development potential; sometimes referred to as a SWOT analysis. The second element of this report is a presentation of proposed goals and objectives that relate to economic (commercial) development in the planning area. These proposed goals and objectives are based on the same public input process described above.

Subsection A₁ — Strengths & Weaknesses Analysis

Economic Development Strengths

Economic development strengths of the area include the following:

A. Alternative low-density lifestyle

Our survey research clearly shows a strong preference on the part of area residents for low density development; achieved primarily through residential development with larger lots, the use of continuous open space and trails, and the establishment of design standards. These characteristics will create a very appealing environment for residential growth and development, and the attendant commercial growth that can follow.

B. A growing population base

Estimated at ±45,000 residents at build-out. Sunregion's recent survey research in the planning area suggests that there may be a market for small farmers market and roadside produce commercial ventures; sustained by small demonstration and commercial farming operations in the area. Our survey research found that flavor, price, appearance, and convenience ranked in that order when residents were asked what their most important criteria were when purchasing produce.

With just 3-4 square miles of the planning area yet unplanned, a policy should be developed quickly to help assure that these opportunities will be sustained as the area's build-out moves ahead at a dramatic pace.



Appendices: Southeast Chandler Area Plan

APPENDIX VIII - ECONOMIC DEVELOPMENT ANALYSIS

C. Large tracts of vacant and agricultural land

With an estimated build-out population of $\pm 45,000$ residents (assuming 3.5 d.u. per acre and an average household size of 2.35 persons), the Southeast Chandler planning area could absorb approximately 280 acres of new commercial retail/office development (237 commercial retail and 43 commercial office), plus an additional 160 acres of industrial land at build-out; with the jobs and tax base that go along with it. (Refer to Appendix II for data assumptions underlying these figures.) In addition to retail trade, many of these jobs will be in the higher-paying, office-related medical and financial services because of the area's demographics.

Market-driven commercial development, especially on the east side of the planning area, will be successful and should help assure that there is no significant retail trade and sales tax leakage to Gilbert, Queen Creek, and possibly even the Gila River Indian Community on Gilbert Road.

D. Residents support the availability of conventional shopping facilities if planned to minimize commercial incursion in the area

When asked about the type of shopping facilities that would best serve Southeast Chandler, area residents supported neighborhood and community shopping centers with grocery stores and major retailers respectively, in addition to other special features like quality restaurants.

An approach that may be worth considering is that found in the commercial nodes designed as part of 5,500-acre planned Desert Ridge development on State land in north Phoenix.

E. A large existing population base to the south and west in the Sunbird, Springfield and Sun Lakes developments

This represents considerable disposable income and demand potential for commercial development along the Arizona Avenue corridor in the planning area.

F. A variety of home builders with projects planned or under development offering a variety of housing styles and prices

Hopefully, from an economic development perspective, this will help assure the availability of some affordable housing.

G. Future development within the context of coordinated master planning

This feature should significantly enhance the area's desirability as a residential alternative for many people employed in Pinal County who desire a residential setting closer to the Phoenix metro area. Additionally, present metro area residents should be attracted to the low-density lifestyle.

H. Future San Tan Freeway accessibility as well as access to Interstate-10

While completion of the San Tan Freeway to I-10 is several years off, a more immediate improvement of Riggs Road to I-10 could effect an acceleration of market growth and help attract more interest in industrial/business park potential offered along the Arizona Avenue/SPRR corridor. Access to I-10 would be significantly improved in this far south Chandler area for employment-based uses.



Appendices: Southeast Chandler Area Plan

APPENDIX VIII - ECONOMIC DEVELOPMENT ANALYSIS

The strength of the near-term market, 5-10 years, appears to be for small-lot industrial subdivisions for small feeder industries; with lots of .5 to 10 acres for multi-tenant light manufacturing and distribution users.

I. Planned 27-hole public golf/recreational facility

This public course west of McQueen Road is planned for completion within two years. While its completion is more likely to attract residential developers to the area, it also has the potential to attract a high-quality business park/office environment.

J. The scenic beauty of the area

The area has strong appeal due to dramatic views of mountains to the southeast, southwest and northwest.

K. Adequate water supply to serve the expanding population base

L. Availability of electrical service

SRP has assured that there is more than adequate electrical power to serve the area as it grows. Additionally, SRP has assured that no new power plants will be built in and adjacent to the planning area; as the need arises, they will be built in outlying areas (the Coolidge, Casa Grande region).

M. Specific areas along Arizona Avenue should be well-suited for industrial and commercial development if adequate infrastructure were put in place

This would provide the opportunity to establish an employment node in the area and help reduce some of the job commuting that is bound to create serious traffic congestion at build-out if not addressed. Significant job development at the Chandler Airport would also be very helpful in this regard.

Economic Development Weaknesses

The Southeast Chandler planning area's economic development weaknesses include the following:

- A. Absence of job opportunities in immediate area
- B. Absence of adequate infrastructure along the Arizona Avenue/SPRR corridor to support industrial/business park development
- C. Poor transportation access generally

The existing road network in the planning area and its environs is wholly inadequate to serve the area's projected population and commercial growth.

D. Lack of consumer support services in the area

This includes financial institutions and related firms, personal service providers (cleaners, doctors, lawyers, accountants, etc.), and repair services. In the longer term this weakness could also be viewed as a road map for business investment opportunity.



Appendices: Southeast Chandler Area Plan

APPENDIX VIII - ECONOMIC DEVELOPMENT ANALYSIS

- E. Few retail services in the area, most are now in Sun Lakes or north and northwest of the planning area

The newest services are west along Alma School Road from Germann to Chandler Heights Road.

- F. Absence of commercial office and industrial employment centers

- G. Lack of improved industrial land

The absence of basic infrastructure along the Arizona Avenue/SPRR rail corridor on the west side of the planning area will significantly slow the pace at which the area attracts a market for industrial/business park (employment) uses. Unlike residential land developers, industrial developers are disinclined to want to carry major front-end costs for infrastructure; especially in areas that are some distance from the edge of the market; in this case at least 3-4 miles northwest of the planning area.

The market could be at least 10 years away for industrial uses along the Arizona Avenue/SPRR corridor.

- H. Limited freeway access

At the present time, access to I-10 and U.S. 60 is inconvenient or economically unfeasible for industrial sites south of Ocotillo Road along the Arizona Avenue/SPRR corridor.

- I. There is a need for strong multi-jurisdictional planning and zoning cooperation

This is especially true in this planning area, which is largely under Maricopa County's jurisdiction.

Subsection A₂ — Economic Development

The following goals and objectives were prepared for Southeast Chandler to assist the City and other stakeholders in implementing economic development as appropriate.

- A. **Goal:** Assure that the desired low-density development in the planning area does not result in inadequate commercial development and retail trade leakage.

Objective: Thoroughly investigate the potential use of density transfers at appropriate locations throughout the planning area to help achieve an *overall target density* of 2.5 d.u. per acre for the Southeast Chandler planning area.

- B. **Goal:** Provide a broad range of consumer services to local residents.

Objective: Ensure that adequate land in strategic, accessible locations will be made available for retail and services industries.

- C. **Goal:** Help assure that adequate revenue will be available to the City for the provision of services and infrastructure.

Objective: Develop a variety of affordable family as well as professional housing opportunities to achieve a good balance.

Objective: Encourage sales tax-generating retail services.



Appendices: Southeast Chandler Area Plan

APPENDIX VIII - ECONOMIC DEVELOPMENT ANALYSIS

D. **Goal:** Encourage strong job development in the planning area, including the Chandler Airport.

Objective: Reduce commute times and minimize traffic congestion.

Objective: Provide employment opportunities for area residents.

Objective: Designate target areas (nodes) for commercial office and industrial development.

Objective: Designate strategic areas for retail/services industries.

E. **Goal:** Where feasible, annex unincorporated County-island areas.

Objective: Develop the area within the context of one master area plan.

Objective: Manage development within one jurisdiction.

F. **Goal:** Plan for improved roadways to serve the expanding population base.

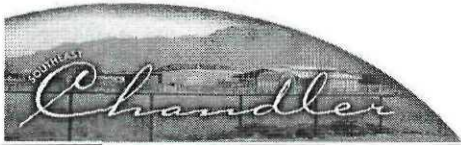
Objective: Eliminate congestion and allow for safe movement of traffic.

Objective: Allow for the efficient movement of commerce.

Objective: Improve east-west traffic flows to I-10

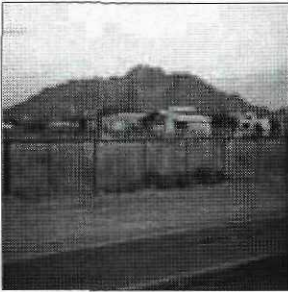


Appendix IX — Potential Funding Mechanisms



Appendices: Southeast Chandler Area Plan

APPENDIX IX - POTENTIAL FUNDING MECHANISMS



"Adopt an area plan for the Southeast Chandler Character Area that preserves the agricultural atmosphere of the community and creates open spaces, community gardens, and a feeling of openness."

— City of Chandler Land Use Element

Section A — Potential Funding Mechanisms

Funding is always an issue with respect to public improvements. This section summarizes a variety of potential methods for funding improvement projects in Southeast Chandler. This listing is not intended to exclude any other available funding source nor does it require the use of any source listed. Included in some of the funding descriptions are ideas for possible applications in Southeast Chandler.

Subsection A₁ — Conditions of Approval for Individual Projects

Under this method of financing, individual developers are required to construct infrastructure and other facilities as part of their project approval when such improvements are directly related to their project.

Construction of facilities by individual developers is the easiest financing method to implement and should be employed whenever possible. This method allows developers to move ahead with their projects subject to their own timing without the potential delays which might accrue in the creation of more elaborate financing schemes.

However, issues of equity preclude developer construction for features of area wide or general benefit unless reimbursement is involved. In requiring construction of facilities by developers, even if there is to be reimbursement, care must be taken to avoid overloading front end development costs to the point that on-site project amenities be sacrificed in favor of up-front costs for off-site facilities/ improvements.

Subsection A₂ — Special Districts and Fees

Special fee districts are frequently established by local agencies to address specific infrastructure needs such as sewer, water or drainage. In most instances fees are collected upon the development of land within the fee district, based on a master plan for the specific facility. Fees are usually collected on a per acre, per unit, or per square foot basis.

Impact fees are monetary exactions (other than taxes or special assessments) that are charged by local agencies in conjunction with approval of a development project. Impact fees are levied for the purpose of defraying all or a portion of the costs of any public improvements or amenities which benefit the project. The collection of impact fees does not require formation of a special district.

Impact fees are paid by builders or developers, typically at the time a building permit is issued. The public facilities funded by impact fees must be specifically identified. There must be a reasonable relationship, in compliance with Arizona Revised Statutes, other relevant laws, and case law, between the type of development project, the need for the facilities, the cost of the facilities and the need to impose a fee.



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While developer fees cannot typically be leveraged (i.e. provide security for bonds or other debt instruments), fees can be used in conjunction with debt financing to help retire bonds secured by other means (e.g. land). In this case, developer fees can generate supplemental revenues to reduce future special taxes or assessments, or free up tax increment or other revenues for alternative uses. Developer fees can also be used to generate reimbursement revenues to property owners or public agencies who have previously paid more than their fair share of public improvement costs.

Subsection A₃ — Urban Development Through Tourism

The Economic Development Administration (EDA) provides strategy grants to perform regional and local studies for assessing the feasibility of tourism activities. EDA has also provided public works grants for local public infrastructure necessary to accommodate tourism activity. This resource could assist the City in determining the viability of agricultural tourism opportunities in Southeast Chandler.

Subsection A₄ — Public Works & Development Facilities

The EDA provides grants for funding of public works and development facilities that contribute to the creation or retention of private sector jobs. Eligible activities include water and sewer systems, access roads to industrial areas, port facilities, railroad siding/spurs, public tourism facilities, vocational schools, and site improvements for industrial parks.

These are frequently combined with other funding sources (such as CDBG). Matching funds of varying proportions are required. This could be an excellent source of funding for creating a multi-modal transit center along Arizona Avenue, industrial development along Arizona Avenue, or contributing to a natural reclaimed water facility or agricultural facility in Southeast Chandler that also serves as a public

tourism facility. For more information, contact: Economic Development Administration.

Subsection A₅ — National Small Business Administration Tree Planting Program

Up to \$200,000 is available for tree planting projects on land owned by the applicant agency. Trees must be purchased from small business nurseries and planted by small business contractors. This could be a feasible resource for street tree planting along major arterials in Southeast Chandler as well as in parks and open spaces. For more information, contact: Small Business Administration.

Subsection A₆ — TEA-21: Transportation Efficiency Act for the 21st Century (H.R. 2400)

TEA-21 gives local governments unprecedented flexibility in developing a mix of highway corridor enhancements, with funds for such projects as public transit, bikeways, highway enhancements, recreation, historic preservation, scenic byways, and other alternatives to address transportation and community needs. Contact source for funding amounts. States and localities are permitted to use federal dollars (provided primarily from the gas tax) more flexibly to meet their transportation needs. More comprehensive planning, taking into account such factors as desired land use patterns and environmental effects, is required as a prerequisite to federal funding. For more information, contact: U.S. Dept. of Transportation - Federal Highway Administration.



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Subsection A₇ — "Information Superhighway" Grants to Nonprofits and State and Local Governments

The National Telecommunications and Information Administration (NTIA), Department of Commerce, serves as the President's principal advisor on telecommunications and information policy. Through its Office of Telecommunications and Information Applications, NTIA administers four Federal assistance programs, including the Telecommunications and Information Infrastructure Assistance Program (TIIAP), to support the development of educational economic and cultural telecommunication services to the public. The TIIAP was created by the Congress in 1993 to promote the widespread use of telecommunications and information technologies in the public and nonprofit sectors. Funds must be matched by contributions generated by the applicant. For more information, contact: Department of Commerce, Telephone (202) 482-2048. This could be a beneficial resource for attracting opportunities for telecommuting in Southeast Chandler.

Subsection A₈ — Bonds

Nonprofit, 501 (c)(3) organizations may now borrow for land purchases, acquisition and/or improvement of facilities, design and financing of same. Museums, performing arts, theaters, social services (e.g., teen centers), historical societies and others are included. This could provide a resource for nonprofit groups in Southeast Chandler who have an interest in trails development, agricultural preservation, etc.

Subsection A₉ — Revenue Bonds

These debts involve payback methods that are tied to specific revenue streams. This form of debt does not require a public vote. Common uses include industrial development, housing, and social services. Requires local government support. For more information, contact: Private banking industry.

Subsection A₁₀ — Adopt-a-Light Program

As a unique method for paying for streetscape improvements or major gateway entries or other design amenity, a small projected plaque sign could be affixed to the light pole with the name or logo of the local merchant/business/person/entity who purchased or contributed to the fixtures. This program can be applied to most any facility in Southeast Chandler.