



Pima Country Educational Hike on Oracle Ridge Trail, Santa Catalina Mountains, With Martha Burgess and Meg Quinn

2.3 Jurisdictions and Planning Areas

Pima County consists of several jurisdictions, of which the city of Tucson is the largest and is the county-seat. The vast majority of the county population lies in and around Tucson, filling much of the eastern part of the county. Tucson, Arizona's second largest city, is a major commercial and academic center. The other jurisdictions are the Town of Oro Valley, the Town of Marana, the Town of Sahuarita, and the City of South Tucson. There are several unincorporated communities in Pima County such as Ajo, Why, Green Valley, Catalina, Robles Junction, Arivaca, and Picture Rocks. The County also includes two sovereign nations: the Tohono O'odham Nation and the Pascua Yaqui Tribe. The Tohono O'odham Nation comprises the largest land mass for Central Pima County and also includes the physically separate San Xavier District in the Tucson Metro Area. The Pascua Yaqui Tribe has a growing land ownership in the southwest part of the Tucson Metro Area. The rest of the county is rural in nature. Over one third of the County's population lives in the unincorporated area.

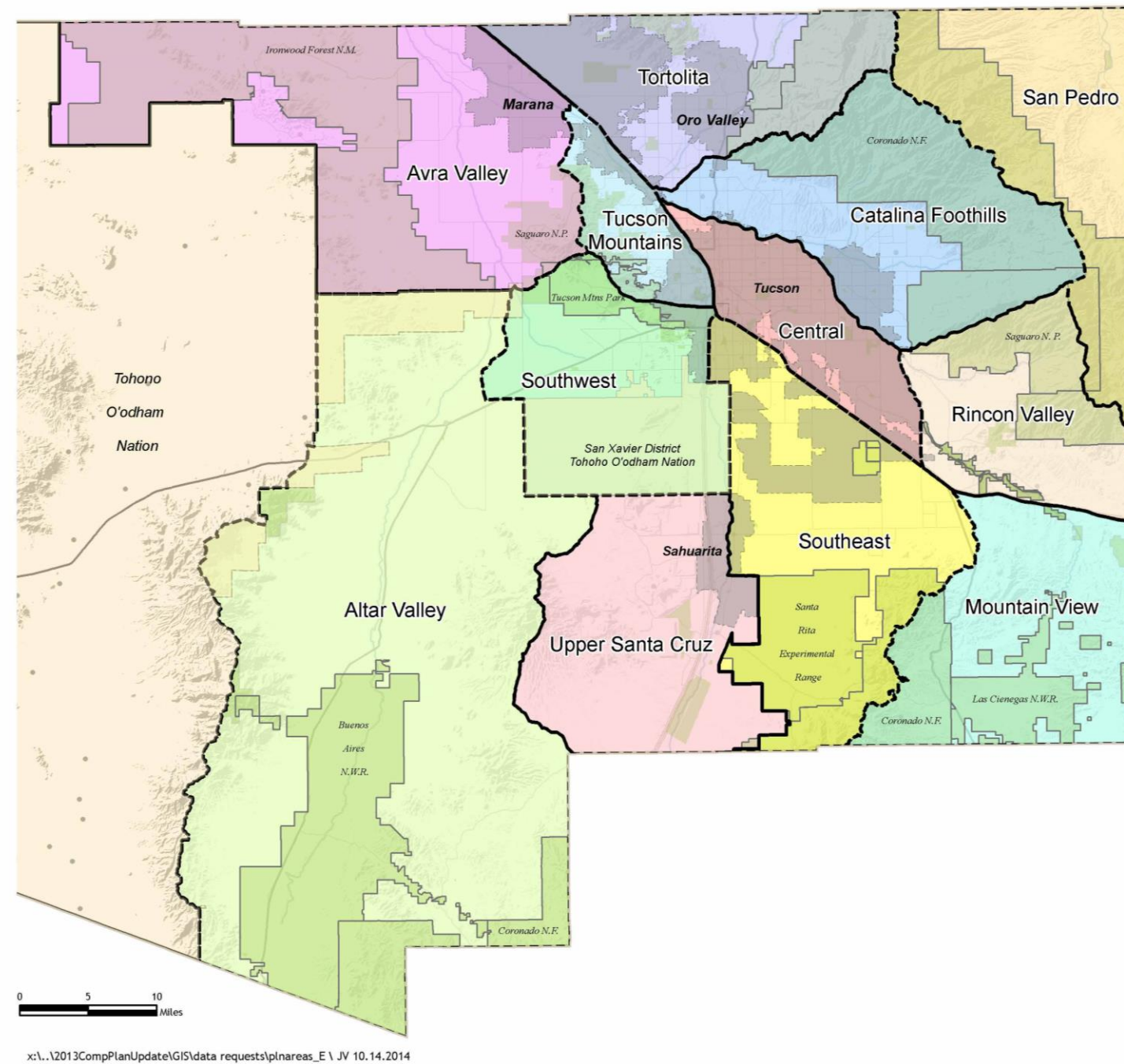
Consistent with the Pima County Infrastructure Study undertaken in 2011, thirteen planning areas have been delineated for the purpose of distinguishing opportunities and challenges for land use, the provision of services and infrastructure, and economic development. The planning areas used for this study included incorporated as well as unincorporated areas. They include:

1. Avra Valley
2. Tucson Mountains
3. Southwest
4. Altar Valley
5. Upper Santa Cruz
6. Mountain View
7. Southeast
8. Central
9. Catalina Foothills
10. Rincon Valley
11. Tortolita
12. San Pedro
13. Ajo-Why (Western Pima County)*

*** Note: Planning Area 13 was not a part of the 2011 Pima County Infrastructure Study but is included in Appendix A.**

For purposes of land use analysis, only the unincorporated portions of these planning areas were considered. Exhibit 2.3.1 and Exhibit 2.3.2 show planning areas within the County.

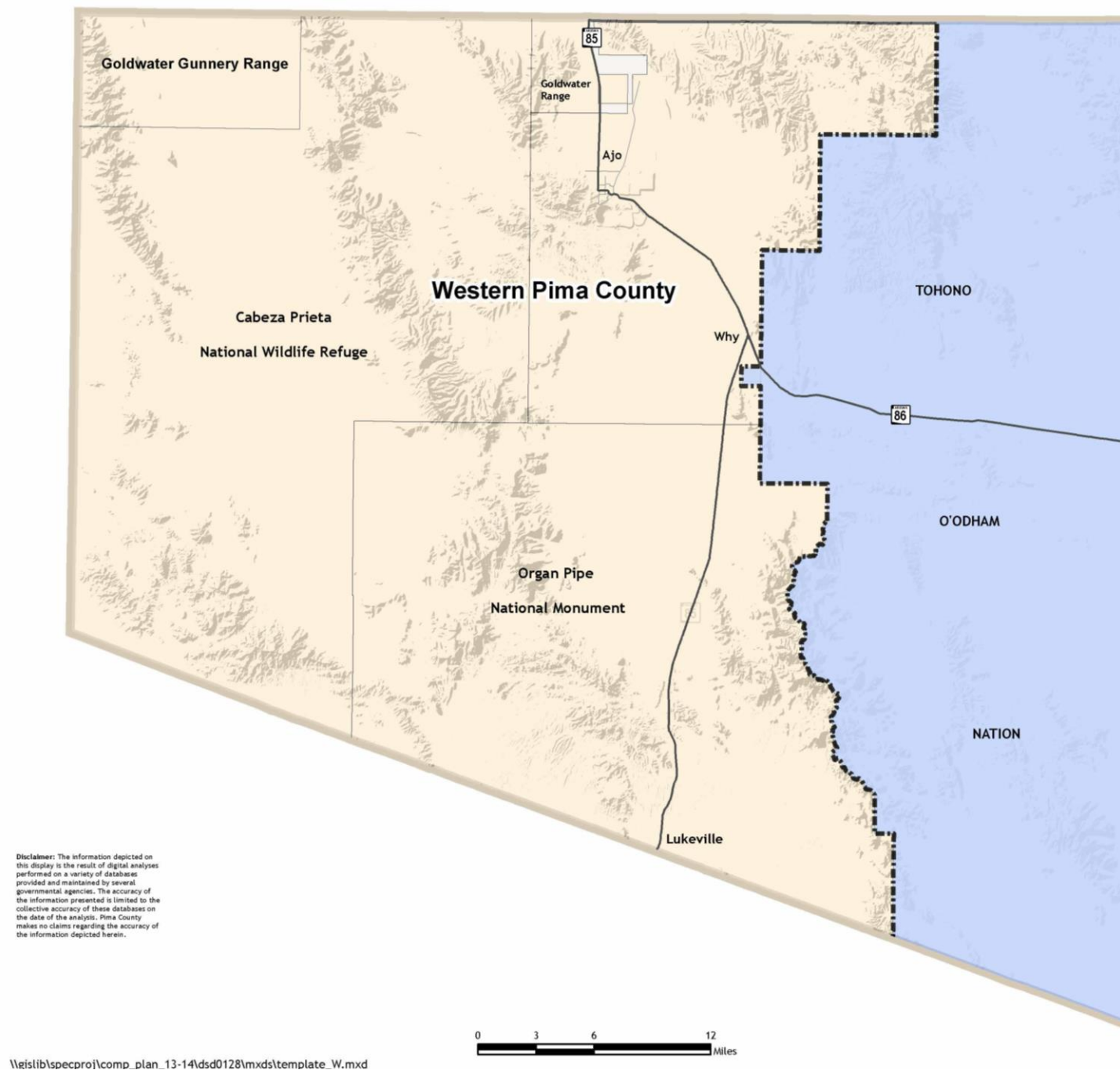
Exhibit 2.3.1: Planning Areas (East)



Planning Areas (East)

- Altar Valley
- Avra Valley
- Catalina Foothills
- Central
- Mountain View
- Rincon Valley
- San Pedro
- Southeast
- Southwest
- Tortolita
- Tucson Mountains
- Upper Santa Cruz
- Planning Area Boundaries

Exhibit 2.3.2: Planning Areas (West)



Planning Areas (West)

-  Tohono O'odham Nation
-  Western Pima County

2.4 Using the Document

Chapter 1 of this Comprehensive Plan provides the **Vision** for the plan, the overall organizing principle for the plan, and some context for its content.

Chapters 3-5 are organized by element within that overall topic area. Within each element are goals, which tie back to the Vision as expressed in Chapter 1. Chapters 6 and 7 are organized exactly the same but each is a specific element of the plan by itself. Each goal has one or more policies which represent policy guidance to the County staff. Under each goal, there may be implementation strategies particularly when a new action is to be undertaken.

Not all policies have specific implementation strategies, especially if the policies refer to items that are currently being implemented or are ongoing. To avoid repetition, an implementation strategy may implement multiple policies, perhaps even from differing elements. Appendix B will serve as a working document reflecting completed work and modified work for budgetary and other reasons through the lifespan of the plan.

Chapter 8 includes the **land use legend** for the land use maps and the **land use maps** themselves. Chapter 3 in the Environmental Element also includes the Maeveen Marie Behan Conservation Lands System, and Chapter 4 in the Flood Control and Drainage Element also includes the 13 Regional Hydrology Maps, both sets of which are to be used in conjunction with the land use maps. Maps are considered plan policy in addition to the written word.

Chapter 9 contains two separate documents: **Special Area Policies** and **Rezoning Policies**. Special Area Policies are general policies that only apply to specific areas of the County. Most of these are carried over from previous county plans but are nonetheless valid. Rezoning policies apply to a specific parcel or parcels of land and are usually the result of a previous comprehensive plan amendment. Both Special Area and Rezoning Area policies are identified by number in the appropriate locations on the land use maps in Chapter 8.

Chapter 10 contains guidance and direction as to how this Comprehensive Plan is to be implemented.

Use of Land

Chapter 3: Use of Land Goals and Policies



The overarching goal of this chapter is to guide development and conservation planning, housing, and community design decisions consistent with the plan’s vision, community input, and respect for private property rights. This Use of Land chapter advances the welfare of our people and our communities by creating convenient, equitable, healthy, efficient, and attractive environments for present and future generations. The implementation of the goals and policies of this chapter will assist in the expansion of a tax base sufficient to provide for the public health, safety, and welfare of Pima County residents, private/public partnerships, and efficient allocation of public resources for capital improvements and maintenance of our physical, social, environmental, and financial environment. The goals and policies of this chapter seek to use land efficiently, provide the necessary balance of uses in a compatible form, protect natural resource systems, meet social and economic needs, respect the unique local culture and geography, and do it all in a fiscally responsible way.

This chapter includes the following elements of the Comprehensive Plan:

- Land Use
- Focused Development Investment Areas
- Open Space
- Environmental
- Housing and Community Design
- Cultural Resources

All of these elements work together as they address the physical use and habitation of space, whether in terms of development, conservation or a combination of both.

This Chapter meets the state requirements for comprehensive plans for the following: Land Use Element, Growth Area Element, Open Space Element, and a portion of the Environmental Element.

3.1 Land Use Element

The Land Use Element designates the proposed general distribution and location and extent of uses of the land for housing, business, industry, agriculture, recreation, education, public buildings and grounds, open space, and conservation lands. Section 11-804 of the Arizona Revised Statutes requires the land use plan to include: (a) “standards of population density and building intensity recommended for the various land use categories”; and (b) “specific programs and policies that the County may use to promote compact form development activity and locations where those development patterns should be encouraged.” The former is covered in the land use maps and land use legend. The latter is covered in this section of the plan.

In addition to meeting state requirements, the Land Use Element integrates land use development strategies with physical infrastructure, human infrastructure, economic development, and resource conservation to create a healthy region. The land use element addresses development patterns, mix of uses, uses for suburban, urban, and rural areas, compact form, horizontal/vertical form, connectivity and specific tools such as health impact assessments, transferable development rights, and more detailed community plans.

When evaluating land use changes for implementation, in addition to land use and other policies, the set of special area and rezoning policies outlined in Chapter 9 may apply and, if so, must be consulted. If appropriate they may serve as the basis for conditions of rezoning. Further explanation of these processes are covered in Chapter 10, Administration.

If an issue is not addressed in this chapter, it may be addressed in another overlapping chapter.

Goal 1: Integrate land use strategies with physical infrastructure, human infrastructure, economic development, and resource conservation to ensure the long-range viability of the region

Policy 1: Promote land use patterns that support healthy people, a healthy environment, and a healthy economy.

Policy 2: Provide an appropriate mix of land uses that:

- a) Supports a balance of housing, employment, shopping, recreation, and civic uses;
- b) Furthers expansion of economic development goals;
- c) Recognizes in the unincorporated County the dominant suburban growth pattern within the metropolitan area and the dominant rural growth pattern outside of the metropolitan area;
- d) Promotes the integrated and efficient use of infrastructure and services; and
- e) Conserves, protects and maintains culturally and biologically important lands.

- Policy 3:** Petitioners for rezoning of any parcel greater than one acre in size to be developed at a residential density of four or more residences per acre; or greater than one acre in size to be developed for non-residential uses; or greater than five acres in size shall submit a Site Analysis prepared in accordance with Pima County Site Analysis Requirements, as referenced in Section 18.91.030F of the Pima County Zoning Code.
- Policy 4:** Support land uses, densities, and intensities appropriate for the urban, suburban, and rural areas of the unincorporated County.
- Policy 5:** Include regulatory floodplains and regulated riparian habitat areas as open space priorities to maintain hydrologic integrity, wildlife corridor connectivity and contiguous open space corridors.
- Policy 6:** Promote a compact form of development in urban and suburban areas where infrastructure is planned or in place and the market is receptive.
- Policy 7:** Support and incentivize horizontal and vertical mixed use development and redevelopment in character and scale with existing development in:
- a) Community nodes and gateways;
 - b) Key transportation routes;
 - c) Industrial and employment centers;
 - d) Innovative infill development in brownfield areas and Revitalization Development Opportunity Corridors (See also Element 3.2. Goal 3); and
 - e) Rural Centers (See Land Use Legend).



Vertical Mixed Use (retail or office on ground floor with residential on second floor).



Horizontal Mixed Use – Government Services/Offices with Integrated Gathering Places Providing Bicycle and Pedestrian Connectivity.

- Policy 8:** Require all mixed use developments to incorporate design elements for walkability, bikeability and access to work, school, services, infrastructure, and healthy foods.
- Policy 9:** Consider in all land use decisions access to work, school, services, infrastructure, and healthy foods to create healthy communities, including pedestrian and bicycle infrastructure and amenities.
- Policy 10:** Land use planning shall consider air quality and access to incidental solar energy.
- Policy 11:** Promote Transit Oriented Development (TOD) where appropriate and feasible.
- Policy 12:** Support infill and revitalization efforts in approved Community Development Target Areas (See also Element 3.2. Goal 2).
- Policy 13:** Encourage the use of the Conservation Subdivision Ordinance (CSO) for proposed subdivisions in the Conservation Lands System located in CR-1 (one site-built home per acre) or less intense zones meeting all Conservation Lands System (CLS) requirements as administered by the Board of Supervisors if the subdivision is the result of a land use change.
- Policy 14:** Encourage the use of Health Impact Assessments (HIA) as a tool for measuring the health impacts of land uses in public and publicly funded policies, programs, and projects.
- Policy 15:** Continue to maintain a voluntary Transfer of Development Rights (TDR) program by:
- a) Identifying additional TDR receiving areas;
 - b) Identifying additional TDR sending areas only if adequate receiving areas are established;
 - c) Eliminating barriers and strengthening opportunities to implement the TDR program; and
 - d) Considering applicability to nonresidential development.
- Policy 16:** Consider assisting the community of Ajo in the preparation of a community plan that addresses, but is not limited to:
- a) Dark skies;
 - b) Economic development including identification of appropriate land for industrial use for comprehensive plan amendment and rezoning;
 - c) Trails and arroyo/wash protection; and
 - d) Recreation and neighborhood open space.
- Policy 17:** Consider preparation of community plans for other unincorporated communities or hamlets if desired by the residents and businesses.
- Policy 18:** Explore options to address the re-use of entitled, unconstructed golf courses; retired/abandoned golf courses; and golf courses without an alternative use.
- Policy 19:** Support developments, particularly “Planned Development Communities” within Lighting Areas E1a, E1b, and E1c (as defined in Ord. 2012-14), that voluntarily establish “Dark Skies” mitigation efforts beyond the outdoor lighting code requirements.

Policy 20: Consider creating a second application review window for non-major comprehensive plan amendments and consider reasonable expansion of the ability to request a concurrent comprehensive plan amendment and rezoning.

Policy 21: Continue to update the zoning code to bring it up to date and align it with the Comprehensive Plan.

Goal 1 Implementation Measures:

- a. With the input from diverse community stakeholders, update the Zoning Code and Subdivision standards as necessary to conform to the Comprehensive Plan and to serve as its primary implementation tool.
- b. Facilitate the addition of a second plan amendment submittal period for non-major amendments through an amendment to the zoning code (chapter 18.89 Comprehensive Plan).
- c. Examine, and improve as needed, the interagency, interdisciplinary approach to reviewing land use actions in furtherance of the vision and plan policies.
- d. Implement preferred land use patterns per the above policies (e.g. Policies 1-8) through land use change actions in conformance with the land use legend.
- e. Further study to identify areas where mixed use and Transit Oriented Development are appropriate, and propose amendments to the Comprehensive Plan as necessary.
- f. Annually monitor and evaluate progress towards implementing Comprehensive Plan policies through a formal monitoring program as outlined in the Administration chapter.
- g. Identify funds for the preparation of a community plan for Ajo, AZ.
- h. Implement Special Area Policies and Rezoning Policies included in Chapter 9.
- i. Create and update applicable design manuals which support land uses leading to healthier communities.
- j. Continue to notice the Mt. Hopkins, Mt. Lemmon and Kitt Peak observatory operators/agencies of any specific plan, rezoning, or comprehensive plan requests within their affected areas.
- k. Develop an implementation schedule, and work with stakeholders, to update the zoning code as may be required to align it with comprehensive plan goals and policies.

Aggregate Mining Operations

Pima County is endowed with many mineral resources, not only copper mines, but also important products such as sand, gravel and limestone, used every day in supporting the infrastructure of our region. State legislation requires the County to maintain land suitability for aggregate mining operations. State maps showing locations of these operations are not yet available. The state also requires the County to adopt policies to preserve currently identified, aggregate mining operations and to avoid their encroachment by incompatible land uses that may impede the expansion of future aggregate mining operations.

Aggregates are particulate materials such as sand, gravel and crushed stone, used in construction to make concrete and are typically mined from riverbeds. This chapter's goals and policies are to minimize potential conflicts between aggregate mining and nearby uses for the benefit of both parties.

Goal 2: Maintain land suitable for aggregate mining operations in accordance with State Statutes

- Policy 1:** Ensure that proposed land uses within the unincorporated areas of the County are compatible with sources of currently identified aggregates as mapped by State of Arizona agencies when such maps are made available.
- Policy 2:** Ensure that aggregates identified on those maps within the unincorporated areas of the County are protected from encroachment of incompatible land uses to the extent practicable and necessary.
- Policy 3:** Evaluate current and future aggregate mining areas to identify locations that can be repurposed for other uses upon closure (e.g. regional detention).

Goal 2 Implementation Measures:

- a. Integrate potential aggregate mapping data into County mapping system, once mapped information is available from the State.
- b. Once mapped areas are available, identify and adopt legal and practical means to protect identified aggregates from incompatible land uses through the development review process and any other applicable mechanism.

Military Airports



Davis-Monthan Air Force Base, Pima County, Arizona

Territory in the Vicinity of a Military Airport or Ancillary Military Facility and High Noise and Accident Potential Zones

This Comprehensive Plan and all zoning regulations of the County comply with all applicable State statutes, including those statutes pertinent to (1) territory within the vicinity of a military airport or ancillary military facility, and (2) land within the high noise and accident potential zones of Davis-Monthan Air Force Base (DMAFB) or any ancillary military facility. See Exhibit 3.1.1. The language and provisions of this Comprehensive Plan comply with the A.R.S. §28-8481, and any construction or interpretation contrary to A.R.S. §28-8481 is hereby rejected and renounced.

For purposes of preserving public health and safety pursuant to A.R.S. § 28-8481, no new residential development within the high noise and accident potential zones as depicted in this map is allowed unless the subject property had a building permit, had a residence constructed or was approved for development in a development plan prior to December 31, 2000. If Pima County and Davis-Monthan Air Force Base mutually agree that an individual use is compatible with the high noise and accident potential of this military airport the use shall be deemed to comply with A.R.S. § 28-8481.

§ 28-8481, no new residential development within the high noise and accident potential zones as depicted in this map is allowed unless the subject property had a building permit, had a residence constructed or was approved for development in a development plan prior to December 31, 2000. If the City of Tucson and Davis-Monthan Air Force Base mutually agree that an individual use is compatible with the high noise and accident potential of this military airport the use shall be deemed to comply with A.R.S. § 28-8481."

The goals and policies comply with the February 2004 The Arizona Compatibility Project: Davis-Monthan Air Force Base/Tucson/Pima County Joint Land Use Study (JLUS). The study guides the decisions made by a variety of public and private entities in relation to compatible land use around DMAFB. The JLUS study defines recommended compatible uses and performance standards used by Pima County (and the City of Tucson) to guide development in order to protect DMAFB's mission and its economic benefits, while increasing the economic diversity and viability of the community by facilitating the development of other key sectors in ways that are compatible with DMAFB's mission.

Other policies in this subsection are based on the February 2004 Board of Supervisors resolution, reiterating the County commitment to work proactively with DMAFB and other entities to implement the JLUS and take other actions to protect the interests of the community and future mission of the base, as necessary.

Please note the Economic Development Chapter (see Chapter 6) includes many implementation strategies to protect the military operation and functionality of DMAFB and the 162nd Air National Guard Fighter Wing.

Goal 3: Protect the Military functionality of DMAFB and the 162nd Air National Guard Fighter Wing

Policy 1: Ensure that DMAFB and National Guard operations are not adversely impacted by encroaching incompatible development.

Policy 2: Continue to coordinate with DMAFB to protect operations and maximize resources.

Policy 3: Prohibit new and expanded residential development within the high noise or accident potential zones except pursuant to:

- a) A development plan or building permit issued prior to the completion of the *Davis-Monthan Air Force Base City of Tucson and Pima County Joint Land Use Study (JLUS)* February 2004;
- b) A written compatibility finding issued by DMAFB; and/or
- c) An agreement between the County and DMAFB.

Policy 4: Support the recommendations of the Governor's Military Facilities Affairs Commission.

Policy 5: Support the acquisition recommendations of the Governor's Military Installation Fund and continue to pursue purchase of development rights and support land acquisition

efforts by other entities within the Approach/Departure Corridors (ADCs) and Accident Potential Zones (APZs).

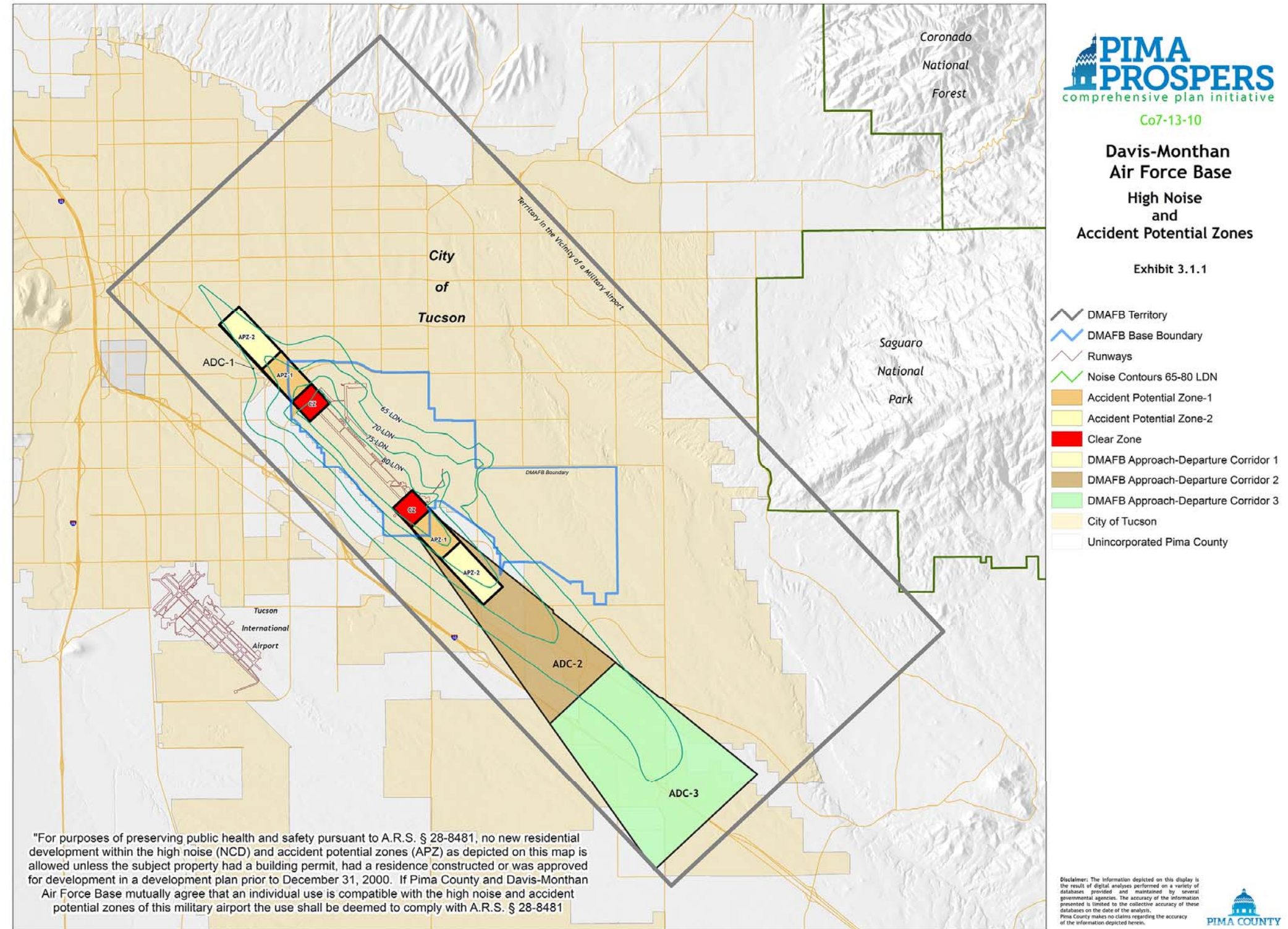
Policy 6: Continue to work collaboratively with the University of Arizona to develop the UA Tech Park as a major economic driver for the region, in a manner that is compatible with and supports the mission and operations of DMAFB.

Policy 7: Continue to support “best practices” to guide development around DMAFB and other military facilities.

Goal 3 Implementation Measures:

- a. To the extent possible, incorporate by amendment the results of the draft DMAFB Installation Development Plan into the Land Use Element of the plan.
- b. Continue to implement the zoning code requirements for proposed development within DMAFB Environs Zone for land compatibility.
- c. Continue to provide timely notification to DMAFB of all discretionary development requests for the “Territory within the Vicinity of Davis-Monthan Air Force Base Military Airport” including requirements in the zoning code.
- d. Continue to work with the State Land Department and other agencies to pursue land exchanges and support land acquisition efforts to minimize development within the ADCs and APZs that would help facilitate long term viability of DMAFB.
- e. Collaborate and participate in planning processes with DMAFB to assess future transportation, utility, recreation, library, open space, social services and other sustainability indicators as it relates to the base.

Exhibit 3.1.1: Davis-Monthan Air Force Base High Noise and Accident Potential Zones



3.2 Focused Development Investment Areas Element



Focus Development Investment Areas Concept

State statutes require planning for growth areas, specifically identifying those areas that are particularly suitable for multimodal transportation and infrastructure expansion and improvements designed to support a concentration of a variety of uses, such as residential, office, commercial, tourism, and industrial uses. In unincorporated Pima County, Focused Development Investment Areas fulfill these functions.

Pima Prospers has identified the following portions of the county, identified on Exhibit 3.2.1, as falling under this element of the comprehensive plan:

1. Each of the incorporated jurisdictions of the County;
2. The Tucson International Airport-I-10 economic development corridor;
3. The bulk of the Southwest planning area within the unincorporated county;
4. Community Development Target areas;
5. Specific Revitalization Corridors; and
6. The “Loop” recreational trail (within the urban area).

In accordance with state requirements, policies and implementation strategies in this element are designed to: “(a) Make automobile, transit and other multimodal circulation more efficient, make infrastructure expansion more economical and provide for a rational pattern of land development; (b) Conserve significant natural resources and open areas in the growth area and coordinate their location to similar areas outside the growth area’s boundaries; (c) Promote the public and private construction of timely and financially sound infrastructure expansion through the use of infrastructure funding and financing planning that is coordinated with development activity” (ARS §11-804C2).

The Focused Development Investment Areas also include the County’s revitalization efforts both in terms of Community Development Target Areas and Revitalization Opportunity Development Corridors. The former are designated to receive priority for available U.S. Housing and Urban Development (HUD) entitlement grant funding for community revitalization and economic development activities. The latter are other specific corridors identified for a public-private collaboration toward revitalization, redevelopment and sustaining of surrounding residential uses.

Municipal entities are governed by their own general plans, and this element of Pima Prospers assumes just that. Reference is made to Plan Tucson’s Future Growth Scenario Map.

Goal 1: Balance growth management strategies, economic development, conservation, community integrity and efficient use of services and infrastructure

Policy 1: Promote efficient growth in urban, suburban and rural areas compatible with each area’s specific scale, character and identity in areas where infrastructure is planned or in place.

Policy 2: Coordinate public and private investments in capital infrastructure and services within Focused Development Investment Areas through efficient use of land and public/private funding partnerships.

Policy 3: Recognize the link between urban form, infrastructure availability, resource efficiency and economic development to create a healthy and climate-resilient region.

Goal 1 Implementation Measures:

- a. In conjunction with stakeholders, update guidelines, standards and regulations to eliminate barriers and:
 - 1) Incentivize compact, energy efficient development;
 - 2) Connect housing to jobs, services and amenities locationally or through multimodal transportation linkages;
 - 3) Promote emerging clean industries and technology;

- 4) Incentivize job creation;
- 5) Support healthy lifestyles (healthcare, healthy foods, walkability and bikeability);
- 6) Encourage local food distribution and community gardens;
- 7) Establish lifestyle, entertainment and art districts that are revenue generators;
- 8) Support multigenerational housing and neighborhood opportunities;
- 9) Incorporate, where feasible and cost-effective, complete streets principles and best practices;
- 10) Support the unique regional identity, Sonoran Desert setting and the diverse arts, cultural, ethnic, geographic and historic characteristics that make Pima County a world destination;
- 11) Support urban development within evolving mixed use areas; and
- 12) Provide a variety of housing tenures, types, and price ranges.

Goal 2: Improve the quality of life of County residents through revitalization and redevelopment efforts

- Policy 1:** Utilize infill development to strengthen existing neighborhoods, create the higher density necessary to support desirable services, increase the tax base, and make our communities more efficient without being disruptive to existing neighborhoods.
- Policy 2:** Encourage the reuse of historic or otherwise unique or significant buildings.
- Policy 3:** Support efforts to identify and secure funding for Pima County Community Development Target Areas.
- Policy 4:** Support redevelopment efforts in areas that include densifying neighborhoods, vacant or non-performing shopping centers, or blighted or unsafe housing.
- Policy 5:** Invest in local public service facilities to support and complement revitalization.
- Policy 6:** Integrate parks, plazas, and other gathering places with shade - providing trees, and comprehensive landscaping into neighborhood centers to provide places for community activity and interaction and to reduce the urban heat island effect.

Goal 2 Implementation Measures:

- a. Identify strategies to incentivize infill development such as streamlining the development review process and reduction of processing fees.
- b. Identify non-traditional funding sources (in addition to Community Development Block Grant (CDBG) program grants and Brownfields program grants, etc.) for redevelopment, revitalization, infill, historic preservation, and climate adaptation.

Goal 3: Develop, implement and adopt effective infill, redevelopment and revitalization in Community Development Target Areas

- Policy 1:** Support a public-private partnership approach to accelerate infill, redevelopment, and revitalization efforts.
- Policy 2:** Encourage locating of affordable housing in mixed-use development areas.
- Policy 3:** Remediate deteriorated and blighted conditions.
- Policy 4:** Support the creation of tools and programs to facilitate the revitalization efforts.
- Policy 5:** Support and align local, state and federal resources to facilitate revitalization.
- Policy 6:** Support the integration of climate adaptation features in revitalization and affordable housing efforts.

Goal 3 Implementation Measures:

- a. Appoint a Revitalization Task Force comprised of development professionals, commercial brokers, lenders, and area community stakeholders to identify barriers and support creation of tools and programs to facilitate the revitalization efforts.
- b. Identify existing conditions, barriers and opportunities to attract and sustain public and private investment in the redevelopment and reuse of vacant or distressed properties.
- c. Propose amendments to existing Arizona Revised Statute (ARS) 11-254.06. to remove or reduce process barriers to more effectively establish County Infill Incentive Districts.
- d. Develop incentives, including innovative zoning codes, streamlined approval processes, and public investments in street designs and open space.
- e. Focus efforts in Revitalization Opportunity Corridors and commercial corridors in Community Development Target Areas.
- f. Work with the Arizona State Land Department (ASLD) to prepare statutorily required conceptual plans for lands owned by the State Land Department.
- g. Utilize demolition and clearance resources (e.g. CDBGfunds) to secure unsafe property conditions.
- h. Facilitate acquisition of underutilized and blighted properties for redevelopment compatible with adjacent neighborhood character.
- i. Develop a viable Commercial Façade Program.
- j. Develop a Streetscape Enhancements Program for public projects utilizing the Pima County plant nursery and design team.
- k. Establish County Infill Incentive District in Revitalization Opportunity Corridors.
- l. Explore Revitalization Districts per A.R.S. 48-6808.

- m. Consider Government Property Lease Excise Tax (GPLET) for County use and propose amendments to ARS as appropriate.
- n. Explore incentives to provide connectivity to open spaces, parks and river parks.
- o. Document and support existing capacity building efforts to promote community and ultimately economic development in stressed areas.
- p. Utilize General Obligation Bond Funds, CDBG and Brownfields grants to facilitate revitalization.
- q. Coordinate with other local jurisdictions when planning Community Development Target Areas.
- r. Support the creation of an online region-specific climate adaptation resource site.
- s. Create incentives to the extent possible for energy efficiency and climate adaptation design features in redevelopment projects.
- t. Create opportunities, awareness of, and incentives for low-income residents to improve existing structures with energy and water efficiency improvements.

Community Development and Neighborhood Capacity

Goal 4: Build capacity and spur community driven change in low-income neighborhoods and in unincorporated communities to plan, implement and sustain climate-resilient revitalization efforts

- Policy 1:** Support and expand existing County efforts to develop the knowledge, skills, relationships, opportunities and organizational resources that enable residents, civic leaders, public and private sectors and local organizations to create community plans:
- a) Support and expand the Neighborhood Reinvestment Program’s mission to incorporate community and neighborhood capacity building;
 - b) Allocate sufficient resources to fully integrate, staff and enhance the Neighborhood Reinvestment Program’s Neighborhood Leadership Institute; and
 - c) Prioritize capacity building efforts and resources in identified unincorporated Community Development Target Areas and distressed neighborhoods adjacent to Revitalization Opportunity Corridors.
- Policy 2:** Support the interdepartmental adoption of community area plans for distressed areas to provide a strategic and coordinated approach to foster healthy and vibrant residential and commercial opportunities. (Concurrent with Land of Use Element 4.1; Goal 1; Policy 14)
- Policy 3:** Provide, to the extent possible, low-cost climate adaptation resources and education opportunities as part of low-income neighborhood revitalization projects.

Goal 4 Implementation Measures:

- a. Identify community stakeholders, historic and integral community/business assistance, working partnerships, and issues to attract and leverage available resources.
- b. Develop specific community goals, policies and implementation strategies to supplement but not supplant County-wide goals.
- c. Prioritize Community Development Target Areas in unincorporated Pima County.
- d. Consider utilizing HUD Neighborhood Revitalization Strategy Area methodology.
- e. Integrate community area plans by reference into the Comprehensive Plan.

Land Use Corridors

Certain existing and proposed major corridors in Pima County provide significant opportunities to focus commercial, research, industrial and other types of development where these uses are the most effective and mutually beneficial.

Goal 5: Strategically plan economic development corridors to build new opportunities for job growth, housing, commerce and services

Policy 1: Promote a mix of compatible land uses along economic development corridors that:

- a) Support emerging employment centers for biosciences, medical services, innovation and technology;
- b) Promote and leverage the region's economic strengths and emerging industry clusters;
- c) Identify and promote revitalization opportunity corridors;
- d) Incorporate opportunities for support services, job training, and commerce;
- e) Support small and local businesses;
- f) Provide community gathering areas (courtyards, plazas, river walks, etc.) and other amenities that help attract, support, encourage and retain a healthy workforce and appeal to multigenerational family members as well;
- g) Where appropriate, incorporate a diversity of housing types including workforce housing and a conveniently located mix of residential neighborhoods;
- h) Include activity centers appropriate in scale and location; and
- i) Support, as short and long term funding allows, a regional transportation network that includes multimodal opportunities including bike paths, electric vehicle recharging stations and electric street car public transportation routes and features.

Goal 6: Foster sound logistics-based industry along the Aerospace Parkway, contributing to the long-term viability of the region

Policy 1: Collaborate with the private sector; local, state, and federal governments; the University of Arizona (UA); U.S. Department of Defense; and Tucson Airport Authority (TAA) in master planning the Aerospace Parkway Industrial Park.

Policy 2: Protect, connect, and grow the regional employment base by providing a mix of land uses along the Aerospace Parkway that:

- a) Achieve multiple economic development objectives, job creation and protection;
- b) Protect the mission and future expansion needs of Raytheon;
- c) Position Tucson International Airport as a logistics center;
- d) Implement an aerospace/defense business park on property owned by the County, the TAA, and ASLD;
- e) Implement the Tucson International Airport Master Plan;
- f) Take advantage of the intermodal logistics capacity of Port of Tucson; and
- g) Provide continuous support to the UA Tech Park, including the Tech Corridor and Tech Launch Arizona initiatives.

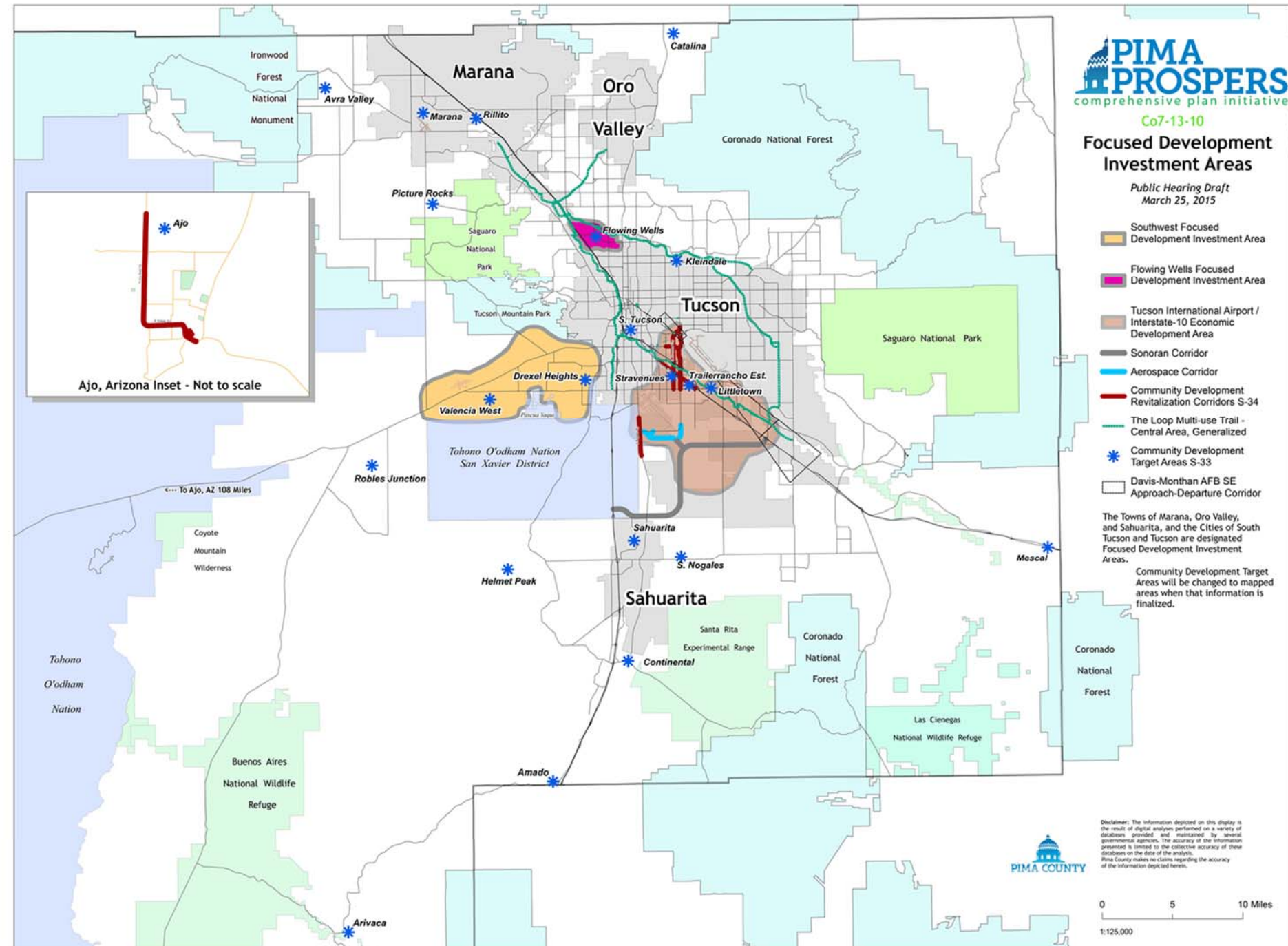
Goals 5 and 6 Implementation Measures:

- a. Market and promote land use corridors.
- b. Invest in infrastructure to bring utilities and transportation to economically viable industrial lands to make shovel ready lands available to new industry.
- c. Prepare and adopt a master plan for the Aerospace Parkway Industrial Park.



Regional Intermodal Logistics Capacity

Exhibit 3.2.1: Focused Development Investment Areas



3.3 Open Space Element



Sonoran Desert, Pima County, Arizona

Arizona Statutes require the County to plan for open space acquisition and preservation. Open space or conservation land owned outright by the county totals approximately 98,286 acres and shows on the County's Land Use Maps as "Resource Conservation".

Pima County has been working on fulfilling the task assigned by our community through voter approved bond funds to conserve this region's most prized natural and cultural resources and to protect encroachment on certain types of development, such as DMAFB. Other purposes for the open space Pima County has purchased include general recreation, floodplain and riparian area protection, preservation of Sonoran desert, conserving scenic views, ground water recharge, and mitigation for county construction projects and farmland/ranch protection. The community's investment in maintaining open space along floodplains has reduced the cost of flood insurance for County residents. In the future, many of the open space lands will also serve as mitigation for the impacts of certain types of development activities on species protected under the Endangered Species Act by way of the County's forthcoming Section 10 permit from the U.S. Fish and Wildlife Service.

Voters have consistently supported open space acquisition. Voter-approved County bonds in 1974, 1986, 1997, and 2004 have generated \$230 million for the acquisition and expansion of parklands and natural areas. These bond dollars have, in many cases, allowed the County to leverage other funding sources, such as grants and federal funds, to effectively increase the amount of funds available.

Goal 1: Continue to purchase, manage, and monitor lands to protect the value, function, and conservation of natural and cultural resources for present and future generations

Policy 1: Manage the county land portfolio through adoption of an Open Space and Conservation Land Management Program.

Policy 2: Establish, refine, and maintain policies and protocols governing the use of and access to these lands.

Policy 3: Provide opportunities on these lands to mitigate environmental impacts of development projects in Pima County, where appropriate.

Policy 4: Continue to acquire open space and conservation lands from willing sellers.

Policy 5: Promote the acquisition of open space lands that positively contribute to and maintain a high value of ecosystem services.

Goal 1 Implementation Measures:

- a. Develop, fund, and implement an inter-departmental open space and conservation land management program which:
 - 1) Initiates an inter-departmental Geographic Information Systems (GIS) and data management project to:
 - i. Create and maintain an open space and conservation land GIS layer(s) as well as data collection and project sites located within these lands;
 - ii. Develop and maintain a database solution that allows multiple departments to store, access, and share data collected on these lands; and
 - iii. Provides a mechanism to regularly assess ecosystem service benefits of lands, including climate mitigation and adaptation benefits.
 - 2) Promotes the retention of lands owned in fee simple and apply appropriate mechanisms to ensure long-term protection;
 - 3) Presents strategies to promote habitat and landscape connectivity throughout the region; and
 - 4) Explores opportunities to efficiently and cost-effectively maintain, monitor, and manage open space and conservation lands.
- b. Continue to pursue the issuance of a regional Section 10 permit from the U.S. Fish and Wildlife Service.
- c. Maximize and coordinate the use of these lands as mitigation for other future federal and state permits as may be required.

- d. Based on the best available science, update methodologies used to monitor changes in habitat quality and impacts on vulnerable species.
- e. Systematically inventory cultural resources on open space and conservation lands to determine and implement appropriate levels of protection and preservation.
- f. Subsequent to inter-departmental coordination, develop a set of draft policies for consideration by County Administration that comprehensively address the use of and access to open space and conservation lands.
- g. Develop an Ecosystem Services Valuation Model.

Goal 2: Honor traditional cultural land uses

- Policy 1:** Consider opportunities to allow traditional cultural uses where such uses do not conflict with cultural or natural resource conservation or open space management objectives.

Goal 3: Maintain the contribution that open space lands make to the regional, national, and international continuity of ecosystems, biological diversity, and cultural heritage

- Policy 1:** Continue to acquire land and resources that favorably contribute to the integrity of regional, national, and international ecosystems, retention of biological diversity, and cultural heritage.
- Policy 2:** Share data, research methodologies, and management strategies with regional, national, and international resource colleagues and preserve managers.

Goal 2-3 Implementation Measures:

- a. Seek out opportunities to share data, research methodologies, management strategies, and other information with regional, national, and international cultural or natural resource colleagues and preserve managers.
- b. Participate in regional, national, and international forums that address cultural or natural resource management and retention of biodiversity across large landscapes.

Goal 4: Consider open space lands for geo-tourism or other economic considerations where appropriate

Policy 1: Identify appropriate opportunities and types of uses suitable for open space lands to support geo-tourism or other economic considerations where such do not conflict with cultural or natural resource conservation or open space management objectives.



3.4 Environmental Element



Natural Resources, Pima County, Arizona

The Environmental Planning Element calls for analysis, policies and strategies to address anticipated effects of implementation of plan elements on natural resources. Policies and strategies under this plan element are designed to have countywide applicability. Conservation actions are to be encouraged, and protection of biological resources is considered an essential component of land-use planning.

The Maeveen Marie Behan Conservation Lands System (CLS) is designed to protect biodiversity and provide land use guidelines consistent with the conservation goal of the Sonoran Desert Conservation Plan (SDCP).

The CLS identifies areas important to the conservation of our natural resources heritage and embodies the biological goal of the SDCP which is to “ensure the long-term survival of the full spectrum of plants and animals that are indigenous to Pima County through maintaining or improving the habitat conditions and ecosystem functions necessary for their survival.”

Exhibits 3.4.1 and 3.4.2 show the CLS for eastern and western Pima County and are located at the end of this section.

Goal 1: Conserve and protect natural resources

Policy 1: CLS category designations and CLS Conservation Guidelines apply to land uses and activities undertaken by or under the jurisdiction of Pima County or Pima County Regional Flood Control District (Flood Control District) as follows:

- a) Pima County and the Flood Control District will seek consistency with the CLS for federal and state land-use decision plans and processes;
- b) Application of CLS designations or guidelines shall not alter, modify, decrease or limit existing and legal land uses, zoning, permitted activities, or management of lands;
- c) When applied to development of land subject to county or Flood Control District authority, CLS designations and guidelines will be applied to:
 - 1. New rezoning and specific plan requests;
 - 2. Time extension requests for rezoning cases;
 - 3. Requests for modifications or waivers of rezoning or specific plan conditions, including substantial changes;
 - 4. Requests for Comprehensive Plan amendments;
 - 5. Type II and Type III conditional use permit requests; and
 - 6. Requests for waivers of subdivision platting requirement of a zoning plan.
- d) Implementation of these policies shall achieve the level of conservation necessary to protect a site's conservation values, preserve landscape integrity, and provide for the movement of native fauna and pollination of native flora across and through the landscape; and
- e) Projects subject to these designations and guidelines will be evaluated against the Conservation Guidelines for the CLS categories provided in conservation guideline policies, where applicable, to determine their appropriateness.

Conservation Guidelines

Policy 2: The Conservation Guidelines for the associated CLS designation apply to the total acreage of the site that lies within the boundaries of that designation:

- a) If a CLS designation applies to a portion of a site, Conservation Guidelines for that designation will apply only to that portion of the site affected by that category;
- b) For purposes of this policy, site is defined as a single lot or combination of contiguous lots; and
- c) Where more than one CLS categories overlap, the more protective Conservation Guideline will apply to the affected portion.

Policy 3: The following Conservation Guidelines apply to Important Riparian Areas (IRA):

- a) Across the entirety of the CLS landscape, at least 95 percent of the total acreage of lands within this designation shall be conserved in a natural or undisturbed condition;

- b) Every effort should be made to protect, restore and enhance the structure and functions of IRA, including their hydrological, geomorphological and biological functions;
- c) Areas within an IRA that have been previously degraded or otherwise compromised may be restored and/or enhanced;
- d) Such restored and/or enhanced areas may contribute to achieving the 95 percent conservation guideline for IRA;
- e) Restoration and/or enhancement of degraded IRA may become a condition or requirement of approval of a comprehensive plan amendment and/or rezoning; and
- f) On-site mitigation is preferable, however mitigation may be provided on-site, off-site, or in combination.

Policy 4: The following CLS Conservation Guidelines apply to Biological Core Management Areas:

- a) Across the entirety of the CLS landscape, at least 80 percent of the total acreage of lands within this designation shall be conserved as undisturbed natural open space;
- b) Land use and management focus on the preservation, restoration, and enhancement of native biological communities including, but not limited to, preserving the movement of native fauna and flora across and through the landscape and promoting landscape integrity; and
- c) Projects subject to this policy and within this designation will yield four conserved acres (mitigation) for each acre to be developed:
 - 1. Mitigation acres may be provided on-site, off-site, or in combination;
 - 2. The preference is for the mitigation acres to be within Biological Core Management Area or Habitat Protection Priority Areas;
 - 3. For purposes of this policy, Habitat Protection Priority Areas are those areas referenced and mapped as part of the 2004 Conservation Bond Program or subsequent conservation bond programs;
 - 4. The 4:1 mitigation ratio will be calculated according to the extent of impacts to the total surface area of that portion of any parcel designated as Biological Core Management Areas;
 - 5. Development shall be configured in the least sensitive portion(s) of the property;
 - 6. On-site mitigation area(s) of undisturbed natural open space will be configured to maximize conservation values and preserve the movement of native fauna and pollination of native flora across and through the landscape; and
 - 7. A Transfer of Development Rights (TDR) may be used in order to secure mitigation lands.

Policy 5: The following Conservation Guidelines apply to Scientific Research Areas:

- a) Scientific Research Areas should continue to be managed for the purpose of scientific research on the environment and natural resources;
- b) Scientific research activities should minimize any long-lasting impacts that may affect adjacent or nearby CLS lands; and
- c) Any land-use changes subject to Pima County jurisdiction should achieve the conservation goals of the underlying CLS category.

Policy 6: The following Conservation Guidelines apply to Multiple Use Management Areas:

- a) Across the entirety of the CLS landscape at least 66 ⅔ percent of the total acreage of lands within this designation shall be conserved as undisturbed natural open space;
- b) Land use and management goals within these areas focus on balancing land uses with conservation, restoration, and enhancement of native biological communities and must:
 1. Facilitate the movement of native fauna and pollination of native flora across and through the landscape;
 2. Maximize retention of on-site conservation values; and
 3. Promote landscape integrity.
- c) Projects subject to this policy within this designation will yield two conserved (mitigation) acres for each acre developed:
 1. Mitigation acres may be provided on-site, off-site, or in combination;
 2. The preference is for mitigation acres to be within Multiple Use Management Areas, any more protective category of the CLS, or Habitat Protection Priority Areas;
 3. For purposes of this policy, Habitat Protection Priority Areas are those areas referenced and mapped as part of the 2004 Conservation Bond Program or any subsequent conservation bond program;
 4. The 2:1 mitigation ratio will be calculated according to the extent of impacts to the total surface area of that portion of any parcel designated as Multiple Use Management Areas;
 5. Development shall be configured in the least sensitive portion(s) of the property;
 6. On-site mitigation area(s) of undisturbed natural open space will maximize conservation values and facilitate the movement of native fauna and pollination of native flora across and through the landscape;
 7. Additional conservation exceeding 66⅔ percent will be encouraged through the use of development-related incentives and may utilize undisturbed natural open space on individual lots; and

8. A Transfer of Development Rights (TDR) may be used in order to secure lands utilized for mitigation, restoration, and/or enhancement purposes.

Policy 7: The following Conservation Guidelines apply to Agriculture In-Holdings within the Conservation Lands Systems:

- a) Intensifying land uses of these areas will emphasize the use of native flora, facilitate the movement of native fauna and pollination of native flora across and through the landscape, and conserve on-site conservation values when they are present; and
- b) Development within these areas will be configured in a manner that does not compromise the conservation values of adjacent and nearby CLS lands.

Policy 8: The following Conservation Guidelines apply to Special Species Management Areas:

- a) Across the entirety of the CLS landscape, at least 80 percent of the total acreage of lands within this designation shall be conserved as undisturbed natural open space and will provide for the conservation, restoration, or enhancement of habitat for the affected Special Species;
- b) Projects subject to this policy and within this designation will yield four conserved (mitigation) acres for each acre to be developed:
 1. Mitigation acres may be provided on-site, off-site, or in combination;
 2. The preference is for the mitigation acres to be within a designated Special Species Management Area;
 3. The 4:1 mitigation ratio will be calculated according to the extent of impacts to the total surface area of that portion of any parcel designated as Special Species Management Area;
 4. Development shall be configured in the least sensitive portion(s) of the property;
 5. On-site area(s) of undisturbed natural open space will be configured to facilitate the movement of the relevant Special Species through the landscape and will include conservation values essential to survival of the relevant Special Species; and
 6. A TDR may be used in order to secure mitigation lands.
- c) Special Species and associated Conservation Guidelines may be added or deleted in the future based on the best available regional scientific information as developed by the Science Technical Advisory Team and added to or deleted from the Special Species Management Areas as shown on the CLS map; and
- d) Additions and/or deletions to the list of Special Species or Conservation Guidelines for Special Species Management Areas will be processed as a comprehensive plan amendment.

Policy 9: The following Conservation Guidelines apply to Critical Landscape Connections:

- a) Land-use changes in these broadly defined areas should protect existing biological linkages;
- b) Where they occur, barriers to the movement of native fauna and pollination of native flora across and through the landscape should be removed and fragmented corridors of native biological communities should be restored;
- c) Opportunities to remove barriers and restore corridor connectivity may arise as part of other, non-land use related activities (e.g., new construction for or upgrade of infrastructure services). Such opportunities should be pursued; and
- d) High priority shall be given to identifying, preserving, and re-establishing the connection between native biological communities especially where natural connectivity is most constrained.

Policy 10: The Board of Supervisors has the sole authority to modify mitigation specified in any Conservation Guideline or otherwise determine the appropriate amount of mitigation necessary for a comprehensive plan amendment or rezoning to comply with the CLS, including increases, reductions, and exemptions:

- a) Requests to modify or be exempt from providing mitigation will be deliberated on a case-by-case basis; and
- b) Staff may review proposals and make recommendations for the modification of mitigation ratios, including exemption.

Conservation Lands System Mitigation Lands

Policy 11: The following guidelines apply to lands being considered for off-site mitigation:

- a) The location of off-site mitigation properties should be within the same general geographic region of the original project site;
- b) Off-site mitigation property should provide the same or better resource values as the original project site including, but not limited to:
 - 1. CLS designations inclusive of 2004 Conservation Bond Habitat Protection Priority designations or subsequent conservation bond programs;
 - 2. Vegetation community type(s);
 - 3. Habitat values for applicable CLS Special Species (e.g., breeding, dispersal);
 - 4. Surface water or unique landforms such as rock outcrops;
 - 5. Contribution to landscape connectivity; and
 - 6. Demonstration that the resource and conservation values of the off-site mitigation property will be protected in perpetuity.
- c) Off-site mitigation of IRA may include the purchase and transfer of water rights that directly impact and/or support groundwater dependent ecosystems.

Policy 12: Lands that are to be reserved from development and which will provide CLS mitigation shall be conserved and managed, in perpetuity, for the benefit of the natural resources:

- a) Various means may be utilized to protect conservation or mitigation lands including, but not limited to, the transfer of deeded property to Pima County, pending approval by the Board of Supervisors, or other conservation entities and the granting of conservation easements;
- b) CLS mitigation lands shall be established as separate, natural open space parcel(s) from the development area; and
- c) Residents, or associations of residents, of a development may not serve as the sole administrator or enforcement entity for the management and protection of those conservation or mitigation lands.

Amendments to the Conservation Lands System Map and Policies

Policy 13: Amendments to the CLS map and policies are appropriate only at such time as new, comprehensive, region-wide information is available.

Goal 1 Implementation Measures:

- a. Applications for Comprehensive Plan amendment will:
 - 1) Inventory and assess the site's conservation values and context within an area-wide landscape;
 - 2) Analyze the biological impacts of the requested amendment;
 - 3) Demonstrate that intensifying the land use designation will preserve the integrity of the CLS;
 - 4) Promote development that is consistent with the existing infrastructure service area or land use planning and infrastructure studies that address the logical expansion of infrastructure services;
 - 5) When requesting modification of or exemption from CLS Conservation Guidelines demonstrate that:
 - i. SDCP goals are upheld;
 - ii. Landscape integrity of the CLS remains intact;
 - iii. On-site conservation values are protected, restored, or enhanced; and
 - iv. Native fauna retain the ability to move across the landscape and pollinate native flora.
- b. Staff will review Comprehensive Plan Amendment applications, at a minimum, for the following:
 - 1) The site's landscape context as it relates to the biological, hydrological and built environments;

- 2) Potential biological impact of the requested amendment;
 - 3) Preservation of the integrity of the CLS; and
 - 4) Consistency with the existing infrastructure service area or land use planning and infrastructure studies that address the logical expansion of infrastructure services.
- c. Approvals of Comprehensive Plan Amendments:
- 1) May include special area policies in order to govern or otherwise direct subsequent rezoning to specifically address conservation of certain landscape attributes; and
 - 2) Will apply any modification of or exemption from Conservation Guidelines through any subsequent rezoning.
- d. Applications for a rezoning will:
- 1) Inventory and assess the site's conservation values and context within an area-wide landscape;
 - 2) Analyze the biological impacts of the requested amendment;
 - 3) Demonstrate that intensifying the land use will preserve the integrity of the CLS;
 - 4) Demonstrate that highly valued on-site native flora and fauna species are conserved;
 - 5) Provide for development that achieves at the least as much conservation as development under the existing zoning; and
 - 6) When requesting modification of or exemption from Conservation Guidelines demonstrate that:
 - i. SDCP goals are upheld;
 - ii. Landscape integrity of the CLS remains intact;
 - iii. On-site conservation values are protected, restored, or enhanced; and
 - iv. Native fauna retain the ability to move through and across the landscape and pollinate native flora.
- e. Staff will review rezoning requests for the following, at a minimum:
- 1) Potential biological impact of the requested rezoning;
 - 2) The site's landscape context as it relates to the biological and built environments;
 - 3) The on-site presence of or potential to support highly valued native flora and fauna species and conservation of these species;
 - 4) The occurrence of physical characteristics that contribute to biodiversity; and
 - 5) Preservation of the integrity of the CLS.
- f. Approvals of rezoning requests:

- 1) May include special conditions in order to govern or otherwise direct conservation of certain landscape attributes; and
 - 2) Will apply any modification of or exemption from Conservation Guidelines.
- g. Continue to implement the CLS of the SDCP.
 - h. Develop and implement development-related incentives appropriate for use in Multiple Use Management Areas. Incentives may, if appropriate, be established through revision of allowable zoning districts, overlays, and comprehensive plan land use plan designations.
 - i. Continue to develop and refine guidance criteria for restoration, enhancement, and mitigation proposals.
 - j. Continue to develop and refine site design guidance and other site planning recommendations for environmentally-sensitive development.
 - k. Assess existing environmentally-related zoning code ordinances for opportunities to align implementation and create incentives accessible to existing and legal land uses, zoning, and permitted activities to promote broader support of CLS and goals of the Sonoran Desert Conservation Plan. Ordinances appropriate for review and revision may include:
 - 1) Native Plant Preservation Ordinance (18.72);
 - 2) Buffer Overlay Zone Ordinance (18.67);
 - 3) Cluster Development Option (18.09.040);
 - 4) Conservation Subdivision Requirements (18.09.100);
 - 5) Hillside Development Zone Ordinance (18.61);
 - 6) Modification of Development Standards in Riparian Areas (18.07.080);
 - 7) Landscape Buffering and Screening Standards(18.73); and
 - 8) Off-Street Parking & Loading Standards (18.75).

Exhibit 3.4.1: Conservation Lands System Eastern Pima County

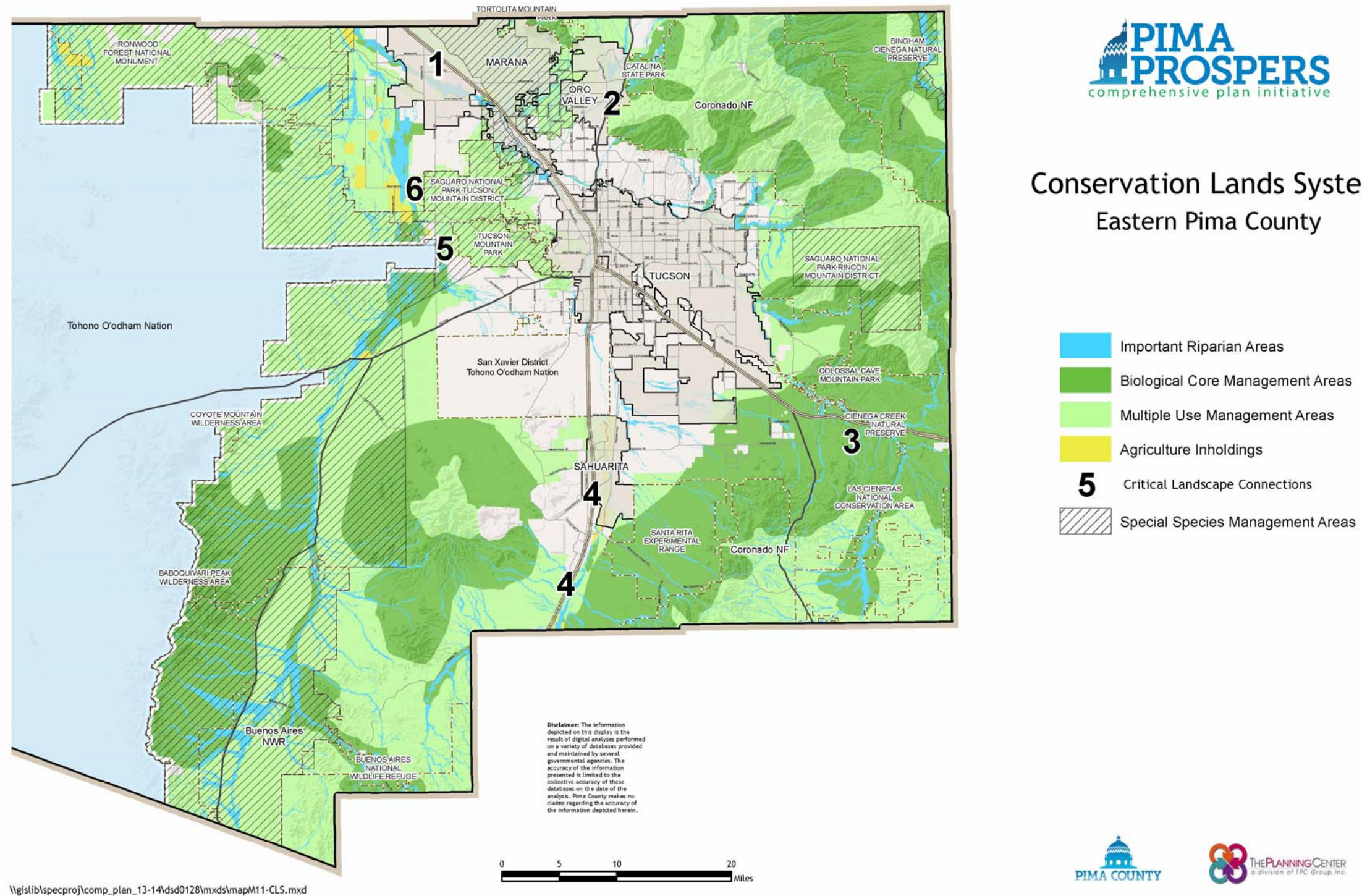
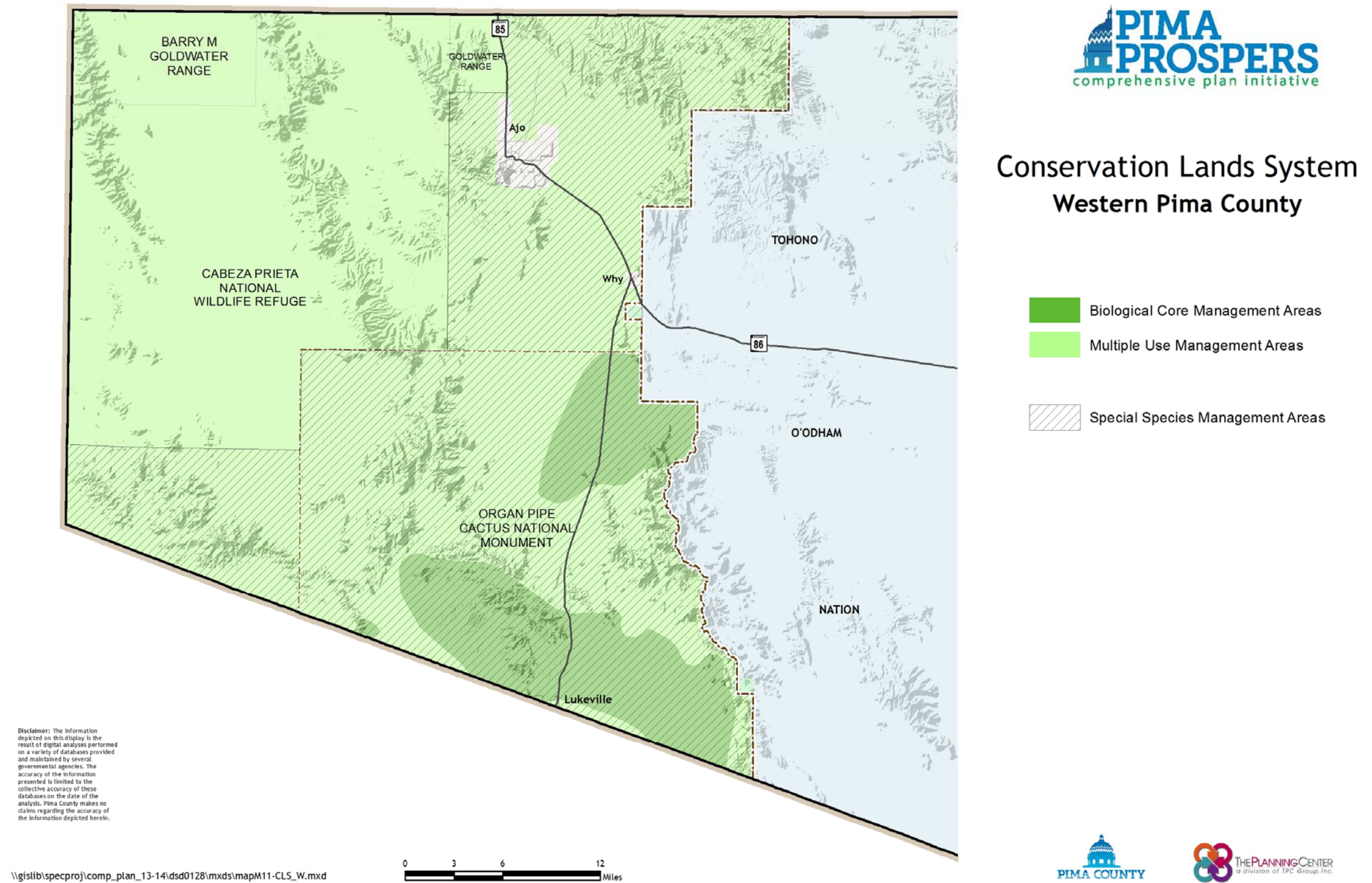


Exhibit 3.4.2: Conservation Lands System Western Pima County



Climate and Emerging Environmental Issues

Pima County has made sustainability, reduction of greenhouse gas emissions, and preparing for the impacts of climate change a high priority by leading by example.

Over time, climate change stands to adversely impact the natural environment of the rich and diversified Sonoran Desert, threatening (a) the resilience and vitality of our economy; (b) the health and safety of vulnerable populations; (c) our limited water supply with more frequent and persistent drought; (d) more intense flooding; and (e) the overall well-being of our community and surrounding natural areas through increased frequency and intensity of extreme heat, cold, drought and wildland fires.

Proper planning and execution of that planning is necessary on a local, regional and statewide basis to both prepare adaptation strategies and to address ways we can make modifications that improve public health, reduce the stress on the environment and benefit the economy.

The County has taken a number of steps in collaboration with other organizations and agencies to plan for – and mitigate – the negative effects of climate change and increase the resilience of the human and natural dimensions of the environment to climate-induced changes. Work has included:

- Sonoran Desert Conservation Plan (2001)
- Pima County Drought Response Plan and Water Wasting Ordinance (2007, 2014)
- Pima County Sustainability Resolution (2007)
- Regional Optimization Master Plan (2007)
- PAG Regional Greenhouse Gas Inventory (2008, 2010, 2012, 2014)
- Travel Reduction Ordinance
- LEED Silver Building Standards for County Facilities
- 2011-2015 Action Plan for Water Sustainability (2010)
- Community Wildfire Protection Plan (2013)
- Planning for Change in Southern Arizona forum (2013)
- Pima County Sustainability Action Plan for County Operations (2008, 2014)
- Multi-Jurisdictional Hazard Mitigation Plan (2012)

Goal 2: Minimize the negative impacts of climate change on Pima County and increase the resiliency of the human, economic, and natural environment

Policy 1: Support climate adaptation strategies that benefit the public health, economy, and the environment by:

- a) Developing drought response preparedness plans and other emergency management plans;
- b) Improving stormwater management strategies to minimize runoff and flooding in urban areas by considering incorporation of Low Impact Development (LID) principles, and making beneficial use of stormwater;
- c) Adopting strategies to reduce loss of life and property from flooding and erosion; and
- d) Retaining natural open space.

Policy 2: Pursue adaptive, flexible, cost-effective, multi-pronged preparedness strategies such as diversification of water supplies, water conservation, improved demand management and increased reliance on water harvesting.

Policy 3: Reduce greenhouse gas emissions and heat island effects by:

- a) Establishing targets and monitoring progress;
- b) Reducing barriers to the production of renewable energy;
- c) Continuing to increase energy efficiency including energy efficiency standards in both County-owned and privately owned buildings;
- d) Developing strategies and providing incentives to reduce single-occupancy Vehicle Miles Traveled (VMT); and
- e) Promoting, designing and constructing multimodal (alternative modes) transportation and transit systems.

Policy 4: Ensure the viability of the natural environment in context of climate change by:

- a) Preserving watershed and ecological function, connectivity, and resiliency;
- b) Identifying and protecting areas that have served as ecological refugia for species during time of past climatic variability (e.g., riparian areas, talus, limestone);
- c) Ensuring the availability of an adequate water supply for the natural environment in the context of climate change including using best management practices to establish and maintain water for wildlife and their habitats;
- d) Protecting the carbon dioxide (CO₂) sequestration functions of the natural environment including maintaining a balance between preserving natural, grassland and riparian areas that can absorb excess carbon from the atmosphere and developed areas by implementing the CLS; and
- e) Creating consistency in regulatory requirements, policies, and practices for the restoration and re-vegetation of construction activities impacting undisturbed desert areas.

Policy 5: Enter a regional conversation on carbon footprint reduction (see carbon footprint illustration of page 4.25 of the Physical Infrastructure Connectivity chapter).

- Policy 6:** Support and strengthen Pima County-based policies and programs to control and eradicate buffelgrass and other non-native invasive species to reduce the threat of wildfire and loss of native species.
- Policy 7:** Support the establishment of an integrated and adaptive drought management strategies plan for the County that:
- a) Utilizes the Local Drought Impact Group with cross-disciplinary expertise that includes representatives from all the jurisdictions in Pima County to assist in the continuous identification of drought management strategies appropriate for Pima County;
 - b) Includes community education programs on best water conservation and drought management practices, with drought exercises and training;
 - c) Periodically assesses the effectiveness of water conservation regulations through continuous data collection, monitoring, forecasting and data and tools sharing with other agencies throughout the region; and
 - d) Plans and develops new water policy and infrastructure to maintain competitive economic advantage.
- Policy 8:** Continue to support the Pima County Local Drought Impact Group to:
- a) Monitor the status of drought;
 - b) Assess impacts and recommend drought response actions; and
 - c) Coordinate declarations and responses with water providers.
- Policy 9:** Ensure that Pima County is ready to respond to drought-induced wildfires.

Goal 2 Implementation Measures:

- a. Adopt an Integrated Adaptive Drought Management Strategies Plan for the County.
- b. Implement and update as needed the County Drought Management Plan and Water Wasting Ordinance.
- c. Continue to monitor drought status and its impacts through Local Drought Impact Group.
- d. Coordinate with local water providers on drought declarations and response actions.
- e. Solicit U.S. Natural Resource Conservation Service drought assistance to achieve temporary reductions in stocking rates on ranches not owned or managed by Pima County.
- f. Continue to periodically update the Community Wildfire Protection Plan.
- g. Establish greenhouse gas emissions targets, develop plans to attain targets and establish monitoring processes.
- h. Increase focus on, and identify funds and creative funding sources, for programs to eradicate buffelgrass and other invasive species.

- i. Update and maintain consistency between lists of exotic, invasive species identified in County regulations.
- j. Work closely with the Southern Arizona Buffelgrass Coordination Center (SABCC) in regards to updating policies, procedures, and specifications as best practices improve.
- k. Add Sahara mustard and other invasive species, as needed, to the List of Invasive Species.
- l. Continue to implement and improve the Multi-Jurisdictional Hazard Mitigation Plan.
- m. Initiate a discussion with other jurisdictions in the region regarding taking steps toward a regional approach to carbon footprint reduction.
- n. Update the Native Plant Preservation Ordinance and the Landscape Design Manual.
- o. Integrate and use best climate science modeling data for regional drought planning.

Tohono O'odham Nation Environmental Review

The Tohono O'odham Nation's Environmental Protection Office reviews environmental and biological resources on the Nation's lands within the County. Pima County coordinates related efforts with the Tohono O'odham Nation, but has no jurisdiction over the Nation's land.

Goal 3: Work cooperatively with the Tohono O'odham Environmental Protection Office to protect environmental and biological resources

Policy 1: Continue to work cooperatively with the Tohono O'odham Environmental Protection Office to protect regional environmental and biological resources.

3.5 Housing and Community Design Element



Activity Centers with Integrated Higher Density Housing

Housing is a vital component of a vibrant, livable, and healthy economy. The County has a variety of communities including urban, suburban, rural, age-targeted, and family-oriented. It has relatively self-sufficient areas and bedroom communities, college environments, and exurbs. In a regional sense, creating quality places means ensuring that a full range of live-work-play options are provided. This includes having a mix of vibrant activity centers and walkable neighborhoods.

Historically, our region has developed horizontally in suburban and rural patterns including affordable and market-rate housing.

Historically, housing and transportation costs have consumed a significant portion of household budgets, leaving less disposable income for other necessities. The housing cost burden is felt not just by low-income households and seniors and students on fixed incomes, but also by moderate income households.

Housing affordability is not just market price but also depends on access to essential services such as health care, healthy foods, libraries, community centers, recreation, and lower-cost transportation options (walking, biking and transit). In order to introduce a diversity of housing options for different income ranges, including mixed use developments, it is important to ensure compatibility with existing neighborhoods through the use of community design tools.

The goals and policies in this element address the provision of a wide variety of housing to meet varying needs, access to services and supplies, safe and healthy housing, fair practices, and services to retain housing.

Housing

Goal 1: Create livable, viable, multi-generational communities

Policy 1: Ensure a safe, diverse, and quality housing supply for all income ranges for existing and future populations.

Policy 2: Support and ensure multi-generational housing that is accessible to jobs, multimodal transportation education, recreation, commerce, healthy foods, and health-related services.

Policy 3: Develop programs or incentives such as adjusting fee structure to encourage market-rate affordable housing.

Goal 1 Implementation Measures:

- a. Develop, adopt, and implement voluntary residential guidance programs for “Aging in Place.”
- b. Review effectiveness of existing Inclusive Home Design Ordinance with a committee of stakeholders and consider further changes to encourage aging in place, universal design, and accessibility amendments.
- c. Support, develop and consider a secondary dwelling unit ordinance, or update, that may include innovative design/development standards; permit procedures; community education and incentives such as:
 - 1) Flexible zoning requirements and development standards;
 - 2) Parking considerations;
 - 3) Setback requirements;
 - 4) Priority processing of approvals for health and safety projects;
 - 5) Alternate impact fee arrangements as may be necessary for low- or very low-income households; and
 - 6) Allowing for owner-occupancy in either primary or secondary unit.
- d. Establish an incentive program for developers to build innovative, residential product types and designs of varying densities.

Goal 2: Maintain a safe and healthy housing stock

Policy 1: Ensure existing owned and rental housing is maintained at a level of human habitability, meeting basic life and safety standards while minimizing displacement of residents.

Policy 2: Support, develop in partnership with housing industry and other stakeholders and adopt “Healthy Housing Standards” for Pima County.

Policy 3: Encourage the use of Health Impact Assessments (HIA) as a tool for measuring the health impacts of housing in public and publicly funded policies, programs and projects.

Goal 2 Implementation Measures:

- a. Consider development of a Housing Assessment Inventory Tool and interdepartmental guidance to assess housing stock on a regular and ongoing basis to identify:
 - 1) Housing in substandard condition including crowding, lacking adequate plumbing, heating and cooling or other structural problems;
 - 2) Resources and process for the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures;
 - 3) Inter-departmental collaborations that direct regulatory compliance processes and available funding resources to address substandard housing conditions; and
 - 4) Resources that provide relocation of inhabitants and/or replacement of substandard housing.
- b. Explore processing, fee waivers or incentives program to bring unpermitted improvements into compliance.
- c. Convene a stakeholders group to review and consider adopting sections of the International Property Maintenance Code for all residential dwellings with a focus on safe, decent, sanitary housing.
- d. Consider adoption of a Pima County Rental Inspection Program as outlined in Arizona Revised Statutes Title 11, Chapter 12 Residential Rental Inspection program.
- e. Adopt a ban on the importation into the County and installation of pre-1976 mobile homes.
- f. Work with stakeholders to identify and convene applicable County departments to adopt parts or all of the National Healthy Housing Standards developed by the American Public Health Association and the National Center for Healthy Housing.
- g. Support, identify, and implement best practices to inform residents and property managers on healthy housing standards and methods to maintain healthy homes (e.g. green improvements; use of fewer chemicals in cleaning; redesign of outdoor areas to provide for safe, active lifestyles).
- h. Pursue and support local, state and federal funding for “Healthy Homes” implementation.

Housing Affordability

Affordable housing through homeownership and safe decent affordable rental units continues to be a priority in the County. Supporting the growth and vibrancy of the local economy, putting more people to work and incentivizing increased wages with the goal of increasing area median income is a component of making housing more affordable. The Housing Program of the Community Development and Neighborhood Conservation department offers a comprehensive one-stop housing center where Pima County residents can find resources, information, and direct services for housing. The Pima County Housing Center offers the public classes on financial education that include credit repair and debt management through a small grant received from Freddie Mac to help residents recover from foreclosure.

Goal 3: Ensure safe, decent and affordable housing for a wide range of economic levels, household sizes, and age groups with proximity to schools and other community facilities such as libraries, transit centers, community centers, health clinics, and parks and recreation

Policy 1: Incentivize the integration of affordable housing developments to provide new rental and for-sale dwelling units priced for households earning below the area median income.

Policy 2: Preserve affordable housing stock.

Goal 3 Implementation Measures:

- a. Consider expanding the Pima County Housing Commission to actively develop and adopt housing policy to promote the creation of new affordable housing and address existing substandard housing conditions.
- b. Support, develop and adopt regulatory incentives that provide affordable housing in new developments.
- c. Continue to work closely with local nonprofit and for-profit housing developers to attract Arizona Low Income Housing Tax Credit investment in Pima County.
- d. Pursue, support and prioritize private and public local, state, and federal financial assistance efforts, programs and initiatives that promote affordable housing development including, but not limited to:
 - 1) Private Activity Bonds;
 - 2) Donation of Pima County-owned property;
 - 3) Pima County Community Land Trust;
 - 4) Pima County Housing Trust Fund;
 - 5) Affordable Housing General Obligation Bonds;

- 6) Arizona Department of Housing;
 - 7) U.S. Department of Agriculture; and
 - 8) U.S. Department of Housing and Urban Development.
- e. Develop and maintain a GIS-based Vacant & Underutilized Land Inventory to identify and prioritize county parcels ideal for mixed income residential affordable housing developments.
- f. Identify, prioritize and make available County-owned property for affordable housing developments as appropriate for potential private/public partnerships.
- g. Preserve the Pima County Housing Trust Fund by identifying an alternative revenue stream.
- h. Encourage and support strategies that preserve and subsidize affordable housing, including but not limited to:
 - 1) Community land trusts;
 - 2) Deed restrictions;
 - 3) Equity sharing arrangements; and
 - 4) Cooperatives.
- i. Support private, public, and non-profit home repair and weatherization efforts to assist very low- and low-income owner and renter households to improve their homes to a safe, sanitary, and decent state of repair.
- j. Work with housing industry to develop and provide education opportunities for do-it-yourself home repairs.
- k. Continue to pursue HOME Investment Partnership Program (HOME) grants for homeownership and rental housing development, rehabilitation and preservation.
- l. Continue to pursue funds to leverage federal, state and local housing funding sources.
- m. Engage housing stakeholders through the Pima County Housing Commission in developing strategies for the investment in affordable housing projects.

Goal 4: Ensure safe, decent and affordable market-rate housing for a wide range of income levels, household sizes and age groups

Policy 1: Incentivize the integration of affordable market-rate housing units into developments to provide new rental, rent-to-own, and for-sale dwelling units for all income ranges.

Goal 4 Implementation Measures:

- a. Work with housing industry stakeholders to determine policies and incentives that could be developed and implemented to facilitate affordable market-rate housing.

Goal 5: Support housing and emergency shelter for the homeless and special populations

Policy 1: Whenever possible, address the underlying causes of homelessness.

Goal 5 Implementation Measures:

- a. Identify Pima County residents in need of emergency shelter or supportive housing including residents with pets.
- b. Support programs that address mental illnesses, addictions, joblessness, veteran post-traumatic stress and rehabilitation.
- c. Continue to provide awards to non-profit organizations that offer creative solutions to address homelessness and special populations and consider for social impact bond eligibility.
- d. Seek safe housing alternatives to relocate the homeless from contaminated sites, washes, hazardous waste, and brownfield sites.

Goal 6: Proactively promote fair housing and equal housing opportunity

Policy 1: The County will promote healthy, sustainable, and diverse communities and meet its federal and state fair housing obligations by affirmatively furthering fair housing, supporting fair housing enforcement, and providing fair housing education services to the public, housing providers, and others.

Goal 6 Implementation Measures:

- a. Working collaboratively, Pima County agencies will prepare and update the County's Analysis of Impediments to Fair Housing Choice as required.
- b. Integrate fair housing (or fair housing goals) into county planning and development process.
- c. Ensure that fair housing practices are in place.
- d. Further fair housing that provides for a range and mix of household incomes and family sizes.
- e. Working collaboratively, promote affordable housing in a wide range of diverse communities throughout Pima County.

Goal 7: Increase homeownership or rental stability and decrease foreclosures and damaged credit.

Policy 1: Continue and expand outreach strategies to increase public awareness about their rights, opportunities and obligations regarding financial education, debt management, foreclosure prevention, and credit repair services.

Goal 7 Implementation Measures:

- a. Expand home-buying opportunities by providing housing resources, information and services.
- b. Offer counseling related to legal rights and responsibilities of home ownership, mortgages, rental and tenure.
- c. Map and identify areas with a high index of foreclosures to inform outreach strategy.
- d. Map and identify areas with a low index of foreclosures to better understand influencing factors.
- e. Provide programs to revitalize, restore and redevelop struggling neighborhoods.

Community Design



Goal 8: Ensure that all development and redevelopment is generally compatible and scale-appropriate

- Policy 1:** Incorporate through good design housing types within mixed use developments at scales generally compatible, but more dense than adjacent established neighborhoods.
- Policy 2:** Continue to use appropriate transitions for dissimilar types of development and provide connectivity to trails, pedestrian walkways, and bicycle routes.
- Policy 3:** Ensure that all new development in historic areas is reasonably compatible in scale, mass, architectural design and character and respects the privacy needs of adjacent historic and/or established neighborhoods.
- Policy 4:** Include trees and other landscape elements as design mechanisms in creating scale appropriate developments.

Goal 8 Implementation Measure:

- a. Adopt design standards that incorporate appropriate transition elements to ensure reasonable compatibility of higher density housing and mixed use development with adjacent established and historic neighborhoods.

Goal 9: Support quality development at appropriate scales in urban and suburban areas

- Policy 1:** Support urban development patterns that exhibit the physical design characteristics of pedestrian-oriented, store front-style retail and encourage physical activity, alternative transportation, social interaction, and activation of the public realm where appropriate.

Goal 9 Implementation Measures:

- a. Lead by example on Pima County's properties in the urban and suburban area.
- b. Adopt mixed use design standards that activate the public realm including:
 - 1) Human-scale neighborhood-serving retail, services and other similar uses on the ground floor and residential uses above non-residential space (vertical mixed use); and
 - 2) Human-scale neighborhood-serving retail, services, and other similar uses within walking distance to residential areas (horizontal mixed use).
- c. Incorporate trees and other landscaping to promote pedestrian activity and use of outdoor spaces.

Goal 10: Ensure that all new development and redevelopment reflects the character and sense of place of the area

Policy 1: Define an authentic identity and sense of place at appropriate scales in urban and suburban areas in a manner that reflects the character, identity, cultural heritage, and Sonoran Desert setting.

Policy 2: Encourage development in suburban areas to be integrated with its Sonoran Desert setting by:

- a) Encouraging a Sonoran Desert color palette that is not limited to earth tones;
- b) Incorporating the site's prominent existing natural features (rock formations, etc.) as part of the design, where appropriate;
- c) Supporting contemporary and energy efficient versions of vernacular architectural styles;
- d) With the exception of local food production, continue to utilize a drought-tolerant plant palette that emphasizes both the use of native species and precludes the use of non-native invasive plant species near public preserves and natural open spaces;
- e) Establishing trail linkages to surrounding natural areas; and
- f) Maximizing the use of shade devices where most appropriate including planting trees for pedestrians.

Goal 11: Maximize the efficient use of land outside the Maeveen Marie Behan Conservation Lands System

Policy 1: Work with stakeholders to reduce regulatory barriers, examine existing regulations for opportunities to consolidate requirements, and provide incentives where possible to increase efficiency of resources as well as support healthy communities.

Goals 10 and 11 Implementation Measures:

- a. Examine all existing design standards to determine appropriate changes.
- b. Review and consider amendments to the zoning code and other regulatory documents to remove regulatory barriers.

Active Design

Active Design guidelines provide design professionals with a manual of strategies for creating healthier buildings, streets, and urban spaces, based on the latest research and best practices in the field. Such guidelines include:

- Urban design strategies for creating neighborhoods, streets, and outdoor spaces that encourage walking, bicycling, and active transportation and recreation;
- Building design strategies for promoting active living where we work, live and play, through the placement and design of stairs, elevators, and indoor and outdoor spaces;
- Discussion of synergies between active design with sustainable and universal design initiatives such as LEED and Healthy Communities principles and strategies; and
- Promote shade and the reduction of urban heat island effect to encourage more outdoor activity, by the inclusion of shade trees, landscaping, and shade structures.

Goal 12: Incorporate principles of Active Design in new development

Policy 1: Work regionally to create guidelines for planning and design of development, including transportation networks that help define the public realm based on principles of Active Design.

Goal 12 Implementation Measure:

- a. Develop and adopt voluntary Active Design Guidelines in partnership with other jurisdictions, Pima County Health Department, other departments, housing industry and other stakeholders.

Healthy Communities and Health Impact Assessment**Goal 13: Develop a Health Impact Assessment program for public and publicly-funded projects based on healthy communities principles**

Policy 1: Utilize Health Impact Assessment processes for publically-funded projects that:

- a) Encourage physical activity through walkability and bicycle ridership;
- b) Increase access to healthy foods via community gardens, roof gardens, urban agriculture, and contained farming;

- c) Improve air and water quality;
- d) Minimize the effects of climate change and improve climate resiliency;
- e) Incorporate natural areas and parks within the built urban environment;
- f) Incorporate alternative energy sources;
- g) Include water harvesting and mitigation of heat island effect;
- h) Incorporate complete streets where appropriate;
- i) Strengthen the community social fabric;
- j) Support economic viability;
- k) Provide access to livelihood, education, workforce training, health care and other resources; and
- l) Encourage healthy, safe, and energy efficient housing (both owner and renter occupied).

Goal 13 Implementation Measure:

- a. Develop, adopt and periodically update a Health Impact Assessment Program (HIA) in partnership with other jurisdictions, Pima County Health Department, other departments and stakeholders.

Green Building Materials



Rammed Earth Home Construction

Green building strategies seek to reduce energy, water, and material uses and create a healthier indoor environment. The subsequent reduction in operating cost makes a building more affordable. Green building promotes efficiencies in six areas: location and linkages, site development, water use, energy use, material resources and indoor air quality. The goals and policies of this section are intended to reduce the resource use and increase the overall compatibility with the environment.

Please note that the policies included in this element complement policies are found in **4.3 Energy Element** located in the Physical Infrastructure Connectivity chapter.

Goal 14: Encourage cost-effective green building and site design methods, techniques, and materials

- Policy 1:** Decrease heat island effect and reduce water run-off through site development strategies.
- Policy 2:** Reduce outdoor water use by encouraging water-efficient practices such as:
- a. Low water use, drought-tolerant or native vegetation (xeriscapes) with the exception of local food production;
 - b. Drip irrigation;
 - c. Increase use of reclaimed water and rainwater harvesting; and
 - d. Low Impact Development (LID) principles such as preserving and recreating natural landscape features and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product where applicable and feasible.
- Policy 3:** Reduce indoor water use by installing water-efficient fixtures and appliances.
- Policy 4:** Increase building energy efficiency by encouraging active and passive solar methods of construction.
- Policy 5:** Incentivize the use of local materials for buildings and historically efficient building construction methods and styles such as rammed earth construction.
- Policy 6:** Reduce indoor air pollution by encouraging the use of materials that have reduced volatile organic compound (VOC) emissions.

Goal 14 Implementation Measures:

- a. Working with stakeholders, periodically update existing codes and regulations to include the latest green methods, techniques and material.
- b. Working with stakeholders, prepare and adopt LID guidelines.
- c. Working with stakeholders, develop public education and awareness programs to increase the market receptiveness of green building.
- d. Create an incentive program to encourage incorporation of green building techniques.

3.6 Cultural Resources Element



Effective land use planning requires the identification of significant cultural resources and the conservation, preservation and protection of the non-renewable and irreplaceable resources that are significant to our communities, our regional identity and our sense of place. The history and pre-history of the peoples who have inhabited our region before our present time give us meaning and gives us context for how we and future generations view and use this land and its resources.

The intent of this section's goals and policies are to reflect and promote the importance of cultural resources, maintain an inventory of cultural resources, and prescribe methods to protect cultural resources within the development process.

Goal 1: Conserve and protect cultural resources

Policy 1: Encourage the conservation, preservation and protection of the non-renewable and irreplaceable cultural resources that are significant to our region, our collective identity and our sense of place.

Policy 2: Continue to inventory and maintain a list of priority cultural resources.

Policy 3: As defined by the Sonoran Desert Conservation Plan, which includes Archaeological Sites, Archaeological Site Complexes and Historic Sites, the following apply:

- a) The list of Priority Cultural Resources shall provide a basis for the Pima County Register of Historic Places (PCRHP); and
- b) All properties within Pima County listed on the National Register of Historic Places and/or the Arizona Register of Historic Places shall be places on the PCRHP.

Policy 4: Monitor and evaluate priority cultural resources through time.

- Policy 5:** Maintain the PCRHP including those subject to Zoning Code Chapter 18.63: Historic Zone Overlay.
- Policy 6:** Identify and manage significant cultural resources within Pima County preserves and designated open space.
- Policy 7:** Adopt a comprehensive Cultural Resource Protection ordinance that consolidates the County's land use and development policies and regulations pertaining to cultural resources protection to ensure that cultural resources goals are effectively achieved.
- Policy 8:** Avoid impacts to cultural resources. If avoidance is not possible, mitigate the negative effects on cultural resources by legally prescribed strategies requiring recovery of archeological and historical information contained within the resource before it is adversely impacted by private or public development actions.
- Policy 9:** Encourage in-place protection of cultural resources as a part of land use planning.
- Policy 10:** Report unrecorded archaeological material unearthed under construction activities by the builder, contractors or individuals to the Primary Developer and Pima County Cultural Resources Office. Reasonable cost-effective measures shall be taken to document these archaeological features and materials by a professional archaeologist.
- Policy 11:** Except as necessary for the avoidance and protection of cultural resources, the Primary Developer shall restrict information on the location and nature of the cultural resources within the proposed development, and require a statement of confidentiality on appropriate documents that reads:
- Discussion of the location of historic properties to the public may be in violation of both federal and state laws. Applicable United States laws include, but may not be limited to Section 304 of the National Historic Preservation Act (16 U.S.C. 470w-3) and the Archaeological Resources Protection Act (16 U.S.C.S 470hh). In Arizona, applicable state laws include, but may not be limited to, Arizona Revised Statute Title 39, Section 125.*
- Policy 12:** In the event that human remains, including human skeletal remains, cremations, and/or ceremonial objects and funerary objects are found during discovery, scientific excavation or construction and ground disturbing activities shall cease in the immediate vicinity of the discovery.
- Policy 13:** Require that all aspects of the cultural resources inventory, evaluation, and mitigation:
- a) Are conducted by a professional State-permitted archaeologist or preservation architect; and
 - b) Use accepted professional standards and practices consistent with all applicable guidelines.
- Policy 14:** Promote cultural resources education and outreach.
- Policy 15:** Continue to strengthen outreach partnerships with public agencies and volunteer organizations whose goals and objectives promote preservation of cultural resources.

Policy 16: Encourage nominations to the National, State, and Pima County Registers of Historic Places.

Policy 17: Whenever possible, support adaptive use, or re-use, of historic resources, buildings, and structures over demolition or significant alteration of the resource.

Policy 18: Continue to support the public's interest in cultural resources and historic preservation projects through the County Bond program and State Historic Preservation Tax Incentive Program.

Goal 1 Implementation Measures:

- a. Require that all rezonings, specific plans, historic overlay, development plan requests, subdivision plat reviews, Type II Grading Permit applications, and Site Construction permits include review for cultural resources.
- b. Periodically update the list of Priority Cultural Resources and the PCRHP as needed.
- c. Adopt a Cultural Resources Protection ordinance.

Physical Infrastructure Connectivity

Chapter 4: Physical Infrastructure Connectivity Goals and Policies



The Physical Infrastructure Connectivity chapter addresses aspects of physical infrastructure including:

- transportation;
- water resources, including conservation, supply, demand and quality;
- wastewater;
- energy, including alternative energy sources;
- waste removal and recycling;
- brownfield clean up and redevelopment potential;
- communications;
- public facilities and grounds;
- trails;
- flood control/drainage;
- county-wide infrastructure concurrency.

Elements in this chapter provide goals and policies related to the efficient use of existing and planned infrastructure needed to support current populations and accommodate future growth. Each of the topics in the chapter either cover a part of the County's critical infrastructure, connect people and goods or both. All are components of the outlined regional vision noted in Chapter 1.

The Background and Current Conditions Volume (Appendix A) summarizes all of the background data and analysis supporting these goals and policies.

This Comprehensive Plan introduces the concept of an Integrated Facilities Planning System (IFPS) that includes an Integrated Monitoring System based on Level of Service and other standards. The intent of the IFPS is to provide a more efficient and measurable planning process that allows for a comprehensive evaluation of infrastructure needs tied to the Capital Improvements Program (CIP). The IFPS is further described in Section 4.7.

This chapter meets the requirements set forth in Arizona Revised Statutes for the following required elements: Circulation (Transportation); Water Resources; Energy; and the portion of Environmental Planning requirement for air and water quality.

4.1 Transportation Element

The Transportation Element addresses existing and proposed freeways/roadways, bicycle and pedestrian routes/facilities, airports, rail, and any other modes of transportation appropriate for Pima County. It also correlates with the land use and economic development goals and policies. A well-functioning transportation system in Pima County is essential to ensure the efficient movement of people and goods, maintain the quality of life, and facilitate economic growth. The Transportation Element recognizes the need to develop policies and practices that create a sustainable and cost-effective transportation system. The basis of this element is developing a transportation system that meets the mobility and accessibility needs of current and future residents and visitors in ways consistent with the character of the community as expressed throughout the Comprehensive Plan.

Goal 1: Provide a cost-effective, comprehensive and multi-modal transportation system while providing mobility for all users and goods, and all modes of travel including automobile, transit, bicycling, and walking which will reduce carbon emissions

Policy 1: Manage traffic congestion and demand through capacity improvements, land use decisions, transit service, and other comprehensive strategies.

Policy 2: Support transit service and programs, especially for those who are transit dependent, where ridership meets minimum thresholds.

Policy 3: Support multimodal transportation and transit oriented development to improve mobility and reduce traffic congestion.

Policy 4: Incorporate “complete streets” designs on arterials and collectors, where appropriate, to improve access for all roadway users, including bicyclists and pedestrians.

Policy 5: Encourage bicycling and pedestrian safety through education, engineering, enforcement and evaluation.

Policy 6: Pursue a zoning code text amendment to eliminate or reduce the additional 30-foot building setback for Major Streets and Routes.

Goal 1 Implementation Measures:

- a. Update the Major Streets and Scenic Routes Plan, based on established and future land use patterns, including existing zoned land, to further define future right-of-way needs and support future growth.
- b. Work with stakeholders to periodically update all design manuals to ensure efficient use of resources, regionally appropriate alignment with current national standards and consideration of best practices.
- c. Work collaboratively with the Tohono O’Odham Nation, the Pascua Yaqui Tribe, National Park Service, Federal Highway Administration, Central Federal Lands and other state and federal agencies to access funding sources that benefit the entire region.
- d. Accelerate the identification and acquisition of rights-of-way for future transportation infrastructure, where feasible.
- e. Actively participate in the state planning efforts to explore the potential of an intercity passenger rail line connecting Southern Arizona with the Phoenix metro area.
- f. Engage business leaders and employers to identify transit needs for a growing workforce.
- g. Increase the number of and distribution of electric vehicle recharging stations.
- h. Create incentives for solar construction on existing and new parking structures.
- i. Pursue a text code amendment to eliminate or reduce the zoning code requirement for a 30-foot building setback for Major Streets and Routes.

Goal 2: Maintain the county roadway system in a state of good repair

Policy 1: Prioritize roadway maintenance as a core service of Pima County.

Policy 2: Consider improvements that are based on ongoing evaluation of roadway conditions through the County’s Pavement Surface Evaluation and Rating system.

Policy 3: Evaluate existing legal mechanisms for roadway maintenance. Develop a sustainable and equitable participation program for roadway maintenance, resurfacing and improvements to improve major and local roadway conditions.

Policy 4: Support and seek alternative funding sources for roadway maintenance efforts.

Goal 2 Implementation Measure:

- a. Work with local, state, and national legislators to develop a stable funding source for transportation improvements and maintenance.
- b. Collaborate with development industry stakeholders to explore options for road maintenance funding, identifying trade-offs and incentives, including private sector involvement.

Goal 3: Improve traffic safety and reduce accidents on county roads

Policy 1: Prioritize roadway safety projects based on ongoing evaluation of crash statistics through the County's Safety Management System.

Policy 2: Manage roadway access points to improve safety and accessibility for all users.

Policy 3: Support efforts to educate drivers and users of all modes of transportation on traffic safety.

Policy 4: Advocate for legislative and other agency efforts to increase and improve funding for local government traffic safety programs.

Policy 5: Support additional efforts to enforce traffic laws to improve traffic safety and reduce accidents.

Policy 6: Support the reduction of wildlife/vehicle collisions.

Goal 3 Implementation Measures:

- a. Work with regional partners to prepare a regional access management plan.
- b. Work with Pima County Sheriff Department to plan, develop and implement a strategic traffic safety and speed management plan.
- c. Work with regional partners to develop and implement a region-wide traffic signing and pavement marking management plan.
- d. Work cooperatively with the region's school districts and charter school providers to coordinate normal and special event traffic demand in an effective and reasonable fashion.
- e. Work collaboratively with transportation agency partners to evaluate the appropriateness of incorporating scale-dependent wildlife crossing features as part of County roadway improvement projects.
- f. On a region-wide level, continue to work with other agency partners to evaluate opportunities to integrate wildlife crossing features into regional and roadway projects and corridors.

Goal 4: Promote economic development with strategic transportation investments

Policy 1: Support the growth of aerospace, defense, and logistics industries in and around all regional and military airport facilities.

- Policy 2:** Support transportation investments that assist current employers as well as bringing new and permanent jobs to Pima County.
- Policy 3:** Support efforts to expand rail infrastructure and intermodal connections throughout the region.
- Policy 4:** Support the growth of renewable energy industries and new and permanent jobs to Pima County through the development and implementation of low carbon emission transportation options and incentives.

Goal 4 Implementation Measures:

- a. Conduct planning and seek regional support and funding for the Sonoran Corridor/Auxiliary Interstate Highway connecting 1-10 to 1-19.
- b. Petition the State Transportation Board to accept the Sonoran Corridor as a state highway under the operational management and control of ADOT.
- c. Support Tucson International Airport Master Plan and the development of a second main runway.
- d. Work with the Tucson Airport Authority, ADOT, Town of Marana, and Pinal County to provide the infrastructure needed to best position Ryan Airfield, Marana Regional Airport, and Pinal Airpark (for Pinal Airpark, the lead in planning and infrastructure would be the airport itself) as sub-regional employers.
- e. Work collaboratively Port of Tucson and other community partners to position the Port as a key transportation and logistics center.
- f. Continue to work with PAG in the implementation of the most recent long-range transportation plan, the 2040 Regional Transportation Plan Update (RTP), prepared by PAG.
- g. Support any rail enhancements needed for the successful operation of the Port of Tucson.

4.2 Water Resources Element

The state mandated water resources element requires that counties perform a basic known water supply and demand comparative analysis to show whether there is an impact of proposed new development on the overall water supply. In 2008, Pima County amended the Water Resources Element to more adequately measure and mitigate impacts of proposed development on water supply. Pima County is not a water provider and no new hydrogeologic studies are required to do this analysis. Consequently, quite a number of assumptions are required. The water quality portion of this element satisfies part of the state mandated Environmental Planning Element.

Analysis of Land Use Changes

As noted elsewhere in this plan, few land use changes were proposed in Pima Prospers from the 2001 Pima County Comprehensive Plan, as amended in the interim years. Pima County is not a water provider. This section denotes the changes anticipated only during the 20 year plan horizon, and the estimated total new development is summarized by affected planning area. Only planning areas where new land use changes were approved by the Board of Supervisors are listed. Changes planned but not expected for at least 20 years are not included.

Planning Area	Number of Changes	Total Acreage	Estimated Dwellings	Estimated Non-Residential (Square Feet)	Water Providers
Catalina Foothills	1	42.3	-84	190,000	Tucson Water
Southeast	5	633.5	2381	1,392,000	Spanish Trail Water, Tucson Water, State Land CAP, Other
Southwest	3	47.74	-34	200,000	Other
Tortolita	2	52.5	-101	365,000	Metro Water, Marana, Other
Tucson Mtns	1	30.99	14	0	Other
Totals	12	806.99	2177	2,147,000	

Assuming 2.48 people per dwelling unit, not counting vacancy rate, the estimated number of dwelling units account for 5,399 people. Per 2013 Arizona Department of Water Resources figures for the Tucson Active Management Area, the expected use is 90 gallons per capita per day. This means consumption at 2013 rates would be 485,910 gallons per day. 893 gallons equal 1 acre foot per year so the math indicates the population increase would equal 544 acre feet per year.

For non-residential, it is difficult to determine gallons per capita per day because the types of uses are both unknown and vary, and therefore do the number of employees and visitors. However,

assuming the 2013 Tucson Active Management Area amount of 40 gallons per capita per day for large non-residential uses, it is clear that at least the rate of consumption is less than half per capita as compared to residential uses. The bulk of the square footage of non-residential in the table above is expected to be for industrial use within the Airport – I-10 Economic Development Corridor, and clearly serves an economic development purpose.

The estimated annual water use from these projects when they come online over the next 20 years is well within the total amount of water needed to serve the metropolitan area. Individual projects will need to provide further site specific detail at the time of rezoning, including the source of water. The number of residential units is accounted for with the Pima Association of Government's population projection totals for 2035.

In addition to these changes, the land use maps in Pima Prospers include a number of changes compared to the 2001 plan that more accurately depict existing developed land use and correct land uses that are unrealistic due to a lack of services and/or Federal ownership, most notably in the greater Ajo area. While all new development will cause water to be consumed, estimates of the population growth caused by the very few land use changes approved that are likely to occur over the next 20 years are well within overall regional growth expectations. Each rezoning case expected by these changes will be subject to a more refined water analysis at the time of application.

[Pima County 2011-2015 Action Plan for Water Sustainability and Water Resource Policy](#)

The City of Tucson and Pima County completed a multi-phase water/wastewater infrastructure study in 2010. Phase 1, completed in February 2009, consisted of an infrastructure inventory. Phase 2 established a framework for sustainable water resources planning through the implementation of 19 goals and 56 recommendations. A five-year Action Plan for Water Sustainability (2011-2015) guides completion of the recommendations and each year the City and County transmit an annual report card tracking progress towards meeting those goals.

In 2007, the Board of Supervisors adopted a policy (F54.9) on County water rights acquisition, protection and management. The policy requires that Pima County water resources be used to the benefit of Pima County's citizens. It establishes a collaborative effort of numerous Pima County Departments to identify County initiatives for improved management and utilization of County owned water rights. The County Water Management Committee has provided guidance in managing its water resources by building a database of water sources, rights and infrastructure while encouraging improved departmental maintenance, procedure and administration. Strategic planning for County reclaimed water, long term storage credits and groundwater and surface water rights will maximize resource value and efficient utilization.

The Pima County 2011-2015 Action Plan for Water Sustainability and the Water Rights Policy have numerous common goals and are complementary plans that reinforce sustainable planning.

Goal 1: Achieve water sustainability through comprehensive integrated planning that coordinates water supply, demand management, climate variability, economic growth and respect for the environment

Policy 1: Comply with all applicable goals and recommendations in the 2011-2015 Action Plan for Water Sustainability, approved by the Board of Supervisors and the City of Tucson Mayor and Council.

Policy 2: Maximize County water resource assets including groundwater rights, surface rights and production and use of reclaimed water to sustain and protect the County's natural environment consistent with Board of Supervisors Policy F 54.9 "Water Rights Acquisition, Protection and Management."

Policy 3: Make beneficial use of the Conservation Effluent Pool (CEP) for environmental restoration.

Policy 4: County water resources, and associated rights and credits, are valuable public assets to be preserved for public benefit. Reclaimed water is a local renewable water resource vital to sustainable water resource planning and a key component of future supply. It is the policy of Pima County to maximize available County water assets, including the production and use of reclaimed water. The beneficial use of County reclaimed water is undertaken recognizing the following priorities to achieve highest and best use, maximizing efficiency:

- a) Direct re-use;
- b) Environmental restoration; and
- c) Aquifer replenishment.

Policy 5: Increase reliance upon renewable water supplies.

Policy 6: Promote the efficient utilization of existing infrastructure and the prudent construction of additional infrastructure needed for a safe, reliable and renewable water supply.

Policy 7: Protect groundwater-dependent ecosystems including springs, perennial and intermittent streams and shallow groundwater areas.

Policy 8: Continue to conduct Water Supply Impact Reviews of proposed comprehensive plan amendments and rezonings larger than 4 acres using the following 5 critical issues on existing water infrastructure and potential environmental constraints:

- a) Water service and renewable water supply options to site;
- b) Current and projected depth of groundwater and groundwater trend data at the site or wells;
- c) Proximity of site or wells (if known) to areas of known or potential ground subsidence;
- d) Proximity of site and wells (if known) to known groundwater-dependent ecosystems; and

- e) Location within a hydro geologic basin, including depth to bedrock.

Policy 9: Minimize effect of development upon water supply for existing and future residents of Pima County through water conservation measures when appropriate to offset the impacts as conditions of rezonings.

Goal 1 Implementation Measures:

- a. Implement and update as needed the 2011-2015 Action Plan for Water Sustainability.
- b. Continue transmittal of Year End Progress Reports of the Action Plan recommendations.
- c. Develop strategies for the utilization of Pima County water resources consistent with the Water Rights Policy.
- d. Prepare a Watershed Management Plan which identifies the watersheds impacting Pima County, their drainage characteristics, regulatory and infrastructure needs.
- e. Continue to conduct Water Supply Impact Reviews on proposed comprehensive plan amendment requests larger than four acres.
- f. Continue to include the Preliminary Integrated Water Management Plans (PIWMP) as part of the site analysis and conduct Water Resource Assessments on all rezoning or specific plan requests that require a site analysis. Update the site analysis checklist as needed.
- g. Develop incentives to encourage beneficial use of stormwater and other water conservation measures.
- h. Develop a practicable method to assess both the increased water demand associated with new development and the offset measures that are proposed in Integrated Water Management Plans in order to compare them.

Water Supply and Demand Management

The Bureau of Reclamation and the Arizona Department of Water Resources (ADWR) studies recommend using all water supplies as efficiently as possible and the expansion of reclaimed water use for non-potable purposes to ease potable demand. Reclaimed water has and will continue to be a key water supply in the state's management plans and goal of safe yield, or hydrological balance. Yet both reports agree that no one strategy will solve future imbalance; augmentation of supply will be required despite conservation and reuse efforts.

Tucson Water recently released a Recycled Water Master Plan. New recycled water programs are predicated on the conclusion that the reclaimed water system is not expected to gain significant additional demand and new uses are needed to achieve full utilization and maximize water resource

benefit. Full utilization is a compelling goal as Tucson Water expects shortages to the City's Central Arizona Project (CAP) allocation due to drought and climate change and is shifting strategy "to decrease reliance on CAP supplies." Plans for supplementing the City's CAP allocation include recycled water, Central Arizona Groundwater Replenishment District (GRD) replenishment, Arizona Water Banking Authority (AWBA) credits, long term storage credits and incidental recharge.

Tucson Water is considering to use unutilized recycled water for groundwater replenishment, through recharge, and then recover the water for advanced treatment before delivery as a supplement to potable water supplies a process called "indirect potable reuse", one used by other communities in the Southwest. Indirect potable reuse is the primary strategy of Tucson Water's Recycled Water Master Plan to establish additional renewable water supplies, increase system reliability and retain a valuable water resource within the county.

In 2013, concerned about the ongoing drought and the continuing decline of water levels in Lake Mead and Lake Powell, the Department of the Interior and the Basin States set out to develop a drought response and sustainability plan for the Colorado River basin. The Lower Basin states have proposed to retain an additional 1.5 to 3 million acre-feet in Lake Mead over the next five years to reduce the risk of that reservoir dropping below the critical elevation of 1,000 feet. CAP is partnering with other states and the U.S. Bureau of Reclamation to fund pilot Colorado River water conservation projects demonstrating cooperative, voluntary compensated demand reduction in the agricultural, municipal and industrial sector. The Colorado River System Conservation Program is a critical first step in conserving water within the Colorado River System to protect reservoir levels.

Goal 2: Acknowledge new water supplies may be needed to ensure a secure water future

- Policy 1:** Collaborate with water providers to support the development of new water supplies.
- Policy 2:** Collaborate with water providers to support sustainable water management in County-identified regional growth areas outside of the Tucson metropolitan area.
- Policy 3:** Consider use and underground storage of high-quality reclaimed water as viable future water supply strategies.

Goal 2 Implementation Measures:

- a. Achieve full utilization of the County's reclaimed water as part of a strategy that best incorporates direct reuse, aquifer replenishment and accrual of long term storage credits.
- b. Support increased use of reclaimed water by water providers with reclaimed water entitlements.

- c. Support increased use of CAP water and a blend of recharge of CAP water and groundwater including wheeling agreements between water providers.
- d. Stay apprised of the Colorado River water supply and its impacts to local water providers.

Goal 3: Support efficient water demand management practices and strategies that protect both local and basin-wide water supplies

- Policy 1:** Integrate efficient water demand management practices and strategies in land use decisions.
- Policy 2:** Direct new development to areas that are served by water providers with a renewable and potable supply or the ability to create the same, and away from areas that are served by water sources that impact groundwater-dependent ecosystems.
- Policy 3:** Encourage new construction to implement efficient water practices and use renewable water resources where feasible and available.
- Policy 4:** Encourage the use of renewable water sources including reclaimed water, CAP water and water harvesting.
- Policy 5:** Encourage efficient investment and coordination among regional public and private water and sewer providers for potable and renewable supply, treatment and conveyance infrastructure.
- Policy 6:** Promote and incentivize, where appropriate, long-term water conservation strategies such as:
- a) Low water use fixtures and appliances in building codes;
 - b) Low water use drought tolerant landscapes or xeriscapes;
 - c) Drip irrigation;
 - d) Increase use of reclaimed water and rainwater harvesting; and
 - e) Low Impact Development (LID) principles such as preserving and recreating natural landscape features and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product where, applicable and feasible.
- Policy 7:** Continue to require that all solar energy generating fields utilize solar technologies that minimize consumption of water.
- Policy 8:** Continue to require a PIWMP for any rezoning that requires a site analysis. The PIWMP submittal requirements are as follows:
- a) If the site is served by a water system with a potable and renewable water supply, or the ability to create the same, the PIWMP shall consist only of the required Water Conservation Measures found in the site analysis requirements.

- b) If the site is served by a water system that does not have a potable and renewable water supply, in addition to the Water Conservation Measures, the PIWMP shall contain:
 - 1. A description of where the proposed rezoning will occur geographically based upon its proximity to existing and planned renewable supply and potable water supply infrastructure and defined water service area boundaries;
 - 2. Water demand projections for the development, based upon both the existing and proposed zoning. For vacant land, existing water demand shall be calculated based upon maximum residential or commercial development under existing zoning. All water demand projections shall be generated using the current ADWR Demand Calculator, unless water demand information from similar development can be provided.
 - 3. A plan showing the location of all wells, existing and proposed, that may be used to supply water to the development, including ADWR well registry numbers for existing wells; and
 - 4. The location of the development and the area from which groundwater will be withdrawn relative to all groundwater-dependent ecosystems including: springs, perennial streams, intermittent streams and shallow groundwater areas as mapped on the Sonoran Desert Conservation Plan GIS database.
- c) If the site is located within a groundwater-dependent ecosystem, or relies on groundwater from wells that are within one mile of a groundwater-dependent ecosystem, the PIWMP shall also include a demonstration that the development will not have an impact on the groundwater-dependent ecosystem. The demonstration can include a combination of groundwater drawdown analysis and additional conservation measures that will reduce the water demand of the proposed rezoning to be at or below the existing demand calculated in b.2. The demonstration may include:
 - 1. An analysis of water level trends in the area from which groundwater will be withdrawn for the service to the development and depth to groundwater at the nearest existing well location
<https://gisweb.azwater.gov/waterresourcedata/WellRegistry.aspx>;
 - 2. Existing site-specific geologic and hydrogeologic studies available for the area from which groundwater will be withdrawn to serve the project;
 - 3. A hydrologic impact analysis to show how groundwater withdrawn for the development may impact ecological assets including employing pump tests and monitoring, and use avoidance strategies, including well site selection and screening of wells;