# CHANDLER AIRPARK Area Plan

## Airpark Area Plan

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# 2.0 Land Use Element

The Land Use Element of the Chandler Airpark Area Plan is presented in the following sections:



## 2.1 Introduction

The Land Use Element is the focal point of the Chandler Airpark Area Plan and will guide development through the Year 2020. The element outlines the process by which the Airpark Area is expected to develop based upon existing and projected development, socioeconomic and man-made influence factors.

The Land Use Element is a guide to decision making for the Airpark Area that achieves the following:

- Identifies the general types, locations, and pattern of land uses desired in the Airpark Area.
- Establishes guidelines for various land use categories shown on the Land Use Plan.
- Promotes compatible land use and protects the Chandler Municipal Airport from residential encroachment.
- Identifies courses of action and strategies that provide the means to implement the Land Use Plan.

## 2.2 Existing Setting

In 1997, the Airpark Area contained a population of approximately 1,000 residents, which represented less than one percent of the city's population. The Airport site represents a large portion of the total developed property in the Airpark Area. This property has attracted fixed base operators and other airport related companies.

The existing land use patterns indicate a limited amount of urban development and encroachment around the Airport. Most of the Airpark Area is used for agricultural and livestock (dairy) purposes. Single family residential subdivisions are located along the northern border of the Airpark Area (north of Pecos Road) and several smaller subdivisions, located in county islands, are located immediately west and south of the Chandler Municipal Airport. These subdivisions generally contain houses on one acre or more and are rural in nature. Several small areas of commercial/industrial development dot the area, especially along Arizona Avenue and the Southern Pacific Railroad.

The Area contains several concentrations of public services: the City of Chandler water treatment plant, located north of the airport between Pecos and Willis Roads; the City landfill located on McQueen Road, south of the airport; and a Public Works water distribution yard located in the northwest corner of the municipal airport, adjacent to the consolidated canal. The Airport wastewater reclamation plant is under construction at the southwest corner of Queen Creek and McQueen Roads with future plans for development of a solid waste transfer station on this site. Parks and open spaces include a neighborhood park on Frye Road north of the airport and public tennis courts located in Tumbleweed Regional Park.

### Current Zoning

The City of Chandler and Maricopa County have adopted zoning ordinances to control development within their jurisdictions pursuant to Arizona Revised Statutes (ARS-462 and 11-821). These ordinances specify permitted land uses and size, height, and bulk of structures within each district. The predominant zoning districts in the Airpark Area are Agricultural and Low Density (Rural) Single Family Residential. There are small groupings of commercial uses located at some of the major one-mile grid intersections and some industrial uses are located around the airport and along the Southern Pacific Railroad. Several Planned Area Developments are found along the south side of Pecos Road, north of the airport.

### Property Ownership

There is no Federal or state owned land within the nine square mile Airpark Area. Most of the land in the Airpark Area is either privately owned or is owned by the City of Chandler (Municipal Airport, Tumbleweed Park, the Landfill, Public Works Yard, Water Treatment Plant, Water Reclamation Plant and Solid Waste Transfer Station/Mini-Dump).

### The Previous Plan

An Area Plan for the Chandler Airpark Area was completed in 1986. While the study area parameters and influence factors were similar to those used in the 1998 Plan, the new Land Use Plan is not as aggressive in its employment or population projections. This is due to several changes in assumptions since the development of the 1986 Plan. This includes the realization that the 1986 Plan was overly optimistic in population projections and employment creation. Population projections have been lowered in the 1998 Plan to reflect the desire for lower density development and the increase in parks and open space over the 1986 Plan. Employment projections are similar or somewhat lower due to the expectation that Williams Gateway Airport (a military base at the time of the 1986 Plan, now being developed as a regional airport capable of handling large jets and cargo operations) will siphon away some of the aerospace growth to service small commercial aircraft, originally projected for Chandler Municipal Airport.

### Influence Factors

In creating the Airpark Area Plan six influence factors and their potential impacts on development were considered:

- The San Tan Freeway (AZ Loop 202) and associated interchange locations
- The Southern Pacific Railroad Corridor
- The Consolidated Canal (SRP) and Paseo System
- Arterial Streets
- Public Facilities
- The Municipal Airport

Each of these factors had a unique influence on the land use patterns developed for the Land Use Plan. Most of these influence factors relate to transportation and infrastructure, two keys that guide and direct where development will occur.

*San Tan Freeway*

The *San Tan Freeway* (AZ Loop 202) alignment runs through the north end of the Airpark Area (between Arizona Avenue and Gilbert Road) just south of the Pecos Road alignment and north of Germann Road. Freeway construction, from Arizona Avenue to Gilbert Road, begins in 2005 with completion

in 2008 and may be accelerated subject to funding availability. A portion of the San Tan Freeway extending from Interstate 10 to Arizona Avenue (the Airpark Area's western boundary) will start construction in 2002 and be completed in 2005.

The San Tan Freeway will provide direct access to the Chandler Municipal Airport with an interchange at Cooper Road. Additional interchanges are planned for Arizona Avenue, McQueen Road and Gilbert Road. All interchanges will be full diamond or urban configuration. The freeway itself is expected to be a rolling, below-grade design similar to other Valley freeways. The exception is the portion of the freeway between Arizona Avenue and McQueen Road where the freeway would pass over the railroad. The freeway will come up to grade and pass slightly over the consolidated canal between McQueen and Cooper Road.

*Southern Pacific Railroad*

The *Southern Pacific Railroad* Corridor runs north and south through the Airpark Area approximately one-quarter mile to the east of Arizona Avenue. The rail line is a spur line and is not in use except as an occasional freight-way for agricultural products grown and harvested to the south of the Airpark Area.

*Consolidated Canal Paseo System*

The *Consolidated Canal* provides irrigation to agricultural water users in South Chandler. As agriculture has been displaced by other land uses, the canal is losing its main mission of providing large amounts of water for irrigation.

The City of Chandler recognizes the need to preserve the unique characteristics of the canals make them more appealing. Thus, the Paseo System concept was developed. The Paseo system is a combination of bicycle, equestrian and pedestrian trails that follow the existing canal system throughout the City.

*Arterial Streets*

The City of Chandler is set up on the one-mile grid system for major arterial street alignments. The major arterial streets in the Airpark Area include:

| | |
|---|---|
| North/South Arterial Streets | • Arizona Avenue<br>• McQueen Road<br>• Cooper Road<br>• Gilbert Road |
| East/West Arterial Streets | • Pecos Road<br>• Germann Road<br>• Queen Creek Road<br>• Ocotillo Road |

These arterial streets (with the exception of Cooper Road, which will have four lanes and a median) will have an ultimate width of six lanes with a median and separate sidewalk and bicycle lanes in a 130-foot right-of-way.

*Public Facilities*

The major *Public Facilities* include the Airport, Wastewater Reclamation Plant, Water Treatment Plant, Landfill, Transfer Station/Mini-Dump, Tumbleweed Regional Park and Public Works Yard. Inappropriate land uses were discouraged around these areas with an emphasis placed on buffering and screening.

*Municipal Airport*

The Chandler Municipal Airport is the most important influence factor in the Airpark Area. It is one of three general aviation airports

located in the Southeast Valley, the other being Williams Gateway Airport and Falcon Field. The three airports do not compete in the same market and attract a different aviation related industries.

The 2020 noise contours are limiting factors to development within the nine square mile Airpark Area. The Federal Aviation Administration (FAA) restricts residential development within the 65 DNL noise contour or greater. The alternatives prohibit new development within the 55 DNL noise contour as an added buffer to encroachment.

## 2.3 Land Use Vision, Goals and Policies

### Vision

The City of Chandler seeks to take advantage of the last large economic development opportunity in the City and guide the orderly and planned growth of the Airpark Area and establish criteria that promotes compatible new developments, maximum economic development and the creation of recreational open space.

### *General Land Use*

**Goal 1.0** To guide and control the orderly growth of the Airpark Area to ensure compatible new development.

Policy 1.1 The City shall ensure that development in the areas adjacent to the Airport Area is compatible with development in the Airpark Area.

Policy 1.2 The City shall partner with Maricopa County for all proposed developments and rezonings within County Islands and require property owners to go through the City review process.

### *Industrial and Commercial/Office/Business Park*

**Goal 2.0** To promote the development of industrial and commercial/office/ business park.

Policy 2.1 The City shall promote the Airport Area as Chandler's prime location for industrial and commercial development, with the airport as the focal point.

Policy 2.2 The City shall promote a campus-like design for industrial and office developments within the Airpark Area.

Policy 2.3 The City shall promote the San Tan Freeway and Southern Pacific Railroad corridors as opportunities for industrial and commercial development.

Policy 2.4 The City shall encourage rail-oriented industrial uses to locate along the east side of the Southern Pacific Railroad tracks, south of Ryan Road.

Policy 2.5 The City shall require buffering between commercial and industrial land uses and residential developments.

Policy 2.6 The City shall encourage through-the-fence operations to occur adjacent to the Airport.

*Retail Commercial*

**Goal 3.0** To promote the development of retail commercial uses at strategic locations within the Airpark Area.

Policy 3.1 The City shall promote the strategic assets of commercial areas along the San Tan Freeway. In particular, the City shall emphasize opportunities at major commercial interchanges at Gilbert Road, Cooper Road, and Arizona Avenue.

Policy 3.2 The City shall discourage uninterrupted stretches of commercial development along the frontages of major arterial streets in the Airpark Area.

*Residential*

**Goal 4.0** To create quality residential developments for the Airpark Area citizens.

Policy 4.1 The City shall plan for the development of a mix of housing types and densities within the Airpark Area.

Policy 4.2 The City shall protect residential areas from nuisances generated by commercial or industrial uses through buffering and site design regulations.

Policy 4.3 The City shall work with property owners in the Airpark Area's two transitional areas to convert these properties to uses more compatible with Airport operations.

Policy 4.4 The City shall encourage builders and developers to use a variety of housing designs and building materials for a varied architectural look.

Policy 4.5 The City shall promote the development of a mixed-use "Urban Village" along the Paseo System immediately north and south of Germann Road.

Policy 4.6 The City shall require all new development within the transitional overlay zones to provide adequate buffering and adhere to the transitional overlay zone development requirements.

Policy 4.7 The City shall develop a disclosure policy to ensure that all new property owners in the Airpark Area are aware of aviation easements and the Airport Influence Area.

Policy 4.8 The City shall continue to require aviation easements and public disclosure of the Airpark Area Airport Overlay Zones per the Zoning Ordinance.

*Airport Compatibility*

**Goal 5.0** To protect the Airport from incompatible land uses.

Policy 5.1 The City shall consider flight tracks, noise patterns and Airport safety zones when determining the appropriateness of proposed developments.

Policy 5.2 The City shall prohibit the development of noise-sensitive institutions, such as day-care facilities, schools and churches, within arrival and departure flight tracks, touch-and-go patterns and within the 55 DNL noise contour.

Policy 5.3 The City shall prohibit new residential development within the Airport's 55 DNL noise contour.

Policy 5.4 The City shall develop and implement noise attenuation standards to be incorporated into new development for the Airpark Area.

***Parks and Open Space***

**Goal 6.0** To ensure the development of a well-balanced system of public and private parks and passive open spaces.

Policy 6.1 The City shall require that all developments contain a minimum of 10 percent useable open space.

Policy 6.2 The City shall implement the Paseo System along the Consolidated Canal.

Policy 6.3 The City shall use open space as a means of protecting the Airport runway and taxiway safety zones from encroachment by incompatible development.

Policy 6.4 The City shall integrate parks and open space through a series of inter-connected greenbelts.

Policy 6.5 The City shall develop plans to utilize the City Landfill site as a landscaped open space.

***Paseo System***

**Goal 7.0** To develop a linear system of equestrian, pedestrian, and bicycle trails along the Consolidated Canal.

Policy 7.1 The City shall consider the uniqueness of waterfront development prior to approval of any development plans.

Policy 7.2 The City shall integrate the "Urban Village" into the Paseo System.

Policy 7.3 The City shall require a minimum building setback per the adopted Paseo System Ordinance for trail preservation purposes.

Policy 7.4 The City shall require all development along the Paseo system to orient to the Canal.

***Public Facilities and Services***

**Goal 8.0** To provide sufficient land to accommodate public services and facilities to the Airpark Area.

Policy 8.1 The City shall work with local school districts in reviewing development proposals to ensure that land is set-aside to provide school facilities to accommodate enrollment increases associated with new development.

Policy 8.2 The City shall consider using existing public facilities and properties when siting or locating new services.

Policy 8.3 The City shall set aside different facilities for well production and water storage.

*Freeway Encroachment*

**Goal 9.0** To protect the San Tan Freeway Corridor right-of-way from encroachment and incompatible land uses.

Policy 9.1 The City shall require all developers to build sound walls or noise attenuation into projects adjacent to the Freeway.

Policy 9.2 The City shall establish a building setback policy during the development of the San Tan Freeway Corridor Area Plan.

Policy 9.3 The City shall work with ADOT to ensure that Freeway landscaping is installed and maintained.

*Railroad Compatibility*

**Goal 10.0** To protect the Southern Pacific Railroad corridor from incompatible land uses.

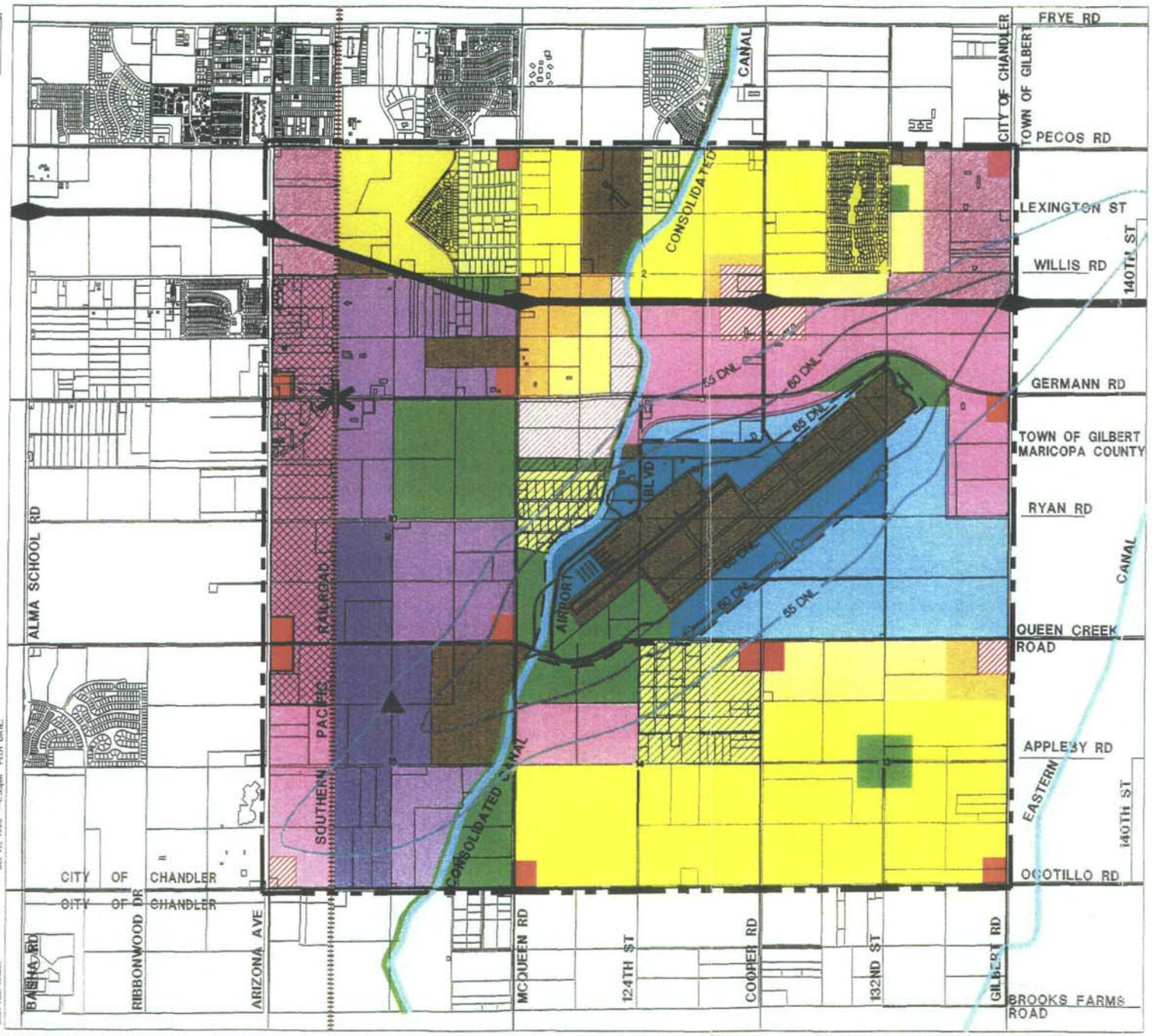
Policy 10.1 The City shall promote development of industrial and commercial/office/business park uses along the Southern Pacific Railroad corridor.

Policy 10.2 The City shall work with RPTA in planning for transit-oriented development in the Southern Pacific Railroad corridor in anticipation of development of a commuter light rail system within the SPRR right-of-way.

## 2.4 Land Use Plan

The Land Use Plan shown on Figure 2-1, *Land Use Plan*, was derived from a series of alternative land use scenarios that were evaluated for compatibility based on influence factors and rating criteria. The resulting Land Use Plan depicts a development pattern that protects the Airport from residential encroachment while providing for aggressive economic development. As shown in Table 2.1, *Land Use Plan – Land Use Calculations,* The Draft Land Use Plan supports a population of 16,725 residents in a total of 6,997 dwelling units, most of which would be single family. Total employment for this alternative is 68,091.

The overall land use pattern confines residential uses primarily to the areas north of the San Tan Freeway alignment and south of Queen Creek Road and east of McQueen Road. This pattern of residential development keeps new housing from being built within the 55 DNL noise contour. The Land Use Plan also continues the aggressive economic development policies of the City of Chandler and protects the Airport with a buffer of commercial and industrial uses. Another important feature is the proposed "Urban Village" along and west of the Consolidated Canal that would provide a mix of medium- and high-density housing and Special Use Commercial. This "Urban Village" would complement the Paseo System and tie in nicely with the adjacent Tumbleweed Park.




CHANDLER AIRPARK Area Plan

## LAND USE PLAN

- RR (0-1.5 D.U. PER ACRE) 300 ACRES
- LDR (1.6-3.5 D.U. PER ACRE) 1020 ACRES
- LMDR (3.6-8 D.U. PER ACRE) 240 ACRES
- MDR (8.1-12 D.U. PER ACRE) 200 ACRES
- HDR (12.1-18 D.U. PER ACRE) 130 ACRES
- NEIGHBORHOOD COMMERCIAL 110 ACRES
- COMMUNITY COMMERCIAL 76 ACRES
- REGIONAL COMMERCIAL 240 ACRES
- SPECIAL USE COMMERCIAL 100 ACRES
- COMMERCIAL/OFFICE/BUSINESS PARK 848 ACRES
- LIGHT INDUSTRIAL 510 ACRES
- INDUSTRIAL 280 ACRES
- COMMERCIAL/OFFICE/BUSINESS PARK (TAXIWAY ACCESS) 440 ACRES
- AEROSPACE INDUSTRY (FBO) 297 ACRES
- PUBLIC / SEMI-PUBLIC FACILITIES 470 ACRES
- PARKS AND OPEN SPACE 500 ACRES
- TRANSITIONAL OVERLAY ZONE (TO ANY COMMERCIAL USE) 220 ACRES
- LIGHT RAIL CORRIDOR OVERLAY PLANNING AREA (POTENTIAL MIXED USE) 250 ACRES
- FUTURE TRANSIT CENTER
- POTENTIAL FUTURE TRANSIT RAILYARD
- LOOP 202 SANTAN FREEWAY TENTATIVE ALIGNMENT
- 55 DNL NOISE CONTOUR 55
- 60 DNL NOISE CONTOUR 60
- 65 DNL NOISE CONTOUR 65 OR GREATER
- AIRPORT BOUNDARY
- STUDY AREA BOUNDARY AND AIRPORT OVERLAY DISTRICT

NOTE: DNL IS THE AVERAGE DAY/NIGHT NOISE LEVEL MEASURED IN DECIBELS. NOISE EXPOSURE IS FOR 2020 LEVELS.

SOURCE: BRW, INC. 1996

GRAPHIC SCALE

500 0 500 1000 2000

( IN FEET )

1 inch = 2000 ft.

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## TABLE 2.1
## Land Use Plan
## Land Use Calculations

| Land Use Category | Gross Acres | Efficiency Factor [1] | Resultant Net Development Acres [2] | Density/ Intensity [3] | Total Dwelling Unit | Population/ Dwelling Unit [6] | Resultant Population [7] | Employment Factor [8] | Resultant Employment [9] |
|---|---|---|---|---|---|---|---|---|---|
| Rural Residential | 300 | 0.95 | 285 | 1.0 DU [4]/AC | 285 | 2.8/DU | 798 | - | - |
| Low Density Residential | 1020 | 0.90 | 918 | 2.5 DU/AC | 2,295 | 2.7/DU | 6,197 | - | - |
| Low-Medium Density Residential | 240 | 0.80 | 192 | 6.0 DU/AC | 1,152 | 2.5/DU | 2,880 | - | - |
| Medium Density Residential | 200 | 0.80 | 160 | 10.0 DU/AC | 1,600 | 2.2/DU | 3,520 | - | - |
| High Density Residential | 130 | 0.85 | 111 | 15.0 DU/AC | 1,665 | 2.0/DU | 3,330 | - | - |
| Commercial | 525 | 0.80 | 420 | 0.23 FAR [5] | - | - | - | 1 Employ/400 SF | 10,520 |
| Business/Office Park | 848 | 0.85 | 721 | 0.23 FAR | - | - | - | 1 Employ/250 SF | 28,894 |
| Industrial | 790 | 0.85 | 672 | 0.32 FAR | - | - | - | 1 Employ/680 SF | 13,775 |
| Aerospace Industry and Commercial Office Business Park Taxiway Access | 737 | 0.85 | 626 | 0.32 FAR | - | - | - | 1 Employ/750 SF | 11,635 |
| Public Facility | 470 | 0.85 | 400 | 0.15 FAR | - | - | - | 1 Employ/800 SF | 3,267 |
| Park/Open Space | 500 | - | - | - | - | - | - | - | - |
| **TOTALS** | **5,760** | - | **4,505** | - | **6,997** | - | **16,725** | - | **68,091** |

Source: BRW, Inc. 1998

All Calculations are based upon build-out at 2020.

Notes:

1) Efficiency Factor – percentage of developable land after removing right-of-ways and easements.
2) Resultant Net Developable Acres – amount of land available for development after removing right-of-ways and easements.
3) Density – numbers of residential dwelling units per acre. Intensity – the floor area ratio of a non-residential use.
4) DU - dwelling units.
5) Floor Area Ratio – ratio of total building area compared to total site area.
6) Population per Dwelling Units – number of people typically living in that type of dwelling.
7) Resultant Population – number of people per dwelling unit multiplied by number of dwelling units.
8) Employee Factor – number of employees per square foot of used space.
9) Resultant Employees – the net developable acres converted to square footage.

## Land Use Definitions and Guidelines

The Land Use Plan serves as a tool to establish contiguous and compatible land development within the Airpark Area that is consistent with the City of Chandler's community vision. The land use categories shown on the Land Use Plan are defined in additional detail in this section and in Table 2.2, *City of Chandler Land Use Categories and Standards.* These definitions establish general guidelines for land development in each land use category.

Dwelling units per acre (DU/AC) is the standard for measuring residential land density. Within the Airpark Area, residential densities range from zero to 18 dwelling units per acre. The Floor Area Ratio (FAR) is the standard for measuring non-residential land use intensities, such as commercial or industrial. The FAR is the gross floor area of a building divided by the net area of the parcel of land. Net area is the total developable area of the property (i.e., *without rights-of-way*).

## Residential Uses

The Land Use Plan designates approximately 1,890 acres of land for residential uses throughout the Airpark Area. Five residential land use types are classified by density, ranging from Rural Residential to high density residential, defined primarily by structure type and the density of development.

*Rural Residential*
*(0.0 – 1.5 DU/AC)*

*Rural Residential* denotes areas where low-density single family residential development is preferred based upon a desire to retain the rural character of a given location, and/or due to environmental constraints or limited infrastructure. The density ranges from 0 to 1.5 dwelling units per acre.

*Low Density Residential*
*(1.6 - 3.5 DU/AC)*

*Low Density Residential* denotes areas where increased residential density can be accommodated, within a range of 1.6 to 3.5 dwelling units per acre. Public infrastructure is required to serve this density of residential development. The use of single-family subdivision design concepts may be applied. In general this district is intended to serve as a transition between rural areas and more intense residential land uses.

*Low-Medium Density Residential*
*(3.6 – 8.0 DU/AC)*

*Low-Medium Density Residential* denotes areas where moderate intensities of primarily single family residential uses are considered appropriate, based upon existing patterns of development, available transportation and other infrastructure, and proximity to service, employment, and retail facilities. Public infrastructure is required to serve this density of residential development. A variety of housing forms may be developed, including townhouses and garden apartments. Institutional uses such as schools, convalescent facilities, or religious facilities are often considered appropriate, if sited in locations that are sensitive to impacts on adjacent residential uses. Residential density ranges from 3.6 to 8.0 dwellings units per acre.

*Medium Density Residential*
*(8.1 – 12.0 DU/AC)*

*Medium Density Residential* denotes areas generally located within established development corridors, in close proximity to retail, transit facilities, services, and employment uses, where multi-family residential uses are appropriate. Infill housing development may also be appropriate, as a means of maximizing the infrastructure investments. A variety of housing types and styles are permitted in order

to serve the needs of a wide range of demographic and income groups. Specialized forms of group housing (elderly, affordable, group homes, etc.) may also be appropriate. The residential density ranges between 8.1 and 12.0 dwelling units per acre.

*High Density Residential*
*(12.1 – 18.0 DU/AC)*

*High Density Residential* denotes where significant amounts of high-density residential dwellings are appropriate. These areas are located in existing urban settings, or locations where substantial development intensity is desired. Housing may be developed in multiple story structures. Overall densities achieved will be predicated on available infrastructure capacity and development impacts. Rental and owner/occupied housing are equally appropriate. The high residential densities possible in these locations will provide substantial support to service and retail uses in the area. The residential density ranges from 12.1 to 18.0 dwelling units per acre or greater.

**Commercial Uses**

The Land Use Plan identifies the proposed locations of commercial development within the Airpark Area. The Plan identifies a large campus-oriented commercial/ office/business park to be located between the Airport and the Freeway. Regional Commercial sites are located in both the northwest corner and the northeast corner of the Airpark Area. These sites will not only utilize the regional traffic from the freeway, but will attract local patrons due to the proximity to the City's Central Business District.

*Neighborhood Commercial*
*(FAR 0.23)*

*Neighborhood Commercial* denotes where neighborhood-based commercial uses of 10 to 20 acres are appropriate. Development takes the form of grocery stores, clustered retail, personal services and restaurant uses. It is anticipated that these areas will attract patrons from a smaller (1 to 2 miles) radius than the larger, community commercial facilities. Total building area is typically 30,000 to 140,000 sq./ft. and the FAR is less than .23.

*Community Commercial*
*(FAR 0.23)*

*Community Commercial* denotes where community commercial uses of 30 to 40 acres are appropriate. Development takes the form of high-volume grocery or retail "superstore" outlets, personal services and restaurant uses. It is anticipated that these areas will attract patrons from a smaller radius (2 to 4 miles) than the larger, regional commercial facilities. Total building area is typically 140,000 to 300,000 sq./ft. and the FAR is less than .23.

*Regional Commercial*
*(FAR 0.23)*

*Regional Commercial* denotes where regional commercial land uses of 40 to 200 acres are appropriate. Large retail can be developed in combination or singular designs. This land use is intended to establish regional retail and employment uses in locations with adequate access, and where impacts on residential uses are minimized. Immediate access to major transportation corridors is available. A wide variety of retail, service, hotel and office employment uses are allowed. Total building area is typically 400,000 to 1.5 million sq./ft. and the FAR is less than .23.

**Note:** Regional Commercial may be considered for any commercial zone adjacent to the San Tan Freeway.

*Special Use Commercial*
*(FAR 0.23)*

*Special Use Commercial* denotes where the most intense types of commercial and high-density residential development may take place. Special commercial areas may include any combination of retail, service, entertainment and office development. These areas are intended to develop as major retail and entertainment service centers along the Paseo System and create the feel of an "Urban Village." Developments encompassing a variety of uses are preferred over singular land uses, as a means of maximizing the economic use of limited land resources, and promoting a vibrant, pedestrian oriented urban environment. Total building area is typically 30,000 to 500,000 sq./ft. and the FAR is less than .23.

*Commercial/Office/Business Park*
*(FAR 0.23)*

*Commercial! Office/ Business Park* denotes major, campus-like employment centers. Permitted uses includes retail services, research and development or office/showroom development. Design standards may be applied to assure a consistent and high quality physical product. This land use is typically located adjacent to arterial roads and freeways. Typical techniques such as screening landscape buffers, separation of incompatible uses, lighting design, and architectural standards may be used. Total building area is typically 100,000 to 750,000 sq./ft. and the FAR is .23.

For the particular area bounded by Arizona Avenue, Southern Pacific Railroad tracks, Willis Road, and Appleby Road, public assembly uses may also be permitted, in addition to the Commercial/Office/Business Park uses outlined above.

Public Assembly Uses are those having the potential for public assembly such as religious, institutional, community, and conference facilities as well as other uses in a campus-like setting. Coordination between developments, i.e. between public assembly and Commercial/Office/Business Park uses, will be encouraged to provide shared/overflow parking and establish interior collector streets between dissimilar land uses. Typical techniques such as screening, landscape buffers, separation of incompatible uses, lighting design, and architectural standards may be used. Total building area is typically 30,000 to 500,000 sq./ft. and the FAR is less than .23.

**Industrial Uses**

The Land Use Plan identifies the Arizona Avenue corridor as an area of high—intensity industrial land use. Properties directly adjacent to the Airport will attract aerospace- related industrial development that will be able to directly access the airport.

*Light Industrial*
*(FAR 0.32)*

*Light Industrial* denotes uses for small manufacturing, warehousing and distribution, back office space and high tech uses. Site and facility design should balance function with aesthetics and amenities. The FAR is less than .32.

*Industrial*
*(FAR 0.32)*

*Industrial* areas have been designated for general industry, such as manufacturing, distribution, warehousing, wholesaling, and

utility uses. This designation is appropriately sited to eliminate potential negative impacts upon other non-business uses, and therefore promote a fairly permissive and supportive industrially oriented environment. Site and facility design will be primarily concerned with function. The FAR is less than .32.

*Commercial/Office/Business Park (Taxiway Access)(FAR 0.32)*

*Commercial/Office/Business Park (Taxiway Access)* denotes designated areas for aviation oriented office or light industrial uses that have access to the airport taxiways. Campus-like business parks with corporate offices, commercial services, office park and high tech users needing direct taxiway access are appropriate uses. The FAR is greater than .23 and less than .32.

**Note:** Light Industrial and Commercial/ Office/Business Park with and without taxiway access may be considered as interchangeable on a case by case basis.

*Aerospace Industry (FBO)*
*(FAR 0.32)*

*Aerospace Industry (FBO)* denotes designated areas for Fixed Based Operations (FBO) aviation, and/or limited to uses that directly support aviation, (e.g. require direct proximity to the airfield). Aviation training, maintenance, distribution, warehousing, refueling and similar uses are appropriate. Use of these areas is strictly controlled through direct public ownership, or otherwise limited to the types of uses listed. The FAR is less than .32.

**Other Uses**

The Chandler Airpark is host to various types of public facilities and open space areas. These areas have been established to anticipate future development needs.

*Public/Semi-Public Facilities*
*(FAR 0.15)*

*Public/Semi-Public Facilities* denotes existing or planned public use(s) such as schools, community centers, government facilities, libraries, hospitals, educational campuses, airports and similar uses. Use of these areas is strictly controlled through direct public ownership, or otherwise limited to the types of uses listed. The FAR is less than .15.

*Light Rail Corridor Overlay Planning Area (12.1 to 18.0 DU/AC)*

If, after a formal study, a light rail transit corridor is found to be a feasible alternative for the use of the Southern Pacific Railroad Tracks, then a Light Rail Corridor Overlay Planning Area would be implemented, allowing mixed- use residential and commercial developments. The commercial FAR would be .23 to .32 with residential densities of 12.1 to 18.0 dwelling units per acre.

*Parks and Open Space*

*Parks and Open Space* depicts areas set aside for non—development, either through City, State or Federal ownership or by designations in municipal General Plans. Areas may be used for active and passive recreation, formal parks, or may be natural conservation areas.

*Transitional Overlay Zone*

*Transitional* areas have the potential for a variety of commercial land uses based upon compatibility with surrounding land uses.

This land use allows the transition from residential to commercial land uses as the economics become favorable for the transition to occur.

Transitional areas must be transitioned from rural residential to a compatible commercial use according to the following guidelines:

- Industrial uses will only be permitted if all the property owners in the contiguous transitional area_ request rezoning to that zoning district.
- Property owners in any transitional area request a rezoning of a minimum of 40 contiguous acres made up of whole subdivision lots.
- All requests for rezoning are for a specific proposed commercial project with committed funding.
- The development site where the new zoning occurs is adequately buffered so as not to create a hazard or a nuisance to the adjacent rural residential land use.
- Adequate infrastructure either exists or is planned as part of the development design to support the proposed use and traffic impacts on residential uses are minimal.
- All properties proposed for rezoning are adjacent to and border an arterial roadway, or border a commercial property that is adjacent to or borders an arterial roadway. This guideline is intended to prevent fragmented commercial development.
- Include the use of noise attenuation as provided for in Appendix A of this report.

**Buffering Requirements**

All developments in the Airpark Area, both existing and planned, should adhere to the buffering requirements set forth in the City of Chandler General Plan.

In residential areas, a transition from higher to lower densities should occur gradually. Proper transitional techniques include landscaped and open space buffers (such as parks and retention basins) and separations such as roads and canals.

Commercial and industrial areas should be adequately buffered from residential areas through open space and landscaping as well as other design guidelines. Roads, freeways, railroad tracks and canals also provide good separation from non-residential land uses when combined with appropriate setbacks. Building heights should be graduated from highest to lowest to conform with those found on adjacent parcels. Colors and materials should blend with the character of the surrounding developments and neighborhoods. Non-residential buildings should be designed to respect the scale, mass and privacy of surrounding developments. Architectural designs should apply to all four sides of buildings and avoid unbroken building facades and repetition.

Streetscapes should be pedestrian-friendly and provide for attractive landscaping and building setbacks. Wall and fence treatments should include staggering and variety of color to avoid a monotonous look. Streets should be well lighted and provide easy-to—read monumentation and street signs.

**Phasing**

Development within the Airpark Area should be phased in response to market demands and absorption rates according to a logical and orderly extension of roadways, public utilities, and other infrastructure. Water, sewer, electricity, and other utility improvements, when phased properly will ensure the Airpark Area reaches full buildout without creating leap-frog development or increased infrastructure costs. Phasing should ideally occur in a general northwest

to southeast direction with development occurring first along the freeway corridor and adjacent to the Airport.

Demand for development in the City of Chandler is centered on residential and neighborhood commercial. These land use designation types will most likely be the first land uses to reach buildout capacity. As residential single family and multi-family housing is completed, the community will be able to support neighborhood and community commercial services. As the Airport expands to accommodate increased volumes of air traffic, service improvements will accelerate the pace of aerospace related industry within the vicinity of the Airport. In addition this development is likely to spur commercial and industrial growth in the Airpark area. The completion of the San Tan Freeway will also enhance the rate of development adjacent to the freeway corridor.

## 2.5 Land Use Implementation Program

Table 2.3, *Land Use Implementation Program*, identities the land use implementation measures that the City should take to implement the goals and policies of the Chandler Airpark Area Plan. The implementation program lists the specific implementation measure, the purpose, timeframe, key participants, project location and the resources necessary to accomplish each implementation measure.

**Definitions:**

- *Implementation Measure* — Lists the action necessary to carry out the Land Use Plan Element of the Chandler Airpark Area Plan.
- *Purpose* - Identifies the intent of accomplishing that particular action.
- *Timeframe* — Establishes the target 5- year priority within the 20-year planning horizon for implementation of the A action.
- *Key Participants* — Assigns the elected or appointed public body, agency, group, individuals or volunteers principally responsible to initiate the implementation action.
- *Resources* - Lists the potential funding, City staff, volunteer or other community resources necessary to carry out the implementation action.

## Table 2.2
## City of Chandler
## Land Use Categories and Standards

| Land Use Category | Typical Development Standards | General Development Characteristics |
|---|---|---|
| Rural Residential (RR) | 0 - 1.5 DU per Acre | One- to two-story single-family detached homes on large lots |
| Low Density Residential (LDR) | 1.6 - 3.5 DU per Acre | One- to two-story single-family detached homes on lots in excess of 7,000 square feet. |
| Low-Medium Density Residential (LMDR) | 3.6 - 8.0 DU per Acre | Housing types found in low density areas on smaller lots and areas of transitional land use |
| Medium Density Residential | 8.1 – 12.0 DU per Acre | Includes townhomes and condominiums, typically located adjacent to high intensity land uses |
| High Density Residential | 12.1 – 18 DU per Acre | Multi-family developments which include apartments and condominiums |
| Neighborhood Commercial | Maximum FAR = 0.23<br>Site Size = 10 to 20 acres | Provides for the development of smaller scale commercial areas to serve adjacent neighborhoods within 1 or 2 miles |
| Community Commercial | Maximum FAR = 0.23<br>Site Size = 30 to 40 acres | Large retail centers located along arterial corridors and activity nodes, serving a market radius of 2 to 4 miles |
| Regional Commercial | Maximum FAR = 0.23<br>Site Size = 40 to 200 acres | Encompasses the entire range of large-scale retail and service activities and will serve the region, immediate community and tourist/traveler trade |
| Special Commercial | Maximum FAR = 0.23<br>Site Size = N/A | Will service the retail commercial established in conjunction with the Paseo System and may be integrated with moderate to high density residential |
| Commercial/Office/Business Park | Maximum FAR = 0.23<br>Site Size = 10 to 200 acres | Includes office and business complexes and promotes a campus oriented environment |
| Light Industrial | Maximum FAR = 0.32<br>Site Size = 10 to 200 acres | Encompasses low intensity uses such as warehousing and light or high-tech manufacturing industries |
| Industrial | Maximum FAR = 0.32<br>Site Size = 40 to 250 acres | Includes production, assembly and manufacturing based businesses, associated with high intensity land use |
| Commercial/Office/Business Park (Taxiway Access) | Maximum FAR = 0.32<br>Site Size = 10 to 200 acres | Similar to standard commercial/ office/ business park characteristics and includes regulated accessibility to the Airport taxiway |
| Aerospace Industry (FBO) | Maximum FAR = 0.32<br>Site Size = 5 to 40 acres | Encompasses all airport related businesses (fixed base operators) |
| Public/Semi-Public Facilities | Maximum FAR = 0.15<br>Site Size = 1 to 640 acres | Properties designated for a variety of municipal and quasi-public uses to include: utilities, public services and educational institutions |

Source: City of Chandler Circulation and Land Use Element, 1998.
Note: Typical Development Standards, Site Size is meant only as a guide and not a fixed standard for the Land Use being defined.

## Table 2.3
## Land Use Implementation Program

| Implementation Measure Action | Purpose | Timeframe (Years) | | | | Key Participants | Resources |
|---|---|---|---|---|---|---|---|
| | | 1-2 | 3-5 | 5-10 | 10-20 | | |
| Adopt Chandler Airpark Area Plan in accordance with ARS §9-461.09 | To guide growth and encourage compatible land uses. | • | | | | City Council | N/A |
| Establish open space acquisition plan for end of runways | To establish funding initiatives for public land appropriation. | • | • | | | City Planning Staff, Public Works, Airport Commission, City Council | Municipal Bonds and FAA/ADOT Funding |
| Establish buffering guidelines for compatible development within the airport influence area | To prevent the development of incompatible uses within the 55 DNL noise contour area. | • | | | | City Planning Staff, Airport Commission, City Council | FAR part 150 Noise Study and Consultants |
| Annex remaining County Islands in accordance with the Annexation Policy | To encourage orderly growth of jobs, housing and services. | • | • | • | • | City Planning Staff, Planning and Zoning Commission and City Council | City Staff |
| Implement re-zoning strategies | To reconcile the current Land Use Map with existing zoning districts. | • | • | • | • | City planning Staff, Planning and Zoning Commission, City Council | N/A |
| Review buffering requirements for new development. | To establish buffers (e.g. open space, landscaping, enhanced building setbacks, intervening land uses, etc.) as a means to transition between incompatible land uses. | • | | | | Planning and Zoning Commission | Community Planning and Development Staff |
| Complete the San Tan Freeway Corridor Study | To determine and affirm the appropriate land uses adjacent to the freeway corridor. | • | • | | | City Planning Staff, ADOT | Consultants |
| Create a policy to prevent disjointed redevelopment of transitional land uses. | To protect areas designated as Transitional Land Uses from infringement by incompatible land uses. | • | • | | | City Planning Staff, Economic Development, City Council | Annexation, Improvement Districts, Municipal Bonds |
| Create a policy for acquiring Water Storage Tank sites. | To protect future sites for adequate water distribution. | • | | | | *Public Works, City Council* | *Easements,* Municipal Bonds |
| Update Airpark Area Plan on a five-year basis | To ensure compatible land uses near the Airport. | | • | | | City Planning Staff, Planning and Zoning Commission, Public Works, Airport Commission | Consultants |
| Develop and adopt Noise Attenuation Standards. | To ensure compatible uses near the Airport that minimize noise disruptions | • | | | | Airport Commission, City Council, Planning and Zoning Commission | FAR Part 150 Study and Consultants |

Source: BRW, Inc., 1998