MARICOPA COUNTY

2020

Eye To The Future

COMPREHENSIVE PLAN

ADOPTED OCTOBER 20, 1997
REVISED AUGUST 7, 2002

MARICOPA COUNTY, ARIZONA

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TA 2002-005

RESOLUTION OF AMENDMENT

Maricopa County Board of Supervisors

MARICOPA COUNTY 2020, EYE TO THE FUTURE

RESOLUTION AMENDING THE
MARICOPA COUNTY COMPREHENSIVE PLAN
AUGUST 7, 2002

BE IT RESOLVED by the Maricopa County Board of Supervisors as follows:

WHEREAS, Title 11, Section 806 of the Arizona Revised Statutes directs the Planning and Zoning Commission to prepare a comprehensive plan of the area of jurisdiction of the county for the purpose of bringing about "coordinated physical development in accordance with the present and future needs of the county. The comprehensive plan shall be developed so as to conserve the natural resources of the county, to ensure efficient expenditure of public funds, and to promote the health, safety, convenience, and general welfare of the public."; and

WHEREAS, this Comprehensive Plan has been developed to accommodate growth and economic prosperity, to enhance the high quality of life in Maricopa County, and to facilitate continued development in a coordinated and harmonious fashion; and

WHEREAS, this Board acknowledges the responsibility to exercise its power in establishing land use patterns and development requirements which mitigate adverse impacts to the environment and ensure compatible land uses while enhancing individual freedom and opportunity, respecting private property rights, and facilitating competition and the operation of a free marketplace; and

WHEREAS, growth in accordance with sound planning can result in a stronger economy, more efficient use of infrastructure, compatible development patterns, decreased pollution, protection of natural resources, and an improved quality of life; and

WHEREAS, consideration of development issues requires a regional perspective to ensure coordinated development and preservation of the quality of life in the county; and

WHEREAS, this Board seeks to establish an efficient and cost effective government framework to accomplish the foregoing with well designed processes, coordinated effort, and careful avoidance of duplicative or conflicting requirements with other government agencies; and

WHEREAS, this Comprehensive Plan will provide the Board of Supervisors and other decision makers in the county, both public and private, with proper long range guidelines to make decisions based on clear regional policies; and

WHEREAS, prior to preparation of the Comprehensive Plan document, broad public participation and input was sought in order to understand issues concerning growth; to develop a vision for the County; and to establish policies for the plan's elements to achieve the goals and desires of the community; and

WHEREAS, the General Plans of the cities and towns within Maricopa County have been carefully considered as they relate to unincorporated lands; and

WHEREAS, an Oversight Steering Committee, comprised of members of the Board of Supervisors, the Planning and Zoning Commission, and the Transportation Advisory Board, was established to provide guidance and strategic direction in the preparation of this Comprehensive Plan; and

WHEREAS, this Comprehensive Plan is a policy guide and is intended to give direction to the creation and revision of Area Plans and is intended to be changed from time to time by the Board of Supervisors; and

WHEREAS, the Planning and Zoning Commission of Maricopa County, after careful study and a public hearing, has recommended approval of this Comprehensive Plan to the Board of Supervisors; and

WHEREAS, the Board of Supervisors has carefully considered the Comprehensive Plan and has held a public hearing and finds that said Plan constitutes a suitable, logical, and timely document to guide the future development of Maricopa County to the year 2020.

NOW, THEREFORE, BE IT RESOLVED, that the document consisting of the text, maps, and supporting materials entitled "*Maricopa County 2020, Eye to the Future*" and dated 1997, is hereby amended this 7th day of August, 2002 to add new plan elements as required by State Statutes; and

RESOLVED FURTHER, the goals, objectives, and policies contained in each plan element and the recommended Comprehensive Plan Agenda for Action be implemented as policy.

RESOLVED FURTHER, this Comprehensive Plan may be amended from time to time to reflect changing community needs or desires, to comply with statutory requirements, and to represent the best thinking of the Board of Supervisors and the Planning and Zoning Commission; and

RESOLVED FURTHER, the Commission shall review the Comprehensive Plan every four years and recommend amendments, if it determines any should be made. The review should be timed so that necessary amendments to the Comprehensive Plan be adopted prior to the development of the Capital Improvement Programs of the Department of Transportation and the Flood Control District; and

RESOLVED FURTHER, the Planning and Zoning Commission shall conduct a major update of the Comprehensive Plan every ten years; and

RESOLVED FURTHER, the General Plans of the cities and towns of Maricopa County shall serve as a guide for the physical development of unincorporated lands, and that such development shall be generally consistent with the General Plans in which the lands are contained, provided the General Plans have been updated within five years and have included the values and desires of the residents and property owners of unincorporated areas; and

RESOLUTION OF AMENDMENT

RESOLVED FURTHER, all matters affecting the rezoning or physical development of lands in the unincorporated county submitted to the Planning and Zoning Commission shall be in general conformity to the goals, objectives, and policies of the Plan, or to an approved Development Master Plan. All submittals shall include a report indicating general conformity to the Plan.

8/13/02

Chairman Date

8/13/02

Attest: Clerk of the Board Date 080702

8.12.02

Director, Date
Planning and Development Department

EXECUTIVE SUMMARY

OVERVIEW

Maricopa County is required by state law to prepare a comprehensive plan "to conserve the natural resources of the county, to ensure efficient expenditure of public funds, and to promote the health, safety, convenience, and general welfare of the public." (A.R.S.§11-806)

The "Eye To the Future" planning process is structured to emphasize public involvement and incorporate comments, ideas, and direction of the public into the plan. Through this effort, the citizens of Maricopa County have developed a vision statement to guide the plan:

> *Our overriding vision for Maricopa County is to accommodate growth in a fashion that will preserve our sense of community and protect and enhance our quality of life. Priorities include protecting our unique desert environment, cultural heritage, and Southwestern lifestyle. These unique features define our region and provide an identity that is recognizable in the international arena. Recognition and enhancement of these characteristics are critical to our future success.*

This plan seeks to create strong and vibrant communities within Maricopa County by encouraging orderly development while creating a healthy environment and a healthy economy. By accommodating new growth in areas that can sustain additional development, the plan endeavors to conserve scarce resources and to build strong communities based on an efficient transportation system, well-protected environmental resources, and a strong, diversified economy. The plan's elements reflect the character of the county's population, while the policies and implementation tools guide future land use and transportation decisions.

HOW TO USE THE PLAN

The Comprehensive Plan provides a guide for decisions by the Planning and Zoning Commission and the Board of Supervisors concerning growth and development. While it is to be used by policy makers to guide their decisions, it also serves as a reference for the private sector in making informed investment decisions.

Comprehensive Plan Elements

Each of the Comprehensive Plan elements contains a series of goals, objectives and policies used to define development standards, guide public investment, and guide public and private decision making.

LAND USE

Land Use Areas

Given the vast area under the jurisdiction of Maricopa County, the land use area designations in this plan embody generalized land use, development or preservation concepts. However, underlying these areas are more detailed plans that recommend specific land uses. The designations also vary by jurisdiction and regulatory authority. The designations are:

- Incorporated Areas
- General Plan Development Area
- County Area Plans
- Established Communities
- Existing Development Master Plans
- Dedicated Open Space
- Proposed Open Space
- Rural Development Area
- Municipal Planning Area

GOALS, OBJECTIVES, AND POLICIES

The goals of the land use element are:

Goal 1: Promote efficient land development that is compatible with adjacent land uses, is well integrated with the transportation system, and is sensitive to the natural environment.

Goal 2: Ensure the availability of safe and sanitary affordable housing for all residents of unincorporated Maricopa County, especially those with very low, low, and moderate incomes.

Within these goals, the following objectives apply:

GOAL ONE:

Objective L1 Promote infill development.

Objective L2 Provide employment opportunities proximate to housing.

Objective L3 Encourage innovative and varied approaches to development.

Objective L4 Provide for the coexistence of urban and rural land uses.

Objective L5 Promote planned communities that provide a mix of housing types and land uses.

Objective L6 **Cluster development in appropriate patterns.**

Objective L7 **Ensure the provision of adequate public facilities.**

Objective L8 **Support innovative technological operations and facilities to encourage an appropriate balance of automobile use, and to encourage energy efficiency and the use of renewable resources.**

Objective L9 **Integrate transportation planning with land use.**

Objective L10 **Promote the balance of conservation and development.**

Objective L11 **Promote an interconnected open space system.**

GOAL TWO:

Objective L12 **Support and encourage efforts by public, private, and non-profit agencies to establish affordable housing programs.**

Objective L13 **Promote zoning, subdivision, and land use regulations that accommodate affordable housing.**

Objective L14 **Promote community participation in affordable housing decisions.**

Objective L15 **Support the rehabilitation of substandard and existing housing units to help ensure safe and sanitary affordable housing.**

TRANSPORTATION

The transportation element defines a system of transportation facilities and services that may be developed in Maricopa County through the year 2020. The element includes existing and future roadway networks and regional efforts towards creating a multi-modal system to accommodate transit, pedestrian, and bicycle needs. The transportation element provides an overview of the roadway conditions, network connections, and capacities and limitations of the existing system. The goals and objectives outlined in this element emphasize the need to maximize and efficiently use the existing and future Maricopa County transportation systems by considering alternatives to automobile travel and better coordinating land use as it relates to transportation planning.

GOALS, OBJECTIVES, AND POLICIES

The goal of the transportation element is to:

Provide an efficient, cost effective, integrated, accessible, environmentally sensitive, and safe county-wide multi-modal system that addresses existing and future roadway networks, as well as promotes transit, bikeways, and pedestrian travel.

Within this goal, the following objectives apply:

Objective T1 **Reduce the proportion of trips made in single occupancy vehicles.**

Objective T2 **Increase transit ridership.**

Objective T3 **Employ applicable technology to improve the use of transportation facilities.**

Objective T4 **Identify and accommodate transportation corridors.**

Objective T5 **Optimize public investments.**

Objective T6 **Minimize travel times.**

Objective T7 **Reduce crashes.**

Objective T8 **Minimize and mitigate impacts of construction and operations.**

ENVIRONMENT

Maricopa County's environmental ecosystems and land ownership patterns provide a complex natural setting and planning agenda. The Comprehensive Plan recognizes the importance of creating, improving, and conserving natural habitat and open space in order to increase biological diversity. The Plan focuses on maintaining and improving the physical environment, natural resource conservation, and other environmental considerations. The Environmental Element for the Comprehensive Plan summarizes existing conditions within the natural environment and identifies objectives that will ensure protection for the County's air, water, land, and cultural resources.

GOALS, OBJECTIVES, AND POLICIES

Two environmental goals have been established through the comprehensive planning process for Maricopa County that specifically address the natural and human environment:

Goal 1: Promote development that considers adverse environmental impacts on the natural and cultural environment, preserves highly valued open space, and remediates areas contaminated with hazardous materials.

Goal 2: Improve air quality and minimize noise impacts.

With these goals the following objectives apply:

GOAL ONE:

Objective E1 **Encourage preservation of significant mountainous areas with slope over 15% for parks, open space, and/or compatible recreation use.**

Objective E2 **Promote development that is compatible with the visual character and quality of the site.**

Objective E3 **Promote the appreciation and preservation of significant archeological and historic resources within the framework of state and federal laws, regulations, and guidelines.**

Objective E4 **Encourage the protection of habitat within the framework of state and federal laws, regulations, and guidelines.**

Objective E5 **Promote the protection and preservation of riparian areas within the framework of state and federal laws, regulations, and guidelines.**

Objective E6 **Encourage the reduction of pollutants in rivers and streams within the framework of state and federal laws, regulations, and guidelines.**

Objective E7 **Discourage new development in major 100-year floodplains.**

Objective E8 **Encourage protection and enhancement of future water and groundwater supplies within the framework of state and federal laws, regulations, and guidelines.**

Objective E9 **Encourage the cleanup and development of brownfield sites within unincorporated Maricopa County within the framework of state and federal laws, regulations, and guidelines.**

GOAL TWO:

Objective 2E1 **Support efforts by the Maricopa County Department of Environmental Services to reduce emissions sufficiently to reach and maintain National Ambient Air Quality Standards by 1999 in county non-attainment areas.**

Objective 2E2 **Minimize vehicle traffic noise on sensitive land uses.**

Objective 2E3 **Promote reduction of existing noise problem areas.**

ENVIRONMENTAL EFFECTS

The Environmental Effects element helps Maricopa County fulfill the requirements of the Growing Smarter Act, and helps ensure that planning for future development in Maricopa County is consistent with federal, state, and local requirements for air quality, water quality, and other issues affecting the environment. The background report titled *Environmental Effects* contains analysis, goals, objectives, and policies that address anticipated effects that development may have on air quality, water quality, noise abatement, and sensitive plant and wildlife species. The objectives and policies developed for this report are designed to have countywide applicability. In this report, Maricopa County analyzes numerous environmental issues, and the potential effects that future growth and development may have on these issues.

Goal 1: Encourage development that considers environmental impacts on air quality, water quality, and sensitive plant and wildlife species, as well as the impacts that noise exposure has on health and quality of life.

Goal 2: Encourage development that protects, preserves, enhances the use of (where appropriate), and raises the public's appreciation of prehistoric, historic, and archaeological sites, buildings, structures, and objects.

Goal 3: Encourage development that minimizes environmental hazards.

With these goals the following objectives and polices apply:

Objective EE1 **To help improve air quality, encourage mixed use development that reduces vehicle miles traveled (VMT).**

Objective EE2 **To help improve water quality, encourage development that minimizes land disturbance to reduce soil erosion and sedimentation in rivers, streams, and washes.**

Objective EE3 **To help improve water quality, encourage wastewater treatment coordination efforts in newly developing areas.**

Objective EE4 **Encourage protection and preservation of sensitive plant and wildlife habitat and riparian areas within the framework of state and federal laws, regulations, and guidelines.**

Objective EE5 **Encourage noise abatement in new development located near noise generating activities, according to federal, state, and local regulations and guidelines.**

Objective EE6 **Encourage monitoring and evaluation of all sites prior to development for evidence of prehistoric, historic, and significant archaeological sites, buildings, structures, and objects.**

Objective EE7 **Encourage development that protects air quality, water quality, and water resources; that minimizes soil and water way disturbance; that mitigates noise problems; and that preserves historic resources.**

ECONOMIC DEVELOPMENT

Maricopa County has the power to intervene as a catalyst or facilitator for quality development in the region. Thoughtful land use decisions, comprehensive transportation planning, and sensitive environmental controls, combined with economic development opportunities, should aid in the generation of quality jobs and contribute to the enhancement of the quality of life for residents and communities.

GOALS, OBJECTIVES, AND POLICIES

The goal of the Economic Development Element is to:

Promote a growing balanced, efficient, and diversified economy, consistent with available resources, that enhances quality employment opportunities, improves quality of life, and is sensitive to the natural and cultural environment.

Within this goal, the following objectives apply.

Objective ED1 **Expand quality employment opportunities and capital investment.**

Objective ED2 **Encourage employment opportunities proximate to housing.**

Objective ED3 **Foster community revitalization and development.**

Objective ED4 **Enhance opportunities for education and labor training in the region.**

GROWTH AREAS

The Growth Areas element establishes criteria for helping to identify when and where growth should occur. As noted in the land use element, Maricopa County encourages urban growth within the Urban Service Area where services, infrastructure, and facilities are readily available to serve residents' needs.

Most of the urban service area is located within the General Plan Development Areas of the county's various jurisdictions. Those areas outside the Urban Service Area are generally not suitable for urban type growth (i.e. commercial, employment, and residential density greater than 1 dwelling unit per acre), but are generally suitable for rural growth that is consistent with the underlying zoning.

The goal of the Growth Areas Element is to:

Promote orderly, timely, and fiscally responsible growth in Maricopa County.

Within this goal, the following objectives apply:

GOALS, OBJECTIVES, AND POLICIES

Objective G1 **Encourage timely, orderly, and fiscally responsible growth within the General Plan Development Areas, within specifically identified areas of County Area Plans intended for higher intensity use, and within mixed use Development Master Plans.**

Objective G2 **Evaluate growth areas to ensure continued feasibility and effectiveness.**

Objective G3 **Maintain cooperation with stakeholders to help ensure that future growth is coordinated in an efficient manner.**

OPEN SPACE

The purpose of the Open Space element is to address the Growing Smarter Act as it relates to regional open space planning. Regional open space has been broadly defined to include existing parks and preserves, mountains, rivers and significant washes, upland Sonoran Desert vegetation, sensitive and unique wildlife areas, historic and archaeological sites, canals and trails, and agriculture. To ensure consistency with the existing comprehensive plan, open space is analyzed within regions of Maricopa County. Five regions / planning areas are identified: northwest, southwest, north, northeast, and southeast (see *Open Space Element Report* for further discussion). However, planning jurisdiction is limited to the unincorporated areas of Maricopa County.

GOALS, OBJECTIVES, AND POLICIES

The goal of the Open Space Element is to:

Maintain and, where necessary, encourage expanding the open space system for Maricopa County to address public access, connectivity, education, preservation, buffering, quantity, quality, and diversity for regionally significant open spaces.

Within this goal, the following objectives apply:

Objective O1 **Promote physical and visual public access to open space resources.**

Objective O2 **Establish regional open space connectivity and linkages for both recreation and wildlife purposes.**

Objective O3 **Promote the economic and quality of life benefits of open space.**

Objective O4 **Protect and enhance environmentally sensitive areas, including mountains and steep slopes; rivers and significant washes; historic, cultural, and archeological resources; view corridors; sensitive desert; and significant wildlife habitat and ecosystems.**

Objective O5 **Encourage appropriate open space between communities and land uses.**

Objective O6 **Improve quantity, quality, and diversity of open space and recreational opportunities.**

WATER RESOURCES

The Water Resources element helps fulfill Maricopa County's obligation under the Growing Smarter Plus Act. Specifically, Maricopa County must address water resources by including in its comprehensive plan an inventory of county water supplies, as well as calculations of historical and projected water demand. Detailed sections in the *Water Resources* element report include issues relevant to water use, available supplies for future growth in the county, descriptions of practices for managing future water supplies, and a series of goals, objectives and policies to help guide land use decisions.

GOALS, OBJECTIVES, AND POLICIES

The goals of the Water Resources Element are as follows:

Goal One: *Promote development that makes conservative use of renewable water supplies such as effluent, surface water, and Central Arizona Project water when feasible, and that uses groundwater as the primary water source only in the absence of renewable sources.*

Goal Two: *Reduce the impacts of development on water quality, land subsidence and fissuring, and riparian habitat.*

Within these goals, the following objectives apply.

Objective W1 **Encourage the protection and enhancement of future renewable water and groundwater supplies within the framework of state and federal laws, regulations, and guidelines.**

Objective W2 **Ensure adequate facilities are available for the treatment of wastewater, and the distribution of effluent, in newly developing areas.**

Objective W3 **Encourage the reduction of pollutants in rivers, streams, and washes within the framework of state and federal laws, regulations, and guidelines.**

Objective W4 **Promote the protection and preservation of riparian areas within the framework of state and federal laws, regulations, and guidelines.**

COST OF DEVELOPMENT

The Cost of Development element helps Maricopa County fulfill the requirements of the Growing Smarter Act by ensuring orderly and fiscally responsible growth. The policies and strategies identified in this element are used to ensure that new development pays its fair share towards the cost of additional public facility needs generated by new development. Given the significant future growth expected in Maricopa County, the Cost of Development element is important to help ensure a fiscally responsible budget, and to help ensure an efficient use of taxpayer funds. The Cost of Development element also helps establish an equitable sharing of costs associated with future growth and development. Additional information regarding this element can be found in the background report titled *Cost of Development*.

GOALS, OBJECTIVES, AND POLICIES

The goal of the Cost of Development Element is to:

Ensure that new development pays its fair and proportional share of the cost of additional public facility and service needs generated by new development.

Within this goal, the following objectives apply:

Objective C1 **Develop a method to determine the need for, and assessing costs of, new facilities and services required to serve new development in order to maintain service levels.**

Objective C2 **Adopt and implement level of service standards for new development to help promote consistency and certainty in the cost sharing process**

Objective C3 **Identify and monitor cost sharing programs for potentially adverse impacts.**

AGENDA FOR ACTION

It is important to identify short-term goals and tasks that can be undertaken soon after plan adoption. The Agenda for Action presents an overview of the tasks to be undertaken immediately upon plan adoption.

NOTES:

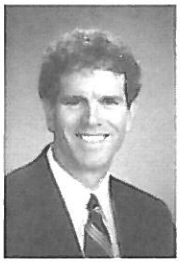
ACKNOWLEDGMENTS

The preparation of **Maricopa County 2020, Eye to the Future**, was made possible by the cooperative efforts of the Maricopa County Board of Supervisors, the Planning and Zoning Commission, the Transportation Advisory Board, the Oversight Committee, the Staff Steering Committee, the County Administrative Office, and staff of the Planning and Development Department and the Department of Transportation, with additional assistance from the Flood Control District. Maricopa County would like to extend its appreciation to all the citizens, property owners, homeowners' associations, community organizations, non-governmental organizations, businesses, cities, towns, Indian communities, state agencies, and federal agencies whose diligent participation throughout the planning process has been instrumental in the development of this Plan. Special thanks are extended to Commissioners Sandy Goldstein and Nancy Edwards for their diligence, perseverance, and support.

ACKNOWLEDGMENTS

BOARD OF SUPERVISORS (2002)

Don Stapley, Chairman
District 2



Fulton Brock
District 1

Andy Kunasek
District 3

Max W. Wilson
District 4

Mary Rose Wilcox
District 5

Former members: Jan Brewer (District 4)

Planning and Zoning Commission (2002 Comprehensive Plan Update)

Carole Hubbs, Chairman	District 4
C. Dennis Barney	District 1
Bob Beckley	District 1
Mark Pugmire	District 2
Richard Gulbrandsen	District 2
Clancy Jayne, Vice Chairman	District 3
Dick Smith	District 3
Bill Clayburg	District 4
Jimmie Munoz	District 5
Abe Harris	District 5

Former members: Sal DiCiccio (District 1)

Transportation Advisory Board (1997)

Joseph E. LaRue, Chairman	District 4
Fran Emerson	District 1
Craig Cardon	District 2
Harold Woods	District 3
Ben Miranda	District 5

Oversight Committee (1997)

Sanford G. Goldstein, Chairman	Planning and Zoning Commission
Don Stapley	Board of Supervisors
Nancy Edwards	Planning and Zoning Commission
Abe Harris	Planning and Zoning Commission
Art Coates	Transportation Advisory Board

Former members: Nancy K. Russell, Planning and Zoning Commission

ACKNOWLEDGMENTS

Staff Steering Committee (1997)

Jill Herberg-Kusy	Planning & Development
Tom Buick	Transportation
Bill Van Ausdal	Recreation Services
Trina Belanger	County Administrative Office
Vi Brown	Environmental Services
Leslie Dornfeld	Maricopa Association of Governments
Irma Moreno	Community Development
Christine Holloway	Solid Waste
Terry Johnson	Maricopa Association of Governments
Richard G. Perreault	Flood Control District of Maricopa County
Major Bill Williams	Sheriff's Office
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Comprehensive Planning Team (1997)

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Comprehensive Planning Team (2002 Comprehensive Plan Update)

Joy Rich, AICP, Director
Lynn Favour, AICP, Deputy Director
Matthew Holm, AICP, Principal Planner
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Nathan Williams, Planning Assistant

Department of Transportation (1997)

Tom Buick, Michael Dawson, Michael Sabatini, Craig Seppelfrick, Tim Oliver, Thomas Herz, Hilary Perkins, Jim Gardner, Alan Preston, Michael List, Patt Calderon, Leticia Cons, Rachael Koehler, Patti Suman, Julie White-Faist, Barry Burns, Mike Pavlina, Dave Wolfson, Kelly McMullen, Victoria Davis, Teresa Verbout, Janice Miller
Graphic Layout: Mary Ann Archuleta

Flood Control District of Maricopa County (1997)

Doug Williams

Former members: Bryant Anderson, Scott Edwards, Michael Graham, Carlin Holley, Mark Holley, Greg Holverson, Dave Hunt, Michael James, Courtney James, Steve Lutman, Joel McCabe, Bert Miller, Janice Miller, Debra Stark

Consultants (1997)

BRW Inc.	Dames & Moore
Mosaic Analytical Planning	Tischler and Associates

Parsons Brinckerhoff Quade & Douglas, Inc.

INTRODUCTION

OVERVIEW

Maricopa County has experienced rapid and robust growth throughout its history. Based on economic opportunity, beneficial climate, and an active lifestyle, growth has transformed the region from an agricultural center to a vibrant commercial, industrial, and recreational hub. As the County proceeds in the twenty-first century, its citizens have the opportunity to shape the process of growth to sustain economic prosperity and enhance the quality of life. This Comprehensive Plan addresses challenges facing the county, and presents opportunities for the continuing success of the region.

County government is required by state law to prepare a comprehensive plan for the unincorporated areas "to conserve the natural resources of the county, to ensure efficient expenditure of public funds, and to promote the health, safety, convenience, and general welfare of the public" (A.R.S. 11-806). Fundamental to the role of county government in serving the different interests and areas within the county is the mission statement adopted by the Board of Supervisors in 1995:

> *The mission of Maricopa County is to enhance, increase and enrich the individual freedom and opportunities of all Maricopa County citizens.*

This mission statement is the foundation of all county efforts and provides the philosophical framework for the Comprehensive Plan.

The planning process is structured to emphasize public involvement and incorporate comments, ideas, and direction of the public into the plan. Through this effort, the citizens of Maricopa County have developed a vision statement to guide the preparation and implementation of the plan:

> *Our overriding vision for Maricopa County is to accommodate growth in a fashion that will preserve our sense of community and protect and enhance our quality of life. Priorities include protecting our unique desert environment, cultural heritage, and southwestern lifestyle. These unique features define our region and provide an identity that is recognizable in the international arena. Recognition and enhancement of these characteristics are critical to our future success.*

The government of Maricopa County explicitly acknowledges there is an appropriate responsibility between the government and private property owners to address this mission and vision. The Comprehensive Plan is designed to respect private property rights while enhancing, increasing, and enriching the individual freedoms and opportunities of all citizens.

Creation of this plan is authorized under Title 11, Section 806 of the Arizona Revised Statues. The statute requires counties to prepare a comprehensive plan to guide coordinated, adjusted, and harmonious development within the County. Under this section, the County Planning and Zoning Commission is directed to prepare, "a comprehensive plan of the area of jurisdiction of the County for the purpose of bringing about coordinated physical development," and "to promote the health, safety, convenience, and general welfare of the public." The statute requires the comprehensive plan be developed so as, "to conserve the natural resources of the county and to ensure efficient expenditure of public funds." Upon adoption, the plan becomes the official guide for the development of the unincorporated areas of the county.

PHYSICAL CHARACTERISTICS

Maricopa County, located in central Arizona within the upper Sonoran Desert, encompasses 9,226 square miles. (See Figure 1–Maricopa County) The county is bisected by the Salt River, which runs from northeast to southwest. It joins the Gila River near the center of the county, continuing in a southwesterly direction towards the Colorado River, meeting it near Yuma. The life-sustaining water this extensive river system brings to the region has defined life in Maricopa County from the earliest Native American settlements to the present day.

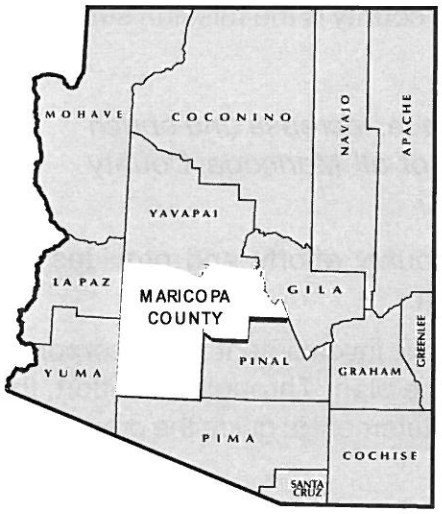


Figure 1-Maricopa County

Varying in elevation from 436 feet above sea level in the southwest to 7,645 feet at the northeast, the county contains several plant communities. At the lower elevations, desert scrub punctuated with saguaro cactus predominate. The higher elevations contain woodlands and forests. Along the rivers, streams, and washes, riparian communities flourish. The riparian areas sustain the majority of the diverse plant and animal life found in the county.

Maricopa County has one of the most ample water supplies of any desert region in the west. The watershed of the Salt and Verde Rivers is impounded behind the dams of the Salt River Project. The Central Arizona Project canal which brings water from the Colorado River, can supply more than a fifth of the total water for the county. In addition to this supply, the metropolitan area is situated over a prolific aquifer. To assure an adequate water supply for future generations, the state legislature adopted the Groundwater Management Act in 1980. This act requires careful water management and conservation measures to ensure water will be available for the influx of people expected in the next 20 years and beyond.

HISTORY

Maricopa County was originally inhabited by Native Americans, who abandoned the area during the 1300's for unexplained reasons. Agriculture was the prominent activity and was reestablished during the 1860's as the first European settlers migrated to the Salt River Valley. Rapid growth and robust development have been the hallmark of Maricopa County ever since. The Valley's agriculture base and population grew steadily. In 1870 the town site of Phoenix was established. On February 14, 1871, the Territorial Legislature created Maricopa County. By 1872, there were over 700 people in the county with 5,000 acres under cultivation.

The arrival of the railroad in 1877 caused a surge in economic activity. In 1900, the county population was about 20,000 (See Figure 2-Maricopa County Population). In the early 1900s, the larger farm parcels scattered throughout the region were divided into small farm communities such as Chandler, Gilbert, and Tolleson. In 1902—at the request of President Theodore Roosevelt—after a series of devastating floods, Congress passed the Reclamation Act of 1902. Shortly thereafter, the U.S. Bureau of Reclamation started construction on Theodore Roosevelt Dam. This marked the beginning of a modern system of irrigation works for the storage, diversion, and development of water for agriculture.

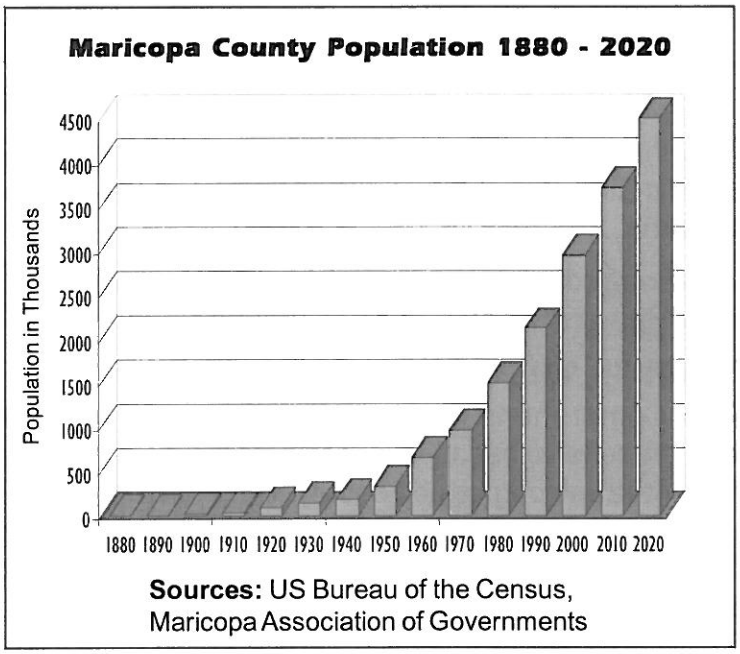


Figure 2-Maricopa County Population

Irrigated agricultural production and population exploded after the completion of Roosevelt Dam in 1912, providing the region with a reliable water supply. Maricopa County quickly became one of the leading agricultural producing counties in the United States. During this period, the county also became a winter haven for tourists.

Growth in the area continued as tourism, automobile travel, military, and industrial activities came to the county. Construction continued on residential developments, highways, and commercial districts, making Maricopa County an increasingly popular place to live.

Until the end of World War II, the traditional economic powerhouses of both the State of Arizona and Maricopa County were known as the four "Cs": cotton, copper, cattle, and citrus. The planned strategic decentralization of the nation's industrial base during the war further established Maricopa County as a center for aluminum processing, aviation, electronics production, and a center for pilot training. These newly established industries fueled the monumental growth of the county in the post-war era.

By 1960, the population was over 660,000 people, reaching one million residents in the early 1970s. Combined with the general economic expansion of the 1980s and the rush to the Sun Belt, Maricopa County claimed over 2.2 million residents by 1990. Even with economic sluggishness in the early 1990s, the region continued to grow. The Special Census of 1995 set the county population at 2,551,765 people.

The Arizona Department of Economic Security projects Maricopa County will have 4.5 million people in 2020. These projections assume the historical conditions for growth will continue. In addition, increased trade with Mexico, South America, and the Pacific Rim is expected to provide new sources of economic growth and migration to the area.

Additional demographic and historical information is available in the *Historical Overview and Population Background Report*, published in 1996.

WHAT IS THE COMPREHENSIVE PLAN?

The Comprehensive Plan encompasses the future vision of the county. It is *comprehensive* because it considers the interrelationships of planning activities over the entire unincorporated county. The Plan represents the interests of the wide range of citizens who are active participants in the planning process and the interests of future citizens. The Plan shows the interdependence of the use of land and resources in the different geographic areas, the physical infrastructure of the built environment, and the process of governing. Ultimately, because it is comprehensive, the Plan guides decision making by the Planning and Zoning Commission and the Board of Supervisors to protect natural resources, ensure efficient expenditure of public funds, and promote the health, safety, convenience, and general welfare of the public.

This Comprehensive Plan is the continuation of a long tradition of planning in Maricopa County. Planning activities in both the Planning and Development Department and the Department of Transportation have continually evaluated the pace of growth in the county and have clearly foreseen the effects of growth.

Long range, comprehensive planning has been integral to the mission of Maricopa County since the late 1950s. At that time, the Planning Department started studying regional land use and population growth, while the Transportation Department led the development of the *Major Streets and Highway Plan.* Over the years, comprehensive general plans were developed for specific unincorporated county areas and many of the incorporated cities and towns. In the 1960s, the county planning department was at the forefront of planning in the region. When the cities' planning resources were

limited, Maricopa County worked with them to develop general plans and to coordinate regional planning activities.

The vast size of Maricopa County has dictated a subregional approach to comprehensive planning in the county during the last twenty years. A series of area land use plans have been developed in a continuing program to plan for unincorporated areas. By the early 1990s, due to increasing development pressure and the realization of the need to address issues on a regional basis, the county committed to developing a comprehensive plan for the entire unincorporated area. This plan incorporates existing planning efforts into a unified vision for the future.

ORGANIZATION OF THE COMPREHENSIVE PLAN

The Maricopa County Comprehensive Plan is organized into five sections, as follows:

1. **Introduction**: This section provides background information concerning the history and physical features of the county. It examines the tradition of comprehensive planning and provides information on the organization and use of the plan.
2. **Comprehensive Plan Elements**: The Plan has nine elements: Land Use, Transportation, Environment and Environmental Effects, Economic Development, Growth Areas Open Space, Water Resources, and Cost of Development. Each element contains goals, objectives, and policies that provide guidance for evaluating activities within the element. The key issues and strategies are explained and supported with tables and figures.
3. **Agenda for Action**: The Action Plan is the program by which the Comprehensive Plan will become a significant force for the accommodation of growth. The program contains strategies and indicators for each element, leading to the implementation of the vision.
4. **Amending the Plan**: The Comprehensive Plan is a flexible document that will adapt to changing conditions. The amendment process will facilitate the evolution of the plan.
5. **Appendixes**: This section contains a glossary of terms, an acronym list, the Citizen Participation Process, and by reference, other supporting documents. Citizen participation ensured significant citizen input, including the development of subregional visions and goals. This process also supported the alternatives analysis which resulted in the final land use and transportation plan. The supporting documents includes inventory and analysis reports, background information, and General Plans of the local jurisdictions in Maricopa County. These documents will be on permanent file in the Planning and Development Department library, and most will be available on the Comprehensive Plan Internet web page at http://www.maricopa.gov.

HOW TO USE THE PLAN

The Comprehensive Plan provides a schematic guide for decisions concerning growth and development. While it is ultimately a tool to be used by policy makers to guide their decisions, it also serves as a reference for the private sector in making informed investment decisions. The plan is guided by the following basic principles:

- Decision-making processes should recognize and integrate both short-term and long-term land uses, transportation, environmental, and economic development considerations.
- Planning efforts should be coordinated between various levels of government.
- The most cost-effective solutions should always be considered.
- Citizen participation will remain an integral part of the Comprehensive Plan's implementation and amendment process.

Each of the Comprehensive Plan elements contains a series of goals, objectives and policies that can be used to define development standards according to the principles.

- A ***goal*** is a concise statement describing a condition to be achieved. It does not suggest specific actions, but describes a desired outcome.
- An ***objective*** is an achievable step toward the goal. Progress towards an objective can be measured and is generally time dependent.
- A ***policy*** is a specific statement to guide decision making. It is derived from the goals and objectives of the plan.

The goals, objectives and policies are the action component of the Plan. The remaining portion of the text is for background, information, definition of terms, and clarification of policies. Any person processing plans with the county who is required to show consistency with the Plan, needs only show consistency with the goals, objective and policies. Cases initiated prior to adoption of the Comprehensive Plan will not be subject to the requirements of this Plan.

The underlying tenet of the Comprehensive Plan is to encourage urban growth in the urban areas within the planning areas of the municipalities, and reserve the balance of the county for rural uses, open space, and high-quality development master plans.

Development Master Plans (DMPs) are an important part of the development pattern in Maricopa County. DMPs encourage flexibility in the development of land and allow for adjustment to changing public and private development needs. DMPs will continue to be encouraged within any land use area for the accommodation of growth.

The plan seeks to encourage high-quality, orderly and efficient development at the right time, in the right place, and at the right cost. Development proposals should consider these three criteria:

- ***Is it in the right place*?** The plan identifies development areas. A proposal should be generally consistent with the use indicated by the land use area within which it lies.
- **Is it at the right time?** Services are required for all development. The nature and extent of the services will be indicated by thedevelopment area.
  If services are in place or can be provided, by either the public or private sector, then it is the right time to develop.
- **Is it at the right cost?** Do public revenues generated by the proposed development exceed the cost for county government to provide services? If the projected revenues exceed the costs, then it is the right cost to county government.

CONCLUSIONS

This Plan demonstrates Maricopa County's commitment to enhancing the quality of life for all its citizens. High-quality and efficient growth, in balance with the environment and property rights, can be achieved when supported by the requisite legislation, ordinances, policies, and procedures. Implementation of the Plan can facilitate predictable and consistent treatment of growth and development proposals. The Plan is intended to respect private property rights while enhancing, increasing, and enriching the individual freedoms and opportunities of all citizens. The Plan will also serve as a catalyst for further enhancements to guide growth in cooperative, regional settings.

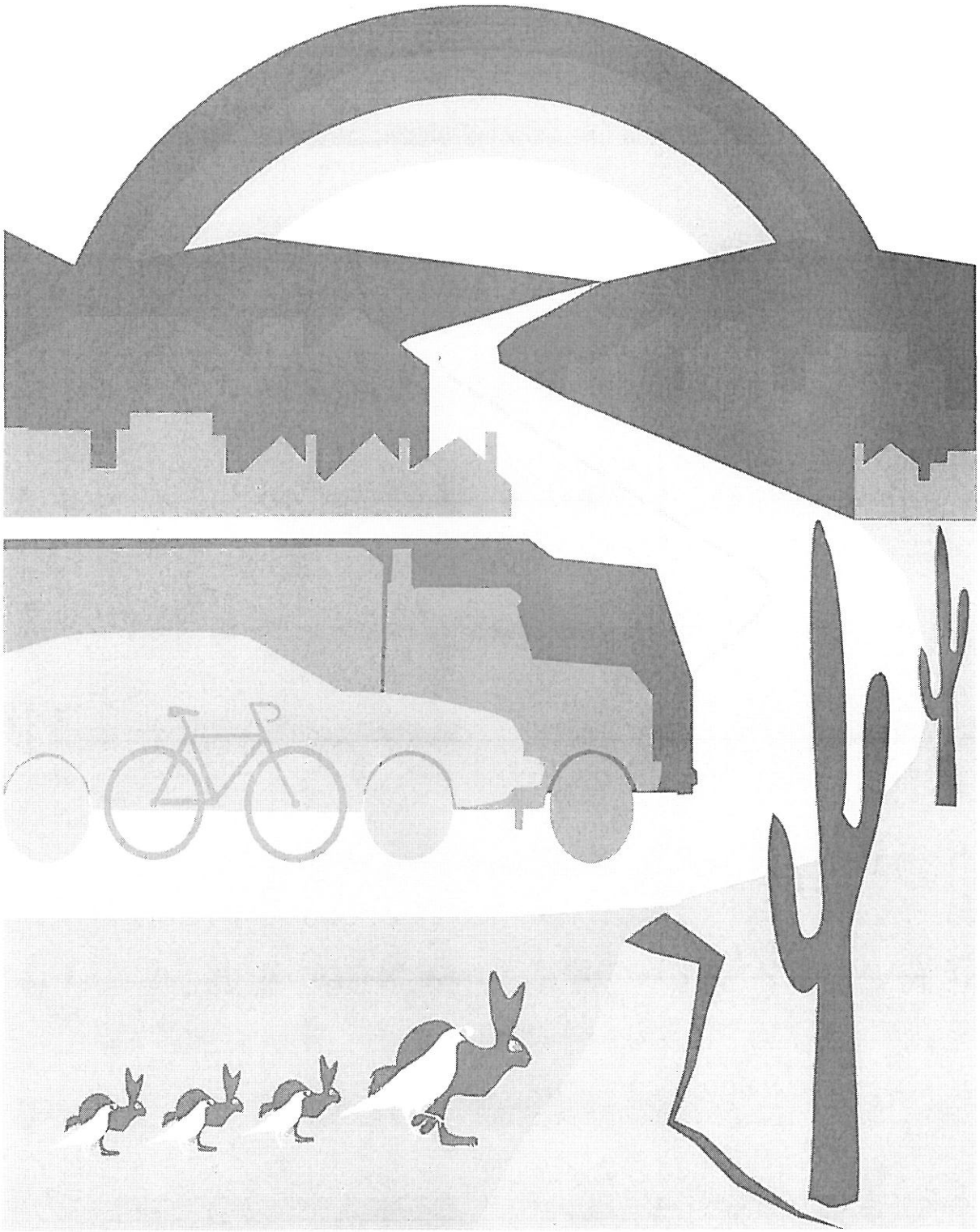
The development of the Comprehensive Plan has occurred during a period of transition in Maricopa County. At the beginning of the planning process, the region was struggling to recover from an economic recession. At that time, regional growth priorities focused on expansion. As the Comprehensive Planning process developed, the economy rebounded with such a sustained vigor that concerns surfaced about the effects of growth on the region's quality of life.

Present planning methods must be examined for their sustainability. New and innovative methods are needed that can preserve a high quality of life as Maricopa County welcomes nearly two million new residents over the next two decades. By being able to adapt to changing conditions, Maricopa County will face the challenge of maintaining this high quality of life, while accommodating substantial growth.

NOTES:

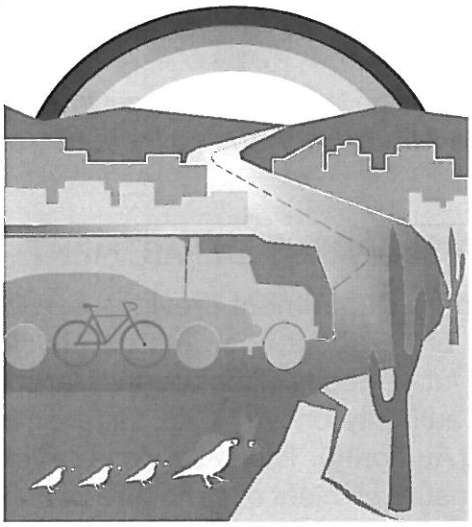
COMPREHENSIVE PLAN ELEMENTS

Land Use



LAND USE

INTRODUCTION



The land use element, in concert with the other elements of the Comprehensive Plan, establishes a planning process designed to achieve a well-integrated and efficient decision making process. This element will accommodate growth in the unincorporated county until the year 2020 by identifying goals, objectives, and policies that translate into land use designations. These will influence the pattern and timing of land development in the county, while recognizing environmental constraints and the desires of residents to have different types of living and working conditions. Uniform application of these policies and objectives should result in balanced and harmonious communities where a high quality of life can be maintained.

Land use in Maricopa County changes as it is affected by existing and new factors. This element envisions a more efficient land use pattern for the future. Reliance on the automobile and the expanding roadway network have resulted in a dispersed development pattern, which contributes to street and highway congestion and other regional deficiencies. In addition, housing and employment have not always been well integrated. The separation of housing and employment increases commuting time and distance, further affecting the quality of life in the county. Innovative patterns of growth are needed if the county is to continue to attract high-quality development and maintain its quality of life.

This plan element will create a foundation upon which future planning by the county, adjacent cities, the Indian Communities, other public agencies, and the private sector can be coordinated. While the land use element does not cross jurisdictional boundaries, it does consider land uses throughout Maricopa County to help establish a coordinated and sustainable development pattern. Maricopa County will consider the adopted land use plans of adjacent cities when developing future county land uses. As with the other elements, this section acknowledges that there are explicit rights and responsibilities of both the county and private property owners.

The land use element permits development at urban densities where urban services can be provided efficiently and discourages urban densities in areas where urban services cannot be made available. The land use element encourages the phasing of urban densities concurrent with the extension of urban services. The extension of urban

services will be encouraged after coordination with the affected jurisdictions to ensure regional consistency. Large scale development master plans are permitted if these developments are of high quality and provide necessary services.

Besides the urbanized areas, the land use element includes several development areas that will retain their existing character or be built as currently designated. Rural areas, where urban services are not currently expected to be provided, are also addressed.

Supporting data for the land use element is available in the *Land Use Element Inventory and Analysis Report*, published in 1996, and the *Affordable Housing Inventory and analysis Report*, published in 2002.

MARICOPA COUNTY PLANNING AND DEVELOPMENT DEPARTMENT

The Maricopa County Planning and Development Department provides services mandated by Arizona State Statutes to help bring about coordinated physical development in accordance with the present and future needs of the county. Maricopa County has comprehensive planning and zoning authority for over 3,000 square miles of land in the county (Figure 3-County Planning Authority). These services strive to conserve the natural resources of the county, ensure efficient expenditure of public

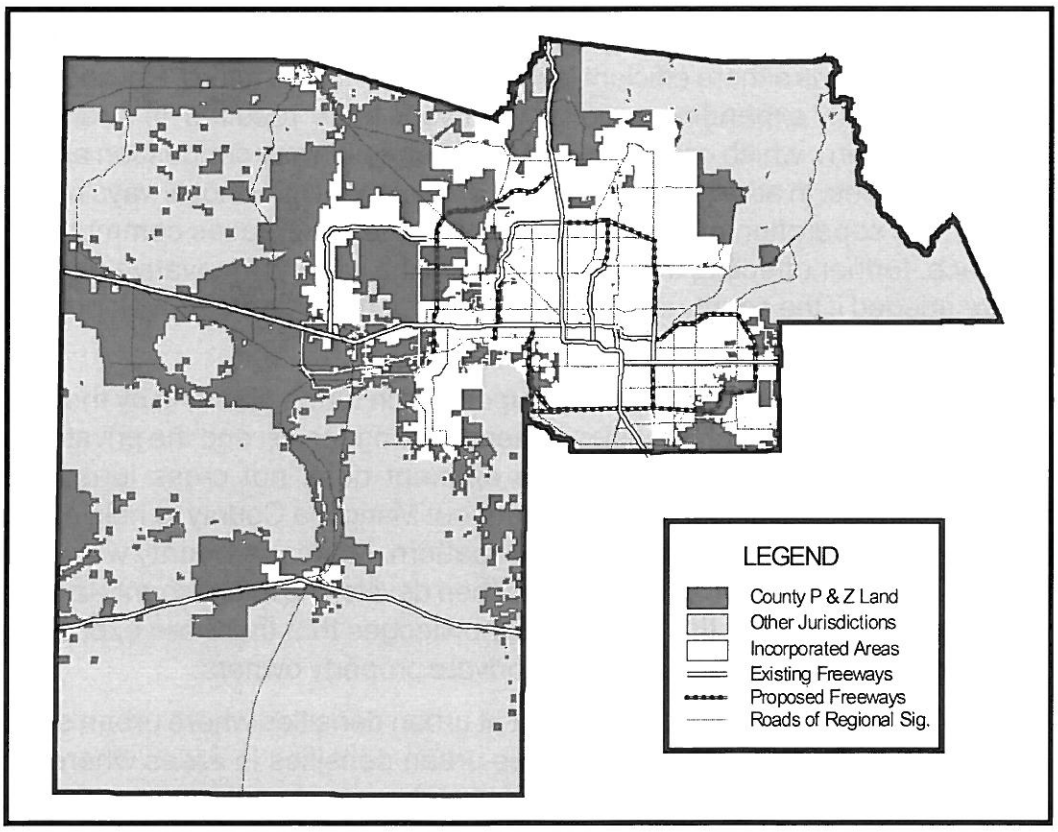


Figure 3-County Planning Authority

funds, and promote the health, safety, and general welfare of the present and future inhabitants of the unincorporated areas. Services of the Planning and Development Department include the preparation and implementation of the Comprehensive Plan and the implementation and enforcement of the Maricopa County Subdivision Regulations, Zoning Ordinance, and Building Code. Department personnel also act as staff to various boards and commissions. Additionally, the department plans, coordinates, and administrates county economic development programs.

The services provided by the department create a foundation upon which planning and development is based. The department's coordination of services provide guidance for incremental decisions made by both the public and private sector which affect the character and quality of life of the region.

LAND USE ISSUES

Through public meetings, partnering sessions, and other public participation activities, the following county-wide land use issues were identified:

- Protect the desert environment, including scenic views, native vegetation, and open space
- Maintain a visual sensitivity for the natural environment in new construction
- Establish stronger maintenance standards within existing subdivisions
- Develop additional recreational amenities
- Maintain opportunities for rural life-styles
- Buffer high density residential land uses in rural areas
- Locate commercial development proximate to roadways, with appropriate landscaping and height restrictions
- Encourage master-planned communities as an appropriate pattern of development in unincorporated areas of the county

LAND USE AREAS

Given the vast area under the jurisdiction of Maricopa County, the land use area designations in this Plan embody generalized land use, development, or preservation concepts, not specific land uses or densities. However, underlying some of these areas are more detailed plans that recommend specific land uses. The designations also vary by jurisdiction and regulatory authority (Figure 4-Land Use Designations). The land use designations of the plan are:

- Incorporated Areas
- General Plan Development Area
- Municipal Planning Areas
- County Area Plans
- Existing Development Master Plans
- Established Communities
- Rural Development Area
- Dedicated Open Space
- Proposed Open Space

The process for determining the status of any given area in the county is illustrated in (Figure 5-Land Use Decision Tree). Entering the chart at "start" and following the questions in the flag shaped boxes will lead to a rectangular box containing the appropriate land use designation. Note that the Urban Service Area and future Development Master Plans do not appear as part of this determination. The Urban Service Area functions as an evolving guideline, and is determined on a case-by-case basis. The location of future Development Master Plans is discretionary; this Plan dose not seek to predict their location. A full explanation of these concepts follow.

Incorporated Areas

These areas are under the jurisdiction of the cities, towns, and Indian Communities. The majority of urban development in the region to 2020 will occur in these areas. While Maricopa County does not regulate land use within these areas, the Comprehensive Plan encourages new development to occur either within or in proximity to the incorporated areas.

General Plan Development Area

The General Plan Development Area (GPDA) is unincorporated area that is likely to be annexed by a city or town in the future and is included in an adopted municipal general plan. These general plans often provide specific recommendations for proposed land uses. These areas include many of the unincorporated lands that are either surrounded completely by a jurisdiction (Class I County Island) or surrounded by a "strip annexation" (Class II County Island).[1]

Under A.R.S. §11-831, "The rezoning or subdivision plat of any unincorporated area completely surrounded by a city or town shall use as a guideline the adopted general plan and standards as set forth in the subdivision and zoning ordinances of such city or town... If an affected city or town objects toany such proposed action the board or commission shall set forth in the minutes

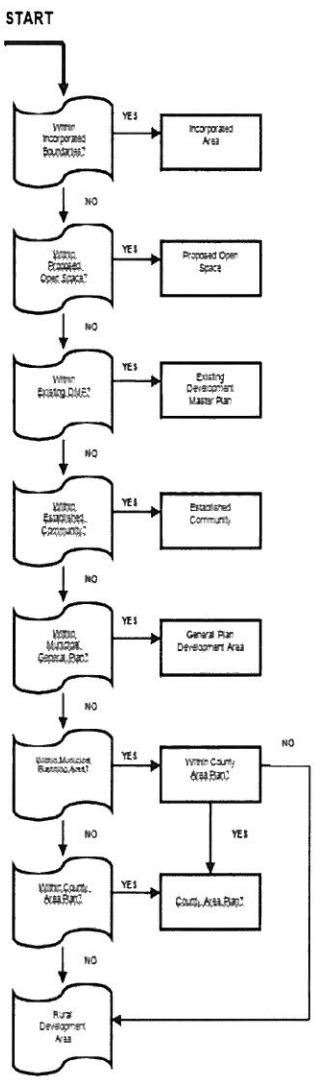
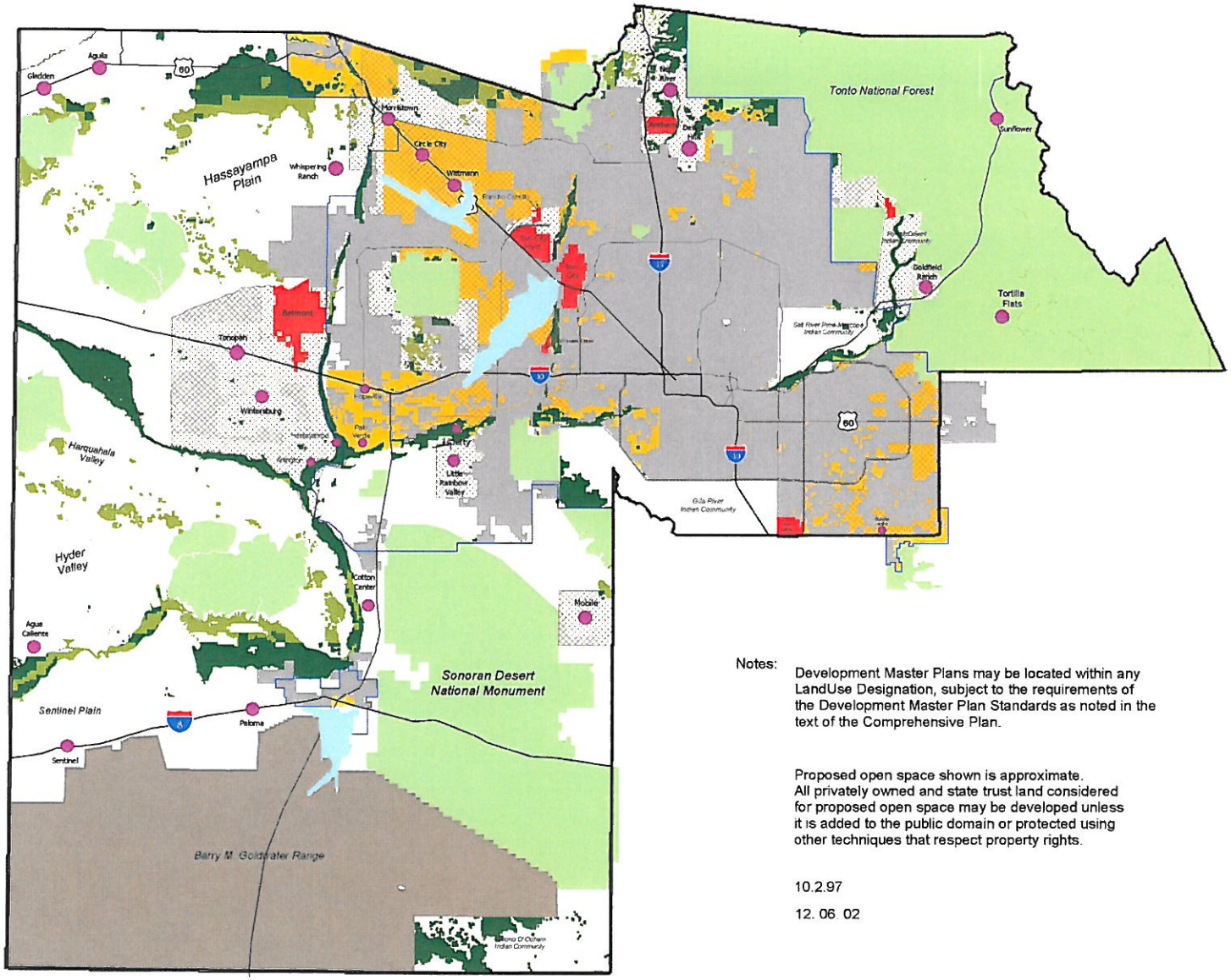


Figure 4 – Land Use Decision Tree

[1] Refer to Appendix B-County Island in the *Land Use Element Inventory and Analysis Report*, 1996

Figure 5

Land Use Designations



Notes:

Development Master Plans may be located within any LandUse Designation, subject to the requirements of the Development Master Plan Standards as noted in the text of the Comprehensive Plan.

Proposed open space shown is approximate. All privately owned and state trust land considered for proposed open space may be developed unless it is added to the public domain or protected using other techniques that respect property rights.

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LEGEND

- Incorporated Areas
- General Plan Development Areas
- County Area Plans
- Existing Development Master Plans
- Dedicated Open Space
- Proposed Open Space - Public
- Proposed Open Space - Private
- Rural Development Area
- Indian Community
- Established Communities
- Municipal Planning Area
- Interstate
- Major Highway
- Planned Highway
- Military Compatible

N

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MARICOPA COUNTY 2020 Eye to the Future

MARICOPA COUNTY ARIZONA

Maricopa County Planning and Development Department

of the meeting specific reasons why, in its opinion the guideline is actually being followed or why it is not practicable to follow the guideline of the general plan."

On the basis of the above quoted statute, the county will take into consideration the general plans of the municipalities within these areas to guide decision making under the following circumstances:

1. The municipal plan has been updated in the previous five years.
2. The municipality can demonstrate that residents, property owners, and improvement districts from the unincorporated areas in the specific planning area have been involved in the planning process.

Urban Service Area

The Urban Service Area (USA) designation exists as a guideline for decision making to encourage coordinated physical development within the urbanizing areas of the General Plan Development Area. It is based on the provision of the infrastructure necessary to establish and maintain a high quality of life. The USA is not delineated on the land use designation map, rather it is defined by the ability of a jurisdiction, improvement district, or private entity to provide infrastructure and appropriate urban services to a specific site or project.

Determination of the USA is based on the presence or feasibility of infrastructure to support urban densities and urban life. Minimal infrastructure necessary to promote the health and safety of the public includes potable water, sewer, electricity, telephone, drainage, flood control, police protection, fire protection, and transportation. Desirable urban services which promote the convenience and general welfare of the public include schools, parks, open spaces, libraries, public transportation, and government services, as appropriate.

The Urban Service Area is considered suitable for development at urban densities. It is also considered efficient to expend public funds for infrastructure within the Urban Service Area. A proposed development can be considered to be within a USA if it conforms to the relevant general plan, and utilities and infrastructure can be provided.

Municipal Planning Area

The Municipal Planning Area (MPA) consists of unincorporated areas identified by the municipalities as being within their area of future interest, but are presently not included in a municipal general plan. These areas are under Maricopa County jurisdiction as long as they remain unincorporated. Most of the Municipal Planning Area is covered by existing county area land use plans. Portions of the Municipal Planning Area that are not included in any municipal general plan or an existing county area land use plan are designated as part of the Rural Development Area.

County plans will continue to guide growth and development in the Municipal Planning Area until such time as the respective municipality amends its general plan to include specific portions of the MPA. At that point, the county will take into consideration the amended plan as a guide to decision making if the municipality can demonstrate residents, property owners, and improvement districts from the unincorporated areas in the specific planning area have been involved in the process to amend the general plan.

County Area Plans

County Area Plans include areas, generally located outside a municipal general plan, that are contained in a county area land use plan. County area land use plans were developed and approved by the county and provide direction on land use decisions. As long as these areas remain unincorporated, they are expected to develop at rural densities unless higher densities are approved as part of a Development Master Plan. Residents in these areas have supported the land use recommendations in these plans and would generally like to see them maintained. The county will continue to recognize these plans and update them as needed to be consistent with the Comprehensive Plan. The goals and policies set forth in the Comprehensive Plan are intended to be carried forward and be reflected in updates to the Area Plans.

Area Plans in this category are:

- New River Land Use Plan
- Grand Avenue Land Use Plan
- Tonopah Land Use Plan
- Williams Regional Planning Study
- Wickenburg Highway Scenic Corridor Development Guide
- Goldfield Land Use Plan
- Little Rainbow Valley Land Use Plan
- Westside Military Land Use Plan
- Desert Foothills Policy & Development Guide
- White Tanks-Agua Fria Policy & Development Guide

Existing Development Master Plans

Within the county are existing development master plans that are builtout, under construction, or proposed. These areas include, but are not limited to, such DMPs as:

- Belmont
- Dreamland Villa
- Leisure World
- Rio Verde
- Sun City
- Sun City West
- Sun Lakes
- The Preserve
- The Villages at Desert Hills
- Tonto Hills
- Tonto Verde

All existing DMPs within the county may be developed in accordance with their approved Development Master Plan. The balance of an existing Development Master Plan may be developed in substantially the same manner as the developed portions.

The Comprehensive Plan will not impose new or modified development requirements on Existing Development Master Plans. Furthermore, Existing Development Master Plans do not need to demonstrate consistency with the Plan.

Established Communities

Within unincorporated areas of the county there are communities with established patterns of development and sense of community, although the exact boundaries may be difficult to delineate. The intent of the Established Communities designation is to recognize these areas and ensure their character and lifestyle are respected. These areas are characterized by existing patterns of development. These are guided and/or regulated by land use plans, community plans, improvement districts, or traditional zoning ordinances.

The established communities are located in various areas of unincorporated Maricopa County and may be characterized by the following criteria:

- Existing or approved subdivisions
- Roadway network in place or programmed (improved and/or unimproved)
- Lot split areas
- Defined land use patterns

Residents of these areas have stressed the importance of preserving the character of their communities. To achieve this, historic development patterns will continue. However, the county would consider other land use options, if they are components of a large scale, self supporting Development Master Plan.

Established Communities can be categorized in a number of ways. They can be specific communities or areas of development within an area land use plan such as:

- New River
- Tonopah
- Wittman
- Chandler Heights
- Wintersburg
- Desert Hills
- Laveen
- Arlington
- Mobile
- Morristown
- Palo Verde
- Little Rainbow Valley
- Circle City

Established communities can also be existing settlements which have not been included in any previous county planning study:

- Agua Caliente
- Santa Maria
- Perryville
- Sunflower
- Hassayampa
- Aguila
- Cotton Center
- Norton's Corner
- Liberty
- Harquahala Valley
- Paloma
- Sentinel
- Hopeville
- Gladden

These settlements vary from well established villages to rural crossroads. For these areas, specific land use plans or community plans could be developed to define the character and extent of the community and guide future development.

Rural Development Area

The Rural Development Area (RDA) includes areas generally outside the General Plan Development Area of the municipalities which are not covered by an area land use plan or any other regulatory program. The RDA is designated "Rural" according to the county land use categories (See Table 4-Land Use Categories, Appendix G). These areas are typically vacant land or rural in character with minimal, if any, infrastructure or public services. Residential development will be allowed at a very low density, generally not to exceed one house per five acres, except where higher density zoning exists, or as part of a Development Master Plan. The purpose of the RDA is to preserve the opportunity for low density rural living as a lifestyle choice. Residents choosing a rural lifestyle should not expect urban services. These areas generally rely on wells and on-site septic systems, rather than municipal water and sewer systems. Further, residents in rural areas can expect longer travel times to schools, libraries, shopping, and parks.

While the primary land uses of the RDA are residential and agricultural, other compatible public and private nonresidential uses may be located within these areas. Appropriate uses could include: agricultural support services, ranching, hunting clubs, recreational areas, dude ranches, RV parks, churches, home-based businesses, and small scale cottage industries. Such development, when appropriate, would be required to meet standards for rural development.

Although the RDAs will generally develop at low density, higher densities are not precluded if requested as part of a Development Master Plan. Development Master Plans in a RDA would require measures such as buffers to mitigate the impact of the proposed master plan on the surrounding rural area.

It is possible that as the county develops, some parts of the RDA could come within the path of more urbanized development. Amendments to the RDA will be considered upon presentation of appropriate evidence and with measures to mitigate the impact of such development on the surrounding rural area.

Agriculture

Historically, agriculture has been the county's most important industry. Presently, the county's agricultural base is being converted to urban uses. While many residents of the county believe that agriculture is important, there is no consensus on whether to protect agriculture and agriculture-related resources. Owners of agricultural properties have the right to develop their land as they see fit, within the limitations of zoning or other applicable laws and regulations. However, for those residents who wish to continue to farm, Maricopa County could consider providing technical guidance to ensure future viability of agriculture.

Such guidance could include:

- Transferring of development rights to other areas where development may be more appropriate
- Encouraging infill development and directing high intensity development into an urban service area
- Establishing land use buffers to mitigate the impact of agriculture and agricultural resources on nonagricultural development
- Providing incentives to promote the preservation of agricultural lands, such as clustered development or community supported farms

Dedicated Open Space

Dedicated Open Space areas are areas under public ownership—except state trust land—that have unique environmental and physical qualities. These qualities include mountains and foothills, rivers and washes, canals, significant desert vegetation, wildlife habitat, and cultural resources. Within Maricopa County, dedicated open space exists in the form of regional parks, wilderness areas, wildlife areas and the Tonto National Forest. These sources of open space, nearly 2,000 square miles, provide recreation and visual resources for the residents of Maricopa County.

The Maricopa County Regional Parks System consisting of nine parks, is considered to be the largest parks system in the country. Containing approximately 180 square miles, the majority of these parks are bordered at least to some extent, by unincorporated portions of the county, with two exceptions—San Tan Mountains Regional Park is located entirely within Pinal County and Lake Pleasant Regional Park is located partially in Yavapai County. This regional park system is utilized for a variety of activities, including: biking, camping, hiking, boating, fishing, and equestrian trails.

Wilderness areas within Maricopa County consists of nearly 500 square miles. Located primarily in the Rural Development Area, these lands are managed by the Bureau of Land Management as part of the National Wilderness Preservation System. The Tonto National Forest, managed by the US Department of Agriculture, Forest Service, provides for multiple uses and a sustained yield of goods and services that maximizes long-term net public benefits in an environmentally sound manner. The Forest is comprised of nearly 1,000 square miles in the northeastern corner of the county, of which approximately 235 square miles are managed as wilderness areas. The United States Fish & Wildlife Service manages three wildlife areas which are also classified as Dedicated Open Space.

Proposed Open Space

Natural resources and open spaces are important to the quality of life in the county. These areas, if acquired for the public domain, are intended to be planned and

managed to protect, maintain, and enhance their intrinsic value for recreational, aesthetic, and biological purposes. Within Proposed Open Spaces, public access should be protected and preservation encouraged. All privately-owned and state trust land considered for open space conservation may be developed unless it is added to the public domain or protected using other techniques that respect property rights.

The Proposed Open Spaces, when combined with existing Dedicated Open Spaces, provide guidance for the establishment of an interconnected system of protected natural open spaces. This system corresponds to regionally significant mountains, rivers, washes, upland desert, and cultural resources in unincorporated Maricopa County. Potential open spaces suitable to be considered for protection were identified by a county-wide working group. The group, comprised of representatives from Maricopa County's Planning and Development Department, Department of Transportation, the Flood Control District, and Recreation Services as well as various municipal, state, and federal agencies, worked with a team of consultants for over eighteen months to develop the plan. The process included mapping and analysis of information on topography, hydrology, flora and fauna, land use, ownership and demographics to determine suitability of open space. It also included a process to solicit public participation and comment consisting of newsletter mailings, public meetings, focus groups, and a planning charette. The complete findings were published as *Desert Spaces: An Open Space Plan for the Maricopa Association of Governments* in 1995. Maricopa County initiated the MAG conducted study and provided major funding for the effort.

Significant mountainous areas, major rivers and washes, upland Sonoran Desert vegetation, canals and trails, and archeological sites will be considered for potential open space. There are almost 650 square miles of Proposed Open Space in the unincorporated areas of the county. Approximately 360 square miles are publicly-owned. Privately-owned land, including State Trust land, accounts for almost 290 square miles. Two thirds of the privately owned land is either in the 100-year floodplain or located on slopes over 15%. Most of the remaining one third—about 90 square miles—is state trust land.

Mountainous areas include ridge lines, enclosed terrain, and foothills that buffer mountains. Rivers and washes include the 100-year floodplain, wildlife habitat, native vegetation along waterways, and endangered and natural riparian habitat of the region. Upland Sonoran Desert vegetation is comprised of the rich saguaro, palo verde, ocotillo, and other mixed cactus plant community and wildlife habitat found at the higher elevation of the county. Canals and trails could connect the various components of Dedicated Open Space and possible future open spaces. The historic legacy of the county is contained in sites containing evidence of historical European settlements and the Hohokam Indians.

The degree to which open space can be added to the public domain or be otherwise protected depends on the use of specific preservation techniques (actions that can

be used to acquire and protect open space) and the public commitment to financial support for such actions.

Techniques that could be utilized include:

- Fee simple purchase
- Conservation easements
- Purchase of development rights
- Purchase of right-of-way easements
- Environmentally Sensitive Land Ordinance
- Right of first refusal
- Density transfers
- Performance based zoning
- Dedication/donations
- Preservation easement
- Hillside ordinance
- Cluster development
- Conveyance of property to homeowner associations
- Arizona Preserve Initiative
- Lease/use agreements

The suitability of any of these techniques to preserve a specific parcel would be evaluated on a case by case basis. The application of preservation techniques must not infringe on the property rights of any land owner.

Military Compatible

The Military Compatible designation includes areas located within the state-statute defined *High Noise or Accident Potential Zone* of Luke Air Force Base, the Auxiliary Airfield #1 near Surprise, and the auxiliary airfield near Gila Bend. State statute defines this area as being within the noise contours that surround these facilities and the accident potential zones that extend off the ends of their runways. The purpose of this designation is to ensure that future development is compatible with the high noise or accident potential generated by these military facilities that may have an adverse effect on public health and safety. This designation is established in compliance with Arizona Revised Statutes §28-8461 and §28-8481 and only those uses found by the Arizona Legislature to be compatible and consistent with the high noise or accident potential generated by these facilities are allowed. Other uses may also be permitted upon mutual consent of Luke Air Force Base and Maricopa County. The compatible and consistent uses are identified in Chapter 10, Section 1010 of the Maricopa County Zoning Ordinance.

Future Development Master Plans (DMPs)

Master planned communities have long been a preferred type of residential development within Maricopa County. The Development Master Plan component of the Comprehensive Plan encourages quality standards of prudent and sustainable land use for future master planned development outside the urbanized area of the county.

Development Master Plans provide opportunities for creative and innovative design and development techniques. These communities have the potential to provide mixed land use opportunities, a wide range of housing choices, open space and recreational opportunities, and an appropriate multi-modal transportation system connected to schools, parks, retail, and employment centers. Development agreements can be used to define appropriate standards and incentives, and aid in the implementation of Comprehensive Plan goals and policies in specific DMPs. Newly approved Development Master Plans in the county—including those areas covered by a new or existing area plan—become the controlling planning document and area plan for that property.

Location

Historically, DMPs have been allowed throughout the county. While future DMPs can be developed in any location in the unincorporated county, appropriate development guidelines would vary depending on the land use area as defined in the Comprehensive Plan.

Transportation

Previous development patterns rarely offered county residents alternatives to frequent, long distance trips by automobile. To mitigate this trend, new DMPs will strive to reduce the dependency on automobiles for some types of travel. Modes such as transit, golf carts, bikeways, equestrian trails, and pedestrian networks must be considered in a complete transit system. By using alternative modes of transportation, vehicle miles of travel should be significantly lower than in similar suburban developments.

Mixed land use patterns within the community will provide multi-modal access to open space, public facilities, employment, schools, and other activities, while reducing vehicle trips. To accommodate this, bicycle racks, telecommuting centers, and delivery services will be strongly encouraged.

Road design within the communities will enhance the character of the area. Development Master Plans will allow flexible standards for roadway design, transit facilities, pedestrian circulation, and bike lanes. Innovative techniques for accommodating emergency service vehicles will also be considered instead of mandatory street widths.

Residential

The density and location of residential development heavily influences the cost of housing, the type and level of services required, and the impacts on the natural environment. Residential development within DMPs will promote a variety of residential densities to address these considerations while promoting a diversity of housing choices for residents within the community. A range of housing densities will be allowed within a DMP, promoting various opportunities for social and economic success.

Higher density residential development should be located near transportation routes, commercial centers, and public facilities. The remaining residential development will be encouraged to be clustered and located near natural features or community amenities. Residential development should have direct access to open space wherever possible and should be within a short walk or bike ride to schools, commercial centers, and activity centers to encourage alternative modes of transportation, such as walking and bicycling.

Employment

The opportunity for residents to work close to their home is an important objective of the DMP component. In creating a "jobs to housing" balance, residents of the community will have a shorter commute time and distance, while having the option to use alternative modes of transportation. An economic base within the community, located in local employment centers, will result in a growing sense of community and greater quality of life. Even though retirement communities are not expected to include employment centers in their plans, service and retail employment in such communities could consider similar alternatives.

Development Master Plans should encourage small businesses within the community, including home-based businesses, as appropriate. As the community continues to grow, a major employment anchor may become established with options for telecommuting, flexible schedules, and other innovative techniques to decrease work trips.

Open Space/Buffering

The preservation of open space provides recreation, visual character, wildlife, vegetation, and a greater quality of life for the community. The Development Master Plan component of the Comprehensive Plan encourages environmentally sensitive development with innovative land use techniques to preserve potential open space. For Development Master Plans located in the Rural Development Area, an appropriate buffer at the perimeter of the development should be considered to assure compatibility with the existing rural character of the area.

Public Facilities and Services

Development Master Plans approved outside the General Plan Development Area will be required to work with appropriate agencies to provide urban services within the development. These services include police, fire, schools (except in retirement communities), water, sewer, parks, and libraries if needed and not available within a reasonable distance.

Techniques for financing infrastructure in Development Master Plans could include Improvement Districts or Community Facilities Districts. These districts provide a flexible mechanism to balance the financial burden of infrastructure financing, without

increasing the purchase price of residential units. Presently in Arizona, counties may form Improvement Districts but are not authorized to use the more flexible and comprehensive tool of the Community Facilities District. The use of such districts would require the development of statutory authority in Title 11 of the Arizona Revised Statutes.

Development agreements are voluntary arrangements between county or municipal governments concerning the design and construction of development projects. These agreements protect projects from changes in laws and regulations, while allowing governments to obtain specified exactions to ensure construction of infrastructure and reinforce local planning efforts. Arizona counties have the statutory authority to enter into these agreements. Development agreements offer a method of reducing developers' risks while simultaneously increasing governments' ability to guide local development. A recent large scale Development Master Plan in northern Maricopa County utilized this technique, and it is expected that such agreements will become more common in the region.

AFFORDABLE HOUSING

In 1998, the State of Arizona passed the Growing Smarter law to help ensure that local jurisdictions plan for and manage growth in a functional and efficient manner. Under this new law, Maricopa County is given the opportunity to provide several new elements in its comprehensive plan, including developing a long-range plan that addresses housing quality, variety, and affordability.

Housing is arguably one of the most important aspects of society. In a basic sense, housing provides shelter, security, and protection from the surrounding environment. Socially, because housing normally constitutes between 30% and 50% of developed land in an urban area it helps define communities, helps foster social interaction, provides a sense of place and pride, and shapes people's quality of life. Economically, housing significantly impacts the macroeconomy as a source of job and wealth creation, and as a source of revenue and expense for governments. In 1998, for example, 44% of the nation's total wealth was contained in home equity. In addition, housing and related industries account for one-fifth of the entire gross domestic product of the United States. Housing also impacts the microeconomy since housing is usually the greatest expense and largest investment for individuals.

Because of its social and economic impacts on society, providing decent and affordable housing opportunities for citizens is often considered one of the most important issues facing communities. For Maricopa County, it is necessary to understand the impact that rapid growth will have on housing costs and how the potential lack of affordable housing may impact future socioeconomic growth, which could then have long-term negative consequences. The *Affordable Housing Inventory and Analysis Report* is designed to help analyze and address affordable housing to help ensure the long-term prosperity of Maricopa County.

Issues of Affordable Housing

As has been discussed, affordable housing is an important issue that affects the social and economic stability of all communities. Its importance to Maricopa County and Arizona was even identified in a recent report from the Arizona Department of Commerce. This report identifies the widening gap between household income and housing costs as a message that affordability is a serious issue which affects all jurisdictions, neighborhoods, and businesses. In addition, the report identifies housing affordability as one of the top 10 most important issues that will affect economic development over the next 5 years.

While the importance of affordable housing is known, many of the influencing factors are not. Some factors are beyond the control of local governments. However, there are certain areas in which public agencies may either help or hinder affordable housing. The following is a list of some factors that determine housing affordability:

- Personal income
- Local job market
- Building material and labor costs
- Construction financing
- Public additudes (*'Not in my backyard'*)
- Regulatory barriers and incentives
- Individual credit worthiness
- Availability of public transportation
- Availability of tax increment finance
- Davis-Bacon Act requirements
- Availability of multifamily housing in rural communities
- Housing demand
- Interest rates and financing
- Type of housing available
- Exclusionary zoning
- Government commitments
- Property assessment methods
- Non-profit sector participation
- Rental tax
- Rental laws and practices
- Infrastructure guidelines
- Utility costs in rural areas

opportunities for Affordable Housing

Affordable housing can be a complex issue that is affected by many or all of the issues identified earlier. Given this complexity, it is important to consider the opportunities available to encourage affordable housing. Some of the most frequently utilized land use techniques include the following:

- Upzoning
- Incentive programs
- Cluster development
- Development agreements
- Inclusionary zoning
- Allowing accessory units
- Mixed use zoning
- Flexible siting for mobile and manufactured home parks

GOALS, OBJECTIVES, AND POLICIES

Goals, objectives, and policies evolved from existing county goals, existing goals of municipalities within Maricopa County, and lengthy discussions at public meetings, focus groups and partnering meetings. The following goals, objectives, and policies have been developed to accomplish the land use component of the Comprehensive Plan.

The goal of the land use element is to:

Promote efficient land development that is compatible with adjacent land uses, is well integrated with the transportation system, and is sensitive to the natural environment.

Within this goal, the following objectives and policies apply:

Objective L1 Promote infill development.

Policy L1.1 Encourage Capital Improvement Program (CIP) expenditures to be directed to infrastructure development in the Urban Service Area of the General Plan Development Area.

Policy L1.2 Explore financing mechanisms to pay the cost of capital improvements necessitated by new development.

Policy L1.3 Encourage the creation of density bonuses and other innovative development techniques within the General Plan Development Area.

Policy L1.4 Encourage incentives for development within the Urban Service Area.

Policy L1.5 Explore the use of development agreements to encourage infill.

Policy L1.6 Use the adopted general plan and standards of municipalities as a guideline for development in the General Plan Development Area contingent upon such plans having been updated or reviewed within five years and with evidence that the affected residents, property owners, and improvement districts have been involved in the process to update the general plan.

Objective L2 Provide employment opportunities proximate to housing.

Policy L2.1 Encourage mixed use development within future planned communities. Retirement communities will not be expected to include employment generators, other than local community services.

Policy L2.2 Encourage incentives and public/private partnerships to provide employment opportunities within Development Master Plans, where appropriate.

Policy L2.3 Encourage residential development that provides opportunities for a variety of income levels.

Policy L2.4 Encourage incentives and public/private partnerships to act as a catalyst for ovision of affordable housing.

Objective L3 Encourage innovative and varied approaches to development.

Policy L3.1 Encourage high quality residential, commercial, and industrial land developments.

Policy L3.2 Encourage flexible standards to accommodate innovative and varied approaches to development.

Policy L3.3 Encourage the use of unit plans of developments for residential developments with more than ten dwelling units.

Objective L4 Provide for the coexistence of urban and rural land uses.

Policy L4.1 Encourage appropriate buffers to mitigate conflicting land uses.

Policy L4.2 Encourage adequate separation between intensive urban and rural land uses.

Policy L4.3 Encourage development patterns and standards compatible with the continuing operation of military airports and ancillary military facilities pursuant to Arizona Revised Statute §28-8461 and §28-8481, civilian airports, and other major noise generating employment centers within unincorporated county areas.

Policy L4.4 Consider lot split review.

Policy L4.5 The county may provide for the use of business licenses in conjunction with the establishment of adult oriented facilities, including adult arcades, adult bookstores or video stores, adult live entertainment establishments, adult motion picture theaters, adult theaters, massage establishments, and nude model studios.

Objective L5 Promote master planned communities that provide a mix of housing types and land uses.

Policy L5.1 Encourage the creation of master planned communities that provide a diversity of land uses.

Policy L5.2 Encourage continued development within existing Development Master Plans under existing standards and administrative guidelines. Minor amendments to DMPs approved prior to adoption of the Comprehensive Plan that do not increase the density by more than 10% need not show conformity to this Plan.

Policy L5.3 Encourage the use of nontraditional zoning and flexible development standards in new Development Master Plans.

Policy L5.4 Encourage residential development that provides opportunities for a variety of income levels, including affordable housing.

Policy L5.5 Encourage the use of development agreements and protected development rights.

Policy L5.6 Encourage public/private partnerships to act as catalysts for Development Master Plans that demonstrate substantial job creation.

Policy L5.7 Encourage Capital Improvement Program expenditures to share costs of regional facilities within Development Master Plans.

Objective L6 Cluster development in appropriate patterns.

Policy L6.1 Encourage and accommodate mixed use development.

Policy L6.2 Encourage a mixture of housing types and intensities within planned developments.

Policy L6.3 Encourage planned communities that incorporate quality and clustered development.

Policy L6.4 Encourage new development to preserve significant desert habitats, natural resources, and landscapes.

Objective L7 Ensure the provision of adequate public facilities.

Policy L7.1 Encourage creation of mechanisms to assess the phasing, timing and location of infrastructure in accordance with adopted land use plans.

Policy L7.2 Consider the creation of a system to evaluate the fiscal implications of development on the Maricopa County budget.

Policy L7.3 Explore the formation and use of improvement and community facilities districts.

Objective L8 Support innovative technological operations and facilities to encourage an appropriate balance of automobile use and to encourage energy efficiency and the use of renewable resources.

Policy L8.1 Encourage transit oriented development.

Policy L8.2 Encourage zoning that supports and promotes in-home business, compatible with residential development.

Policy L8.3 Encourage innovative techniques for water conservation to meet standards set by the Arizona Department of Water Resources as required in the Arizona Groundwater Code.

Policy L8.4 Encourage and support innovative technological operations and facilities.

Objective L9 Integrate transportation planning with land use.

Policy L9.1 Encourage transportation mitigation plans, or other traffic studies, to consider the relationship of land use to transportation corridors.

Policy L9.2 Encourage Capital Improvement Program expenditures to focus infrastructure development towards Urban Service Areas in the General Plan Development Area.

Objective L10: Promote the balance of conservation and development.

Policy L10.1 Encourage the preservation of environmentally sensitive areas through the transfer of development rights, density transfers, or other suitable techniques.

Policy L10.2 Encourage building envelopes and localized grading, to reduce blading and cut and fill, in environmentally sensitive areas.

Policy L10.3 Encourage and provide incentives for clustered development patterns within Development Master Plans.

Policy L10.4 Encourage the development of critical area programs to preserve environmentally sensitive areas in a manner that protects private property rights.

Policy L10.5 Encourage development standards for hillsides and other environmentally sensitive lands that allow street standards and other infrastructure to respond in an innovative manner to topography and drainage.

Policy L10.6 Encourage the preservation of ridgelines, foothills, and mountainous land with slopes of 15% or greater.

Objective L11: Promote an interconnected open space system.

Policy L11.1 Determine, encourage, and support techniques for acquisition and maintenance of open space.

Policy L11.2 Preserve and respect private property rights in any future designation of open space areas.

Policy L11.3 Encourage the protection of ridgelines, foothills, significant mountainous areas, wildlife habitat, native vegetation, and riparian areas.

Policy L11.4 Discourage development within major 100-year floodplains.

The goal of the land use element with respect to affordable housing is to:

Ensure the availability of safe and sanitary affordable housing for all residents of unincorporated Maricopa County, especially those with very low, low, and moderate incomes.

Within this goal, the following objectives and policies apply:

Objective L12: Support and encourage efforts by public, private, and non-profit agencies to establish affordable housing programs.

Policy L12.1 Evaluate the use of market incentives to make affordable housing more cost effective, while assuring target units remain affordable for specified periods of time.

Policy L12.2 Meet periodically with public, private, and non-profit sector participants to evaluate affordable housing opportunities, and identify strategies to increase affordable housing options.

Policy L12.3 Encourage partnerships and ongoing communication with public and private lending institutions to identify ways to reduce financing costs for both builders and consumers.

Policy L12.4 Encourage the construction of an adequate supply of rental housing units that meets the needs of very low, low, and moderate income residents.

Policy L12.5 Support and provide assistance to other Maricopa County departments in the pursuit of federal and state monies directed at affordable housing.

Policy L12.6 Support efforts of the Maricopa County Industrial Development Authority to provide affordable housing opportunities.

Objective L13: Promote zoning, subdivision, and land use regulations that accommodate affordable housing.

Policy L13.1 Establish a periodic review of zoning and subdivision regulations to evaluate potential impacts on affordable housing efforts, and mitigate potential deterrents if warranted.

Policy L13.2 Encourage mixed use developments that provide affordable housing proximate to employment and commercial uses, and that physically integrate, rather than isolate, very low, low, and moderate income citizens from other sectors of a community.

Policy L13.3 Encourage transit options in new communities in conjunction with affordable housing.

Policy L13.4 Encourage flexible design criteria specifically for affordable housing developments.

Policy L13.5 Support the use of manufactured housing in planned communities where appropriate.

Policy L13.6 Evaluate new development to determine whether affordable housing needs are being met by individual developments, and the unincorporated county as a whole.

Policy L13.7 Evaluate the feasibility of alternative zoning techniques to encourage affordable housing.

Policy L13.8 Review adopted land use categories to determine if additional categories are necessary to increase affordable housing options.

Policy L13.9 Periodically monitor affordable housing programs in other communities, and report findings to the Planning and Zoning Commission.

Objective L14: Promote community participation in affordable housing decisions.

Policy L14.1 Encourage public input in the design of affordable housing.

Policy L14.2 Encourage efforts to educate citizens about the social and economic importance of affordable housing.

Objective L15: Support the rehabilitation of substandard and existing housing units to help ensure safe and sanitary affordable housing.

Policy L15.1 Continue to monitor and enforce zoning and housing codes that assure safe and sanitary conditions for both tenants and community residents.

Policy L15.2 Support code enforcement of safety, aesthetic, and design requirements.

Policy L15.3 Provide assistance to low-income communities to encourage and maintain beautification efforts, and generate a sense of community pride.

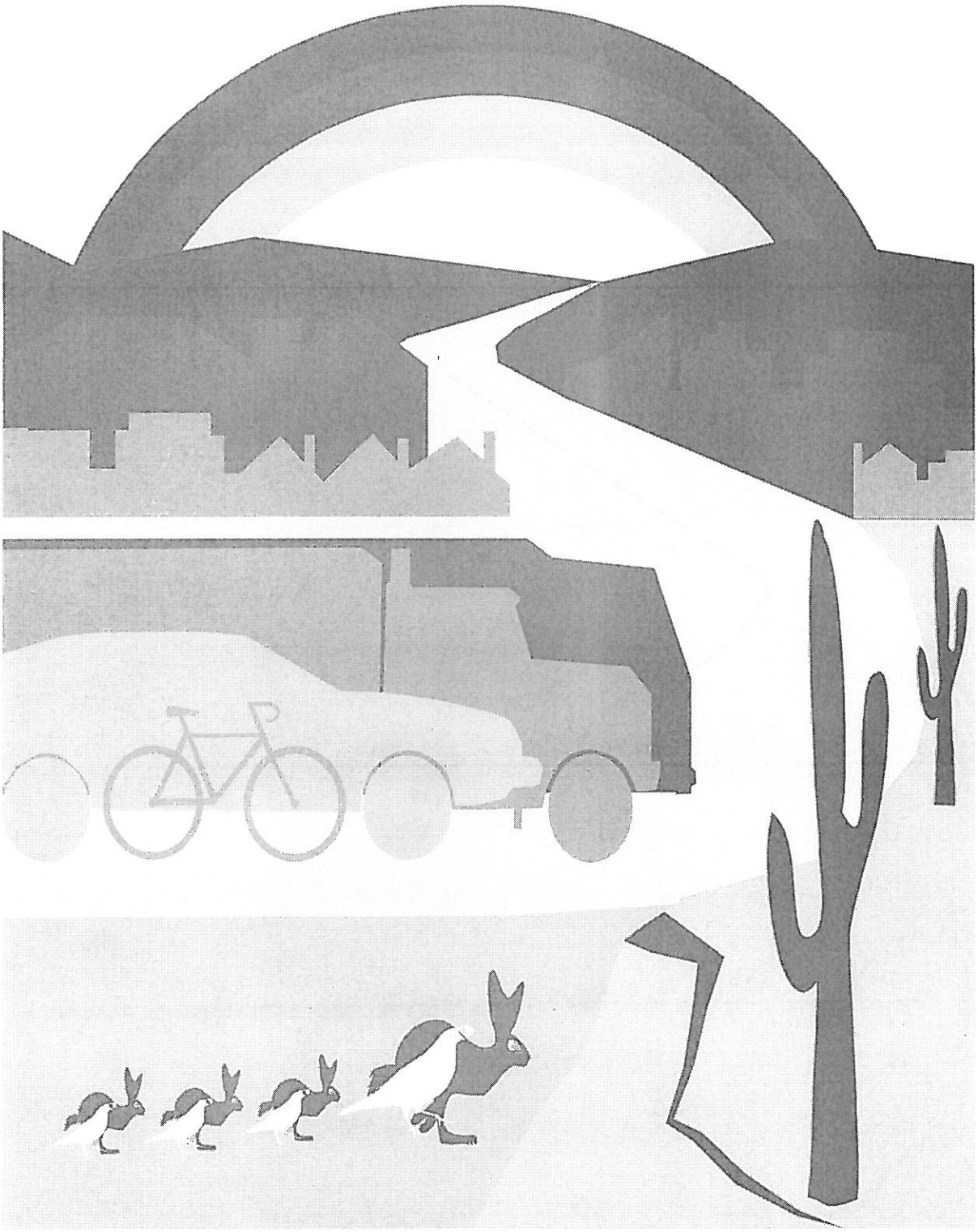
Policy L15.4 Encourage the use of energy efficient and water conserving reconstruction techniques to help reduce occupant utility costs, and thus help maintain affordability.

Policy L15.5 Encourage and support efforts to maintain housing affordability for extended periods of time.

NOTES:

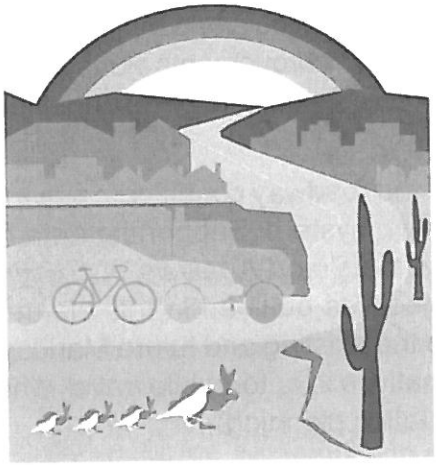
COMPREHENSIVE PLAN ELEMENTS

Transportation



TRANSPORTATION

INTRODUCTION



An appropriate transportation network for Maricopa County supports safe and efficient movement of goods and people, is environmentally compatible with surrounding conditions, and is supportive of economic development activities. This element identifies a system that consists of a primary, secondary, and local roadway network, combined with a series of overlays, to create a county roadway network. It defines a system of transportation facilities and services that may be developed in Maricopa County through the year 2020. The scope of this element includes not only existing and future roadway networks within the county, it also highlights regional efforts towards creating a multi-modal system to accommodate future transit, pedestrian, and bicycle needs.

Maricopa County is served by an extensive transportation system of highways, major thoroughfares, buses, regional airfields, and an international airport. In addition, a growing trail and bikeway system serves pedestrian and bicycle travel. This transportation system accommodates thousands of trips daily, mostly by single occupancy vehicles. However, the construction of transportation facilities within the county has not kept pace with development over the past 30 years. Increasing congestion on freeways and major arterials, combined with insufficient mass transit, highlights the need to develop a more comprehensive roadway and transit network within Maricopa County.

Several factors contributed to the transportation system that currently exists in Maricopa County. Many of these are related to the high rate of growth within the Phoenix metropolitan area and include not only the pace and quantity of land development within the county, but also its type and characteristics. Maricopa County development patterns are generally low density, suburban growth, with limited nonresidential land use and few employment centers outside the urban core. Other socioeconomic factors, such as high automobile dependency and two worker households, contribute to an increasing demand for transportation facilities.

Along with an increased demand for transportation services in Maricopa County, further complications arise from the patchwork of jurisdictional and political boundaries that

dominate the Phoenix metropolitan area. The presence of county islands within incorporated areas, rapidly expanding municipal boundaries, and the needs of rural county residents compete to complicate planning, funding, and implementation of transportation improvements within Maricopa County.

The better integration of land use planning with transportation planning is a principal method for achieving long term improvements in the transportation system in Maricopa County. Specifically, this means finding ways to support more efficient land use patterns related to transportation. One method is to concentrate densities along major existing or planned transportation corridors. Further, since roadway improvements alone cannot provide boundless transportation capacity into the future, actions to bring about less demand for capacity are also necessary.

The transportation element provides an overview of the roadway conditions, network connections, capacities, and limitations of the existing system. Supporting data for this element is available in the *Transportation Inventory and Analysis of Existing Conditions*, published in 1997. The goals and objectives outlined in this element emphasize the need to maximize and efficiently use the existing and future Maricopa County transportation systems by considering alternatives to automobile travel, while better coordinating land use as it relates to transportation planning.

ISSUES FOR TRANSPORTATION PLANNING

Discussions with the public and with partnering agencies within Maricopa County have focused on several key transportation related issues. These issues have been synthesized from public meetings, partnering sessions, and other public participation opportunities. These issues can be summarized as (not in priority order):

- Air quality
- Congestion
- Fuel (and other) taxes
- Incomplete freeway system
- Insufficient public transit
- Low density urban sprawl/inefficient roadway network
- Transportation funding sources

It is important to note that, like the other elements in this Comprehensive Plan, transportation issues do not stand alone. Numerous interrelated issues discussed in the public meetings cross element lines. These issues include annexations and the lingering effect of county islands, the location of future commercial development, low density unplanned sprawl, unplanned drainage and water management, growth management, alternatives for infrastructure financing, and compatibility with municipal

plans. Each of these issues has an impact on transportation—and the transportation network will influence these issues. Through careful linkages, each of these issues will be addressed within this document. Strategies and policies have been developed that, once implemented, should begin to mitigate the existing negative relationships between these issues.

EXISTING SURFACE TRANSPORTATION SYSTEM

Maricopa County is often criticized for being too reliant on the automobile. Cars dominate the lifestyle of most county residents. Plans for Maricopa County dating back over 30 years show a road network that is not too different from the one that has been constructed, or planned, today.

Maricopa County has 2,107 miles of rural roads and 722 miles of urban roads. To accommodate and plan for new roadway construction, it is helpful to organize them into a classification system. Many roadway classification systems are based upon purpose or function. Function is generally divided into two competing purposes: mobility and access. Mobility is based upon the volume of traffic moving at the greatest unimpeded speed along a given thoroughfare. Access is provided by accommodating low-speed and low-volume roadways with intersections and driveways. In Maricopa County, roads are classified as rural or urban roadways, and further classified according to the function they serve. These functions range from providing access to adjacent land uses to providing mobility with little or no access, based on their existing functional classification.

Freeways

The Arizona Department of Transportation (ADOT) is responsible for freeway maintenance and construction within Arizona. The Maricopa Association of Governments (MAG) is the regional agency responsible for planning freeways for the Phoenix metropolitan area. The MAG Long Range Transportation Plan (LRTP) calls for an 84% increase in freeway lane miles over the next 20 years. This consists of 76 new freeway centerline miles, increased high-occupancy vehicle lanes, and major investment studies to complete freeway corridor analyses.

Roads and Streets

The road network is the nucleus of the transportation system in Maricopa County. Automobiles, buses, trucks, and bicycles all strive for space on the network. Pedestrians compete for time to cross the street. While expansion of the network generally means accommodating additional automobiles, some reallocation of space and priorities is becoming necessary to encourage alternatives.

This Plan recommends that available resources be used to fund projects and programs that sustain mobility, access, safety, the environment, and economic development within

and around Maricopa County. Further, preservation, rehabilitation, reconstruction, and improvement of existing roads are also recommended.

All roadways in Maricopa County have current and future functional classifications. The current classification is in accordance with the MCDOT Roadway Design Manual, Chapter Five, Geometric Design Standards, adopted on November 3, 1993. A roadway's future classification is also based on the MCDOT Roadway Design Manual and other factors. These factors typically include future traffic volumes, land use compatibility, county Comprehensive Plan recommendations, and local transportation circulation elements.

Functional classification is a long range planning tool that helps link land use with transportation. Functional classification further allows for the preservation of right-of-way in the future as properties are developed.

Arterials

Roads in the network are classified as rural principal arterials, rural minor arterials, urban principal arterials, or urban minor arterials. Depending on the connections and the character of the adjacent land use, the patterns of use vary along the arterials. Arterials typically have four to six lanes and average traffic volumes of 6,000-45,000 vehicles per day. In general, arterials are designed and managed for through, or regional, travel.

The characteristics of the arterial network make these roads particularly suited to regional commuting. Parking is often restricted on these routes and would remain so for future planning considerations. Further, arterial roads that act as regional connectors may be candidates for widening, possible speed limit increases, or other capacity increases. They may also be suitable for additional transit opportunities such as busways, bike lanes, or carpool/vanpool lanes.

Collector Roads

Collector roads are divided into rural major and minor collectors, and urban collectors. As with the arterial system, usage varies depending on the location of the road and the nearby land uses. Collector roads are designed as two lane roads with average traffic volumes of 500-18,000 vehicles per day. Traffic movement along collector roads serves intra-community travel and routes of higher classifications.

Since collector roads are less critical to regional commuting, they may be suitable candidates for traffic calming, parking, pedestrians, and bicycle lanes. Speeds and road standards should be kept consistent with the character of the neighborhood or area, and road widths should be determined based on compatibility with the terrain, particularly in hillside areas.

Local Roads

Rural local roads and urban local roads (also known as residential roads) differ primarily by design characteristics and land use. Both are designed to serve primarily local

traffic, have only two lanes, and have average traffic volumes of less than 1,000 vehicles per day.

PUBLIC TRANSIT

A continuing regional effort has been looking for better ways to encourage development patterns that reduce the need for automobile travel through alternative modes and shortened trips. At the most comprehensive level, reduced auto usage may result in improved air quality, agricultural and open space preservation through a more compact urban form, and help build a sense of community. Further, transit can be more effective when it is a viable alternative to congested roadways, high parking costs, and limited parking availability. Transit should not only serve the transit-dependent rider, but the general public.

In addition, an important part of regional transit is the development of transit stations that can become activity centers by:

- Encouraging economic development by creating and attracting businesses near transit stations
- Improving air quality by reducing the number and length of automobile trips. (If bicycling and walking are also encouraged, air quality can be further improved)
- Providing a choice of housing options by encouraging mixed-use development of varying densities

Growth in any area is desirable and is the by-product of an effective, healthy, and aggressive economy. As Maricopa County grows, an efficient multi-modal system will require development patterns that advance alternatives to automobile travel for work and non-work trips. This is particularly true as jobs are dispersed throughout the county and regional densities approach the scale of the central metropolitan area. To meet this challenge, the Intermodal Surface Transportation Efficiency Act (ISTEA) reinforced the necessity for regional planning efforts aimed at creating a better union of transportation and land use planning.

Bus

In order to expand the roadways available for bus transit, the county's arterial network should be suited for the highest degree of public transit use. One option to enhance bus service is the development of a bus network that places emphasis on community circulators to provide more cost-effective bus service to suburban areas using smaller, neighborhood-friendly vehicles. Other options would be to extend the hours of daily bus service, add Sunday service throughout the metropolitan area, implement new routes and trips, use alternative fuel vehicles, and expand passenger bench and shelter programs.

Rail

Rail systems under consideration in Maricopa County include light rail, heavy rail, and commuter rail. Commuter rail consists of short-haul rail passenger service operated within metropolitan and suburban areas. Light rail is generally the least expensive because it involves lighter vehicles and structures, more design flexibility, more frequent stops, and lower operating costs. Most newer rail systems in the United States are light rail systems. Heavy rail is more expensive, but usually covers a larger geographic area than light rail systems. Heavy rail is an electric powered rail transit system that operates on a completely grade separated right-of-way. It is generally characterized by wide station spacing (1 to 2 miles apart), high average operating speeds, and greater capacity than light rail. In general, both light rail and heavy rail use dedicated tracks.

Growth in Maricopa County has followed a dispersed pattern, relying on automobiles for most travel. Lack of density, combined with concern for the cost of a new or improved transit system, are often seen as hindrances to transit expansion. However, to encourage the use of rail transit, the alternative modes must have sufficient capacity and be safe, convenient, and attractive. In Maricopa County, this would mean investing in new systems. Since a variety of technologies are available, decisions must be made as to the most appropriate system for the metropolitan area.

The challenge for rail systems continues to be to find a way to address the specific benefits of such a system, while justifying its cost. The county supports further study of the creation of rail service and is willing to be a stakeholder in the study process.

ALTERNATIVE MODES AND TELECOMMUTING

Alternative modes of transportation must play an increasingly larger role in the transportation system of the future. Key to the transportation goal is the notion of "integrated" and "multi-modal" transportation systems. This holds true for alternative systems, particularly when planning for a balanced circulation system through efficient placement of employment and services, and encouragement of bicycling, walking, and transit as alternatives. It will be important, however, to continue extensive publicity campaigns and public involvement programs to move toward modes of travel other than single occupancy vehicles.

Pedestrian

Provisions for pedestrians are encouraged in this Comprehensive Plan. With adequate facilities and appropriate urban design, walking can be used as a mode of travel for school, convenience shopping, recreation, social, and even work trips. Pedestrian facilities can be accommodated as enhancements with new roadway construction or maintenance. However, urban design issues allowing short walk trips must be addressed before significant walk trips will occur. For example, subdivisions designed

as "enclaves" and homogeneous land uses are often not favorable to pedestrian activities.

In 1993, a MAG Pedestrian Plan described policies to bolster walking activities, and indicated areas where these approaches might best be implemented.

Bicycles

A regional bicycle plan was developed in 1991 and incorporated into the MAG Long Range Transportation Plan in July, 1992. The plan is currently being updated.

The plan identifies interconnected routes for bicycle travel within and through the region. Included in this system are on-street bike lanes and signed bicycle routes. Also included is an off-street multiple use path system that generally follows existing canals and riverbanks in the urbanized area and the Central Arizona Project canal to the north and east. The major policy goals of the bicycle plan are:

- Provide for bicyclists in transportation programs and projects.
- Improve safety by educating bicyclists and motorists to share the road.
- Promote awareness of the benefits of bicycle transportation to engineers and planning professionals engaged in the development of transportation projects.
- Support enforcement of applicable traffic laws to improve traffic safety and enhance courtesy among roadway users. Promote strict prosecution of traffic infractions to increase respect for riding privileges.
- Promote bicycling as a viable means of transportation and as a healthful form of recreation.

Bicycle projects are funded under various ISTEA programs administered by ADOT and MAG. Many jurisdictions are implementing local bicycle facilities. New roadway construction should include bicycle facilities to increase opportunities for those who choose to bicycle.

Intermodalism

Efforts should be made to provide points of interaction and efficient transfer among the various modes of transportation. This concept has broad implications and a wide scope of possibilities including station area development, mixed-use development, or multi-modal centers for transfer of goods. Intermodal efforts include continuing the "Bike on Bus" program, and redevelopment and adaptive reuse along existing transportation routes.

Telecommuting

With the arrival of new technology and socioeconomic changes, telecommuting is becoming a viable option for many employers and employees. Telecommuting allows

employees to connect to a central office with a personal computer and modem or fax machine. Some workers may telecommute full time, while others only part time. The transportation advantages of telecommuting are trip reduction, reduced single occupancy vehicle usage, and reduced roadway congestion. These types of programs also have the potential to contribute to improved air quality.

Research indicates that 30-40% of workers have jobs that would allow telecommuting at least one day per week. To promote this, the Regional Public Transportation Authority (RPTA) has developed a series of workshops, training sessions, and public relations campaigns to educate employers and employees.

Miscellaneous

Rural Public Transit Services

Providing public transit service for residents in rural communities is vital to their mobility and quality of life. Public transportation can be provided through general public transit service, program related service, and privately operated service. Residents in unincorporated Maricopa County have limited transit services available. Transit in rural areas is currently limited to programs related to human services trips and privately operated service. Program related services only provide trips for the elderly, disabled, and low income riders. Services operate like a traditional dial-a-ride program and do not provide assistance to everyone who may need it.

To understand the needs of the unincorporated residents, Maricopa County conducted a rural transit study in 1997. Findings indicate a significant shortfall between available services and existing needs. The study also suggested that most peer counties take a more active role in providing public transportation for their residents. This plan identifies existing demand for rural public transportation and a strategy to implement needed services. The plan's findings are consistent with the goals and objectives outlined in this document. The findings from the study will also be included in the Transportation System Plan.

Park-and-Ride Facilities

Park-and-ride facilities are an important component to the success of carpool programs and increased bus ridership. Maricopa County has contributed to the development of regional park-and-ride facilities and will continue involvement where it supports trip reduction. There are several large stand alone park-and-ride facilities throughout Maricopa County and many smaller facilities incorporated into existing parking lots. The county supports the development of carpool facilities that are part of the regional park-and-ride lot network. Today, there are over 60 such facilities in the metropolitan area with over 2,500 parking spaces available. Continued growth will propel the need for more of these facilities, especially where they can support the growing public transportation network.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) is a program of a broad range of diverse technologies. Authorized under ISTEA, projects developed through the ITS program enhance transportation needs in the areas of safety, congestion management, traveler information, and incident identification. ITS can collect and transmit information on traffic conditions, alert travelers to hazards and delays, reroute traffic around delays, automatically collect tolls, automate dispatching, improve productivity through tracking systems, and provide route guidance. In Arizona, the application of ITS technologies has been a standard for the past 15 years. Communications and long standing partnerships among federal, state, county, metropolitan planning organizations, and municipalities throughout the state have culminated in an integrated, interoperable transportation system. Applications of ITS are only limited by the imagination. At present, numerous projects are ongoing in various aspects of the transportation industry.

Maricopa County is a partner with the FHWA, ADOT, MAG, RPTA, local governments, and private industry to promote more efficient use of transportation through advanced technology and communication. National and local standards for "Intelligent Transportation Infrastructure" to support ITS are being developed. These standards, when adopted, will be incorporated into county policies and procedures for design and development review.

REGIONAL TRANSPORTATION PLANNING

Maricopa Association of Governments

Long Range Transportation Plan

The Maricopa Association of Governments (MAG) has prepared a Long Range Transportation Plan (LRTP) that addresses all modes of transportation through 2015. An update of the plan was completed in 1996. The LRTP covers airports, roads (including freeways and streets), pedestrian and bicycle systems, and transit. The county Transportation System Plan will be developed in close coordination with the MAG LRTP, particularly in those areas where the goals are similar. This will include close coordination with land use planning, the preservation of existing transportation facilities, congestion management, efficient financial programming, and region-wide connectivity.

Transportation Management Systems

The Intermodal Surface Transportation Efficiency Act (ISTEA) resulted in a new standard for productive, environmentally sound, and safe transportation systems. By providing a framework for new and expanded opportunities to improve surface transportation, ISTEA changed the way transportation planning is conducted in the United States. Over a six year period, ISTEA allocated more than $155 billion in funding for projects throughout the United States. This is 75% more than previous legislation.

Table 1-Transportation Management Systems		
Management System	**Lead Agency**	**Operational Status**
Congestion Management System	MAG	Fully Operational
Intermodal Management System	MAG	Fully Operational
Pavement Management System	ADOT	Partially operational
Safety Management System	ADOT	Under development
Bridge Management System	ADOT	Largely operational
Public Transportation Management System	RPTA	Under development

Local governments are given significant roles in planning and decision-making under this legislation. ISTEA requires state and metropolitan planning organizations (MPOs) to develop and apply various management systems. Management systems provide information to optimize the transportation system, leading to project selection and funding. MCDOT will develop and implement the following systems (Table 1-Transportation Management Systems):[2]

Roads of Regional Significance

The Roads of Regional Significance (RRS) concept was developed to have a system of roadways, secondary to the freeway system, that would carry more than half of the vehicle miles of travel within the region. Routes comprising the RRS design concept incorporate principal arterial streets consisting of a three to six mile grid of roadways constructed to a high level of design. The RRS was adopted as an advisory concept by the MAG Regional Council in the Spring of 1990.

Roads of Regional Significance consist of "Gateway" and "Urban" routes:

- Gateway RRS are portions of existing state routes that render system continuity and expedite travel entering and leaving the region.
- Urban RRS are existing streets spaced three to six miles apart, which provide for regional system continuity and have the capacity to be improved to high design standards.

Maricopa County

Maricopa County is responsible for short-, medium-, and long-range transportation planning within the county-owned and maintained roadway network. This section summarizes some of these larger efforts.

[2] For information on ISTEA Systems, refer to *Transportation Inventory and Analysis of Existing Conditions*, 1997.

Capital Improvements Program

The Capital Improvements Program (CIP) is designed to fulfill MCDOT's mission to provide a quality transportation system at the right time at the right cost. County transportation planners and engineers develop the five-year plan from the combined recommendations of county residents, their elected representatives, the municipalities, and MCDOT staff. MCDOT reviews the combined recommendations and applies a scoring and ranking process to all project requests, evaluating such considerations as traffic volume, safety, problem conditions, environmental impact, economic impact, and costs. The projects are prioritized and presented to the Transportation Advisory Board (TAB) for further review.

Many factors contribute to the programming process. As the CIP develops, MCDOT looks for ways to best apply county resources. Federal aid, legislative mandates, and environmental and archaeological considerations are all part of the prioritization process.

Transportation Systems Plan

The transportation element is a key component of the Comprehensive Plan. The land use and transportation impacts expected as a part of the implementation of this Plan are considered in the Transportation Systems Plan (TSP). The TSP evaluates the regional impacts of the transportation system and defines a comprehensive county transportation system with supporting plans, policies, and programs. The TSP should be considered the principal implementation component of the transportation element. It focuses on MCDOT issues, particularly customer service, the impact of technology, and regional issues.

The Transportation System Plan organizes roadways under MCDOT's jurisdiction. It helps identify priorities for funding and maintenance, and provides a mechanism to effectively invest the department's resources. The TSP system is designed to be a flexible, proactive tool for system planning and capital programming beyond the five-year CIP horizon.

The TSP defines a roadway system organized into primary, secondary, and local roads. It also includes bridges and a series of overlays[3] (See Figure 6-Transportation System Plan). In order to categorize county roadways, those serving regional interests and required for roadway system performance were identified.

Primary roadways are significant routes for regional travel. The county will give high priority to improving primary roadways under its jurisdiction. The county also recognizes opportunities inherent in partnering with other jurisdictions for primary roadway improvements.

Secondary roadways serve primarily subregional travel. Improvements to secondary county roadways will be programmed based in part on their proximity to neighboring or surrounding jurisdictions and availability of other urban services.

[3] Overlays include: scenic, recreational, emergency management, intelligent transportation systems, bicycle, and transit.

Table 2-Transportation System Plan Funding Priorities			
Area: System:	Primary	Secondary	Local
Urban Service Area	H	M	L
Rural Development Area	H	L	L
Established Community/Existing DMP's	H	L	L
General Plan Development Area	M	L	L
Incorporated	L	N	N
New Development Master Plan	M	DR	DR

Local county roadways serve nearby development and as collectors for primary and secondary roadways. In general, the county will only program major improvements to local roadways where there is a special need or unless there is extensive participation from the surrounding community.[4] Table 2 summarizes the relationship between the transportation element of the Comprehensive Plan and the TSP, and highlights the system funding priorities by land use category (See Table 2-Transportation System Plan Funding Priorities).

When considering investment potential, MCDOT will participate in "High" priority projects for planning, design, and construction. Under this scenario, the availability of partnering opportunities is an advantage, but not a requirement. MCDOT will also fully participate in "Medium" priority projects, but partners will be required. Finally, MCDOT will only participate in the planning and design of "Low" priority projects, and partners will be required. Further, MCDOT will "Not" participate in secondary or local road projects in incorporated areas, and will require a project developer (DR) to assume all responsibly for non-imary road projects within Development Master Plans. MCDOT recognizes its responsibility to operate and maintain all publicly accessible roadways built to MCDOT roadway standards located in its jurisdiction. MCDOT will also consider partnering efforts with developers to provide additional resources to accommodate future increases in regional travel on primary roads. The developer's responsibility is to provide funding for roadway projects in proportion to traffic generated by the development.

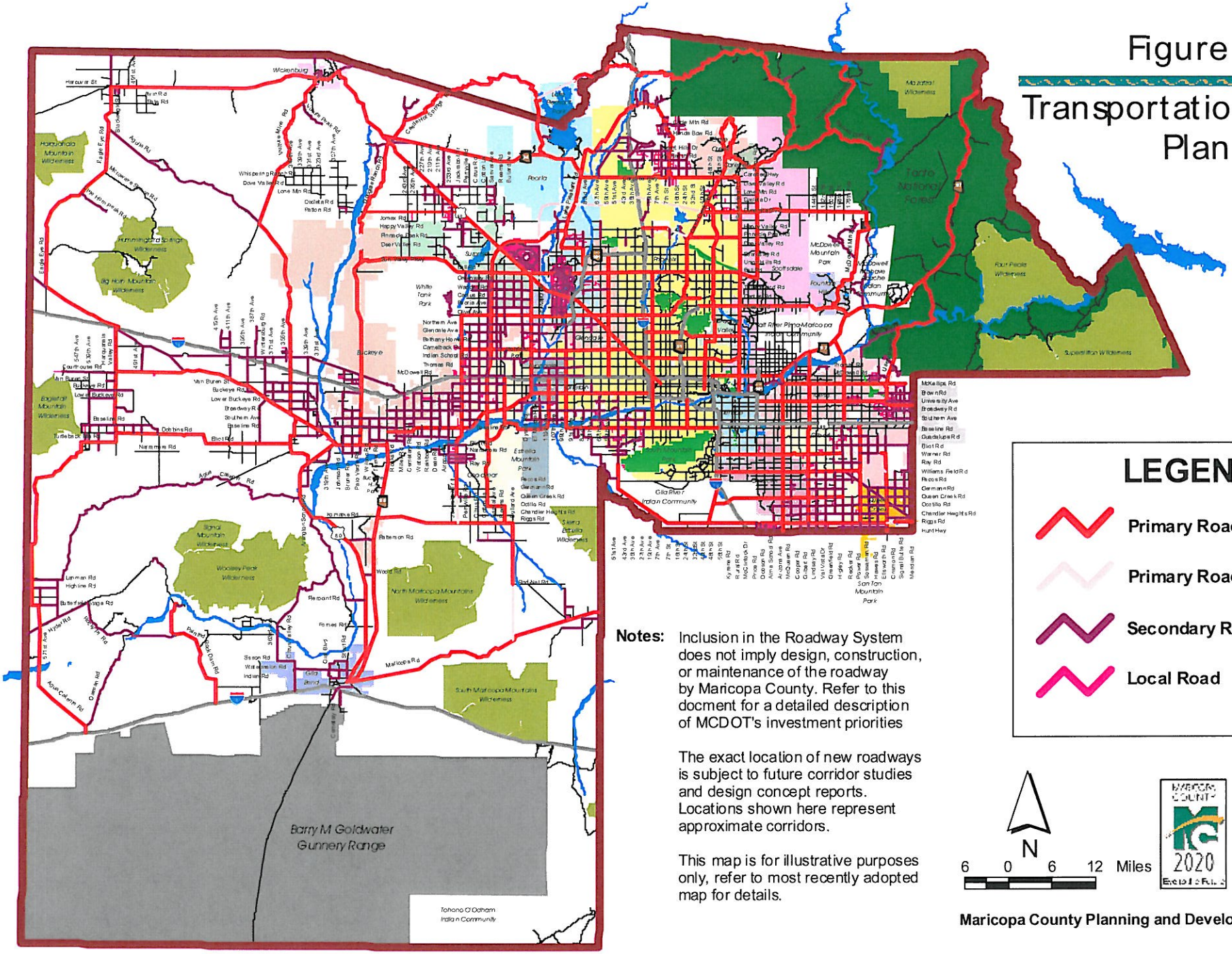
Major Streets and Routes Plan

A Major Streets and Routes Plan (MSRP) will be proposed and implemented upon completion of the TSP. The MSRP is expected to define and map specific development requirements as they apply to primary and secondary roadways. The proposed plan will be supported by other county ordinances that apply to zoning and development review, as well as other right-of-way requirements where no roadways currently exist.

[4] Assessment from within improvement districts is the most common form of participation.

Figure 6

Transportation System Plan



Notes: Inclusion in the Roadway System does not imply design, construction, or maintenance of the roadway by Maricopa County. Refer to this docment for a detailed description of MCDOT's investment priorities

The exact location of new roadways is subject to future corridor studies and design concept reports. Locations shown here represent approximate corridors.

This map is for illustrative purposes only, refer to most recently adopted map for details.

LEGEND

- Primary Road (existing)
- Primary Road (future)
- Secondary Road
- Local Road

N

6 0 6 12 Miles

Maricopa County Planning and Development Department

The MSRP is expected to specify right-of-way setback and overlay definitions to be applied on current and future routes. It will provide a legal basis for reasonable and consistent limitations on development near county roadways.

Small Area Transportation Studies

Four regional transportation studies have been completed or are underway in Maricopa County. These studies will be implemented as a part of this comprehensive planning process and the TSP:

- The ***Northeast Valley Area Transportation Study*** produced a transportation plan encompassing the New River and Desert Hills communities. The transportation plan contains a five-year program, a ten-year action plan, and a long-range transportation plan for the study area. The Board of Supervisors adopted this study on November 6, 1996.
- MCDOT, in cooperation with the communities of Avondale, Goodyear, Litchfield Park, Buckeye, and Tolleson, initiated the ***Southwest Valley Transportation Study*** in the Fall of 1995. The study involves development of evaluation methodologies and standards, an inventory of existing conditions, formulation of transportation goals and policies, and traffic forecasting based on current socioeconomic data and MAG regional travel models. A sensitivity analysis regarding a more aggressive growth scenario for the Town of Buckeye and vicinity was also performed.
- The ***Williams Area Transportation Plan*** was prepared by the Williams Gateway Airport Authority and Maricopa County in conjunction with consultants and representatives of local jurisdictions, state organizations, and regional planning and transportation authorities. A major growth node within the study area is the former Williams Air Force Base property. Redevelopment plans for the property include a reliever airport, an aerospace center, and an extension of Arizona State University's (ASU) campus. The center also plans to accommodate general aviation, cargo, commercial passenger service, and aerospace manufacturing, maintenance and modification.
- The ***Northwest Area Transportation Plan*** will be completed in 1998.

Transportation-related recommendations from the area land use plans will also be included in the Transportation System Plan.

Life Cycle Analysis

As they currently exist or are planned, each of the roadway and management systems operate as stand-alone systems. For example, the Pavement Management System does not take into consideration safety issues from the Safety Management System, and the Intermodal Management System will not be affected by maintenance costs arising from the Bridge Management System. Moreover, the county-wide effects of

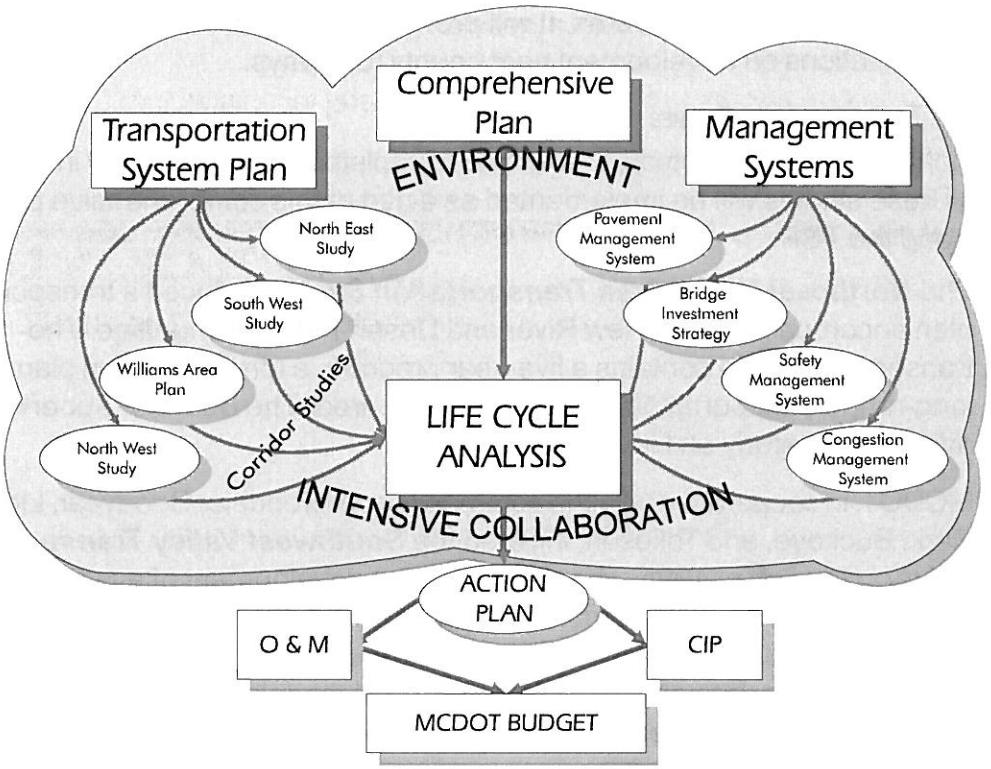


Figure 7-Life Cycle Analysis

the small transportation studies must also be examined. If a study recommends improvements within one region of the County, transportation systems in other areas may also be affected.

Life cycle analysis (Figure 7-Life Cycle Analysis) seeks to study the analysis derived from the various roadway and management systems, the County Comprehensive Plan, and the regional transportation studies, and evaluate the long-term decisions rendered by each. This analysis usually takes the form of a fiscal evaluation, but is not limited to this.

Economic Analysis

Economic evaluation provides a cost/benefit structure to determine the worthiness of a given project. Economic analysis compares similar things, such as the alternatives of a particular project. It may also be performed to compare dissimilar options, such as increased transit service, in contrast with building additional roadways. Ultimately, proper economic analysis ensures that a project will result in effective and efficient use of public money while meeting the transportation needs of the public. Economic analyses are generally a required part of project inception, design, and construction, and provide decision makers with the basis to make informed and sometimes difficult choices.

GOALS, OBJECTIVES, AND POLICIES

The goal of the transportation element of the Maricopa County Comprehensive Plan is a declaration of anticipated and ideal results based on a combination of community endeavors and professional opinion. The goals address relevant transportation inputs into the regional growth and development process within the county. The intent is that the transportation improvements and alternative mode development process will contribute to an improved quality of life for the residents of Maricopa County.

The goal of the transportation element is to:

Provide an efficient, cost-effective, integrated, accessible, environmentally sensitive, and safe county-wide multi-modal system that addresses existing and future roadway networks, as well as promotes transit, bikeways, and pedestrian travel.

Within this goal, the following objectives and policies apply:

Objective T1 Reduce the proportion of trips made in single occupancy vehicles.

Policy T1.1 Encourage transit oriented development.

Policy T1.2 Explore and encourage options to increase bikeways.

Policy T1.3 Explore and encourage options to increase pedestrian facilities.

Policy T1.4 Explore and encourage telecommuting and teleconferencing options.

Policy T1.5 Encourage the development of market incentives for transit and vehicle reduction opportunities.

Policy T1.6 Explore congestion pricing options during peak travel hours.

Policy T1.7 Explore and encourage options to expand the trip reduction program.

Objective T2 Increase transit ridership.

Policy T2.1 Support the 100% subsidy of Maricopa County employee transit use.

Policy T2.2 Support and encourage increased funding for transit.

Objective T3 Employ applicable technology to improve the use of transportation facilities.

Policy T3.1 Continue financial support for Intelligent Transportation Systems (ITS). This should include, but not be limited to:

Global Positioning System (GPS)	Kiosks
Traffic Operations Centers (TOCs)	Internet
Closed Circuit TV	Messageboards

Policy T3.2 Encourage future roadway development to use technological innovations to accommodate future communication technologies.

Policy T3.3 Continue efforts to coordinate regional signal synchronization and coordination.

Policy T3.4 Encourage the development of alternative fuels recharge stations.

Policy T3.5 Encourage and participate in the expansion of the Traffic Management Systems (TMS) to the arterial system.

Policy T3.6 Encourage the development of an incident management response system.

Policy T3.7 Develop public/private partnerships to encourage technological advances.

Objective T4 Identify and accommodate transportation corridors.

Policy T4.1 Model new corridors.

Policy T4.2 Monitor development and subdivision proposals.

Policy T4.3 Develop the Major Streets and Routes Plan.

Policy T4.4 Develop and implement a Congestion Management System.

Policy T4.5 Identify future activity centers.

Policy T4.6 Identify current and future recreation centers and corridors.

Objective T5 Optimize public investments.

Policy T5.1 Promote and encourage inter-jurisdictional partnerships.

Policy T5.2 Resolve county island/strip annexation issues using existing plans and legislative opportunities.

Policy T5.3 Utilize the functional classification system or MSRP to ensure sufficient right-of-way for future roadway needs.

Policy T5.4 Utilize incentives to promote developer participation.

Policy T5.5 Develop and implement Bridge Investment and Pavement Management Systems.

Policy T5.6 Encourage multi-modal alternatives in all investment proposals.

Policy T5.7 Apply cost effectiveness guidelines for public investments in order to gauge intangible costs (i.e. air pollution).

Policy T5.8 Explore the development of an equitable user fee structure.

Policy T5.9 Evaluate benefit/cost ratios on all public roadway projects.

Policy T5.10 Enter into partnering agreements to provide additional resources to allow future increases in regional travel on primary roads.

Objective T6 Minimize travel times.

Policy T6.1 Identify future regional by-pass routes.

Policy T6.2 Maintain level of service C or better for all roadways and intersections.

Policy T6.3 Reduce unwarranted signals.

Objective T7 Reduce crashes.

Policy T7.1 Develop and implement a Safety Management System.

Objective T8 Minimize and mitigate impacts of construction and operation.

Policy T8.1 Increase and standardize field monitoring.

Policy T8.2 Publish and promote traffic control requirements.

Policy T8.3 Reduce length of lane and total road closures per project.

To implement these goals, objectives, and policies, Maricopa County can invest in its transportation system in any combination allowed by state statutes. These investments are prioritized along the following guidelines:

1. Develop a seamless transportation system
2. Maintain the existing system
3. Serve the needs of existing and future development in unincorporated Maricopa County
4. Serve regional travel
5. Direct future growth to the Urban Service Areas and DMPs[5]

These management philosophies are guided by the MCDOT's Strategic Plan through its vision, mission, and values statements. The MCDOT vision is:

> *We set a standard of excellence regionally enabling us to consistently deliver on our commitment to provide the right transportation system for Maricopa County, at the right time and the right cost.*

These management guidelines are further guided by five core assumptions:

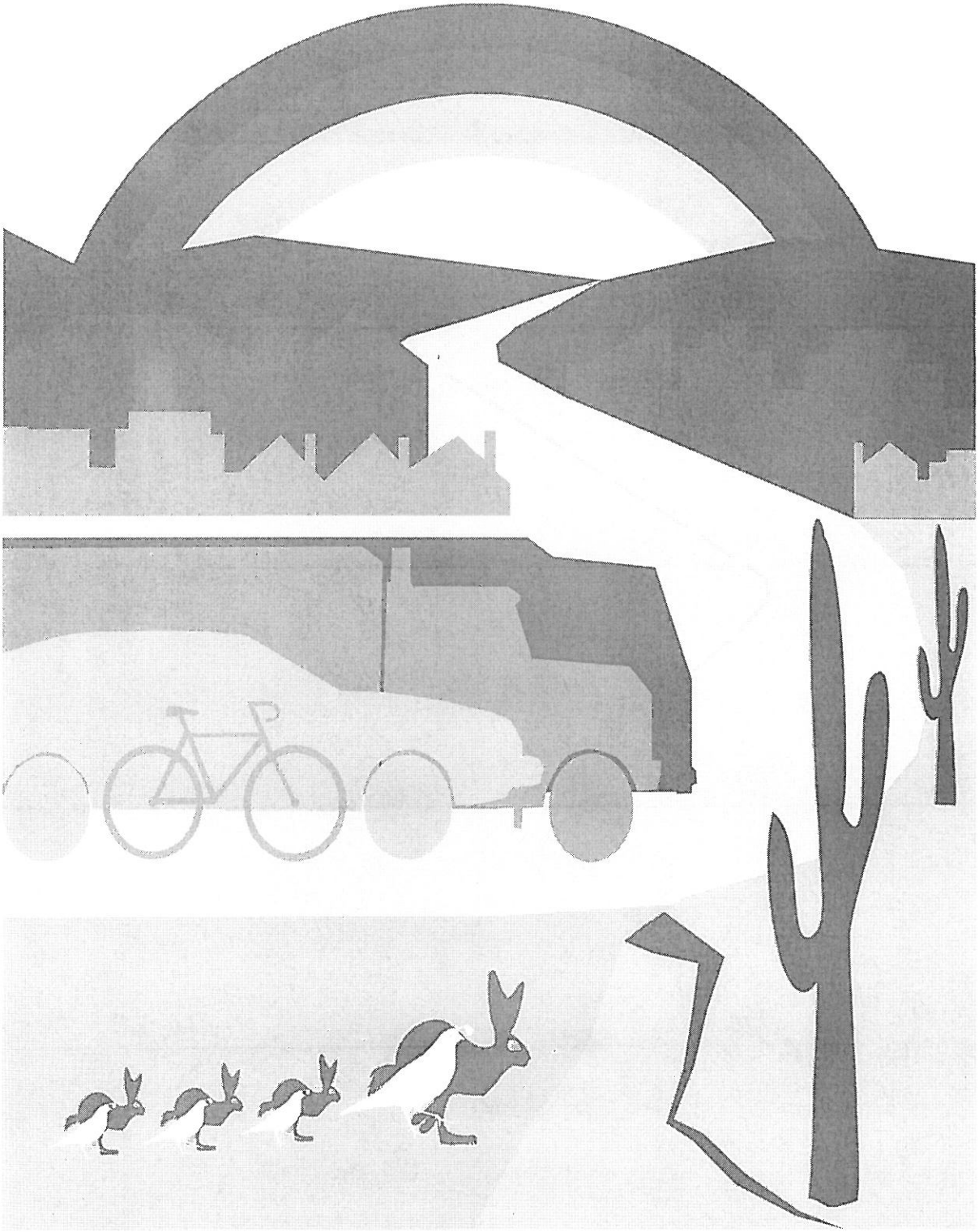
- Maricopa County seeks to plan, establish, and construct a seamless regional system of county highways that serve as a regional travel network for all county residents, regardless of jurisdictional boundaries.
- Maricopa County seeks to integrate the Comprehensive Plan and Transportation System Plan with its Transportation Investment Strategy. The

[5] Refer to the land use element for descriptions of the land use categories.

county seeks to establish a clear, rational transportation policy in these documents, and implementation through a transportation programming system.

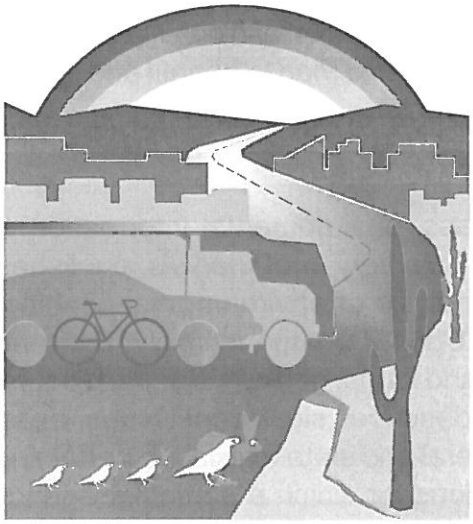
- Maricopa County seeks to support economic development, protect and enhance the environment and communities within the county, and develop insightful policy direction and clear transportation spending priorities.
- Maricopa County seeks to establish funding priorities in the area of regional county highways, arterial and collector roads, and the local county street network.
- Maricopa County seeks to end the practice of municipal annexations that do not include the roadways that serve adjacent developments and confuse the transportation investment role of cities and the county alike.

COMPREHENSIVE PLAN ELEMENTS
Environment & Environmental Effects



ENVIRONMENT & ENVIRONMENTAL EFFECTS

INTRODUCTION



NATURAL SETTING

As the fourteenth largest county in the United States in terms of land area, Maricopa County's size and environmental diversity is greater than many states. The county's ecosystems and land ownership patterns provide a complex natural setting and planning agenda. Located in central Arizona within the Upper Sonoran Desert, Maricopa County, varying in topography and climatic conditions, is much more than desert. Numerous mountain ranges crisscross the county, many within national forests and other federal land.

Seven different vegetative communities occur in Maricopa County. Vegetation is predominantly characterized by desert scrub plant communities except in the extreme north and northeastern portions of the county where elevations exceed 4,000 feet. There is also one small area of non-desert vegetation in the Harquahala Mountains in northwestern Maricopa County. A multi-layered understory of desert shrubs, cactus flora, and small-leafed desert trees such as mesquite, palo verde and ironwood occupy the desert floor. At slightly higher elevations, desert grasslands cover undulating terrain; in the mountainous areas ponderosa pine and evergreen oaks are the common cover. Wildlife throughout the county is abundant and diverse, with species of rabbit, javelina, mountain lion, deer, and an occasional bear. Many species of snakes, reptiles, and birds frequent all parts of the county.

Much of the vegetation and wildlife of Maricopa County depends on a reliable water supply. The Salt, Verde, and Gila Rivers and their tributaries account for much of this supply. The riparian habitats and ecosystems associated with these waters require special consideration by development, grazing, and recreation interests.

Protecting wildlife species and their habitats throughout Maricopa County is indicative of environmentally responsible planning in Arizona. The Comprehensive Plan recognizes the importance of creating, improving, and conserving natural habitat and open space in order to increase biological diversity.

While growth has been constant, the natural environment will always be affected by human activity. Within Maricopa County, cities, towns, and other agencies are

undertaking efforts to mitigate increases in growth-related environmental problems. A variety of policies, ordinances, and regulations have been implemented at various levels of government throughout the county in an attempt to mitigate the adverse effects of growth, industry, and development on the environment.

The Maricopa County Comprehensive Plan focuses on maintaining and improving the physical environment, thereby making the community more functional, beautiful, healthy, interesting, and efficient. Natural resource conservation and other environmental considerations are incorporated into this Comprehensive Plan to benefit and enhance the future quality of life for Maricopa County residents.

Environmental Inventory and Analysis

As part of the comprehensive planning process, environmental information was collected and presented in the *Environmental Inventory and Analysis*, published in 1997. This report includes information and analysis of environmental conditions, regulations, policies, and programs in Maricopa County. Components of this inventory are air quality, surface water, groundwater, flora and fauna, geology, cultural resources, and parks and open space. Each component describes significant issues: existing conditions and current status of resources; federal and state legislation pertaining to the component; and any programs or regulations for which a particular agency is responsible. In addition to the information provided in the *Environmental Inventory And Analysis*, a database was compiled in a geographic information system (GIS) for the components listed above. This database includes environmental inventory maps related to the components. The report also identified primary issues and concerns, development constraints, and opportunities for each of the components.

ISSUES FOR THE ENVIRONMENT

The Comprehensive Plan includes short-term and long-term approaches to address environmental concerns. This approach recognizes that today's actions are likely to influence the ecosystems necessary to support our future environment. A planning area may have several different ecosystems related to each other in some aspects and distinctly separate in others. Individual ecosystems in or near a planning area should be identified and recognized as important and vital to a healthy and sustainable environment. Maricopa County recognizes the importance of reducing the negative impact of human activity on our ecosystems; it realizes the value of natural ecosystems in maintaining a high quality of life for our residents.

The environmental element for the Comprehensive Plan summarizes existing conditions within the natural environment. The element identifies objectives that will ensure protection for the county's air, water, land, and cultural resources. Implementation of strategies that address these objectives is key to maintaining a high quality of life as

growth and development occur between now and the year 2020. In this section, the following definitions apply:

- **Air Resources**: attainment of a level of air quality that will bring Maricopa County into compliance with federal standards and development of measures to reduce noise pollution
- **Water Resources**: rivers, streams, lakes, floodplains, and wetlands/ riparian areas
- **Land Resources**: vegetation, wildlife, habitat, contaminated soils, topography, geology, and areas reserved for recreation, open space, and scenic quality
- **Cultural Resources**: archaeological resources, historical sites, and architecturally significant places

The following section briefly discusses each of the environmental element components and outlines specific constraints and opportunities as they relate to the environmental goals. Many of the constraints and opportunities will be identified within more than one component since some of the components have related issues.

Air Quality

Air quality is one of Maricopa County's most controversial issues. Significant increases in population and vehicles on the road, development patterns, land forms, and atmospheric conditions make air pollution a serious health and environmental hazard. The area of highest population density is located in the central part of the county in a region that traps airborne pollutants and limits their distribution into the atmosphere. In the winter months, this problem is exacerbated when heavier, cold air settles over the valley and traps the warmer, polluted air below. This condition can last for several days until winds develop and disperse the "brown cloud."

Effective land use planning is critical to improved future air quality. New development should be planned so that it does not unreasonably contribute to violations of the National Ambient Air Quality Standards (NAAQS). Consideration for regional air quality must also be integrated into the planning for industrial and residential development, utilities, highways, waste disposal sites, and other uses. With Maricopa County taking the lead, all local jurisdictions will need to coordinate efforts to ensure acceptable air quality for county residents.

Many different activities affect air quality. Some of these activities produce a specific pollutant that contributes to air quality degradation. Activities that have been found to affect air quality include construction of new buildings, parking lots, and roadways; movement of vehicles along roadways; movement of vehicles on unpaved roads and vacant land; preparation of agricultural fields for planting; use of paint and cleaning solvents; electrical power generation; gasoline powered lawn and garden equipment; and various types of incineration.

Six pollutants have been identified as detrimental to human health when concentrated in large amounts, and for which standards have been set by the Environmental Protection Agency (EPA). These pollutants are carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), lead (Pb), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2). National Ambient Air Quality Standards, required by the Clean Air Act, allow the EPA to set two types of standards for pollutants. Primary standards set limits to protect public health. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Primary standards have been set for CO, while both primary and secondary standards have been set for NO_2, O_3, Pb, $PM_{10,}$ $PM_{2.5}$, and SO_2.

The EPA normally designates nonattainment areas only after air quality standards are exceeded for several consecutive years. A nonattainment area is defined as a locality where air pollution levels persistently exceed National Ambient Air Quality Standards. Maricopa County has been designated as a nonattainment area for CO, O_3, and PM_{10}.

Air Quality: Regulations and New Developments

The Clean Air Act of 1970, amended in 1977 and 1990, enables the federal government to participate in regulating pollution from mobile sources such as cars and trucks. Basic vehicular engine design has improved since 1970 with the introduction of catalytic converters that are designed to convert carbon monoxide to carbon dioxide. Passenger cars are capable of emitting 90% less carbon monoxide over their lifetimes than their counterparts in the 1960s. The amount of carbon monoxide produced by each vehicle has been reduced, yet there are many more vehicles on the roads today and miles traveled by each vehicle have generally increased. Unless more effective emission controls are used in the future, carbon monoxide levels will rise as population grows and more and more vehicles take to the road.

Although air quality regulations and responsibilities are described in detail in the Environmental Element Report, prepared for the *Eye to the Future 2020* Comprehensive Plan, some of the general regulations and responsibilities are included here. The EPA oversees and enforces provisions of the Clean Air Act. The Clean Air Act gives state and local governments primary responsibility for regulating pollution from power plants, factories, and other stationary sources. The Arizona Department of Environmental Quality (ADEQ) is the state agency responsible for compliance and enforcement for all portable sources of air pollution within the state and all stationary sources outside Maricopa, Pinal, and Pima counties. The state is also responsible for vehicle emission testing, administering the Stage II Vapor Recovery Program, enforcing the Agricultural Best Management Practices Rule, and issuing Air Quality Control permits to industries and facilities that emit regulated pollutants. The Maricopa Association of Governments is responsible for maintaining plans and addressing problems with CO, O_3, and PM_{10} within Maricopa County.

Maricopa County agencies are responsible for issuing permits for most stationary sources of air pollution emissions, as well as enforcing the county's Fugitive Dust Rule 310, the Trip Reduction Program, the Clean Burning Fireplace Ordinance, and the voluntary Lawn Mower Emission Reduction and Vehicle Retrofit and Repair programs. Maricopa County air quality regulations provide emission standards or limitations for many sources and activities.

Noise

Growth and development result in the generation of activities that create noise. In recent years, ambient noise emanating from a variety of sources such as highway traffic, airplanes, construction, and industrial and commercial activities has become an increasing concern both to the public and to local, state, and federal agencies. The ambient noise levels in the county have been increasing over the years, resulting in incremental diminishing of "peace and quiet." Minimizing noise impacts can be realized with the implementation of noise abatement criteria.

Noise abatement in Maricopa County will need to occur on three fronts:

- Point source noise from major developments
- Area source noise from individual land uses in zoning districts
- Line source noise from vehicular traffic

The Comprehensive Plan proposes to protect, preserve, and promote the health, safety, and welfare of Maricopa County's citizens through the reduction, control, and prevention of noise. This can be accomplished by establishing guidelines that will eliminate and reduce unnecessary and excessive traffic and other noise.

Noise is defined as unwanted, offensive or irritating sound that unreasonably intrudes into daily human activities. Noise is created by many sources, a number of which are associated with urban development. Some noise sources include road traffic, airplane and train traffic, construction equipment, manufacturing processes, yard maintenance equipment, and radios and other musical equipment. Urban traffic noise and aircraft noise are considered to be the most pervasive outdoor noise sources.

Studies performed by the U.S. Department of Housing and Urban Development (HUD) indicate that noise is the most frequently cited undesirable condition that people consider when choosing a place to live. Noise from traffic, aircraft, and construction are cited as the most annoying urban noises.

Noise Abatement

Noise abatement is the responsibility of all levels of society, with regulatory responsibility falling to the EPA at the federal level, and counties and municipalities having responsibility for enforcing state and local regulations. Although the 1972 Noise

Control Act declared that the policy of the United States is to promote an environment for all Americans free from noise that jeopardizes their health and welfare, the federal government does not have the financial means to enforce noise reduction and abatement regulation. It is essential that all citizens are aware of their individual responsibility to practice noise control out of courtesy and consideration for their fellow citizens. More importantly, communities must realize that efficient noise abatement can be achieved through such things as land use planning, real estate disclosure requirements, and building codes. Additionally, the Federal Aviation Administration (FAA) is responsible for controlling aircraft noise by regulating source emissions, with flight operational procedures, and with management of air traffic control systems and navigable airspace to minimize noise impact on residential areas. Airport proprietors, along with state and local governments, are accountable for land acquisition; airport use restrictions; and land use planning, zoning, and housing regulation that limits the uses of land near airports to those that are compatible with airport operations. In Maricopa County, Luke Air Force Base and Williams Gateway Airport are of particular importance because of their potential impact on unincorporated areas. Both airports create certain noise issues, making compatible land use planning around these airports an important consideration.

While state laws protecting Luke Air Force Base have existed for some time, in 2004 the Arizona Legislature enacted additional laws that provide enhanced protections for Luke Air Force Base, added ancillary military facilities to the list of protected installations, and required that local governments adopt land use plans and zoning for property in the high noise or accident potential zone of ancillary military facilities. For Maricopa County, ancillary military facilities include the Auxiliary Airfield #1 in Surprise and the auxiliary airfield south of Gila Bend. The purpose of this requirement is to ensure that future development is compatible with the high noise or accident potential generated by these facilities' operations. While these requirements apply to Maricopa County, pursuant to Arizona Revised Statute §28-8481(A) the political subdivisions of Surprise, Glendale, El Mirage, Goodyear, Youngtown, Buckeye, and Gila Bend are also required to adopt general plans and zoning regulations to assure development compatible with the high noise and accident potential generated by military airport and ancillary military facility operations that have or may have an adverse effect on public health and safety. Arizona Revised Statutes §28-8461 and §28-8481 identify specific uses that are deemed compatible with the high noise or accident potential of these facilities. Other uses may also be permitted upon mutual consent of Luke Air Force Base and Maricopa County. The consistent and compatible uses are identified in Chapter 10, Section 1010 of the Maricopa County Zoning Ordinance and are applicable to Luke Air Force Base, Auxiliary Airfield #1, and the auxiliary airfield south of Gila Bend.

Water Resources

Water resources represent environmental and/or physical constraints to development as well as provide a necessary resource for continued growth. Since Maricopa County is located in an arid part of the state, water is a precious commodity. Surface water and groundwater are equally important suppliers for the region. Surface water flows are regulated by large upstream dams. Other surface water conveyances in Maricopa County include the Central Arizona Project (CAP) aqueduct and a system of irrigation canals that divert water from the river channels for agricultural use.

Groundwater, which is drawn from a series of large aquifers below the earth's surface, is also used to meet agricultural, municipal, and industrial needs. In some areas of the county, use of groundwater exceeds the rate of natural and incidental recharge and depths to groundwater have increased due to this overdraft. Because state law governs the use of groundwater and the circumstances under which it may be used for new development, Maricopa County does not intend to impose independent requirements concerning water sources and usage.

Water quality for surface water and groundwater is monitored by various federal, state, and local government agencies. Several different sources of pollution can adversely affect the quality of water, including urban run-off, combined sewer overflows, on-lot wastewater disposal, agricultural run-off and various municipal and industrial point and non-point discharges. Since these pollution sources are regional in nature, they are regulated under a variety of programs administered by the state and federal governments. Maricopa County does not intend to impose independent requirements concerning water quality.

In general, water resources in Maricopa County are of acceptable quality for most uses, and most water supplies can be treated to meet federal and state drinking water standards. Surface water in Maricopa County is generally of a quality acceptable for most uses after appropriate treatment. However, the water quality in Painted Rocks Lake on the Gila River (southwestern Maricopa County) is the exception. Most surface water in the county, including water that flows over land surfaces, flows to this lake, resulting in a build up of pollutants carried downstream to this point. Painted Rocks Lake State Park has been closed to the public since 1989 due to contamination of the lake from these pollutants. In 1991, it was found that the long-term consumption of fish from the lake and from upstream along the Gila River could result in a greater than acceptable lifetime cancer risk.

Central Arizona Project (CAP) water, which comes from the Colorado River, is treated by water providers to meet drinking water standards established by the EPA for municipal and industrial uses. Levels of total dissolved solids (TDS) in CAP water are higher than in groundwater, but this is generally true of river water. TDS are measured by the amounts of calcium, magnesium, bicarbonate, sodium, and sulfate in the water.

Much of the groundwater in Maricopa County is of acceptable quality for most uses. Some of the groundwater aquifers, however, have been degraded as a result of contamination. Nitrates from industrial sources, wastewater treatment plants, septic tanks and leach fields, and agricultural fertilizers, sulfates from mining areas, agricultural land, and areas of natural mineralization, and volatile organic compounds (VOCs) from manufacturing, industry, and landfills contaminate some of the groundwater aquifers in the county. Petroleum hydrocarbons from leaking underground storage tanks and pesticides from agricultural activities have degraded aquifers to some extent. Naturally occurring elements such as arsenic, fluoride, and radon have been found at elevated levels in some groundwater aquifers in Maricopa County.

Sources of Water Pollution

There are both point and nonpoint sources of water pollution. Point sources are places where polluting substances enter surface water from a confined, discernible conveyance such as a sewer pipe, culvert, or other channel or conduit. These substances usually originate in industrial facilities and municipal or private sewage systems. Nonpoint sources of pollution are those that cannot be precisely located. Common pollutants include sediment eroded from soil exposed during construction of homes and industrial and commercial buildings, and pesticides and fertilizers that wash off cropland during rain events. Domestic wastewater may be contaminated with paint, household chemicals, pesticides, industrial wastes, organic material, nutrients, sediment, bacteria, and viruses. This wastewater runs through sewers or leaches through the ground from septic systems. Disposal of paint, pesticides, industrial wastes, and many other contaminants into septic systems is not allowed by law.

Regulations Governing Water Quality

The Clean Water Act is the primary federal law that protects the nation's lakes, rivers, and aquifers. Enacted in 1972, the Clean Water Act's primary objective is to restore and maintain the integrity of the country's waters. The two goals of the Clean Water Act are to eliminate discharge of pollutants into waters and to achieve water quality levels that are fishable and swimmable. The Clean Water Act was amended in 1977 to strengthen controls on toxic pollutants and to allow the states to assume responsibility for carrying out federal programs. The adoption of the Water Quality Act in 1987 supported new state and local efforts to deal with polluted runoff and created funds to provide support for the construction of wastewater treatment plants.

The Federal Water Pollution Control Act established a National Pollutant Discharge Elimination System (NPDES) requiring permits for all point sources of pollution to surface waters of the nation. When a potential discharge of pollutants is made to groundwater, an Aquifer Protection Permit (APP) is required by law. When issued, the NPDES and APP permits regulate what may be discharged and the amount of each pollutant allowed to be discharged from a facility. At the state level, water quality standards are set by ADEQ. The agency is responsible for the Point and Nonpoint

Source Control programs as well as the APP Program, development and implementation of Best Management Practices for timber industry activities, grazing activities, urban runoff, sand and gravel operations, and farming and animal feeding operations, and the Pesticide Contamination Prevention Program. ADEQ implemented the Wastewater Reuse Permit Program to regulate facilities reusing wastewater for agricultural, lake filling, and golf course irrigation purposes. Groundwater is protected to drinking water standards by the 1986 Arizona Environmental Quality Act and is monitored by ADEQ.

Water quality in Maricopa County is monitored by ADEQ. This state agency fulfills Clean Water Act mandates for water quality monitoring and assessments. Maricopa County Department of Environmental Services is responsible for water quality compliance and enforcement of drinking water standards within the county. Maricopa Association of Governments (MAG) is designated as the Areawide Water Quality Planning Agency for Maricopa County. As such, MAG oversees the 208 Water Quality Program that establishes a process to ensure that construction of wastewater treatment facilities is coordinated within the county. Maricopa County Department of Environmental Services is responsible for the Drinking Water Program, which regulates public water systems in Maricopa County. Any public water system that serves drinking water to 25 or more people or has 15 or more service connections is governed under this program.

Vegetation and Wildlife

A diversity of plant and wildlife species plays an important role in the quality of the environment. The key to maintaining this diversity is to preserve the land that supports wildlife habitats. The impacts of development and other human activities on wildlife and their associated ecosystems can be significant. Complex ecosystems support life as numerous interrelated organic and inorganic components are continuously recycled. An activity that disrupts part of this system invariably has a secondary effect on the rest of the system. As Maricopa County grows, sensible planning that promotes the preservation and conservation of significant vegetation and wildlife species is important.

The richness and diversity of plant and wildlife species in Maricopa County create a unique environment. Mountain ranges, washes, riparian areas, and desert produce a network of wildlife habitats throughout the county. Areas dominated by scrub oak and manzanita, occurring at elevations of 4,000 feet or greater in the extreme north and northeast portions of the county, support diverse species of plants and wildlife, while the flat, low-lying areas contain desert scrub plant communities found in only a few other places in the world.

ENVIRONMENT & ENVIRONMENTAL EFFECTS

The protection and conservation of the county's valuable natural resources is everyone's responsibility. Maricopa County has accepted stewardship in managing these resources to assure a healthy environment. This intergovernmental responsibility requires coordination and cooperation with all jurisdictions in the county.

An objective of open space acquisition is to preserve wildlife habitat in urbanizing areas by conservation of significant wildlife habitat areas and corridors. These wildlife corridors can also function as paths for pedestrians, equestrians, and bicyclists to link open spaces. Avoiding or reducing adverse impacts to the natural environment is an important goal identified in this Comprehensive Plan.

Sensitive Vegetation and Wildlife: Environmental Impacts

Most of the described vegetative and wildlife communities are impacted by urban development. As such, it is important to strike a balance between the need to accommodate growth and the loss of some habitat. Road construction and development destroy and fragment wildlife habitat, creating barriers to wildlife movement and increasing habitat edges that make native plants more susceptible to invasive non-native species. Habitat destruction and degradation is the most pervasive threat to species biodiversity. Habitat is isolated, increasing inbreeding of isolated species and decreasing genetic variability. To keep small fragments of habitat viable, it is important that migration corridors exist.

Riparian and aquatic habitats are directly impacted by development when washes are channelized or destroyed. These impacts need to be balanced against the need to accommodate a growing population. Precipitation that falls onto impervious surfaces such as roads, driveways, and parking lots flows over land faster than over undisturbed desert, carrying with it contaminants and sedimentation that build up in waterways. Effluent produced in developed areas and released into waterways benefits riparian habitats, but only as long as the amount released is measured against the needs of the habitat. A final impact is the loss of insects, birds, and mammals that act as plant and crop pollinators. Hummingbirds, bees, wasps, moths, butterflies, and bats function as effective pollinators that can be harmed by pesticides and loss of habitat. Education programs may help inform future residents about their potential benefits, and about what environmentally friendly methods are available for pest control.

Regulations Governing Sensitive Vegetation and Wildlife Species

The Endangered Species Act of 1973 allows the U.S. Fish and Wildlife Service the authority to protect threatened or endangered wildlife and plant species. However, not all sensitive plants and wildlife are designated as such. In fact, there are only 13 wildlife and plant species in Maricopa County that are on the Endangered Species List. The EPA Office of Pesticide Programs is responsible for ensuring that a pesticide will not pose unreasonable adverse effects to human health and the environment. Information on pesticide use limitations intended to minimize impacts on threatened and endangered species is available for each county on the EPA Endangered Species

Protection Program website. The Arizona Native Plant Law, administered by the Arizona Department of Agriculture, was established to protect unique Sonoran Desert vegetation, such as the ocotillo, yucca, mesquite, paloverde, ironwood, and the saguaro, barrel, cholla, prickly pear, and hedgehog cacti.

Cultural Resources

Cultural resources reflect our prehistoric, historic, and traditional heritage. Maricopa County was home to prehistoric people for thousands of years up until about 1400 AD. Late archaic peoples hunted in the region and may have settled in what is now Maricopa County. The Hohokam were the first to permanently settle in the Salt River Valley. Discoveries of sites occupied by these people are still being made today, although much has been destroyed by the progress of civilization. Evidence of the Hohokam civilization constitutes the most significant archaeological resources in the region.

Maricopa County recognizes the importance of cultural resources as emphasized in the *Desert Spaces Plan*. In October, 1995, the MAG Regional Council adopted the *Desert Spaces Plan* as a commitment to the conservation and preservation of natural and cultural resources. An inventory of cultural resources was completed and includes:

- Properties and districts in Maricopa County that are on the National Register of Historic Places
- National Historic Landmarks in Maricopa County
- Administrative units that are defined by their cultural resources
- Areas within Maricopa County that have been the subject of cultural resources overviews or of large-scale surveys

This Comprehensive Plan acknowledges the rich historic legacy inherent to the region and supports the policies and recommendations presented in the *Desert Spaces Plan*. Cultural resources are extremely valuable for scientific, historic, and environmental research as educational opportunities and as attractions to the tourist industry.

The National Historic Preservation Act of 1966, amended in 1980 and 1992, establishes the role of the Federal government in partnership with state and local governments, Indian communities, and private organizations and individuals in the preservation of prehistoric and historic resources of the United States. It is the policy of the Federal government to provide for the preservation of prehistoric and historic resources and to assist state and local governments, Indian communities, and the National Trust for Historic Preservation in expanding their historic preservation programs and activities. The National Trust for Historic Preservation, formed in 1949, preserves and administers sites, buildings, and objects that are significant in American history and culture. The Secretary of the Interior is authorized to maintain a National Register of Historic Places

composed of sites, buildings, districts, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

Within Arizona, the State Historic Preservation Office (SHPO) assists individuals and groups in the identification, evaluation, protection, and enhancement of historic and archaeological properties. SHPO is responsible for nomination of eligible historic and archaeological properties to the National Register of Historic Places, for performing statewide surveys to identify and evaluate historic structures and archaeological sites, and for reviewing federal and state actions that may affect historic and archaeological properties. They present public education and awareness programs and offer technical assistance to owners of historic properties, local governments, and local preservation commissions. The Arizona Register of Historic Places has adopted the National Register criteria for evaluating eligibility of the state's districts, sites, buildings, structures, and objects worthy of preservation. The Arizona Historic Sites Review Committee reviews nominations and advises the State Historic Preservation Officer on properties that should be placed in the National and Arizona Registers of Historic Places. The Arizona Archaeology Advisory Commission has been instrumental in the development of educational programs such as Arizona Archaeology Awareness Month, Archaeology Expo, and the Site Steward Program. Many other agencies, groups, and individuals at the federal, state, and local level are involved with historic and prehistoric preservation.

Parks, Open Space, and Visual Resources

Geologically, Maricopa County is in the Sonoran Desert section of the Basin and Range Physiographic Province of the southwestern United States. This province is characterized by steep, discontinuous subparallel mountain ranges separated by broad alluvial-filled valleys or basins. The development of the Salt and Gila River drainage ways and erosion of the mountain blocks resulted in the topographic features of today.

Conservation and management of natural resources and open spaces is critical to the quality of life in the county. The Comprehensive Plan seeks to establish a network of protected open spaces that correspond to regionally significant mountains, rivers, washes, and upland deserts. Specific policies for mountainous areas include protection of ridge lines, enclosed terrain, and foothills that buffer mountains. River and wash policies include discouraging development within 100-year floodplains, maximizing wildlife habitat and native vegetation along waterways, and management principles to protect the natural riparian habitat of the region.

Parks and recreation facilities are a form of secured open space that provide the foundation for a coordinated outdoor recreation system and contribute to the county's quality of life. Existing publicly-owned recreation areas include neighborhood and community parks, Maricopa County regional parks—Maricopa County administers the largest county parks system in the country—federally managed multiple-use and

wilderness areas, State Game and Fish lands, and municipal mountain preserves. These lands provide recreational opportunities within or near urbanized areas. However, the rapid expansion of the urban area has resulted in increasing demand for these amenities. The Comprehensive Plan recommends acquisition of open space to meet the passive and active recreation needs of the region's population.

Complementing open spaces and parks are visual resources. Scenic corridors and vistas offer county residents the opportunity to view the natural environment without man-made intrusions. Major rivers and washes thread through the region providing uninterrupted views of mountains, vegetation, and wildlife native to the county. Major roads traverse picturesque landscapes, offering motorists scenic vistas as they travel.

Protecting open space provides regional environmental, economic, social, educational, and recreational benefits. Some of these benefits are more quantifiable than others, but they all have an influence on the lives of present and future generations.

Hazardous Materials

The generation, handling, disposal, and cleanup of hazardous waste is one of this country's primary environmental challenges. Improper disposal and management of hazardous wastes, hazardous substances, and toxic chemicals have created substantial problems for government agencies in the planning, design, and construction of new developments and facilities. These wastes consist of chemical products, biological products, fuels, petroleum products, explosives, acids, fertilizers, pesticides, radioactive materials, and various industrial wastes.

GOALS, OBJECTIVES, AND POLICIES: ENVIRONMENT

Two environmental goals have been established through the comprehensive planning process for Maricopa County that specifically address the natural and human environment:

Goal 1: Promote development that considers adverse environmental impacts on the natural and cultural environment, preserves highly valued open space, and remediates areas contaminated with hazardous materials.

Goal 2: Improve air quality and reduce noise impacts.

With these goals the following objectives and polices apply:

GOAL ONE

Objective E1 Encourage preservation of significant mountainous areas with slopes over 15% for parks, open space, and/or compatible recreation use.

Policy E1.1 Conduct site evaluations in the planning stage.

Policy E1.2 Explore incentives and options for preservation.

Policy E1.3 Refine existing topographic classification system.

Objective E2 Promote development that is compatible with the visual character and quality of the site.

Policy E2.1 Encourage guidelines for building construction, modification, and landscaping that reflect community or regional character.

Policy E2.2 Encourage preservation of scenic corridors and vistas.

Objective E3 Promote the appreciation and preservation of significant archeological and historic resources within the framework of state and federal laws, regulations, and guidelines.

Policy E3.1 Conduct surveys and evaluations for cultural resources as required by the Arizona Antiquities Act, the State Historic Preservation Act, the National Historic Preservation Act, and other applicable laws, regulations and guidelines.

Policy E3.2 Implement mitigation measures for cultural resources as required by the Arizona Antiquities Act, the State Historic Preservation Act, theNational Historic Preservation Act, and other applicable laws, regulations and guidelines.

Policy E3.3 Consider alternative funding sources for impact avoidance or mitigation of impacts to significant cultural resources.

Objective E4 Encourage the protection of habitat within the framework of state and federal laws, regulations, and guidelines.

Policy E4.1 Identify priority habitat areas subject to development in compliance with the Endangered Species Act and other applicable laws, regulations and guidelines.

Policy E4.2 Participate in the inventory and classification of habitat for noted important species in priority areas if required by state or federal laws, regulations and/or guidelines.

Policy E4.3 Develop habitat conservation plans for protected species if required by state or federal laws, regulations and/or guidelines.

Policy E4.4 Explore incentives to preserve habitat.

Policy E4.5 Explore methods to acquire lands classified as priority habitat areas as part of an open space plan.

Objective E5 Promote the protection and preservation of riparian areas within the framework of state and federal laws, regulations, and guidelines.

Policy E5.1 Encourage site evaluation and classification of riparian areas as required by the U.S. Army Corps of Engineers 404 permit program or by other state or federal laws, regulations and/or guidelines.

Policy E5.2 Consider incentives and options for preservation.

Objective E6 Encourage the reduction of pollutants in rivers and streams within the framework of state and federal laws, regulations, and guidelines.

Policy E6.1 Cooperate with the Arizona Department of Environmental Quality bi-annual Water Quality Assessment Report in accordance with the Clean Water Act.

Policy E6.2 Apply the National Pollutant Discharges Elimination System (NPDES) Urban Stormwater Control Program as required by the Clean Water Act.

Objective E7 Discourage new development in major 100-year floodplains.

Policy E7.1 Ensure that local floodplain management regulations remain in conformance with state flood control statutes and the National Flood Insurance Program (NFIP) Rules and Guidelines.

Policy E7.2 Review proposed floodplain uses and issue only appropriate permits and clearances.

Policy E7.3 Review existing 100-year floodplains as necessary against changed conditions and obtain revisions through the Federal Emergency Management Agency (FEMA) where necessary.

Policy E7.4 Encourage flood identification studies in areas where development is imminent or ongoing to identify 100-year flood hazard areas.

Policy E7.5 Continue public education efforts pertaining to the judicious uses of flood-prone properties.

Objective E8 Encourage protection and enhancement of future water and groundwater supplies within the framework of state and federal laws, regulations, and guidelines.

Policy E8.1 Encourage development in accordance with state and federal laws, regulations, and guidelines that govern water quality.

Policy E8.2 Encourage groundwater recharge alternatives for water disposal for new industrial facilities.

Policy E8.3 Follow water conservation guidelines as set by the Arizona Department of Water Resources.

Policy E8.4 Encourage development which complies with the Arizona Aquifer Protection Permit program.

Policy E8.5 Encourage agricultural uses of fertilizers and pesticides that reduce risk of groundwater contamination.

Policy E8.6 Encourage the reuse of reclaimed effluent and treated industrial wastewater.

Objective E9 Encourage the cleanup and development of brownfield sites within unincorporated Maricopa County within the framework of state and federal laws, regulations, and guidelines.

GOAL TWO

Objective 2E1 Support efforts by the Maricopa County Department of Environmental Services to reduce emissions sufficiently to reach and maintain National Ambient Air Quality Standards by 1999 in county non-attainment areas.

Policy 2E1.1 Encourage the reduction of unpaved roads within the PM_{10} non-attainment area.

Policy 2E1.2 Encourage the reduction of unpaved shoulders within the PM_{10} non-attainment area.

Policy 2E1.3	Encourage the replacement of (non-emergency) vehicles with clean burning fuel vehicles.
Policy 2E1.4	Provide clean fuels refueling facilities at county vehicle fueling stations.
Policy 2E1.5	Encourage the reduction of unpaved commercial parking in the non-attainment area and encourage all commercial parking in non-attainment area to be paved.
Policy 2E1.6	Encourage appropriate transit facilities in new residential development.
Policy 2E1.7	Within the constraints of existing development and site topography, encourage developments to have through mile and ½ mile streets to allow alternate mode facilities, where appropriate.
Policy 2E1.8	Encourage all construction activities to use the best available control measures, as required by Environmental Services, to control emissions.
Policy 2E1.9	Encourage all new construction to use clean burning fireplaces, if fireplaces are installed.

Objective 2E2 Minimize vehicle traffic noise on sensitive land uses.

Policy 2E2.1	Develop performance standards for noise for property fronting arterials.
Policy 2E2.2	Encourage the consideration of noise impacts in site planning.
Policy 2E2.3	Enforce muffler requirements.

Objective 2E3 Promote reduction of existing noise problem areas.

Policy 2E3.1	Encourage technological innovation to reduce roadway noise.
Policy 2E3.2	Consider additional mitigation measures, including bypass routes, for severe problem areas.

GOALS, OBJECTIVES, AND POLICIES: ENVIRONMENTAL EFFECTS

Three additional goals have been established through the comprehensive planning process for Maricopa County that specifically address environmental effects of future growth:

Goal 1: Encourage development that considers environmental impacts on air quality, water quality, and sensitive plant and wildlife species, as well as the impacts that noise exposure has on health and quality of life.

Goal 2: Encourage development that protects, preserves, enhances the use of (where appropriate), and raises the public's appreciation of prehistoric, historic, and archaeological sites, buildings, structures, and objects.

Goal 3: Encourage development that minimizes environmental hazards.

With these goals the following objectives and polices apply:

Objective EE1 To help improve air quality, encourage mixed use development that reduces vehicle miles traveled (VMT).

Policy EE1.1 Encourage land use configurations for all new development that minimizes trip lengths and vehicle trips.

Policy EE1.2 Encourage development master plans that offer a mix of residential, commercial, employment, and community service land uses.

Policy EE1.3 Encourage a balance of employment, housing, and retail within new developments that minimizes or eliminates vehicular travel between work, home and shopping.

Policy EE1.4 Encourage provisions for using alternative modes of transportation in new development, including transit stops, bicycle paths, and pedestrian walkways.

Policy EE1.5 Encourage the use of alternative fuel and electric powered vehicles for short trips within mixed use development.

Objective EE2 To help improve water quality, encourage development that minimizes land disturbance to reduce soil erosion and sedimentation in rivers, streams, and washes.

Policy EE2.1 Encourage development that minimizes blading, cutting, and filling.

Policy EE2.2 Encourage development that minimizes disturbance of the natural desert environment and utilizes native soils, plants, and existing topography.

Objective EE3 To help improve water quality, encourage wastewater treatment coordination efforts in newly developing areas.

Policy EE3.1 Encourage the direct use of treated wastewater for non-potable uses, such as agriculture irrigation, golf course and landscape watering, cooling water for power plants, and dust control, to decrease wastewater discharges into surface water.

Policy EE3.2 Encourage the use of treated wastewater to supply vital ecosystems with water flow when water diversion upstream has decreased the natural flow to the areas.

Policy EE3.3 Encourage the organization of wastewater treatment efforts among multiple users.

Objective EE4 Encourage protection and preservation of sensitive plant and wildlife habitat and riparian areas within the framework of state and federal laws, regulations, and guidelines.

Policy EE4.1 Encourage protection of plants identified by the Arizona Native Plant Law.

Policy EE4.2 Encourage protection of all endangered and threatened plants and wildlife designated on the Endangered Species List for Maricopa County.

Policy EE4.3 Encourage the development of corridors linking established and proposed open space areas to allow migration of wildlife and encourage biodiversity of species.

Objective EE5 Encourage noise abatement in new development located near noise generating activities, according to federal, state, and local regulations and guidelines.

Policy EE5.1 Encourage compatible land uses in noise problem areas.

Policy EE5.2 Encourage disclosure of noise control problems for areas known to have existing problems.

Policy EE5.3 Encourage public education emphasizing an individual's responsibility to understand noise control issues and the responsibility each citizen has in noise abatement.

Policy EE5.4 Promote development that uses the latest available energy efficiency technology in building materials and construction practices.

Policy EE5.5 Support compliance with Arizona Revised Statute §28-8461 and §28-8481 relating to land use compatibility and consistency with the high noise or accident potential generated by military airport and ancillary military facility operations.

Objective EE6 Encourage monitoring and evaluation of all sites prior to developmentfor evidence of prehistoric, historic, and significant archaeological sites, buildings, structures, and objects.

Policy EE6.1 Encourage cultural resource surveys or building assessments to be completed prior to development activity, with review of results by the state historic preservation office for comment and proposed action, to determine the presence or absence of historic resources.

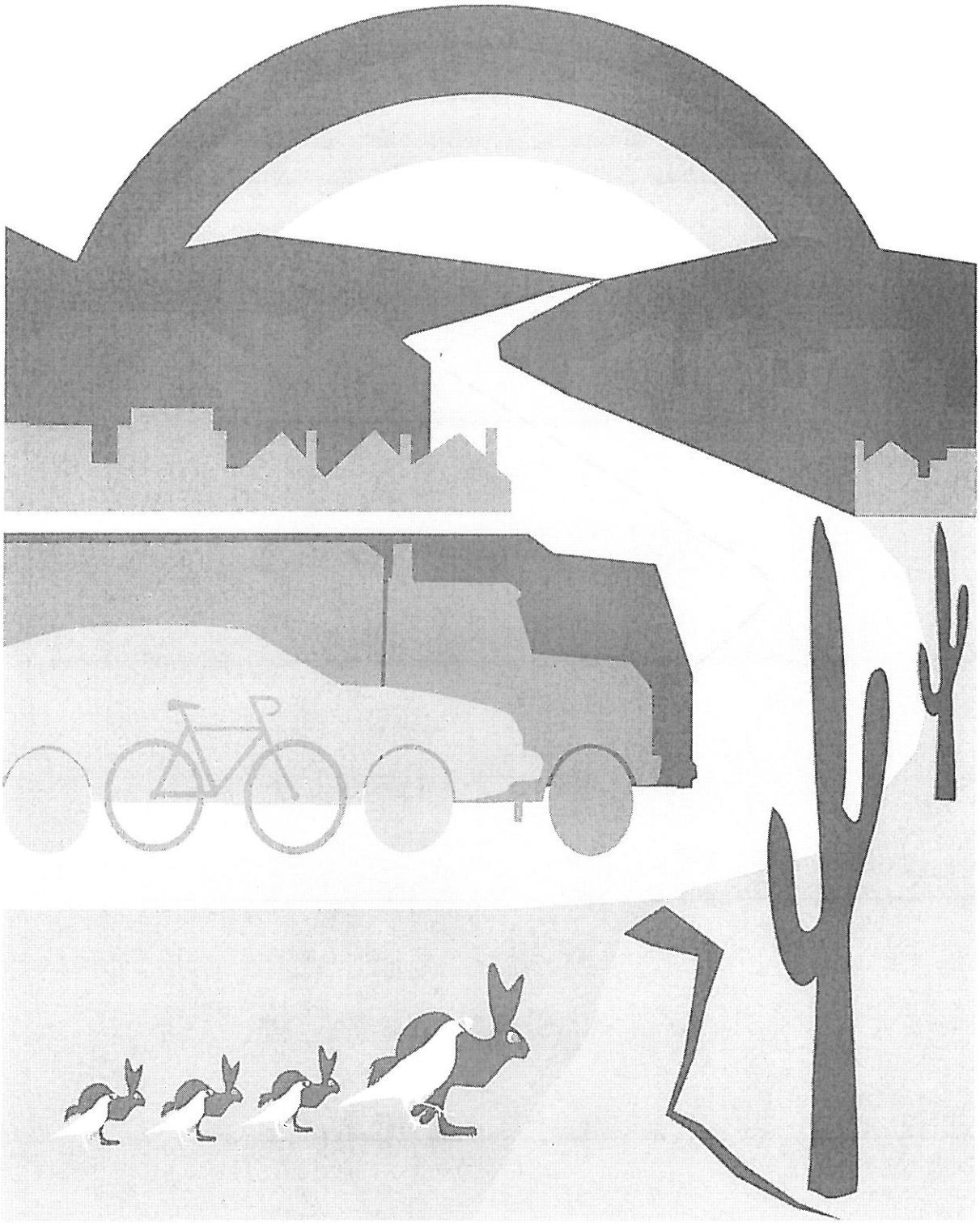
Policy EE6.2 Encourage appropriate treatment measures be taken when significant prehistoric, historic, or archaeological sites, buildings, structures, and objects may be adversely impacted.

Objective EE7 Encourage development that protects air quality, water quality, and water resources; that minimizes soil and waterway disturbance; that mitigates noise problems; and that preserves historic resources.

Policy EE7.1 Promote development that minimizes grading and blading of the landscape.

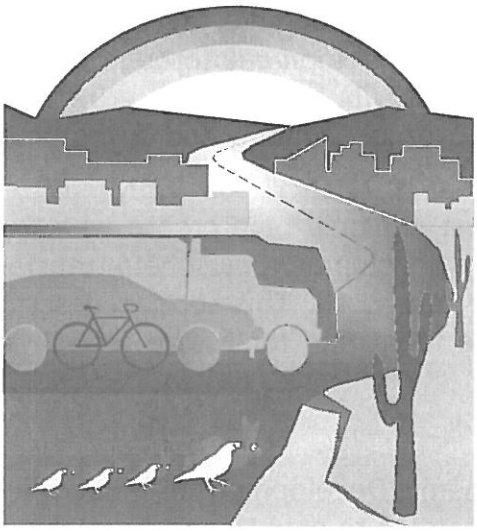
Policy EE7.2 Promote development that emphasizes protection of waterways.

COMPREHENSIVE PLAN ELEMENTS
Economic Development



ECONOMIC DEVELOPMENT

INTRODUCTION



A sound economy is important to the livelihood and well-being of Maricopa County residents and communities. Defining a vision for economic and community development requires a thorough assessment of the region's economic potential, needs, opportunities, and constraints.

Most economic indicators show the region will continue to benefit from business expansions and relocation, tourism, retail trade, services, construction, and value-added agriculture. County residents have expressed an interest in an economic climate that can expand business opportunities in the face of new challenges. Therefore, the region must expand its economy on the basis of available resources, ensuring that development is balanced with the surrounding environment. Under this scenario, communities will become well established or revitalized, with jobs and housing opportunities in balance, while the need to travel long distances for jobs, goods, services and recreation is diminished.

The vitality of communities in Maricopa County is enhanced through active participation of residents in community planning, marketing, and development. Citizen groups that originally participated in the Comprehensive Plan may become strong advocates, participate in its execution, and scrutinize its results.

The overall business climate in the region should be enhanced through: state, county, and local actions and initiatives; tax and business incentives policies; the availability of capital; and the deployment of infrastructure and services. To enhance the county's economic development opportunities, the region should be supplied with affordable housing and community facilities. In this manner, neighborhoods and central business districts will be revitalized, while labor training and quality educational programs and facilities become accessible to residents. This should become a draw for new residents and economic enterprises alike.

Maricopa County has the power to intervene as a catalyst or facilitator for quality development in the region. Thoughtful land use decisions, comprehensive transportation planning, and sensitive environmental controls, combined with economic development opportunities, should aid in the generation of quality jobs and contribute to the enhancement of the quality of life for residents and communities.

ECONOMIC DEVELOPMENT

Additional background information is available in the Economic Development Element Background and Analysis Report 1995-2020, published in 1996.

ISSUES FOR ECONOMIC DEVELOPMENT

The economic and physical transformation of Maricopa County will occur as a result of a myriad of physical, political, and socioeconomic factors that will influence the form and direction of growth and development through the year 2020. Forces outside of the county will also contribute to future growth and development, generating impacts within the internal economy and development patterns.

To be beneficial, economic development must not only help create wealth, it must also generate community benefits. Future development must help transform Maricopa County into a better place to live and work. This section describes programs and "economic clusters" that were identified for future growth and enhancement.

Cluster Business Opportunities

The Governor's Strategic Partnership for Economic Development (GSPED) will be the vehicle for implementation of policy pertaining to growth and development within the state. These policies are embodied in the State of Arizona's Strategic Plan for Economic Development (ASPED). Ten economic clusters were identified for GSPED action in the ASPED: bioindustry; environmental technology; food fiber and natural products; high-tech industry; minerals and mining; optics; tourism and experience; transportation and distribution; software; and retirement communities. Of these, the following are the most promising for strengthening and expanding the economy of the county:

Environmental Technology

Businesses that create and provide products and services that utilize technology to (a) monitor, eliminate, control, treat, and prevent pollution; and (b) conserve and restore natural resources.

Food, Fiber and Natural Products

Growth, processing, and distribution of plant and animal products including edible crops, wine, cotton, livestock, processed foods, and forestry products.

Minerals and Mining

Development, processing, and supply of mineral resources and energy.

Tourism

Recreational and visitor facilities and services built around Arizona's natural beauty. This includes: cultural, historical, and natural attractions; amusement parks; eating/drinking establishments; lodging and resort facilities; film production; entertainment

services; sports and recreational attractions; and traveler and transportation services.

Transportation and Distribution

Physical infrastructure, capital goods, and services needed to carry passengers and deliver tangible products locally and regionally via air, rail, road, and pipeline.

Certain industry groups stand out within each of these clusters in the county, offering the most potential for expanding and strengthening its economy.

Retirement Communities

Direct and indirect impacts from retirement communities include construction, employment, retail expenditures, bank deposits and other revenue generated by the retirement sector. This also includes impacts generated in the service and recreation sectors.

Business and Recreation Services

Within this group, the golf industry appears to offer the most promise for value-added products and services. The golf industry is strongly established in retirement communities such as Sun City, Sun City West, and Sun Lakes. Spin-offs from this industry emerge in the design and engineering of golf courses and ancillary facilities: turf production and maintenance; golf course construction; production of golf equipment; clothing; souvenirs; uniforms; restaurants; catering; travel services; and others.

Manufacturing

Maricopa County offers the potential to become a prime candidate for the location of a select group of manufacturing firms. In particular, this includes those looking for freestanding sites in rural areas, proximity to large population centers, and the availability of key infrastructure and labor supply.

Manufacturers of home components and/or manufactured housing which appeal to rural or retirement living could be attracted. The rural nature of much of the county may attract industries that might be best suited away from populated areas.

Agriculture

Agribusiness development opportunities could be systematically examined and encouraged through GSPED and the Agribusiness Council of Arizona. Agriculture is a principal contributor to the region's economy and a major land user. Limited water supply, global competition, urban encroachment, and changes in federal subsidy policies will force agriculture to be more diversified in the region.

The expansion of value-added economic activity could become possible in food processing, in particular, canning and freezing, vegetable dehydration, value-added cotton, greenhouses, ornamentals, turf grass, ethanol, and others. The potential transformation of farms into commercial enterprises and dude ranch facilities could be examined as a means of promoting and attracting tourism. Living in an agricultural environment may appeal to many. Opportunities for spin-offs in the aquaculture industry should also be examined, as this sector appears to have substantial unrealized potential in the region. The opportunities the protection of agriculture could provide for income and revenue, small town preservation, and open space in the region should be examined.

The lack of capital, planning, marketing, and managerial experience are barriers that will need to be addressed to build on existing agricultural resources. Traditional farming practices may have to yield to the realities of water and land availability, quality limitations, and cost.

Mining

This industry will require further assessment to ascertain its potential. The exploitation of gravel and sand for construction is the most important mining activity within the county. At present, no coordinated efforts exist to evaluate this potential.

Tourism and Recreation

Maricopa County's natural and artificial attributes offer opportunities for further development of tourism and recreation. For example, abundant scenic resources may provide the impetus for attracting and expanding the film industry. As with mining, no coordinated effort to promoting the industry exists at present.

The GSPED could be the instrument to assist the county plan and promote opportunities around its tourism and recreation resource base. The State of Arizona's Office of Tourism and the Phoenix and Valley of the Sun Convention and Visitors Bureau, along with federal, state and county recreation agencies may also contribute to the development of tourism and recreation opportunities in the planning area.

Transportation and Distribution

Along with manufacturing, the planning area could position itself to attract and accommodate transport, warehousing, and distribution facilities. These facilities are fundamental for expanding the region's economy. As with manufacturing, these need to be located along major transportation routes and in the vicinity of production centers.

Other industry groups with value-added potential in the region include services for the large permanent and visiting retirement population, including planned residential development, health maintenance, recreation, commercial, and hospitality services.

The growth and expansion of identified industry groups may be inhibited by the lack of coordinated local planning and sector promotion capacity, infrastructure, and specialized labor.

The region will need to work to improve its basic economic infrastructure and to expand its capacity to tap business development inducements identified in the *Economic Development Background and Analysis Report*. Other inhibiting factors include the lack of coordination in planning, promotion, and marketing of the county's assets and opportunities to economic enterprises.

Community Development

Economic development in Maricopa County will thrive when accompanied by stronger, better organized communities supplied with infrastructure, services, and amenities. Communities of the future will be judged in terms of their capabilities to provide for the economic needs of their citizens. This includes the capacity to supply goods and services that contribute to the health, safety, convenience, and general welfare of the public. Maricopa County can become a catalyst in the provision of these facilities, with public policy directed at strengthening and shaping communities and their environment. Communities in the region may become more cooperative, rather than competitive, working together to promote development and shape the quality of life sought by individual residents.

The vision for community development will necessitate a definition of policy to address community issues. These limiting issues include: lack of organized community representation; limited planning; a limited tax base; and limited financial and infrastructure resources. The dispersed geographic pattern of many communities in the region makes it difficult to address needs in a cost effective manner. This suggests a policy of overall resource decentralization with concentration in areas with greatest community and economic impact potential.

Business Climate

The county has abundant land supplied with a regional infrastructure for new development. Maricopa County benefits from the vast array of incentives offered through the state to expand its business base. However, communities in the planning area lack the organizational capacity to effectively tap those resources.

The county will follow the greater Phoenix metropolitan area in economic development opportunities. It is envisioned that Maricopa County will play a greater role in regional and community planning. In this capacity, the county will act as a catalyst to promote job creation through new business development, attraction, expansion, and retention. Due to its rural character, the unincorporated areas are not expected to attract industry that relies heavily on specialized labor, research centers, or universities. The employment base will likely remain tied to the basic resources of agriculture, tourism, recreation, construction, retail, services for retirement communities, and limited manufacturing, warehousing, trucking, and distribution.

Regionalism

The agricultural and retirement industries maintain regional organizations to support and advance their interests. Other regional organizations are tied to the educational school system, water irrigation districts, and public utilities. In addition, MAG provides planning and research services to the region.

Implementation of the Comprehensive Plan will require extensive consultation and cooperation with municipalities, state, and federal agencies. It will also require close cooperation with other organizations to accomplish the goals, objectives and policies of the Plan.

The Role of Maricopa County

Maricopa County may have a role in economic development through a number of means including:

- Financial support through regional economic development agencies and the county Office of Economic Development.
- Promotion of tourism through the Arizona Department of Tourism and the Phoenix and Valley of the Sun Convention and Visitors Bureau.
- Promotion of professional sports through the Maricopa County Sports Authority and the Stadium District.
- Direct financing of industrial, residential and health facilities through the issuance of bonds through the Industrial Development Authority of the County of Maricopa.
- Road improvements through ADOT and MCDOT.
- Facilitation of plan approvals by means of a One Stop Shop established in the Planning and Development Department.
- Flood control projects through the Flood Control District of Maricopa County.
- The construction of facilities utilizing resources of the Community Development Department, the Library District, and the Parks and Recreation Department.

Maricopa County may also assist with labor recruitment, screening, testing, and training for established enterprises through the Maricopa County Private Industry Council (PIC) JTPA Program. In addition, the county may promote the attraction and expansion of job-creating enterprises through the Western Maricopa Enterprise Zone, and facilitate the procurement of grants from federal, state, and corporate sources.

GOALS, OBJECTIVES, AND POLICIES

Goals, objectives, and policies reflect the direction that will be taken by the Maricopa County government in shaping economic growth and development in the planning region. These are designed in consideration of the vision outlined in this plan element within each of the designated strategic planning areas of the Comprehensive Plan, up to the year 2020.

The goal of the economic development element is to:

Promote a growing, balanced, efficient, and diversified economy, consistent with available resources, that enhances quality employment opportunities, improves quality of life, and is sensitive to the natural and cultural environment.

Objective ED1 Expand quality employment opportunities and capital investment.

Policy ED1.1 Encourage the county to direct resources to promote business attraction, retention and expansion.

Policy ED1.2 Encourage the completion of an Economic Development Implementation Plan.

Policy ED1.3 Encourage, coordinate, and support the promotion of employment in growth clusters, mainly value-added farming, retirement, tourism, manufacturing/distribution, and service sectors.

Policy ED1.4 Encourage the development of infrastructure, industrial parks, access roads, sewer, and water systems and the designation of employment centers in appropriate locations.

Policy ED1.5 Encourage and coordinate the formation of a "one stop" center for economic development.

Policy ED1.6 Encourage the brokerage of services to facilitate small business development.

Policy ED1.7 Encourage and secure the reauthorization of the Western Maricopa Enterprise Zone (WMEZ).

Policy ED1.8 Foster the formation of local nonprofit organizations to promote community and economic development in the region.

Objective ED2 Encourage employment opportunities proximate to housing.

Policy ED2.1 Encourage bonus provisions to reward development that improves the jobs/housing balance.

Policy ED2.2 Encourage the establishment of a "one stop" center for planning, zoning, and building permits to ensure prompt plan approvals.

Policy ED2.3 Encourage and facilitate research of alternatives for new communities, making the product of research available to the private sector.

Policy ED2.4 Encourage the sponsorship of events to showcase advances in the development of communities and transportation solutions.

Objective ED3 Foster community revitalization and development.

Policy ED3.1 Encourage neighborhoods and commercial revitalization initiatives.

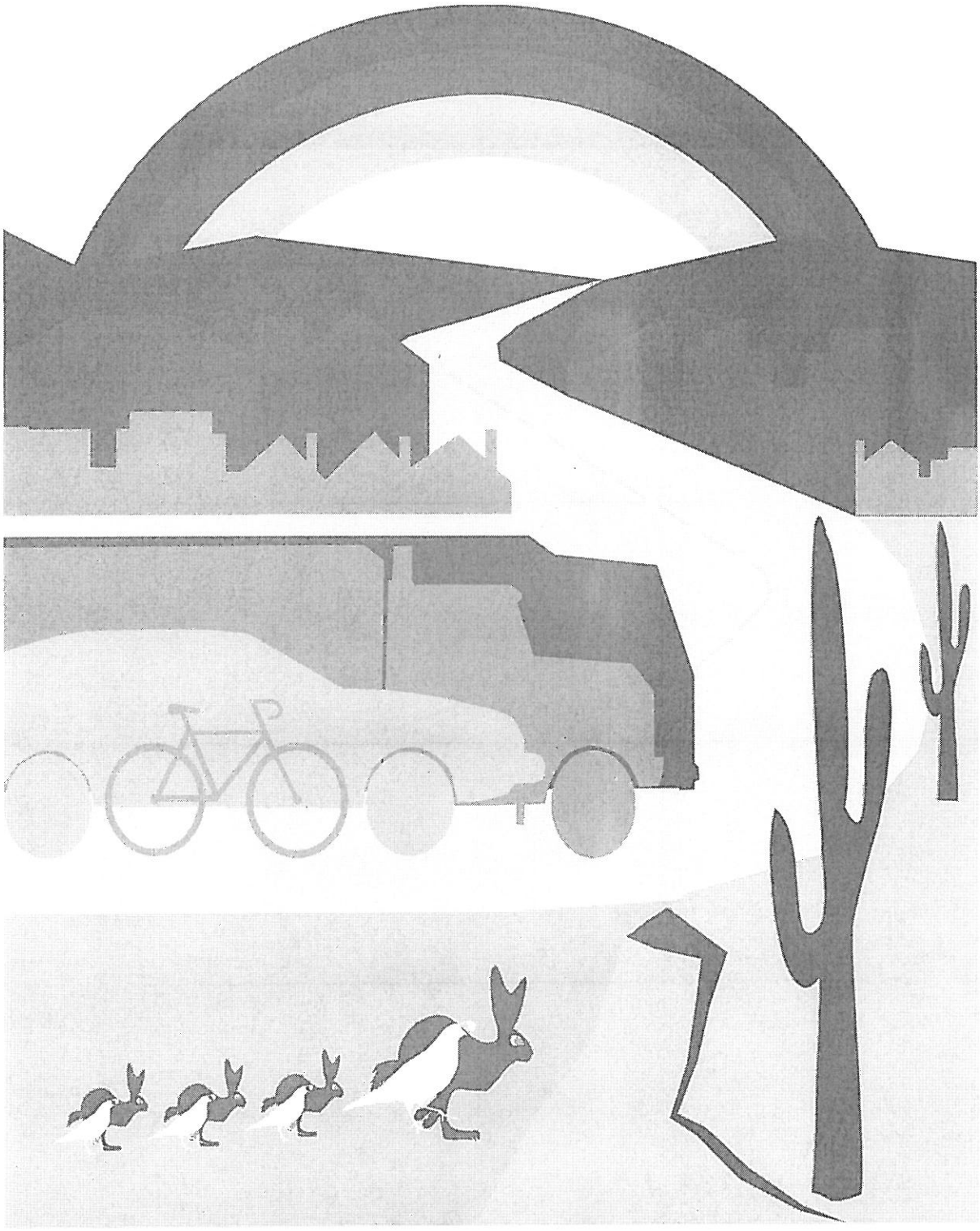
Objective ED4 Enhance opportunities for education and labor training in the region.

Policy ED4.1 Support state initiatives to establish "one stop" career centers.

Policy ED4.2 Encourage the maintenance of a databank with services through the Job Training Partnership Act.

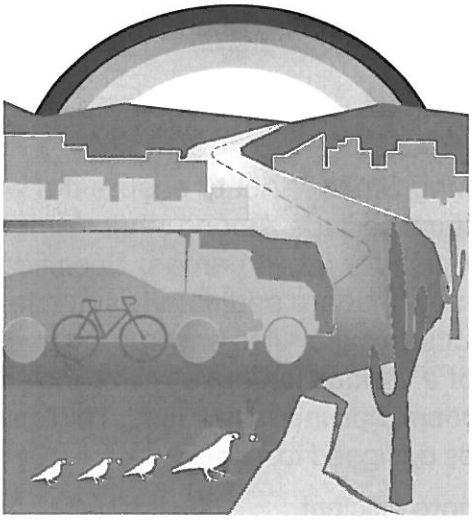
COMPREHENSIVE PLAN ELEMENTS

Growth Areas



GROWTH AREAS

INTRODUCTION



Accommodating growth in an efficient and functional manner is essential for Maricopa County to retain its unique Sonoran quality of life. It is this quality of life that has attracted people from all over the country in search of a mild climate, abundant recreational opportunities, and a strong economy. Because of these and other qualities, Maricopa County has been one of the fastest growing counties during the last several decades. While growth is an important part of Maricopa County's success, how and where growth occurs can have an impact on issues such as the environment, transportation systems, and budgetary constraints. Therefore, the Growth Areas element, in coordination with other Comprehensive Plan elements, helps ensure that growth occurs in a manner consistent with the goals, objectives, and policies established within this section.

Besides encouraging efficient growth patterns, Maricopa County also strives to achieve a balanced development pattern whereby housing and employment are more integrated rather than separated. Such integration helps reduce traffic congestion and infrastructure costs, and makes multimodal transportation and natural resource conservation more likely. As always, Maricopa County encourages innovative growth and development to meet the needs of Maricopa County residents. Further, Maricopa County encourages phasing development to coincide with the extension of urban services.

The Growth Areas element establishes criteria for identifying when and where growth should occur. As noted in the land use element, Maricopa County encourages urban growth within the urban service area where services, infrastructure, and facilities are readily available to serve residents' needs. Most of the urban service area is located within the General Plan Development Areas of the county's various jurisdictions. Those areas outside of the urban service area are generally not suitable for urban type growth (i.e. commercial, employment, and residential density greater than 1 dwelling unit per acre), but are generally suitable for rural growth that is consistent with the underlying zoning.

GROWTH AREAS

Supporting data for the Growth Areas element is found in the *Growth Areas Element Inventory and Analysis Report*. This data includes an overview of past, present, and future population and growth patterns, and a discussion of physical, built, and jurisdictional considerations for growth. Also included is an analysis of growth related issues identified by the numerous stakeholders that participated in the process, as well as a list of the goals, objectives, and policies established to help accommodate growth in an effective and thoughtful manner.

OVERVIEW

In 1998, the State of Arizona passed the Growing Smarter Act to ensure the wise management of growth and protect our state's natural heritage. Among other elements, Maricopa County is now required to include a plan for growth areas. Specifically, Maricopa County must identify those areas, if any, that are particularly suitable for planned multimodal transportation and infrastructure expansion and improvements designed to support a planned concentration of a various land uses. This includes residential, office/employment, commercial, tourism, and industrial uses. This mixed use planning must include policies and strategies designed to:

- Make multimodal transportation circulation more efficient
- Make infrastructure expansion more economical
- Provide for rational land development patterns
- Conserve significant natural resources and open space areas within growth areas, and coordinate their location to similar areas outside of growth areas
- Promote timely and financially sound infrastructure expansion

The Growth Areas element is important to Maricopa County's future because it allows Maricopa County to accommodate growth in an orderly and fiscally responsible manner that is sensitive to the natural environment and residents' quality of life. This is the type of growth that will keep Maricopa County economically, socially, and environmentally successful for many years to come.

GROWTH AREAS ISSUES AND CONSIDERATIONS

Although significant growth is expected to continue for the foreseeable future, where and when growth occurs is determined by a variety of factors. Both physical and built features can impact growth, as can land ownership and existing infrastructure. However, public opinions regarding growth and development are also important in determining growth patterns.

Included in this section is an overview of public issues, identified during the public participation process, regarding growth. Also included is a review of some of the potential physical, built, and jurisdictional considerations that may affect future growth and development patterns.

Growth Area Issues

Stakeholders involved in the planning process were very helpful in identifying a variety of growth-related issues and concerns. Although many issues were based on local concerns, a list of some of the most frequently identified countywide issues is included below.

- Preserve open space, especially hillsides and mountains
- Preserve water supply and quality
- Ensure that development pays for itself
- Ensure that private property rights are protected
- Evaluate and consider cumulative effects of growth and development
- Discourage aggressive annexation
- Increase land use and transportation planning coordination
- Preserve agriculture
- Growth should occur in an orderly manner

In general, stakeholders believe that strong growth in Maricopa County will continue for the foreseeable future. However, stakeholders in general also believe that local jurisdictions should do a better job of ensuring that there are adequate facilities to accommodate growth, and that they should cooperate to ensure that growth occurs in an orderly fashion.

Growth Area Considerations

Besides public attitudes about growth, there are also potential natural, built, and ownership constraints to growth. While not necessarily a complete list, this section presents a brief overview of some of these possible constraints.

Physical Considerations

Topography

Maricopa County varies considerably in terms of slope and elevation. Significant slope areas exist in the Goldfield, Superstition, and Mazatzal Mountains in the eastern portion of Maricopa County. Significant areas of slope are also found in the New River and Hieroglyphic Mountains in northern Maricopa County. Other areas of considerable slope include areas in and around the White Tank Mountains (west-central Maricopa County), Sierra Estrella Mountains (south-central Maricopa County), Belmont and Bighorn Mountains (western Maricopa County), Gila Bend and Painted Rock Mountains (southeast Maricopa County), Vulture and Harquahala Mountains (northwest Maricopa County), and the Crater and Sauceda Mountains on the Barry M. Goldwater Gunnery Range (southern Maricopa County).

Maricopa County encourages preservation of significant slope areas, especially those above 15%. For areas over 15% slope, the Maricopa County Zoning Ordinance provides guidelines for development to protect public health, safety, and welfare, and to minimize impacts to the existing character of such areas.

Floodplains

Floodplains are those areas that are susceptible to flooding during significant rain events. The most common delineation is the Federal Emergency Management Agency 100-year floodplain. The 100-year flood is defined as the flood level having a 1% chance of occurring within a year. It is important to note that the 100-year flood may occur more often than once every 100-years, and that it is not the maximum flood that can occur along a waterway.

Flooding typically occurs in major drainages, but can also occur in and along canals. Within Maricopa County, there are approximately 895 linear miles and approximately 252,000 acres of land within the 100-year floodplain. An additional 99,700 acres are located within the floodway, which is a particular area of the floodplain that has restrictions on the type of development that can occur. *Eye to the Future 2020* contains policies that discourage development within the 100-year floodplain.

Subsidence and Earth Fissures

In certain portions of Maricopa County, excessive water withdrawal has created land subsidence. When excessive water is removed from an area the weight of the overlying material compresses, causing land to settle and the ground to sink. The amount of identified subsidence that has occurred in Maricopa County varies from just a few inches to as much 18 feet.

When land does subside, it often does so in an uneven pattern. The result is a phenomenon known as Earth fissures, which are cracks in the ground surface that occur due to uneven land subsidence. Fissures generally begin as small fractures, but can expand over time due to water erosion. Depending on circumstances, fissures can form gullies as much as 50 feet wide and 10 to 15 feet deep. Once fissures begin, they tend to increase in number and length, spreading at uneven speeds and directions.

The effects of land subsidence and Earth fissures can be significant because they can cause significant damage to infrastructure (i.e. highways, railroads, utilities, irrigation systems, sewage disposal facilities, and built structures), increase flooding potential, increase groundwater pollution, and accelerate soil erosion.

Water Supply

Water in Maricopa County comes from both ground and surface sources. Groundwater is found in the numerous sub basins that are located both inside and outside the Arizona Department of Water Resources' *Active Management Areas*. Groundwater supply and depth varies throughout Maricopa County.

Surface water is also available in Maricopa County. Major surface water features include the Salt, Verde, Gila, Agua Fria, Hassayampa, and New Rivers as well as the Cave Creek, Skunk Creek, and Centennial Wash. Surface flow in the county's major rivers is controlled by a system of dams. However, should large or prolonged precipitation occur (including snow melt from outside Maricopa County) water may be released from reservoirs and create significant flooding.

The other important supply of surface water comes from the system of canals that bring water from the Colorado River. However, not all areas of Maricopa County have access to this water source, which can also have an impact on the size, location, and/or type of development.

Vegetation and Wildlife Habitat

One of the reasons many people come to Maricopa County is because of the unique Sonoran Desert environment. Indeed, various species of animals and plants in Maricopa County are found nowhere else in the world. As such, identifying and protecting critical species and environmentally sensitive areas is an important part of *Eye to the Future 2020*.

A variety of federal and state laws that protect biological resources help govern development. This includes the Endangered Species Act, the Clean Water Act, the National Environmental Protection Act (NEPA), and the Arizona Native Plant law.
A more in depth discussion of vegetation and wildlife is found in the *Environmental Impacts* element report.

Built Considerations

Infrastructure and Services

One of the most important considerations for growth is the availability of infrastructure and services. Both can dictate the type and timing of future development. The availability of infrastructure and services is especially important to support urban development.

One of the principles of *Eye to the Future 2020* is ensuring that growth occurs in an orderly and fiscally responsible manner. This includes ensuring that necessary infrastructure and services are available to meet the needs of future residents. When evaluating future urban development, Maricopa County analyzes whether the following urban services and infrastructure either exist or will be provided for future residents in a timely manner:

- All necessary roads
- All necessary flood control structures
- Adequate utilities (sewer, water, electric, natural gas, etc)

- Adequate capacity and appropriate proximity to elementary, middle, and high schools
- Appropriate emergency service (police and fire) response time
- Proximity to library facilities
- Adequate supply and appropriate proximity to parks and open space
- Proximity to commercial and large-scale employment opportunities
- Proximity to hospital/emergency medical facilities
- Opportunities for multimodal transportation
- Other services and infrastructure on a case by case basis

Locations having these services are known as the *Urban Service Area.*[1] The adequacy of infrastructure and services influences timing more than the specific locations of future growth. In addition, it is reasonable to conclude that since urban services more likely exist near urban areas, future growth is more feasible and appropriate near these locations.

Noise Generating Operations

Careful consideration must also be given to noise generating operations. Significant and sustained noise can affect health, sleep, and learning patterns. Prolonged exposure to loud noise can cause general community annoyance and possibly a reduction in property values.

There are many potential sources of noise throughout Maricopa County. While too many to detail, a brief overview of several prominent noise operations follows.

Airports

Given their potential noise and safety hazards, airports can impact the type of development that is appropriate in certain areas of the county. In particular, the type of airport plays a significant role in determining the impact it has on surrounding areas, as well as the suitability of specific uses.

Maricopa County contains a variety of airports, ranging from Sky Harbor International Airport to smaller general aviation airports located throughout the Phoenix metropolitan area. Of the existing airports, Luke Air Force Base and Williams Airport are of particular importance because of their potential impact on unincorporated areas. While both airports create certain noise and safety issues, they also have an important economic impact on Maricopa County and the entire state. As such, compatible land use planning around these airports is an important consideration and is required by Arizona Revised Statute §28-8461 and §28-8481 for the high noise or accident potential zone around Luke Air Force Base, Auxiliary Airfield #1, and the auxiliary field near the town of Gila Bend.

Automotive Proving Grounds

There are several automotive proving grounds located within Maricopa County. Owned and operated by their respective manufacturers, these facilities test the capabilities of automobiles. As such, noise (resulting from high speed testing) and security (desire to protect the design of new models) are important considerations in determining the location of appropriate land uses.

Major Roadways

Major roadways, especially highways, can generate significant vehicle noise.
While potentially annoying for certain uses, major roadways are an important part of growth and development. As such, major roadways can and should play a role in determining the location of future growth, especially for commercial and employment type uses.

Flood Control

The Maricopa County Flood Control District maintains over 70 flood control structures and facilities, including 22 dams and over 55 miles of major underground conduits and improved channels. These flood control structures are located throughout Maricopa County in both urban and rural areas. Without question, the location of existing and future flood control structures can impact the location and type of future development. While flood control structures minimize the impacts of floods onhuman safety, health, and welfare, they can also influence where specific development is and is not appropriate.

Ownership Considerations

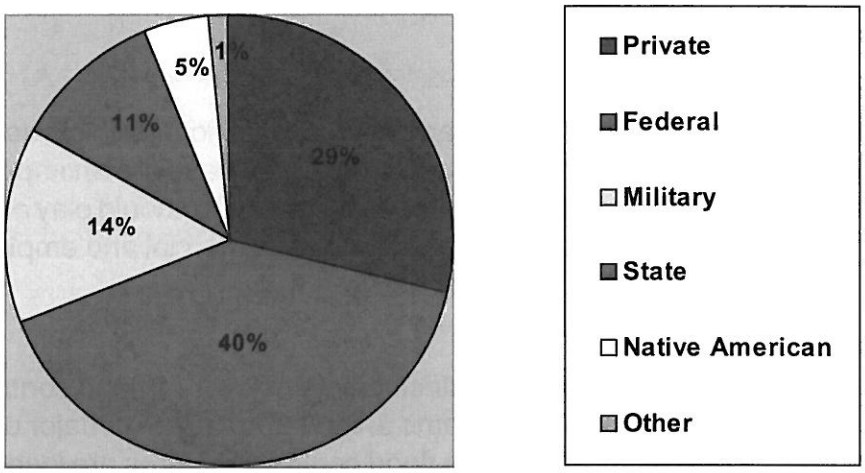
Besides potential physical and built constraints, land ownership can also impact growth and development. Of the over 9,000 square miles in Maricopa County, only about 29% is held in private ownership (Figure 8). Of the remaining land, approximately 40% is managed by the Federal government (Department of Interior, Department of Agriculture), 14% by the United State military, 11% by the State of Arizona, and 4.6% by Native American tribes. The remaining land is controlled by various entities, including Maricopa County. A brief overview of land ownership is included below.

Federal

The Department of Interior (Bureau of Land Management/BLM) and the Department of Agriculture (Forest Service, Bureau of Reclamation) are the largest landowners in Maricopa County. Among these agencies holdings are the 484,000 acre Tonto National Forest, 508,000 acres of wilderness areas, and approximately 1.5 million acres of other federally managed land. Many of these areas, especially the wilderness areas and the Tonto National Forest, will not be available for development. However, portions of BLM land may be available for either disposal or trade since many of these areas are administered according to the 1976 Federal Land Policy and Management Act.

Figure 8

Maricopa County Land Ownership



This law declared it is the policy of the United States to retain public lands in federal ownership unless it is determined, through a land use plan, that disposal of a particular parcel will serve the national interest. However, sale of such land must meet specific criteria.

State

The State of Arizona owns approximately 665,000 acres of land in Maricopa County. Under state charter, the Arizona State Land Department has the responsibility on behalf of beneficiaries to assure the highest and best use of the Trust lands. The Federal Enabling Act and State Constitution mandate that fair market value must be obtained from all Trust land transactions which include sales and commercial leasing. All revenues derived from the sale of Trust lands are placed in a fund which is administered by the State Treasurer. Trust beneficiaries include the public schools, colleges, hospitals, charitable institutions, and specialized schools as well as others. Given this well defined mission, development can and does occur on state-owned land.

Military (Barry M. Goldwater Gunnery Range)

Located 70 miles southwest of Phoenix, the Barry M. Goldwater Range provides 2.7 million acres for Air Force and Marine training, approximately one-third of which is located in Maricopa County. Air-to-ground gunnery targets comprise 40,000 acres, which leaves about 90% of the range undisturbed. The entire area is considered undevelopable.

Native American Communities

Various Native American tribes manage approximately 200,000 acres of land in Maricopa County. These tribes include the Fort McDowell-Apache, the Salt River Pima-Maricopa, the Gila River, and the Tohono O'odham. While development can occur on tribal lands, it is subject to the rules and regulations of the respective community.

Maricopa County

The Maricopa County Parks and Recreation Department owns and manages approximately 116,000 acres of regional parks throughout Maricopa County. These parks offer both passive and active recreation opportunities for all county residents. Because these are public parks, development is prohibited other than for park enhancements.

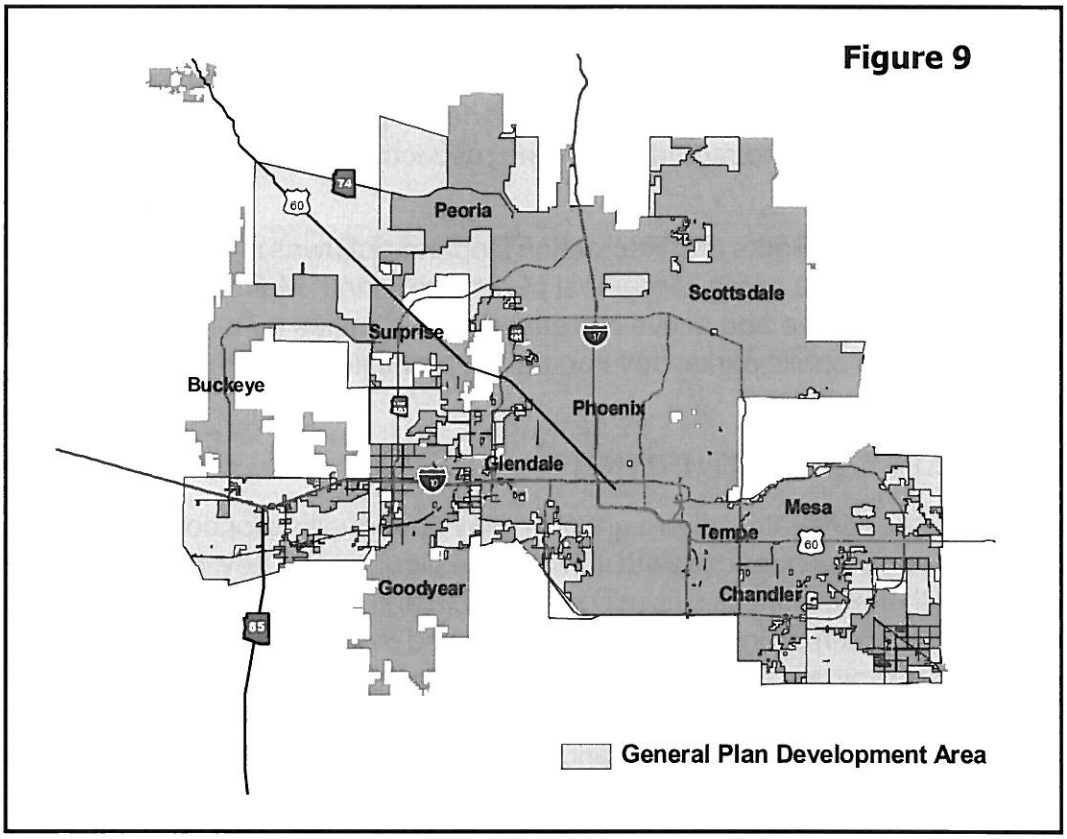
GROWTH AREA OPPORTUNITIES

Despite potential constraints, there are still many opportunities for continuing physical and socioeconomic growth in Maricopa County. The key, however, is to encourage growth that is done in a fiscally responsible and orderly manner. To help determine if growth is occurring in a fiscally responsible and orderly fashion, Maricopa County will continue to evaluate future development to ensure that it is consistent with infrastructure and service needs identified earlier in this report. . Based primarily on the need for services and infrastructure, Maricopa County has identified areas where growth and development should occur over the next several years.

General Plan Development Areas

The General Plan Development Area (GDPA) is unincorporated area that is likely to be annexed by a city or town in the future, and is therefore included in an adopted municipal general plan. These municipal general plans often provide specific recommendations for proposed land use.

Currently, there are nearly 375,000 acres of unincorporated land within the GDPAs (Figure 9), to accommodate future growth over the next several years. Future growth is encouraged within GDPAs for several reasons. First, development in these areas will likely be annexed in the future. This is beneficial since municipalities have the ability to provide the types of services and infrastructure necessary to support urban development. Second, encouraging growth within the GDPAs is consistent with the goals, objectives, and policies already established in *Eye to the Future 2020*. Third, development in GDPAs represents orderly growth patterns that offer the best opportunity for mixed use development, as required under the Growing Smarter Act. Finally, development within the GDPAs helps Maricopa County fulfill other requirements under the Growing Smarter law. As noted, these requirements include:



- Making multimodal transportation circulation more efficient.
- Making infrastructure expansion more economical.
- Providing for rational land development patterns.
- Conserving significant natural resources and open space within growth areas, and coordinating their location to similar areas outside of growth areas.
- Promoting timely and financially sound infrastructure expansion.

County Area Plans

County Area Plans include areas that are generally located outside of a municipal general plan. However, urban growth opportunities do exist in specifically identified locations within these plans. These locations of higher intensity use (i.e. commercial, industrial, mixed use, and residential density greater than 1 dwelling unit per acre) were selected based on residents' input during the planning process, and as such would like to see them maintained. Those locations within area plans that have been identified for urban growth have several advantages. First, since they are based on recommendations identified during the plan development process, they are supported by the community they affect. Second, these locations are usually near existing

infrastructure and services needed to support higher intensity development. As such, they generally meet the requirements of the Growing Smarter law. Those portions of the Area Plans that are not designated for higher intensity are expected to develop in a more rural nature.

Development Master Plans

Eye to the Future 2020 recognizes Development Master Plans (DMP), also known as master planned communities, as a preferred type of development because of the opportunity to provide mixed land uses—an important component of the Growing Smarter requirements. Historically, DMPs have been allowed throughout Maricopa County. As such, Maricopa County will continue to evaluate DMPs on an individual basis to determine if they provide mixed use, multimodal development opportunities as encouraged under Growing Smarter, and that they either have or will provide the necessary infrastructure and services to support urban type development.

GOALS, OBJECTIVES, AND POLICIES

This section identifies comprehensive goals, objectives, and policies to address growth areas for unincorporated Maricopa County. These goals, objectives, and policies help support and implement *Eye to the Future 2020*, and are derived from the numerous stakeholders that provided information and recommendations.

The goal of the Growth Areas element is to:

Promote orderly, timely, and fiscally responsible growth in Maricopa County.

Objective G1: Encourage timely, orderly, and fiscally responsible growth within the General Plan Development Areas, within specifically identified areas of County Area Plans intended for higher intensity use, and within mixed use Development Master Plans.

Policy G1.1: Evaluate future development in concert with physical, built, and jurisdictional constraints.

Policy G1.2: Evaluate future urban development to determine if adequate infrastructure and services are available to meet the needs of future residents.

Policy G1.3: Within growth areas, evaluate future urban development to determine consistency with the guidelines of the Growing Smarter Act.

Objective G2: Evaluate growth areas to ensure continued feasibility and effectiveness.

Policy G2.1: Continue to update existing County Area Plans to determine appropriate growth areas, and develop new County Area Plans as necessary.

Policy G2.2: Periodically review General Plan Development Areas as they relate to growth areas, and make changes as necessary.

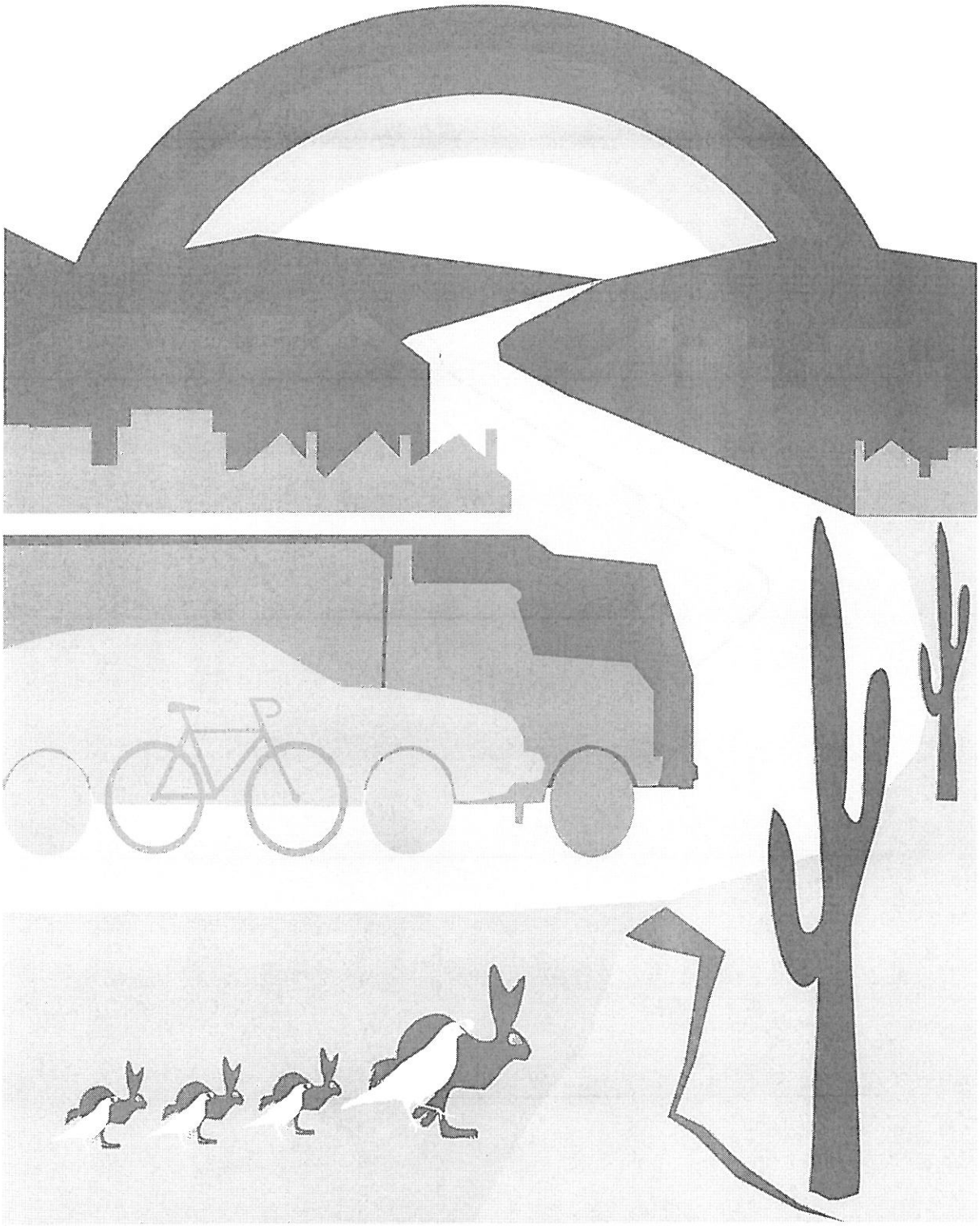
Objective G3: Maintain cooperation with stakeholders to help ensure that future growth is coordinated in an efficient manner.

Policy G3.1: Continue to solicit input from municipalities regarding future growth in unincorporated Maricopa County.

Policy G3.2: Work with residents and other stakeholders in the review of future growth and development.

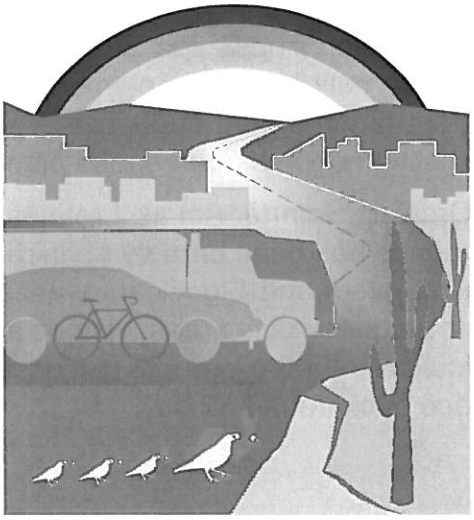
COMPREHENSIVE PLAN ELEMENTS

Open Space



OPEN SPACE

INTRODUCTION



Open space plays an important role in Maricopa County. It helps define our citizens and the communities in which we live. The availability of open space also provides important environmental benefits by protecting plant and animal habitats, providing places of beauty, mitigating air pollution, controlling erosion, supporting groundwater recharge, and moderating urban temperatures. Open space also enhances Maricopa County's quality of life by providing opportunities for active and passive recreation, as well as valuable public education. Moreover, even though the Phoenix metropolitan area has grown significantly during the past several decades, most residents are only a short distance to one of several large regional parks where they can hike beautiful trails, camp, view native wildlife, or enjoy water activities.

While the environmental and quality of life benefits of open space are well documented, many communities also recognize the economic benefits in that open space is a valuable asset in attracting business and employment growth, thus increasing the tax base for local jurisdictions. Indeed, many communities realize that open space represents an investment in their future economic well-being.

Although Maricopa County currently features the largest county park system in the nation, urban expansion could alter the future of these parks in significant ways. As such, protecting these and other valuable open spaces is more important than ever.

STATE LAW AND PURPOSE

On October 20, 1997 the Maricopa County Board of Supervisors adopted *Eye to the Future 2020*, the Maricopa County Comprehensive Plan. The comprehensive plan currently includes four elements: land use, transportation, environment, and economic development. The plan also includes an action plan which identifies specific implementation techniques.

OPEN SPACE

With passage of the Growing Smarter Act (A.R.S. 11-821D), Maricopa County must now include several new elements, including an examination of open space acquisition and preservation. Specifically, Maricopa County must prepare a comprehensive inventory of open space areas, recreational resources, and designations of access points to open space areas and resources; an analysis of forecasted needs, policies for managing and protecting open space areas and resources; identify potential strategies to acquire additional open space areas and further establish recreational resources; and create policies and implementation strategies designed to promote a regional system of integrated open space and recreational resources while considering any existing regional open space plan.

The purpose of this element is to address the Growing Smarter Act as it relates to regional open space planning. Regional open space has been broadly defined to include existing parks and preserves, mountains, rivers and Significant washes, upland Sonoran Desert vegetation, sensitive and unique wildlife areas, historic and archaeological sites, canals and trails, and agriculture. A more in depth discussion of these open spaces is found in the *Open Space* background report.

OPEN SPACE ISSUES

Research of previous Maricopa County open space documents, as well as input from numerous stakeholders, have identified the following countywide open space issues:

- Agriculture is important to our national heritage and culture.
- Physical and visual access to public open spaces is lacking.
- Regional connectivity and linkages are important for both recreation and wildlife.
- Education is important for recognition of the economic and quality of life benefits of open space.
- Environmentally sensitive areas, including mountains and slopes; rivers and significant washes; historic, cultural, and archeological resources; view corridors; Sonoran Desert; and wildlife habitat and ecosystems need to be protected.
- Buffers between communities and land uses are lacking.
- There is a degradation of quantity, quality, and diversity of recreational opportunities.
- Implementation of existing plans is important (i.e., *Desert Spaces* plan and Sun Circle Trail).

OPEN SPACE INVENTORY

The Maricopa County Comprehensive Plan divides open space into two main categories: dedicated open space and proposed open space. Proposed open space will be discussed in later sections.

Dedicated Open Space

Dedicated open spaces are open space areas under public ownership, except for excluding State Trust Land, that have unique environmental and physical qualities. In Maricopa County, dedicated open space exists as regional parks, wilderness areas, wildlife areas, and the Tonto National Forest (**Figure 2**). There are approximately 2,000 square miles of dedicated open space in Maricopa County which provide recreation and aesthetic opportunities. Existing open space, which includes open space outside but adjacent to Maricopa County and within county developments, totals about 6,000 square miles.

Proposed Open Space

Eye to the Future 2020, the Maricopa County Comprehensive Plan, separates proposed open space into publicly owned proposed open space and privately owned proposed open space. Proposed open spaces are areas that, if acquired for the public domain, should be planned and managed to protect, maintain, and enhance their intrinsic value for recreational, aesthetic, and biological purposes. It is also recommended that proposed open space be protected from development and its effects through policy amendments, easements, restrictions, and/or acquisition. Within proposed open spaces, public access should be protected and preservation encouraged.

While areas identified as proposed open space offer opportunities for protection, it is important to note that all privately-owned and State Trust Land considered for open space conservation may be developed unless it is added to the public domain or protected using other techniques that respect private property rights. Further, current Arizona law allows proposed open space to be developed at a minimum of one dwelling unit per acre.

OPEN SPACE PROTECTION TECHNIQUES

There are numerous techniques used by jurisdictions for protecting and/or acquiring open space. The following is a list of some of these techniques.

- Arizona Preserve Initiative
- Cluster development
- Conservation easements
- Conveyance of Property to Homeowner Associations
- Density bonuses
- Transfer of development rights
- Federal land management
- Impact fees
- Land dedication
- Land exchange
- Lease agreements
- Performance zoning
- Planned unit development
- Slope/Hillside ordinance
- Design guidelines
- Fee simple purchase

GOALS, OBJECTIVES, AND POLICIES

This section identifies comprehensive goals, objectives, and policies to address open space for Maricopa County, and help support and implement *Eye to the Future 2020*.

Goals, objectives, and policies come from existing county goals, municipal plans and regional plans within Maricopa County as well as from discussions with various stakeholders at public meetings. However, it is also important to acknowledge the existing open space goals, objectives, and policies contained within the land use, transportation, environmental, and economic development elements of the comprehensive plan.

The goals, objectives, and policies are the action component for addressing open space in *Eye to the Future 2020*. Therefore, land use decisions should be made in coordination with the goals, objectives, and policies contained in this section. The goal of the Open Space elements is to:

Maintain and, where necessary, encourage expanding the open space system for Maricopa County to address public access, connectivity, education, preservation, buffering, quantity, quality, and diversity for regionally significant open spaces.

Objective O1 Promote physical and visual public access to open space resources.

Policy O1.1 Encourage efforts to protect and improve public access to open space resources.

Policy O1.2 Encourage protection of view corridors within new and established scenic corridors.

Policy O1.3 Encourage protection of public access around existing regional parks from urban encroachment.

Objective O2 Establish regional open space connectivity and linkages for both recreation and wildlife purposes.

Policy O2.1 Coordinate trail linkages in new developments with Maricopa County Flood Control projects and other open space projects and/ or resources.

Policy O2.2 Encourage development of trails along rivers, significant washes, and canals to link existing open space resources throughout the region.

Policy O2.3 Design all road crossings to minimize disturbance to the natural environment, and to accommodate identified trail crossings and other open space.

Policy O2.4 Encourage preservation of Upper Sonoran Desert areas to serve as major links between regionally significant open space resources. In addition, encourage inclusion of smaller areas of foothills (bajadas), flatlands, and small valleys to provide connectivity and transition functions.

Policy O2.5 Encourage completion of the Sun Circle Trail (Figure 2) through integration into the Maricopa County Regional Trail plan.

Policy O2.6 Support and participate in the planning, development, and implementation of the proposed Maricopa County Regional Trail in coordination with local stakeholders, to ensure a widely accessible, unified trail system.

Policy O2.7 Encourage integration and consideration of the proposed Maricopa County Regional Trail into future development.

Policy O2.8 Support partnerships with public and private entities whenever possible to establish open space corridors and linkages.

Objective O3 Promote the economic and quality of life benefits of open space.

Policy O3.1 Encourage communication efforts with open space stakeholders to share information and discussion on current issues and/or projects.

Policy O3.2 Discuss and encourage open space preservation with applicants during the zoning and subdivision process.

Policy O3.3 Explore implementation of development standards for open space.

Policy O3.4 Participate in multi-jurisdictional projects that promote open space protection.

Policy O3.5 Encourage on-going education and communication with residents about open space needs.

Policy O3.6 Support and encourage efforts to preserve agricultural land where deemed appropriate.

Objective O4 Protect and enhance environmentally sensitive areas, including mountains and steep slopes; rivers and significant washes; historic, cultural, and archeological resources; view corridors; sensitive desert; and significant wildlife habitat and ecosystems.

Policy O4.1 Conserve mountainous areas that contain important wildlife habitats, cultural resources, and scenic areas.

Policy O4.2 Discourage development on ridge or crestlines and on steep slopes.

Policy O4.3 Encourage the use of native plant material for all types of landscaping.

Policy O4.4 Consider creation of a landscape ordinance.

Policy O4.5 Explore implementation of flexible zoning techniques that promote open space preservation.

Policy O4.6 Consider alternate funding sources and protection techniques for acquisition of priority open space areas.

Policy O4.7 Discourage development in areas that are environmentally sensitive.

Objective O5 Encourage appropriate open space between communities and land uses.

Policy O5.1 Promote transitional land uses around mountainous areas, open space linkages, and public access points.

Policy O5.2 Encourage density transitions to separate rural from urbanized areas and to buffer preserve areas from urbanized areas.

Policy O5.3 Protect view corridors through buffering, screening, and other development standards.

Objective O6 Improve quantity, quality, and diversity of open space and recreational opportunities.

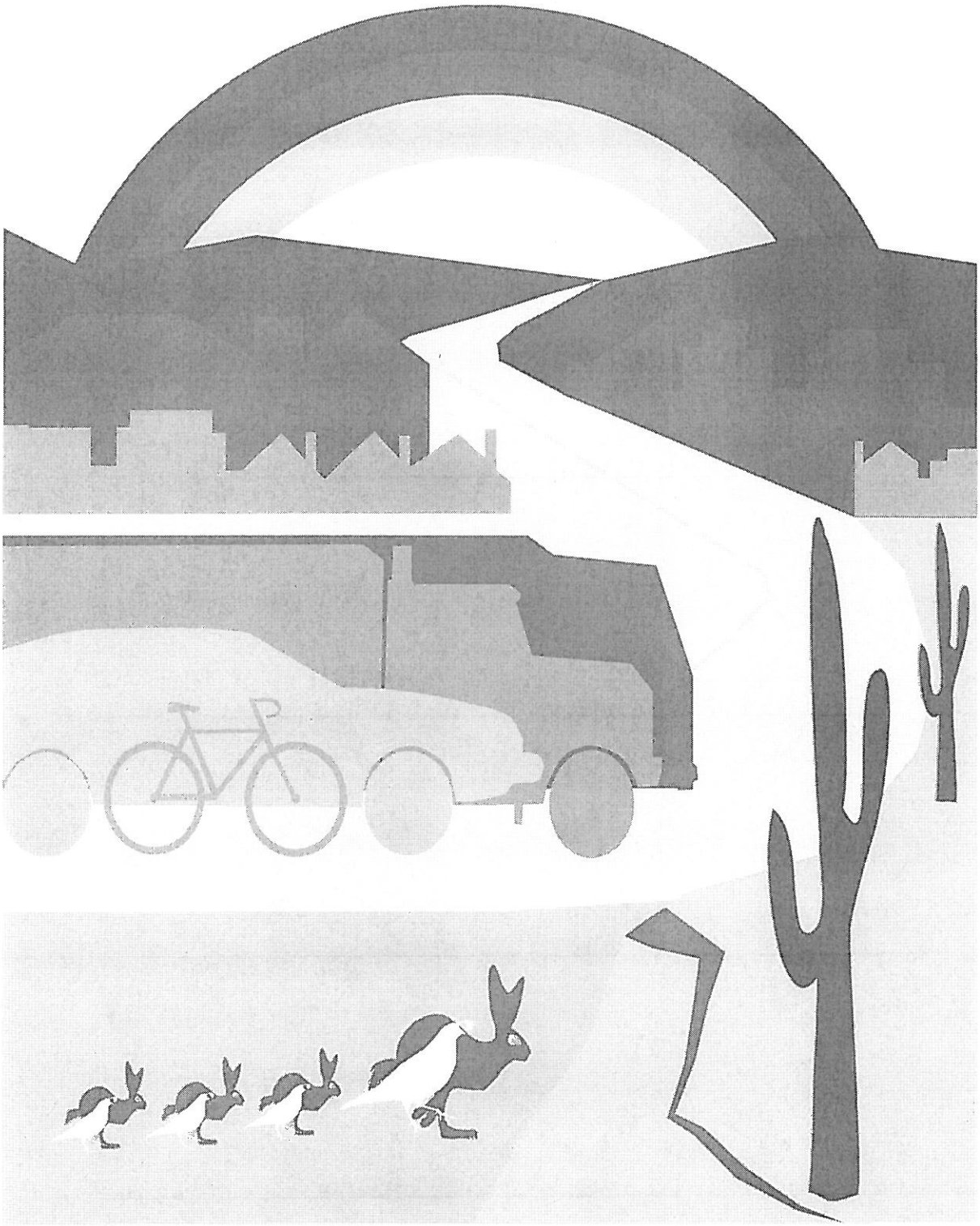
Policy O6.1 Support efforts to expand regional park boundaries to conserve and protect adjacent open space resources.

Policy O6.2 Protect significant cultural resources on developable lands from degradation by encouraging sensitive development or public acquisition.

Policy O6.3 Monitor and coordinate with the State Land Department, the Bureau of Land Management, and the U.S. Forest Service regarding reclassification, exchange, disposal, and acquisition of lands identified as proposed open space under their management, to promote the cause of open space conservation.

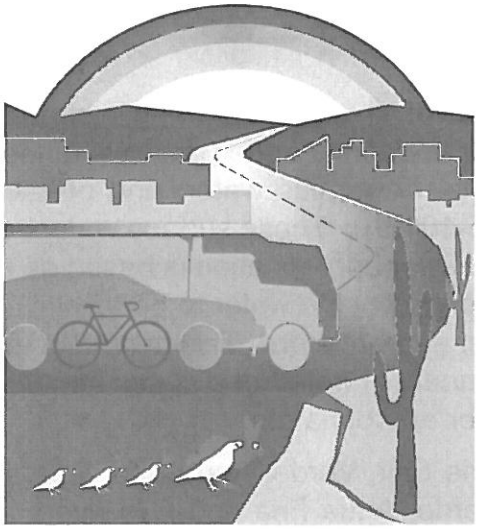
COMPREHENSIVE PLAN ELEMENTS

Water Resources



WATER RESOURCES

INTRODUCTION



Water is essential to human life and to many scenic and fragile environments. Given that only 2% of all the water on earth is freshwater, it is vital to protect both its quality and quantity. Indeed, water quality and quantity are closely linked and help determine the livability of a region. Whereas water quality generally concerns its physical, chemical, biological, and aesthetic characteristics, water quantity affects a region's supply of drinking water, the ability to grow crops, the ability of industry to carry out manufacturing processes, and the availability of recreational opportunities. Therefore, it is obvious that water resources are of environmental, social, and economic importance to Maricopa County, and if water becomes degraded it will lose its value. Further, if water supplies are degraded then an area becomes less competitive for certain economic development activities. As such, proper water management is essential so that present and future Maricopa County can flourish.

STATE LAW AND PURPOSE

The Growing Smarter Plus Act requires that Maricopa County include a water resources element in its comprehensive plan that provides an inventory of currently available water supplies and an analysis of how future growth will be adequately served with these water supplies. With the recent adoption of the Arizona Department of Water Resources' Third Management Plans, new regulatory requirements need to be met by municipalities. The Third Management Plans require not only the practice of water conservation by water users, but also emphasize augmentation of existing supplies with greater use of renewable supplies in the future.

Renewable supplies that are available in Maricopa County include Central Arizona Project (CAP) water, which comes from the Colorado River, surface water, and effluent. The use of each renewable source has certain obstacles, especially the ability to transport the water from the source to the user.

Water resource planning is an important consideration in planning for future growth, and all water sources need to be considered in long-term, comprehensive water planning.

WATER SUPPLY INVENTORY

Maricopa County has been able to support sustained urban growth due in part to its adequate water supply. Water supplies in Maricopa County include surface water, CAP water, groundwater, and effluent or treated wastewater. An overview of available water supplies follows.

Surface Water

Arizona law defines surface water as "the waters of all sources, flowing in streams, canyons, ravines or other natural channels, or in definite underground channels, whether perennial or intermittent, flood, waste, or surplus water, and of lakes, pondsand springs on the surface" (A.R.S. § 45-101(9)). These surface waters are subject to the "doctrine of prior appropriation." Prior appropriation is based on the tenet "first in time, first in right." The first person to put the water to beneficial and reasonable use acquires a right superior to later appropriators. This person or their successors have the right to use a specified amount of water for a stated beneficial use each year, subject only to the rights of prior appropriators.

Surface water in Maricopa County includes the Salt, Verde, Agua Fria, Gila and Hassayampa rivers. Flows from the Salt, Verde, Agua Fria and Gila rivers are stored in reservoirs for users downstream. On the Salt River, storage reservoirs include Roosevelt Lake, Apache Lake, Canyon Lake and Saguaro Lake. Reservoirs on the Verde River include Bartlett Lake and Horseshoe Lake. On the Agua Fria River, Lake Pleasant stores water flowing into the lake from the river as well as CAP water. Other surface water tributaries include Queen Creek, Cave Creek, Skunk Creek, New River, Waterman Wash, and Centennial Wash.

Central Arizona Project Water

The CAP, a multipurpose water resource development and management project, delivers Colorado River water into Maricopa, Pinal, and Pima counties. It consists of a system of pumping plants and aqueducts that convey the river water from the Bill Williams River arm of Lake Havasu to the project service area. The aqueduct system runs for about 336 miles from Lake Havasu to its end southwest of Tucson. The CAP was constructed to deliver 1.415 million acre-feet annually of Arizona's allocation of 2.8 million acre-feet per year of Colorado River water. As much as 1.8 million acre-feet can be delivered through the CAP aqueduct if it is used at maximum capacity.

The CAP is managed and operated by the Central Arizona Water Conservation District (CAWCD). The CAWCD is a political subdivision of the State of Arizona and a tax-levying public improvement district under the laws of the state, responsible for CAP system maintenance and operations, repayment obligations, allocation contracts, and creating water resource management programs for Arizona.

Arizona Water Bank Authority

The Arizona Water Banking Authority (AWBA) was created in 1996 to maximize the long-term benefit of Arizona's share of Colorado River water. In the past, southern California users consumed most of Arizona's unused allotment of Colorado River water. The AWBA protects this resource and helps secure water supplies for the future by storing Arizona's unused Colorado River water underground. The AWBA pays for the delivery and storage of unused Colorado River water that is transported through the CAP aqueduct and either stored underground in existing aquifers or used directly by irrigation districts in-lieu of pumping groundwater. The AWBA is funded by an ad valorem property tax levied by CAP, general fund appropriations, groundwater withdrawal fees collected within the state's Active Management Areas, and the proceeds of interstate water banking activities. The amount of excess CAP water available for storage by the AWBA will decrease as Arizona uses more of its Colorado River allocation.

Groundwater

Groundwater is defined by statute as "... water under the surface of the earth regardless of the geologic structure in which it is standing or moving. Groundwater does not include water flowing in underground streams with ascertainable beds and banks" (A.R.S. § 45-101(5)). Groundwater is an essential element of Maricopa County's water supply since it currently accounts for approximately 40% of all water use. Groundwater pumping can create environmental hazards such as lowering of groundwater levels, subsidence and earth fissuring, aquifer compaction resulting in loss of aquifer storage space, and water quality problems due to the migration of poor quality water and deterioration of aquifer water quality with depth.

There are four groundwater basins and eight groundwater subbasins in Maricopa County. Groundwater basins include the Harquahala, McMullen Valley, Gila Bend, and the Lower Gila. Groundwater subbasins include the East Salt River Valley, West Salt River Valley, Hassayampa, Rainbow Valley, Fountain Hills, Lake Pleasant, Carefree, and Vekol Valley. Each basin and subbasin has its own unique hydrogeologic characteristics and a number of factors influence groundwater conditions in each. These include groundwater inflow and outflow, depth to groundwater, withdrawals and recharge, surface water conditions, subsidence potential, and quality of groundwater in different locations.

Effluent

Effluent availability is dependent on the population that is served by wastewater treatment plants, and capacity for use is directly related to the degree of treatment and the ability to store effluent until it is needed. For uses such as crop and landscape irrigation, recreational impoundment, toilets, and commercial air conditioning, wastewater must receive secondary and tertiary treatment.

Effluent is used more during the summer months for cooling and irrigation purposes. Since effluent is produced at a fairly constant rate depending on population, it is necessary to store excess effluent generated in the winter months underground or in surface impoundments. To encourage increased use of effluent, the Arizona Department of Water Resources Third Management Plans provide incentives to all municipal, industrial, and agricultural users of effluent.

In 1995, effluent production in Maricopa County amounted to approximately 241,200 acre-feet, while use of effluent in the same year was about 107,400 acre-feet. In 1998, effluent production increased to 257,000 annual acre-feet, while effluent use increased to 175,000 annual acre-feet. The significant increase in effluent use demonstrates the improvements that municipalities have made in the treatment and delivery of this constantly increasing renewable source of water.

WATER RESOURCE ISSUES

Research of water data and documents, as well as input from numerous stakeholders, have identified the following countywide water resource issues for consideration when making land use decisions:

- In certain areas of Maricopa County, excessive groundwater pumping has created land subsidence and associated earth fissures. Both phenomena can result in damage to both surface and subsurface infrastructure.
- Water quality varies throughout Maricopa County, with pollution problems resulting from both point and non-point sources.
- The use of renewable water sources is becoming more common, and is encouraged whenever possible. Constraints to use include cost, infrastructure requirements, and strict regulations.
- The Assured Water Supply program, established to provide long-term certainty regarding water availability for future growth, will gradually reduce groundwater dependency, but may affect the size and location of future development. While the Central Arizona Groundwater Replentishment District will help replentish groundwater aquifers, the inconsistent manner in which water is drawn and replaced will make monitoring an important priority.
- Outside of Active Management Areas, Adequate Water Supply rules will help guide future development and water use in rural areas.
- The demand for water by Indian Communities will have a significant impact on water management in Maricopa County, but uncertainties remain due to outstanding water settlement claims between these communities and the federal government.

GOALS, OBJECTIVES, AND POLICIES

The goals, objectives, and policies help public and private decision makers with respect to protecting and ensuring water quality and quantity. Further, these goals, objectives, and policies are designed to interrelate with other plan elements with respect to future growth considerations.

Two goals are identified for Maricopa County with respect to water resources:

Goal 1: Promote development that makes conservative use of renewable water supplies such as effluent, surface water, and Central Arizona Project water when feasible, and that uses groundwater as the primary water source only in the absence of renewable sources.

Goal 2: Reduce the impacts of development on water quality, land subsidence and fissuring, and riparian habitat.

Objective W1	**Encourage the protection and enhancement of future renewable water and groundwater supplies within the framework of state and federal laws, regulations, and guidelines.**
Policy W1.1	Encourage development in accordance with state and federal laws, regulations, and guidelines that govern water quality.
Policy W1.2	Encourage compliance with Arizona Department of Water Resources programs, rules, and regulations for new development.
Policy W1.3	Encourage compliance with water conservation guidelines set by the Arizona Department of Water Resources.
Policy W1.4	Encourage development which complies with the Aquifer Protection Permit program.
Policy W1.5	Encourage the use of crop fertilization and pest management practices that reduce risk of groundwater and surface water contamination.
Policy W1.6	Encourage the use of effluent and treated industrial wastewater.
Objective W2	**Ensure adequate facilities are available for the treatment of wastewater, and the distribution of effluent, in newly developing areas.**
Policy W2.1	Encourage provisions for wastewater treatment and reuse for new development.
Policy W2.2	Encourage compliance with Arizona Department of Environmental Quality standards for effluent treatment and reuse.

Objective W3 **Encourage the reduction of pollutants in rivers, streams, and washes within the framework of state and federal laws, regulations, and guidelines.**

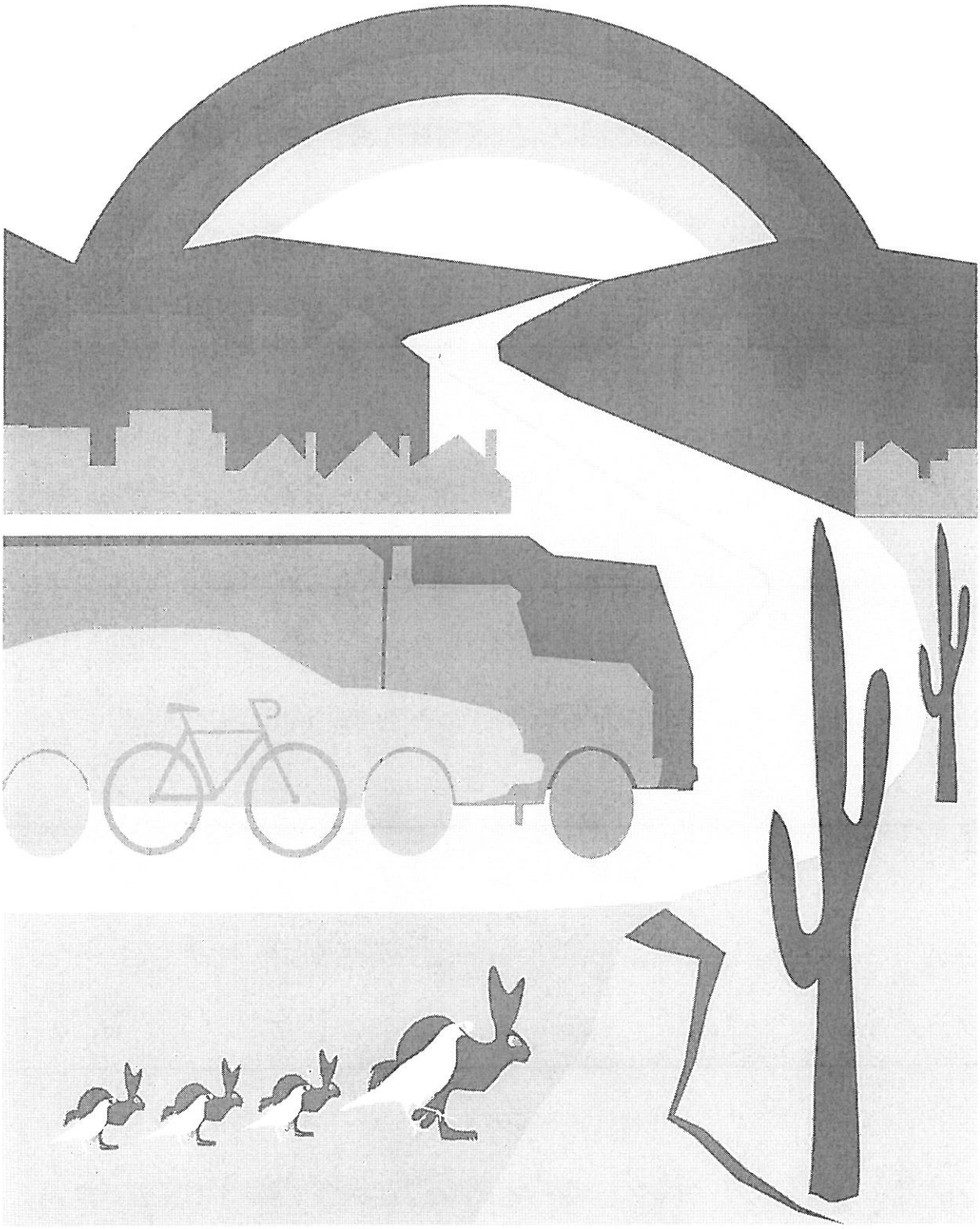
Policy W3.1 Cooperate with the Arizona Department of Environmental Quality biannual Water Quality Assessment Report in accordance with the Clean Water Act.

Objective W4 **Promote the protection and preservation of riparian areas within the framework of state and federal laws, regulations, and guidelines.**

Policy W4.1 Encourage site evaluation and classification of riparian areas as required by the US Army Corps of Engineers 404 permit program or by other state or federal laws, regulations, and/or guidelines.

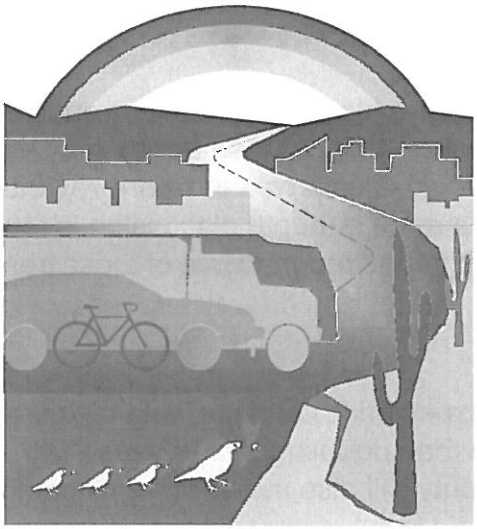
Policy W4.2 Consider incentives and options for preservation of riparian areas.

COMPREHENSIVE PLAN ELEMENTS
Cost of Development



COST OF DEVELOPMENT

INTRODUCTION



Maricopa County was the nation's fastest growing county during the decade of the 90's, adding nearly 1 million new residents in just ten years. While this is a continuation of the rapid growth trend that has occurred since World War II, significant population growth is expected to continue over the next several decades. Although such growth brings new opportunities to a region, it can also create significant challenges, including the ability of local governments to meet rapidly expanding service and infrastructure needs.

Urban growth can place heavy fiscal demands on local governments for the provision of new and expanded facilities and services. For Maricopa County, new growth requires additional capacity for the health care and criminal justice systems, protective services, parks and recreation, and many other regional and non-regional services provided by the county. Of course, all of these services come at a cost to residents and property owners. Given these competing requirements, it is important for Maricopa County to be prudent in its infrastructure and service investments, and to implement strategies that will allow Maricopa County to grow in a way that minimizes fiscal impacts on current taxpayers.

STATE LAW AND PURPOSE

In 1998, Arizona passed the Growing Smarter Act to help local governments plan for and manage growth in a functional and efficient manner. Among the Act's requirements, Maricopa County must now include a "Cost of Development" element in its Comprehensive Plan. Specifically, Maricopa County must identify policies and strategies that it will use to require development to pay its fair share toward the cost of additional public facility needs generated by new development. This element must also include an analysis of existing techniques that can be used to fund additional public services associated with new development, and policies to ensure that any funding mechanism(s) bear a reasonable relationship to the financial burden imposed on the County.

COST OF DEVELOPMENT

Given the significant future growth expected in Maricopa County, the Cost of Development element is important to help ensure a fiscally responsible budget, and to help ensure an efficient use of taxpayer funds. The Cost of Development element also helps establish an equitable sharing of costs associated with future growth and development.

EXISTING AND FUTURE CONDITIONS

There are and will continue to be several demographic and economic trends that will affect the costs associated with future growth. Some of these trends may have only a minimal impact, while other may play a significant role in future revenues and expenditures for Maricopa County. While a more in-depth discussion is found in Maricopa County's *Cost of Development* background report, some of these trends are identified below.

DEMOGRAPHICS

- The large increase in county population is expected to continue, with the current population of approximately 3 million more than doubling by the year 2040. As such, service demands from Maricopa County will also increase significantly.
- An aging population will also affect the need and expenditures for services such as health care, education, social services, and various types of infrastructure, as well as potentially affect revenues from changes to incomes, tax rates, spending patterns, and user fees.
- Over the next several decades, Maricopa County's population will not only become older, it will become more diverse due to a marked increase in the Hispanic population. Such demographic changes will also likely affect spending needs and priorities, as well as revenues from various sources.

ECONOMICS

- Employment growth in both the service and goods producing economies is projected to continue growing over the next several years, but at a slower rate than over the last decade. This trend, accompanied by a aging and retiring workforce, will likely translate into slower growth of revenues for Maricopa County.
- As with employment growth, personal income growth is also projected to slow over the next several years. This too will affect several revenue sources.
- Growth in retail sales over the next several years is also expected to slow in comparison to the previous decade. This is significant in that retail sales create an important revenue source from both sales taxes and in the formulation of state-shared revenues.

- As a result of strong population growth, construction and real estate growth will continue to grow in the next several years. However, the rate of growth will moderate, and will likely be below the unprecedented growth experienced during the mid to late 1990's. This is an important trend not only because it affects tax revenues, but also affects necessary expenditures for infrastructure and service expansion.

AVAILABLE FUNDING TECHNIQUES

There are numerous techniques available to local governments (including Maricopa County) to help fund the additional public services necessary to serve future growth and development. These techniques include the following:

- Specialty/Industry tax
- User fees
- Lease purchase finance
- Development agreements
- Intergovernmental agreements
- Property tax
- Bonds
- Dedications
- Development fees
- Special/Improvement Districts

CURRENT COST SHARING

Although Maricopa County does not have an impact fee ordinance, there are ways in which new development is required to pay for and provide facilities and services associated with growth. Some of these methods include the following:

- Requiring urban development to be within the Urban Service Area
- Using development agreements to ensure proper funding and level of services and infrastructure.
- Adding stipulations to entitlements that address service and infrastructure levels and funding.
- Soliciting voluntary financial contributions to help pay for service and infrastructure needs.

ISSUES AND CONSIDERATIONS

Prior to pursuing any cost sharing program, Maricopa County should consider several issues that could negatively impact the outcome of such programs. While not a complete list, some issues for consideration are identified below.

LEGAL

One of the most important issues regarding service and infrastructure financing is the extent to which local governments can convey expenses on new development without violating state or federal laws. When the Arizona Legislature enacted the Cost of Development element requirement, it did so with the condition that

mechanisms requiring new development to pay its fair share must ensure fair and equal treatment. Specifically, the law requires that any method used must result in a beneficial use to the development, bear a reasonable relationship to the financial burden imposed on the county to provide additional facilities, and that they be imposed according to law.

Due Process

The Fourteenth Amendment of the U.S. Constitution prohibits local government from depriving people of liberty or property without the "due process of law." With respect to cost sharing, this clause essentially requires local governments ensure that whatever method(s) is chosen to require new development to pay fair share costs that it be neither unreasonable, arbitrary, or capricious, and that the method(s) selected have a relationship to the objective sought by the local government.

Due process issues are separated into two categories known as procedural due process and substantive due process. Procedural due process concerns the methods by which a local government adopts the regulation in question. Substantive due process concerns the rationality of a government's decision, and requires a rational relationship between the decision and the goals that the community wants to achieve. In addition, substantive due process requires local regulations and ordinances to serve a legitimate public purpose.

Takings

The takings clause of the Fifth and Fourteenth Amendments prohibits private property from being taken for public use without just compensation. With respect to cost sharing, takings issues arise as a result of disputes regarding the *reasonable/rational nexus*, or the link between a cost sharing program and the public interest being advanced, and *rough proportionality*, which is establishing a fair share relationship between a program and the impacts intended to be allayed.

Equal Protection

The equal protection clause of the Fourteenth Amendment to the U.S. Constitution ensures that all people are given equal protection under the law. In relation to cost sharing, this means that local governments must ensure that they do not unreasonably discriminate between persons who present similar circumstances. However, courts have generally ruled that persons do not have to be dealt with identically. Rather, equal protection requires that distinctions that are made should have relevance to the *purpose* of the distinction.

Socioeconomic

While most local governments spend considerable time analyzing the potential legal implications of cost sharing programs, there are other issues that warrant consideration. Unlike legal implications, these issues can affect the economic and social well being of a community. While not all-inclusive, some other considerations are identified.

Cost Assessment

Besides varying annexation patterns, Maricopa County contains various residential land use patterns, ranging from dense, urban areas to traditional suburban to very rural. Therefore, assessing the different costs of servicing residential areas, as well as determining accurate service area boundaries, can be difficult. However, when assessing residential development costs there are generally two lines of reasoning. The first is that residential development tends to be more expensive to service than other types of land use, and thus negatively impacts local government finances. Another theory is that while the costs of providing services to residential development may be greater than the tax revenues generated, the residential building and associated industries provide an important stimulus to local governments and economies.

Program Management

Regardless of the type, cost sharing programs require constant administration and oversight to ensure proper and consistent implementation. This process may involve several separate agencies and would require both coordination and efficiency among various departments.

Program Cost

While cost sharing programs create administrative expenses for local governments, the amount will likely depend on the complexity and nature of the program. Therefore, it is important to carefully understand such costs to determine whether or not a cost sharing program is sensible, and to ensure that benefits outweigh administrative expenses.

Affordable Housing Effects

With some cost sharing programs, imposed costs are usually passed along to prospective homebuyers, resulting in higher home prices that prevent certain income groups from home ownership. Local governments, including Maricopa County, need to consider whether selected cost sharing program(s) exasperate affordable housing problems, and how such problems can be mitigated.

Development Process Costs

Depending on the type of program, a development process might be slowed due to the intricacies of negotiation and calculations. This becomes a complicated balancing act because quick agreements between local governments and developer(s) could raise public suspicion that not enough scrutiny has been given to the potential infrastructure and service costs. However, lengthy discussions and/or negotiations could add development costs which may then be passed on in the form of higher home costs. Such situations can be avoided by ensuring that consistent and uniform standards exist even when individual negotiations occur. This will help provide certainty and predictability to the negotiation and development process; both of which are desirable.

Land Use Patterns

Because cost sharing tends to vary among local jurisdictions, the amount developers are required to contribute to new infrastructure might impact the location and timing of growth. In short, cost sharing systems that reflects the relative costs of different sites may shift development from high cost areas to those with lower costs, creating competition and inefficient decisions.

Employment Impacts

Nonresidential development is an important part of community growth. A proper jobs to housing ratio helps diversify the local tax base and prevents undue tax burdens from being placed on residents. Therefore, it is important to ensure that cost sharing programs do not deter business and employment expansion. The key is to cost share in a way that maintains economic vitality and efficiency, yet discourages inefficient development that merely "shops" communities for the fewest requirements.

GOALS, OBJECTIVES, AND POLICIES

The goals, objectives, and policies for the Cost of Development element help ensure the efficient expenditure of public funds to address the timely and orderly expansion of services and infrastructure, and to ensure that new development helps pay its proportionate share for such services and infrastructure. Within this framework, Maricopa County has identified the following goal for the Cost of Development element:

Ensure that new development pays its fair and proportional share of the cost of additional public facility and service needs generated by new development.

Objective C1: Develop a method to determine the need for, and assessing costs of, new facilities and services required to serve new development in order to maintain service levels.

Policy C1.1: Work with other county agencies and affected stakeholders to establish cost sharing programs.

Policy C1.2: Work to ensure that the proportional share charged to a project includes only those costs associated with the infrastructure and service needs of that project.

Policy C1.3: Seek regional coordination to promote developer cost sharing for regional services and infrastructure.

Objective C2: Adopt and implement level of service standards for new development to help promote consistency and certainty in the cost sharing process.

Policy C2.1: Maintain and support Maricopa County's capital improvement programs that help promote service needs and standards.

Policy C2.2: Adopt and periodically update level of service standards for new development to maintain their viability.

Objective C3: Identify and monitor cost sharing programs for potentially adverse impacts.

Policy C3.1: Identify and periodically review administrative costs created by cost sharing programs to determine ongoing practicality.

Policy C3.2: Identify and monitor cost sharing programs for potentially negative impacts on affordable housing efforts.

Policy C3.3: Periodically review cost sharing programs to ensure consistency with federal and state laws and court decisions.

NOTES:

AGENDA FOR ACTION

The Comprehensive Plan seeks to promote vibrant communities within Maricopa County by encouraging growth in areas suitable for development, an efficient transportation system, a healthy environment, and a diversified economy. The Plan's elements reflect the character of the county's population, while the policies and implementation tools guide future land use and transportation decisions.

The Agenda for Action identifies short- and long-term measures that can be undertaken to implement the objectives and policies in the Comprehensive Plan (See Table 3–Five Year Agenda for Action). The table is organized as follows:

Action	Lists the actions necessary to carry out the vision of the Comprehensive Plan.
Purpose	Describes the intent of the action.
Timeline	Establishes when the action should begin.
Elements Involved	Lists the elements of the Comprehensive Plan that are involved in the action.
Department/Agency	The county departments and/or partnering agencies involved in plan implementation are identified as follows:
	MCP&DD — Maricopa County Planning and Development Department
	MCDOT — Maricopa County Department of Transportation
	MCCDD — Maricopa County Community Development Department
	MCESD — Maricopa County Environmental Services Department
Implementation Method	Determines if the action is legislative, requires future planning, is an existing process, a departmental procedure, or public information.
Related Objectives	Lists the related objectives involved in the action.

Table 3 - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Update Area Plans	Update existing area land use plans in alignment with the Comprehensive Plan. Develop new area plans as necessary.						All	MCP&DD, MCDOT, FCDMC, MCCD	Future Planning	
Development Master Plan Guidelines	Revise existing DMP guidelines to provide options for innovative DMP design. Consult all potentially affected interests during the revision process						All	MCP&DD, MCDOT, FCDMC	Future Planning	L2, L3, L4, L5, L6, L10, T1
Continue Staff Steering Committee	Continue communication with county agencies to coordinate plan implementation and projects.						All	MCP&DD, MCDOT, FCDMC, MCESD	Existing Process	2E1
Resources for Action Plan	Establish and maintain a system to track resources for Plan implementation						All	MCP&DD, MCDOT	Future Planning	
Continue MCDOT / MCP&DD Coordination	Coordinate Plan implementation and updates through the joint MCDOT and MCP&DD planning team.						All	MCP&DD, MCDOT	Existing Process	L1, L5, L7, L8, L9, T1
Infrastructure Financing	Study methods for financing infrastructure in collaboration with all potentially affected interestes.						All	MCDOT	Legislation, Future Planning	L7, T5, E6, E8, 2E1

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Development Indicators	Develop and implement a monitoring system to gauge effects of Comprehensive Plan activities						All	MCP&DD, MCDOT	Future Planning	
Monitor/ Coordinate with Cities' General Plans	Maintain file of current municipal general plans. Coordinate updates to general plans in unincorporated areas with municipal planning agencies						All	MCP&DD, MCDOT, All municipalities	Future Planning, Partnering	L1, L9
County Extension Service	Study the capacity of the Office of Economic Development to broker and extend technical planning and development assistance services to county communities						All	MCP&DD	Future Planning	L5, L8, ED3, ED4
Fiscal Impact Model	Study the development of a fiscal impact model to gauge the impact new development has on the county budget.						All	All	Future Planning	L7, T5
Create "One Stop" Centers	Streamline the development process by creating development assistance and economic development centers.						All	MCP&DD MCDOT	Existing Process	L1, L5, L7, L8, L9, T1

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Development Guidelines / GIS Atlas	Provide land-based information to assist development activities in the county using the existing county GIS system. The atlas will contain data such as parcels, roadways, hydrology, and topographic conditions.						All	MCDOT	Future Planning	L8, T3
Monitoring the Action Plan	Document the ongoing progress towards implementation of the Comprehensive Plan.						All	MCP&DD, MCDOT	Public Information	
Comprehensive Plan Summit	Convene a summit in conjunction with each review and update to report progress of the Comprehensive Plan to decision makers, citizens, and the partners involved in the development of the plan.						All	MCP&DD, MCDOT	Public Information	
Comprehensive Plan Annual Report	Produce an annual report to update the progress of the Comprehensive Plan.						All	MCP&DD, MCDOT	Public Information	
Lot Splits	Study the review process for land divisions involving 5 or fewer lots, within existing state statutes.						Land Use	MCP&DD, MCDOT, FCDMC	Legislation, Future Planning	L4

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Transportation System Plan (TSP)	Evaluate regional transportation impacts and develop a county transportation system with supporting plans, policies, and programs.						Transportation	MCDOT	Future Planning	L9, T4, T5, T6, T8
Northwest Valley Transportation Study (NWVTS)	Develop a comprehensive, multimodal transporation plan consisting of a short-range transportation improvement program, a medium-range action plan, and a long-range transportation plan for the northwest portion of the county.						Transportation	MCDOT	Future Planning, Partnering	L9, T1, T2, T4, T5, T6, T7, T8
Update TSP	Annual MCDOT monitoring and review of the TSP and update of the plan on an approximately five-year cycle, including changes in general plans and demographics.						Transportation	MCDOT	Public Information	T5
MCDOT CIP Process	Annual MCDOT review of development patterns, urban services, and fiscal impacts to serve newly developing areas.						Transportation	MCDOT	Existing Process	L9, T4, T5

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
TSP Annual Report	MCDOT will monitor implementation, track major changes (such as county boundaries and infrastructure) and produce the annual TSP update.						Transportation	MCDOT	Public Information	T5
Economic Development Implementation Plan	Identify action strategies for economic development.						Economic Development	MCP&DD, MCCD	Future Planning	ED1, ED2, ED3, ED4
Community Development Plans	Examine extending community technical and financial assistance services to small, unincorporated communities						Economic Development	MCP&DD, MCCD	Future Planning, Partnering	L5, L6, L7, ED2, ED3
Value-Added Agriculture	Initiatives to determine the feasibility of an agribusiness and/or distribution center.						Economic Development	MCP&DD	Future Planning, Partnering	L8, E8, ED1
Mitigation Banking	Wetlands/riparian mitigation banking program to provide compensation for the loss of wetlands and riparian habitat as a result of public highway, bridge construction, and other flood control projects						Environment	MCDOT, FCDMC	Legislation, Future Planning	L9, L10, T8, E5, E6, E7

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Establish IGAs	Agreements with various entities on joint planning in county islands within the GDPA for transportation, public safety, and other services						Land Use, Transportation	MCP&DD, MCDOT, FCDMC	Legislation, Future Planning	L7, L9, T1, T4, T6, E6, 2E1, 2E2, ED3
Define Established or Approved Communities.	Conduct inventory and analysis of population concentrations in the rural unincorporated areas and make recommendations on the development of new area land use plans.						Land Use, Transportation	MCP&DD	Future Planning	L4, L5
Amend Zoning Ordinance	Revise current standards and processes, and simplify the existing Zoning Ordinance. Consult all potentially affected interests during the revision process						Land Use, Transportation	MCP&DD, MCDOT, FCDMC	Legislation, Future Planning	L3, L4, L5, L6, L7, L9, E4, E7, ED2
County Island Studies/Policies	Inventory and analyze county islands. Develop strategies to facilitate the eventual annexation of Class I islands into the surrounding jurisdictions.						Land Use, Transportation	MCP&DD, MCDOT, All Municipalities	Legislation, Future Planning, Partnering	L1, L7, T5, E9

Table 3 (cont.) - Five Year Agenda for Action										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/Agency	Implementation Method	Related Objectives
Amend Subdivision Regulations	Revise standards and streamline processes currently used in the subdivision process. Consult all potentially affected interests during the revision process.						Land Use, Transportation, Environment	MCP&DD, MCDOT, FCDMC	Legislation, Future Planning	L3, L4, L5, L6, L8, L9, L10, T1, T4, T5, E1, E2, E7
Coordinate MCDOT and FCDMC	These two departments in the newly formed Maricopa County Public Works Agency will embark upon a policy of planning and program collaboration.						Transportation, Environment	MCDOT, FCDMC	Future Planning	L10, T5, E5, E6, E7, E8
Open Space Management / Implementation	Determine methods of prioritizing, protecting, and managing proposed open spaces and ensuring private property rights. Consult all potentially affected interests during the revision process.						Land Use, Environment	MCP&DD, FCDMC, MAG, State Land, All Municipalities	Legislation, Future Planning	L6, L10, L11, E1, E2, E4, E5
Environmentally Sensitive Land Ordinance (ESLO)	Develop revisions to the existing zoning requirements for steep slopes, floodplains, and the possible addition of habitat and scenic areas. Consult all potentially affected interests during the revision process.						Land Use, Environment	MCP&DD, MCDOT, FCDMC, MAG	Legislation, Future Planning	L10, L11, E1, E2, E4, E5
FCDMC Multiple-use Projects	Consider floodplain management as a tool to facilitate open space access.						Land Use, Environment	FCDMC	Future Planning, Partnering	L10, L11, E4, E5, E7

Table 4 - Five Year Agenda for Action: 2001/2002 Update										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/Agency	Implementation Method	Related Objectives
Review Growth Areas	Review preferred gorwth areas to ensure feasibility and efficiency						Growth Areas Land Use	MCP&DD Municipalities Stakeholders	Future Planning	G1, G2, G3, L4, L7, L9
Monitor Growth Areas	Review potential development constraints and make adjustments as necessary						Growth Areas Environment	MCP&DD	Future Planning	G1, G2, G3, E1, E3, E5, E7, E5,
Cost Analysis	Conduct cost analysis on priority open space						Land Use Environment Open Space	MCP&DD Parks Stakeholders	Future Planning	O2, O6
Funding Options	Explore feasibility of funding techniques for acquisition of priority open space and improvements for existing parks						Land Use Environment Open Space	MCP&DD Parks	Future Planning Legislation	L4, L10, E1, E4, E7,
Zoning Ordinance	Where feasible, update and revise zoning ordinance to include development, performance, and landscaping standards for open space						Land Use Environment Open Space	MCP&DD Stakeholders	Future Planning	L3, L5, L6, L10, L11, E1, E2, E7, O2, O6

Table 4 (cont.) - Five Year Agenda for Action: 2001/2002 Update									
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Subdivision Regulations	Where feasible, update and revise subdivision regulations to include design standards for open space						Land Use Environment Open Space	MCP&DD Stakeholders	Future Planning	L3, L5, L6, L10, L11, E1, E2, E7, O2, O6
Maricopa County Regional Trails	Participate in staff Trails Commission meetings						Open Space	MCP&DD Parks	Future Planning	O1, O2, O3, O4, O5, O6
Maricopa County Regional Trails Plan	Participate in the planning, development, and implementation of the Maricopa County Regional Trails Plan						Open Space	MCP&DD Parks	Future Planning	O1, O2, O3, O4, O5, O6
Scenic Corridor Studies	Update existing scenic corridor studies and identify new corridors as necessary						Land Use Transportation Environment Open Space	MCP&DD Parks MCDOT Stakeholders	Future Planning	L4, L9, L10, T4, E2, 2E2,

Table 4 (cont.) - Five Year Agenda for Action: 2001/2002 Update										
Action	Description	Timeline Adoption → 5 Years					Elements Involved	Department/ Agency	Implementation Method	Related Objectives
Historic Resource Management	Meet with AZSHPO, to discuss issues and update MCP&DD staff on new regulations governing historic resources						Environment	MCP&DD AZSHPO	Future Planning	E3
Cost Sharing Preparation	Work with county agencies to determine appropriate cost sharing program, and develop methodology for implementation						Cost of Development	Agencies Stakeholders	Future Planning	C1
Level of Service Standards	Develop, adopt, and implement level of service standards for infrastructure and services						Cost of Development	Agencies Stakeholders	Future Planning	C2
Monitor Program	Monitor cost sharing program to ensure appropriateness, effectiveness, and fairness						Cost of Development	MCP&DD Agencies	Future Planning	C3

NOTES:

AMENDING THE COMPREHENSIVE PLAN

The Comprehensive Plan is intended to be a policy guide for development in unincorporated Maricopa County. While it reflects the shared vision of the citizens of the county, it must also be responsive to the evolving desires of the various communities. The plan must also be flexible enough to respond to changing conditions, technologies, and development innovations. It is important that the document provide versatility, yet be definitive enough to provide predictability to residents and land owners. In order to facilitate the evolution of the Plan, an amendment process is a critical component of the document.

The Comprehensive Plan functions as a framework for generalized land use, transportation, environmental, and economic development decisions. While it contains specific goals, objectives, and policies, it also contains by reference, land use plans, transportation systems, and environmental or other programs administered by Maricopa County, local jurisdictions, and other state and federal agencies.

Amendments to the Comprehensive Plan can be categorized as either direct amendments or referenced amendments. Direct amendments include changes to the goals, objectives, and policies, or specific requests for changing the land use category in the Rural Development Area. Referenced amendments include updates, amendments, or revisions of the land use plans, transportation systems, and environmental or other programs contained by reference in the Comprehensive Plan. All Development Master Plans approved after adoption of this Plan are automatically considered to be the controlling document for the applicable area, and would be considered a referenced amendment.

DIRECT AMENDMENTS

Direct amendments include: the decennial update; the four year review; requests for changes to the goals, objectives and policies; and specific requests for changing the land use category in the Rural Development Area. In order for the Board of Supervisors to approve a direct amendment, it must be approved by a majority vote of the Board.

DECENNIAL UPDATE

The decennial update of the Plan includes a reevaluation of goals, objective and policies, reassessment of each of the plan elements, and consideration of additional elements if deemed necessary. In addition, the update must reassess the financial capability of the county to carry out the Comprehensive Plan and the financial impact to the county of alternative land use development patterns. Upon completion of the overall Plan update, the county will then update the area plans in the same manner. This update is initiated and conducted by county planning staff.

Four Year Review

The four year review of the Comprehensive Plan is intended to coincide with the instatement of the Board of Supervisors and provide an opportunity for the Plan to maintain alignment with the County Strategic Plan. The Planning and Zoning Commission will review the Plan and, if it determines any changes should be made, recommend amendments to the Board of Supervisors. The review should consider amendments to provide guidance to the development of the Capital Improvement Programs of the Department of Transportation and the Flood Control District. This review is initiated and conducted by county planning staff.

Requested Amendments

Requested amendments include requests for changes to the goals, objectives and policies, or requests for changing the land use category in the Rural Development Area. These amendments may be submitted from time to time by the Board of Supervisors, the Planning and Zoning Commission, county staff, and private individuals and property owners. Development Master Plans do not require an amendment request. The process to request an amendment to the Comprehensive Plan is contained in the *Maricopa County Comprehensive Plan Amendment Guidelines,* (Appendix H) as prepared by the Planning and Development Department in September, 1990.

Administrative Amendments

Administrative amendments include minor adjustments to correct typographical inconsistencies or to maintain graphical consistency. These amendments are initiated and implemented by county planning staff. Staff will inform the Planning and Zoning Commission and the Board of Supervisors upon the execution of such amendments.

REFERENCED AMENDMENTS

Referenced Amendments include updates, amendments, or revisions of the land use plans, transportation systems, and environmental or other programs contained by reference in the Comprehensive Plan. Amendments to any of these referenced items will be considered an amendment to this Plan, to the extent such amendments do not conflict with the fundamental intent of the Plan or the mandated powers and responsibilities of Maricopa County.

Municipality Amendments

Because the county Comprehensive Plan reflects the general plans of the municipalities, staff should review updates and major amendments to them for the following considerations:

- The amendment should conform to the goals and policies of the county Comprehensive Plan

- The amendment should recognize the limitations of existing and planned capabilities of public services in the area
- The amendment should not negatively impact county residents or property owners
- The amendment should further enhance the goals and policies of the Comprehensive Plan

If staff review determines the amendment to be incompatible with the Comprehensive Plan, staff will report their findings to the Planning Commission and the appropriate planning commission or legislative body. The county Planning and Zoning Commission will review such amendments and make recommendations to the Board of Supervisors on the suitability of using the amendments as a guideline for decision making within the relevant General Plan Development Area. The Board of Supervisors shall consider the recommendations of the Planning Commission and either accept or reject the amendment as a guideline.

Land Use Plan Amendments

Amendments or updates to land use plans that would amend the Comprehensive Plan by reference include county area land use plans; general plans of the cities, towns, and Indian communities in Maricopa County; and any land use, resource management, range management, or forest plan approved by any local, state, or federal agency with planning jurisdiction in Maricopa County. Changes made by cities and towns within Maricopa County may include expansion of the municipal planning area, or updates to municipal general plans.

Amendments to county area land use plans would be processed according to the *Maricopa County Comprehensive Plan Amendment Guidelines* (Appendix H). Approval of an amendment to a county area land use plan would constitute a de facto amendment to the Comprehensive Plan. All Development Master Plans approved after the adoption of this Comprehensive Plan are considered to be in conformance with the Plan, and as such, do not require a Comprehensive Plan Amendment.

Transportation Plan Amendments

Any update or amendment to the Maricopa County Transportation System Plan, municipal transportation plans, Short and Long Range Regional Transportation and Transit Plans, the State Highway Plan, the National Highway System, the Federal Interstate Highway System, or any other transportation system within Maricopa County, will be considered as amendments to the Comprehensive Plan.

Other Referenced Amendments

Amendments to any municipal, county, state or federal environmental or economic development program specifically stated or generally referenced within the goals, objectives and polices of the Comprehensive Plan, will be considered as amendments to this Plan.

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APPENDICES

APPENDIX A-GLOSSARY OF TERMS

Agriculture: Any use of land for the growing and harvesting of crops or animals for sale for profit; uses which are directly ancillary to the growing and harvesting of crops or animals, which is the exclusive or primary use of the lot, plot, parcel, or tract of land; processing crops to the generally recognizable level of marketability; or the open range grazing of livestock.

Agri-business: Any business that deals with agriculture.

Agriculture/Industrial Land Use: Dairy processing, value added food processing, canning.

Aquifer: A saturated underground formation of permeable materials capable of storing water and transmitting it to wells, springs, or streams.

Best Available Control Measures: The maximum degree of emissions reduction of PM_{10} and PM_{10} precursors from a source which is determined on a case-by-case basis taking into account energy, environmental, and economic costs.

Buffer: A method of separating incompatible uses. Examples include opaque fencing, vegetated berms, and dense landscaping.

Capital Improvements Program: A Board of Supervisors approved timetable or schedule of future capital improvements to be carried out during a specific period and listed in order of priority, together with cost estimates and the anticipated means of financing each project.

Character: Distinguishing quality or qualities that make an area unique.

Cluster Development: A development design that concentrates buildings in areas of the site to allow remaining land to be used for recreation, common open space, and/or preservation of environmentally sensitive features.

Community: A group of individuals living in a common location sharing common interests.

Congestion Pricing: The policy of charging drivers a fee that varies with the level of traffic on a congested roadway. Congestion pricing is designed to allocate roadway space, a scarce resource, in a more efficient manner.

Density: A numeric average of families, individuals, dwelling units or housing structures per unit of land; usually refers to dwelling units per acre in the Comprehensive Plan.

Density Bonus: Permitting additional development on a parcel in exchange for items of public benefit such as affordable housing, recreation sites, infrastructure expansion, etc.

Developer: Any person or group of persons or legal entity which builds improvements on land including buildings, streets, parking lots, drainage structures, and utilities to serve buildings.

Dwelling Unit: A room or group of rooms (including sleeping, eating, cooking, and sanitation facilities) that constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

Easement: An interest held by one person, party, or entity in land of another, whereby that person is accorded partial use of such land for a specific purpose such as access or utility extensions.

Ecosystem: Community of different species interacting with one another and with the chemical and physical factors making up its nonliving environment.

Effluent: Any material that flows outward from something (e.g. treated wastewater).

Endangered Species: A species of animal or plant that is listed as endangered in accordance with the federal Endangered Species Act.

Environment: All the factors (physical, social, and economic) that affect a population.

Floodplain: The channel and the relatively flat area adjoining the channel of a natural stream or river which has been or may be covered by floodwater. Land immediately adjoining a stream which is inundated when the discharge exceeds the conveyance of the normal channel.

General Plan: A long-range plan for the physical development of a municipality. The general plan includes any unit or part of such plan separately adopted and any amendment to such plan or part thereof.

Goal: An ideal future end, condition, or state related to the public health, safety, or general welfare toward which planning and planning implementation measures are directed.

Groundwater: Water stored beneath the earth's surface in cracks and crevices of rocks and in the pores of geologic materials that make up the earth's crust.

Incident Management: The coordination of information between the various respondents to an accident, disabled vehicle, spilled debris, or other traffic incidents. Respondents would include such agencies as police, fire, emergency medical service, highway maintenance, and traveler assistance.

Infill: The development of new housing or other buildings on scattered vacant sites or small groups of sites in an otherwise built up area.

Infrastructure: Facilities and services needed to sustain any type of development—residential, commercial, or industrial activities. Includes water and sewer lines, streets, electrical power, fire and police stations, etc.

Intelligent Vehicle Highway System: A multilevel cooperative public/private effort to develop and implement new technologies to improve transportation efficiencies.

Intermodal: A system of moving goods that integrates several different forms of transportation methods (e.g. truck to rail).

Jobs-Housing Balance: An attempt to balance the number and types of jobs with the amount and cost of housing.

Land Use: The occupation or utilization of land or water area for any human activity or any purpose defined in the Comprehensive Plan.

Level of Service: A qualitative measure of traffic flow and driver satisfaction, with values ranging from A (free flow) to F (oversaturation).

Multi-modal: Capable of accommodating a variety of transportation modes, such as buses, automobiles, rapid transit, rail, bicycles and pedestrians. A multi-modal transportation hub is a facility for the transfer of passengers and/or goods between different modes of transportation.

Natural Resources: Elements relating to land, water, air, plant and animal life, and the interrelationship of those elements. Natural resources include soils, geology, topography, floodplains, vegetation, wildlife, surface and groundwater, and aquifer recharge zones.

Neighborhood: An area of a community with characteristics that distinguish it from other community areas and which may include distinct ethnic or economic characteristics, schools, or social clubs, or boundaries defined by physical barriers such as major highways and railroads or natural features such as rivers.

Non-Attainment Area: Areas that do not meet the National Ambient Air Quality Standards (NAAQS) for one or more pollutants. The pollutants included in these standards include lead, oxides of nitrogen, sulfur dioxide, ozone, carbon monoxide, and PM_{10}.

Objective: A specific end, condition, or state that is an intermediate step toward attaining a goal. An objective should be achievable and, when possible, measurable and time specific.

Open Space: Publicly or privately owned and maintained lands in their natural state and protected from development. Open Space lands are generally comprised of mountains and foothills, rivers and washes, canals, vegetation, wildlife habitat, parks, and preserves.

Pedestrian Facilities: Physical infrastructure that allows for or promotes walking as a mode of travel. These facilities either support walking as a stand-alone mode of travel or support walking between origins and destinations as an interface with public transit.

Point Source: A single identifiable source that discharges pollutants into the environment.

Policy: A specific statement that guides decision making. Policies are statements of intent for actions to be taken in pursuit of a given objective.

Planning: The establishment of goals, policies, and procedures for social, physical, and economic order.

Plat: A scaled drawing, developed from a survey performed by a surveyor, that contains a description of subdivided land with ties to permanent survey monuments.

PM_{10}: Airborne particulate matter of 10 microns or less in diameter. PM_{10} is the result of agricultural and construction operation, suspended dust, tire abrasion from vehicles traveling on roads, and natural occurrences such as wind storms.

Potable Water: Water that meets state and federal drinking water standards.

Regional Park: A recreation area of 200 or more acres offering passive recreation opportunities for activities such as hiking, camping, picnicking, and climbing, but has no facilities for organized active forms of recreation.

Right-Of-Way: A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads and utility lines.

Riparian Area: An ecosystem associated with bodies of water, such as streams, lakes, or wetlands, or is dependent upon the existence of perennial, intermittent, or ephemeral surface or subsurface drainage.

Rural Residential: Single family residence on a parcel of 1 or more acres; may include mixed residential and agricultural use.

Streetscape: The character or scene that observed along a street as created by natural and man-made components including width, paving materials, plantings, lamp posts, traffic lights, benches, and the forms of surrounding buildings.

Subdivider: Any person who offers for sale or lease six or more lots, parcels or fractional interests in a subdivision, or who causes land to be subdivided into a subdivision for himself or for others, or who undertakes to develop a subdivision, but does not include a public agency or officer authorized by law to create subdivisions (as defined by A.R.S.§32-2101-49).

Subdivision: Improved or unimproved land or lands divided or proposed to be divided for the purpose of sale or lease, whether immediate or future, into six or more lots, parcels or fractional interests. Subdivision or subdivided lands include a stock cooperative and include lands divided or proposed to be divided as part of a common promotional plan (as defined by A.R.S.§32-2101-50).

Traffic Demand Strategies: A set of programs aimed at reducing the volume of traffic by influencing the manner in which people travel to work. Examples of traffic demand strategies include carpooling, congestion pricing, and providing a financial subsidy for transit riders.

Transportation Mitigation Plan (TMP): A plan to show how traffic flows will be smoothed or diverted during construction. A TMP might call for installing ramp meters or upgrading parallel roads; boosting public transit service; aggressively marketing carpooling and vanpooling; and mounting a public information campaign.

Transit-Oriented Development: The design and location of land uses and activities of a density that encourages ridership on public transit. Transit-oriented design projects attempt to attract people to the transit system by creating an atmosphere which is safe, convenient, and easily accessible by foot, bicycle, or alternative transit mode.

Zoning: The division of a jurisdiction into parcel specific categories with regulations governing the use, placement, spacing, and size of land and buildings corresponding to the categories.

APPENDIX B-ACRONYM LIST

AACE	Arizona Association of County Engineers
AASHTO	American Association of State Highway & Transportation Officials
ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
ADT	Average Daily Traffic
AHCCCS	Arizona Health Care Cost Containment System
APTS	Advanced Public Transportation Systems
A.R.S.	Arizona Revised Statutes
ARTS	Advanced Rural Transportation Systems
ASPED	Arizona's Strategic Plan for Economic Development
ASU	Arizona State University
ATMS	Advanced Traffic Management Systems
AVL	Automatic Vehicle Locator
BACM	Best Available Control Measures
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMS	Bridge Management System
BOR	Bureau of Reclamation
BOS	Board of Supervisors
CAA	Clean Air Act
CAC	Citizens Advisory Committee
CAP	Central Arizona Project
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CMS	Congestion Management System
CO	Carbon Monoxide
COE	Corps of Engineers
CVO	Commercial Vehicle Operations
CWA	Clean Water Act

DMP	Development Master Plan
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESLO	Environmentally Sensitive Land Ordinance
FCDMC	Flood Control District of Maricopa County
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMS	Freeway Management System
GIS	Geographic Information System
GPDA	General Plan Development Area
GPS	Global Positioning System
GSPED	Governor's Strategic Partnership for Economic Development
HURF	Highway User Revenue Fund
IGA	Inter-Governmental Agreement
IMS	Intermodal Management System
ISTEA	Intermodal Surface Transportation Efficiency Act
ITI	Intelligent Transportation Infrastructure
ITS	Intelligent Transportation Systems
LOD	Level of Development
LOS	Level of Service
LRTP	Long Range Transportation Plan
MAG	Maricopa Association of Governments
MCCD	Maricopa County Community Development
MCDOT	Maricopa County Department of Transportation
MCESD	Maricopa County Environmental Services Department
MCP&DD	Maricopa County Planning and Development Department
MPO	Metropolitan Planning Organization
MSRP	Major Streets and Routes Plan
NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement

NEPA	National Environmental Policy Act
NEVTS	Northeast Valley Transportation Study
NFIP	National Flood Insurance Program
NHS	National Highway System
NO_X	Oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
O_3	Ozone
PCR	Pavement Condition Rating
PM_{10}	Particulate matter with an aerodynamic diameter equal to or less than 10 micrometers
PMS	Pavement Management System
PTMS	Public Transportation Management System
RACT	Reasonably Available Control Technology
RAPID	Rapid Access for Phoenix Intermodal Deployment
RBDS	Radio Broadcast Data System
RDA	Rural Development Area
RDPC	Regional Development Policy Committee (MAG)
ROW	Right-of-Way
RPTA	Regional Public Transportation Authority
RRS	Roads of Regional Significance
SIP	State Implementation Plan
SLD	State Lands Department
SMS	Safety Management System
SO_2	Sulfur Dioxide
SRP	Salt River Project
STB	Surface Transportation Board
SWVTS	Southwest Valley Transportation Study
TAB	Transportation Advisory Board
TDR	Transfer of Development Rights
TIP	Transportation Improvement Program
TMS	Traffic Monitoring System

TOC	Traffic Operations Center
TSP	Transportation System Plan
USA	Urban Service Area
USC	United States Code
VPD	Vehicles per Day
WMEZ	Western Maricopa Enterprise Zone

APPENDIX C-THE CITIZEN PARTICIPATION PROCESS

The development of the Maricopa County Comprehensive Plan followed an intense work program. The process outlined below provides an overview of the public involvement efforts that were used during the development of the Plan. Several overriding principles were followed to ensure that this planning effort had the public input and support needed for adoption. Those principles are:

- A sound public involvement plan is critical to the success of any planning process. It must include techniques to share information and create lines of communication between interested parties.
- Citizen participation must be a genuine effort to encourage public involvement in the decision-making process and to instill confidence and trust in everyone who might be affected.
- Information must be disseminated through public notices, newsletters, flyers, telephone hotline, newspaper articles, the Internet, and other events. Participation opportunities should occur through public workshops, informational meetings, surveys, or other means. Without mechanisms to notify the public and a means to receive public comment, a plan may fail since it will not have the support of the public it impacts.
- An effective public involvement process must address issues that arise when planning recommendations do not adequately consider the concerns of the residents affected.
- Recommendations made by professional staff are no more credible than those judgments made by the public.
- By hearing what the public expects and responding in the most effective, efficient way possible, an agency will be respected and supported for its decisions and their implementation.

Public involvement might increase the time and cost of the planning process, but it can yield greater returns since the outcome will be based on the expressed needs of the public it serves.

Time Table

The public participation process was divided into five time periods: issues identification; goals development and visioning; alternatives development and refinement; alternatives evaluation; and final plan development. While the phases overlapped, the processes involved were geared around these five periods and public involvement strategies were utilized to support the work completed in each.

Issue Identification

The first several months of 1995 were devoted to identifying issues critical to the Comprehensive Plan. Considerable information was gathered during these first few months which helped guide the development of the Plan. Public involvement included public meetings with residents throughout the county. It also included individual meetings with city and town staffs to obtain their views on the planning process. A partnering meeting was held for city and town staff, and appointed and elected officials. A second partnering meeting was held with the development community and other special interest groups. Finally, a random sample phone survey was conducted to identify specific transportation issues.

Goals Development and Visioning

Goals development and visioning to guide the rest of the planning process were completed in June 1995. Public meetings were again held throughout the county. This was also a period where additional informal meetings were held with city and town staff. This portion of the planning process lasted several months. A mail survey was completed during this time to gather information on land use.

Alternatives Development and Refinement

As summer ended in 1995, alternatives development was underway. Once the alternatives were developed, the planning team began evaluating the alternatives. It was also during this period that a Futures Forum was held for elected officials, city and town staff, and the business and development communities. This forum provided a look at the past, a picture of the present, and an impression of the future to provide participants with insights from each.

Alternatives Evaluation

During this period, another round of public meetings was held to narrow the five alternatives to two. The planning team also began work on evaluating the two alternatives. When the two land use alternatives were finalized, the team again went to the public for comment in another round of public meetings.

While there was some overlap in time periods, this began the evaluation period of the study. This portion of the planning process consumed the greatest percentage of time.

Nearing the end of the detailed evaluation of the two alternatives, the planning team once again went out to the public to share the findings in another round of public meetings. The evaluation included fiscal, quality of life, and feasibility studies. The information gained here and from another round of partnering meetings with the municipalities and the business community led to the development of the final plan.

Final Plan Development

The last phase of the planning process was the final plan development period. This occurred during the winter of 1996–1997, culminating with the last round of public

meetings in February and March of 1997, and public hearings in September and October of 1997.

Throughout this process, public notices, paid advertisements, newsletters, the Internet, a telephone hotline, and flyers announced the public meetings. Focus groups were also employed, using experts to ensure that everyone involved understood the complex issues addressed in the county Comprehensive Plan. Focus groups brought experts together to share and help formulate direction for many areas of the Plan.

Public Involvement Strategies

The planning team is confident that the public involvement process utilized in the development of the Plan is one of the most complete ever used in Maricopa County. This process was not initiated until a complete strategic effort was completed to outline an outreach program that would be inclusive. To do this, a large menu of techniques were identified and included.

Public Meetings

Public meetings were used extensively throughout the Comprehensive Plan public involvement process. The planning team held over 50 public meetings during six different time periods. Each round of meetings had a distinct purpose, so the format was developed to best suit the purpose. Workshop style formats were used when maximum interaction was needed, such as when issues and goals were developed. Formal presentations were used when the meeting consisted of large amounts of technical information to share, such as when the results of the analysis of plan alternatives were presented.

Meetings were held throughout Maricopa County to give all citizens an opportunity to participate. Each series consisted of six to ten meetings located at regularly used public locations such as schools, community centers, libraries, and town halls. The same sites were used so that repeat participants would feel comfortable with the location.

The first series of meetings took place in January 1995. These meetings followed a workshop format that was designed to help the planning team identify issues critical to Maricopa County. Six meetings were held during this round. The next round of meetings took place in July of that same year. These six meetings also followed the workshop format. The public was asked to help formulate a county-wide vision and helped outline goals and objectives to drive the Plan. The third round of public meetings took place in the fall of 1995. The planning team increased the number of meetings to ten to provide better opportunities for residents in outlying areas of Maricopa County to participate. These meetings included a formal presentation on the land use alternatives and a visual preference survey.

The fourth series of public meetings took place in the Spring of 1996. Ten meetings were held throughout Maricopa County. These meetings used a workshop format for participants to share their ideas about the land use and transportation alternatives.

The fifth series of meetings was held in the fall of 1996. These ten meetings used a presentation format that shared data with participants on the alternatives analysis that had been completed.

The final public meetings were held in February and March of 1997. The ten meetings used a workshop format for participants to learn more about the recommended land use and transportation alternative and to share their ideas.

Partnering Meetings

Three series of partnering meetings were held during the planning process. Each series consisted of two meetings: one for city and town representatives (which included planning and transportation staff members and elected and appointed officials from the communities within Maricopa County); the second meeting included utility companies, home builders, and water districts.

The first series of partnering meetings took place in the early stages of the planning process when issues identification took place. The second series occurred after the analysis of the two alternatives was completed. This allowed the participants the opportunity to view the results and share their thoughts on what the final plan should begin to look like. The final series took place after the final plan was drafted. This provided staff a good chance to preview the "draft" final plan with attendees.

Futures Forum

A Futures Forum was held on October 23, 1995 at the Embassy Suites in Tempe, Arizona. Participants included city and town planning staff, and members of the business and development communities. This public involvement event reinforced the notion of planning and the importance of including as many people as possible.

Focus Groups

Focus groups of various size were used throughout the planning process. The groups brought together experts for detailed discussion on important issues concerning specific Comprehensive Plan topics. These meetings varied in length and format and produced important information on a myriad of topics. Focus groups were held on topics such as agriculture, open space, zoning issues, and the amendment process.

Breakfast Briefings

Another public involvement activity included breakfast briefings. These breakfasts were sponsored and lead by members of the county Board of Supervisors. Business leaders from around the valley were invited for a briefing on the status of the Plan and for an opportunity to share their feelings on the overall direction of the Plan. Ten of these breakfast meetings took place in the spring of 1996.

Speakers Bureau

Planning team members made presentations to civic and professional organizations, city staff, homeowner associations, and water districts. Each opportunity allowed planning team members the chance to share planning information with interested individuals for comment.

Public Hearings

Arizona Revised Statutes (A.R.S. §11-822 and §11-823) require two public hearings be held prior to adoption of the Comprehensive Plan by Maricopa County. The first public hearing was held at the Maricopa County Planning and Zoning Commission meeting on September 25, 1997. This was followed by the second public hearing at the Board of Supervisors meeting on October 20, 1997. These two hearings allowed the public to formally comment on the Comprehensive Plan before both appointed and elected bodies. These hearings were posted and notices given in accordance with requirements set forth in the Arizona Revised Statutes.

Newsletters and Flyers

Newsletters were another integral part of the public involvement process. Nine issues were mailed during the planning process. Newsletters were used to share Plan results and to announce upcoming meetings. To ensure that everyone in unincorporated Maricopa County was aware of the planning process, the first issue was mailed to all registered addresses in unincorporated Maricopa County. This initial mailing of about 70,000 newsletters asked citizens to inform the planning team (by phone, mail, or in person) if they wished to remain on the mailing list. Those who responded continued to receive newsletters. All attendees at the public meetings, partnering meetings, focus groups, and the Futures Forum were also added to the newsletter mailing list. In addition, the hotline and the Maricopa County Comprehensive Plan Internet web page provided two more methods for interested persons to have their names added to the mailing list.

The planning team also developed an additional list of key stakeholders which included all municipalities, large property owners, business leaders, and other affected parties within Maricopa County. After the first newsletter mailing, an average of 8,000 newsletters were mailed for each edition. The last newsletter was again mailed to every address in unincorporated Maricopa County and to key stakeholders to ensure maximum coverage.

Informational flyers were also used regularly throughout the planning process. Flyers were used primarily to inform interested persons of upcoming meetings. They were placed in libraries, community centers, and other government offices. Flyers were also distributed at grade schools for children to take home to their parents.

Public Notices

Many newspapers, radio stations and television stations provide free advertising opportunities to governmental entities to furnish information to the public on upcoming meetings or programs. Public notices were given to most newspapers, radio stations, and television stations within Maricopa County for each series of public meetings held. Notices were also posted by the Clerk of the Board of Supervisors for other public meetings.

Paid Advertisements

Paid advertising was also used to announce public meetings. This included ads in a number of newspapers in the rural areas of unincorporated Maricopa County. These ads were generally published a week before public meetings.

Surveys

Surveys are an excellent mechanism to gather public opinion and can be completed in-person, through the mail, and over the phone. The planning team employed phone and mail surveys. A random telephone survey was used to gather insights into transportation related issues for the transportation element.

Two mail-out surveys were completed, seeking information on land use issues. While these surveys were not statistically valid, they provided insight into the aspirations of the citizens who participated. A mailing to several thousand residents was done for each survey, and approximately 2,000 surveys were returned for each.

Participants who attended the public meetings were surveyed as part of the meeting program. These surveys were used to evaluate the performance of the planning team.

Telephone Hot Line

A Comprehensive Plan hotline was established for people to offer comments, add their name to the mailing list, or inquire about the Plan. On average 10 or more calls were logged per week during the development of the Plan.

The Comprehensive Plan Internet Web Page

A Maricopa County Comprehensive Plan web page[6] was developed during the early stages of the planning process. This page provides residents the opportunity to view documents created as part of the planning process. The page allows users to comment on the information contained. These pages have had thousands of visitors who took advantage of this technology.

Oversight and Staff Steering Committees

Two committees were established to provide guidance to the planning process: the Oversight Committee and the Staff Steering Committee. The Oversight Committee was comprised of one member of the Board of Supervisors, three members of the

[6] http://www.maricopa.gov

Planning and Zoning Commission, and one member of the Transportation Advisory Board. These committees advised staff throughout the development of the Comprehensive Plan. The Oversight Committee met monthly to provide strategic direction, comment on Plan development, and review documents prepared in support of the Plan.

The Staff Steering Committee was comprised of key staff from all county departments with a stake in the Plan. This included Flood Control, Transportation, Planning and Development, Solid Waste, Environmental Services, Recreation Services, Public Health and Community Services, Community Development, Office of Management and Budget, and the Sheriff's Office. The Maricopa Association of Governments also participated. The committee met regularly and provided important input from their respective departments.

APPENDIX D-BACKGROUND REPORTS

The comprehensive planning team conducted extensive research throughout the planning process in support of the development of the Plan. The following documents are on file at the Maricopa County Department of Planning and Development and the main branch of the Maricopa County Public Library. Many of the documents are available on the Maricopa County Comprehensive Plan web page.

- County Profile
- Historical Background and Population Analysis
- Land Use Attitudinal Survey
- Land Use Inventory and Analysis
- Transportation Survey
- Transportation Inventory and Analysis
- Environmental Inventory and Analysis
- Economic Development Element Background, Inventory and Analysis Report 1995–2020
- Agriculture White Paper
- Boundary Review White Paper
- Growth Enhancement Tools White Paper
- Performance Zoning White Paper
- Plan Amendment White Paper
- Seniors in Maricopa County White Paper
- Transit White Paper
- Technical Analysis of Five Land Use Alternatives
- Technical Analysis of Two Land Use Alternatives
- Comparative Fiscal Analysis of Two Land Use Alternatives
- Comprehensive Plan Newsletters Numbers 1-8

APPENDIX E-COUNTY LAND USE PLANS

The Comprehensive Plan incorporates the area land use plans adopted by the Board Of Supervisors. These plans are on file at the Planning and Development Department.

♦ Desert Foothills Policy and Development Guide	1979
♦ East Mesa Land Use Plan	1988
♦ Estrella Land Use Plan	1989
♦ Goldfield Land Use Plan	1995
♦ Grand Avenue Land Use Plan	1988
♦ Laveen Land Use Plan	1988
♦ Little Rainbow Valley Land Use Plan	1988
♦ New River Land Use Plan	1988, rev. 1995
♦ Queen Creek Land Use Plan	1988
♦ Tonopah Land Use Plan	1988, rev. 1992
♦ Westside Military Airbase Area Land Use Plan	1991
♦ Wickenburg Highway Scenic Corridor Development Guide	1991
♦ Williams Regional Planning Study	1996
♦ White Tanks Agua Fria Policy and Development Guide	1982

APPENDIX F-MUNICIPAL GENERAL PLANS

The Maricopa County Comprehensive Plan considers the general plans of the cities and towns in Maricopa County as a guideline for decision making within the General Plan Development Area. Copies of these plans are on file at the Planning and Development Department for reference only. To ensure accuracy, inquiries concerning general plans should be directed to the relevant jurisdiction.

- Avondale General Plan
- Buckeye General Plan
- Carefree General Plan
- Cave Creek General Plan
- Chandler General Plan
- El Mirage General Plan
- Fountain Hills General Plan
- Gila Bend General Plan
- Gilbert General Plan
- Glendale General Plan
- Goodyear General Plan
- Guadalupe General Plan
- Litchfield Park General Plan
- Mesa General Plan
- Paradise Valley General Plan
- Peoria General Plan
- Phoenix General Plan
- Queen Creek General Plan
- Scottsdale General Plan
- Surprise General Plan
- Tempe General Plan
- Tolleson General Plan
- Wickenburg General Plan
- Youngtown General Plan

APPENDIX G-LAND USE CATEGORIES

The regional standardization of land use designations is crucial to the efficient coordination of the Comprehensive Plan with municipal general plans. The following 24 land use categories (Table 4-Land Use Categories) will be applied throughout the next steps of the comprehensive planning process, including updates to the existing area land use plans and the development of new area plans. These categories are based on the regional land use categories developed in 1995, with the intention of unifying land use designations throughout the region.

Table 5 - Land Use Categories

Category		Description
1	Rural	1 dwelling unit/acre or less
2	Large Lot Residential	Greater than 1 and less than or equal to 2 dwelling units/acre
3	Small Lot Residential	Greater than 2 and less than or equal to 5 dwelling units/acre
4	Medium Density Residential	Greater than 5 and less than or equal to 15 dwelling units/acre
5	High Density Residential	Greater than 15 dwelling units/acre
6	Neighborhood Retail Centers	Building area less than 100,000 square feet
7	Community Retail Centers	Building area 100,000 to 500,000 square feet
8	Regional Retail Centers	Building area more than 500,000 square feet
9	Hotels, Motels, and Resorts	Includes general recreational and convention facilities
10	Warehouse/Distribution Centers	
11	Industrial	Includes general warehousing, storage, distribution activities, general manufacturing
12	Business Park	Includes enclosed industrial, office or retail in a planned environment
13	Office	Includes professional office environments which are conmprised of real estate health care, land banking, and related activities
14	Educational	Includes schools, colleges, technical schools, and other facilities
15	Institutional	Includes hospitals, churches, and cemetaries
16	Public Facilities	Includes community centers, power substations, libraries, city halls, police and fire stations, and other government facilities
17	Large Assembly Areas	Includes stadiums and fairgrounds
18	Transportation	Includes railroads, railyards, transit centers, and freeways
19	Airports	
20	Recreational Open Space	Includes parks and golf courses
21	Dedicated or Non-developable Open Space	Includes mountain preserves and washes
22	Water	Includes lakes, rivers, and canals
23	Agriculture	Includes land for cultivation, the raising of crops, and the production and maintenance of livestock
24	Mixed Use	Includes business parks, commercial, office, and/or high density residential
25	Military Compatible	Includes those uses that are compatible and consistent with the high noise or accident potential of a military airport or ancillary military facility

APPENDIX H-COMPREHENSIVE PLAN AMENDMENT GUIDELINES

Plan Amendment Process

Preliminary Discussion and Review
(5 days)

↓

Staff Determines if Amendment is Necessary
(Time Varies)

↓

Application
(2 days)

↓

(Refer for T.A.C. Review)
(19 days maximum)

↓

T.A.C. MEETING
(14 days Average)

↓

Posting and Notice of Public Hearing
(Minimum of 22 days)

↓

PLANNING AND ZONING COMMISSION HEARING

↓

Posting and Notice of Public Hearing
(Minimum of 24 days)

↓

BOARD OF SUPERVISORS HEARING
Adoption or Denial of
Comprehensive Plan Amendment

COMPREHENSIVE PLAN AND AREA PLAN AMENDMENT GUIDELINES

An amendment to the adopted Comprehensive Plan or an Area Plan may be filed with or without a rezoning request or Development Master Plan application. These guidelines are provided to assist an applicant in the processing of a Comprehensive Plan or Area Plan amendment.

On July 23, 1990, an Amendment to the Maricopa County Zoning Ordinance was approved by the board of Supervisors requiring compliance with the County Comprehensive and Area Plans prior to the approval of any Development Master Plan (DMP) or rezoning request 40 acres in size or larger.

If a DMP or rezoning request is not in conformance with the Comprehensive Plan or Area Plans, an applicant must apply for a Comprehensive Plan Amendment (CPA). The following outline describes the process for a Comprehensive Plan Amendment.

Process

1. **Preliminary Discussion and Review**

   When a DMP is submitted, or an applicant applies for a rezoning, 40 acres or larger in size, preliminary discussions will be held with the applicant to determine whether or not their request is in conformance with the Comprehensive Plan or Area Plans. This is determined by reviewing the nature of the proposal (including density, uses, and location) against the Comprehensive Land Use Plan for the area. This review also enables staff to advise the applicant of those characteristics of the proposal that do not conform with the Plan and possible changes to the proposal that could bring it into conformance. Staff will respond to the applicant in 5 days or less.

2. **Application**

   Once it has been determined that a CPA is required, a formal application must be filed and the appropriate filling fees paid. The cost to apply for a CPA is $500.00 plus $10.00 per acre or portion thereof. This fee is nonrefundable. Additionally, the Supplemental Questionnaire and a map showing the requested change must be submitted.

3. **Formal Review**

   Upon receipt of the application and filing fee, the Planning and Development Department will refer the application for review by various agencies and schedule a meeting of the Technical Advisory Committee (T.A.C.) At this meeting, the Planning and Development Department will evaluate the proposal based on the following:

a) Whether the amendment constitutes an overall improvement to the Comprehensive Plan and is not solely for the good or benefit of a particular landowner or owners at a particular point in time.

b) Whether the amendment will adversely impact all or a portion of the planning area by:

- altering acceptable land use patterns to the detriment of the plan
- requiring public expenditures for larger and more expensive public improvements to roads, sewer, or water systems than are needed to support the planned land uses
- adversely impacting planned uses because of increased traffic
- affecting the livability of the area or the health or safety of present and future residents
- adversely impacting the natural environment or scenic quality of the area in contradiction to the plan

c) Whether the amendment is consistent with the overall intent of the Comprehensive Plan

d) The extent to which the amendment is consistent with the specific goals and policies contained within the plan.

4. Public Hearing - Planning and Zoning Commission

Upon the satisfaction of the T.A.C. requirements, the CPA will be scheduled for a Public Hearing before the Maricopa County Planning and Zoning Commission. Adjacent landowner, homeowner associations, neighboring municipalities, and affected agencies will be notified of the hearing. Notice of the Hearing will be published in a newspaper of general circulation and posters posted at the Plan Amendment location.

The Planning and Development Department will prepare a written staff report for the Planning and Zoning Commission based on the evaluation and comments received. The Department's recommendation on the CPA is included in the staff report, which will be mailed to the applicant approximately one week prior to the Commission Meeting. The Planning and Zoning Commission may recommend approval, denial, or alter the proposed amendment.

5. Public Hearing - Board of Supervisors

The Maricopa County Planning and Zoning Commission recommendation will be transmitted to the Maricopa County Board of Supervisors for a second Public

Hearing. Notice of the hearing will be given in the same manner as the Planning and Zoning Commission hearing. The Board of Supervisors can either accept the Planning and Zoning Commission's recommendation or reject all, or a portion of it. However, if the Board of Supervisors chooses to revise the amendment, it must be referred back to the Planning and Zoning Commission for their review and recommendation on the revision desired by the Board of Supervisors.

If the proposed Amendment is referred back to the Planning and Zoning Commission, the Commission will hold another public hearing after notice is given (per item 4). At such time that the Planning and Zoning Commission adopts a recommendation concerning the amendment requested by the Board of Supervisors, another public hearing will be held before the Board of Supervisors after notice is given (per Item 4). The Board of Supervisors, again, can either deny, approve or alter the proposed amendment in part or in its entirety.

6. Post Board Action

If the County Board of Supervisors approves the CPA, it becomes adopted and takes effect immediately. The Comprehensive Plan or Area Plan will be revised to reflect the amendment.

SUPPLEMENT FOR COMPREHENSIVE PLAN AND AREA PLAN AMENDMENTS

(To be completed by the Applicant and filed with the application)

(Additional sheets May be attached)

Location of Property: _____

_____

_____

Land Use Plan to be amended: _____

Current Land Use Designation: _____

Proposed Use of Property by Applicant: _____

_____

_____

_____

Summary of features in Rezoning/DMP request that do not conform with the Comprehensive Land Use Plan: _____

_____

_____

_____

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_____

Why should this plan be amended as requested?

_____

_____

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_____

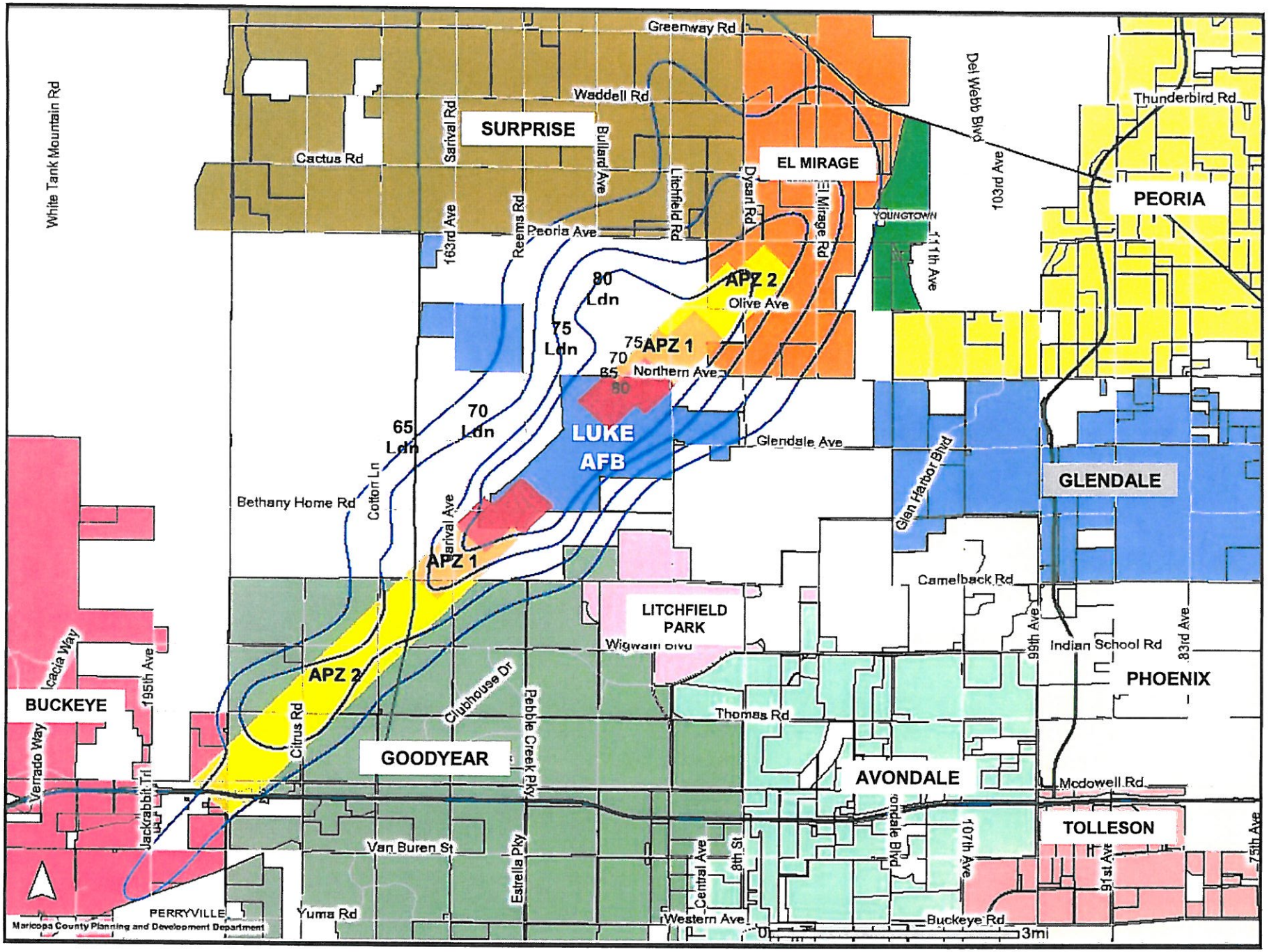
_____

_____

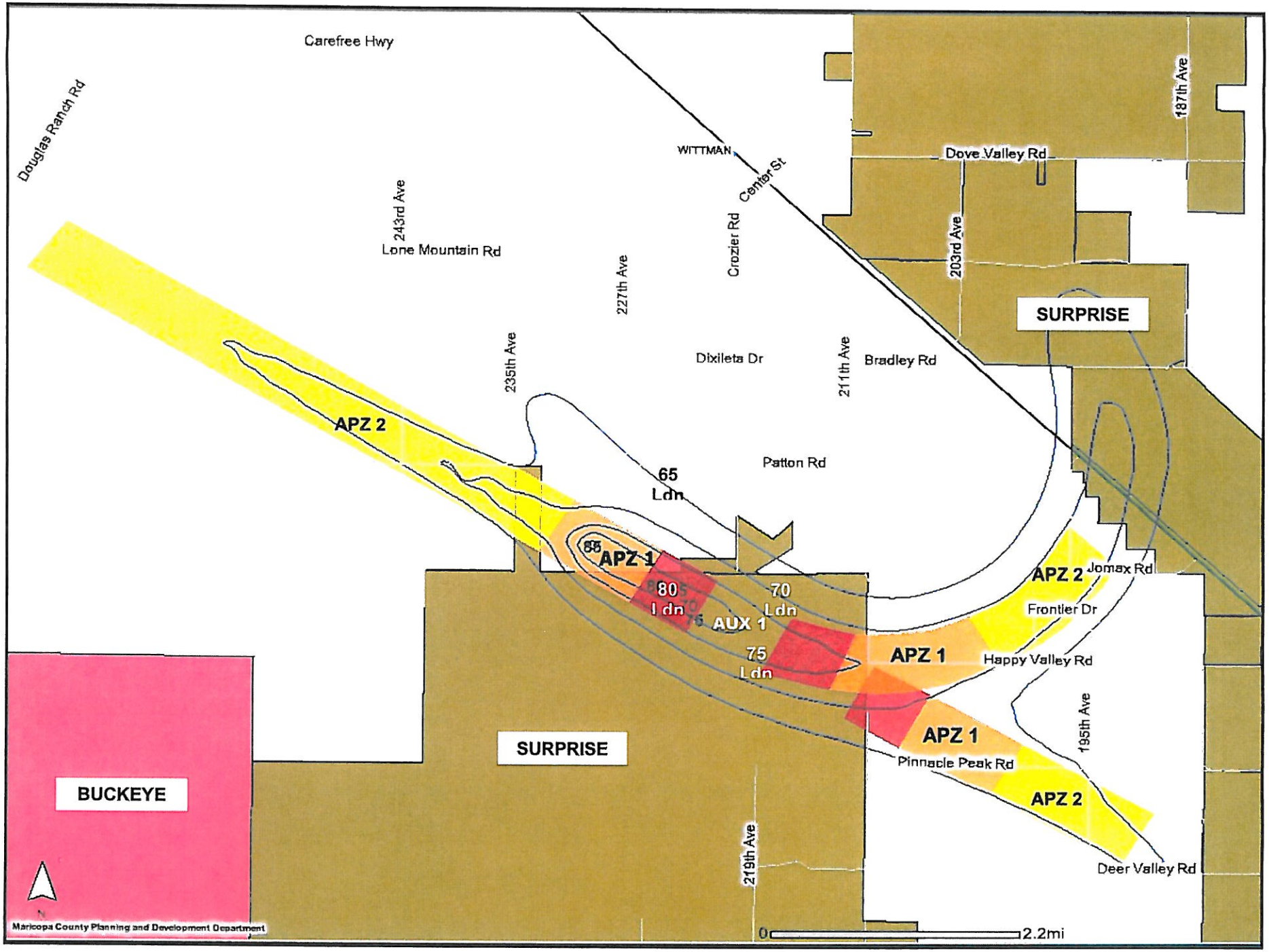
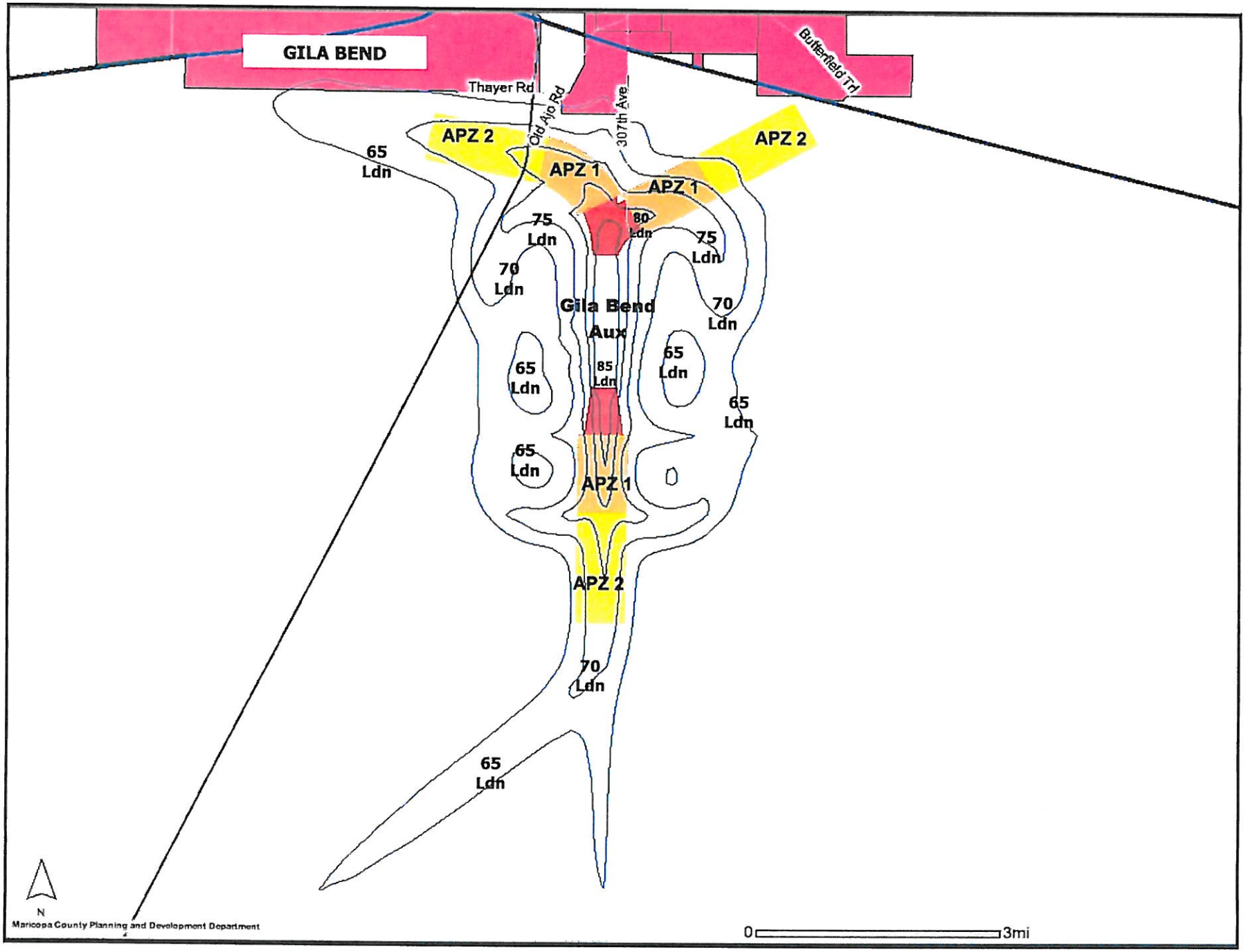
Case Number:_____

NOTES:

APPENDIX I – LUKE AFB NOISE CONTOURS AND ACCIDENT POTENTIAL ZONES



APPENDIX J – AUX. AIRFIELD #1 NOISE CONTOURS AND ACCIDENT POTENTIAL ZONES



APPENDIX K – GILA BEND AUXILIARY FIELD NOISE CONTOURS AND ACCIDENT POTENTIAL ZONES