



Greater Airpark Community Area Plan Existing Conditions Report



Table of Contents

Table of Contents..... i
List of Tables..... vi
List of Figures..... vii
Acknowledgements..... ix
Executive Summary..... xi

1. Introduction..... 1
 Overview..... 1
 General Plan Overview..... 1
 Community Area Planning Overview..... 2
 Greater Airpark Environs..... 2
 Greater Airpark Community Area Plan..... 5

2. History..... 6
 Overview..... 6
 Greater Airpark History..... 6

3. Demographics..... 9
 Overview..... 9
 Workforce Population..... 9
 Resident Population..... 9
 Households..... 10
 Resident Age..... 10
 Resident Income..... 11
 Resident Education..... 11
 Resident Migration..... 11

4. Housing and Neighborhoods..... 12
 Overview..... 12
 Existing Housing and Neighborhoods..... 12
 Housing Condition..... 13
 Housing Compatibility..... 14
 Housing Affordability..... 15

5. Employment & Economic Conditions..... 17
 Overview..... 17
 Existing Economy..... 17
 Existing Economic Goals..... 17

5. Employment & Economic Conditions (continued)	
Labor Force & Employment Trends.....	18
Top Employers.....	18
Space and Land Absorption.....	18
Economic Impact.....	19
Land Value.....	19
Tourism.....	20
Major Investments & Development Projects.....	20
Regional Competition.....	22
Economic Trends.....	24
6. Land Use and Zoning.....	25
Overview.....	25
Greater Airpark Land Uses.....	25
Undeveloped Land.....	29
Zoning Overview.....	29
Zoning Trends.....	30
Building Height.....	30
7. Infrastructure, Community Facilities, Social Services	32
Overview.....	32
Existing Community Facilities Goals.....	32
Community Facilities.....	32
Libraries.....	32
Schools.....	32
Parks.....	34
Community Centers.....	37
Municipal Buildings.....	37
Event Facilities.....	37
Social Services.....	38
Daycare Facilities.....	38
Non-Profit Organizations.....	38
Community Health Facilities.....	38
Hospitals.....	38
Medical Clinics.....	39
Assisted and Independent Living Facilities.....	39
Commercial Gyms/ Athletic Facilities.....	39
Spas and Wellness Centers.....	39
Churches and Spiritual Establishments.....	39
Public Safety.....	39
Code Enforcement.....	39

7. Infrastructure, Public Facilities & Social Services

(continued)

Fire Department.....	40
Police Department.....	41
Utilities.....	41
Water.....	41
Reclaimed Water.....	42
Wastewater.....	42
Electricity.....	43
Communications.....	43
Solid Waste.....	44
Storm Drainage.....	44
Capital Improvement Projects (CIP).....	45

8. Mobility, Parking & Wayfinding..... 46

Overview.....	46
Existing Mobility Policies.....	46
Street Classification.....	46
Traffic Volumes/ Capacity.....	47
Transit.....	48
Bicycle & Pedestrian Facilities.....	49
Bicycle Facilities.....	49
Pedestrian Facilities.....	49
Trails.....	49
Parking.....	50
Structured Parking.....	50
On-Street Parking.....	50
Surface Parking.....	50
Shared Parking.....	50
Bicycle Parking.....	51
Park-and-Rides.....	51
Wayfinding and Signage.....	51
Proposed Projects.....	52

9. Design and Character..... 54

Overview.....	54
Design Identity.....	54
Existing Community Design Goals.....	54
Urban Form and Character.....	54
Rural Character.....	55
Suburban Character.....	55
Urban Character.....	55

9. Design and Character (continued)	
Large-Scale Commercial Character.....	56
Small-Scale Commercial Character.....	56
Natural or Recreation Character.....	57
Streetscapes.....	58
Transitional.....	58
Urban.....	58
Natural.....	58
Frank Lloyd Wright Design Guidelines.....	58
Scottsdale Road Design Guidelines.....	59
Scenic Roadways.....	59
Overhead Power Lines.....	59
Prominent Visual Features.....	60
Sensitive Edges.....	60
Public Art.....	60
10. Natural Environment & Historic Preservation.....	61
Overview.....	61
Existing Environmental and Preservation Goals.....	61
Climate.....	61
Air Quality.....	61
Floodplains and Stormwater.....	62
Geology.....	63
Topography.....	63
Soils.....	64
Biology.....	64
Flora.....	64
Tree Cover.....	64
Fauna.....	64
Wildlife Hazard Management.....	65
Hazardous Materials, Pollution & Solid Waste.....	65
Noise.....	66
Lighting.....	66
Odors.....	67
Green Building.....	67
Archeological Resources.....	67
Historical Resources.....	67
11. Aviation.....	68
Overview.....	68
Scottsdale Airport Overview.....	68
Existing Aviation Goals.....	68

11. Aviation (continued)

Scottsdale Airport Economic & Financial Condition	69
Airport Master Plan.....	69
Part 77 Airspace Plan.....	70
Part 150 Noise Compatibility Program.....	71
Aviation-related Businesses.....	72

Appendix I: Public Outreach Interim Summary Report, December 2008.....	A1-1
Appendix II: Greater Airpark Zoning Districts Summary.....	A2-1
Appendix III: Supporting Reference Documents.....	A3-1
Appendix IV: Street Classification.....	A4-1
Appendix V: Capital Improvement Project Summary..	A5-1
Appendix VI: Case Studies.....	A6-1
Appendix VII: Housing Types.....	A7-1
Appendix VIII: Economic Analysis of the Greater Airpark, 2009 (Executive Summary).....	A8-1
Appendix IX: Demographic Statistical Areas.....	A9-1
Appendix X: Planning History Timeline.....	A10-1

List of Tables

3. Demographics

3-1 Greater Airpark Workforce Distribution..... 9
3-2 Residential Population Growth and Projections..... 9
3-3 Greater Airpark Age Distribution, 2000..... 10
3-4 Educational Attainment Comparison..... 11

4. Housing and Neighborhoods

4-1 Comparison of Average Housing Characteristics, 2005. 13
4-2 Greater Airpark and Scottsdale Housing Growth..... 13
4-3 Median Home Prices, 2006-2007..... 15
4-4 Median Monthly Rent Comparison, 2007..... 15

5. Employment and Economic Conditions

5-1 Scottsdale Largest Employers, 2008..... 17
5-2 Business Square Footage Growth 1997-2007..... 18
5-4 Privilege, Use & Bed Tax Paid since 2004..... 19
5-4 Regional Competitor Size and Projected Employment.... 23

6. Land Use and Zoning

6-1 General Plan/ Greater Airpark Land Use Breakdown..... 25
6-2 Greater Airpark Zoning, 2008..... 29

7. Infrastructure, Community Facilities & Social Services

7-1 Arabian Library Statistics and IFLA Standards..... 32
7-2 Greater Airpark & Vicinity Public School Enrollment..... 34
7-3 Greater Airpark & Vicinity Park Space..... 35
7-4 Greater Airpark & Vicinity 2030 Park Needs..... 35
7-5 Greater Airpark Crime Incidents, 2008..... 41

8. Mobility, Parking and Wayfinding

8-1 Greater Airpark Transit Service, 2007..... 48
8-2 Schedule of Shared Parking Calculations..... 50

11. Aviation

11-1 Airport Operating Revenues, Expenses and Outcome.. 69
11-2 Forecast Hangar Square Footage Requirements..... 69

List of Figures

1. Introduction

1-1 Community Area Boundaries Map..... 1
 1-2 Greater Airpark Environs Map..... 2
 1-3 Greater Airpark Study Area Map..... 3

3. Demographics

3-1 Two or More Person Household Composition..... 10
 3-2 Geographic Location of Population Living in a
 Different House in 1995..... 11

4. Housing and Neighborhoods

4-1 Residential Areas in the Greater Airpark & Vicinity..... 12
 4-2 Major Neighborhoods in Greater Airpark Vicinity..... 13
 4-3 Possible Areas Where Housing May Be Incompatible..... 14
 4-5 Median-Priced Home and Median Salaries..... 16
 4-6 Median Rent and Median Wage..... 16

5. Employment and Economic Conditions

5-1 Commercial Building Permit Trendline, 1998-2007..... 18
 5-2 Recent Development & Investments..... 21
 5-3 Regional Competitors Map..... 22

6. Land Use and Zoning

6-1 Greater Airpark Conceptual Land Use Map, 2006..... 26
 6-2 2001 General Plan Growth Areas Map..... 28
 6-3 Greater Airpark Undeveloped Land Map..... 29
 6-4 Building Height Standards by Existing Zoning Map..... 30

7. Infrastructure, Community Facilities & Social Services

7-1 Public and Private Schools, 2008..... 33
 7-2 Higher Learning Institutions Map..... 34
 7-3 Parks in the Greater Airpark & Vicinity..... 36
 7-4 Greater Airpark Daycares Map..... 38
 7-5 Code Enforcement Case Density, 2007-2008..... 40
 7-6 Greater Airpark Fire Stations 40
 7-7 Greater Airpark Police Beats..... 41
 7-8 Stormwater Basins and Washes..... 44

8. Mobility, Parking and Wayfinding

8-1 Greater Airpark Bus Routes, 2009..... 47

9. Design and Character	
9-1 Existing Character by Area Map.....	54
9-2 Typical Rural Character.....	55
9-3 Typical Suburban Character.....	55
9-4 Typical Urban Character.....	56
9-5 Typical Large-Scale Commercial Character.....	56
9-6 Typical Small-Scale Commercial Character.....	57
9-7 Typical Natural or Recreation Character.....	57
9-8 Streetscapes Map.....	58
9-9 Greater Airpark Overhead Power Lines.....	59
9-10 Sensitive Edges Map.....	60
10. Natural Environment and Historic Preservation	
10-1 Greater Airpark FEMA Flood Zones Map.....	62
10-2 Greater Airpark 50 CFS Washes Map.....	63
10-3 Environmentally Sensitive Lands Map.....	63
10-4 U.S. Aircraft Wildlife Strikes, 1990-2007.....	64
10-5 Hazardous Material Handling Facilities Map.....	65
10-6 Ambient Light Areas Map.....	66
11. Aviation	
11-1 Parcels with Taxilane Access Map, 2007.....	68
11-2 FAA Part 77 Imaginary Surfaces Map.....	70
11-3 2025 Noise Contours.....	71

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Executive Summary

The Greater Airpark Existing Conditions Report provides background information detailing the existing conditions and projected future conditions of the Greater Airpark Community Planning Area. Coupled with community input, the report provides recommendations for the vision, goals and policies of the Greater Airpark Community Area Plan and explains the plan's relationship to the General Plan and other city-adopted plans and policies.

Key Facts, Findings and Policy Considerations

The following are some of the key facts and findings from the Greater Airpark Existing Conditions Report and 2009 Economic Analysis of the Greater Airpark conducted by Gruen Gruen + Associates (Appendix VIII) organized by report chapter or theme, followed by potential policy considerations related to each topic:

Environs

Key Facts:

- The Greater Airpark (or study area) comprises five percent of Scottsdale's total land area, or 5,409 acres;
- It is the largest employment center serving a growing sub-region, north and east of Paradise Valley, that will more than double in population by 2030; and
- It is centrally located between two Mayo Hospitals and two Scottsdale Healthcare Campuses.

Policy Consideration:

Recognize the Greater Airpark as a key asset to the regional economy and the City of Scottsdale.

Regional competition will endanger the Greater Airpark's strategic advantage in the near future. Policies should focus on the retention, attraction and support of area businesses.

Implementation programs, such as enhancing the existing industrial and general commercial zoning districts to supply employment now and in the future, as well as attraction of regional employment, such as bio-sciences, corporate offices and research and development, will be important to maintaining the area as a major employment center.

Demographics

Key Facts:

- There are 2,600 residents in the Greater Airpark and more than 41,000 residents in a one-mile radius, of which 60% have a college degree;
- The population is aging, with approximately 63% at or near retirement; and
- Greater Airpark residents have higher median incomes than most of Maricopa County.

Policy Consideration:

Maintain and expand social services and facilities to accommodate future demographic shifts.

Additional social services, programs and community facilities will be necessary as the population in the vicinity of the Greater Airpark ages. Senior centers, assisted and independent living facilities, group homes, medical clinics and adult daycares are examples of potential future facilities. Services for workers with young children, such as daycares and after school programs, will also be important.

Housing and Neighborhoods

Key Facts:

- The Greater Airpark contains only 1.2% of Scottsdale's housing stock;
- It is surrounded by residential neighborhoods; and
- Residential neighborhoods that abut the area to the south are primarily rural in character.

Policy Consideration:

Sustain and enhance sensitive transitions between single-family residential neighborhoods and more intense commercial and employment areas.

The continued protection of residential neighborhoods in close proximity to the study area should be a primary goal of the Greater Airpark Community Area Plan. Policies should be established that promote effective transitions through the design and form of buildings in close proximity to residential neighborhoods, as well as proper land use compatibility between the two areas. Appropriate buffering, building setbacks and building step-backs from employment areas to residential areas will help to achieve this goal. The provision of pedestrian connections through appropriate site design and street elements will increase compatibility between residential neighborhoods and neighboring commercial and employment areas.

Noise, odors, traffic and lighting impact residential areas and other sensitive land uses, such as schools, potentially reducing the overall quality of life in the city. Policies should focus on minimizing land uses that produce nuisance noise, odors and lighting close to residential areas. At the same time, residential land uses should not impede upon land uses that provide employment opportunities in the community. Policies should also discourage cut-through traffic on neighborhood-serving streets, such as Thunderbird Road east of Hayden Road.

Employment and Economics

Key Facts:

- The Greater Scottsdale Airpark is the second largest employment center in Arizona, employing approximately 50,000 people as of 2006;
- The area employs more than one in four, or 28%, Scottsdale workers;
- Private sector employment in the area grew by 112%, or 6.5% annually, from 1995 to 2007;
- The area's economic base has shifted away from traditional manufacturing over the past twelve years;
- Nearly one-quarter of Scottsdale's tax revenues are generated in the Greater Airpark annually;
- Nine of Scottsdale's 30 largest employers are located in the area;
- Commercial building in the area increased 193% from 1997 to 2007; and
- Sixteen percent, or 1,499, of Scottsdale's hotel rooms are located in the Greater Airpark.

Policy Considerations:

The Greater Airpark should focus on becoming a premier office agglomeration.

According to Gruen Gruen + Associates, and given the supply competition in Phoenix and on the lands of the Salt River Pima-Maricopa Indian Community, policies should encourage diverse and new types of office development. The design, height, amenities, and products developed or redeveloped should reflect the image of a premier office agglomeration. Adequate site planning, landscaping, parking, and access areas should be incorporated into these developments.

Sustain and expand business diversity within the Greater Airpark.

The Greater Airpark has historically been a hub for diverse business types, from start-ups to national headquarters. Goals and policies in the Community Area Plan should focus on maintaining and enhancing clusters of diverse business types and sizes.

Land Use

Key Facts:

- Eighty percent of Scottsdale’s General Plan-designated employment areas are in the Greater Airpark;
- The area contains the largest industrial-zoned area within Scottsdale;
- The 2001 General Plan designated a large portion of the area as a Growth Area, or an area most appropriate for development focus, multi-modal transportation, and concentration of a variety of uses to discourage sprawl;
- Twenty-five percent of the area is undeveloped; and
- One unique land use feature, not typically found throughout the rest of the city, is the cluster of recreational facilities, such as rock climbing, dance studios and ice rinks, located in the area.

Policy Consideration:

Maintain and enhance the diversity of land uses within the Greater Airpark.

As identified by the community, the diversity of land uses in the area is what makes the Greater Airpark special. The land use categories of the 2001 General Plan should be examined and/or streamlined to better fit the future needs of this diverse area.

In community visioning exercises in 2008, employers explained that they generally have a hard time recruiting and retaining entry-level employees because of long and expensive commutes from areas where housing costs are lower. In the end, these commuters contribute to the overall traffic congestion in the area. Given the intense competition for office and retail uses that can be expected in the region, coupled with traffic concerns, encouraging relatively high-density housing integrated into mixed-use developments may facilitate efficient development patterns, encourage replacement of obsolete building spaces, and reduce automobile reliance.

Public Services and Facilities

Key Facts:

- The Greater Airpark lies within two school districts: Paradise Valley Unified and Scottsdale Unified;
- The area currently contains two parks, encompassing 89 acres of park land, or 10% of total Scottsdale park land;
- Code enforcement violations related to illegal signs, usually A-Frame signs, is common in the area because of sign ordinance restrictions and little street visibility for some businesses;
- The area will require additional water and wastewater capacity if additional intensification occurs; and
- There is increasing demand for additional electric and communications service in the area south of the CAP Canal.

Policy Considerations:

Identify and meet the needs of infrastructure requirements in advance of new development.

Infrastructure requirements should be identified and met in advance of the next market cycle and should be improved to, at a minimum, keep pace with development and the needs of space users. Additional water, sewer, electric and communications capacity will be required for increases in population and commercial intensity. Policies should also focus on the continued enhancement of the Greater Airpark's street infrastructure. The plan should incorporate and support the planned street network outlined in the 2008 Transportation Master Plan.

Policies should also encourage stormwater detention to prevent environmental hazards; however, the costs associated with on-site detention (particularly for small lots) can be detrimental to property and business owners. Revised drainage requirements, incentives and public-private partnerships will be necessary to maintain and improve stormwater infrastructure in the future while still enabling investment in the area.

Ensure a safe environment for all residents, employees and visitors of the area.

Public safety is important to the community, and policies that maintain current safety levels should subsequently be incorporated into the Plan. Following established Federal Aviation Regulations (FAR), building heights should not penetrate the FAR Part 77 boundaries, and sensitive land uses—such as housing and schools—should not locate within the Part 150 noise contours. In addition, emergency service levels should be sustained in accordance with increases in population and workforce.

Mobility and Parking

Key Facts:

- The Greater Airpark is served by a regional street network, including the Loop 101 Freeway, Scottsdale Road and Bell Road/Frank Lloyd Wright Boulevard;
- The area is forecast to experience an increase in traffic volumes in 2030, with anticipated problem areas of Scottsdale Road, from Thunderbird Road to Loop 101, and Frank Lloyd Wright Boulevard, from Hayden Road to Loop 101;
- The Greater Airpark currently lacks internal bicycle and pedestrian connectivity;
- The physical orientation of the Scottsdale Airport breaks up the traditional street grid found in the rest of the city, thus limiting the number of east-to-west street linkages south of the CAP Canal;
- Four fixed-route bus lines and two express bus routes serve the area and have all experienced ridership increases since 2006; and
- There are 26,320 surface (parking lot) parking spaces south of the CAP Canal, which is approximately 9.2 million square feet of asphalt dedicated to parking lots alone.

Policy Consideration:

Continue to reduce traffic congestion and increase public transportation options through public-private partnerships and accessibility.

Traffic congestion in certain areas of the Greater Airpark is not just a peak hour concern, but is one that occurs throughout much of the day. In order to make transportation viable and capable of adjusting to changing conditions in the area, it will be important to enlist the support of local businesses and property owners. One example, recommended by the 2008 Transportation Master Plan, is the development of Transportation Management Associations (TMAs) that could maintain or improve employee access to certain areas, improve transportation choices for

commuters, and/or reduce the demand for parking. TMAs are typically city-assisted groups of businesses or non-profit corporations that form to improve mobility in a district.

Policies and implementation strategies in the Community Area Plan should promote the development of TMAs which will be essential to reductions in traffic congestion. Implementation strategies to alleviate traffic congestion and increase transit present opportunities for public-private partnerships to provide internal transit and other solutions, such as car and van pooling, telecommuting and staggered work hours. Pedestrian and bicycle connections, along with mixed land uses, should also be considered as potential congestion-reducing strategies in the plan.

The business community identified accessibility as one of the areas' greatest assets, even though traffic congestion was listed as one of the greatest issues in the area. Policies should ensure that connections to the Loop 101 Freeway, regional arterial streets and regional transit services are maintained and enhanced wherever possible as outlined in the 2008 Transportation Master Plan.

Design and Character

Key Facts:

- The character and identity of the Greater Scottsdale Airpark is derived from the Scottsdale Airport, residential areas, the McDowell Mountains, Sonoran Desert, Frank Lloyd Wright and the Central Arizona Canal;
- The majority of the area has been built under development standards which have limited design flexibility; and
- Many buildings are becoming obsolete because of age and inadequate size to meet everyday business needs.

Policy Consideration:

Encourage development character that reflects the urban, economic and technological environment of the Greater Airpark, and that promotes community health and history.

Goals and policies should ensure that the character of future development is attuned to the economic and technological environment of the next two decades. Design that contributes to community health, such as pedestrian-oriented streets, bicycle lanes, fitness facilities, medical clinics and safe places for relaxation; takes advantage of primary view corridors (which may be identified as a part of the Plan); and provides public space should be encouraged. Designs of public art, buildings, and open space should also consider promoting aviation and its history in the community. The 2001 General Plan streetscape categories in the area should be examined and potentially revised to meet future development character goals. Recommended programs may include design guidelines or incentive programs for designs that meet the Community Area Plan's goals.

In order to avoid physical and economic obsolescence, it will be important to encourage the appropriate scale and type of development in the Greater Airpark. If development is too small or inappropriately designed to be viable for a variety of land uses, future owners will not have the economic strength to properly maintain either the physical structures or the activities they contain.

Areas suitable for increased building intensity, along with appropriate building types, will be explored as a part of the Community Area Plan. The usefulness of the Industrial and General

Commercial Zoning Districts, to support revitalization and encourage appropriate development scales, may be considered as recommended implementation strategies of the plan. For example, building height standards could be revised to reflect current and future market needs.

Natural Environment

Key Facts:

- The elevation of the area rises 241 feet from south to north, creating interesting views; and
- Historically, green building designs and features have not been practiced in the area.

Policy Consideration:

Encourage energy and resource conservation through green building, environmental stewardship and proper site design.

Energy conservation through green building, environmental stewardship, and proper site design will reduce the amount of utilities required for new developments. Encouraging proper building design that conserves energy and other resources could significantly reduce the amount of infrastructure that needs to be added or upgraded in the Greater Airpark in the future.

Aviation

Key Facts:

- A defining feature of the area is that it contains the Scottsdale Airport, one of the busiest single-runway facilities in the nation;
- The area south of the Central Arizona Canal boasts a unique situation, in that several lots have direct taxilane access to the airfield, which most, if not all, U.S. Airports do not allow; and
- Land uses, building heights, and construction standards in certain vicinities of the Airport are subject to Federal Aviation Administration (FAA) Regulations.

Policy Consideration:

Sustain aviation as an identifiable characteristic of the area.

Airport-related goals should focus on the safe and efficient operations of the Scottsdale Airport. Noise mitigation measures for buildings within certain distances of the Airport, special aviation-use standards, and discouragement of incompatible land uses should all be examined to further protect the health and safety of area residents and visitors.

Policies should encourage Airport facility maintenance and improvements that reflect an upscale image. “Through-the-fence” operations, or businesses with taxilane access from their lots, should be considered in policies, in addition to being considered as opportunities and defining features of the Greater Scottsdale Airpark.

Report Preface

The aforementioned items for consideration do not represent an exhaustive list of issues for the Greater Airpark; they represent ideas, opportunities and concerns for the future and may be addressed as a part of the Community Area Plan. Information in this report is derived from a variety of sources and projections, thus the city does not attest to its complete accuracy. The figures in this report are intended to provide a general basis for existing and future conditions in and around the Greater Airpark. The Appendices provide additional technical information, community input summaries, case studies and references.

1. Introduction

Overview

This report provides background detailing the existing conditions and projected future conditions of the Greater Airpark Community Planning Area. Coupled with extensive community input, the report provides the basis for the vision, goals and policies of the Greater Airpark Community Area Plan. This report also explains the plan’s relationship to the city’s General Plan and other city-adopted plans and policies.

It should be noted that although each chapter of this report represents an aspect of the Greater Airpark’s development, all aspects are interrelated. For example, land use intensity and type will affect the types of transportation systems required for the movement of people, goods and services.

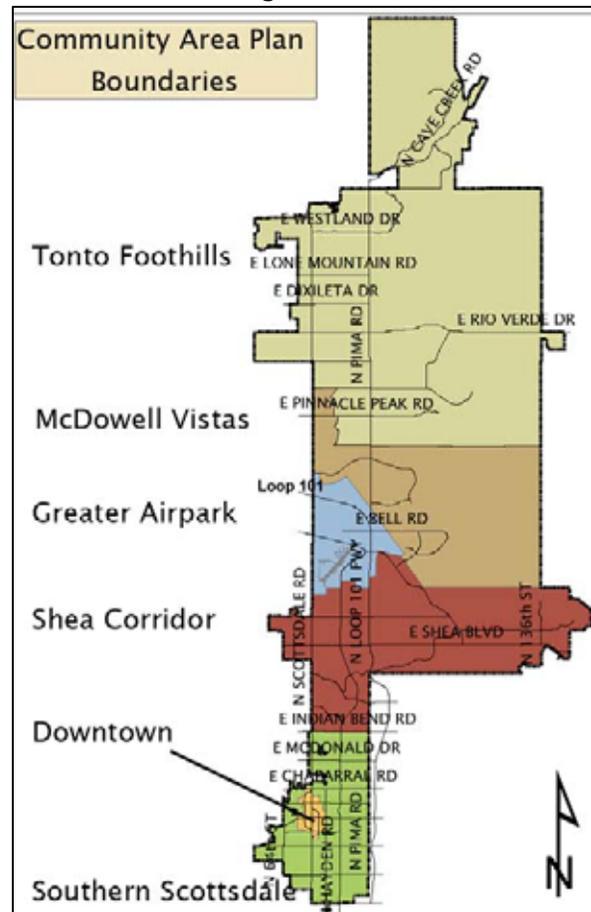
The General Plan

The General Plan contains the city’s policies on character and design, land use, open spaces and the natural environment, business and economics, community services, neighborhood vitality, transportation, energy and growth issues. Its focus is on shaping the physical form of the city, yet it includes policies and statements about other aspects of the community as well. (Scottsdale General Plan, 2001).

The General Plan is used by city boards and commissions, and ultimately the City Council, to evaluate policy changes and to make funding and budget decisions. It is used by city staff to evaluate building and development and to make recommendations on projects. It is used by citizens and neighborhood groups to understand the city’s long-range plans and proposals for different geographic areas. The General Plan provides the basis for the city’s development regulations and the foundation for its capital improvements program. (Scottsdale General Plan, 2001).

The State of Arizona requires an update to the General Plan every ten years, thus requiring an update to Scottsdale’s 2001 General Plan by 2011. The existing General Plan recommended Character Area Planning as a way to define, maintain and/or enhance a desired ‘character’ for a specific area and to maintain the quality of planning and development in Scottsdale. Twenty-four geographic areas were identified as Character Areas. However, only a few of the Character Area Plans were adopted and most were never created. The Greater Airpark originally consisted of the Airpark and Sonoran Regional Core Character Areas. See the 2001 General Plan for more information.

Figure 1-1:



Source: Advance Planning, Planning & Development Services, 2008

Community Area Planning

In 2007, the Planning and Development Services Department began to update the General Plan using a process referred to as Community Area Planning. The process accomplishes similar objectives of Character Area Planning, but on a larger geographic scale. Each Community Area Plan will be adopted as a chapter of the 2011 General Plan.

Figure 1-1 (previous page) shows the six community planning areas within Scottsdale. Each area is represented with a defined boundary; however, because neighboring areas affect one another, information from surrounding community areas is examined as a part of each study. For example, the neighborhoods in the Shea Corridor surround the Greater Airpark and are affected by the commercial activity and regional events that happen there. For the same reasons, the planning areas also consider neighboring municipalities, such as Phoenix.

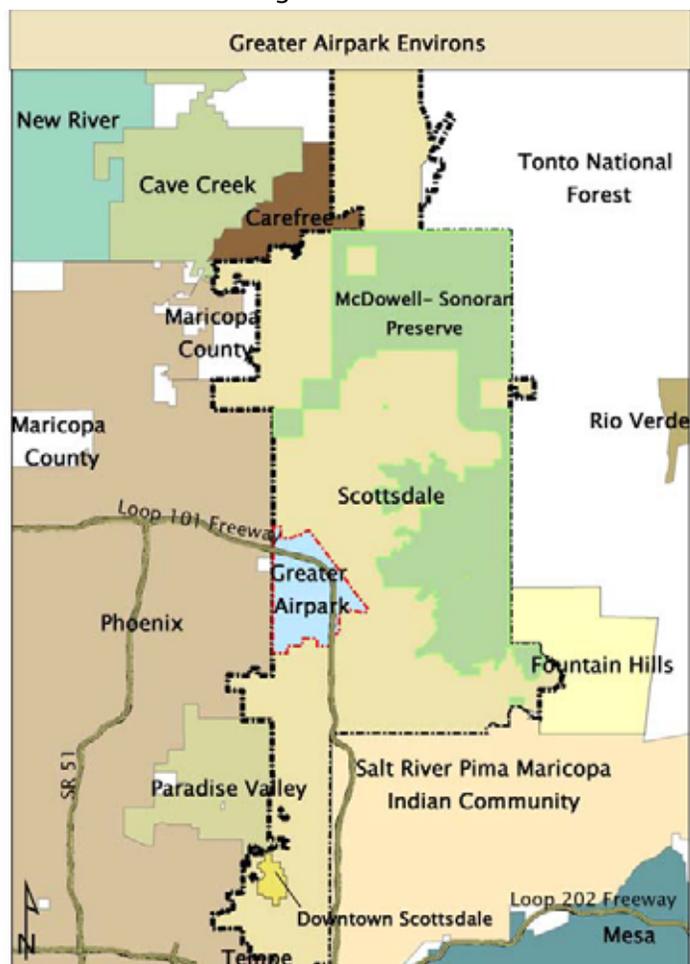
Each Community Area Plan will feature long-range goals, policies and implementation strategies unique to the area, as identified through an extensive public outreach process, as well as discussions on items such as future land use, mobility and design. Careful consideration is taken to ensure that each Community Area Plan aligns with other adopted plans and policies within the city. The Community Area Plans will ultimately be reviewed and adopted by the Planning Commission and City Council.

Greater Airpark Environs

The Greater Airpark's 5,400 acres are situated in a unique place in the Valley. The Greater Airpark lies due east of northern Phoenix, south of northern Scottsdale, west of the McDowell Sonoran Preserve—city-owned land dedicated to preserving the McDowell Mountains and Sonoran Desert in Scottsdale—and north of both the Shea Boulevard/ Scottsdale Road mixed-use area and Downtown Scottsdale. It is immediately surrounded by residential areas and centrally situated between two Mayo Medical Campuses and two Scottsdale Healthcare Campuses.

The Greater Airpark is a part of a larger sub-region in the East Valley. There are virtually no other employment areas of the study area's magnitude north and east of Paradise Valley (see Figure 1-2). Thus, it serves as the major shopping and job center for a large market area in the northeast Valley.

Figure 1-2:



Source: 2008 Advance Planning, Planning & Development Services; Scottsdale GIS

Figure 1-3: Greater Airpark Study Area

Several places of note are located within the Greater Airpark study area and vicinity and will be referred to throughout this document. The following locations are also identified in Figure 1-3:

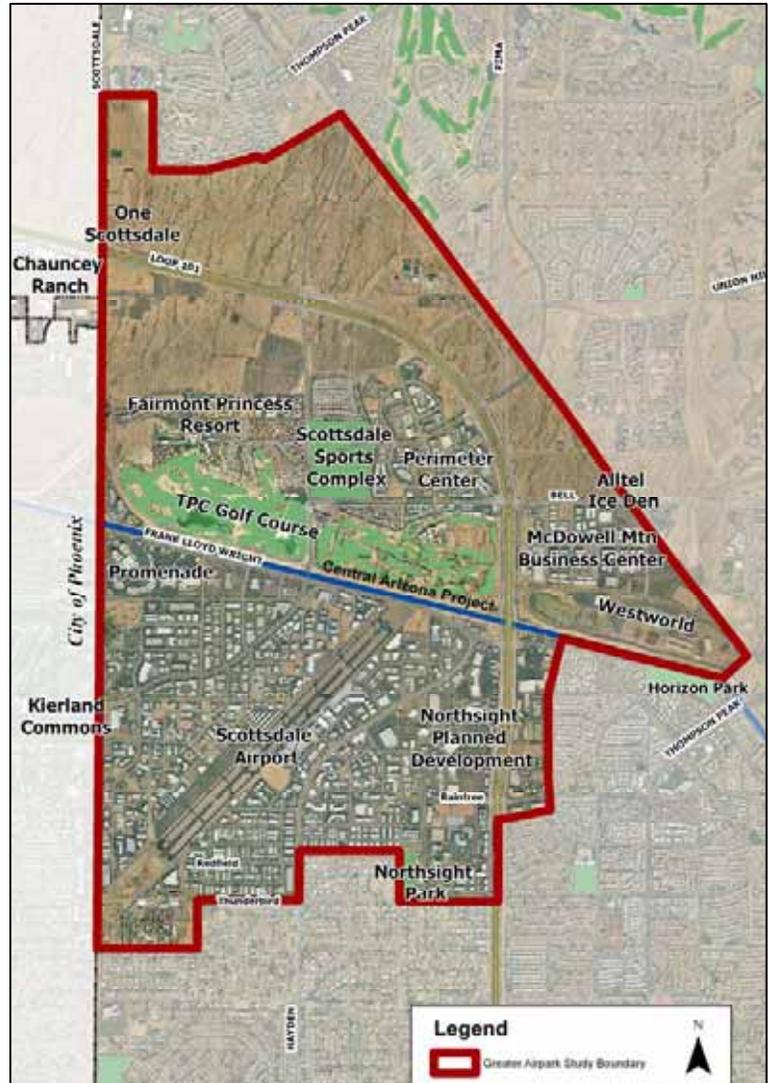
Scottsdale Airport- Located in the southern portion of the study area, the 297-acre Scottsdale Airport is one of the busiest single-runway, non-commercial facilities in the nation. Aviation related activities in Scottsdale contribute \$140 million¹ to the regional economy annually.

Loop 101 Freeway- Also known as the Pima Freeway, the Loop 101 Freeway begins at Interstate 17 in Phoenix; travels through the West Valley and north Phoenix; and makes its way through Scottsdale (and the Greater Airpark); finally terminating at the Loop 202/ San Tan Freeway. Construction of the Pima Freeway through Scottsdale was completed in 2003.

Kierland Commons & Kierland Westin Resort- Kierland Commons is one of the most recognized destinations just outside the study area in Phoenix. The development is a “lifestyle center” mall which mimics the pedestrian and shopping atmosphere of traditional downtown areas. Kierland features on-street parking, covered walkways, condominiums, retail shopping and restaurants. The western portion of Kierland features the Westin Resort Hotel and Spa.

WestWorld- This city-operated and nationally-recognized equestrian and event facility is comprised of approximately 120 acres in the northeastern portion of the study area. It hosts popular events such as the Barrett-Jackson Car Auction, Scottsdale Arabian Horse Show, other horse shows, dog shows, and other community events.

Central Arizona Project (CAP) Canal- The CAP Canal is a 336-mile diversion canal that delivers water to the Valley from the Colorado River. The CAP Canal bisects the Greater Airpark study area.



Source: Scottsdale Geographic Information Systems; Advance Planning 2008

¹ Source: Arizona Department of Transportation.

Tournament Players Club (TPC) Golf Course- This nationally-known, city-owned golf course was built in 1986 and is host to the annual FBR Open Golf Tournament—the largest attended golf event in the world. The TPC is designated a “Certified Audubon Cooperative Sanctuary” because it helps to preserve and enhance wildlife habitat and natural resources in the area. It is located just north of the CAP Canal and east of Scottsdale Road in the study area.

Fairmont Scottsdale Resort and Princess Village- Formerly the Princess Resort, the Fairmont is located just north of the TPC and offers 649 guest rooms, including more than 100 guest casitas.

Scottsdale Sports Complex- The 71-acre complex serves two functions—community sports facilities and stormwater detention for the CAP Canal. It has attracted national and regional tournaments in soccer, lacrosse, football, and rugby and serves as an overflow parking facility for the FBR Open.

Alltel Ice Den- The Ice Den is a 120,000 square-foot ice skating facility in the northeastern portion of the study area. The facility is the home training facility of the Phoenix Coyotes hockey team, host to national figure-skating events, and serves as a party and meeting center.

Scottsdale Promenade- The Scottsdale Promenade is an 85-acre regional, mixed-use shopping center at the southeast corner of Scottsdale Road and Frank Lloyd Wright Boulevard with approximately 750,000 square feet of retail, including Lowe’s, Nordstrom Rack and several upscale restaurants. The Frank Lloyd Wright Spire art piece is located within the development as well.

Northsight Planned Development- This area, located between Hayden Road, Loop 101 and Raintree Drive, is often referred to as “the big box area” because it contains a number of large retail establishments such as Wal-Mart, Costco, Sams Club and Kohls.

Auto Dealers- There are three sets of auto dealers within the vicinity of the Greater Airpark: along the southern side of Frank Lloyd Wright Boulevard and west of Greenway-Hayden Loop; east of the Airport along Hayden Road; and on the west side of Scottsdale Road, north of Frank Lloyd Wright Boulevard. The third set is technically within Phoenix city limits, but the dealers claim a Scottsdale address.

One Scottsdale- One Scottsdale is a mixed-use development that is also home to the new Henkel (Dial) Headquarters at the northeast corner of Scottsdale Road and Loop 101. More detailed information on One Scottsdale can be found in the Economic and Employment Chapter of this report.

Perimeter Center- Perimeter Center is a 260-acre master planned development located at the northwest corner of Bell Road and Loop 101 Freeway, containing various offices, hotels and retail establishments.

McDowell Mountain Business Center- This business center is a 14+ acre site located at 90th Street and Bahia Drive, just north of WestWorld. It contains the Alltel Ice Den, many recreational-type businesses and several office and retail establishments.

Chauncey Ranch- Chauncey Ranch is a 160-acre mixed-use development located in Phoenix on the west side of Scottsdale Road, south of the Loop 101 Freeway. It is home to Allied Waste, Keller

Graduate School of Management, and a variety of uses such as medical offices, financial-service firms, residences, restaurants, a market and a church.

Greater Airpark Community Area Plan

The Greater Airpark study area boundaries are generally described as Grayhawk Neighborhood to the north, the power line corridor and WestWorld to the northeast, 90th Street and the Loop 101 to the east, Thunderbird Road to the south and Scottsdale Road to the west. Figure 1-3 (page 3) illustrates the study area.

The Greater Airpark is unique in comparison to other community areas in Scottsdale. It contains the largest of the few industrial-zoned areas within Scottsdale. It presently ranks as the second largest employment center in the Valley (Phoenix Metropolitan Area), and it is expected to become the largest regional employment center in 2010. It also contains the Scottsdale Airport.

The planning process for the Greater Airpark is comprised of five phases:

Phase 1- Visioning & Data Gathering. In the initial stages of the process, related studies, plans, policies and regulations are reviewed; existing conditions are researched; an inter-departmental technical advisory group is organized; future conditions are projected; and an extensive public outreach process is initiated. Community members are asked to describe, explain and prioritize their visions for the Greater Airpark for the next 20 years.

Phase 2- Data Analysis. In this phase, all of the information from Phase 1 is analyzed and the impacts on the future are examined. An existing conditions report is created, detailing the issues and opportunities of the area.

Phase 3- Draft Plan. After evaluating the issues and opportunities of the area, a draft plan is created. The draft is presented to the community, the City Council and Planning Commission.

Phase 4- Final Plan. Upon receiving public comments and input from elected officials, the plan is revised and finalized.

Phase 5- Adoption/Implementation. In this phase, the plan is adopted as a chapter of the 2011 General Plan. Implementation programs occur immediately and continue over the next ten years.



Greater Airpark CAP Visioning Participants

Source: Advance Planning, Planning & Development Services, 2008

2. History

Overview

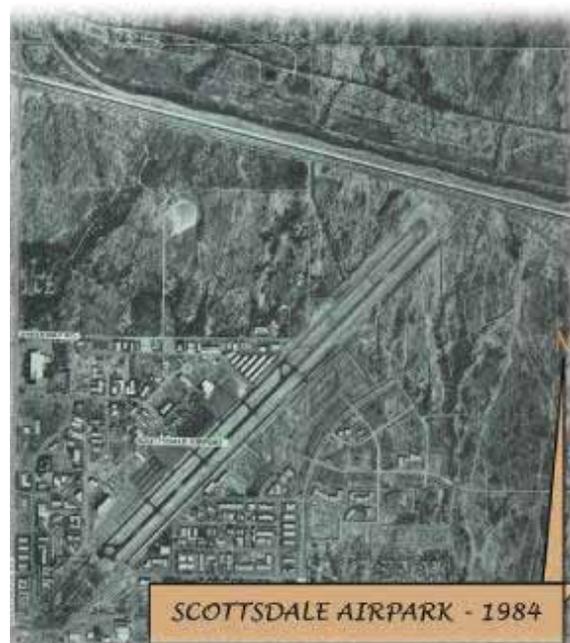
This chapter outlines the history of the development and planning of the Greater Airpark. Information in this chapter is attributed to a 2005 Scottsdale Airpark White Paper from the City of Scottsdale Planning Department, unless otherwise noted.

Greater Airpark History

The Greater Airpark and surrounding area, as it is known today, began its life nearly a century ago when E.O. Brown established DC Ranch north of Bell Road and east of Pima Road. His cattle drive stories of going south to the train depot and the Tovrea Stockyards in Phoenix are thought to be the sources of many of the cowboy legends associated with Scottsdale today. DC Ranch ended operations in the 1950s².

The modern development of the Greater Airpark began 70 years ago as part of a military strategy. A consortium of private investors initiated a program to train aviators from the United States and other countries who were being recruited to fly for the U.S. Army Air Corps and British Royal Air Force during World War II.

The consortium built and operated several training fields in the Valley including: Thunderbird I Airfield in Glendale, Falcon Field in Mesa and Thunderbird II Airfield in Scottsdale. All of the training facilities had runways, aircraft service and maintenance facilities, living quarters and support facilities which were acquired and operated by the federal government following the United States' formal declaration of war in December 1941.



Source: Airpark/Sonoran Regional Core Character Area Background Report 2001; Advance Planning, Planning & Development Services, 2008

² Fudala, Joan. 2001. *Historic Scottsdale: A Life from the Land*. Historical Publishing Network: San Antonio, Texas.

After the end of World War II, the demand for military pilots declined, and the aviator training fields were put up for sale under the federal Surplus Property Act. The airfield was eventually donated to Arizona State University (ASU). In 1953, the Seventh-Day Adventist Church acquired Thunderbird II Airfield from ASU. They developed a small part of the property with a church and a private school and operated the airfield as a private pilot training facility for their missionary program. Although they no longer use the airfield, the Seventh Day Adventist Church remains today.

In the early 1960s, local land developer, George Tewksbury, purchased 642 acres from the Seventh-Day Adventist Church to develop an industrial park. In 1966, shortly after annexing the area, the City of Scottsdale acquired 226 acres from Tewksbury—including the airfield—to develop a municipal airport.

Tewksbury had developed and promoted plans for the land adjacent to the Airport as well. He envisioned an industrial and business park where businesses could have taxiway access from their facilities. One of the first major companies to settle in the industrial park was Armour-Dial Technical Center in 1976.²

“By the mid 1980s the City and Scottsdale Chamber of Commerce felt... it would be helpful to entice a more diverse range of businesses to Scottsdale. In 1984, the McManis Group did an economic development study, then helped the City and Chamber formulate a strategy to attract certain types of industries to move to Scottsdale. They sought corporate and regional headquarters, research and development firms and business and professional service companies—all with high-paying jobs. With Armour-Dial’s research facility in the Scottsdale Airpark, and plenty of land available in and north of the Airpark, other corporate and regional headquarters, research and development facilities and high-tech companies began locating in the Airpark in the late 1980s and 1990s... By the late 1990s, the Scottsdale Airpark was among the top three employment centers in Arizona.”

--Joan Fudala, 2001

Scottsdale became a center for entrepreneurial activity, for companies that have since expanded into national and international markets, because investors were attracted to its exceptional quality of life. Businesses were also lured by attractions such as the Tournament Players Club (TPC) Golf Course which opened in 1986 and became host to the Phoenix Open golf tournament.² Other events, namely equestrian-related events, began coming to WestWorld at the same time.



Source: Advance Planning, Planning & Development Services, 2008

With all of the new businesses and attractions coming to Scottsdale, growth of residential areas north of the original city boundaries began to boom in the 1970s and 1980s. Because of this growth, access to an adequate water supply became a significant challenge for the City. Historically, Arizona residents relied on groundwater sources; however, because of the rate of growth in the State and City, residents and businesses used the groundwater faster than it could be replaced. Thus, in 1985, Scottsdale became one of the first municipal customers of the Central Arizona Project (CAP) water.²

In the 1990s, Scottsdale began to respond to the global market, becoming less of just a seasonal tourist town. The Scottsdale Princess, became one of many world-class resorts to attract international tourists to Scottsdale. During this time, international visitors accounted for twenty percent of the seven million tourists that visited Scottsdale each year.²

In 1995, Scottsdale citizens voted to increase the sales tax to preserve the McDowell Mountains at the eastern end of the Greater Airpark through the McDowell-Sonoran Desert Preserve, and, in 2003, the Pima Freeway/Loop 101, was completed and connected Scottsdale and the Greater Airpark to the rest of the Valley.



Historic Photos: Construction of the Loop 101 Freeway and the original Armour-Dial Headquarters
Source: Advance Planning, Planning & Development Services, 2008

The Greater Airpark has achieved several milestones in recent years. No longer solely considered an industrial park, the Greater Airpark has become recognized as a place offering a variety of housing, shopping, jobs, and entertainment and contributing significantly to the City, State and Regional economies.

A timeline illustrating the history of planning in the Greater Airpark is located in Appendix X.

3. Demographics

Overview

The purpose of this chapter is to illustrate the different aspects of the Greater Airpark’s population, including, workforce composition, resident population, education, income, age and migration.

Workforce Population

The Greater Airpark’s population is mostly comprised of the workforce. It is home to approximately 50,000 workers, as of 2006³, which is more than 19 times the number of Greater Airpark residents. Table 3-1 shows the estimated composition of the workforce in 2006 and projected composition in 2030.

Table 3-1: Greater Airpark Workforce Distribution

Job Type	Percent of Workforce (2000)	Percent of Workforce (2006)	Percent of Workforce (2030)
Office	40%	40%	40%
Industrial	30%	27%	23%
Retail	14%	21%	22%
Hospitality	6%	6%	6%
Other	10%	6%	9%

Source: Maricopa County Association of Governments (MAG) 2000, 2006, and 2030 Projections

The workforce composition is expected to remain relatively consistent in most sectors; however, it is estimated that the area will see a decrease in the percentage of industrial workers and increases in retail workers. The workforce population is projected to reach more than 73,000 by 2030.

In May 2008, the Scottsdale Area Chamber of Commerce conducted a survey of 150 businesses in the study area which revealed that of the surveyed businesses, 83% of their employees live outside of the City of Scottsdale. Of that 83%, 40% live in Phoenix, 40% live in the East Valley and 20% live in the West Valley.

Resident Population

It is estimated that the Greater Airpark’s resident population increased 13% between 2000 and 2006. In 2006, the residential population of the Greater Airpark was estimated to be 2,568³ and is expected to more than double by 2030. The residential population could reach 14,468⁴ at build-out⁵. The study area’s share of Scottsdale’s population decreased slightly between 2000 and 2006, but is expected to rise from 1% to 4% by 2030.

Table 3-2: Residential Population Growth and Projections

Year	Greater Airpark Population	Scottsdale Population	Share of City Population
2000	2,273	202,705	1.1%
2006 (estimate)	2,568	238,900	1.0%
2030 (projection)	10,199	275,950	3.7%
Build-Out (projection)	14,468	285,164	5.0%

Source: 2000 U.S. Census Bureau; Scottsdale/MAG SAZs; MAG projections; Advance Planning Land Use Impact Model Projections

³ Estimates and projections are based upon Transportation Analysis Zones (TAZ) and Socioeconomic Analysis Zone (SAZ) data and projections from the Maricopa County Association of Governments (MAG).

⁴ From Land Use Impact Model using ranges provided in 2001 General Plan land uses.

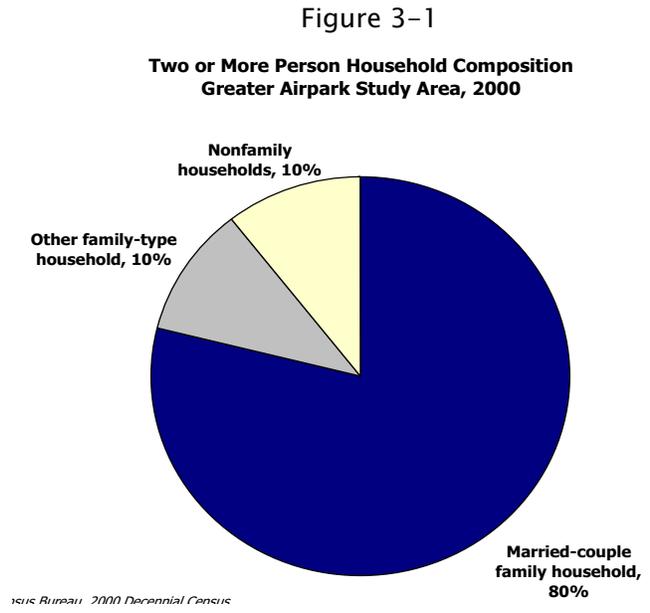
⁵ Build-out is defined as when all land in the study area has been developed to its full potential according to proposed future land uses in the 2001 General Plan

In contrast to the immediate study area, the one-mile radius that surrounds the Greater Airpark is primarily comprised of residential neighborhoods. As of 2006, the Greater Airpark and surrounding area contained an estimated population of 41,241, which is projected to increase by 68% in 2030. The figures found in Appendix IX illustrate the geographic areas identified as the basis for demographic, housing and economic analysis.

Households

The number of households in the Greater Airpark increased slightly from 1,039 in 2000 to 1,077 in 2006—an increase of 3.7%.⁶ The average household size of a single-family residential home was approximately two-and-a-half persons per household and multi-family was approximately two persons per household in 2000.

Figure 3-1 shows the composition of households in the Greater Airpark. Three-quarters of households in the area consist of two or more people, of which, 80% are characterized as married-couple families, 10% are non-family households (two or more unrelated people living together), and 10% consist of some other type of family household (e.g. one parent + child only, etc).



Resident Age

Table 3-3 illustrates the age distribution of the Greater Airpark and vicinity’s residential population.

The majority of the population is in the “adult” bracket (76%) according to the 2000 Census. The remainder of the population consists of seniors (19%) and children (5%). Within the city of Scottsdale, the Greater Airpark has a significantly larger proportion of adults, a difference of nine percent.

Table 3-3: Greater Airpark Age Distribution, 2000

Age Bracket (2008)	% of Greater Airpark Population	% of Scottsdale Population	% of Valley Population
Seniors, 65+ years	19%	17%	19%
Adults, 18-64 years	76%	67%	72%
Children, 0-17 years	5%	16%	9%

Source: U.S. Census Bureau, 2000 Decennial Census

The remainder of the Valley has a higher percentage of children (9%) than the Greater Airpark, and Scottsdale overall is much higher at 16%. At build-out, school-age children in the study area vicinity are expected to occupy 25% of the population.

⁶ Data from 2000 MAG SAZs and Scottsdale TAZ (2006)

Resident Income

In 1999, the median household income of the residential population of the Greater Airpark and vicinity was approximately \$80,693⁷. The area’s median income was higher than the Valley median of \$44,752.

The population in the vicinity of the Greater Airpark had a low poverty rate in 1999, with 3.6% being at or below poverty level. Of that percentage, 20.8% were single-mother households and 2.4% were single-father households. When compared to the remainder of the Valley, which had a poverty rate of 12% in 1999, the Greater Airpark had a smaller proportion of residents below poverty level.

Resident Education

The majority of the Greater Airpark and surrounding area residential population is college-educated.

Approximately 59% had at least an Associate Degree in 2000. This is significantly higher than the Valley’s 32% and Scottsdale’s 51%. More than 96% of the Greater Airpark’s population, age 25 years and older, is at least a high school graduate, which is also higher than both Scottsdale and the Valley’s average.

Table 3-4: Educational Attainment Comparison

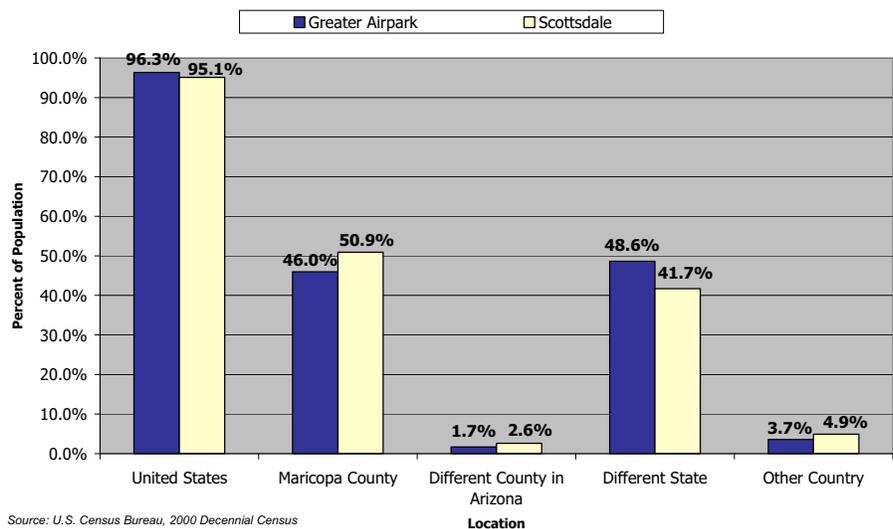
Education Level	Greater Airpark	Scottsdale	Valley
No High School Diploma	4%	6%	18%
High School Graduate	96%	94%	82%
College Degree	59%	51%	32%

Source: U.S. Census Bureau, 2000 Decennial Census

Resident Migration

The Greater Airpark, along with other areas of the Valley, has experienced a high percentage of resident in-migration in recent years. In 2000, over 75% of the Greater Airpark and surrounding area’s population had moved from a different house since 1995, compared to 60% of citywide residents⁸. Of that percentage, 46% had moved from another city in Maricopa County and nearly half, 49%, had moved to the area from another state. Figure 3-2 shows where residents, who moved to the Greater Airpark, lived in 1995.

Figure 3-2
Geographic Location of Population Living in a Different House in 1995
2000



Source: U.S. Census Bureau, 2000 Decennial Census

⁷ Source: U.S. Census Bureau, 2000 Decennial Census

⁸ 2000 U.S. Decennial Census

4. Housing and Neighborhoods

Overview

This chapter examines the supply, compatibility and attainability of the Greater Airpark’s existing housing stock.

Existing Housing and Neighborhoods

The 280 acres of existing residential land uses in the Greater Airpark constitute approximately one percent (1%) of Scottsdale’s total housing. The highest concentration of residential homes in the Greater Airpark is located north of the CAP Canal.

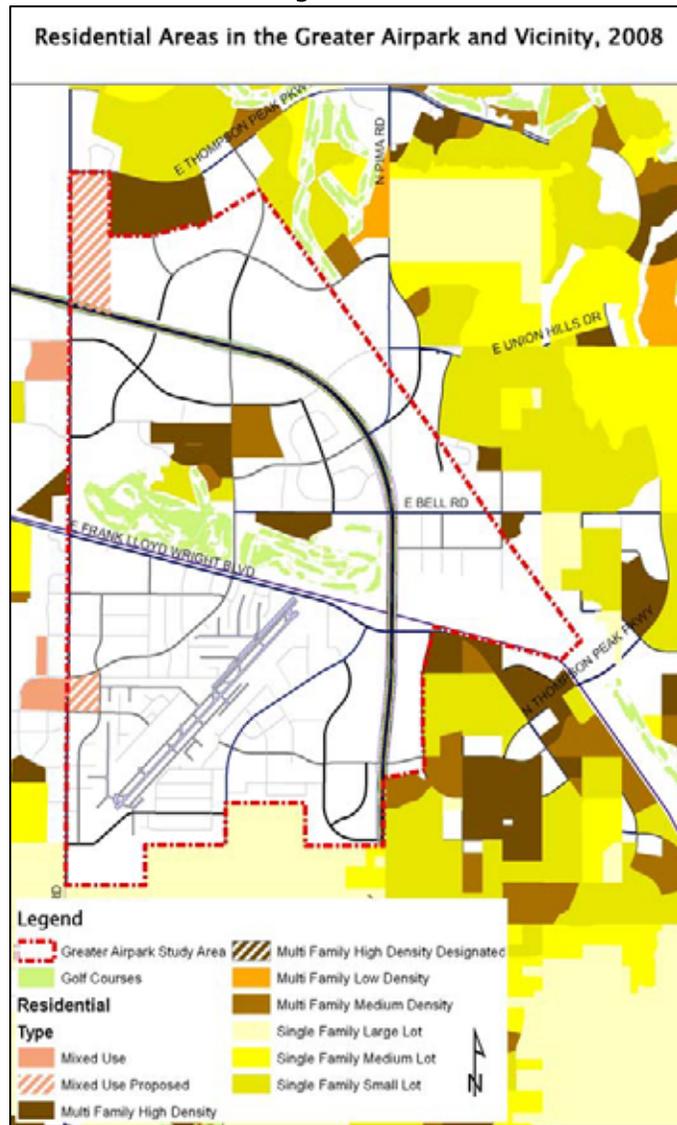
The study area is surrounded by a diverse mix of housing types including rural lots, suburban neighborhoods, townhomes, apartments, condominiums and mixed-use areas. Figure 4-1 shows the locations of residential areas in and around the Greater Airpark. See Appendix VII for definitions of housing types listed on the map.

One of the community’s goals, as expressed in public workshops in May and July 2008, is to continue to protect the residential neighborhoods adjacent to the study area. Neighborhoods which are the most sensitive include the single-family large lot neighborhoods south of Thunderbird Road and the single-family medium and small lot areas to the east of the study area.

The neighborhoods that surround the Greater Airpark provide a distinct character to the area. Notable neighborhoods include Grayhawk, DC Ranch, the Horizons, Ironwood Village, McDowell Mountain Ranch, Patterson Ranch, Desert Wind, Paradise Valley Ranchos, Sundown Manor and Sunrise Estates. Figure 4-2 (page 13) shows the locations of notable neighborhoods in the vicinity of the Greater Airpark study area.

Many of the neighborhoods to the north and east of the study area are master planned communities with home owners’ or property owners’ associations. These associations dictate neighborhood character and maintain common property within the neighborhoods. Many master planned communities provide a variety of housing types, from medium-sized lot single family homes to high density condominiums.

Figure 4-1:



Source: Advance Planning, Planning & Development Services, 2008; Scottsdale GIS. Residential area types are according to the existing zoning.

Housing Condition

Housing age can be an indicator of the potential need for rehabilitation. Generally, housing older than 30 years of age often requires some rehabilitation. In the Greater Airpark and surrounding area⁹, approximately 7.4% of the housing stock is older than 30 years.

A windshield survey of housing conditions in the Greater Airpark and surrounding area was conducted by city staff in May 2008. The purpose was to assess the overall condition of housing in the area and to identify any changes in housing condition trends. The results of the survey indicated that housing conditions in the area are not in need of rehabilitation.

Housing unit sizes vary in the vicinity of the Greater Airpark. The average dwelling within the study area is around 1,400 square feet. This size is somewhat smaller than the city’s average of 1,623 square feet per home. A possible explanation of the size difference is that the majority of housing in the study area is multi-family, which tends to be smaller in square footage. Average lot sizes and the average number of rooms follow similar trends. Table 4-1 shows a comparison between the two areas.

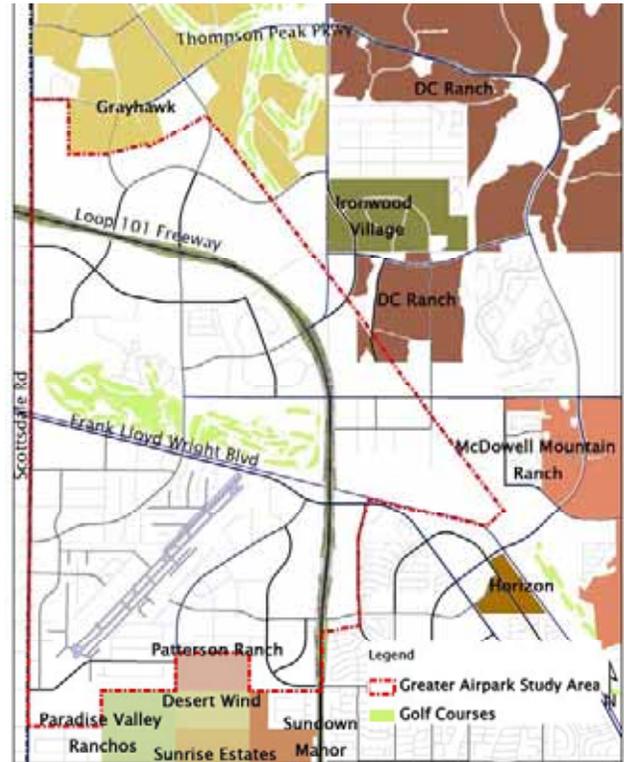
The number of dwellings in the study area increased approximately 92% between 2000 and 2006. If development continues to follow trends and the 2001 General Plan land uses, the number of dwellings could increase to 2,702 (+11%) by 2030¹⁰. The study area’s share of housing in the city is projected to remain constant at 1.9%, as shown in Table 4-2.

Table 4-1: Comparison of Average Housing Characteristics, 2005

Averages	Greater Airpark	Scottsdale
Square Footage	1,412	1,623
No. of Rooms	5	6
Lot Size	2,689	6,645

Source: 2005 Maricopa County Assessor

Figure 4-2: Notable Neighborhoods in the Greater Airpark Vicinity



Source: Advance Planning, Planning & Development Services, 2008; Scottsdale GIS

Table 4-2: Greater Airpark and Scottsdale Housing Growth

Year	Greater Airpark Dwellings	Scottsdale Dwellings	Greater Airpark Share of City Dwellings
2000	1,265	104,862	1.2%
2006 (estimate)	2,425	122,000	1.9%
2030 (projection)	2,702	141,907	1.9%
Change 2006-2030	+11%	+16%	No Change

Source: U.S. Census Bureau; **Projection based upon 2001 General Plan Land Uses and MAG SAZ Projections

⁹ “Surrounding area” refers to the demographic statistical area referred to in the Demography Chapter and illustrated in Appendix IX of this report.

¹⁰ Maricopa Association of Governments, 2006, by Socioeconomic Analysis Zone (SAZ)

Housing Compatibility

Many factors influence where housing is appropriate and inappropriate such as existing zoning, existing land uses, noise levels, federal regulations and environmental concerns. In the study area, appropriate locations for new housing are limited.

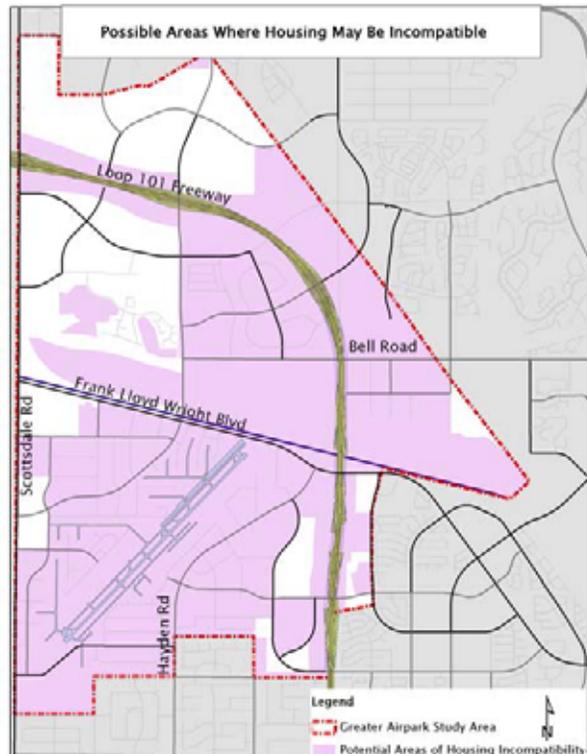
Housing is generally inappropriate in industrial and general commercial-zoned areas of the Greater Airpark because of land uses allowed within each district. Examples of uses allowed in those zones include, but are not limited to, airports, heliports, plastics manufacturing, pharmaceuticals manufacturing, meat or poultry processing, dairy products processing, recycling centers and amusement parks. Business-serving housing, such as executive suites, pilot housing, and live-work units may be appropriate in these zones in limited numbers, on a case-by-case basis, and if proper building design is used to protect tenants and the airport.

Portions of the study area are restricted by Federal Aviation Administration (FAA) regulations and associated noise study areas. As discussed further in the Aviation Chapter of this report, no buildings are permitted to locate on the runway or in the runway protection zones (RPZ) to protect pilots, aircraft passengers and the general public. Sensitive land uses, such as residences, schools and daycares, should not be located within the 65 day-night average noise level (DNL) noise contour established by the FAA. The FAA also strongly encourages that sensitive uses be located outside of the 55 DNL contour.¹¹

Other limitations to the location of housing in this area include Federal Emergency Management Administration (FEMA) flood zones, drainage areas within the study area and the Loop 101 Freeway. FEMA regulates development in flood zones, and the city regulates development that might modify natural 50 cubic feet per second (CFS) washes¹². Housing developments in these areas would be subject to engineering review. Drainage basins, such as the Scottsdale Sports Complex, are also critical to drainage in the area; so, new development should not be permitted in these areas. The Loop 101 Freeway can create noises associated with traffic. Thus, housing in these areas may not be fully compatible in areas close to the freeway without noise attenuation measures. Noise mitigation for freeways follows the Arizona Department of Transportation Noise Abatement Policies.

Figure 4-4 illustrates areas where housing may be incompatible. As the map shows, few areas are compatible with residential land uses.

Figure 4-3:



See text for explanation on locations.

Source: Advance Planning, Planning & Development Services, 2008; Scottsdale GIS

¹¹ Source: FAA, Scottsdale Airport Master Plan, Part 77 Airspace Plan and Part 150 Noise Compatibility Study. See also: Aviation and Land Use Chapters of this report.

¹² See Environment and Historic Preservation Chapter of this report for additional information.

Housing Affordability

The 2001 General Plan’s Housing Element contains goals of providing for a variety of character-compatible housing options that meet the socioeconomic needs of people who live and work in Scottsdale. Consideration of diverse housing types and programs that increase home ownership among entry level and moderate-income households who work in Scottsdale is also encouraged in the City.

Housing is considered “affordable” when standard and sanitary dwellings cost no more than 30% of monthly household income. Maricopa County’s median income, which is used because of the number of employees in the county that work in the study area, is \$45,358 (2007), and 30% of that is \$13,607 or \$1,134 per month.

Scottsdale, north of Indian Bend Road, has some of the highest-priced homes in the Valley. The median price for a single-family home in 2007 was around \$620,000 and \$255,000 for condominiums/ townhomes. Conversely, the Valley’s median home price in 2007 was around \$232,000.

The recent downturn in the housing market has led to slight price depreciations for both single-family homes and condominiums/ townhomes in Scottsdale as illustrated in Table 4-3. Home prices in the rest of the Valley have depreciated at a faster rate than Scottsdale. Rental homes in northern Scottsdale are also priced higher than the Valley median rent. The median monthly rent for a two-bedroom apartment in 2007 was around \$1,134 and a four-bedroom house was around \$2,600. (See Table 4-4).

Table 4-3: Median Home Prices, 2006-2007

Area	December 2006 Median Price	December 2007 Median Price	Change 2006-2007
Scottsdale	\$567,500	\$523,350	-7.8%
Northern Scottsdale (Single-family)	\$657,000	\$620,000	-5.6%
Scottsdale Condos & Townhomes	\$264,000	\$254,835	-3.5%
Valley	\$255,900	\$232,000	-9.3%

Source: ASU Poly 2008; “Northern Scottsdale” is considered the area north of Indian Bend Road

Table 4-4: Median Monthly Rent Comparison, 2007

Area	Studio Apartment	1-Bedroom Apartment	2-Bedrooms	3-Bedrooms	4-Bedrooms
Northern Scottsdale	n/a	\$821	\$1,134	\$1,498	\$2,600
Scottsdale	\$630	\$817	\$1,095	\$1,400	\$2,250
Valley	\$675	\$769	\$954	\$1,211	\$1,502

Source: Zillow.com; “Northern Scottsdale” is considered the area north of Indian Bend Road

Based upon median incomes in the rest of the Valley, homeownership in and around the Greater Airpark is out of reach for many lower- and moderate-income households, while the ability to rent is somewhat more attainable for the average County resident. See Figures 4-4 and 4-5 (page 16) for a comparison of salary to housing expenses. Businesses in the area have expressed frustration with the ability to recruit and retain employees that must commute from long distances, in more affordable areas. The undeveloped area north of the Loop 101 in the study area, as well as northeast Phoenix, are potential areas for workforce housing.

To afford a median-priced home near the Greater Airpark, an annual income of \$138,000 would be needed to cover mortgage, insurance, taxes and utilities. In comparison, to purchase a median-priced condominium an annual income of approximately \$57,000 would be required to cover housing expenses.¹³ In order to afford to rent a median-priced 2-bedroom apartment in northern Scottsdale, a person should make around \$16.90 per hour. In comparison, to afford the same size apartment elsewhere in the Valley, a person should make around \$14.00 per hour.

Figure 4-4:
Median-Priced Home and Median Salaries

Source: AZ Department of Economic Security; ASU Poly 2008

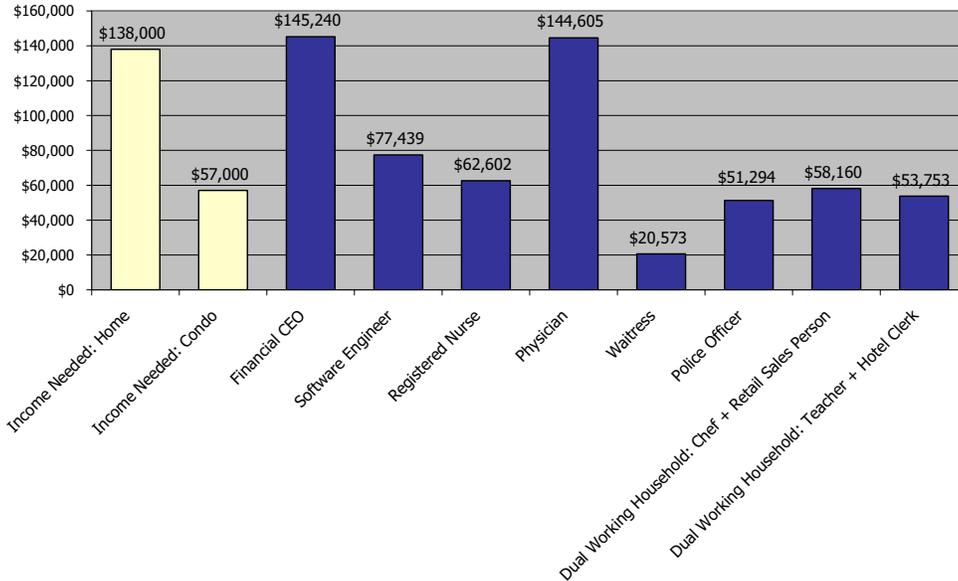
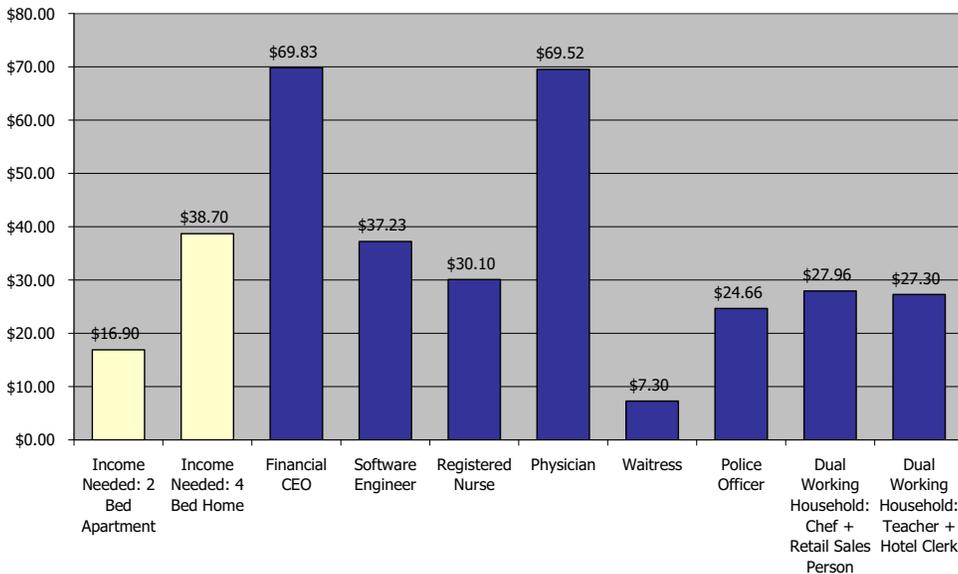


Figure 4-5:

Median Rent and Median Wage

Source: AZ Department of Economic Security; Zillow.com



¹³ Based on 6 percent fixed-interest on a 30-year loan; 10 percent down payment; and 15 percent of housing costs reserved for utilities, taxes, and insurance.

5. Employment and Economic Conditions

Overview

This chapter looks at the recent trends that influence the Greater Airpark’s economic conditions. As a part of the Greater Airpark Community Area Planning process, and in conjunction with the city’s Economic Vitality Department, an update to the 1999 Economic Analysis of the area by Gruen Gruen + Associates was completed and is included in Appendix VIII.

Existing Economy

The Greater Airpark economy is characterized by a growing and diversifying employment base. Historically dependent on the aviation industry and manufacturing, the employment opportunities in the Greater Airpark have expanded to include high-tech manufacturing, class A and B offices, and retail, to name a few. Many industries are clustered with similar and supporting industries in the study area, such as auto sales clusters, home improvement and furnishings clusters and business services clusters.

The Greater Airpark is the second largest employment center in Arizona and also contains the city’s largest employment area, comprising nearly 80% of the city’s total employment land uses. This statistic is important because of the employment area’s contribution to the city’s sales tax and region’s job base.

Existing Economic Goals

The City’s General Plan contains economic policies which are implemented through the Economic Vitality Action Plan available through the city’s Economic Vitality Department. The General Plan’s economic goals and strategies are focused on strengthening the community as a tourist and resort destination; maintaining diverse retail and entertainment activity; and sustaining long-term economic well-being of the city and its residents.

Table 5-1: Scottsdale Largest Employers (2008)

Rank	Company Name	Employees
1	Scottsdale Healthcare	5,213
2	Mayo Clinic	5,003
3	General Dynamics	2,990
4	City of Scottsdale	2,562
5	Scottsdale Unified School District	2,514
6	CVS- Caremark	2,346
7	Go Daddy Group	1,915
8	The Vanguard Group	1,700
9	Troon Golf LLC	1,539
10	Scottsdale Insurance Company	1,400
11	Fairmont Princess Resort	1,200
12	Coventry Healthcare	1,000
13	Dial Corporation	700
14	USPS- Scottsdale	700
15	Desert Mountain Properties	646
16	Nordstrom	610
17	The Boulders Resort	608
18	E-Telecare Global Solutions	600
19	Pulte Homes	600
20	Taser International	545
21	McKesson	518
22	Hyatt Regency at Gainey Ranch	500
23	Wal-Mart	500
24	JDA Software Group	475
25	Scottsdale Medical Imaging	460
26	First National Bank of Arizona	450
27	Sage Software	355
28	Scottsdale Conference Resort	350
29	United Blood Services	329

Source: City of Scottsdale Economic Vitality Department. Blue indicates a Greater Airpark business.

Labor Force and Employment

The 2009 Economic Study of the Greater Airpark by Gruen Gruen + Associates estimates that more than one in every four Scottsdale jobs is located in the study area. For more information on labor force and employment trends, see Appendix VIII.

Top Employers

As shown in Table 5-1 (page 17), of the 29 largest employers in the City of Scottsdale, nine are located in the Greater Airpark. Blue indicates that the company is located or has corporate headquarters in the study area and the lighter shade of blue indicates a branch or franchise located in the study area.

Space and Land Absorption

Each year, Colliers International publishes a “2010 Report” that discusses the current and future state of the economy in the Greater Airpark. Although the boundaries¹⁴ used in the 2010 Report differ from the Greater Airpark study boundary¹⁵, the report gives a good overview of the economic base of the Greater Airpark and surrounding area.

According to the 2010 report, over the last 10 years, the amount of commercial building square footage has grown substantially, as illustrated in Table 5-2.

Although the amount of commercial square footage has increased over the years, the average annual rate of commercial building has decreased, as illustrated by Figure 5-1.

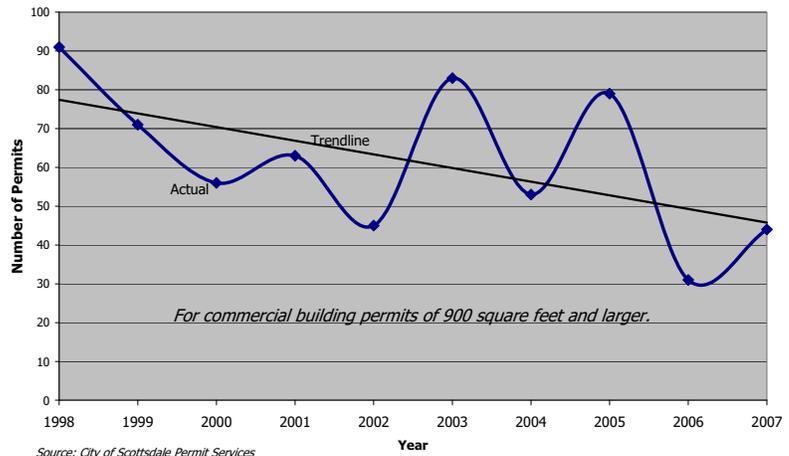
The median square footage of commercial buildings in the study area is around 12,551¹⁶, which is smaller in relation to most recent

Table 5-2: Greater Airpark and Surrounding Area Commercial Square Footage Growth 1997-2007

Year	Business Square Footage	Change from Previous Year
1997	9,697,203	---
1998	11,085,954	+12.5%
1999	14,626,300	+31.9%
2000	15,657,920	+7.0%
2001	16,282,920	+4.0%
2002	17,356,120	+6.6%
2003	18,562,463	+7.0%
2004	20,553,975	+10.7%
2005	21,403,975	+4.1%
2006	22,350,975	+4.4%
2007	28,454,277	+27.3%

Source: The Greater Scottsdale Airpark 2010 Report, Jim Keeley, Colliers International, December 2007.

Figure 5-1: Commercial Building Permit Trendline 1998-2007 Greater Airpark Community Planning Area



¹⁴ The 2010 Report boundaries are Loop 101 on the north; Thunderbird Road on the south, 64th Street on the west and 96th Street on the east.

¹⁵ The difference between the two boundaries is that the “2010 Report” includes portions of Phoenix that are west of Scottsdale Road and does not include areas north of the Loop 101. The Greater Airpark Plan study boundary extends north past the Loop 101 and does not include portions of Phoenix.

¹⁶ Maricopa County Assessor, 2008

building square footages.¹⁷ The median square footage may indicate the presence of many small and start-up businesses in the Greater Airpark. It also indicates that many of the buildings in the Greater Airpark may be becoming obsolete because of age and size. Modern offices, for example, often require more floor-to-floor space for newer technologies, such as internet and computer networking devices, than many of the older office spaces in the area currently provide.

Currently, the I-1 zoning district, which occupies most of the study area south of the CAP Canal, presents some limitations for business expansion. The I-1 District’s development standards limit building volume, floor area ratio¹⁸, building height; require open space; and restrict lot coverage. The development community and property owners have expressed frustration with these outdated development standards.

Economic Impact

The Greater Airpark contributes to a large proportion of the city’s tax revenue. The study area annually contributes to nearly a quarter, or 25%, of the city’s sales (privilege), use and bed tax (see Table 5-3).

In 2003, the City’s Economic Vitality Department updated a study of the economic impact of the Greater Airpark, which included the impact of the Scottsdale Airport. The study found that the Greater Airpark’s value-added economic activity contributes \$2.5 to 3 billion annually to the regional economy. The Airport alone contributes over \$140 million to the regional economy each year. At the time of the study, the overall annual payroll for the Greater Airpark exceeded \$1.36 billion with an average employee salary of \$32,988.

Table 5-3: Greater Airpark Privilege, Use & Bed Tax Paid since 2004¹⁹

Year	Greater Airpark	City of Scottsdale	Percent of City Tax
2004	\$30,353,745	\$132,267,888	23%
2005	\$37,828,568	\$161,801,022	23%
2006	\$39,897,839	\$172,258,079	23%
2007	\$40,928,861	\$178,275,368	23%
Jan. – Aug. 2008	\$24,730,934	\$122,056,084	20%

Source: Scottsdale Tax Auditor’s Office

Land Value

The median lot size in the study area is around 26,000 square feet, or nearly two-thirds of an acre²⁰. The median value of a parcel in the study area is approximately \$478,500 (2008\$), which is close to \$18.40 per square foot. With the median building size being close to 12,500 square feet and the median building value at \$413,900, the median value per square foot is around \$33.11. The median value of land plus improvements is around \$853,000, or about \$33.00 per square foot.

¹⁷ Based on estimate of 2,774 businesses in the Colliers study area.

¹⁸ Floor Area Ratio (FAR) means the ratio of gross building floor area to the net lot area of the building site. Figure listed is an average.

¹⁹ Effective July 1, 2004, the privilege and use tax rates were increased from 1.4% & 1.2% to 1.65% & 1.45% respectively.

²⁰ Maricopa County Assessor, 2008.

Tourism

Tourism has always been an important component to the Scottsdale and Greater Airpark economy, contributing \$36.7 million overall to Scottsdale in fiscal year 2007/2008. Tourism in the Greater Airpark generally revolves around the following events and places:

- WestWorld is home to the following events, to name a few:
 - Arizona Sun Country Circuit Quarter Horse Show- 48,750 attendees
 - Barrett-Jackson Classic Car Auction- a nine-day event with 280,000 attendees
 - Russo and Steele Collector Automobile Auction- a five-day event
 - Scottsdale Arabian Horse Show- 250,000 attendees with a \$50 million impact on Scottsdale
 - Festival of the West/Parada del Sol- 40,000 attendees over a seven-day period
- The Tournament Players Club (TPC) Golf Course hosts the FBR Open, and attendance of this event has risen steadily since 2002, with over 530,000 attendees in 2008. In 2007, the economic impact of this event on the Valley was around \$180.4 million.
- The McDowell-Sonoran Preserve, while not technically within the scope of this study, is an attraction for tourists. The northeastern portion of the Greater Airpark serves as a gateway to this area and the proposed Desert Discovery Visitor's Center.

The Greater Airpark is also home to several hotels and resorts, including one of the largest resorts in the City of Scottsdale, the Fairmont Scottsdale. Hotels and resorts in the Greater Airpark study area comprise 1,499 rooms and over 1.3 million square feet in total, or 16% of the entire city's hotel rooms²¹.

Major Investments and Development Projects

Several major development projects have been approved, are proposed, or have begun construction in the study area in recent years (see Figure 5-2, page 21). The following is a snapshot of several key developments:

Scottsdale Quarter

Scottsdale Quarter is located at Scottsdale Road and Butherus Drive and is intended to be an upscale, mixed-use, regional "district" taking advantage of Kierland Commons on the western side of Scottsdale Road. The 2.8-acre site is expected to feature 1.2 million square feet of office, retail and residential space, as well as a large central park that features public art and community activities. Phase I of the project was completed in 2009.

One Scottsdale

This development is located at the northeast corner of Scottsdale Road and Loop 101. It is the first major commercial, mixed-use development on the north side of Loop 101 Freeway along Scottsdale Road. Under construction at the time of this report, One Scottsdale will contain 1.8 million square feet of retail, restaurant and Class A office space, along with 1,100 mixed-use residential units and 400 boutique hotel rooms. Sixty acres of the site are dedicated to mixed-use development, while 55 acres are reserved for residential living. One Scottsdale is also the new site of Henkel (formerly, Dial) Corporate Headquarters which was completed in 2009. The site will be urban in character with buildings that range from two to six floors connected by pedestrian-friendly internal streets.

²¹ Source: The Scottsdale/ Paradise Valley Tourism Study, February 2008, Scottsdale Economic Vitality Department

Scottsdale Epicenter

Epicenter is situated on 125 acres at Loop 101 and Bell Road. It proposes to be a major, mixed-use business park with over 1 million square feet of Class A office space with hotel and retail uses. The project had not begun construction at the time of this report.

Crossroads East

Crossroads East is located east of Scottsdale Road and north and south of the Loop 101 Freeway. It encompasses more than 1,000 acres of Arizona State Trust Land which is expected to develop within the next five to ten years. The approved land use budget for the property includes 708 acres for commercial and employment uses, 170 acres for mixed-use, and 122 acres for multi-family residential uses. A total of 3,443²² residences are allowed on the property.

Scottsdale Airport Capital Improvements

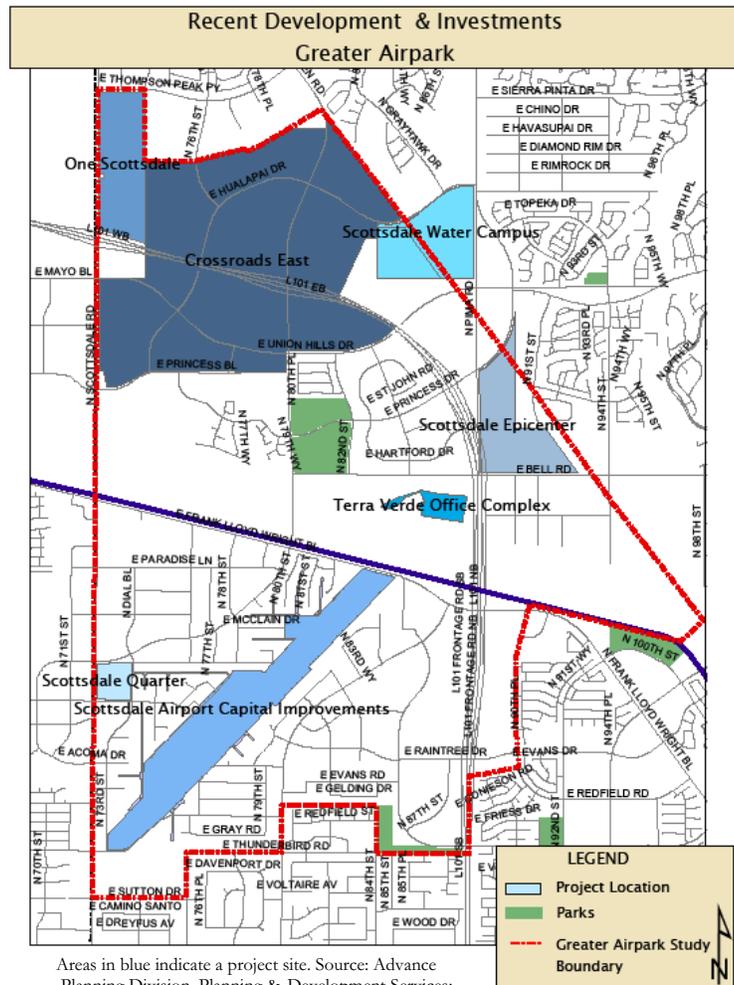
Scottsdale Airport recently completed circulation improvements near the Terminal Building. The projects included providing 100 additional parking spaces, providing a one-way circulation system adjacent to the terminal and adding a west parking lot. Sidewalks were also added to improve pedestrian access to the terminal from the parking areas. These improvements were recommended projects from the Airport Master Plan and completed in 2008.

Terra Verde

Located at Bell Road and the Loop 101 Freeway, the Terra Verde office project is an 18-acre site surrounded by the TPC Golf Course on three sides. One of three, three-story office building is currently under construction and will feature over 300,000 square feet of office space on top of a two-story underground parking structure.

Upon completion, the developments listed could potentially add more than 25 million square feet of office/ employment/ retail space; approximately 1,200 hotel rooms; and 7,322,000 square feet of residential space to the Greater Airpark study area.²³

Figure 5-2:



Areas in blue indicate a project site. Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

²² According to approved land use table.

²³ Assumes average hotel room size of 470 SF, average residential unit size of 1,800 SF, and average employment/ retail/ office lot coverage of 60% (based on random sample of Greater Airpark lots).

Regional Competition

Although the Greater Airpark is a growing economic asset to the Valley, competition from other areas in the Valley could cause a shift of that economic advantage from Scottsdale. Several communities are targeting similar developments to those that are attracted to the Greater Airpark. Many communities have more vacant land available and have slightly more flexible development regulations than Scottsdale. Other communities, like Phoenix, utilize the “Scottsdale Image” to attract customers and developments.

Key areas in regional competition with the Greater Airpark include, but are not limited to:

Northeast Phoenix

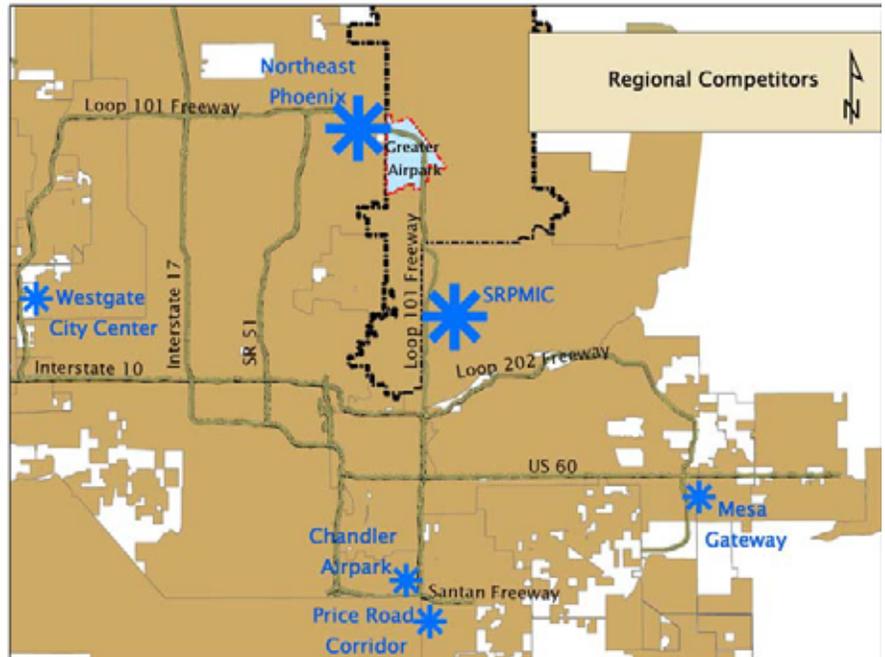
Because many portions of this area have Scottsdale addresses, businesses often use the “Scottsdale Brand” to market themselves. Many people do not realize that sales tax in these areas goes to Phoenix and not Scottsdale. This area also benefits from being directly adjacent to the employment area of the Scottsdale Airpark, in addition to having development regulations²⁴ that promote more commercial development intensity in the area than Scottsdale.

Many projects have recently been constructed or are planned, including Palisene, Paradise Ridge, Desert Ridge Marketplace, City North, American Express Campus, Mayo Hospital Campus, Chauncey Ranch, and Kierland Commons. Most of these projects are mixed-use and include millions of square feet of retail and residential uses in addition to regional-serving healthcare. This area is one of Greater Airpark’s biggest competitors in terms of retail, sales tax and mixed-use development.

Salt River Pima-Maricopa Indian Community

The Salt River Pima-Maricopa Indian Community is a sovereign nation under federal jurisdiction. This area is experiencing an upswing in development because of lower land costs, the amount of available land and the construction of a 15-story hotel and casino which will most likely drive the development of support businesses. In addition, approximately eight miles, twice that of the Greater Airpark, of tribal land fronts the Loop 101 Freeway, which is a major location factor for businesses seeking visibility.

Figure 5-3:



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

²⁴ Phoenix Zoning Ordinance.

Mesa Gateway Area

Mesa recently created a master plan for the Gateway Airport Area, which they refer to as an “aerotropolis” with global appeal. The master plan suggests form-based codes which place more emphasis on the size and shape of buildings instead of their uses, like traditional zoning regulations. Mesa intends to attract upwards of 100,000 high-quality jobs to the area. Mixed-use developments are developing in the area, including the 3,200-acre Mesa Proving Grounds.

Glendale’s Westgate City Center

Westgate is a developing urban core along the Loop 101 Freeway in Glendale. It contains two sports arenas for the Arizona Cardinals Football Team and the Phoenix Coyotes Hockey Team, surrounded by a mixture of retail, hotel, Class A office and residential land uses. The City of Glendale is aiming for Westgate to become a major employment center in the Valley. Several companies have located, or have made plans to locate, their offices in the Westgate area. The cost of living is less expensive in Glendale which enables lower-wage workers to live closer to employment in that area. In addition, the amount of unimproved land in the Westgate area provides an advantage for new developments that do not have the same flexibility in the Greater Airpark.

Chandler Airpark

Chandler Airpark is a nine square mile business park surrounding the Chandler Airpark and is one of the Valley’s most comparable Airparks to Scottsdale. Chandler recently approved taxilane access for private businesses, which is something that the Scottsdale Airpark has historically touted as a benefit. Chandler is a growing economic competitor in the Valley with a goal of employing 25,000 people in the Airpark.

Price Road Corridor, Chandler

The Price Road Corridor, located along Price Road/Loop 101 Freeway and the Santan Freeway, is home to many large scientific and technological corporations such as Intel, Wells Fargo, Orbital Sciences, Motorola and Toyota Financial. The area consists of several business and industrial parks, mixed-use developments, medical facilities and retail establishments.

Table 5-4: Regional Competitor Size and Projected Employment

Area	Acreage	Status	2030 Projected Employment
Northeast Phoenix	16,620	Majority Developed	93,000
Salt River Pima-Maricopa Indian Community	53,450	Several Projects Pending	50,000
Mesa Gateway	20,480	Strategic Plan Approved	55,700
Westgate City Center	640	Some Developed	43,300
Chandler Airpark	5,760	Majority Developed	49,000
Price Road Corridor	400	Some Developed	35,519
Greater Airpark	5,409	Majority Developed	73,000*

Source: Maricopa Association of Governments, 2030 Employment Projections by Regional Analysis Zone (RAZ), 2009. Regional analysis zones may be larger than the selected areas’ acreage. See Appendix IX for map of RAZs. *Projection based upon TAZs as discussed in the Demography Chapter of this report.

Table 5-4 shows that the Greater Airpark is expected to maintain a high level of employment as compared to other regional competitors. However, the rise of competing employment centers could result in a shift of some of the study area’s employment to the other areas in the future.

Enterprise Zones

The Arizona Enterprise Zone program was enacted in 1989 with the primary goal of improving areas of the state with high poverty and unemployment rates. The program achieves that goal by enhancing opportunities for private businesses in areas eligible for zone status. Many areas in the region have Enterprise Zones, including Phoenix, Chandler, Tempe, Mesa, and Western Maricopa County. Businesses in these areas are provided income tax credits for net increases in qualified employment positions. A qualified position is considered full time, above the county wage, and provides health insurance. Businesses are able to benefit financially in areas where tax incentives are provided.

Economic Trends

The city's Economic Vitality Department tracks economic trends for Scottsdale and the Valley and publishes an annual economic trends report. According to the October 2008 report²⁵, wage and salary growth is currently slowing down in the Valley due to reduced construction activity and consumer spending in the recession. However, Scottsdale is expected to remain the income leader among Valley cities over the next several years.

For the past 20 years, Scottsdale has been one of the largest net importers of labor in the Valley. In 2005, there were more jobs located in Scottsdale than there were laborers. Employment in Scottsdale is projected to grow slightly in 2009²⁵. The 2009 Economic Analysis of the Greater Airpark reveals that much of the employment growth in the study area is in finance, insurance and real estate, professional and business services and retail trade. The Greater Airpark economy has shifted away from industries concentrated in the production and trade of goods.²⁶ Office land uses are predicted to experience the highest rate of employment growth at 1.8% annually and industrial land uses are projected to grow one percent (1%) annually.

Commercial and industrial real estate construction in Scottsdale is expected to slow over the next few years, and the value of Scottsdale's building permits declined by \$92 million in 2007. The report also indicates that Scottsdale's population and residential construction growth rates have declined over the past eight years²⁵ possibly due to the lack of available undeveloped land in city limits.

In the Greater Airpark, the supply of office, retail and industrial/warehouse space has grown over the past twelve years; however, industrial/warehouse space grew the least substantially of the three types representing only 22% of total building inventory, which is down from 43% of inventory in 1995. Demand for office space from 2007 to 2020 is forecast at 114,000 square feet per year, or a total of 1,362,000 square feet; demand for retail space is forecast at 120,000 square feet per year; and industrial/warehouse space demand is forecast at 1.5 millions square feet from 2007 to 2020.²⁶

²⁵ Economic Vitality Department and ASU Blue Chip Economic Forecast Phoenix, Second Quarter, 2008

²⁶ Gruen Gruen + Associates, 2009. See Appendix VIII for more information.

6. Land Use and Zoning

Overview

This chapter outlines the current uses of land in the Greater Airpark, as well as zoning and development regulations that govern the area.

Land Use

The Land Use Element of the 2001 General Plan establishes the general policies for the types and location of land uses throughout the city. Under the 2001 General Plan Growth Area Element, the majority of the Greater Airpark is also defined as a growth area, which is an area of the city with the highest potential for development, increased intensity and multi-modal transportation.

The Greater Airpark comprises five percent of the total city’s land area but contains more than 80% of the city’s total employment land uses. Table 6-1 shows the breakdown of the 2001 General Plan’s conceptual land uses within the Greater Airpark Study Area and illustrates approximately how much of the land uses have developed to the General Plan land use designations. Figure 6-1 (page 26) shows where the 2001 General Plan encourages land uses in the Greater Airpark.

Table 6-1: 2001 General Plan/Greater Airpark Land Use Breakdown

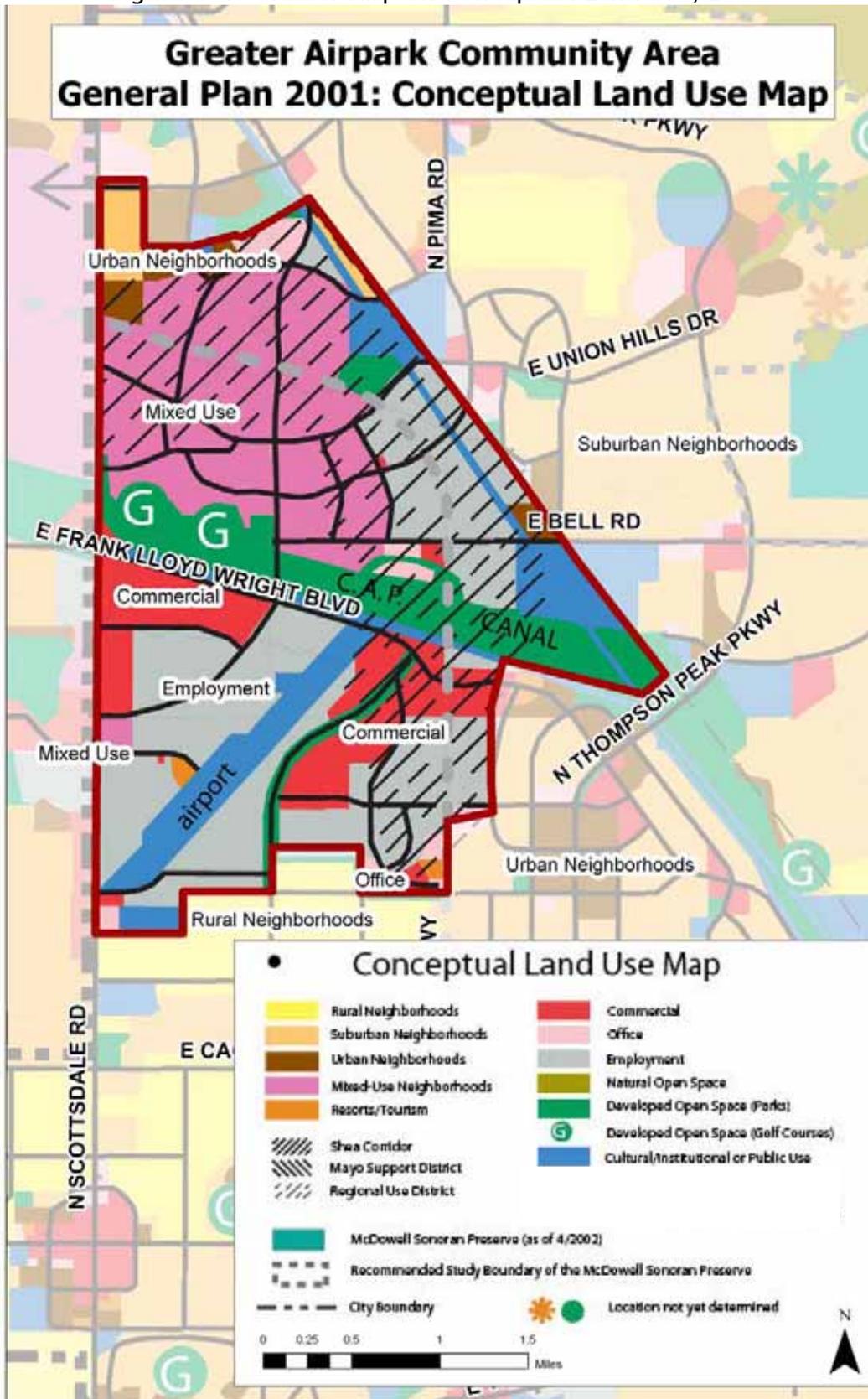
Land Use Category	Study Area Acres Encouraged	Percent of Total Greater Airpark Land by Land Use Category	Percent of Study Area that Developed to Conceptual Land Use
Mixed-Use Neighborhood	1,275	23.6%	2%
Suburban Neighborhood	91	1.7%	1%
Urban Neighborhood	106	2.0%	0%
Resort/ Tourism	18	0.3%	39%
Commercial	562	10.4%	69%
Office	106	2.0%	42%
Employment	1,554	28.7%	70%
Open Space	647	12.0%	79%
Institutional/ Cultural	606	11.2%	118%
Street Right of Way	444	8.1%	n/a
Total Acres	5,409	100%	55%

Source: Advance Planning Division, Planning & Development Services, 2008. All numbers are approximate and based upon Conceptual Land Uses from the 2001 General Plan + Amendments up to 2006. Street right of way is not a 2001 General Plan Land Use Category, but is included to illustrate the amount of land included in street right of way.

Mixed-Use Neighborhoods

The 2001 General Plan encourages nearly one-quarter of the study area as mixed-use, the second largest land use designation in the study area. The General Plan encourages higher-density housing combined with complementary office or retail uses in these areas. Only two percent (2%) of the study area’s mixed-use neighborhoods have developed according to the General Plan. One reason for this small percentage is because Crossroads East (State Land in the northern part of the study area) has not yet developed.

Figure 6-1: Greater Airpark Conceptual Land Use, 2006



Residential Neighborhoods

The 2001 General Plan promoted two percent (2%) of the study area as urban neighborhoods (multi-family) and two percent as suburban neighborhoods (medium-lot single-family). One percent (1%) of the study area's suburban neighborhoods, and no urban neighborhoods, has developed according to the General Plan's recommendation yet.

Resort & Tourism Uses

Resort and tourism uses are characterized as hotel and resort accommodations and supplementary uses. There are several hotels and/or resorts in the study area, comprising about 0.3% of total General Plan-promoted land area. Approximately 39% of the 2001 General Plan's resort and tourism uses have developed in accordance with the land use designation.

Commercial

Commercial land uses provide goods and services for the community and may include other uses such as housing and offices. Commercial land uses in the Greater Airpark are encouraged to occupy approximately ten percent (10%) of the study area, and 69% of the commercial areas have developed accordingly. Commercial land uses are typically encouraged south of the CAP Canal, along major streets and around the employment areas near the Airport. Community and regional commercial uses are encouraged to locate on arterial streets for high visibility and to accommodate high traffic volumes.

Office

Examples of offices include medical offices, attorney offices, and corporate headquarters. Major offices are encouraged to locate near arterial streets or freeway interchanges, while minor offices should be located along collector and arterial streets. Office development makes up approximately two percent (2%) of the Greater Airpark land area, under the 2001 General Plan, and 42% of it has followed the land uses encouraged by the General Plan.

Employment

The 2001 General Plan encourages a range of employment uses, from light manufacturing to light industrial and offices, in this category. Existing employment land uses occupy the highest percentage of Greater Airpark land area at 29%. Examples of employment uses are research and development, warehouses, manufacturing, aeronautical activities, commerce centers, communication services (call centers) and automobile repair shops. Employment uses are generally encouraged around the Scottsdale Airport and in the northeastern portion of the study area where several business parks have been established. The General Plan identifies locations for employment areas where impacts on residential neighborhoods are limited and access is available to labor pools and transportation facilities. Nearly 70% of the study area's encouraged employment areas have developed as employment uses.

Open Space

Open space accounts for 12% of the study area, as promoted in the 2001 General Plan. Open space consists of developed open spaces (i.e. golf courses, parks, etc), hiking trails, and natural open space. Approximately 79% of the General Plan's recommendations for open space locations have developed in accordance with the land use designation. The Central Arizona Canal is a major open space corridor in the study area.

Institutional and Cultural Uses

Examples of institutional and cultural uses are government facilities, schools, churches, performing arts centers, and event venues (like WestWorld). The Airport facility is also included in this category. Eleven percent (11%) of the total Greater Airpark land area is encouraged for these types of facilities, and more than 100% of this allocation has occurred in the area.

Regional Use Overlay

The northern portion of the Greater Airpark study area is designated with a Regional Use Overlay under the 2001 General Plan, as indicated by hatch marks on Figure 6-1. Regional uses include, but are not limited to, corporate offices, region-serving retail, major medical or educational campuses, tourism, and destination attractions.

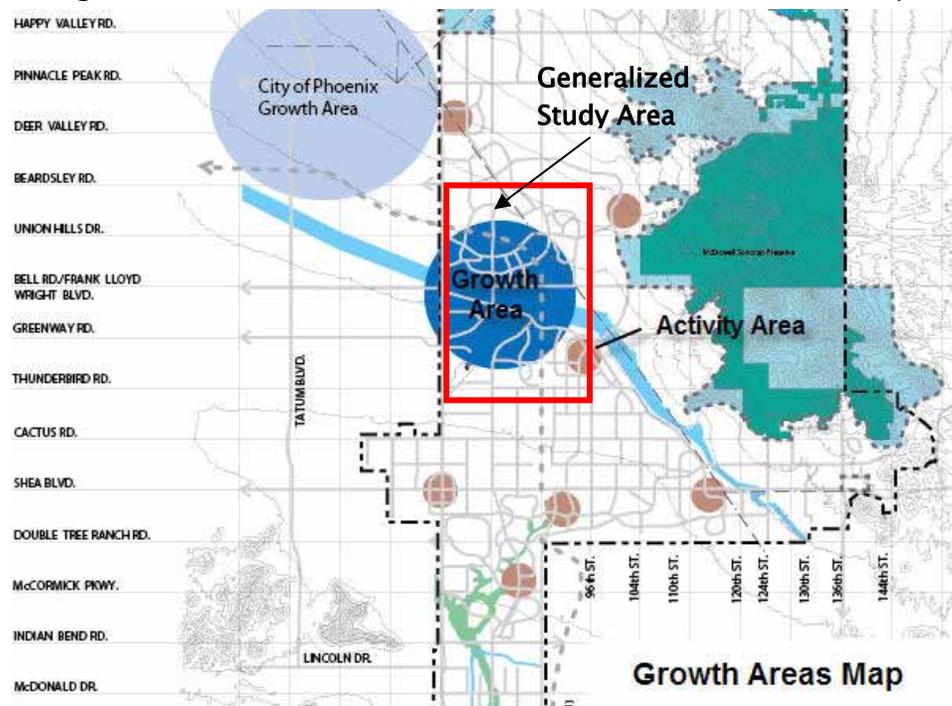
Street Right of Way

Right of Way includes streets and areas adjacent to the streets that are dedicated for public use. This includes sidewalks, bicycle lanes and areas for utility lines. Eight percent of the Greater Airpark Study Area consists of street right of way.

Growth Area

In the 2001 General Plan, a large percentage of the Greater Airpark Study area was determined by the community to be a growth area. These targeted areas are meant to accommodate new developments that integrate land uses (mixed-use), open space, natural resources and multi-modal transportation (transit, pedestrian, bicycling, and motor vehicles). Figure 6-2 shows growth areas and activity areas as identified in the 2001 General Plan.

Figure 6-2: 2001 Scottsdale General Plan, Growth Areas Map



Source: City of Scottsdale General Plan, 2001; Advance Planning Division, Planning & Development Services

Growth Areas are areas where future development is focused and mixed-uses and multi-modal transportation systems are most appropriate. The 2001 Growth Area in the Greater Airpark is generally designated north of Butherus and Raintree Drives and to the north and east of the Loop 101 Freeway. The City of Phoenix has designated a growth area just northwest of the study area.

Activity Areas are where development should be concentrated, but to a lesser degree than the Growth Areas. The closest activity area near the Greater Airpark is located to the east, near the intersection of Frank Lloyd Wright Boulevard and Thompson Peak Parkway.

General Plan Amendments

Since the voter ratification of the 2001 General Plan in 2002, several amendments to the land use section have been initiated. Six amendments in the Greater Airpark have been initiated and passed or remain active. Three involved a change from the office designation to commercial and urban neighborhoods and two from the employment designation to mixed-use and commercial.

Undeveloped Land

Twenty-five percent (25%) of the land within the Greater Airpark is considered undeveloped. Undeveloped land refers to any property that has no building or construction activity. See Figure 6-3.

Zoning

Overview

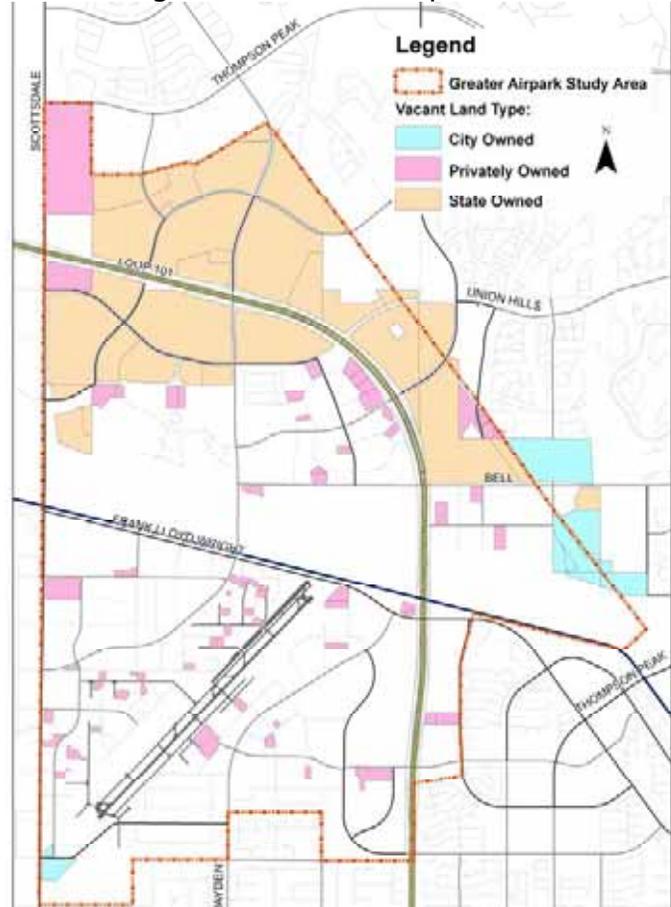
The Zoning Ordinance implements the policies in the General Plan by establishing a set of legal parameters to items such as height, use, setbacks, lot coverage, residential density, and parking requirements.

See Appendix II for the Greater Airpark zoning map and a summary of the zoning districts. The Greater Airpark Study Area currently contains the following 17 of 48 zoning districts established within the City of Scottsdale:

- Commercial: C-2, C-3, C-4, PNC, PRC,
- Industrial: I-1, I-G,
- Office: C-O,
- Mixed-Use: PCD,
- Residential: R1-7, R1-35, R1-5, R-4, R-4R, S-R,
- Cultural: O-S, and W-P.

At 44% of the total land area, mixed-use zoning districts comprise the greatest percentage of the study area’s zoning districts, especially north of

Figure 6-3: Undeveloped Land



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Table 6-2: Greater Airpark Zoning, 2008

Zoning Category	Percent of Land Area
Commercial	14%
Office	Less than 1%
Industrial	25%
Mixed Use	44%
Residential	9%
Open Space	2%
Cultural	6%

Source: Advance Planning Division, Planning & Development Services 2008

the CAP Canal. Industrial zoning categories comprise the second highest percentage at 25% of the study area. (See Table 6-2, page 29).

Greater Airpark Zoning Trend

The Greater Airpark, originally zoned residential under Maricopa County’s jurisdiction, was annexed into the City of Scottsdale in 1963. Having an already functioning airport, the City established an Industrial (I-1) zoning district in areas where undeveloped rural residential zoning had been applied. The Industrial (I-1) zoning district helped protect the Airport from potential residential use conflicts and provide uses integrated with and supportive of the Airport. The I-G district was later established to buffer the industrial areas from the rural neighborhoods to the south of the study area. As more suburban office developments began to locate in the study area, commercial zoning districts such as C-2 and C-O became more prominent. In addition, large retail developments, such as the Promenade and auto dealerships, have utilized C-4 commercial zoning because of building square footage allowances. Many recent developments have been rezoned from I-1 to mixed-use districts (PCD and PRC) because of more flexible development standards and variety of uses allowed.

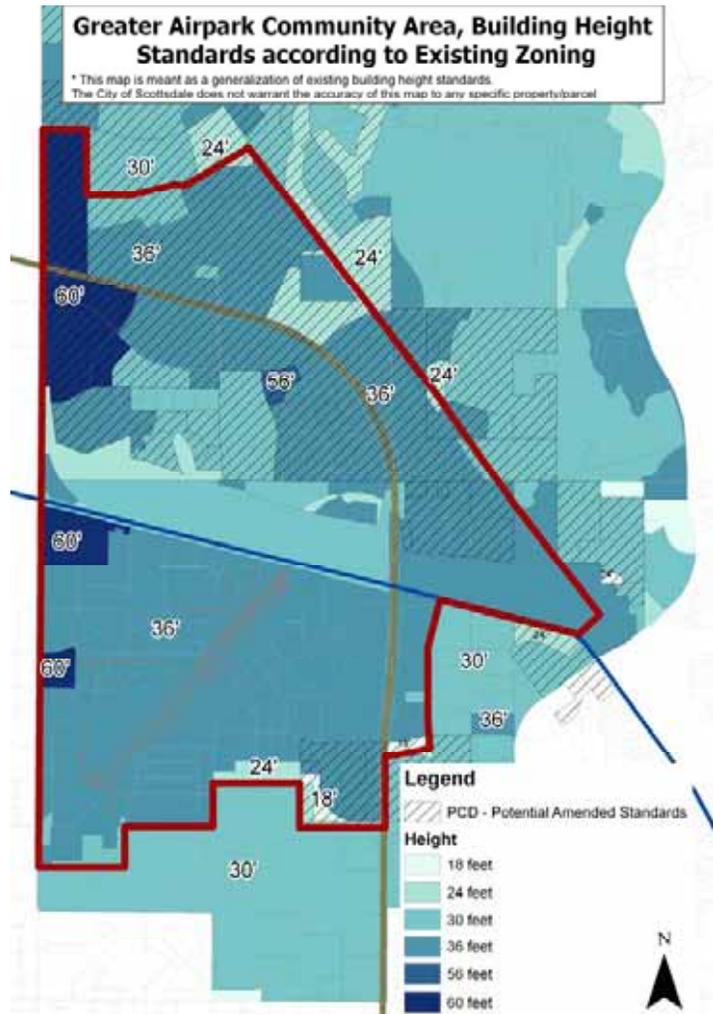
The development community has expressed frustration with what they feel are antiquated development standards of zoning districts in the study area. Requirements such as volume, hard to achieve floor area ratios (FAR), and outdated building height limits have become cumbersome for redevelopment purposes. Another frustration is the lack of flexibility provided in the zoning districts and development standards, further making redevelopment difficult.

Building Height

With new building typologies, market competitiveness, high land values, and redevelopment interest, building height continues to be an issue in the Greater Airpark. Modern offices have needs for increased floor-to-floor height. A few decades ago an office building might only require a 10 to 12 foot floor-to-floor height, but today there is need for 13 to 16 feet between floors to allow for more mechanical equipment, green technologies, and an improved work environment.

The average allowable building height in the Valley for commercial office zoning districts is 41 feet, business park districts

Figure 6-4:



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS, 2008

is 49 feet, and industrial districts is 64 feet. The average building height allowed in the Greater Airpark commercial districts is 36 feet, industrial districts is 24 feet, and business park/ regional center districts (PRC) is 60 feet. PRC only accounts for three percent of Greater Airpark land area. See Figure 6-4 (page 30).

Higher land values in the study area are encouraging a desire for greater height allowances in order for development and/or redevelopment to occur. With the cost of property being relatively high, it is difficult to redevelop land under present zoning standards. The City of Scottsdale's Zoning Ordinance originally anticipated a three-story building height of 36 feet; however, due to the issues addressed above, 42 to 48 feet is becoming a more desirable height range for three story buildings.

Building heights are required to conform to Federal Aviation Administration (FAA) Part 77 height restrictions. Building heights must also be sensitive to the presence of the Airport, aircraft safety and pilot safety. A primary goal of the community, as discussed in community meetings in 2008, is to be sensitive to residential neighborhoods adjacent to the study area when considering building height.

7. Infrastructure, Community Facilities & Social Services

Overview

This chapter examines the existing state of community facilities and services and related city policies.

Existing Community Facilities Goals

The 2001 General Plan’s Public Services and Facilities Element includes five components: public services, human services, safety, public buildings and facilities, and water resources. The goals and strategies of each element aim to promote a high quality of life for Scottsdale residents through the provision of adequate public facilities, human services for in-need populations, and a safe, relaxing environment.

Community Facilities

Libraries

There are four libraries in the Scottsdale Library System, including one main library and three branch libraries. The facility which most closely serves the Greater Airpark is Arabian Library located on McDowell Mountain Ranch Road. The 20,000 square foot facility opened in September of 2007. The Greater Airpark is also served by Mustang and Appaloosa Libraries.

The International Federation of Library Associations (IFLA) has established a set of standards or goals based on the population-served. Arabian Library currently serves a population of 50,000 and Table 7-1 compares its current service to IFLA standards. Arabian Library is measuring closely, and above the standard in some cases, to the standards set forth by the IFLA. In addition, the Scottsdale Facilities Master Plan uses the goal of 0.8 square feet of library per person as a way to evaluate the needs of the library system. In terms of this square footage goal, the Greater Airpark is adequately served by the library system.

Table 7-1: Arabian Library Statistics and IFLA Standards

IFLA Standard	Arabian Library 2008 Statistics
1.5 to 2.5 books per capita	1.5 books per capita
1 personal computer per 5,000 population	4.2 computers per 5,000 population
Median book stock of 100,000 volumes	Currently over 75,000 items
Annual acquisition rate of 11,250 volumes	Approximately 9,500 items next year (2009)

Source: 2008 International Federation of Library Associations and Institutions; Arabian Library Staff

Schools

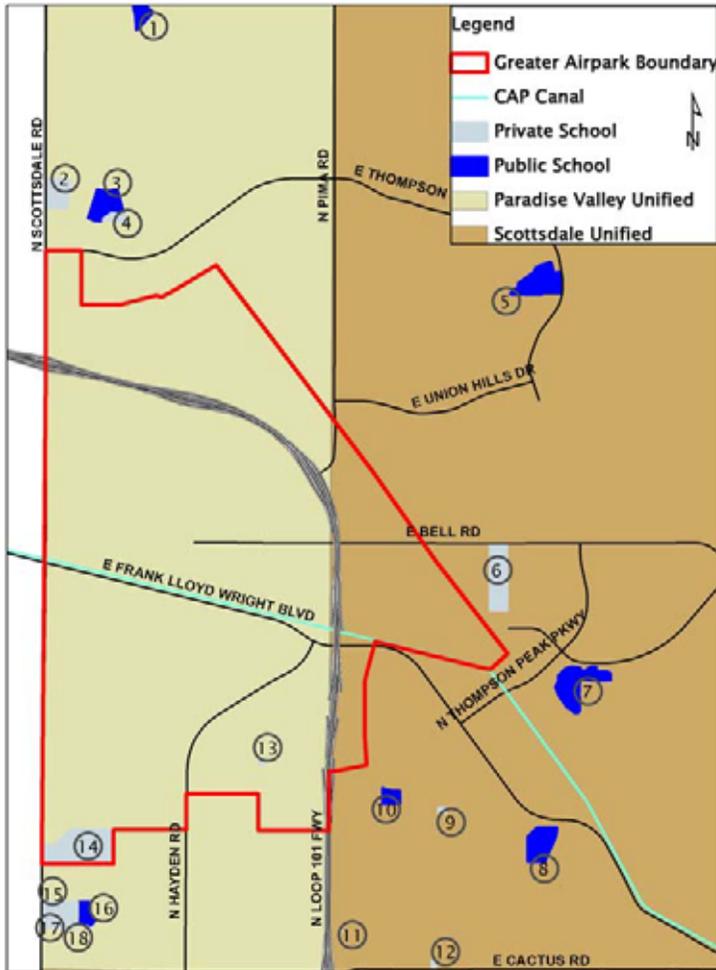
In 2000, approximately 26% of the Greater Airpark and vicinity’s population, age three years and older, was enrolled in school, and most were enrolled in elementary or high school²⁷. There are two school districts that serve the Greater Airpark, the Scottsdale Unified School District (SUSD) and the Paradise Valley Unified School District (PVUSD). Within the two districts there are several public schools located within and nearby the Greater Airpark. There are also two public charter schools in the area. According to the 2000 Census, 24% of the area’s children attend a private school, and there are approximately five in the vicinity.

²⁷ U.S. Census Bureau, 2000 Decennial Census

Public school enrollment overall for the Greater Airpark and vicinity is up 5% since 2003, even though enrollment is down in six specific public school sites (see Table 7-2, page 34). Since enrollment in some schools is dwindling, the SUSD has chosen to consolidate some of the area schools for better efficiency. The Scottsdale Unified School Board voted to merge Zuni and Aztec Elementary Schools in 2008.

Figure 7-1 shows the locations of public and private schools in the Greater Airpark vicinity.

Figure 7-1: Greater Airpark and Vicinity Public and Private Schools, 2008



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Scottsdale Unified School District:

- 5= Copper Ridge Campus
- 7= Desert Canyon Middle School
- 8= Aztec Elementary
- 10= Zuni Elementary
- Not Pictured:
- Desert Mountain High School

Paradise Valley Unified School District:

- 1= Pinnacle Peak Elementary
- 3= Grayhawk Elementary
- 16= Sonoran Sky Elementary
- Not Pictured (in Phoenix):
- Desert Shadows Middle School
- Horizon High School
- Pinnacle High School

Private Schools:

- 2= Tutor Time
- 4= El Dorado Private School
- 6= Notre Dame Preparatory
- 9= Childcare & Learning Center
- 11= CASY Country Day School #2
- 12= CASY County Day School
- 13= La Petite Academy
- 14= Thunderbird Adventist
- 15= Phoenix Hebrew Academy
- 17= King David School
- 18= Thunderbird Christian
- Not Pictured (in Phoenix):
- Great Heart Academy
- Desert Sky Montessori

Table 7-2: Greater Airpark & Vicinity Public School Enrollment, 2003-2007

School	2003/04	2004/05	2005/06	2006/07	2007/08	% Change 2003-2007
Zuni Elem.	591	615	575	588	523	-12%
Aztec Elementary	601	597	580	640	624	+3%
Desert Canyon Elem.	723	742	717	712	682	-6%
Desert Canyon M.S.	803	775	577	578	723	-10%
Desert Mountain H.S.	2,417	2,437	2,463	2,449	2,433	+1%
Copper Ridge Elem.	351	373	519	515	679	+93%
Copper Ridge M.S.	533	580	551	544	402	-25%
Sonoran Sky Elem.	501	514	640	624	626	+25%
Grayhawk Elementary	618	602	705	702	812	+31%
Horizon High School	2,404	2,457	2,472	2,473	2,330	-3%
Desert Shadows M.S.	596	600	576	761	746	+25%
Pinnacle H.S.	1,850	1,888	1,928	1,906	2,041	+10%
Total	11,387	11,583	11,723	11,852	11,997	+5%

Source: Arizona Department of Education, 2003-2008; Note- not all schools have enrollment information available.

There are several higher learning/continuing education institutions within the Greater Airpark, including Scottsdale Community College Business Institute (SCCBI), Penn Foster College International, University of Phoenix, Ageless Wisdom Seminary and University, The University of Arizona, Eller College of Management, and Spartan College of Aeronautics and Classic Cooking Academy.

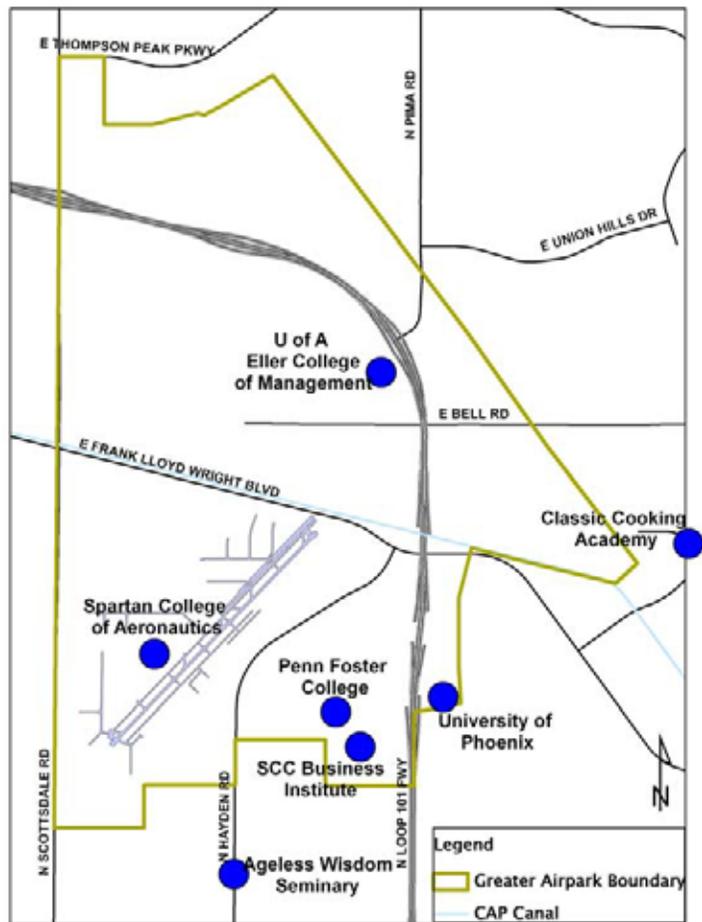
Parks

Scottsdale has long valued outdoor recreation as a major component of the community’s lifestyle. A well-balanced open space system provides more than just recreation and leisure opportunities—it is a vital component of a balanced, attractive and desired way of life; helps residents of urban areas to maintain a connection with nature and the environment; and can be a component of business retention, attraction and expansion.

The City of Scottsdale classifies parks into three major categories, which are as follows:

- Neighborhood Park- Provides primary recreation services and is easily accessible and available for local residents within a 15-minute walking radius. Access is primarily pedestrian or bicycle;
- Community Park- Meant to serve 10,000 to 25,000 people and as recreational areas for the entire city; and

Figure 7-2: Greater Airpark Higher Learning Institutions



Source: Advance Planning, Planning & Development Services; Scottsdale GIS 2008

- Specialty/Regional- Ranges from preserves, to small historic features and/or specialized services, such as equestrian facilities.

In addition to the three major categories, the City has a joint-use agreement with the area school districts for public use of their outdoor recreational facilities. Other recreational open space categories consist of trails, multi-use paths and plazas.

The Greater Airpark study area alone contains approximately 89 acres of park space, which is around 9.5% of the total city’s park space. The study area combined with the residential statistical area (see Appendix IX for area) contains 175 acres of total park space, about 19% of the city’s total.

Table 7-3: Greater Airpark & Vicinity Park Space

Park Type	Greater Airpark Only (acres)	Percent of City Total	Greater Airpark & Vicinity (acres)	Percent of City Total
Neighborhood	19	7%	46	23%
Community	0	0%	59	12%
Specialty/Regional	70	27%	70	27%
All	89	10%	175	19%

Source: Scottsdale GIS 2008; Advance Planning, Planning & Development Services

The Parks and Recreation Master Plan utilizes the goals listed in table 7-4 as standards for the amount of park space in the community. Approximately 400 acres of additional park space will be needed in the Greater Airpark vicinity to meet the city’s parks goals by 2030²⁸. A portion of this acreage need, particularly for specialty/regional parks, may be served by the nearby McDowell-Sonoran Preserve located just east of the area.

Table 7-4: Greater Airpark & Vicinity 2030 Park Needs

Park Type	Acreage Goal per 1,000 People	Study Area & Vicinity Acres (2008)	Acres per 1,000 people (2008)	Acreage Goal 2030	Additional Acres Needed 2030
Neighborhood	2.5	46	1.1	173	127
Community	3.5	59	1.4	242	183
Specialty/Regional	2.5	70	1.7	173	103
All	8.5	175	4.3	587	412

Source: Parks and Recreation Master Plan, 2004; MAG SAZ Population Estimates; Advance Planning, Planning & Development Services 2008

Figure 7-3 shows the location of nine parks and two planned parks located within the Greater Airpark residential statistical area. There are only two parks (numbers 1 and 2, pages 35, 36) located within the study area boundaries.

- ① Scottsdale Sports Complex: The 71-acre specialty park includes ten fields that support tournament level playing conditions in soccer, lacrosse, football and rugby, and it has been successful in attracting both national and regional tournaments.

²⁸ The McDowell-Sonoran Preserve is not considered in these estimates.

② Northsight Park: This is a 19-acre park with a playground, picnic areas, and athletic courts. This neighborhood park primarily serves the residential neighborhoods to its immediate west and south and as a buffer between the commercial uses in the Greater Airpark and low-density residential areas.

③ Horizon Park: The 24-acre community park is located immediately outside of the study area, and it features ramadas, softball fields, basketball courts, sand volleyball courts, tennis courts, playgrounds, and an off-leash area or “dog park”. Horizon Park serves as a recreational resource for nearby apartment dwellers.

④ Thunderbird Park: The ten-acre neighborhood park is located east of Loop 101 and features playground equipment, picnic areas, athletic courts and a restroom.

⑤ McDowell Mountain Ranch Park: This park is a 35-acre community facility located east of the Loop 101. It provides unique amenities, including a skate park, fitness center and aquatic facilities. A trailhead is located within the park that leads eastward into the McDowell-Sonoran Preserve.

Figure 7-3: Parks in the Greater Airpark & Vicinity



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

⑥ Ironwood Park: Ironwood is a four-acre neighborhood park that serves the Ironwood Village neighborhood. It features playground equipment, athletic courts, and picnic areas.

⑦ Grayhawk Neighborhood Park: The 13-acre neighborhood park serves the Grayhawk neighborhood, just north of the study area.

⑧ Cactus Park: This 18-acre community park features a fitness and aquatic center, playground equipment, athletic fields and walking paths.

⑨ Grayhawk Community Park: This community park began construction in 2008 and will feature four multi-use fields, a playground, pathways, and a community center.

⑩ DC Ranch Neighborhood Park: A neighborhood park just outside the northeastern edge of the study area, near DC Ranch. It provides recreational amenities to the surrounding residents.

Not Pictured: McDowell-Sonoran Preserve: The Preserve is (currently) a 16,000-acre area of the city (just east of the study area), dedicated to preserving the McDowell Mountains and Sonoran Desert from development, which links to the Tonto National Forest.

Planned Parks and Parkland Opportunity

In addition to existing parks in the area, a regional multi-use path is planned, as indicated by a “P” symbol in Figure 7-3 (page 36). In 2004, a feasibility study was conducted which describes the constraints and opportunities involved with the proposal to implement a multi-use path along the CAP Canal. The path would rest on the north side of the Canal connecting the Scottsdale portion to the Phoenix portion of the path.

Since only 25% of land is undeveloped in the Greater Airpark, there is little space for additional parks and open space. One exception is the Crossroads East area which has ample opportunity for additional park space which will be needed as the area develops. Open space is also needed in the southern portion of the study area to provide amenities for residents, workers and visitors in this urban setting. Open space could be achieved as redevelopment occurs in the area. Many cities utilize development incentives (such as density bonuses) and open space corridors and large detention basins to provide open space and park opportunities. With the exception of Downtown, Scottsdale has not historically provided incentives to achieve open spaces in developments.

Community Centers

The Community Facilities Master Plan (2004) recommends that community facilities should be located in areas with the greatest amount of need. Few community center facilities are located within the Greater Airpark vicinity; however, growth in the number of seniors expected to occupy the area in 2030²⁹, may constitute the need for a senior center. The closest senior center is located on Via Linda, approximately two and a half miles south of the study area.

Horizon Community Center is a 15,000 square foot facility located just outside the study area in Horizon Park. The Valley of the Sun Jewish Community Center (JCC) is a privately owned community center located just south of the study area. It is open to the public and offers programs from early childhood through adulthood.

Municipal Buildings

In addition to parks, community centers and libraries, there are other municipal facilities located in the Greater Airpark. The Scottsdale Airport, in addition to being a major transportation center, is a municipal facility with public uses. It offers meeting spaces, a business center and public parking.

The Scottsdale Water Campus is a municipal facility that has community meeting space and a neighborhood resource center, in addition to providing water treatment services for the community. The Pima North Neighborhood Resource Center provides multiple services, including development plan reviews, utility bill payment processing, and notary services.

Event Facilities

WestWorld is the only event facility in the Greater Airpark, and it is intended to be a nationally recognized, user-friendly equestrian center and special events facility serving Scottsdale and target

²⁹ Following population trends outlined in Demographics Chapter.

market visitors.³⁰ WestWorld is not a community center or park, meaning it cannot be used by anyone, at anytime, because it is a true event facility and must be reserved in advance.

Social Services

Scottsdale is characterized as being comprised of diverse populations with a variety of needs. Consequently, social services are important community assets.

Child Daycare Facilities

There are approximately seven child daycare facilities, about 12% of Scottsdale daycares, located in the vicinity of the Greater Airpark, as shown in Figure 7-4.

Non-Profit Organizations

Non-profit organizations are essential for providing services to communities and community members. Most non-profit organizations serve regional or city-wide markets and several exist in or directly serve the Greater Airpark, including Scottsdale Job Network, Airpark Rotary Club, and Scottsdale Area Chamber of Commerce Airpark Committee.

Community Health Facilities

Community health is an important aspect for overall quality of life. In 2007, 29% of all deaths in Scottsdale were caused by cardiovascular diseases, or diseases that affect the heart or blood vessels. The second highest cause of death was lung cancer at 5 to 6% of deaths.³¹ Additionally, 48% of deaths in Maricopa County were either caused or contributed to by obesity. This is an increase of 36% since 2000, when the same statistic was only 12%. It is estimated that 21% of Maricopa County residents are obese.³²

Hospitals

Because of the Greater Airpark’s position among many high-quality regional medical facilities, it may be beneficial to attract medical research facilities and other medical industry facilities. Two Mayo Clinic Hospitals are located outside of the Greater Airpark, about three miles to the south east and less than a mile to the west.

Scottsdale Healthcare Thompson Peak Hospital is the closest hospital to the study area, located immediately outside the Greater Airpark to the north. The Hospital is a 26-acre medical campus which currently includes a 64-bed hospital and three medical office buildings. Additional medical office buildings are planned adjacent to the hospital, and as the need for additional inpatient beds arises, the hospital has the ability to expand to 184 beds. Major surgery, intensive care, emergency medicine and diagnostic procedures are among the many medical services offered at Scottsdale Healthcare Thompson Peak.

Figure 7-4: Greater Airpark Day Cares



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

³⁰ WestWorld Master Plan, 2007

³¹ Source: Arizona Department of Health; Vital Statistics 2007

³² Source: Public Health Services, Bureau of Public Health Statistics, “Obesity in Arizona,” 2008

Medical Clinics and Offices

There are approximately six medical clinics located within the Greater Airpark.

Assisted Living Facilities and Senior Independent Living Facilities

Assisted Living Facilities include group homes, recovery centers and nursing homes. Group homes, or community residences, are homes that mimic a family-like environment for approximately 12 to 15 people with disabilities, plus support staff. Approximately ten assisted living facilities are located within the vicinity of the Greater Airpark, but none are located in the study area itself.

There are six nursing homes and senior independent living establishments in the Greater Airpark vicinity. Two of these facilities are located in the Grayhawk neighborhood, three are located just east of the Loop 101 and one is centrally located southwest of the Airport near Redfield and Hayden Roads.

Commercial Gyms and Athletic Facilities

Gyms and athletic facilities provide opportunity for community members to relax and exercise, which helps improve physical health and well-being. Six privately-owned gyms and one athletic facility are located in the Greater Airpark. The study area also includes many sports and athletic health facilities that are not typically found in other parts of the city, such as ice rinks, rock climbing gyms, golf courses and training facilities, batting cages, bicycle touring and rental facilities and dance studios. Most are clustered around the Alltel Ice Den on Bell Road.³³

Spas and Wellness Centers

Spas provide opportunity for community members to relax, and some provide hygienic services. In the Greater Airpark, there are over fifteen spas and wellness centers ranging from dermatological day spas to naturopathic wellness centers.

Churches and Spiritual Establishments

Spiritual health is another essential component to overall community health. There are seven churches and spiritual establishments in the Greater Airpark vicinity.

Public Safety

Code Enforcement³⁴

Some of the most common code issues in the Greater Airpark are illegal signs, landscape maintenance, illegal parking, illegal use of storage containers and airport-related use violations. As shown in Figure 7-5 (page 40), the highest density of code enforcement activity occurs south of the CAP Canal, in the “traditional” Airpark. Particularly high concentrations occur at the Loop 101 and Frank Lloyd Wright Boulevard, along Greenway-Hayden Loop, along Northsight Boulevard, and along Redfield Road between 76th Place and 79th Street. Fewer code enforcement cases occur in the northern portion of the study area as compared to the southern portion.

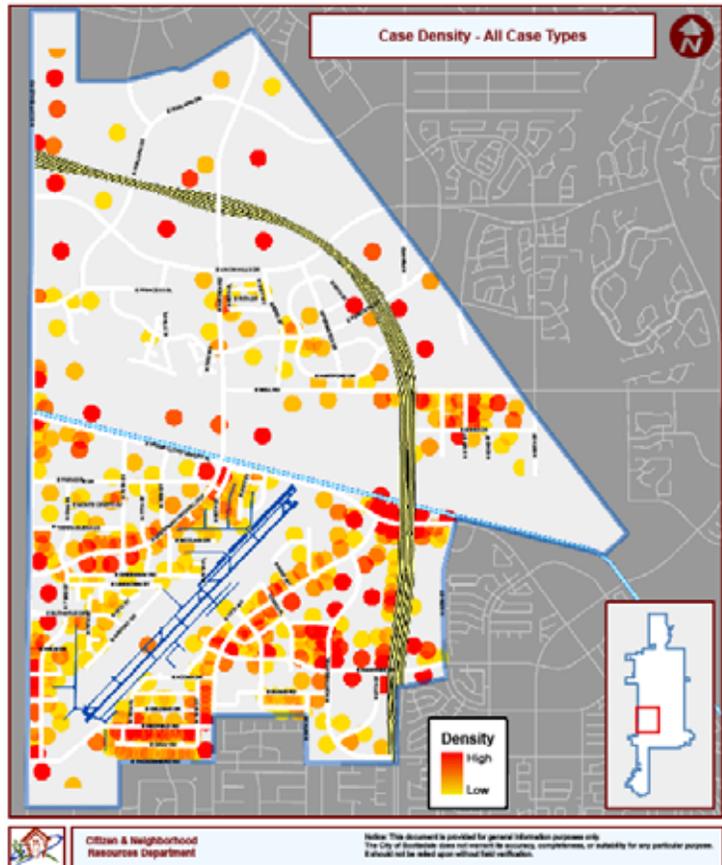
³³ Sports Related Facilities: Scottsdale Airpark news, 2010 Report; http://www.scottsdaleairpark.com/report_2010.php

³⁴ Information in this sub-section, including map, was obtained from the Citizen and Neighborhood Resources Department, 2008

Figure 7-5: Code Enforcement Case Density, October 2007 to September 2008

Sign removal is the greatest code enforcement issue in the Greater Airpark, and is most common along Scottsdale Road, Greenway-Hayden Loop, Hayden Road, south of the CAP Canal, Northsight Boulevard at Raintree Drive, Loop 101 and Frank Lloyd Wright Boulevard, and along Redfield Road between 76th Place and 79th Street. Examples of signs that may be subject to removal are neon signs; A-frames or sandwich boards; banners and temporary signs.

Zoning related issues are most concentrated along Bell Road, east of the Loop 101; along the Loop 101, south of the CAP Canal; and along Scottsdale Road between Tierra Buena Lane and Greenway-Hayden Loop. Zoning related issues include violations such as constructing a building without a permit; operating a business that is not permitted in the zoning district; and constructing a fence or structure in an easement.



Property maintenance violations are mostly concentrated along Gray Road, Scottsdale Road from Helm Drive to Redfield Road, and Loop 101 and Frank Lloyd Wright Boulevard. Property maintenance violations include grass and overgrown weeds; trash or debris in an easement or alley; furniture or construction materials in the front yard; and deteriorating buildings or structures.

Fire Department

Located on the east side of the Airport runway, Fire Station 9 serves the Greater Airpark and surrounding neighborhoods and is home to an engine and two foam trucks for aircraft firefighting. Fire Stations 10 and 11 also serve the Greater Airpark. The City of Scottsdale is currently evaluating sites for a future fire station within the Greater Airpark in the vicinity of Loop 101 and Hayden Road to provide coverage for the high-density, mixed-use construction planned in the northern portion of the study area. The majority of incidents to which the Fire Department responds are Emergency Medical Services (EMS). The Department also partners with local hospitals, regional fire aid, and the media.

Figure 7-7: Greater Airpark Fire Stations



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Police Department

The Greater Airpark is located in Police District Four, the Foothills District. Within this large geographic area are six beats, and portions of the study area fall into beats 15 through 19 (see Figure 7-6).

The Greater Airpark experienced 319 criminal incidents in 2008, five percent (5%) of the city’s total crime incidents. The most common incidents in the study area include residential burglary (26%), burglary from a vehicle (22%), assault (14%), and auto theft (9%).

Table 7-5 illustrates the crime statistics for 2008 in the Greater Airpark and entire city. Crime in the Greater Airpark is primarily concentrated south of the CAP Canal, where development is most intense.

Utilities

Water

The Greater Airpark is served by the South Central and Central Water Service Regions. The South Central Region is located south of the CAP Canal and extends as far south as Indian Bend Road. The Central Region serves the area north of the CAP Canal and north to Jomax Road.

The Central Arizona Project (CAP) Canal runs through the study area and is the primary source of water for the Greater Airpark. The Central Arizona Project is a 336-mile long system of aqueducts, tunnels, pumping plants and pipelines which deliver Colorado River water to central and southern Arizona. The Canal is Arizona’s largest single renewable water source (surface water is annually renewable through rainfall and snowmelt, groundwater is nonrenewable). The Canal water is untreated and sold to the City of Scottsdale, which treats the water and delivers

Figure 7-6: Greater Airpark Police Beats



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Table 7-5: Greater Airpark Crime Incidents, 2008

Incident Type	Scottsdale	Greater Airpark	Study Area's Percent of City Incidents
Homicide	0	0	0%
Robbery	134	12	9%
Residential Burglary	1,240	86	7%
Burglary from Vehicle	1,992	70	4%
Commercial Burglary	556	28	5%
Sexual Assault	72	8	11%
Aggravated Assault	189	12	6%
Assault	775	46	6%
Auto Theft	525	30	6%
Criminal Trespass	211	8	4%
Indecent Exposure	16	1	6%
Sexual Abuse	48	5	10%
Threats/Intimidation	1	0	0%
Sexual Indecency	23	1	4%
Domestic Violence	238	12	5%
Criminal Damage	1	0	0%
Total	6,021	319	5%

Source: 2007 Uniform Crime Report, Scottsdale Police Department; Scottsdale PD LIS; Advance Planning, Planning & Development Services, 2008

it to the residents through pipelines. The majority of water the Canal delivers is used for agricultural purposes, but as the population in nearby municipalities continues to grow, so will the demand for more water from the Canal.

If land uses remain the same as outlined in the 2001 General Plan, then the Greater Airpark will need 9.08 million gallons per day (mgd) to adequately serve the area. According to the Water Resources Department, water supply infrastructure (i.e. transmission lines, booster pumps, etc) is in place to meet these needs. However, if greater intensity is suggested as an outcome of the Community Area Plan, then distribution and potential storage infrastructure upgrades will be required to support redevelopment in the area south of the CAP Canal. The area north of the CAP Canal generally has adequate infrastructure to support increased intensity.

According to the 2008 Water Master Plan, the city has sufficient potable water storage capacity to serve the needs of both the existing and 2035 population. The availability of treated storage to the South Central Region is critical because it accounts for close to 80% of that region's storage needs. The recent completion of a 24-inch transmission line and Booster Pump Station (BPS)-10 now allows the city to transfer the excess storage from the South Region to the South Central region, if needed. Currently, the two regions have sufficient pumping capacity to meet maximum daily demands.

For further information on the Greater Airpark's water service system, including maps of water lines, please reference the 2008 Integrated Water Master Plan.

Reclaimed Water

Reclaimed water is provided from the treated effluent from the City's reclamation plant. Scottsdale's Water Campus is located partly within the Greater Airpark and is a combined water reclamation plant and advanced water treatment plant. The current capacity of this facility is 20 mgd and is currently under expansion to 70 mgd.

The City of Scottsdale adopted a policy requiring golf courses to either connect to the City's reclaimed (non-potable) water system or to provide a new eligible water supply. The TPC golf course, located in the Greater Airpark, is connected to the City's reclaimed system and uses reclaimed wastewater that has been treated at the City's reclamation plant. The TPC's purchased reclaimed water capacity is 2 million gallons per day. As the Water Campus is expanded, reclaimed water may become available for irrigation use in the area north of the CAP Canal.

The effluent currently produced at the Water Campus becomes the City's reclaimed water supply and, by agreement, is made available to golf courses for irrigation purposes.

Wastewater

Scottsdale maintains and provides support to facilities to treat and dispose of wastewater generated within City limits. The 2008 Integrated Wastewater Master Plan proposes additional pipelines in the Crossroads East area to serve future growth. It also proposes pipes to residential areas with septic systems that exist to the immediate south of the study area.

The 2008 Integrated Wastewater Master Plan recommends additional 8, 10 and 12-inch lines in the Crossroads East Area to address the needs of future development.

The average annual wastewater flows in the city of Scottsdale are projected to increase from 24.7 mgd to 40.3 mgd by 2035—an increase of 63%. The Master Plan lists the following Greater Airpark wastewater lines as undersized or in need of up-sizing:

- North pumpback station line should increase from a 30-inch diameter gravity interceptor to the McDowell Mountain Ranch trunkline to a 42-inch diameter;
- East Hualapai Drive line should increase from a 30-inch diameter to a 39-inch diameter;
- Tournament Players Club Golf Course line from Greenway-Hayden Loop to Loop 101 should increase from a 24-inch diameter to a 27-inch diameter; and
- Tournament Players Club Golf Course line from Greenway-Hayden Loop to Scottsdale Road should increase from an 18-inch diameter to a 21-inch diameter.

The City has begun the process of implementing a comprehensive asset management program that includes water production facilities as well as distribution system infrastructure. System improvements will be planned and budgeted for as they are expected to be necessary. For further information on the Greater Airpark's wastewater service system, including maps of sewer lines, please reference the 2008 Integrated Wastewater Master Plan.

Electricity

Scottsdale is served by two electric utility companies, Salt River Project (SRP) and Arizona Public Service (APS). The Greater Airpark lies within the APS service area. APS serves approximately half of Maricopa County with electricity, which gained 696,000 residents between 2000 and 2006. According to APS, per person electricity use has increased by 3.9% in that timeframe³⁵. APS currently has sufficient existing resources through 2009 to meet customer needs. However, additional load growth in the City of Scottsdale and the Valley will create need for additional resources in 2010 and beyond.

Currently, the Greater Airpark has need for increased electric service, and the additional growth predicted for the area, along with any future intensification, will require even more electric service. APS is currently examining the possibility of placing a new substation south of the CAP Canal to address needs in that area. The proposed substation could meet and exceed the current needs of the Greater Airpark area. APS also recognizes the potential to expand further and build a substation on the east side of the Loop 101 and south of the CAP Canal to address further growth in that area.

Communications

Communications in the Greater Airpark consist of internet service, telephone service, cable, and cellular phone service which are all provided by private entities. Many businesses in the area south of the CAP Canal have expressed frustration with slow or inadequate broadband service to the area.

Wireless internet technology, such as Wireless Fidelity (Wi-Fi), technology uses radio waves to allow devices to exchange information without wires. It is commonly used to enable mobile internet access from wireless devices such as mobile phones, laptop computers and handheld computers. With the high concentration of employment in the area, many businesses and visitors would benefit from expanded Wi-Fi capability in the Greater Airpark.

Little Wi-Fi is available in the Greater Airpark outside of small retail providers such as coffee shops and restaurants. There is no Wi-Fi network that covers any significant geographic area in the study area. However, the Greater Airpark contains several wireless internet access and data companies

³⁵ APS Resource Alternatives Report, 2008, <http://www.aps.com/resources>

that provide wireless connectivity to some businesses and office buildings in the area. The city provides wireless internet access at the Scottsdale Airport Terminal.

Solid Waste

Approximately 75% of solid waste disposal services in the study area are provided by private companies. The City's Solid Waste Division estimates that the Greater Airpark generates 14,957 tons of solid waste per year, of which the city hauls around 3,000 tons, 7% of the total city's commercial and multi-family residential waste. The percentage of solid waste from commercial establishments is expected to remain the same over the next 10 years.

The City's Solid Waste Transfer Station is located on Union Hills Drive within the study area. Each year, over 84,000 tons of material are processed at the station. The transfer station reduces the number of miles driven by City collection vehicles by approximately 160,000 miles each year.

The City of Scottsdale Solid Waste Division was awarded a grant in 2008, through the Arizona Department of Environmental Quality, to offer recycling opportunities to business establishments in the Scottsdale Airpark. The program currently accepts cardboard, but may include other recyclable materials with program success.

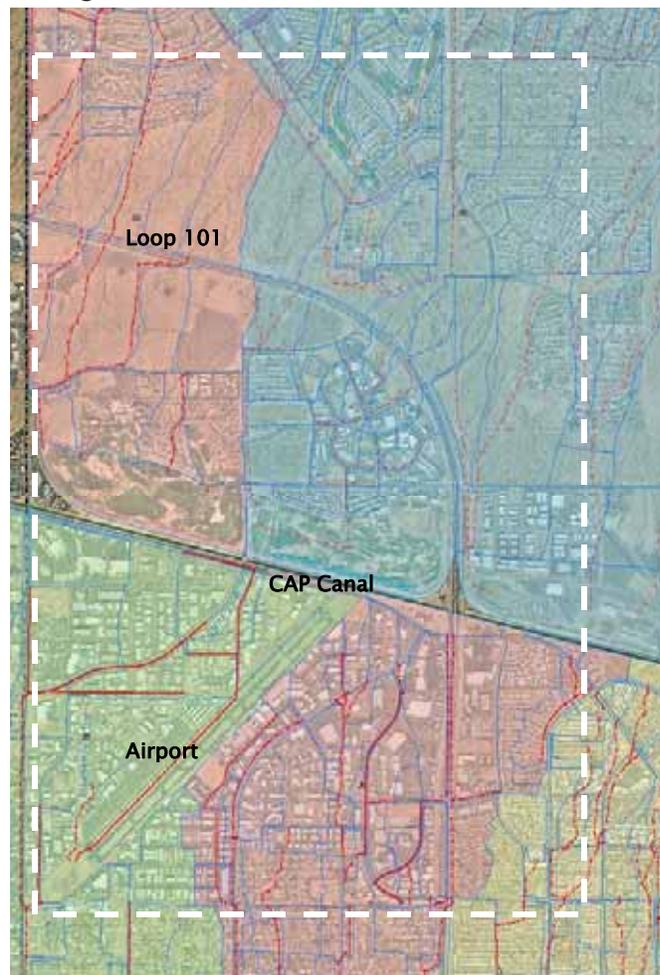
Storm Drainage

Scottsdale, along with other municipalities in Maricopa County, experiences weather patterns that bring heavy rainfall to the area. While the rain may only last for short periods of time, the damage and flooding that occurs can be severe.

According to the City's Stormwater Management Division, the Greater Airpark's existing stormwater infrastructure is inadequate. Flooding occurs frequently around the Scottsdale Airport and north of the CAP Canal. Stormwater issues stem from alluvial fan flows and erosion in the channels due to high flows in the northern part of the study area. More information on flooding and flood zones can be found in the Environment and Historic Preservation Chapter of this report.

Currently in the Greater Airpark, the City of Scottsdale is planning the construction of a storm drain which will attach to the existing

Figure 7-8: Stormwater Basins and Washes



Source: Stormwater Management, 2008. Red lines represent washes in the Greater Airpark; colored areas represent major drainage basins and the dashed white line represents the generalized study area.

outlet structure installed under the Loop 101 Freeway and proceed southerly and westerly to an existing channel along Hayden Road. This will provide relief to the northern portion of the Greater Airpark.

All developments are required to provide on-site stormwater detention. Non-residential land uses may qualify for underground stormwater detention. While this requirement is necessary to reduce flooding and health hazards, it can be costly for new developments. It is particularly costly for smaller, commercial lots seeking in-fill development. Current standards make it difficult to develop or expand commercial buildings and aviation hangars.

Capital Improvement Projects

The City's Capital Improvement Program (CIP) is a short-range plan (four to six years) which identifies capital projects and equipment purchases, provides a planning schedule and identifies financing options. Many capital projects are currently being implemented in the study area. Appendix V outlines Greater Airpark capital projects active in 2008.

8. Mobility, Parking and Wayfinding

Overview

The Greater Airpark is served by a regional transportation system. This system includes regional bus routes, freeway access, airport service, a street network, as well as pedestrian and bicycle facilities, as outlined in this Chapter³⁷.

Existing Mobility Policies

Scottsdale's General Plan establishes a balanced transportation system as the preferred method to meet the needs of the community and encourages transportation systems that provide the safe and efficient movement of people and goods throughout the city, based on the 2001 General Plan. This consists of freeways, major and minor arterial and collector streets, bikeway systems, trails, transit, sidewalks and the Scottsdale Airport.

The 2008 Transportation Master Plan (TMP) identifies goals for the overall circulation system in the city. One goal is to increase the range and convenience of transportation choices for both residents and visitors in order to provide a high quality of life. The TMP also recommends a context-sensitive approach to transportation planning that supports the character of each distinctive area in Scottsdale. More specific to the Greater Airpark, a goal of the TMP is to enhance to and through access by improving internal circulation and reducing traffic congestion.

Street Classification

The Scottsdale street classification is divided into seven categories. The following is a brief explanation of each category:

- *Major and Minor Arterials:* Streets that provide regional continuity and provide for long-distance traffic movements are arterial streets. Major arterials usually have six lanes of through travel; minor arterials have four lanes. The coordination of these streets is important to maintain continuous connections between Scottsdale and the region. Arterial roadways generally serve 25,000 to 55,000 Average Daily Trips (ADT). In the Greater Airpark, Scottsdale Road is considered a Major Arterial and Hayden Road is considered a Minor Arterial.
- *Major and Minor Collectors:* Collector streets serve citywide needs and provide shorter distance traffic movements and traffic movement between arterial and local streets. Major collectors usually have four through lanes while minor collectors often have two lanes. They serve traffic volumes of 5,000 to 30,000 ADT, with emphasis on access to adjacent commercial and residential land uses. In the Greater Airpark, Redfield Road from Thompson Peak Parkway to Raintree Drive is considered a Major Collector. Thunderbird Road from Hayden Road to 84th Street is considered a Minor Collector.
- *Local Collectors, Residential and Commercial/Industrial Streets:* These streets serve local/neighborhood systems. Local streets serve up to 5,000 ADT and are designed to discourage high travel speeds. Gelding Drive is an example of a local street.

³⁷ Information in this Chapter is derived from the City of Scottsdale 2008 Transportation Master Plan prepared by the Transportation Department and HDR Engineering, Inc. unless otherwise noted

In addition to street types, the TMP designates three street character categories—rural/Environmentally Sensitive Lands (ESL), suburban and urban. The following is a brief explanation of each character type:

- *Rural/ESL:* Low-density or desert land use areas. ESL streets are streets within the Environmentally Sensitive Lands Ordinance (ESLO). ESL streets have rural character and are constructed using standards that minimize the impact on the adjacent topography and landscape. No rural or ESL street character types exist in the study area.
- *Suburban:* Areas where land uses are auto-oriented and there is separation between residential and commercial or employment uses. Hayden Road, from Raintree Drive to Frank Lloyd Wright Boulevard, is a suburban street.
- *Urban:* Activity centers and mixed-use areas where pedestrian activity and alternative modes of transportation are likely. Scottsdale Road is an urban street in the study area.

Access to the Greater Airpark is provided by the Loop 101 freeway and several arterial streets—Scottsdale Road, Frank Lloyd Wright Boulevard and Hayden Road. All of these streets serve citywide and regional traffic.

Scottsdale Road is a regional facility and essential link between northern Scottsdale and central/southern Scottsdale. Scottsdale Road and Loop 101 are the only continuous north-south roadways in the Greater Airpark. Consequently, Scottsdale Road is critical to traffic circulation in and around Greater Airpark.

Information on the street functional classification system in the Greater Airpark can be found in Appendix IV.

Traffic Volumes/ Capacity

Forecasted 2030 traffic volumes from the Transportation Department’s travel demand model indicate that traffic volumes are expected to closely match proposed roadway capacity for the majority of major roads in the Greater Airpark. The highest anticipated traffic volume areas are Scottsdale Road, from Thunderbird Road to Loop 101, and Frank Lloyd Wright Boulevard, from Hayden Road to Loop 101.

The forecast predicts continued growth on Scottsdale Road, with traffic volumes increasing from 47,000 vehicles per day (vpd) in 2006 to as high as 58,000 vpd between Frank Lloyd Wright Boulevard and Thompson Peak Parkway in 2030—a volume to capacity (V/C) rate of around 0.75-0.8³⁸. Daily volumes on Frank Lloyd Wright Boulevard near Hayden Road/ Loop 101 are also expected to climb from 47,600 vpd to 48,000 vpd in 2030—a volume to capacity to rate of 0.8. All

³⁸ V/C ratios greater than 0.8 generally indicate congestion.

Figure 8-1: Greater Airpark Bus Routes, 2009



Source: Valley Metro March 2009; Scottsdale GIS; Advance Planning Division, Planning & Development Services

other streets in the Greater Airpark are projected to remain below congestion levels.

Transit

Existing transit service to the Greater Airpark is characterized by four fixed-route bus lines and two express bus lines (See Figure 8-1, page 47). Bus routes operate from 5 am to midnight on weekdays with 15 (at peak time) to 30 (at off-peak times) minute headways on Scottsdale and Hayden Roads. Headways on the Bell Road/ Frank Lloyd Wright Boulevard Route are 30 minutes for both peak and off-peak times. Saturday and Sunday service on Scottsdale Road and Bell Road routes provides 30 minute headways, and 60-minute headways on Hayden Road. The Airport divides the southern portion of the study area east and west; thus requiring transit routes that serve the east side as well as the west side.

Table 8-1: Greater Airpark Transit Service, Fiscal Year 2007-2008

Route	Regional Connections	Other Route Connections	Primary Arterial Street Served	Annual Boardings FY 07-08	Increase Over FY 06-07
72	Chandler Fashion Square north to ASU Tempe, Skysong, Scottsdale Fashion Square, Kierland Commons, and The Promenade.	Route 154 at Greenway to the Airpark (west side); Route 170 to the Airpark (east side); Route 106 from Peoria along Peoria Ave./Shea Blvd. via PV Mall to Route 81	Scottsdale Road	694,550	13.79%
81	Chandler Fashion Square north to ASU Research Park, Tempe Marketplace, Airpark (west side)	Route 76 to Scottsdale Community College, Route 106 at Shea Blvd. to PV Mall	Hayden Road	338,763	17.83%
154*	Greenway Corridor from Glendale to the Airpark (west side)	Route 72 at Scottsdale Road	Greenway Road	17,608 Began 2008	N/A
170	Glendale Arrowhead Town Center east to Bell/117 Park and Ride; SR 51/Bell Park and Ride; and to Scottsdale Airpark (west side)	Route 72; Express Route 511; and Express Route 572	Bell Road/Frank Lloyd Wright Boulevard	91,676	4.29%
Express Route 511*	Chandler north to ASU Research Park, SCC; Airport Terminal via Scottsdale Hospital Shea Blvd./90th St.	Routes 50 (Camelback Rd. to Phoenix) and Route 76 (Miller Rd. to Tempe) at Scottsdale Community College	Loop 101	Began 2009	N/A
Express Route 572*	Surprise Aquatic Center Park and Ride; east to Arrowhead Towne Center Mall; Airport Terminal.	Route 170, 72, 154, and 511	Bell Road, Loop 101	4,386 Began 2008	N/A

*Service on Routes 154, 572 and 511 began in 2008 and 2009; therefore, change data was not available at the time of this report. Source: Scottsdale Transportation Department, March 2009. FY- Fiscal Year; PV= Paradise Valley

Greater Airpark bus route riderships are up since 2006 (see Table 8-1), with an 18% increase on Route 81. When comparing ridership rates to other routes in Scottsdale, it is clear that the Greater

Airpark requires just as much, and in some cases more, transit service than other areas. Further improvements to transit service will help to mitigate the need to increase the amount of available parking (see Parking section of this chapter).

Bicycle & Pedestrian Facilities

The Greater Airpark was initially developed as a low-density industrial employment center and was not designed to readily accommodate pedestrian and bicycle travel. Today the area is characterized by wide vehicular roadways with narrow sidewalks and few bike lanes. The emergence of the study area as a major employment center has increased the need for pedestrian and bicycle facilities, especially given the shift from low-density industrial employment to higher density office and commercial development. Recent developments near the Greater Airpark, such as Kierland Commons, have site layouts that emphasize and encourage internal pedestrian circulation. However, it remains difficult to access these sites on foot from external areas.

The TMP and its implementation program designated 73rd Street, Greenway-Hayden Loop and Paradise Lane for streetscape improvements to enhance area bicycle and pedestrian facilities as well as a general streetscape category for other roadways.

Bicycle Facilities

Few bicycle facilities exist in the Greater Airpark, except for bicycle lanes, paved paths and paved shoulders north of the CAP Canal and a multi-use path north of Bell Road. No bicycle facilities exist south of the CAP Canal. Several bicycle lanes provide access to the study area; however, they terminate before entering the area, such as: Hayden Road, south of Redfield Road, 92nd Street, 96th Street, 100th Street, and Thunderbird Road from Hayden to 82nd Street. A path connection exists through Northsight Park.

Pedestrian Facilities

The 2008 TMP identifies areas of relatively high to high latent pedestrian demand in the Greater Airpark as the following:

- Thompson Peak Parkway, near McDowell Mountain Ranch, south of Bell Road,
- Frank Lloyd Wright Boulevard between Pima Road and Thompson Peak Parkway,
- Scottsdale Road from Shea Boulevard to Butherus Drive, and
- Hayden Road from Indian Bend Road to Frank Lloyd Wright Boulevard.

Please reference the Transportation Master Plan for further information on pedestrian demand.

Trails

The 2004 Trails Master Plan identified the north side of the CAP Canal and the power line corridor (northeastern edge of study boundary) as having the highest suitability for trails in the Greater Airpark. One potential trail connection is a CAP Canal multi-use path that would connect to Phoenix's portion of the Canal. The CAP Canal trail is considered a primary/signature trail and has regional significance. Scottsdale's portion of the trail encompasses 9.2 miles of the 53-mile corridor from Lake Pleasant to Mesa's Southern border. The power line trail and Scottsdale Road Corridor (north of the CAP Canal) are considered primary trails as well. Primary trails are anticipated to receive the greatest level of use of all the City's trails.

Parking

Undesignated or non-striped on-street parking and inadequate parking for business use and employees have been identified as community issues in some places in the Greater Airpark. Building tenants have changed space use from warehouse to office or from low-density office to high-density office use over time. This has created the need for additional parking, which is spilling out onto the streets. On-street parking is now fully occupied most of the day. In locations where shift work is taking place, there is often inadequate parking for both the shift that is ending and the shift that is starting. When there is lack of room for parallel on-street parking, drivers often park head-in, which can block truck access to other businesses in the surrounding area. In some places, delivery trucks, while unloading goods or waiting for cargo to be loaded, will park on the street, causing issues relative to the remaining available parking and area functions.

Structured Parking

There are currently no public parking structures in the Greater Airpark. There are several private parking structures in the study area, but the exact number was unknown at the time of this report.

On-Street Parking

On-street parking is allowed on most local streets in the Greater Airpark; however, actual parking spaces are not designated or striped.

Surface Parking

There are currently 46,320 private off-street, or surface, parking spaces in the Airpark core (south of the CAP Canal).

Shared Parking

The City’s Zoning Ordinance recognizes shared parking in mixed-use environments as an option to reduce the total required parking when adjacent land uses operate at different times from one another. A mixed-use shared parking program allows the property developer to use parking spaces more efficiently by allowing the same spaces to be shared by various land uses. Shared parking is an occurring practice in Downtown Scottsdale and may be appropriate for the Greater Airpark to reduce the overall number of parking spaces required in the area. Table 8-2 illustrates the current Zoning Ordinance’s shared parking calculations.

Table 8–2: Schedule of Shared Parking Calculations

Land Use	Weekday Use of Parking			Weekend Use of Parking		
	12am – 7am	7 am – 6 pm	6 pm– 12am	12am – 7am	7 am – 6 pm	6 pm– 12am
Office/ Industrial	5%	100%	5%	0%	60%	10%
Retail	0%	100%	80%	0%	100%	60%
Residential	100%	55%	85%	100%	65%	75%
Restaurant	50%	70%	100%	45%	70%	100%
Hotel	100%	65%	90%	100%	65%	80%
Theater	0%	70%	100%	5%	70%	100%

Source: City of Scottsdale Zoning Ordinance, Section IX: Parking and Loading Requirements, 2008

Bicycle Parking

Communities that have the highest level of bicycle use tend to be mid-size cities, like Scottsdale. A number of communities have chosen to institute minimum bicycle parking requirements, while some allow for a reduction in the number of required automobile spaces when bicycle parking is provided.³⁹ The Greater Airpark could benefit from bicycle the bicycle parking credits provided in the zoning ordinance to reduce vehicular parking demand in the area which is an issue.

The Scottsdale Zoning Ordinance requires that developments, that are required to provide 40 or more vehicular parking spaces, must provide one bicycle parking space per ten vehicular parking spaces. Developments that are required to provide fewer than 40 parking spaces must provide at least four, and up to 100, bicycle parking spaces.

Scottsdale provides credit for bicycle parking facilities to encourage diverse modes of transportation. Reducing the number of vehicular parking spaces in favor of bicycle parking spaces helps to attain the standards of the Clean Air Act, to reduce impervious surfaces and to save on land and development costs. High-security bicycle spaces— or spaces that protect bicycles or their components against theft through the use of lockers, check-in facilities, monitored parking areas or other means— can also be credited. Additionally, credit can be applied if showers and changing facilities for bicyclists are provided on site.

The Performance Standard Credit applies towards on-site parking, except for residential. One vehicular space can be substituted with ten bicycle spaces. The High-Security Credit substitutes one vehicular space for every four high-security bicycle spaces. Lastly, the Facilities Credit waives two vehicular spaces for every shower provided for bicyclists.

Park-and-Rides

Existing park-and-rides within the City of Scottsdale are joint-use facilities in which informal agreements have been established for shared parking arrangements. Greater Airpark park-and-rides include the Costco lot at Butherus drive and 83rd Place; Dial Tech Center lot at Scottsdale Road and Butherus Drive; and a proposed lot at Hayden Road and Loop 101.

Wayfinding and Signage

A good wayfinding system functions to help people find destinations from all travel modes; establish clear pathways through the use of signs, maps and other landmarks; and carry messages that are user-friendly and understandable. The purpose is to direct people and provide information about destinations, directions, and/or distances. When applied on a regional level, wayfinding can link communities and provide consistent visual indicators to direct travelers to their destinations. Wayfinding signage can also achieve public objectives, such as promotion of community's attractions, education, mile marking and directional guidance. The 2008 TMP recommends developing a city-wide bicycle facility wayfinding system.

The Scottsdale Airport's northeast/southwest orientation breaks up the traditional north/south – east/west street grid system present in the rest of the city. Because of this, many drivers have difficulty navigating the area south of the CAP Canal. The presence of thousands of small businesses

³⁹ Davidson, Michael and Dolnick, Fay. 2002. Parking Standards. Planning Advisory Service Report Number 510/ 511. American Planning Association.

with small street frontages and multi-tenant buildings further exacerbates navigation and circulation. Street name repetition—such as “Greenway-Hayden Loop” and “Hayden Road”—also contributes to a confusing street system. Consequently, a vehicular wayfinding system will be particularly useful at helping alleviate these circulation and navigation issues in the Greater Airpark.

Scottsdale’s sign ordinance is one of the more restrictive in the Valley, creating some navigational difficulty. It generally allows one freestanding business identification sign per street frontage (monument or ground-style), with the exception of multiple-tenant buildings, in which each tenant is allowed a wall sign. Alternative sign options include: directory signs, roof signs, and wall signs. Directional signs are limited to one per driveway in most cases. Businesses in the area have expressed some frustration related to sign ordinance limitations and the ability of customers to locate their business. Others in the area like the existing sign ordinance because of the high aesthetic quality it encourages in the area.

Proposed Transportation Projects

The 2008 Transportation Master Plan (TMP) recognizes that internal circulation and regional access to the Greater Airpark is extremely important to support the expectations that the area will likely become the largest employment center in the Valley. To that end, the following projects were recommended and approved as a part of the TMP implementation program (dates are approximate based upon implementation program):

Airpark Ring Road- The proposed ring road is intended to provide additional circulation to the Greater Airpark by providing more efficient access around the Airport. Originally, a tunnel under the Airport runway was proposed to improve circulation east to west. However, the Transportation Commission removed the tunnel option from consideration during the TMP process because of Homeland Security issues associated with the Airport, high construction and operating costs, impacts to Airport operations and the limited feasibility of construction at the preferred location (Butherus Drive to Raintree Drive). Construction planned to begin in 2013.

Loop 101 Freeway Enhancements- Proposed freeway enhancements include the following:

- Access road onto the southbound Loop 101 from south of the CAP Canal and west of Hayden Road (2020);
- Extension/ addition of left turn (storage) lanes at Frank Lloyd Wright Boulevard onto the Loop 101 (2029);
- Addition of High Occupancy Vehicle (HOV) or “carpool” lanes on Loop 101 with coordinating express bus (completed in 2008);
- HOV ramps at Northsight Boulevard (2026) and Miller Road (2020);
- Fly-over ramps at Hayden Road (north of the CAP Canal) and Pima/ Princess Roads (2021); and
- “Texas U-Turn” at Bell Road (2021).

Roadway Improvements- Proposed roadway enhancements include the following⁴⁰:

- Realignment of 76th Street at Redfield Road (2017),
- Widening Raintree Drive to six lanes (2019),
- Turning Paradise Lane into a traffic diversion for Frank Lloyd Wright Boulevard (2018),

⁴⁰ Thunderbird Road east of Hayden Road will not be extended to access the Loop 101 Freeway

- Intersection modifications at Greenway-Hayden Loop and Frank Lloyd Wright Boulevard (2011),
- Airpark Streetscape Program (2011/2013); and
- Extension of left-turn lanes from Hayden Road onto Frank Lloyd Wright Boulevard (2029).

Pedestrian/ Bicycle Improvements:

- Multi-use path along the CAP Canal (date not specified);
- Bicycle facility improvements at: Greenway-Hayden Loop (2021), Redfield Road (2012), 73rd Street (2021), Hayden Road, Raintree Drive (2019), and Northsight Boulevard; and
- Pedestrian routes: 73rd Street, 76th Street, and 78th Street (dates not specified).

Transit Options- The TMP offers the following options for transit enhancement in the Greater Airpark:

- Improve frequency and hours of service on local bus routes,
- Connect local and express route bus service to park and rides,
- Limited stop service on Scottsdale Road with 10-minute peak hour frequencies, and
- Examine an Airpark Area Circulator and transit center (2025).

Transportation Management Authority

The Greater Airpark may benefit from a district-specific approach to transportation demand management, called transportation management associations (TMA). Although typically city-assisted, TMAs could be formed as independent non-profit corporations. Other organizations or entities could serve as parent organizations for TMAs. Often, TMA membership is open to any interested party in a given district, but should seek to include major area employers. The goals of a TMA could be to improve mode choice and mode split among commuters, or reduce demand for parking. The benefits to reduce congestion, improve employee recruitment/retention, and alleviate parking issues.

9. Design and Character

Overview

This section identifies the design and character found in the Greater Airpark study area as well as prominent visual features and streetscapes.

Design Identity

A large part of the Greater Airpark’s identity and sense of place derives from the Airport, with businesses and marketing materials containing the word “Airpark” and street names, like Thunderbird Road, paying homage to Airport history. However, the Airport is not the only character and place defining feature. Many of the surrounding neighborhoods; commercial centers; and environmental resources, such as the vistas of the McDowell Mountains and colors of the Sonoran Desert define the overall identity of the area as well.

Design is not only defined by the built and natural environments, but smaller elements such as public art, events, and people. The late Frank Lloyd Wright, a prominent architect, continues to inspire unique southwestern architecture, and elements of his design can be found throughout the Greater Airpark and the region. The spire at the corner of Frank Lloyd Wright Boulevard and Scottsdale Road is an art piece inspired by one of his designs. The color “Taliesin Red” is found on the street lights on Frank Lloyd Wright Boulevard—the same street that leads to Taliesin West, Wright’s former winter residence, and architecture school.

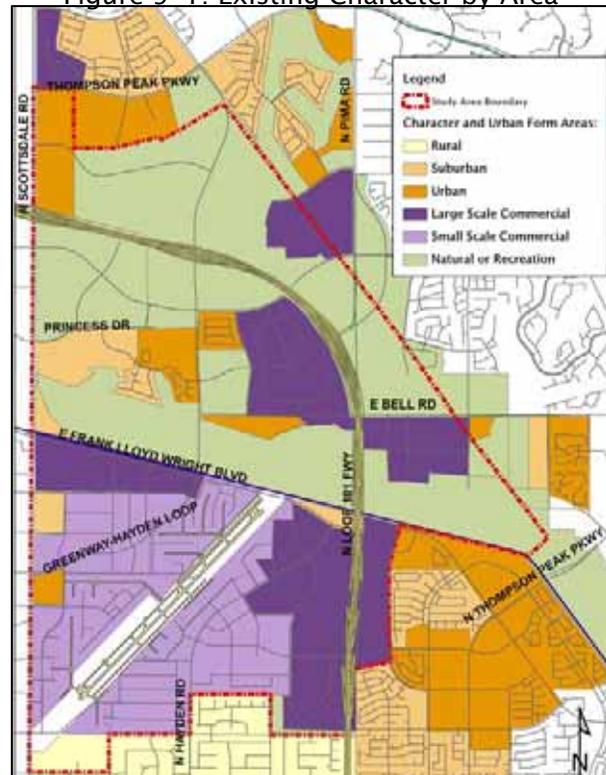
Existing Community Design Goals

The 2001 General Plan’s Design and Character element states that good design is a result of sensitively responding to the character of the surrounding natural and built settings as well as a multitude resources. The General Plan defines the study area as having the following character types—urban employment core, suburban tourism and recreational corridor, urban regional core and urban freeway corridor.

Urban Form and Character

Much of the Greater Airpark’s form and character has developed because of development standards in the Zoning Ordinance. The urban form of the Greater Airpark is characterized by large building masses with little variation in building height. Urban form categories in the Greater Airpark and surrounding area can be categorized as rural, suburban, urban, large-scale commercial, small-scale commercial and natural/ recreation. (See Figure 9-1).

Figure 9-1: Existing Character by Area

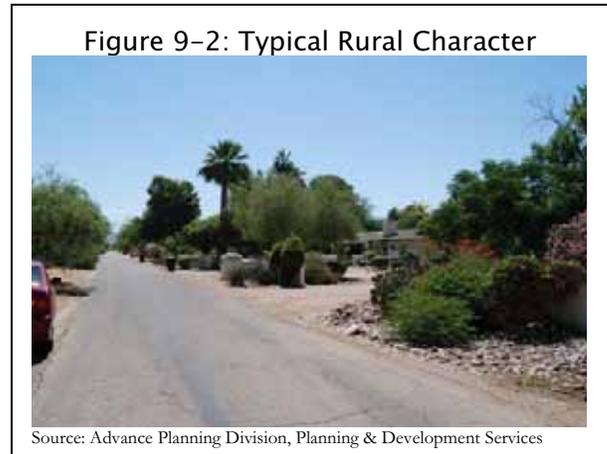


Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Rural

Rural form is most evident directly south of the study area, encompassing low-density, single-family homes that feature low lying, ranch-style architecture with sloped or flat roofs. Homes are oriented toward the street and feature large yards, sometimes with small horse stalls and corrals. Mature, non-deciduous trees and some non-native trees highlight neighborhood age and provide shade to homes, equestrians, and the street. Landscaping typically includes desert ground cover with small amounts of grass.

Streets in rural neighborhoods do not follow a defined grid. The average street is narrow and absent sidewalks, featuring one travel lane in each direction. Pedestrian travel is not particularly attractive because of large block sizes, distances between buildings, and distances between other destinations; however, low automobile traffic levels makes pedestrian travel safer.



Suburban

Suburban character can be found to the east and north of the Greater Airpark, as well as within the northern portion of the study area. Suburban areas feature compact neighborhoods with auto-oriented commercial areas located along arterial streets.

Architecture is most often based on Tuscan style featuring concrete roof tiles, stucco exteriors and desert-brown colors. Neighborhoods north of the CAP Canal feature a desert landscape character while neighborhoods to the south and east of the study area exhibit a more lush landscape with a mix of desert plant life and grass ground cover.

Suburban areas typically feature paved sidewalks. Internal pedestrian travel is somewhat more attractive than in rural neighborhoods, because of smaller distances between streets. However, pedestrian connectivity from residential areas to retail and service areas is generally difficult because of large distances required to travel to those areas and streets that terminate or do not connect to external streets. Automobile circulation is given the highest priority in suburban areas.

Figure 9-3: Typical Suburban Character



Urban

Urban character consists of multi-family and mixed-use neighborhoods, which are currently found in the northern portion of the study area, as well as in surrounding areas to the north and east of the Greater Airpark. This character-type is typically located in areas with access to multiple modes of

transportation, that have regional access and services, and that have a focus on human scale development.

Architectural style consists of desert tones, concrete tile

roofs, and balconies. Some buildings feature garages or retail space on the ground floor with the dedicated living or office space on the upper floors. Buildings either front the street, with entrances that interact with the street frontage, or are oriented internally toward shared community amenities, such as pools and open space. Connectivity by foot to activity areas is easier in urban neighborhoods because of proximity to destinations. Paved sidewalks, pedestrian lighting, canopies, shade structures, and bicycle racks are common street furniture pieces.

Figure 9-4: Typical Urban Character



Large-Scale Commercial

Large-scale commercial areas can be characterized as monolithic buildings with ample site area dedicated to parking, such as large office buildings, big-box stores and auto dealerships. These areas are automobile-oriented and provide few pedestrian connections to adjacent sites and stores.

Buildings are oriented towards parking lots and driveways. The most prominent architectural details are the large windows, entrances and exits. False facades and large signs

Figure 9-5: Typical Large-Scale Commercial Character



break up the massiveness of some of the buildings. Loading and service bays are located in rear or side yards and canopies, trellises, awnings, and overhangs provide shade at entrances and exits.

Large offices of this character exhibit open floor plans with cubicles or non-bearing walls separating offices. The open floor plan allows offices to easily be modified in case of workforce changes. It is common for these areas to have courtyards and open spaces that serve as resting places for employees.

Small-Scale Commercial

Small-scale commercial areas are comprised of small lots, strip malls, aircraft hangars, small warehouses and small office/manufacturing spaces. This character exists immediately around the Scottsdale Airport. Most of the buildings are monolithic structures in which their form follows their function. Defining architectural features consist of large sliding or folding doors, few window

openings (or no windows at all), and one façade-style replicating over entire building mass. Sometimes roofs are slightly pitched and curvilinear but the majority are flat.

Figure 9-6: Typical Small-Scale Commercial Character



Source: Advance Planning Division, Planning & Development Services

Some lots in these areas are served by taxilanes that connect to the Airport property. The streets, taxilanes and sites cater to aircraft, delivery trucks, large equipment and employee traffic. Pedestrian comfort and connectivity is limited in these areas due to large block sizes, streets that terminate without connecting to other streets, and the lack of nearby destinations (such as restaurants and services for employees).

Buildings generally orient internally with the largest percent of building frontage facing internal parking. Because of this orientation's lack of street visibility, signage and identification are top concerns of the businesses and community.

Many property owners in these areas have expressed desire to build larger buildings to house modern aircraft sizes, which is rarely possible under current development standards, and may require the assemblage of two or more adjacent parcels to be feasible.

Natural or Recreation

Areas that have been untouched by development, have been landscaped with native desert elements, or serve as outdoor recreational areas, such as parks, golf courses and WestWorld, are considered natural or recreation character. The majority of this character is located in the northern portion of the Greater Airpark, in undeveloped State Land areas.

Figure 9-7: Typical Natural or Recreation Character



Source: Advance Planning Division, Planning & Development Services

Golf courses and parks have many different characteristics, but generally feature a combination of native desert landscaping and lush, grassy areas. Few of the Greater Airpark's recreation areas can be easily reached by foot from area destinations (such as restaurants, hotels and housing).

The WestWorld facility has a rustic appearance, incorporates desert tones, and comprises buildings that span large distances to accommodate large events. Landscaping is of desert character, with few ground-covering desert plants.

Streetscapes

The General Plan encourages major roadway “streetscapes” that promote the city’s visual quality and character. “Streetscape” is used to describe the combination of design elements which give character to street frontages. Examples of streetscape elements include landscape improvements, street furniture and sidewalk design. Streetscapes also serve as buffers between traffic and adjacent uses. In the business community and commercial area of the Greater Airpark, streetscapes are used to enhance visibility to businesses. Figure 9-8 illustrates three different streetscape types found in the Greater Airpark, as determined by the 2001 General Plan. Suburban Streetscapes are not located in the Greater Airpark.

Transitional Streetscape

Most of the Greater Airpark is classified as a transitional streetscape. Transitional streetscapes are applied in areas of the City where the surrounding development pattern is medium to low intensity. These streetscapes are intended to serve as buffers between traffic and adjacent land uses and to incorporate native or desert-compatible plants into the landscape.

Urban Streetscape

Urban streetscapes concentrate on providing amenities for pedestrian comfort, such as arcades, covered walkways, shade, decorative pavement, landscape improvements, and street hardware. These streetscapes usually have an urban form in which buildings are nearer to the street frontage. In the Greater Airpark, the 2001 General Plan encourages an urban streetscape north of Princess Boulevard, south of the Loop 101 and west of Hayden Road.

Natural Streetscape

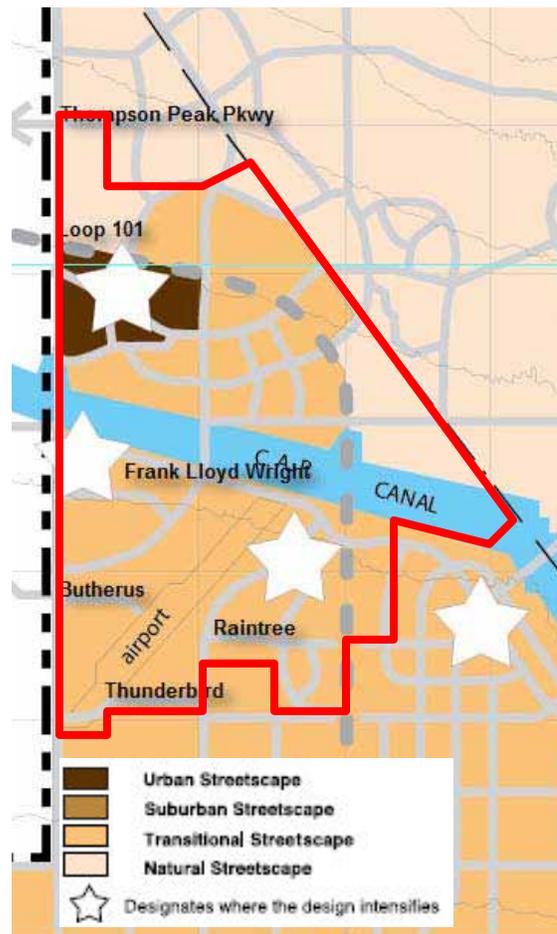
Natural streetscapes encourage compatibility with the natural desert. In the Greater Airpark, natural streetscapes are promoted north of the Loop 101 and in the WestWorld vicinity.

The following are design guidelines that also contribute to the streetscape character in the area:

Frank Lloyd Wright Design Guidelines

The Frank Lloyd Wright Design Guidelines are design standards intended to create streetscape themes that reflect the Frank Lloyd Wright design principle of creating the built environment through the inspiration of nature and organic forms. The guidelines, which are applied on Frank Lloyd Wright Boulevard, encourage wall designs, concrete impressions, unique architecture,

Figure 9-8: 2001 General Plan Streetscape Characters



Source: City of Scottsdale, 2001 General Plan

landscape palettes and specific colors for street hardware. Developments on Frank Lloyd Wright Boulevard are encouraged to reflect Frank Lloyd Wright’s design concepts.

Scottsdale Road Design Guidelines

The Scottsdale Road Design Guidelines provide streetscape design direction and set the framework to create a “signature” corridor for the entire 24-mile length of Scottsdale Road. The guidelines call for uniquely designed transit shelters, bike racks, mechanical equipment screens, public art, paving techniques, street hardware, and shade structures. Please refer to the Scottsdale Road Design Guidelines, segments 4 and 5, for further information.

Scenic Roadways

The 2001 General Plan designates several scenic corridors and buffered roadways to preserve natural settings along the roadway; provide views of nearby landforms, allow for connectivity, visually link to vista corridors and significant open spaces, and to buffer adjacent areas from traffic impacts. Scenic corridors preserve the natural desert setting by requiring buildings to be largely set back from the street. Buffered roadways are meant to achieve a “boulevard” effect by separating structures on both sides of the road and provide open space along the street. Desert Scenic Roadways are another classification in the city; however, none are present within the Greater Airpark.

Scottsdale Road, north of Frank Lloyd Wright Boulevard, is the only designated scenic corridor in the study area. Frank Lloyd Wright Boulevard; Bell Road, east of the Loop 101; and Hayden Road, from Thunderbird Road to Frank Lloyd Wright Boulevard, are designated as buffered roadways. The Hayden Road designation calls for a 50-foot setback from Thunderbird Road to 83rd Street which transitions to a 25-foot setback as it approaches Frank Lloyd Wright Boulevard.

Overhead Power Lines

Visual aesthetics can be greatly improved by converting overhead power lines to underground service. Investing in utility burial encourages reinvestment in older commercial areas⁴¹. Overhead 69 kilovolt (kv) power lines exist in the Greater Airpark along the eastern edge of Scottsdale Road, from Thunderbird Road to Frank Lloyd Wright Boulevard, and on the eastern side of the Loop 101, from Shea Boulevard to Raintree Boulevard. A high voltage, 230kv, transmission line runs diagonally along the eastern border of the Greater Airpark study boundary (also called the power line corridor). The 230kv power line is not being considered for burial, due to safety issues associated with burying a high voltage line. However, 69kv power lines have recently been buried along Scottsdale Road, from Sweetwater Road to Thunderbird Road, and

Figure 9-9:



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

⁴¹ Source: <http://www.scenic.org>

from Frank Lloyd Wright Boulevard to Thompson Peak Parkway. Figure 9-9 (page 59) illustrates where overhead power lines exist in the Greater Airpark.

Prominent Visual Features

The McDowell Mountains are the most visually prominent features in the Greater Airpark. The CAP Canal, in the center of the study area, Loop 101 Freeway, streets, and the Airport runway provide exceptional views of the mountains.

Other prominent visual features in the Greater Airpark include the Thunderbird Academy water tower, just east of Scottsdale Road and Sutton Drive; the Air Traffic Control Tower; Scottsdale Sports Complex; TPC Golf Course; Frank Lloyd Wright Spire; and dynamic features such as aircraft, helicopters, and automobiles.

Sensitive Edges

Residential neighborhoods located within close proximity to the employment area have expressed the need for appropriate transitions from the neighborhood to the commercial development. Areas in need of sensitive transitions are shown in Figure 9-10.

Figure 9-10: Sensitive Edges



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS, 2008

Public Art

Public art is a central, defining characteristic of Scottsdale that enhances the City’s unique character, image, and identity. The following are public art pieces found in the study area:



One With the Eagle, 1989, Pat Matieson, Butherus Drive & Scottsdale Road



TPC Bridge Underpass, Robert Harrison, 1997, Hayden Road & TPC



Icarus Falling, Dale Wright, c. 1964, Hayden & Redfield Roads



Sonoran Suite, Cliff Garten, 2006, Scottsdale Sports Complex



Horseworld, Snell Johnson, 1989, Entrance to WestWorld



Water to Water, Paul Edwards & Chris Tanz, 1999, Entrance to Water Campus

Source: Scottsdale Public Art, 2008

10. Environment & Historic Preservation

Overview

This chapter identifies environmental and preservation issues related to the Greater Airpark, including climate, air quality, geology, biology, hazardous waste, noise, lighting, and historical resources.

Existing Environmental and Preservation Goals

The 2001 General Plan's Preservation and Environmental Planning Element identifies several community goals and strategies related to the environment including safeguarding the natural environment; achieving a sustainable balance between the conservation, use and development of Scottsdale's natural resources; developing programs to attract environmentally sensitive industries to Scottsdale; and expanding opportunities for citizens to live in close proximity to work, to name a few.

Climate

The climate of the Phoenix Metropolitan Area, and Greater Airpark, is semiarid, characterized by little annual rainfall, hot summers, and mild winters. The average maximum temperature ranges from 65 degrees Fahrenheit in January to 106 degrees Fahrenheit in July. The annual rainfall averages approximately seven inches, with most occurring during the summer monsoon, July to August. Winds are generally light and out of the north in the morning, shifting to the southwest in the afternoon and early evening, and are generally calm in the evening. On occasion, thunderstorms have winds upwards of 50 miles per hour for short periods of time. Visibility is usually affected by blowing dust associated with thunderstorms and occasional cloud cover.

Climate is important in land use and airport planning. In terms of airport planning, weather conditions play a significant role in determining runway length and orientation, in addition to determining the need for additional navigational and lighting equipment. Scottsdale's weather conditions provide for excellent flying opportunities year-round. With regard to land planning, the intense sunlight and extreme summer temperatures enable buildings to be more energy efficient when oriented north-south. Large amounts of asphalt and concrete contribute to the urban heat island effect which makes pedestrian activity and bicycling less appealing to some in warmer months.

Air Quality

Pollution potential in the Greater Airpark is relatively high due to the combination of air pollution emission sources in the Valley and transport of pollutants into the area. Emission sources are primarily from automobiles.

Particulate matter (PM₁₀) includes coarse particles that arise from dust and wind-blown soil and fine particles are produced from combustion-related activities such as fuel burned in automobiles, power plants, factories, and wood stoves. High levels of particulate matter can cause public health problems. Only one identified particulate matter point source⁴² is located within the study area. The Scottsdale Airport produces 13.68 tons/yr of PM₁₀ from typical daily emissions, which is average for Valley Airports.

⁴² A single, identifiable source that discharges pollutants into the environment.

Carbon Monoxide (CO) is an odorless, colorless gas formed by incomplete combustion of fuels. Gasoline powered motor vehicles create more than 75% of the area’s CO emissions, according to Maricopa County. CO is highly monitored because of its severe effects on human health, such as unconsciousness, dizziness and even death.

Ozone (O₃) is a colorless, toxic gas and is often referred to as the “brown cloud” in the Valley. Ozone is a respiratory irritant that increases susceptibility to infections and diseases and can harm lung tissue at very high concentrations. Ozone can also cause damage to crops and natural vegetation.

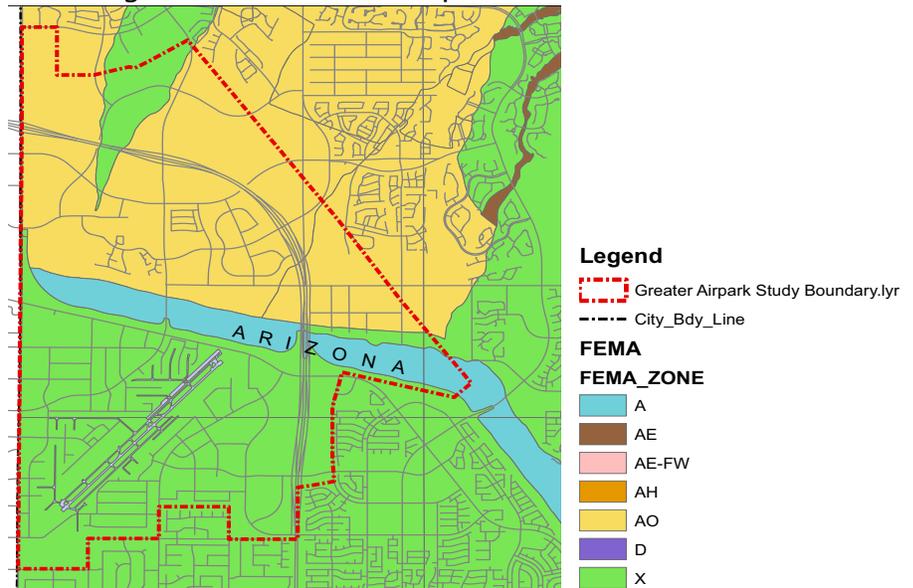
Maricopa County reports a list of air quality violators each month. For the month of October 2008, 134 air quality release violations were listed, including toxic air releases such as asbestos and dust. The list also includes permit violations. Of all listed violating facilities within Maricopa County, four are within the Greater Airpark study area.⁴³

Floodplains and Stormwater

Floodplains are essential in maintaining natural flood and erosion control. Desert topography, compacted soil and numerous washes create flash flooding conditions during severe rainfall events. Floodplains contain and store this runoff. The benefits of floodplains include: floodwater control, water filtering and groundwater recharge, diverse plant and animal habitats support, and parks and recreation opportunities.

Within the Greater Airpark, flood zone designations consist of AO, A, and X. According to the Federal Emergency Management Agency (FEMA), the X zone is at moderate to low risk of flooding and properties do not require flood insurance. Zone A areas are considered high risk, with a 26% chance of flooding over the life of a 30-year mortgage. The A zone is only located on the Central Arizona Project (CAP) Canal as shown in Figure 10-1 (page 61). Zone AO is considered high risk, with river and stream flooding hazards and a 26% chance of flooding over 30 years.

Figure 10-1: Greater Airpark FEMA Flood Zones



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Flooding occasionally occurs in the northern portion of the study area during the summer monsoon. Shallow flooding occurs in the area at depths of one to three feet and velocities of eight feet per second. As the area develops further, important flood storage areas could be lost to impervious surfaces. The

⁴³ Maricopa County Air Quality News Release 2008; www.maricopa.gov

Scottsdale Sports Complex and TPC Golf Course are prominent flood storage areas that assist in flood relief in the Greater Airpark.

Polluted stormwater runoff is a leading cause for unmet water quality standards. Large portions of the Greater Airpark are covered with impervious surfaces such as concrete, asphalt and buildings. Areas in the southern portion of the study area have few to no water runoff control measures—such as stormwater detention and storm drains—because some of the development in this area pre-dates Scottsdale stormwater regulations.

Large natural washes of 50 cubic feet per second (CFS) exist within the northern portion of the study area and should be considered. Modifications to natural water courses in Scottsdale are required to meet City regulations. See Figure 10-2.

Geology

Topography

From the southern point to the northern most point of the study area, the elevation rises 85% from 1,420 feet to 1,661 feet, a difference of 241 feet. The City’s Environmentally Sensitive Lands Ordinance (ESLO) is intended to protect environmentally sensitive lands, such as steep slopes, by providing appropriate and reasonable controls for land development in ESL areas. ESL landforms are shown in Figure 10-3, and include Hillside (HD), Lower Desert (LD), and Upper Desert (UD). The Greater Airpark abuts Lower Desert ESL areas.

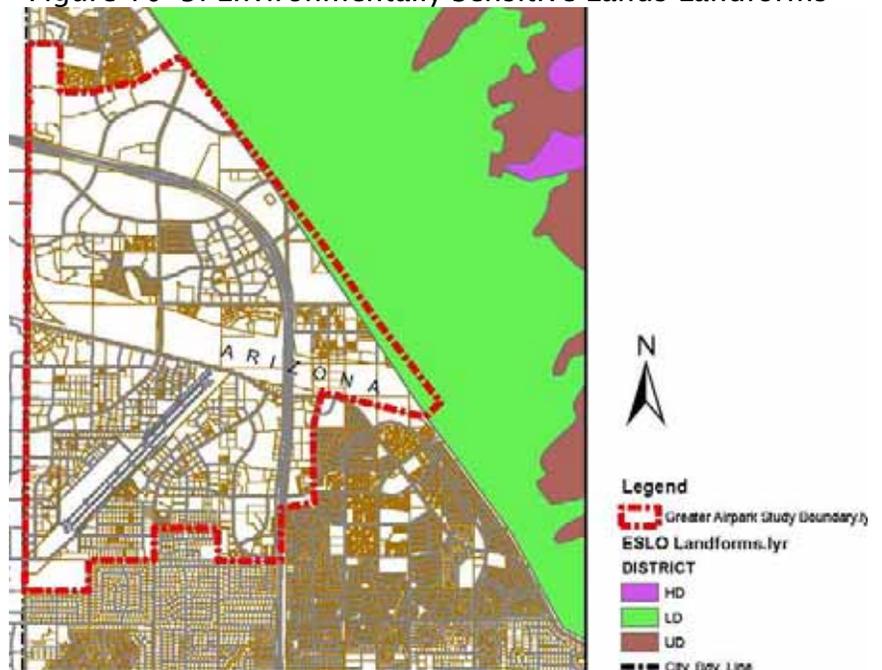
The Lower Desert ESL requires a minimum of 30% natural open space for slopes of 5% to 25% and 25% natural open space for slopes of 0% to 5%. That open space is required to be permanently maintained as non-developable open space on each lot within ESL areas.

Figure 10-2: Greater Airpark 50 CFS Washes



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Figure 10-3: Environmentally Sensitive Lands Landforms



Source: Advance Planning Division, Planning & Development Services; Scottsdale GIS 2008

Soils

The U.S. Department of Agriculture’s (USDA) Soil Quality Indicator’s Report defines Soil Quality as the capacity of a specific kind of soil to function, within natural or managed ecosystems, to sustain plant and animal productivity, enhance water and air quality, and support human health and habitation. Soil quality is dependent on soil function, such as how it filters and stores nutrients, sustains bio-diversity, and regulates water flow, and its physical indicators such as its structure, density, and stability.

Knowledge of soil types can be useful in determining the suitability of community development or recreational activities. Within the Greater Airpark there are five types of soils which have low to moderate shrink-swell potential⁴⁴. A high shrink-swell potential can cause damage to building foundations, roads and other structures and can be quite hazardous, causing unsafe structures and buckles in pavement (danger to motorists).

Biology

Flora

The Greater Airpark is within the Sonoran Desert, one of four desert formations in North America. Natural vegetation is mainly composed of desert communities. The Giant Saguaro cactus is a characteristic species of the area. Mesquite, Brittlebush, Ocotillo, Creosote, Bursage, Prickly Pear, and Cholla are dominant desert shrubs. Riparian vegetation is present along stream channels and associated terraces.

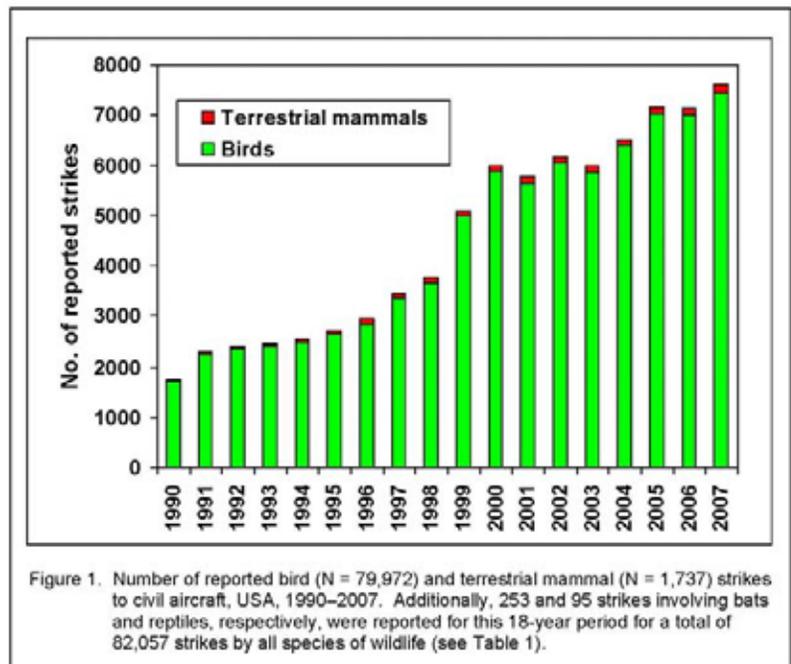
Tree Cover

Few streets in the Greater Airpark boast continuous mature tree cover. Although the city has historically required landscaped areas, some older developments have little to no landscaping. Preservation of mature trees and the addition of more trees along pedestrian routes should be a priority in the area.

Fauna

A great diversity of desert fauna exists in the area, including the Gambel’s Quail, Desert Kangaroo Rat, Desert Pocket Mouse, Harris’ Antelope Squirrel, Black-throated Sparrow, Desert Horned Lizard, Cactus Mouse, Gila Woodpecker, Desert Tortoise, Zebra-tailed Lizard, Desert Iguana, and Western Diamond Rattlesnake.

Figure 10-4: U.S. Reported Wildlife-Aircraft Strikes, 1990-2007



Source: Wildlife Strikes to Civil Aircraft in the United States 1990 – 2007, FAA and USDA, June 2008; Strikes reported from 1,418 US Airports and 207 foreign airports.

⁴⁴ Shrink-swell potential: the shrinking of soil when dry and the swelling when wet

Wildlife Hazard Management

The FAA and the USDA research wildlife hazards and compile a wildlife strike database. The database includes all wildlife strikes reported to U.S. civil aircraft and foreign carriers experiencing strikes in the U.S.A.

In Arizona 1,351 wildlife strikes were reported, including birds, bats, terrestrial mammals, and reptiles between 1990 and 2007. Figure 10-4 (page 64) shows that wildlife strike reports in the United States are increasing in number.

The FAA, USDA and the U.S. Air force expect the risk, frequency and potential severity of wildlife-aircraft collisions to grow over the next decade (FAA and USDA 2008). On a monthly basis, collisions with wildlife are reported, many with aircraft fatalities.

The Greater Airpark is located approximately seven miles from the Fort McDowell Bald Eagle Breeding Area, 12 miles from the Salt River Bald Eagle Breeding Area and 13 miles from the Verde River Bald Eagle Breeding area. Common wildlife issues at the Scottsdale Airport involve Coyotes crossing the runway and taxiways and hawks circling the area.

Hazardous Materials, Pollution Prevention, & Solid Waste

A common problem with solid waste collection includes mixing different classifications of waste together, which makes disposing of the waste difficult and can cause contamination.

Problem wastes, according to the MAG’s Regional Waste Management Plan, are Biohazardous Medical Waste, Wastewater Treatment Plant Biosolids (Sludges), Non-hazardous Liquid Waste, Illegally Dumped Wastes, Electronic Wastes, and White Goods/ Waste containing chlorofluorocarbons (CFLs).

Approximately 85 facilities handle hazardous materials within the study area, as shown in Figure 10-5, including manufacturing plants, dry cleaners, medical laboratories, and automotive maintenance facilities. Four sites in the study area are listed on the Environmental Protection Agency’s (EPA) report for toxic releases⁴⁵.



⁴⁵ This data was extracted on September 29, 2008 from the EPA’s website

Noise

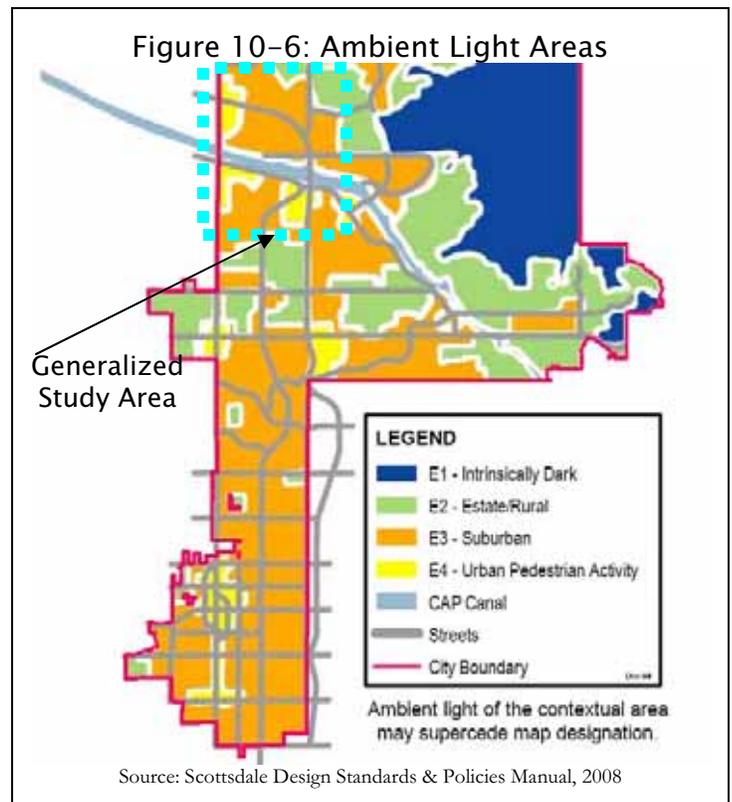
Noise can be generated by a number of sources, including automobiles, airplanes, construction sites, machinery and industrial operations. Sound levels can be reduced by placing barriers between the noise source and the receiver. Effective barriers include buildings, concrete walls, berms, and landscaping.

A major generator of noise in the study area is the Scottsdale Airport. Airport actions that could cause noise impacts include new or extended taxiways, construction and demolition activities, aircraft operations, aircraft types, new or revised flight paths, and new or relocated airport access roadways. A discussion on Airport Noise is available in the Aviation Chapter of this report.

Transportation-generated noise from the Loop 101 Freeway and major arterial streets, as well as noise generated from industrial and commercial businesses, may impact residential and other noise sensitive uses within the Greater Airpark. Sensitive land uses should be prohibited in areas where noise levels exceed 75 Day-Night Average Noise Levels (DNL), and noise attenuation procedures should be required in areas at 60 DNL and above. Most noise complaints in the Greater Airpark are related to aircraft and freeway traffic. The Arizona Department of Transportation is current planning noise wall mitigation in some areas of the Loop 101 Freeway which meet their noise mitigation policies.

Lighting

In places where commercial and employment land uses abut residential land uses, security lighting can become an issue. Businesses often want to be highly visible from the street and prefer to have bright security lighting when closed. This is in contrast to typical residential areas, and particularly, rural residential areas that generally want to have little outdoor lighting. The rural area to the south of the study area has concerns over the amount of light emitted from the adjacent employment area.



The City's Design Standards and Policies Manual (DS&PM) outlines the following standards for the design of outdoor lighting based upon area characteristics, and the areas are shown in Figure 10-6:

- Estate/Rural Areas- Nighttime pedestrian activity is minimal requiring low lighting levels.
- Suburban Areas- A moderate amount of pedestrian activity requires moderate lighting levels around retail centers and schools. The majority of the study area currently falls into this category.
- Urban/Pedestrian Activity Areas- In areas with large amounts of pedestrian activity, higher levels of lighting are required⁴⁶

⁴⁶ The list only includes those areas within or adjacent to the Greater Airpark

City lighting guidelines outline that area ambient lighting levels be maintained; outdoor lighting should be focused on tasks instead of washing an entire building; gradual transitions should be made from lit to unlit areas; special uses require special standards; and lighting sources should not be visible from off of the property. The Development Review Board reviews non-residential lighting.

Odors

Odors are typically annoyances, rather than health hazards. The ability to detect odors varies considerably among the population and is subjective. People may have different reactions to the same odor; one that is offensive to one person, may be acceptable or pleasant to another. Odor-sensitive areas include places where children, seniors and ill persons are present such as hospitals and schools. Strong odor-producing uses should be limited near these sensitive types of land uses. Few community members have expressed odor concerns regarding the Greater Airpark. Areas of potential sensitivity include the residential neighborhoods south of Thunderbird Road.

Green Building

According to the U.S. Green Building Council, buildings use close to 40% of the nation's energy budget, produce 30% of greenhouse gases (like ozone) and create nearly 30% of waste. Building strategies, like the Leadership in Energy and Environmental Design (LEED) Rating System, make it possible to improve environmental and community health through "green" building strategies. Green building can help reduce the amount of waste, infrastructure and utilities required for today's buildings.

In 2005, Scottsdale became the first city in the nation to adopt the LEED Standard for new and remodeled municipal buildings. The percentage of "green" homes built in Scottsdale has risen from less than one to more than 23% from 1998 to 2007. Currently there are no LEED Certified buildings in the Greater Airpark.

Archeological Resources

There are few archeological resources within the Greater Airpark. Evidence that the Hohokam People were present within the area has been documented by the discovery of shards of pottery and fire pits that have been found in the area. A few small archeological sites exist within the study area, but none that deter future development. In addition, the Verde Canal was built in the 1920s and is located north of the CAP Canal and east of Loop 101.

Historical Resources

No structures within the Greater Airpark are listed on the National Register of Historic Places or the Scottsdale Historic Register. The oldest remaining structures in the area are two airport hangars and a water tower on the Thunderbird Academy Campus. All were constructed in the 1970s.

11. Aviation

Overview

This chapter examines aviation in the Greater Airpark, and the majority of information in this chapter is derived from the 2008 Airport Strategic Business Plan Working Papers created by Wilbur Smith Associates and the Scottsdale Airport, in addition to other resources where noted.

Scottsdale Airport Overview

Scottsdale Airport has been a fixture in the physical and economic landscape of the City of Scottsdale since 1942. The area around the Airport serves as a model for airport-industrial park interface development in the aviation industry.⁴⁷

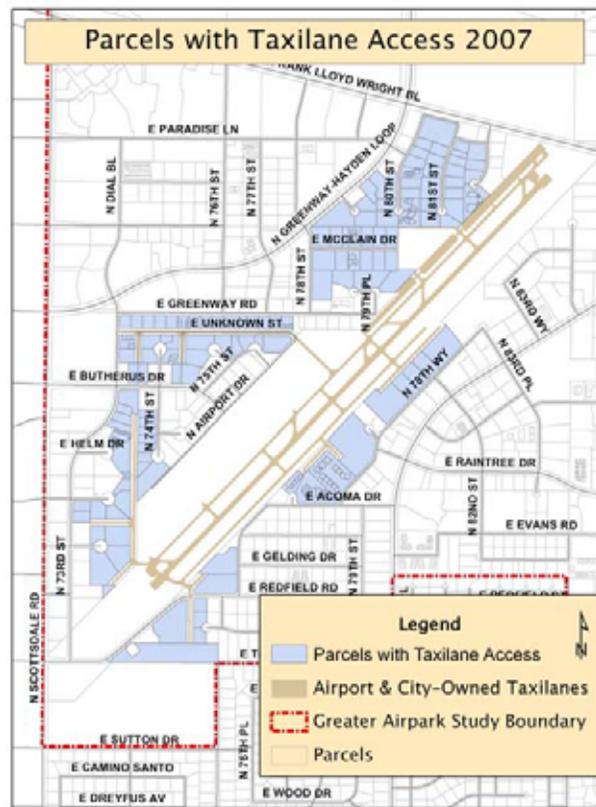
The Airport is located on 297 acres and incurred over 206,000 total operations in 2007 and 191,152 in 2008, making it one of the busiest single-runway facilities in the nation⁴⁷. Approximately 320 aircraft and helicopters are stored on the Airport and 125 aircraft and helicopters are stored in Airpark hangars at any one time. Many aircraft hangars are used for purposes other than aircraft storage, such as personal storage; however, at least 50% of the hangars are thought to be used for their intended purpose.

One unique aspect of the Scottsdale Airport is what is called “through the fence” operations. Businesses, hangars, cargo facilities and other uses have direct taxilane access to the airfield on their fee simple property, as shown in Figure 11-1. Most other airports around the country do not operate in this fashion, with hangars located on leased property on the Airport proper. City ordinances and codes, such as Chapter 5 of the City Code of Ordinances, have been written to accommodate this situation.

Existing Aviation Goals

The 2001 General Plan provides goals regarding aviation, including providing a safe environment for all Scottsdale citizens, visitors, and private interests by alleviating the physical risks that may be encountered in the normal operation and development of the community; protecting the physical integrity of regional transportation networks; and protecting the function and form of regional air and land corridors.

Figure 11-1:



Source: Advance Planning Division, Planning & Development Services; Aviation Division, Transportation; Scottsdale GIS 2008

⁴⁷ Source: 2008 Airport Strategic Business Plan Working Papers

Scottsdale Airport Economic and Financial Condition

Scottsdale Airport is considered financially autonomous and receives no supplemental income from the City of Scottsdale because it receives enterprise funds from the State. Table 11-1 presents a summary of the Airport's revenues, expenses and income over several years. The Airport's net revenues have steadily increased since 2003 until 2008, where the Airport has seen the effects of the struggling global economy.

Table 11-1: Airport Operating Revenues, Expenses, and Outcome

Category	2003	2004	2005	2006	2007
Revenues	\$2,136,205	\$3,166,028	\$2,697,618	\$4,121,985	\$4,382,668
Expenditures	\$1,774,048	\$1,749,294	\$1,900,464	\$2,106,342	\$640,228
Net Revenues	\$362,157	\$1,416,734	\$1,067,154	\$2,015,643	\$3,742,440

Source: Scottsdale Airport/ Wilbur Smith Associates 2008

A strong relationship typically exists between an area's economy and its local aviation infrastructure. Airports are economic generators for their host communities and the surrounding region, providing economic and qualitative benefits to the residents, businesses and visitors. At airports, these economic impacts are typically classified as being one of three types: direct, indirect, and spin-off.

As a direct benefit, the demand for aviation services at an airport, as well as any other associated aviation industries, creates jobs for the local community to meet those aeronautical demands. As an indirect benefit, the transportation access that an airport provides helps stimulate the local economy by facilitating activity in a wide variety of business sectors, including tourism and corporate travel.

As direct and indirect benefits circulate in the local, regional and statewide economies, spin-off benefits occur. Specifically, airport activities create demand for goods and services provided by local corporations, businesses, proprietorships, and government agencies. Any business or government entity that realizes either direct or indirect benefits, must employ workers, realize gross revenues, make local purchases, and pay taxes, as do their individual employees.

In order to quantify the economic benefits attributable to activities at Scottsdale Airport, the Arizona Department of Transportation (ADOT) completed an economic impact study for the Airport in 2003. This study identifies the total regional economic impact of aviation activities at Scottsdale Airport to be over \$140.1 million per year. That impact originates from a variety of aviation-related activities including general aviation, cargo transport, military activities, travel and tourism.

Airport Master Plan

The 1997 Airport Master Plan is a comprehensive analysis of airport needs and alternatives with the purpose of providing direction for the future development of the facility⁴⁸. The Master Plan and Part 150 Airport Noise Compatibility study update in 2004 forecast that in 2025, the Airport will have 299,000 total take-offs and landings. This is a projected 45% increase in operations from 2007.

The Alternatives Chapter of the 1997 Master Plan examined the addition of a parallel runway, but the option was eliminated after further study because the physical characteristics of the Airport would cause impractical and significant economic burdens regarding building and facility relocations.

⁴⁸ Source of this section: 1997 Scottsdale Airport Master Plan, Coffman Associates, Inc & Gilbertson Associates, Inc.

The Master Plan did recommend the addition of hangar space around the airport and the improvement of street access to the terminal and airport area. Table 11-2 shows a forecast of the amount of hangar square footage that will be needed by 2015.

Table 11-2: Forecast Hangar Square Footage Requirements
Scottsdale Airport

	Available (1997)	2000	2005	2010	2015
Total Conventional Hangar Area (square feet)	86,460	277,500	308,100	343,100	378,100

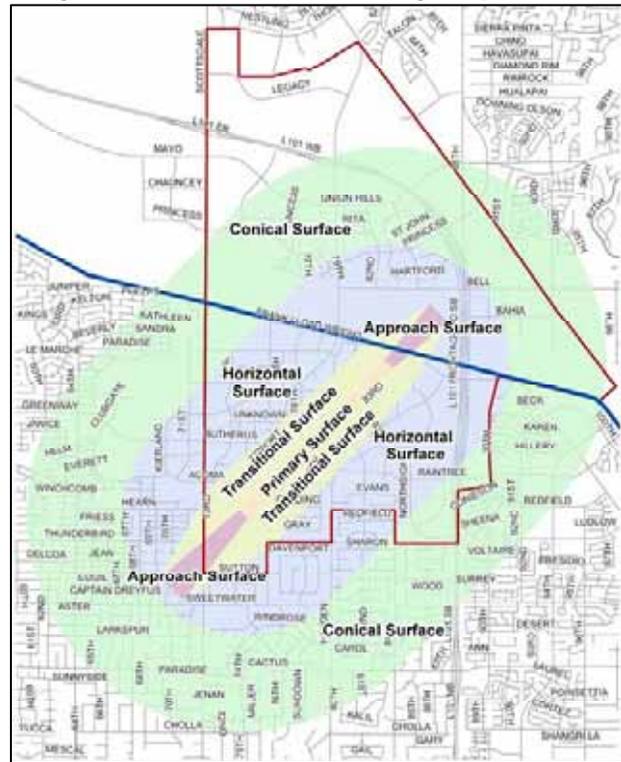
Source: 1997 Scottsdale Airport Master Plan, Coffman Associates, Inc.

Part 77 Airspace Plan

Federal Aviation Administration (FAA) Regulations Title 14, Part 77⁴⁹, establishes standards and notification requirements for objects affecting navigable airspace. The intent of the Part 77 Airspace Plan is to protect the airspace and runway approaches from hazards that could affect the safe and efficient operation of the Airport. The plan allows the City to determine if construction of a proposed structure in the vicinity of the airport will penetrate any protected airspaces. The following are protected airspace regulations determined by the Part 77, and Figure 11-2 shows the location of the imaginary surfaces in the Greater Airpark, as established by the FAA:

- **Primary surface**- 500 feet wide (from center of runway) and 200 feet beyond each runway end. Typically, only objects “fixed by function” are allowed in this area (e.g. navigational aids and lighting).
- **Transition surface**- It rises at a slope of one vertical foot for each seven horizontal feet (7:1), up to 150 feet above the runway. Structures are not allowed to penetrate that slope.
- **Horizontal surface**- Established at 150 feet above the runway, the horizontal surface has a radius of 10,000 feet from the ends of each runway. Thus, structures taller than 150 feet are not allowed in this area.
- **Conical surface**- 4,000 feet in length and slopes away from the horizontal surface at one vertical foot for each twenty horizontal feet (20:1). It rises to a height of 350 feet above the airport elevation. Thus, structures taller than 350 feet are not appropriate in this area.

Figure 11-2: FAA Part 77 Imaginary Surfaces



Source: Advance Planning Division, Planning & Development Services; FAA; Scottsdale GIS 2008

⁴⁹ Federal Aviation Administration (FAA) Regulations Title 14, Part 77

Part-150 Noise Compatibility Program

The impact of aircraft noise on airport area residents and businesses has been an environmental issue in the United States for many years and is a key to fostering positive airport community relations. To help mitigate such issues, airports can voluntarily establish a Part 150 Noise Compatibility Program (NCP) that is intended to promote aircraft noise control and land use compatibility.

In 2004, Scottsdale Airport completed an update to its Part 150 Noise Compatibility Program building upon the foundation established by the two previously approved studies conducted in 1985 and 1997.

The City of Scottsdale has undertaken a number of projects with the goal of mitigating between airport users and residents. Some of the ongoing noise reduction efforts are as follows:

- Pilot education tools regarding noise sensitive areas that can be avoided through awareness and planning;
- Partnerships with aviation organizations to further pilot awareness and noise abatement;
- Formation of a safety and education forum for flight training and noise issues;
- Partnership with residents to identify noise issues and evaluate possible solutions;
- Community dialogue between airport staff and area residents and resident organizations;
- “Noise disclosures” provided to prospective buyers; and
- Avigation easements⁵⁰ for new development within the 55-Day-Night Average Sound Level (DNL) area.

A number of noise-sensitive institutions consisting of schools, daycare facilities, libraries, places of worship, nursing homes, and medical facilities were identified in the Part 150 program. These institutions are primarily located in the southern portions of the study area. The study also found that neither the City of Phoenix nor the City of Scottsdale had subdivision regulations that protect the Airport from litigation for noise impacts, or building codes that require sound insulation in new residential, office and institutional buildings.

The study also found that the majority (1,143) of the study area’s homes are marginally incompatible with noise, or in the 55 to 60 DNL; no dwellings are located within the 65 DNL area or higher, which is where noise begins to have a significant impact as defined by the EPA, HUD and FAA⁵¹; eight noise-sensitive institutions are contained within the

Figure 11-3: FAA Part 150 Noise Contours, 2025



Source: Advance Planning Division, Planning & Development Services; FAA; Scottsdale GIS 2008

⁵⁰ An agreement that grants the right to fly airplanes over property and prohibits noise-related litigation

⁵¹ EPA = Environmental Protection Agency, HUD = Housing and Urban Development, FAA= Federal Aviation Administration

55 DNL area; and a medical office, Thunderbird Academy, and a place of worship are located within the 60 to 65 DNL area.

Under the current land use designations, there is a potential for approximately 582 additional homes (or dwelling units) within the 55 to 60 DNL area by 2025. Figure 11-3 (page 71) shows the Noise Contours for the year 2025. The Scottsdale Zoning Ordinance's I-1 Industrial District requires that developments located between the 55 and 60 DNL noise contours, use sound attenuation measures to reduce outside to inside noise by 25 decibels.

The Part 77 and Part 150 FAA regulations have influenced the development of the Greater Airpark since its inception. Aviation and employment uses have located within close proximity to the Airport because of their compatibility with noise levels and building height regulations.

Aviation-Related Businesses

The parcels that immediately surround the Airport and have taxilane access and/or are located within the I-1 Zoning District is what some community members consider the “traditional Airpark” in Scottsdale. In this area there are a variety of aviation businesses including Aircraft Management, Fueling Service, In-Flight Catering, Aircraft Sales & Maintenance, Avionics Sales & Repair, Hangar/Shade Leasing, Aircraft Washing, Charter Flight Companies and Commercial/Tourism Flights. Aviation businesses with hangars often house aircraft for long and short periods of time and generally require larger buildings and facilities than typical commercial buildings.

Helicopter service is an essential community service in addition to being a convenient amenity for many local businesses and corporate headquarters. Helicopters in the Greater Airpark serve the region's medical and emergency response system for not only medical emergencies, but fire dangers and other community policing and safety issues as well. The Valley's news stations also pilot helicopters out of the Airpark and Airport to provide regional traffic and news updates. The “traditional Airpark” serves as a prime location for some businesses that require corporate or personal helicopters for business efficiency. Some community members also own private helicopters which depart from the area. Off-Airport helicopter operations are limited in location to the I-1 Zoning District and require Conditional Use⁵² Permits.

⁵² Conditional Use means uses specified within each Zoning District which require approval of a special permit by the City Council. These permits may be limited by specific conditions, restrictions, terms or time periods and may be revocable.

APPENDICES

Appendix I– Public Outreach Interim Summary Report, December 2008

Appendix II– Greater Airpark Zoning Summary

Appendix III– Supporting Reference Documents

Appendix IV– Greater Airpark Functional Street Classifications

Appendix V– Capital Improvement Projects, 2008

Appendix VI– Case Studies

Appendix VII– Housing Chapter– Housing Type Definitions

Appendix VIII– Executive Summary, Economic Analysis of the Greater Airpark,
Gruen Gruen + Associates, March 2009

Appendix IX– Demographic Statistical Areas Used for Analysis

Appendix X– Greater Airpark Planning History Timeline

Appendix 1

Public Outreach Summary Report

December 2008



Greater Airpark Community Area Plan Public Outreach Interim Summary Report



Advance Planning, Policy & Design
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Introduction

The Greater Airpark Community Area Plan is a project initiated by the Scottsdale City Council that is managed by the Advance Planning Division of Planning & Development Services with assistance from numerous city departments and the community. The process encourages the participation of business and property owners, community members, and organizations to develop a community-based vision and policies for the Greater Airpark Planning Area.

Because of the Greater Airpark Plan's importance to the future of the area and city as a whole, the public outreach program was designed to engage a broad cross-section of Greater Airpark stakeholders in the development of the plan. The guiding principles of the public outreach program are as follows:

- * Conduct a process that is open and transparent;
- * Engage a broad audience and enhance public awareness of the planning effort and its importance;
- * Educate the public on the Greater Airpark Community Area Plan policy document;
- * Guide the development of a community-based vision for the area;
- * Acknowledge past efforts and show how they affect the future of the Greater Airpark; and
- * Conduct a formal and professional public participation process.

Phase One, Visioning and Data Gathering, of the projected produced a comprehensive understanding of the community's priorities and visions. The complete result of each public outreach method is available on the City's website at:

<http://www.scottsdaleaz.gov/planning/areaplans/GreaterAirparkCAP.asp>

Phase One included the development of the vision for the Greater Airpark, in addition to getting an understanding of the needs and issues in the area. Phase One included a variety of ways to get community input, including:

- * Presentations and discussions were conducted with business organizations, community groups, and city boards and commissions beginning in March 2008 and continuing throughout the process;
- * Business and Property Owner Cafes brought the business community together on May 21, 2008 to discuss the current market, business environment, and their visions for the area;



Community members and city staff worked together to create vision themes for the area.



- * A Community Visioning Workshop on May 22, 2008, asked the Greater Airpark and surrounding community to identify community treasures, challenges and their visions for the area's future;
- * A Visioning Survey which asked for respondents' issues and assets of the Greater Airpark and their visions was available on the city's website and by mail or fax to Greater Airpark stakeholders between June and September 2008;
- * A Vision Priorities Workshop held on July 16, 2008, which invited the community to return to review, edit and prioritize vision themes developed in May 2008, and a virtual version of this event was available on the city's website between July and October 2008; and
- * A series of focus groups on themes such as land use, mobility, design and economics, was held in September 2008 to further refine and examine issues and ideas mentioned in earlier public outreach efforts. A virtual version of these events was also available on the city's website between September and December 2008.

Phase Two, Data Analysis, of the project, which is underway at the time of this report, involves the development of a background report for the Greater Airpark that examines all of the current conditions in the area. The project team will use the information collected and analyzed in the background report, in addition to all of the community input collected in Phase One, to create a draft plan in Phase Three.

Phase Three, Draft Plan, will take all of the information gathered to date and a draft plan will be created based upon that data. The community will be asked to comment and revise policies in the plan. The plan will also be taken to sessions with the Planning Commission and City Council.

Phase Four, Final Plan, will take all of the gathered input and revise the Draft Plan into a final form.

Phase Five, Implementation, will involve an the incorporation of the final plan into the update of the city's General Plan.

This report summarizes Phase One's commonly agreed-upon visions within the Greater Airpark community. Information in this report and the Greater Airpark Existing Conditions Report will serve as the basis for the development of draft policies in Phase Three of the process.

Common Visions

The following vision themes, together with representative supporting comments from the community, reflect the dialogue and comments received in Phase One of the project process. They represent the major themes that were heard from the community and provide a snapshot of the input that many community members share.

Enhance Mobility and Wayfinding

While access and location are the greatest assets of the Greater Airpark, internal circulation and mobility should be enhanced. Greater Airpark should continue to develop a well-connected transportation system with internal wayfinding and signage as well as better access to public transit, an internal transit circulator, park-and-ride lots, bicycle facilities and pedestrian pathways. Defining gateways and entrances into the Greater Airpark, as well as the enhancement of connections to major destinations within the area, are imperative to achieving this vision.

“[My ten year vision involves] timely mass transportation routes [that] feed in and out of the Airpark from various park-and-ride locations within the greater Phoenix area. One or two major transportation centers evolve within the Airpark as spoke and hub interfaces on a local basis. A stronger partnership exists with the city of Phoenix along the Scottsdale Road interface with the Airpark and pedestrian movement from one side to the other is much improved. The retail components of the Airpark are more defined and include opportunity for pedestrian, bike, and other access from any point in the Airpark. Some small and meaningful open space is offered as focal points for walking or biking in the airpark. Shaded and lighted pedestrian walkways are common and can tie any one area with the other, even across the busiest of streets.” –Participant vision statement, 2008.

Sustain Existing Neighborhoods

The Greater Airpark should continue to maintain its internal and surrounding stable neighborhoods and neighborhood open spaces. Transitions between residential and business areas in and around the Greater Airpark should be preserved and enhanced, providing a mutually supportive environment where both residents and businesses thrive. In addition, the City should continue to encourage dialogue among area residents, businesses, property owners and developers to ensure that that environment is created.

“If you could combine the best of a pedestrian-friendly and eclectic downtowns like Mill Street in Tempe with the high-tech, high-quality environment at Kierland and attract top tier companies to base themselves within the airpark proper while still keeping the single-family home environments on the periphery, that would be ideal.” –Participant vision statement, 2008.

Encourage a Variety of Land Uses and Activities

People provide the lifeline to the businesses in the Greater Airpark. Encouraging a variety of land uses in the area helps make Greater Airpark a destination where people can live, work, and play. The incorporation of mixed-use development helps to create an around-the-clock active and lively place, as well as helps to encourage a sense of community and security. Adding more cultural and entertainment activities to the area will further enhance the area's appeal. New developments and activities in the Greater Airpark, however, should also be compatible with and compliment existing land uses.

“[My vision is...] Visitors come from around the world to look at the marvelous relationship and natural interaction of commercial, residential, shopping and aviation interests.” –Participant vision statement, 2008.

Support and Expand Business Diversity

The diversity of businesses in the Greater Airpark makes it the viable and successful location that it is today. Business diversity should be preserved and expanded, including the addition of new restaurants, retail, and recreation opportunities. Programs that assist with business start-up, retention and attraction are all key components to achieving this vision.

“In ten years, the area will be a combination of several large anchor businesses supported by a majority of mid/small companies and retail shops that support the employees and businesses of the area.” –Participant vision statement, 2008.

Sustain and Enhance Aviation

In 1942, the Scottsdale Airport began as a military training facility. Today the Greater Airpark is one of the largest employment centers in the region and a major economic driver for Scottsdale. The City should continue to sustain and enhance its roots in aviation by preserving and promoting growth of aviation-related businesses, continuing to support and maintain the Scottsdale Airport, and promoting aviation-related entrepreneurial opportunities.

“My vision is that everything that has been built meshes nicely with the airport.”
–Participant vision statement, 2008.

Encourage Recreation and Open Space

Neighborhood parks and open space are important to the success and well-being of the community. Continuing to maintain and expand parks, recreation, and open space opportunities is a priority for the Greater Airpark community. In addition, recreational land uses (i.e. gymnasiums, health clubs, and recreational facilities) should continue to be encouraged in the Greater Airpark for the overall health and well-being of the community.

“[In my vision,] lots of open space is preserved, with low-water shade trees cooling and cleaning the surrounding areas. There are off-street bicycle paths and parks, and a walking mall - like in European cities - for the shopping needs. There are no mega stores.” –Participant vision statement, 2008.

Promote Sustainability and “Green” Design

The Greater Airpark should be a global model for sustainability and green design. The City should encourage property owners to incorporate “green” construction, landscaping, and sustainable renovation practices for residential and business development. Additionally, the Greater Airpark should promote sustainability through multi-modal public transit; diverse modes of transportation (such as bicycling, walking, and trolleys); pedestrian connectivity; recycling programs; economic diversity and high-tech infrastructure, such as wi-fi.

“[The Greater Airpark should become] a self-sustaining esoteric metropolis focused on the use of renewable energy providing a harmonious home and work environment with no need for personal transportation within the Greater Airpark community.”

–Participant vision statement, 2008.

Enhance Identity and Architecture

Quality architecture is highly valued in the Greater Airpark, and the area should become a model for innovative architecture in the Valley. It should be obvious when a person is in the Greater Airpark area and when they are not. To achieve this vision, architecture, landscaping and marketing tools should reflect the diverse and technological atmosphere created by area businesses and aviation, as well as luxury which is often associated with northern Scottsdale.

“I dislike the train of office buildings down the freeway. They are all the same level, same material and are monotonous. I want to see more interesting buildings. Additionally, all of the shopping areas look the same off of the freeway. Wal-Mart and Costco are not what Scottsdale is. In contrast, I love Kierland Commons. It has the spirit of something thriving.” –Participant statement, 2008.

Maintain and Enhance the Area’s Regional Role

The Greater Airpark should continue toward becoming a well-designed regional, state and national destination that attracts new businesses and visitors from various backgrounds such as business travelers, families, seasonal residents, year-round permanent city residents, regional residents, and vacationers. Along those lines, the area should continue to provide a significant economic base for Scottsdale and the Valley, but it should also look to new, innovative market niches to further the success of the area.

“[In my vision, the Greater Airpark] functions as it's own micro-city that has creative spaces that intentionally attracts international ultra high-end consumers and business people, has live/work spaces for artists, has walkable areas with artistic designed shaded sidewalks (or no sidewalks, more European layout) - a light industrial area that feels like a small city - think Seattle's Pike Street fish market with the addition of fiber optics and other high-tech areas for professionals to interact in casual, community areas. Less reliance on retail, more focus on office and boutique hotels (tourist and business).”

–Participant vision statement, 2008.

Conclusions

The success of the Greater Airpark Community Area Plan will be measured in part on successfully bringing people together to discuss their visions for the future of the area. Although not all ideas can be agreed upon within the community, the results of the public outreach show that there are several areas in which the community can come together in common support. The information summarized in this report, along with the Greater Airpark Existing Conditions Report, will serve as the basis for the development of alternative policy directions in Phase Three of the process.

DISTRICT	TITLE	PURPOSE	DENSITY	INTENSITY OF USE		SETBACKS / YARDS	OPEN SPACE	HEIGHT	OTHER
			Maximum	F.A.R	Volume	Minimum	Min. % of Lot Area		
C-2	Central Business District	Provide all uses allowed in C-1 district as well as uses usually associated with the central business district and shopping facilities not ordinarily compatible with residential development	Hotels/motels/timeshares - not less than 10 guest rooms at a density of 43.56 rooms/acre; Dwellings -one per business	80%	Not to exceed net lot X 9.6 feet	Side - 50' if abutting single-family, 25' if abutting multi-family; Rear - 50' if abutting single family, 25 if abutting multifamily	10% for 0-12' in height plus 0.4% for each foot in height above 12'	36'	Multiple-family dwellings - at least 500 square feet of floor area per dwelling unit
C-3	Highway Commercial	Permit most types of commercial activities and is designed for application on major streets or portions thereof	Hotels/motels/timeshares - not less than 10 guest rooms at a density of 43.56 rooms/acre	80%	Not to exceed net lot X 9.6 feet	Side - 50' if abutting single-family, 25' if abutting multi-family; Rear - 50' if abutting single family, 25 if abutting multifamily	10% for 0-12' in height plus 0.4% for each foot in height above 12'	36'	
C-S	Regional Shopping Center	Provide for well-designed shopping facilities which serve a large regional area and should be located at the intersection of major arterial streets		80%	Not to exceed net lot X 9.6 feet	Front - 25'; Side -50' if abutting residential; Rear -50' if abutting residential	10% for 0-12' in height plus 0.4% for each foot in height above 12'	36'	Aggregate area of all buildings shall not exceed 25% of lot area
PNC	Planned Neighborhood Center	Provide a hub of activity and a focal point for a given neighborhood; provide a mix of day and night time activities to accommodate the daily needs of the surrounding neighborhood	Residential density shall not exceed 4 dwellings/acre	30%	Not to exceed net lot X 5 feet	Front - 25% of net lot area shall be frontage open space; Side and Rear - 50' if abutting residential district plus 2 feet setback for every foot of building height above 36	15% for 0-12' in height plus 0.5% for each foot in height above 12'	36'	Minimum property size = 4 acres; Maximum property size = 10 acres
PRC	Planned Regional Center	Provide for a broad variety of general merchandise, and services in full depth and variety within a planned commercial center; may include office and residential uses carefully interrelated by design	Hotels/motels - 21.78 rooms/gross acre; Dwellings - 21.78 du/gross acre	80%	Not to exceed net lot X 16 feet	Front - 25% of net lot area shall be frontage open space; Side and Rear - 80' if abutting residential district	10% for 0-12' in height plus 0.4% for each foot in height above 12'	60'	Lot area shall not be less than 25 acres
C-4	General Commercial	Serves as the location for the heaviest type of activities found in the city, including warehousing, wholesaling and light manufacturing	N/A	80%	Not to exceed net lot X 9.6 feet	Side - 50' if abutting single-family, 25' if abutting multi-family; Rear - 50' if abutting single family, 25 if abutting multifamily	10% for 0-12' in height plus 0.4% for each foot in height above 12'	36'	
C-O	Commercial Office	Provide an environment desirable for and conducive to development of office and related uses adjacent to the central business district or other major commercial cores	N/A	60%	Not to exceed net lot X 7.2feet	Front - none unless parking between building and street where 35' required; Side - 50' if abuting single-family, 25' if abuting multiple-family; Rear - 50' if abuting single-family, 25' if abuting multiple-family	a) 15% for 0-12' in height plus 0.5% of total site for each foot in height over 12 feet; b) minimum of half of requirement must be frontage open space	36' except 24' within 100' of residential district	Walls - 8'; 3' in required frontage open space
I-1	Industrial Park	Promote the development of employment and aeronautical activities in an attractive, landscaped industrial park	N/A	60%	Not to exceed net lot X 9 feet	Front - 50' from any street; Side and Rear - 30' abutting any residential district	10% for 0-12' in height plus 0.4% for each foot in height above 12'	36'	Aggregate sum of all buildings shall not exceed 50% of lot area
I-G	Garden Industrial	Provide for administrative, professional, research and specialized manufacturing activities at a low intensity	Aggregate sum of all buildings shall not exceed 50% of lot area	60%	Not to exceed net lot X 7.2 feet	Front - 12% of net lot area shall be frontage open space; Side and Rear - 50' if abutting R1 district and 25' if abutting multifamily district	24% of total lot area	No more than 2/3 of roof area can exceed 18' with max of total of 24'	Lighting - 6' or less within 200' of any R1 district

P-CD	Planned Community Development	Encourage the development of large tracts of land under unified ownership or control	Property development standards of the comparable zoning district	N/A	N/A	Underlying Zoning	Underlying zoning	Underlying zoning	
R1-35	Single-Family Residential	Low density single family neighborhood uses (minimum 35,000 sq. ft. lot)	1 single-family dwelling unit per lot	N/A	N/A	Front - 40' Side - 15' Rear - 35'	N/A	30'	Walls - 8'; 3' in front yard
R1-5	Single-Family Residential	Promote and preserve urban single-family residential neighborhoods with patio home style developments (minimum 4,700 sq. ft. lot)	1 single-family dwelling unit per lot	N/A	N/A	Front - 15' Side - 0 with 10' aggregate Rear - 15' to 25' depending on adjacent zoning	N/A	30'	Walls - 8'; 3' in front yard
R1-7	Single-Family Residential	Promote and preserve urban single-family residential neighborhoods (minimum 7,000 sq. ft. lot)	1 single-family dwelling unit per lot	N/A	N/A	Front - 20' Side - 5' with 14' aggregate Rear - 25'	N/A	30'	Walls - 8'; 3' in front yard
R-4	Townhouse Residential	Medium density residential neighborhoods with individual ownership with enclosed yards	8.31 du/gross acre	N/A	N/A	15' with additional depth of 10' for each additional story over first	10% of total gross land	30' with one story limit near single-family residential possible	Walls - 8'; 3' in required frontage open space
R-5	Multiple-Family Residential	Provide for development of multiple-family residential neighborhoods as well as hotel and healthcare facilities	23 du/gross acre	N/A	N/A	15' except where abutting districts other than R-1 where no setback applies	Varies based on dwelling units or rooms per acre	36' with maximum one story in height within 50' of residential	Walls - 8'; 3' in required frontage open space
S-R	Service Residential	Provide administrative, clerical, and professional offices of a residential scale and character, to serve nearby residential and commercial areas and the community as a whole	3,500 square feet gross land area for each residential dwelling; 12.45 du/gross acre	N/A	N/A	15' when abutting R1, R2, R3, R4, R4-R, or M-H district, 0' or 10' abutting other districts	Density-based uses - 36% of lot area, Non-density-based uses - 24%	18'	
W-P	Western Theme Park	Provide for major western theme park recreational uses while providing open space areas to adequately buffer district from residential districts	Resorts - shall not have less than 10 guest rooms/dwelling units with a maximum density of 43.56 rooms/acre within the area master planned for resort use	8%	Not to exceed net lot X .96 feet	Front - minimum of 1/2 of open space requirement shall be frontage open space Side and Rear - 300' if abutting residential districts	10% of net lot area minimum	36'	Minimum size of 160 gross acres

Appendix III

Supporting Reference Documents

Airpark/Sonoran Regional Core Character Area Background Report, 2000
Airport Area East/West Corridor Feasibility Study, 1991
Airport Area Plan, 1981
Airport Master Plan, 1997
 Part 150 Noise Compatibility Study, 2005
Airport Strategic Business Plan Working Papers, 2008
Air Quality Standards and Area Classification, Maricopa County, 2006
Analysis and Forecast of the Economic Base of Scottsdale with Particular Emphasis on
 the Combined Airpark/Sonoran Regional Core Character Areas, June 1999
Arizona Department of Environmental Quality Website, 2008
Arizona Public Service Company, Resource Alternatives Technical Analysis, 2008
C.A.P. Corridor Study Background Report, 1988
Central Arizona Project Strategic Plan, 2006
City of Scottsdale Charter, 2008
City of Scottsdale Geographic Information Systems, 2008
City of Scottsdale Website, <http://www.scottsdaleaz.gov>, 2008
Community Facilities Master Plan, 2004
 Parks and Recreation Master Plan, 2004
Design Standards and Policies Manual, 2008
Economic Impact of the Scottsdale Airport/Airpark Memo, Economic Vitality, 2003
Economy of Scottsdale, Arizona Department of Commerce, January 2008
Eight Hour Ozone Plan for the Maricopa Nonattainment Area, MAG, 2007
Endangered Wildlife, Maricopa County Fish and Wildlife Service, 2008
Environmental Reference for Airport Actions, Federal Aviation Administration, 2007
Environmentally Sensitive Lands Ordinance (ESLO), 2004
Feasibility Study for a Multi-Use Path Along the CAP Aqueduct System, January 2004
Flood Insurance Rate Maps, Federal Emergency Management Association (FEMA)
Frank Lloyd Wright Boulevard Streetscape Guidelines, 1991
Glossary of Soil Science Terms, Soil Science Society of America, 2008
Greater Scottsdale Airpark 2010 Reports, Jim Keeley, Colliers International, 1998–2008
Integrated Water and Wastewater Master Plans, 2008
Irvine Business Complex Mixed-Use Community Vision Plan, Irvine, CA, 2006
Land Resource Regions and Major Land Resource Areas of the United States, U.S.
 Department of Agriculture, 2008
Measuring Impacts of Noise on People, Coffman Associates, 2008

Modeling Protocol in Support of an Eight-Hour Ozone Redesignation Request and Maintenance Plan for the Maricopa Non-Attainment Area, MAG, 2008
North Burnet Gateway 2035 Master Plan, Austin, TX, 2007
Northeast Area Plan, 1976
Periodic Emission Inventory for Ozone Precursors, Maricopa County, 2005
Periodic Emission Inventory for PM-10, Maricopa County, 2005
PM-10 Source Attribution and Deposition Study, Maricopa Association of Governments, 2008
Recommendations for an Historic Preservation Program, 1997
Regional Solid Waste Management Plan, Maricopa Association of Governments, 2005
Retail Market Analysis and Feasibility Study, November 2007
Scenic Corridor Design Guidelines, 2003
Scottsdale Airpark White Paper, 2005
Scottsdale Airpark Planned Commerce Park, January 1987, Scottsdale Chamber of Commerce
Scottsdale Airport Best Management Practices for Stormwater Pollution Prevention, 2004
Scottsdale Aviation Ordinance, 2008
Scottsdale Civic Art Urban Design Plan, 2001
Scottsdale General Plan, 1967
Scottsdale General Plan, 1992
Scottsdale General Plan, 2001+ Regional Use Overlay and Cultural/Tourism Amendments up to 2006
Scottsdale Foothills General Plan, 1984
Scottsdale Preservation Plan, 1990
Scottsdale Road Streetscape Guidelines, 2008
Scottsdale Zoning Ordinance, September 2008
Soil Quality Physical Indicators, U.S. Department of Agriculture, 2008
State of Arizona Affordable Housing Study, 2002
Stemmons Corridor-Southwestern Medical District Area Plan, Dallas, TX, 2008
Trails Master Plan, 2004
Transportation Master Plan, 2008
U.S. Census Bureau, Decennial Censuses, 1990-2005
Valley Metro Monthly Bus Ridership Reports, 2006-2007
Water Quality Management Plan, Maricopa Association of Governments, 2002
Water Quality Report, 2008
WestWorld Master Plan, 2004
Wildlife Strikes to Aircraft in the United States, Federal Aviation Administration, 2008

Appendix IV

Greater Airpark Functional Street Classifications

The following is information for all arterial and collector streets in the Greater Airpark and the table on the following page:

- 2030 FC (Recommended Functional Classification for 2030)
 - MJA-S: Major Arterial- Suburban
 - MJA-U: Major Arterial- Urban
 - MNA-S: Minor Arterial- Suburban
 - MNA-U: Minor Arterial- Urban
 - MJC-S: Major Collector- Suburban
 - MJC-U: Major Collector- Urban
 - MNC-S: Minor Collector- Suburban
 - MNC-U: Minor Collector-Urban
 - Local: Local Street
 - # Lanes (2006)- Number of Existing Lanes
 - # Lanes (2030)- Recommended number of future lanes
 - FLW- Frank Lloyd Wright Boulevard

Table A10-1: Greater Airpark Street Functional Classifications

Street	From	To	2030 FC	#Lanes (2006)	# Lanes (2030)
Scottsdale	Cactus	Thunderbird	MJA-S	6	6
Scottsdale	Thunderbird	Bell/FLW	MJA-U	6	6
Scottsdale	FLW	Thompson Peak Pkwy	MJA-U	4	6
73 rd	Thunderbird	Butherus	MNC-U	2	2
73 rd / Dial	Butherus	Paradise	MNC-U	2	2
76 th St	Paradise	FLW	MNC-S	2	2
76 th St	Princess	Center	MJC-U	0	4
Hayden	Cactus	Thunderbird	MNA-S	4	4
Hayden	Thunderbird/ Redfield	Raintree	MJA-S	4	6
Hayden	Raintree	FLW	MJA-S	4	4
Greenway- Hayden	FLW	Bell	MNA-U	4	4
Hayden	Bell	Union Hills	MNA-S	4	4
Hayden	Loop 101	Loop 101	MJA-U	4	6
84 th St	Cactus	Thunderbird	MNC-S	2	2
87 th St	Northsight	Raintree	MJC-S	4	4
Northsight	Hayden	Loop 101	MJC-S	4	4
Pima	Loop 101	Thompson Peak Pkwy	MJA-2	6	6
90 th St	Cactus	Thunderbird	MNC-S	2	2
90 th St	Raintree	FLW	MJC-S	4	4
91 st St	Bahia	Bell	MJC-S	2	4
92 nd St	Sweetwater	FLW	MNC-S	2	2
92 nd St	Thunderbird	Raintree	MNC-S	4	2
Thompson Peak Pkwy	Redfield	FLW	MJA-S	6	6
100 th St	FLW	Thompson Peak Pkwy	MNC-S	4	2
Sweetwater	Scottsdale	96 th St	MNC-S	2	2
Thunderbird/ Redfield	Scottsdale	Hayden	MJC-S	2	4
Thunderbird	Hayden	84 th St	MNC-S	2	2
Thunderbird	Loop 101	FLW	MNA-S	4	4
Redfield	Thompson Peak Pkwy	Raintree	MJC-S	4	4
Raintree	78 th Way	Hayden	MNA-S	2	4
Raintree	Hayden	Northsight	MJA-S	4	6
Raintree	Northsight	Loop 101	MJA-S	4	4
Raintree	Loop 101	Thompson Peak Pkwy	MNA-S	4	4
Butherus	Scottsdale	Airport Dr	MNA-S	4	4
Greenway- Hayden	Scottsdale	FLW	MNA-U	4	4
Paradise	Scottsdale	Greenway- Hayden	MNC-S	2	2
Paradise	98 th St	Thompson Peak Pkwy	Local	2	2
FLW	Scottsdale	Thompson Peak Pkwy	MJA-S	6	6
100 th St	FLW	Thompson Peak Pkwy	MNC	4	2
Bell	Hayden	Loop 101	MNA-S	4	4
Bahia	Loop 101	90 th St	MNC-S	2	2
Princess	Scottsdale	76 th St	MJC-U	2	4
Princess	76 th St	Union Hills	MJC-U	0	4
Princess	Hayden	Pima	MNA-S	4/6	4/6
Center	Scottsdale	Pima	MNA-U	4	4
Hualapai	Center	Pima	MJC-U	2	4

Source: 2008 Transportation Master Plan, City of Scottsdale, Transportation Department

Appendix V

Capital Improvement Projects, 2008

Greater Airpark CIPs, 2008

Project	Location	Description	Projected Completion	Budget (millions)
Phase 4- Water Treatment Plant	Water Campus	Expands capacity of treatment plant	2011	\$53.3
RV Pedestal Upgrades	WestWorld	Additional and upgraded RV pedestals installed	2009	\$1.015
Airport Maintenance Facility	Airport	Construct a maintenance facility	2009	\$1.0
Runway Resurfacing	Airport	Resurface the runway with rubberized asphalt	2009	\$2.0
Aviation Design	Airport	For airport safety and capacity	2009	\$0.69
Drainage	Butherus Drive	Install alternate drainage source at intersection	2009	\$0.4
CAP Plant Expansion	CAP Plant	Expand current capacity to 75 mgd	2009	\$106
Interceptor Channel	Union Hills Drive	Construct open channel and storm drain	2011	\$3.08
Grayhawk Park	Grayhawk	Construct a community park	2009	\$8.94
Park and Ride	Loop 101 & Scottsdale Road	Construct a park and ride lot	2011	\$4.27
Detention Basin	Loop 101 / Pima	Stormwater Detention for 100-year floods	2011	\$4.1
Outlet Storm Drain	Loop 101/Union Hills	Construct a storm drain under Loop 101	2011	\$3.45
Powerline Interceptor Channel	Power Line Corridor	Construct interception channel to convey water flows to Loop 101 Detention	2011	\$2.96
Scottsdale Road Upgrades	FLW to Thompson Peak Pkwy	Complete construction and upgrades of six-lane arterial with medians	2009	\$49.1
Thunderbird Maintenance Facility	Scottsdale and Thunderbird Roads	Construction of maintenance facility	2010	\$1.23
Taxiway Connectors	Airport	Construct connectors at Greenway and Delta aprons	2009	\$0.3
Transfer Station Expansion	Union Hills Drive	Expand the existing transfer station	2009	\$3.7
ADA	WestWorld	Install access to Equidome	2009	\$0.15
Horse Barn Repair	WestWorld	Repair the horse barns	2009	\$0.56
PA System	WestWorld	Install a PA system	2009	\$0.2
WestWorld Enhancements	WestWorld	Enhance stalls, barns and arena and refurbish Brett's Barn patio	2009	\$2.2
Flood Warning System	North Scottsdale	Install automated flood warning systems	n/a	\$0.2
Scottsdale Road Streetscape	Scottsdale Road	Provide roadway aesthetic enhancements for <u>all</u> of Scottsdale Road	2010	\$26.9
Legacy Blvd	Crossroads East	Construct a four-lane road from One Scottsdale to Hayden Road	2008	\$8.8
Total				\$284.65

Source: Capital Project Management, Active Projects, December 2008; FLW = Frank Lloyd Wright Boulevard

APPENDIX VI

Case Studies

The Greater Airpark is a unique area in Scottsdale and the region that has experienced much economic success over the last few decades. When planning for the future of an area such as this, it is often helpful to examine the approaches and successes of other cities. In the case of the Greater Airpark, a comparison to areas containing municipal airports and industrial or commerce parks is most beneficial. This chapter seeks to examine the approaches of similar areas/examples to the Greater Airpark.

Irvine Business Complex, Irvine, California¹

The Irvine Business Complex (IBC) is a regional economic hub of Orange County, California that encompasses 2,760 acres, making it the largest business complex in Orange County. It was originally designed as an industrial and commerce center for Irvine and is located in the southwestern portion of Irvine. Similar in geography to the Greater Airpark, it is bounded by John Wayne Airport, San Diego Creek (a waterway similar to the CAP Canal) and two major arterial streets—Barranca Parkway and Campus Drive.

Vision

The 2006 Vision Plan for the IBC suggests a dynamic mix of uses, with urban housing integrated into a conceptual framework of streets, landscape improvements, pedestrian walkways, and urban open spaces. To achieve a balanced, urban environment, the IBC needs walkable districts where people can work, live and play and feel a part of an evolving and vibrant city. The vision requires a mix of uses and places that are activated day and night, drawing together diverse community segments—both commercial and residential.



Useable Urban Open Space

Land Use

Land uses in the IBC include hotel, restaurant, commercial, retail, industrial and office uses. Because of its close proximity to John Wayne Airport, service industries and corporate headquarters have located in the IBC. The market in the area has increased development pressure in the IBC and is encouraging rapid transitions from the suburban mixed-use commercial/ industrial center into an urban and regional mixed use center.

The Vision Plan recommends the provision of a range of housing opportunities including rowhouses, live-work units, courtyard housing, commercial blocks, podiums, liners and towers while still retaining the mature industrial development and its associated job base. Development standards are recommended to mitigate residential impacts on airport operations. Standards include minimum sound attenuation requirements, maximum heights, required notification of residents of the airport proximity and compliance with obstruction lighting and mark-up criteria.

¹ Source: Irvine Business Complex Mixed-Use Community 2006 Vision Plan, City of Irvine, California

The Vision Plan recommends the provision of a variety in building heights in the IBC. The area is currently dominated by one and two story buildings. The Vision Plan recommends concentrating taller buildings, up to seven stories, in the mixed-use district area and varying heights within each project as well as from district to district.

Mobility

Similar to the Greater Airpark, major streets within the IBC are designed to accommodate high-speed through traffic. The streets are wide, making it difficult for pedestrians and bicycles to cross. Future planning, however, must maintain the vehicular capacities for existing development and address capacities for future development intensities. Similar to the Greater Airpark, a major freeway runs through and adjacent to the area.

The creation of a distinctive streetscape system with tree-lined streets, new sidewalks, street lighting and furniture, bicycle trails, parks, plazas and open spaces are also recommended in the Vision Plan. It also proposes a shuttle system within the IBC to link existing bus routes to key locations in the IBC.

The street-block system within IBC was originally based on industrial function, thus necessitating larger block sizes or “super block” street patterns. The blocks are three to four times the block size considered walkable. Most streets within the IBC also lack sidewalks and on-street parking, furthering the difficulties for pedestrian movement.

The Vision Plan recommends the introduction of new streets to reduce the size of blocks to a more pedestrian-oriented scale. The new streets should connect to the main arterials at key locations to continue to move vehicles through the area. The Plan also recommends developing a system of pedestrian linkages, parks, and urban opens spaces that connect to residential and employment areas and the San Diego Creek.



Existing Street Network



Conceptual Street Network

Parks and Open Space

The IBC does not have any public neighborhood parks or recreation facilities. As a result, the Vision Plan recommends creating usable urban open spaces to offset building intensities and to connect streets, bikeways and trails.

Design and Character

Since the IBC was originally planned as a business and industrial complex, little character or distinctiveness exists between its different areas. The Vision Plan suggests the creation of three districts, each with different identities. Influencing the range of land uses, development types, scale of buildings, streetscape design and setbacks will create the character of each of the districts. The districts are as follows:

- Multiple-use: A shared automobile-pedestrian scale environment with vertical mixed-use areas, entertainment, civic uses, shared parking, on-street parking on local streets, and urban streetscapes.
- Urban Neighborhood: Allows a range of land uses and buildings up to seven stories of primarily residential land uses with retail, office and restaurants allowed on the first floor.
- Business Complex: Expands and maintains existing industrial uses and prohibits residential. This area encourages suburban streetscapes with wide setbacks and on-street parking is restricted.

Certain businesses identified as having operating characteristics of which may be incompatible with residential uses on adjacent sites are required to be buffered 200 feet from residential uses.

Crossings over the San Diego Creek serve as gateways into the IBC and should be celebrated. The Vision Plan recommends providing civic or monumental features such as lighting, monuments, signage, street furniture and landscaping to enhance entries into the area.

Landmarks are important to finding one’s way around the IBC, and thus the Vision Plan recommends that buildings on major arterials should have distinctive architecture and corner buildings should be both expressive and visually interesting in order to serve as reference points.

Specific design guidelines are incorporated into the Vision Plan.

Economic Viability

One of the key components in the 2006 IBC Vision Plan is to protect the existing job base. To become a fully-integrated mixed-use district, new residential neighborhoods must be able to co-exist with mature industrial uses.



Example of open space



A rendering of the IBC mixed-use community

The Vision recommends:

- Preserving a core employment area to protect the existing job base;
- Discouraging random, incremental residential encroachment into the core employment area;
- Providing housing for the local and regional employment base;
- Maintaining existing zoning rights for all property owners; and
- Creating criteria that protects both industrial and residential land uses.

Summary

With its many similarities to the Greater Airpark—location, physical features, freeway access, airport vicinity, etc—the Irvine Business Complex Vision Plan provides many items to consider for the Community Area Plan. Goals from Irvine that could be applied or should be considered include:

- Mixed-uses that are activated both day and night;
- Providing a range of housing opportunities;
- Required sound attenuation, notification and avigation easements for residential uses;
- Varying building heights depending on the district;
- Pedestrian-supporting streets;
- Pedestrian-destination spot linkages;
- Urban open spaces;
- Celebrating gateways and the waterway; and
- Preservation of a core employment area.

Stemmons Corridor– Southwestern Medical District. Dallas, Texas²

A comparative example of an economic hub is the Stemmons Corridor-Southwestern Medical District located within Dallas, Texas. This district not only contains a considerable amount of Dallas’ most significant medical facilities, but it also holds more than 5,000 businesses with more than 100,000 employees, and contributes close to one-fourth of the taxes collected by the City of Dallas. Much like the Greater Airpark, the Stemmons Corridor contains the regional 35E Stemmons Freeway and is in very close proximity to the Dallas Love Field Airport.



Stemmons Corridor – Southwestern Medical District Study Area

Vision

The Vision and Plan for the Stemmons Corridor looks to create new developments around the area that contribute to the synergy of working environments that allow residents to live, work, shop and play in the same neighborhood. To accomplish this, the corridor encourages “Campus Districts” that will support alternative modes of transportation. The Campus Districts will focus around major master planned educational, institutional, and business facilities and will ultimately provide more jobs for skilled labor.

² Source: Dallas Stemmons Corridor/ Southwestern Medical District Area Plan, City of Dallas, Texas

Land Use

Land uses within the corridor are mainly institutional and warehousing under industrial zoning. The area contains a mix of warehouse, wholesale trade facilities, hospitality, and medical uses. Warehousing is the most prominent land use activity.

The Stemmons Corridor Area Plan seeks to include a variety of building types including multi-story, mixed-use office/retail and residential/office. More specific goals found within the vision of the corridor entail developing the region into a full-service area that complements the other uses found within. The specific uses that the area seeks to include are as follows:

- Medical technology office uses;
- Design uses;
- Services for employees and residents, such as restaurants, shops and entertainment;
- Housing and retail in the Campus Districts, including affordable rental and upscale condominium units;
- Educational facilities with focus on the medical sector;
- Lodging for out-of-area business visitors, patients, conference attendees and students of the educational facilities; and
- Other amenities such as wider sidewalks between tree-lined streets, a pedestrian-friendly environment, shopping and entertainment districts, parks, trails and open space.

The Area Plan recommends that zoning, development standards and design standards should be administered by appointed officials and not by public hearings which would allow for desired uses to be permitted with a predictable outcome. In addition, zoning should be sensitive to market realities, permitting sufficient density to allow developments that will meet financial standards of development profitability, while also conforming to the district and community goals.



A close-up of the Campus District designation with the purple circles indicating DART transit stations

Mobility

The infrastructure found within and around the Stemmons Corridor is akin to the Greater Airpark. Key arterials such as Harry Hines Boulevard, Motor Street, Oak Lawn, Inwood, and many others, have traffic and pedestrian crossing problems. The Area Plan finds that it is likely that Motor Street will be completely redesigned in order to increase the compatibility of the surrounding uses. Most of the arterials have been recommended for pedestrian improvements in order to improve accessibility. Three DART³ light rail stations are planned in the corridor which will provide more accessibility to the Airport and surrounding areas.

The Area Plan also recommends that sewer, water, wastewater, drainage and flood protection all be addressed. Suitable infrastructure is a key concern due to the fact that housing and employment growth are both projected to increase.

³ DART: Dallas Area Rapid Transit

Parks and Open Space

While parks and open space only take up around 53 acres (roughly 2% of the corridor) of total space, the Area Plan recommends that more parks and open spaces be implemented in order to complement areas designated for those who visit, work and live in the area.

Design and Character

The plan recommends the creation of effective and objective design standards for the area, which should be easy-to-use and will allow for quick processing. Specific design standards for the Campus Districts are recommended as well. Little is mentioned regarding design in the plan.



Rendering of the Southwestern Medical District

Economic Viability

An ongoing aspect within the Area Plan is a call for further economic development within the Stemmons Corridor area, such as leveraging public investment to jump start development, developing methods to stimulate the job market, and identifying key private investments to advance economic revitalization. Redevelopment is now being encouraged within the area.

The Area Plan recommends that additional capital improvements will be required and that a financing plan should be put into place. Funding should be sought from many different contributors such as locally generated funds, like tax increment financing districts; Dallas capital improvement funds; regional funds, such as DART capital improvements; as well as state and federal funds.

Summary

The Stemmons Corridor plan is another example of commerce center similar to the Greater Airpark in airport proximity, employment characteristics and freeway access. The Plan provides goals and strategies that could be considered for the Community Area Plan, including:

- Mixed-uses that provide close employment access for workers;
- Include a variety of building types;
- Pedestrian-supporting streets;
- Provide sustainable infrastructure;
- Provide more parks and open space;
- Utilize specific design standards for districts; and
- Encourage redevelopment through public and private investments.



North Burnet/Gateway area

North Burnet Gateway, Austin, Texas⁴

The North Burnet/Gateway area covers approximately 2,300 acres and is located in north-central Austin. The area is similar to the Greater Airpark in that it is bounded by several major arterial streets and a

⁴ Source: North Burnet Gateway 2035 Master Plan Document, City of Austin, Texas

freeway: Metric Boulevard on the east, US 183 on the south and west, and Braker Lane, MoPac, and the Walnut Creek on the north and northwest. The area is booming economically, and contains many high-profile employers. Although the area does not contain an Airport, other qualities make it an appropriate candidate for study.

Vision

The Master Plan seeks to maximize the efficiency and use of the area by encouraging densification and reformatting existing uses into a new, more vertical urban form. The Vision looks to boldly introduce transit oriented development surrounding two new transit stations within the area. In an effort to conserve land while improving the value of the land, the Vision looks to build upward.

Land Use

The North Burnet/Gateway area currently includes a variety of land uses, consisting of commercial, office, multi-family residential and industrial. When looking at the area as two smaller areas, the Gateway area consists primarily of commercial retail while the North Burnet area is primarily light industrial and office. The Vision area vicinity is composed of the same type of neighborhoods surrounding the Greater Airpark: single-family residential neighborhoods.

The Master Plan Vision recommends that existing low density, auto-oriented commercial and industrial uses are encouraged to redevelop into higher density, mixed-use neighborhoods that take advantage of connections to rail transit.

The Vision cites six major recommendations for land use and zoning changes:

1. Allow increased density and building heights to accommodate some of the expected population growth in the region;
2. Encourage neighborhood services and activities such as restaurants, small retailers and local businesses;
3. Encourage well-designed multi-story, mixed use buildings with direct pedestrian links to transit;
4. Create a “design-based” zoning overlay with urban design standards. Establish sub-district boundaries, as part of a zoning overlay, that determine the FAR⁵, height restrictions, setbacks, environmental and design standards for properties within each district;
5. Create a “public benefit” density bonus system to provide incentives for the creation of affordable housing, civic facilities, better street connectivity, additional stormwater management and publicly-accessible parks and open space; and



Intersection of Braker Lane and Metric Boulevard

⁵ FAR= Floor Area Ratio, or the ratio of gross floor area of a building to the net lot area of the building site.

6. Redevelop city-owned properties to serve as catalyst sites for redevelopment (relocation of city services would be “revenue neutral,” meaning that revenues from redevelopment will equal or exceed the cost of relocating the existing city services on the properties).

Mobility

Comparatively, the North Burnet/Gateway area has some likenesses to the Greater Airpark regarding mobility. The area has traffic congestion concerns attributed to the surrounding arterials and major freeway. The Master Plan finds that if growth continues as it has, then congestion in the region will continue to increase. Public transportation within the area creates workforce connectivity through bus routes and future rail lines, but pedestrian and biking activities are hampered by the fact that there is little connectivity between routes.



Conceptual view of Burnet Road

The Master Plan Vision recommends a parcel by parcel redevelopment of street access over time in order to calm traffic and create a defined character for the area. The new streets would be designed to be slow speed with on-street parallel parking lanes, which provides a desired configuration for a mixed-use, pedestrian-friendly streetscape. A new system of streets and alleys would absorb much of the vehicular and service circulation by connecting to existing arterials.

In terms of pedestrian and bicycle activity, the Vision recommends better connectivity through new paths and new designated bike lanes. It recommends that several streets be converted to urban Transit Boulevards that promote activity. Other recommendations included slowing traffic on local streets and establishing sidewalk standards in an attempt to enhance pedestrian and bicycle activity.

Parks and Open Space

Since the North Burnet/Gateway area currently has very little residential stock, there has been no real demand for parks or public open space. However, because the area is growing rapidly, and the densities that are recommended for the area are intensifying, the vision recommends that a high-quality, well maintained, well connected system of public and private open space must be achieved.

To create a vibrant, open space experience for this corridor, the Master Plan recommends the following:

1. Use the conceptual illustration of parks and open space as a guide for creating a distributed hierarchy of parks spaced by reasonable walking distances;
2. Provide for a range of public open space types for community use from actively-programmed public squares and plazas in the district core, to larger, more loosely programmed park spaces in the residential neighborhoods;
3. Create Rails with Trails as the existing freight rail lines are converted to commuter rail lines. These will provide important connections to the existing Shoal Creek bike route south of the planning area and to the future Walnut Creek trail at the northern boundary of the planning area;
4. Set a precedent for high quality open space by developing a portion of publicly owned parcels or public/private partnership projects as city parks;
5. Ensure that open space is high quality and long-lasting;
6. Create a public open space system that becomes a source of community pride and an attractive feature for encouraging positive growth in the district;
7. Design all open parkland to accommodate some stormwater detention; and
8. Create good pedestrian/bicycle linkages between neighborhood parks and greenbelts.



Examples of urban open space



Design and Character

The Master Plan Vision looks to move away from the past trends that have led to simply re-entitling or re-zoning developments in order to achieve what was not desired. The vision recommends a code that will guide the build-out of the North Burnet/Gateway District in a way that should clearly illustrate the type of development desired. Through this code, a clear and predictable system of design and development standards would become prevalent and lead to more refined forms of development.

To ensure that these new codes are adopted within the corridor, the Vision recommends developing a zoning overlay that would be applied to all properties in the North Burnet/Gateway planning area. Four key components are outlined by the Plan, including a Subdistrict Boundary Map, Street Types, Building Types, and Architectural Principles. The four components are defined as:

Sub-district Boundary Map: a document used for outlining where regulatory standards would apply

- Street Types: define the physical design parameters of each street including right-of-way and pavement width, design speed, parking, placement of street trees, and build-to-lines
- Building Types: the various configurations and massing of buildings that define the street edge in each subdistrict where building placement, including side, rear and tower setbacks, and maximum building height is defined for each building type
- Architectural Principles: architecture that should establish a character that supports the making of a high quality, public environment, and lines the street wall with facades that offer a rich visual experience through guiding principles such as building base, exterior details and materials, and tower elements

Economic Viability

The North Burnet/Gateway area is a currently a major destination for employment. Within the corridor, more than 13,000 jobs affiliated with major employers (defined as having 500 or more employees). Major employers include the IBM Corp, National Instruments, Inc., Tivoli Systems, Inc., as well as several others. Keeping employment high within the corridor is a key element discussed throughout the Master Plan, specifying that dense employment should be interconnected with the other goals discussed earlier.

Summary

The North Burnet/Gateway plan provides another applicable example of an employment core with similar qualities as that of the Greater Airpark, such as the high concentration of employment, high-profile employers and proximity to freeway access. The Plan provides goals and strategies that could be considered for the Community Area Plan, including:

- Promoting open space conservation by intensifying the area vertically ;
- Encouraging transit-oriented development to promote transportation efficiency and reduce traffic congestion;
- Inclusion of sub-districts with unique design and development standards;
- Provide density bonuses for providing items of public benefit (i.e. affordable housing, open space, pedestrian amenities, etc);
- Redevelop public properties to serve as a catalyst for development;
- Create pedestrian-oriented streets; and
- Provide for a range of actively-programmed open space types.

Appendix VII

Housing Chapter– Housing Type Definitions

Mixed Use– Dwellings located above a retail, office or commercial establishment

Mixed Use Proposed– Dwellings located above retail, office or commercial that are under construction or proposed for future construction.

Multi Family High Density– 12 to 22 dwellings per acre. Usually apartments or condominiums.

Multi Family High Density Designated– 12 to 22 dwellings per acre area designated for such use, but no proposals have been submitted to date.

Multi Family Medium Density– 4 to 12 dwellings per acre, usually apartments, condominiums or townhomes.

Multi Family Low Density– 2 to 4 dwellings per acre. Usually consisting of resort residential uses, patio homes, garden apartments or duplexes.

Single Family Small Lot– 2 to 4 dwellings per acre, no attached walls. One home per lot.

Single Family Medium Lot– 1 to 4 dwellings per acre, no attached walls. One home per lot.

Single Family Large Lot– 1/5 to 1 dwelling per acre, no attached walls. One home per lot.

Appendix VIII

**Economic Analysis of the Greater Airpark, Gruen Gruen + Associates, 2009,
Executive Summary.**

For Complete report, please contact City of Scottsdale, Economic Vitality
Department.

**ANALYSIS AND FORECAST OF EMPLOYMENT AND
BUILDING SPACE DEMAND AND STRATEGIC POLICY
RECOMMENDATIONS FOR GREATER AIRPARK STUDY AREA**

**A Report to
The City of Scottsdale**

From

**GRUEN GRUEN + ASSOCIATES
Urban Economists, Market Strategists & Land Use/Public Policy Analysts**

C1252
March 2009

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EXECUTIVE SUMMARY TABLE OF CONTENTS

EXECUTIVE SUMMARY AND RECOMMENDATIONS.....A8-6

INTRODUCTION AND PURPOSE.....A8-6

THE STRUCTURE OF THE EMPLOYMENT BASE OF THE
GREATER AIRPARK STUDY AREA AND CITY OF SCOTTSDALE.....A8-6

CHARACTERISTICS OF LAND USE AND BUILT
SPACE WITHIN GREATER AIRPARK STUDY AREA.....A8-6

 Summary of Make-up and Status of Land DevelopmentA8-6

 Growth in Supply of Built SpaceA8-7

 Shifts in Make-up of Building Space Inventory.....A8-7

FINDINGS AND CONCLUSIONS
DRAWN FROM SURVEYS AND INTERVIEWS.....A8-8

SURVEYS.....A8-8

INTERVIEWSA8-9

 Competitive Office Market.....A8-9

 Competitive Market for Flex-type Uses.....A8-9

 Comparative AdvantagesA8-9

 Primary DisadvantagesA8-10

FORECAST OF THE STRUCTURE AND SIZE OF THE
EMPLOYMENT BASE OF THE GREATER AIRPARK STUDY AREAA8-10

CITY OF SCOTTSDALE EMPLOYMENT FORECASTA8-11

GREATER AIRPARK STUDY AREA EMPLOYMENT FORECAST: 2007-2020A8-11

 Services.....A8-11

 Finance, Insurance and Real Estate.....A8-12

 Retail TradeA8-12

 Manufacturing.....A8-12

 Construction.....A8-12

 Wholesale TradeA8-13

 InformationA8-13

 Transportation and WarehousingA8-13

 Proportion of Total Greater Airpark Study Area EmploymentA8-13

FORECAST BUILDING SPACE DEMAND AND LAND REQUIREMENTS.....A8-14

 Employment by Economic Sector into Type of Building Space.....A8-14

 Forecast Employment-Induced Building Space DemandA8-15

 Forecast of Land to Accommodate Forecast Building Space DemandA8-15

STRATEGIC CONCLUSIONS AND RECOMMENDATIONS.....A8-16

CONCLUSIONS FROM 1999 GG+A REPORT
STILL VALID AND IMPORTANT TODAY.....A8-16

PLANNING POLICY SHOULD ENCOURAGE
RELATIVELY HIGH-DENSITY HOUSING INTEGRATED
INTO DIFFERENTIATED MIXED-USE DEVELOPMENTS.....A8-16

PLANNING POLICY SHOULD ENCOURAGE ASSEMBLAGE
OF INEFFICIENT, SMALL PARCELS AND REPLACEMENT OF OBSOLETE
STRUCTURES IN CORE OF GREATER AIRPARK STUDY AREA.....A8-17

AUGMENT THE STRENGTH AND
DIVERSITY OF IDENTIFIED MIXED-USE ACTIVITY CENTERSA8-17

ENHANCE WESTWORLD AND BETTER LINK RECREATIONAL
RESOURCES IN BELL ROAD AREA TO EACH OTHER AND TO OTHER
ACTIVITY CENTERS WITHIN GREATER AIRPARK STUDY AREAA8-18

IMPROVE INFRASTRUCTURE, INCLUDING BROADBAND ACCESS.....A8-18

STUDY HOW TO PRESERVE BENEFITS
INDUCED BY AUTOMOTIVE DEALERSHIPS.....A8-19

CITY-OWNED LAND.....A8-19

ADDITIONAL POLICY IMPLICATIONS.....A8-20

ACKNOWLEDGEMENTS

While the authors take 100 percent responsibility for the content and conclusions of the study, the report could not have been prepared without the assistance of many others. It is not possible to cite all of those who have offered data and insights but we would like to thank the City of Scottsdale staff and the following individuals which provided data and participated in interviews.

Moshe Barr, President, Advanced International Systems
Andrew Bourne, CEO, Waypoint Technologies
Robert Foster, General Manager, Fairmont Scottsdale
Ken Gerard, Chief Financial Officer, Interface, Inc.
Donn House, Managing Director, Hampton Group
Jim Keeley, Founding Director, Colliers International
Rick Kidder, President, Scottsdale Area Chamber of Commerce
Debra Kuffner, Chief Operating Officer, Scottsdale Area Chamber of Commerce
Mark Linsalata, Principal, Lee & Associates
Bob Mayhew, Vice President, DMB Associates
Scott Nelson, Vice President of Development, Westcor
Mike Pacheco, Real Estate Director, Van Tuyl Auto Investment Group
Tim Phillips, Associate, Lee & Associates
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EXECUTIVE SUMMARY AND RECOMMENDATIONS

INTRODUCTION AND PURPOSE

In 1999, Gruen Gruen + Associates (GG+A) conducted an analysis and forecast of the economic base of Scottsdale with a particular emphasis on the combined Airpark and Sonoran Regional Core character areas. In late 2008 the City of Scottsdale retained GG+A to conduct economic base analysis and prepare new forecasts of employment by economic sector and potential building space demand by type of land use for the Greater Airpark Study Area. GG+A was also asked to identify the strategic policy implications for the preparation of the Greater Airpark Community Area Plan. This report presents the results of the analysis, forecasts, and strategic recommendations.

THE STRUCTURE OF THE EMPLOYMENT BASE OF THE GREATER AIRPARK STUDY AREA AND CITY OF SCOTTSDALE

Total private sector employment within the Greater Airpark Study Area grew by 112 percent over the past twelve years, increasing by approximately 22,500 jobs from 20,000 in 1995 to 42,500 jobs in 2007. This represents a high compounded average annual growth rate of approximately 6.5 percent. Economic sectors comprising much of the employment growth include finance, insurance and real estate, professional and business services, and retail trade. Collectively, these sectors accounted for 14,500 additional jobs or 65 percent of total employment growth that occurred between 1995 and 2007.

The number of business establishments (with five or more employees) in the Greater Airpark Study Area grew from 1995 through 2007 by approximately 500 or 64 percent, from 774 establishments in 1995 to 1,268 establishments in 2007. The number of establishments increased the most in the professional and business service sectors, retail trade, and finance, insurance and real estate sectors. Since 1995, the number of wholesale trade establishments declined and since 2000 the number of manufacturing establishments declined.

Over the past 12 years, the employment base in the Greater Airpark Study Area has shifted such that industries concentrated in the production and trade of goods no longer constitute as significant of a component of the economic base.

In 1995, the Greater Airpark Study Area accounted for approximately 18 percent of all employment within the City of Scottsdale. Today, more than one in every four jobs, or 28 percent of the total jobs within the City of Scottsdale, are located within the Study Area. All but two industry sectors (leisure and hospitality and agriculture, mining and utilities) within the Greater Airpark comprise a larger share of their respective employment within the City than they did in 1995.

CHARACTERISTICS OF LAND USE AND BUILT SPACE WITHIN GREATER AIRPARK STUDY AREA

Summary of Make-up and Status of Land Development

The Greater Airpark Study Area includes a total of approximately 5,530 acres of land (including roadways and open space). Non-residential commercial land uses account for approximately 3,300

acres or 60 percent of the total land area. The primary non-residential land uses within the Study Area are approximately 60 percent built-out.

The vast majority of undeveloped vacant land consists of “mixed-use neighborhoods” under the General Plan, generally encompassing most State-owned land both north and south of the Loop 101. The mixed-use neighborhood classification includes residential uses. A total of approximately 1,344 acres of non-residential commercial land within the Study Area is currently vacant. The three primary General Plan land use designations of commercial, employment and office make up only 1,817 developed acres and 423 acres of vacant land.

Of the nearly 130 acres of land categorized as office under the General Plan, over 96 percent has been built-out so that less than five acres of land classified as office is currently vacant. Of the nearly 1,506 acres of land classified under the General Plan as employment, nearly 76 percent of the land is built-out so that 367 acres of vacant land is available for development of employment (industrial and office) uses. Of the 602 acres of land classified under the General Plan as commercial, 91.5 percent of the land is built-out so that 51 acres of vacant land is available for use. The historical Airpark “core” area (south of Frank Lloyd Wright) contains less than 105 acres of available land, most of which is located in small noncontiguous sites.

Growth in Supply of Built Space

The supply of office space within the Greater Airpark Study Area has grown by more than 4.4 million square feet since 1999, representing a 160 percent increase over the past ten years. The current inventory of office space is estimated to approximate 7.2 million square feet, 23 percent or 1.7 million square feet of which is reported to be currently vacant.

The supply of retail space within the Greater Airpark Study Area has grown by approximately 1.5 million square feet since 1999, representing a 76 percent increase over the past ten years. The current inventory of space approximates 3.5 million square feet. The retail vacancy rate has increased from nearly zero in 1999 and 2000 to approximately six percent in 2008.

The supply of flex/industrial space (including warehouse with office and warehouse with retail uses) within the Greater Airpark Study Area currently approximates 6.4 million square feet. Compared to office and retail uses, the industrial space supply has grown less substantially over the past ten years increasing by approximately 1,360,000 square feet or 27 percent. From 1999 through 2008, the industrial vacancy rate increased from a relatively low 7.7 percent to approximately 14 percent as the amount of vacant space increased by a half million square feet.

Approximately 9.4 million square feet of office, retail, and industrial space has been built within the Greater Airpark Study Area over the past ten years. Office space has comprised the majority of new construction activity, representing 57 percent of all building space added between 1999 and 2008.

Shifts in Make-up of Building Space Inventory

Smaller warehouse-flex buildings have historically been the predominant type of commercial building space located within the Greater Airpark Study Area. Just as the employment base shifted to professional and financial service sectors in recent years, so has the composition of building space. In

1995, warehouse-flex buildings represented nearly 43 percent of all building space located within the Study Area while traditional warehouse and industrial building uses accounted for an additional 22 percent of the total inventory. Office buildings, totaling less than 1.2 million square feet of space, represented only 19 percent of all building space in 1995. In 2007, office buildings represented approximately 34 percent of all building space within the Study Area. In 2007, warehouse-flex space comprised a smaller proportion than office, or 29 percent of all space within the Study Area.

FINDINGS AND CONCLUSIONS DRAWN FROM SURVEYS AND INTERVIEWS

SURVEYS

The review of a 2008 Scottsdale Area Chamber of Commerce survey and interviews indicates the continued validity of findings of surveys GG+A designed and analyzed in its 1999 report.

Findings and conclusions from the analysis of the 1999 hotel survey included the following:

- The hotels indicated that the percentage of total visitors that are estimated to fly in and out of the Scottsdale Airport averages 3.1 percent;
- Special events including NASCAR, Barrett Jackson Car Auction, Spring Training, PGA Golf, and the Arabian Horse Show are important to generating hotel room night demand; and
- Of the employees of hotels north of Cactus Road, 72 percent reside in Phoenix and 17 percent in Scottsdale.

Findings and conclusions drawn from the 1999 employer survey included the following:

- The primary reason firms decide to locate in the Study Area relates to proximity to desirable residential areas in north Scottsdale and quality of life factors;
- Markets and customers served typically are outside of the Study Area;
- Businesses operated out of a diverse set of building types, and performed a wide variety of functions;
- About 69 percent of the firms in the sample leased or subleased their facilities, while 31 percent owned their facilities;
- Employee density ratios averaged 800 square feet per employee overall and 1,388 gross square feet per on-site wholesale/retail trade employee, 573 square feet for services firms and 554 square feet per employee for manufacturing firms; and
- About one-half of the employees working in the Airpark and Sonoran Regional Core character areas resided in the City of Phoenix, while 31 percent resided in the City of Scottsdale and five percent each in the cities of Glendale and Mesa.

Findings drawn from a 2008 Scottsdale Area Chamber of Commerce survey include the following:

- Approximately 83 percent of employees live outside of the City of Scottsdale with approximately 40 percent of commuters originating from residences in the East Valley, 40 percent from Phoenix, and about 20 percent from the West Valley;
- Compared to GG+A survey findings in 1999, a higher proportion of employees live outside of Scottsdale than 10 years ago;
- Accessibility to labor is a key requirement and advantage;
- Transportation and traffic issues are of primary importance with 63 percent of respondents indicating a preference for improved public transportation options, including an increase in bus routes and the frequency of bus service, dedicated street car/trolley service, and dedicated bus rapid transit lines along Highway 101. Approximately 65 percent of respondents indicated the expansion of the freeway system as important to the growth of their businesses;
- Approximately 81 percent of respondents identified as important improvements in telecommunications and broadband Internet access and other infrastructure;
- Approximately 49 percent of respondents indicated increasing options for workforce housing as important to the growth of their businesses; and
- Factors influencing the location decision included: the image of Scottsdale and quality of life advantages; accessibility of the location; and proximity to residences of the decision-makers.

INTERVIEWS

Competitive Office Market

The market area within which office space in the Greater Airpark Study Area typically competes for office users includes:

- The Study Area;
- Desert Ridge (Freeway 101 and Tatum) west of the Study Area;
- The Deer Valley/Interstate 17 corridor;
- The Kierland area; and
- The Alter Group Riverwalk and Opus Group Pima Center located on land of the Salt River Pima-Maricopa Indian Community along Loop 101.

Competitive Market for Flex Uses

For flex space, including high-technology manufacturing and combinations of assembly and services, the primary market area includes the Study Area as well as Deer Valley to the west, Tempe and Mesa to the south, and the Salt River Pima-Maricopa Indian Community lands.

Comparative Advantages

The following comparative advantages apply to the Study Area:

- Accessibility to Freeway Loop 101, Sky Harbor Airport, and Scottsdale Airport;

- Proximity to housing locations of decision-makers and a large commute shed, providing excellent access to a large labor base, including affordable housing in northeast Phoenix;
- Proximity to a large base of high-quality support services and amenities, including lodging and dining options;
- A prestigious image in a safe and secure environment offering “quality of life” advantages; and
- A location within an agglomeration or “critical mass” that helps businesses attract and retain labor and operate cost effectively and productively.

Primary Disadvantages

The primary disadvantages of the Study Area, especially the traditional Airpark core, relate to a limited supply of available land for development; and traffic congestion due in part to the physical orientation of the Scottsdale Airport, which impedes east-west vehicular traffic flows.

A perceived constraint relates to the entitlement process, and the potential for higher costs and uncertainty due to “last-minute” project negotiations and requests. In addition, the interviews suggest that infrastructure for telecommunications, broadband access, and transportation could be enhanced.

For those types of industrial users that employ lower skilled workers, access to labor is a particular disadvantage. Land and building space rental costs are too high to support warehousing activities.

The consideration of advantages and disadvantages indicates the outflow of smaller, lower margin wholesaler and industrial users and inflow of high technology users can be expected. Many flex space uses will include a high component of office space and research and development functions.

FORECAST OF THE STRUCTURE AND SIZE OF THE EMPLOYMENT BASE OF THE GREATER AIRPARK STUDY AREA

Maricopa County Association of Governments projects that Scottsdale’s employment base will grow by approximately 70,000 jobs over the 25-year period between 2005 and 2030 increasing at an average annual rate of 1.3 percent. Between 2005 and 2020, total Scottsdale employment is projected to grow at an average annual rate of approximately 1.7 percent. Office land uses are projected to experience the highest rate of employment growth, increasing by approximately 33,400 jobs at an average annual growth rate of 1.8 percent. Industrial land uses are projected to grow at 1.0 percent annually, increasing by approximately 5,500 jobs.

A significant difference exists between the global economic conditions that prevailed over the last 10 years and the major global recessionary conditions that exist today. In December 2008, the United States lost more jobs than in any prior December since 1945 and the gross domestic products of many countries are declining or increasing at a slower rate. While we expect that the recession will end and growth will resume, the scale of the recession may alter the relative rate of growth of many sectors as consumers and investors adjust their behavior. Therefore, particularly as relates to fast-

growing sectors such as finance, insurance and real estate, we are less certain about the timing and rates of growth shown in the present forecast than was the case in the forecast we prepared 10 years ago. We believe Maricopa County Association of Governments will adjust its forecasts after the 2010 Census and that following the revised forecast, it will be worthwhile to review the forecasts presented in this report.

CITY OF SCOTTSDALE EMPLOYMENT FORECAST

Based on a projected annual growth rate of 1.7 percent, total Scottsdale employment is forecast to increase by approximately 38,000 jobs from 157,000 in 2007 to 195,000 in 2020¹. Office-using industry sectors such as finance, insurance, and real estate, professional services, and information are forecast to experience the highest rate of growth while retail sectors such as retail trade, personal services, and hospitality are projected to experience the lowest rates of growth. The projections for the City indicate the employment base will continue to shift away from sectors related to the production, movement and sale of goods towards the financial and service-related industries. The professional service and finance, insurance and real estate sectors are forecast to grow by approximately 16,400 jobs, representing approximately 38 percent of the employment base in 2020. The retail trade sector is projected to grow at 1.2 percent annually, increasing by approximately 3,000 jobs over the next 13 years. At projected annual growth rates of 1.4 to 1.5 percent, the construction, manufacturing, wholesale trade and transportation and distribution sectors are forecast to grow collectively by approximately 6,300 jobs between 2007 and 2020. Education and health services employment is projected to grow at an annual rate of 1.8 percent, increasing from a current base of approximately 18,900 jobs to 23,700 jobs by 2020. Leisure and hospitality employment is projected to grow modestly at 1.4 percent annually, increasing by approximately 3,900 jobs between 2007 and 2020.

GREATER AIRPARK STUDY AREA EMPLOYMENT FORECAST: 2007-2020

Total Greater Airpark Study Area employment is projected to grow at an annual rate of 2.1 percent between 2007 and 2020, increasing by approximately 13,000 jobs or 31 percent. Employment in many economic sectors, especially construction and in many segments of finance, insurance and real estate and services, may have decreased since 2007. These sectors could experience a decrease in employment from 2008 through 2010. It will therefore take some time to catch up to where employment was in 2007.

Services

A key factor in the retention, expansion, and attraction of new businesses relates to the desirable quality of life that makes decision-makers want to work as well as live in Scottsdale. The large hospitality sector, including eating and drinking establishments and recreational facilities, contributes

¹ Total industry employment within the City of Scottsdale (currently estimated at 157,000 jobs) is lower than presented in MAG's socioeconomic projections because (a) it does not include "work-at-home" employment, and (b) our review of MAG's employer database indicates that some businesses actually located west of Scottsdale Road in Phoenix (for example) are described as being within the City of Scottsdale. The historical and current employment estimates by industry sector for the City of Scottsdale presented in this report do not include these businesses.

significantly to the quality of life advantage. The hospitality industry thus indirectly contributes to the growth of professional and business services. We forecast that the employment base will continue to evolve in favor of services. We predict, however, that Scottsdale and the Greater Airpark, in particular, will continue to experience faster job growth than population growth by drawing workers and serving markets well beyond the City's boundaries. We project an average annual growth rate for professional and business services and education and health services of 3.25 percent. We project that other (personal) services will grow modestly at 1.5 percent annually, although still representing a very small component of the employment base by 2020 given the limited household population within the Greater Airpark. The growth rate assumptions equate to a projected addition of 6,200 jobs in the professional and business services, education and health services, and other services sector by 2020. Consistent with historical growth, we project that employment in the leisure and hospitality sector will continue to grow slowly, at 0.5 percent annually, resulting in approximately 200 added jobs by 2020.

Finance, Insurance and Real Estate

While the Airpark's comparative advantages are significant for the finance, insurance and real estate sector, we believe the rate of growth of future employment in the sector will decline and that office space available near but outside of the Study Area will reduce the amount of employment captured within the Study Area. While much lower than the nearly 12 percent annual growth rate from 1995 through 2007, we still, however, project for the finance, insurance and real estate sector a strong annual employment growth rate of 3.25 percent over the longer-term. This growth rate results in an estimated increase of 3,200 jobs between 2007 and 2020 for the largest percentage growth of 52 percent (and second largest source of projected job growth).

Retail Trade

Historically, retail employment has grown by 7.2 percent annually. With residential growth slowing, the growth of retail supply competition outside the Study Area, and the increase in retailing, we forecast a 2.0 percent annual growth rate in employment for the retail sector. The retail trade sector is projected to grow by approximately 1,700 jobs or 29 percent.

Manufacturing

We project that the manufacturing base will continue to expand, but at a much lower rate than has historically been the case. At a one percent annual growth rate between 2007 and 2020, manufacturing employment is forecast to increase by approximately 700 jobs or 14 percent.

Construction

From 1995 through 2007, construction employment increased at an annual rate of 5.5 percent. It will take time for construction jobs to rebound from recent losses due to an increase in vacant existing space, curtailment in housing development, and other effects of the current recession. Construction employment is forecast to grow by only 330 jobs by 2020.

Wholesale Trade

The number of wholesale trade establishments has declined in the Study Area and historical employment growth of one percent is one of the slowest growing sectors. The interviews suggest wholesale trade firms will tend to locate in lower cost locations closer to labor sources. We forecast an average annual growth rate in wholesale trade employment of 0.5 percent.

Information

Information employment grew robustly from 1995 through 2000, but has since declined. The decline in this sector in more recent history has been largely attributable to several of the largest information businesses leaving the Study Area. Three large businesses in this sector – VODAVI Communication Systems (94 employees), Cox Communications (108 employees), and Tech USA (200 employees) – all relocated from the Study Area to other locations in Phoenix between 2000 and 2007. We forecast a growth rate of two percent annually. This projection results in approximately 300 added jobs in the information sector by 2020.

Transportation and Warehousing

Transportation and warehousing employment grew robustly off a low base until 2005, but has since declined significantly. We forecast annual employment growth of 1.5 percent. This reflects the finding that transportation and warehousing activities are likely to experience higher growth outside of Scottsdale. The transportation and warehousing employment that remains in Scottsdale is likely to be concentrated in the Study Area.

Proportion of Total Greater Airpark Study Area Employment

Professional and business services are forecast to increase by 3.8 percentage points to comprise approximately 27 percent of total Airpark Area employment in 2020. Finance, insurance and real estate employment is forecast to increase by 2.3 percentage points to nearly 17 percent of total employment. Retail employment is estimated to comprise the third largest source of employment at 13.8 percent. This represents virtually no change in the share of employment in 2007. While forecast to decline as a share of total Study Area employment by 1.5 percentage points, manufacturing employment is forecast to comprise the fourth largest source of total employment at 10.1 percent in 2020. Construction employment is forecast to experience the largest downward shift of 2.1 percentage points to 9.4 percent. Leisure and hospitality employment is forecast to shift downward by 1.3 percentage points to 6.0 percent of total employment. Health and education services employment is forecast to increase by 0.6 percentage points to approximately 4.1 percent of total employment in 2020. Wholesale trade is forecast to decline by 1.2 percentage points to 5.2 percent of total employment. Information, transportation and warehousing, and other services are forecast to each approximate 2.3 to 2.7 percent of total Study Area employment in 2020.

FORECAST BUILDING SPACE DEMAND AND LAND REQUIREMENTS

Distribution of Employment by Economic Sector into Type of Building Space

Office building uses within the Greater Airpark Study Area are currently estimated to house the largest percentage of the workforce at approximately 42 percent of the total employment. Retail building uses are estimated to include approximately 15 percent of total employment within the Greater Airpark. Nearly three-quarters of retail trade workers are currently estimated to utilize retail space. Another 14 percent of retail employment utilizes warehouse-flex space. The overall distribution of employment by space has shifted such that the percentage of the total employment base working in warehouse-flex space has declined to approximately 26 percent (from an estimated 53 percent in 1995). Industry sectors in which a considerable percentage of employees continue to work in warehouse-flex space include information (56%), manufacturing (55%), wholesale trade (45%), and construction (38%). A smaller but still significant share of service employees also work in warehouse-flex space. Approximately one-quarter of professional service employment, for example, is located in warehouse-flex space.

Forecast Employment-Induced Building Space Demand

For the period 2007 to 2020 approximately 7,190 office-space using workers are estimated to be added to the Greater Airpark Study Area employment base. This forecast employment growth is estimated to produce total gross demand of approximately 2.1 million square feet of additional office space. However, given the currently high office vacancy rate within the Study Area of approximately 23 percent, some of the future space demand will be met by existing supply alternatives. Approximately 1.7 million square feet of office space is reportedly vacant within the Study Area. We assume, for purposes of estimating the demand for new office space, that approximately 40 percent or 720,000 square feet of the existing vacant space must be absorbed before demand for additional new office product will be stimulated. This would equate to a decline in the office vacancy rate from a current 23 percent to approximately 13 percent. If absolute employment decreases significantly further, an increase in vacant space can be expected to occur and net new demand will be delayed.

As vacancies rise, rents will decrease and this will push out the time in which rents will rise to the point of supporting feasible new development. Net office space demand (gross space demand less absorption of existing space required to bring vacancy rate down to 13 percent) from 2007 through 2020 is forecast to approximate 1,362,000 square feet, or on average approximately 114,000 square feet annually.

Approximately 1,830 retail-space using workers are projected to be added to the Greater Airpark Study Area employment base between 2007 and 2020. Because of the currently still low retail vacancy rate of 6.3 percent with approximately 220,000 square feet of space available, we perhaps optimistically assume all future demand for retail space will need to be met by new space. At an average employment density of 750 square feet per worker, the projected workforce growth results in total retail space demand 1,443,000 square feet. Average annual retail space demand is forecast to approximate 120,000 square feet.

A total of approximately 3,660 industrial, warehouse, and flex space workers are projected to be added between 2007 and 2020. This forecast employment growth produces gross space demand of

1.3 million square feet of flex space, 127,000 square feet of industrial space and 331,000 square feet of warehouse space. Approximately 886,000 square feet of industrial space is reportedly vacant within the Greater Airpark for a vacancy rate of approximately 14 percent. While the current industrial vacancy rate and supply of available space is approximately four to six percent greater than has been historically the case, some of the existing industrial space is not likely to capture future space demand given its age and obsolescence. Assuming approximately 250,000 square feet of currently vacant industrial space is absorbed before new space is demanded (which equates to a decline in the vacancy rate from a current 14 percent to 10 percent), total net demand for all types of flex space is forecast to approximate 1.5 million square feet from 2007 to 2020.

The demand forecast will not occur in such a linear fashion. The forecast above represents an average estimate over a longer period of time. As described in the body of the report, the office space capacity associated with already approved major development projects alone is comparable to the amount of forecast office space demand through 2020. The retail components of these mixed-use developments represent over one-half of retail space demand forecast through 2020.

Forecast of Land Needed to Accommodate Forecast Building Space Demand

Using the office space demand forecast of nearly 1.4 million square feet of space subject to a floor area ratio of 0.35 provides an estimate of the land needed to serve potential office space demand of 89 acres over the 12-year forecast. This represents the amount of land required to accommodate future office space demand at a density representative of existing development in the Study Areas. Should a higher floor-area ratio more typical of a higher density environment be used, the amount of land needed to house office space would decrease. For example, corporate headquarter facilities or other major office uses would typically locate in multi-story office buildings having floor-area ratios substantially higher than 0.35. Higher floor-area ratios of 0.5, 0.75 or even 1.0 would be achieved in more typical three to six story suburban office building configurations. A 0.5 average floor-area ratio would equate to 63 acres of land to accommodate forecast net office space demand.

At a floor area ratio of 0.25, the forecast net retail space demand will require approximately 133 acres of land over the 12-year period. Should a higher floor area ratio of 0.35 be permitted or encouraged, forecast retail space demand would require approximately 95 additional acres of land.

The demand forecast for industrial, warehouse, and flex space of approximately 1.5 million square feet, subject to floor area ratios of 0.30 to 0.35, indicates that approximately 102 acres of land will be required to accommodate future industrial space demand. At higher densities of 0.4 to 0.5, approximately 72 acres of industrial land would be required to accommodate forecast demand growth.

Overall, an adequate amount of land exists to serve forecast demands beyond 2020. Land currently designated employment under the General Plan and zoned for industrial uses (I-1) can be expected to be developed in many cases for office uses. In addition, commercial uses can be expected to be developed on land not designated exclusively for commercial use. As indicated previously, a shortage of vacant land exists in the traditional core Airpark area, while ample land capacity exists north of the Central Arizona Project Canal.

STRATEGIC CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS FROM 1999 GG+A REPORT STILL VALID AND IMPORTANT TODAY

The 1999 GG+A report included the following conclusions:

1. In order to avoid physical and economic obsolescence, it will be important for the city to encourage the appropriate scale and type of development. If development is too small or inappropriately designed to be viable past 2020, future owners will not have the economic strength to properly maintain either the physical structures or the activities they contain.
2. Over the time period of this study, there will be a shift from the dominance of the lower intensity mixed use warehouse structure to more traditional suburban office buildings. . . . It will be important to encourage somewhat higher intensity development, which should include connectedness between buildings, the integration of support retail and services, and transportation management techniques such as bike routes and car pooling and/or shuttle service for nearby services. (page 5)

Accordingly, we supplement the original conclusions and recommendations as follows.

OVERRIDING ECONOMIC DEVELOPMENT OBJECTIVE

Wide concurrence exists among those we interviewed that Scottsdale's positive image or cachet is being challenged by adjoining communities (both the City of Phoenix and Salt River Pima-Maricopa Indian Community) which are "piggybacking" on the "Scottsdale brand" and creating intense competition for users of space and for consumers. Many developments located on the Phoenix side of Scottsdale Road and on Indian Community land advertise their projects as located in Scottsdale. The City's five-year strategic tourism plan also recognizes that Scottsdale is being challenged as a tourism destination.

3. The overriding economic development objective should be to maintain the positive image and unique cachet of the Greater Airpark Study Area. This will require adopting land use and transportation policies that facilitate clustered networks or nodes of economic and social activity that encourage innovation and productivity efficiencies by leading-edge services, technology and other businesses. Policies also need to encourage the linkage of workplaces with shopping, recreational and residential uses.
4. Given the intense competition for office and retail uses that can be expected along with traffic concerns, encourage relatively high-density housing integrated into mixed-use developments at locations such as along Loop 101 interchanges and other locations which will (a) facilitate efficient, higher density development patterns, (b) allow the private market to replace obsolete building space, and (c) reduce reliance on the automobile. Higher-density housing will provide comparative advantages to office-using

businesses and buttress the viability of retail and service establishments, while reducing traffic congestion.

5. Planning policies should encourage mixed-use developments that create harmonious and user-friendly environments with appropriate design and use covenants with built-in flexibility to permit responsiveness to shifting or unforeseen market demands. For example, multiple uses could be permitted provided that design characteristics conform to pre-determined standards related to development orientation, parking locations and amounts, and site and building design.
6. Setback and floor-area ratio requirements and height limitations more typically associated with a low density, separate land use suburban development pattern should be reviewed and revised to reflect the evolution of the Study Area to a more urban environment.
7. Given the supply competition in Phoenix and on the lands of the Indian Community, design, height, amenities and product development commensurate with the image of a premier office agglomeration should be incorporated into site planning, landscaping, parking, and access areas with signage that takes advantage of the unique visibility and highway identity of Loop 101 locations. Planning policies should facilitate new office development responding uniquely well to the preferences and needs of office space users including corporate and regional headquarters and professional, business, and technical service firms.

PLANNING POLICY SHOULD ENCOURAGE ASSEMBLAGE OF INEFFICIENT, SMALL PARCELS AND REPLACEMENT OF OBSOLETE STRUCTURES IN CORE OF GREATER AIRPARK STUDY AREA

8. The core part of the Greater Airpark Study Area includes some smaller parcels and obsolete industrial space (e.g., to the south of the Scottsdale Airport). The core has evolved so that low-margin, low-intensity industrial uses no longer represent the highest and best use of land and urban resources. Therefore, planning policy should encourage the assemblage of small, inefficient parcels and the replacement of obsolete industrial structures in the core of the Greater Airpark Study Area.

AUGMENT THE STRENGTH AND DIVERSITY OF IDENTIFIED MIXED-USE ACTIVITY CENTERS

The 1999 GG+A report concluded that “the scale of population growth in the area suggests the viability of a new regional center with a competitive mix of retail stores and other attractions”. Since that report, among other regional-serving retail developments, the Scottsdale Quarter project located at Scottsdale Road and Butherus Drive and the One Scottsdale project located at the northeast corner

of Scottsdale Road and Loop 101 have commenced development. The approximately 435,000-square-foot urban lifestyle center Kierland Commons has been developed on the Phoenix side of Scottsdale Road at Greenway Parkway and the first retail phase of the mixed-use CityNorth project at 56th Street and Deer Valley Drive off Loop 101 in northeast Phoenix has opened. Nordstrom's and Bloomingdales have been announced as anchors of a subsequent phase of this development. In addition, the one million-square-foot Palisene regional mall across the street from One Scottsdale on the Phoenix side of Scottsdale Road and Loop 101 is proposed to open in 2011-12. Market demand is not likely to support much more regional-serving retail uses than those already planned and under construction and it will be challenging for all of the existing properties and planned projects to build-out in the time frames the developers originally anticipated.

9. Accordingly, given the abundance of existing and planned regional-serving retail uses, rather than encouraging additional regional-serving retail developments, policy actions should be directed to augmenting the strength and diversity of the mixed-use activity nodes which have already gained entitlement (e.g., Loop 101 and Scottsdale Road and Loop 101 and Bell Road).
10. The development review and building permit process should be evaluated and "reengineered" to be more predictable, based on a clear planning policy framework and appropriate regulations uniformly applied, in order to alleviate the potential for higher costs and uncertainty associated with unanticipated project negotiations and requests.

ENHANCE WESTWORLD AND BETTER LINK RECREATIONAL RESOURCES IN BELL ROAD AREA TO EACH OTHER AND TO OTHER ACTIVITY CENTERS WITHIN THE GREATER AIRPARK STUDY AREA

11. The Greater Airpark Community Area Plan should identify opportunities to better link the recreational resources in the Bell Road area such as WestWorld, the TPC Desert Golf Course and the planned Desert Discovery Center. An exciting wayfinding system and, ideally trail system, should tie these resources together. Trail and green space connections to development nodes elsewhere in the Study Area should be made whenever practicable. Connecting commerce and recreational assets through more pedestrian friendly green spaces will highlight Scottsdale's reputation as a special place for recreation and health and will be mutually reinforcing and help differentiate the Study Area.

IMPROVE INFRASTRUCTURE, INCLUDING BROADBAND ACCESS

12. Given the evolution of the Greater Airpark Study Area to higher-order office space, research and development and high technology manufacturing, improve the infrastructure to at a minimum keep pace with development and the needs of space users. Infrastructure will need to accommodate the requirements of higher-intensity mixed-use developments.

13. Enhance the availability and quality of broadband access, especially on the east side of the Study Area.
14. Improving traffic conditions and transportation linkages will also be critical to accomplish.

STUDY HOW TO PRESERVE BENEFITS INDUCED BY AUTOMOTIVE DEALERSHIPS

15. The major downward shift in sales at automotive dealerships suggests the advisability of studying how to best position Scottsdale to benefit from future automotive dealership sales and to assure their viability. For example, the City should study whether it would be advantageous to support legislation that bases sales tax on the location of the residence of the automobile buyer as opposed to location of the automobile dealership.
16. If automotive dealerships are intended and likely to remain at locations such as Frank Lloyd Wright Boulevard within the Study Area, a specialized zoning district and signage ordinances should be created to reflect the differences between automotive dealership uses and general commercial uses.

CITY-OWNED LAND

17. The City should evaluate future uses for its 80-acre land parcel at the northeast corner of Bell Road and 94th Street to improve the magnetism of WestWorld (which is planning to improve its facilities and offerings to be “best in class”, including adding a permanent multi-purpose events center on the site) and associated activities as well as improve the competitive strength of the adjoining Epicenter project. For example, shared parking and shuttle system opportunities could be explored that (a) provide a central location for auxiliary parking for the visitor-related uses and activities if, in the future, State of Arizona land along Hayden Road becomes unavailable for WestWorld and major events; and (b) reduce the amount of expensive underground parking needed to accommodate office and hotel space planned for the Epicenter project.
18. Given the significant existing and proposed supply of office space, regional-serving retail space, and hotel uses sought for the Epicenter site, support uses such as restaurants, coffee shops and convenience services that also appeal to visitors (and residents) should also be considered for a portion of City-owned land. In addition, multi-family uses should also be incorporated. Multi-family uses will improve the competitiveness of the Epicenter development and support retail and other commercial uses in the vicinity of the site.

19. Given that existing properties and projects including Scottsdale Quarter, Silverstone, One Scottsdale, Terra Verde, and Epicenter alone (see Table VI-3) can support much more demand for office space than forecast through 2020, the City might wish to use its land to further its tourism development objectives. For example, it might explore operating a branch of the American Museum of Natural History on the site. This would require conducting pre-architectural planning and programming and negotiating an agreement with the American Museum of Natural History for the Museum to license and provide rotating exhibits and other content that the City would operate and maintain. Another example of a tourism use option to consider includes the provision of venue space for performing arts and other visitor and user events that cannot be accommodated by the planned enhancement of WestWorld and that are too large for existing hotels to provide through their facilities.

ADDITIONAL POLICY IMPLICATIONS

The recommendations and findings reflect evolving market conditions, and the estimates of future development in the Airpark are tempered by the amount of vacant built space and the conditions in place as the current down market recuperates. Within the overall parameters of the projected demand for commercial property, the City may choose to prioritize or emphasize certain types of development to achieve specific objectives. For instance, if the City decides to emphasize increasing sales tax and other revenues related to visitor and shopper activity in the area, there may need to be policy and investment decisions to support visitor attractions and venues that drive business and sales tax receipts, such as are described relating to the City's 80 acre parcel. The same could be true for retail as new retailing concepts emerge in the marketplace. Support for the policies could be reflected in the Area Plan and later in the General Plan.

Given the market conditions and demand forecasts, we believe it would be worthwhile to undertake a fiscal analysis of the emerging Scottsdale economy for at least the next 5-10 years. This fiscal analysis should include both long term revenue and expense forecasts and an identification of the interactions and relationships between potential changes in revenues and expenses. Without this framework, it will be difficult to identify comprehensive policy recommendations directed toward insuring Scottsdale long-term fiscal health and high quality service provision. The projection of revenues to pay for City services is especially important in understanding how to view land use and economic development planning for economic vitality strategy and commits to future growth through the General Plan.

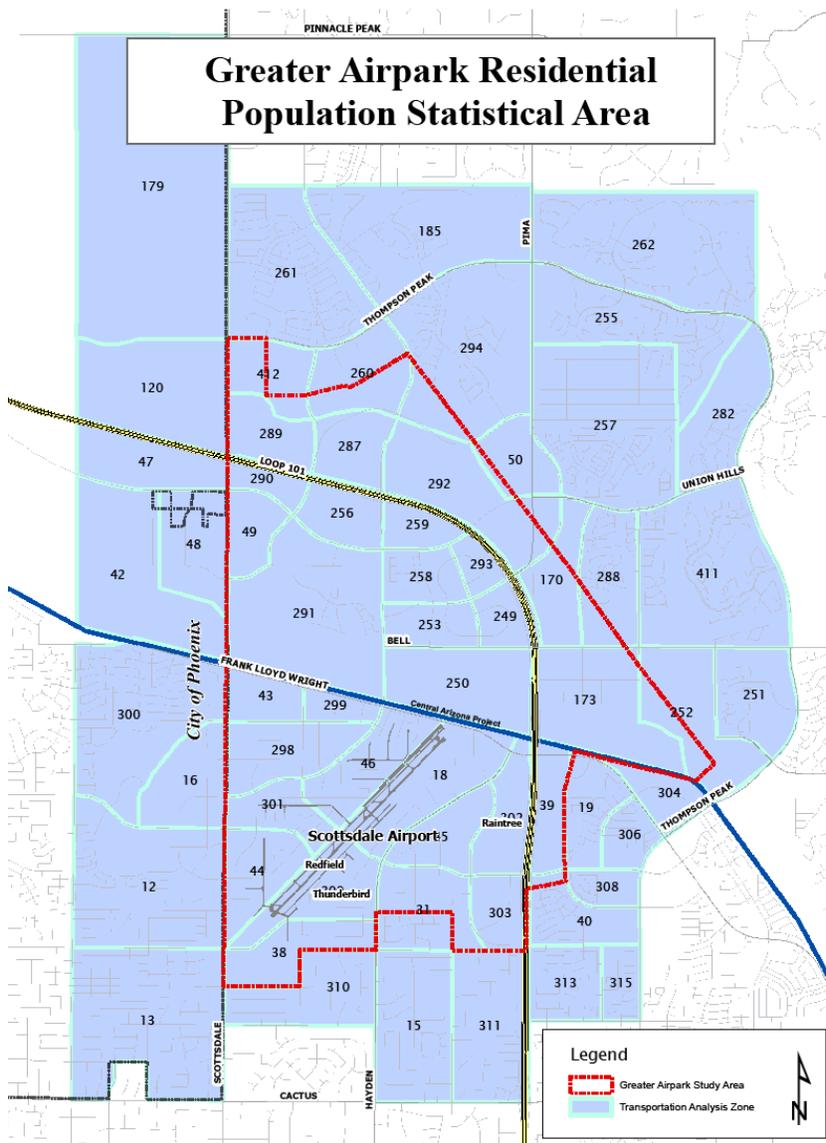
Other identifiable measures may require policy deliberations and decisions regarding the Airpark. These could include the timing and priority of infrastructure improvements, the role of the Airport and the techniques the City may use to encourage or support development and revitalization of portions of the Airpark Area. Beyond the recommendations contained within its pages, this report is intended to serve as a foundation on which to build further policy and program considerations. Additional evaluation of the needs and potential of the Airpark should be ongoing and build on the work of this report.

Appendix IX

Geographic Statistical Areas Used for Analysis

The statistical area below is referred to as “Greater Airpark and surrounding area or vicinity” in the text of this report.

Scottsdale Transportation Analysis Zones (TAZ)



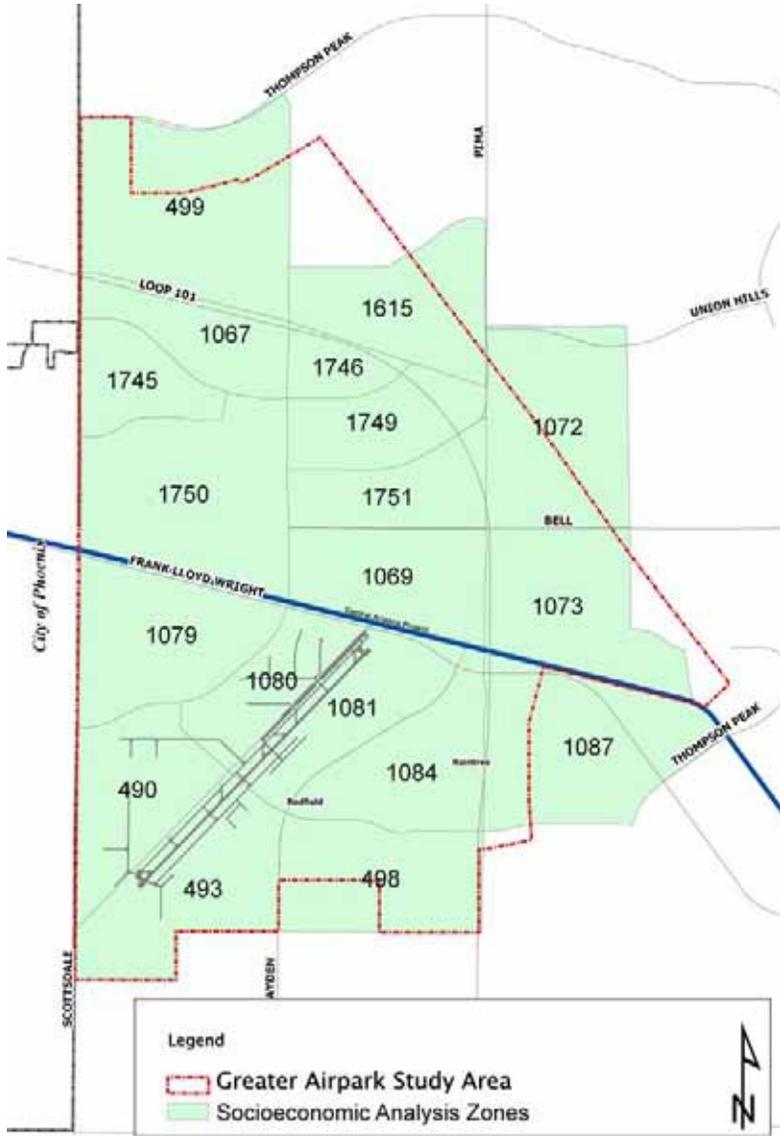
Source: Maricopa Association of Governments Socio-economic Analysis Zones (SAZ) and 2008 Scottsdale Transportation Master Plan Transportation Analysis Zones (TAZ)

MAG Regional Analysis Zones (RAZ)



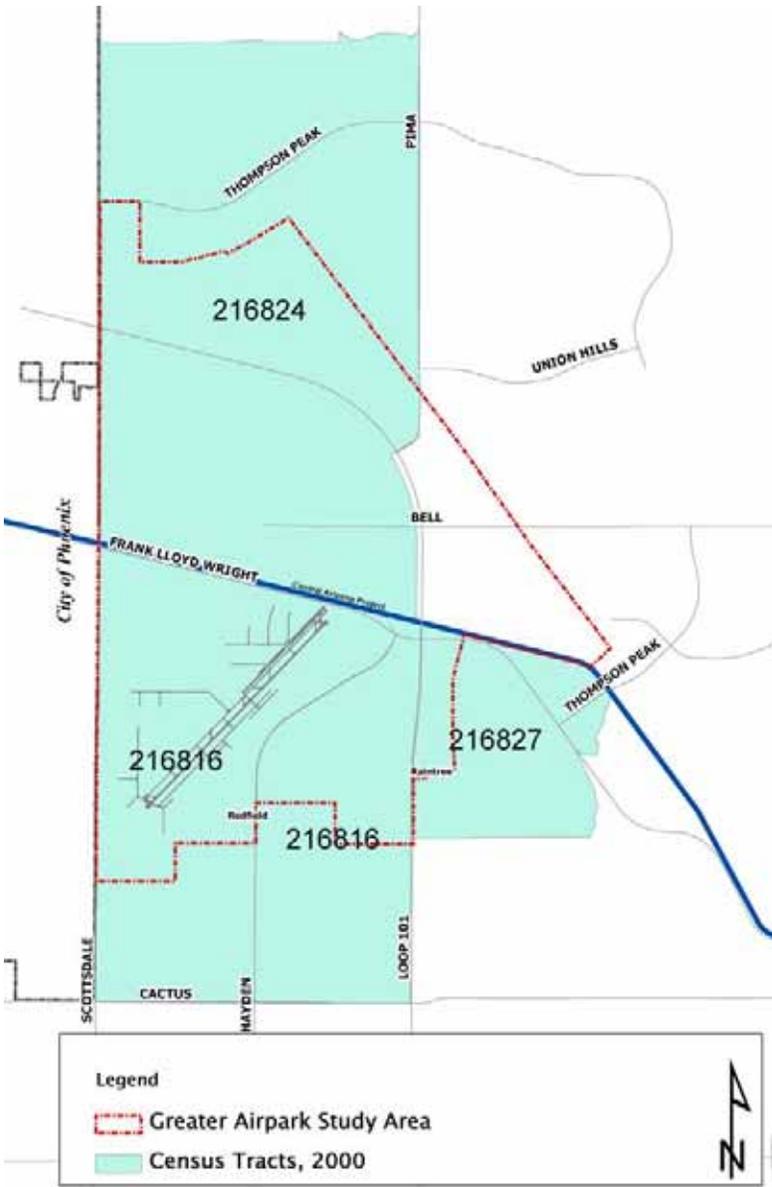
Used for employment analysis.

MAG Socioeconomic Analysis Zones (SAZ)



Used for housing, population and employment analysis. SAZ areas 498, 1087, 1072 and 499 were excluded in housing and population analysis because there are no housing units in those areas.

Census 2000 Census Tracts



Used for age, income and educational attainment analysis.

Appendix X

Greater Airpark Planning History Timeline

1967- Comprehensive General Plan adopted including a generalized land use plan for the Scottsdale Airport Environs. It predicted that the Airpark would provide the primary economic and employment base for the future development of Scottsdale. It referred to the Airpark as an “urban community” with goals of protecting the Airport, developing a major circulation system, an airport residential park (with home taxiway access), encouraging a variety of housing types and price ranges

1972-1975 – General Plan Updates of Land Use and Circulation elements

1974- The first Scottsdale Airport Master Plan is adopted

1976- Northeast Area Study planned land use includes industrial, major office and higher-density housing uses along the east side of Pima Road; Airport Master Plan is updated.

1977- Scottsdale Industrial Inventory identifies 74 business establishments with a total of 1,085 employees in the “Scottsdale Airport Economic Complex”; Analysis of Industrial Market Potential of the Scottsdale Municipal Airport Area examined three differing economic development scenarios and projected the market for industrial land use to the year 2000; Economic Impact Analysis of the Scottsdale Municipal Airport analyzed the direct and indirect financial impacts for seven differing airport development expansion alternatives

1978- Amendment to the City of Scottsdale Comprehensive General Plan for the Airport area established a comprehensive general policy for the area of the city surrounding the municipal airport and provided a set of guidelines for public and private decisions affecting the area

1980- Environmental Impact Statement (EIS) for Airport land acquisition and runway extension

1981- Airport Area Plan for Scottsdale Arizona updated the 1978 General Plan amendment in response to airport expansion and commercial market forces

1982- Scottsdale enters into an agreement with the Federal Bureau of Reclamation to operate and develop WestWorld (called Horsemen’s Park at that time) for recreation

1984- Scottsdale Foothills General Plan included the area located between the CAP Canal and Loop 101 Freeway and a section on Airport Compatibility Plan Guidelines

1985- An Airport Master Plan and Noise Compatibility Program for Scottsdale Municipal Airport evaluated and recommended development of facilities required to meet updated forecast demands with special emphasis on the subjects of noise and land use compatibility

1984, 1987 & 1989- General Plan Land Use Element updates included the Greater Airpark area

- 1988-** Scottsdale created a Conceptual Master Plan for WestWorld in addition to the city and commercial entities that developed various equestrian-oriented facilities
- 1991-** CAP Corridor Study received approval of a Regional Use Overlay General Plan land use category and Pima Freeway interchange revisions affecting the Greater Airpark; General Plan Circulation Element approval included Airport Plan Guidelines
- 1992-** General Plan Environmental Design and Public Facilities Element updates included the Greater Airpark area
- 1994-** Scottsdale Airport Master Plan presents a comprehensive analysis of airport needs and alternatives providing direction for future airport development
- 1995-** Scottsdale Airport Noise Compatibility Study updates and supersedes the original 1985 Noise Exposure Maps accepted by the Federal Aviation Administration (FAA); WestWorld updates its Conceptual Master Plan to include a facility operation plan.
- 1999-** Traffic and Feasibility Report for Airport Tunnel Study develops construction cost estimates for possible tunnel options to carry east-west arterial traffic under the Scottsdale Airport; Gruen Gruen + Associates Economic Study forecasts that the Greater Airpark will become an even larger employment center in 2010 and offered strategic recommendations
- 2000-** Sonoran Regional Core (SRC) Regional Use Overlay/ Bell Road Corridor expanded the “Regional Use Overlay” General Plan designation to the Bell Road Corridor east of the major power line corridor. The Bell Road corridor serves as a major entrance to McDowell Mountain Ranch, WestWorld and as the gateway center to the McDowell Sonoran Preserve; Scottsdale Airpark/ Sonoran Regional Core Character Area Civic Art Plan is a study contracted by the Scottsdale Cultural Arts Commission for an Artist Team to develop art and design concepts for a civic art plan for the Airpark/SRC Study Area
- 2001-** General Plan Update incorporates policies related to the Airport and Greater Airpark, overriding the previous Airport Area Plan and General Plan Land Use updates and designating the northern portion of the area as mixed-use neighborhoods
- 2003-** WestWorld Master Plan is updated to improve operational efficiency, increase recreational opportunities and to retain its signature events
- 2005-** Airpark White Paper provides a list of issues and long-range planning strategies to address them; Scottsdale Airport Noise Compatibility Study supersedes the 1995 Noise Exposure Maps accepted by the Federal Aviation Administration (FAA)
- 2007-** WestWorld Master Plan is updated
- 2008-** Transportation Master Plan includes a special section dedicated to the Airpark Area circulation and recommends policies and strategies to address circulation in the Greater Airpark; Scottsdale Airport Strategic Business Plan is initiated to guide the future of Airport operations