

Exhibit 4.3.b: Electrical Utilities Service Area

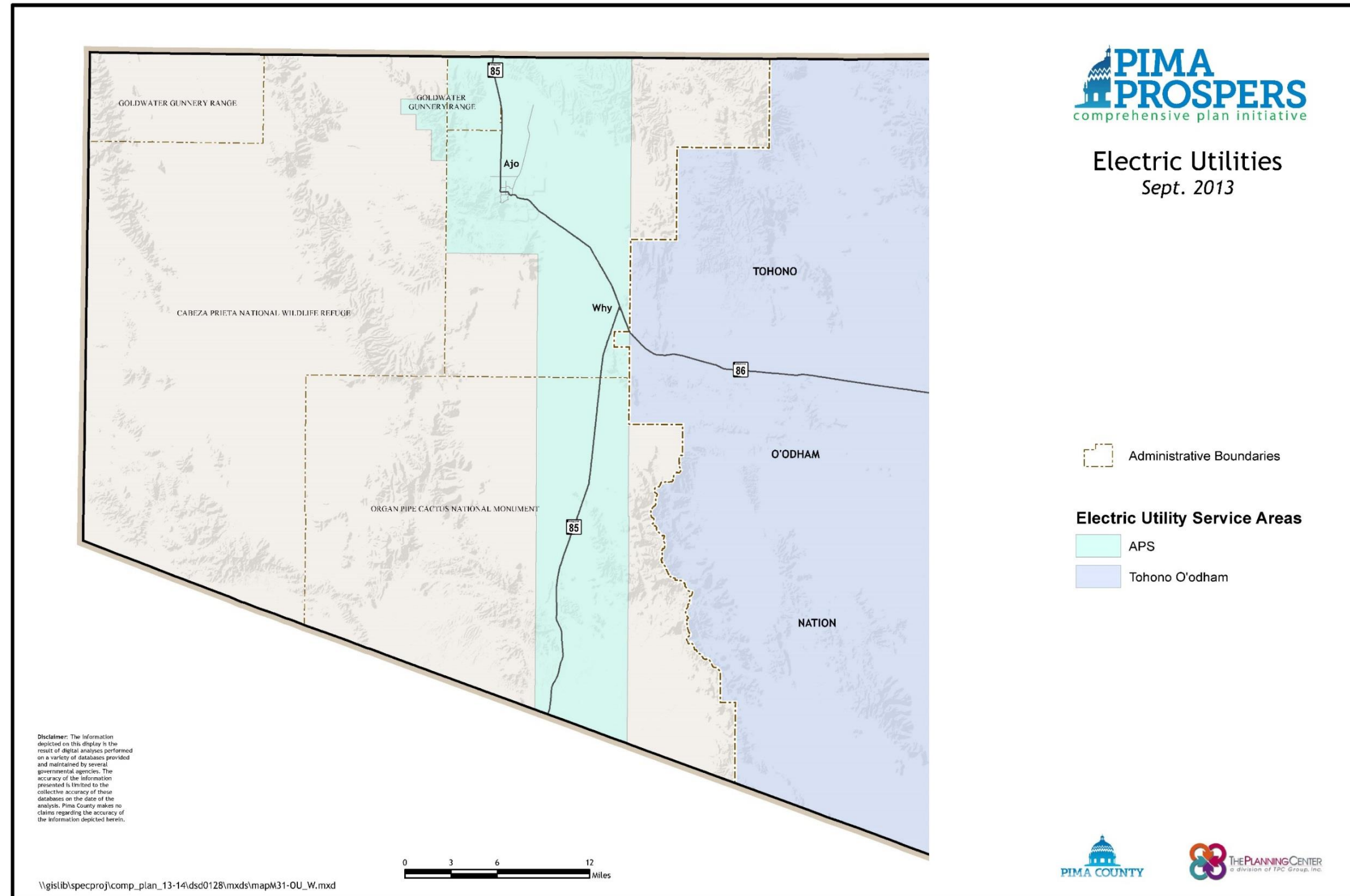


Exhibit 4.4.a: Sewer Service Areas

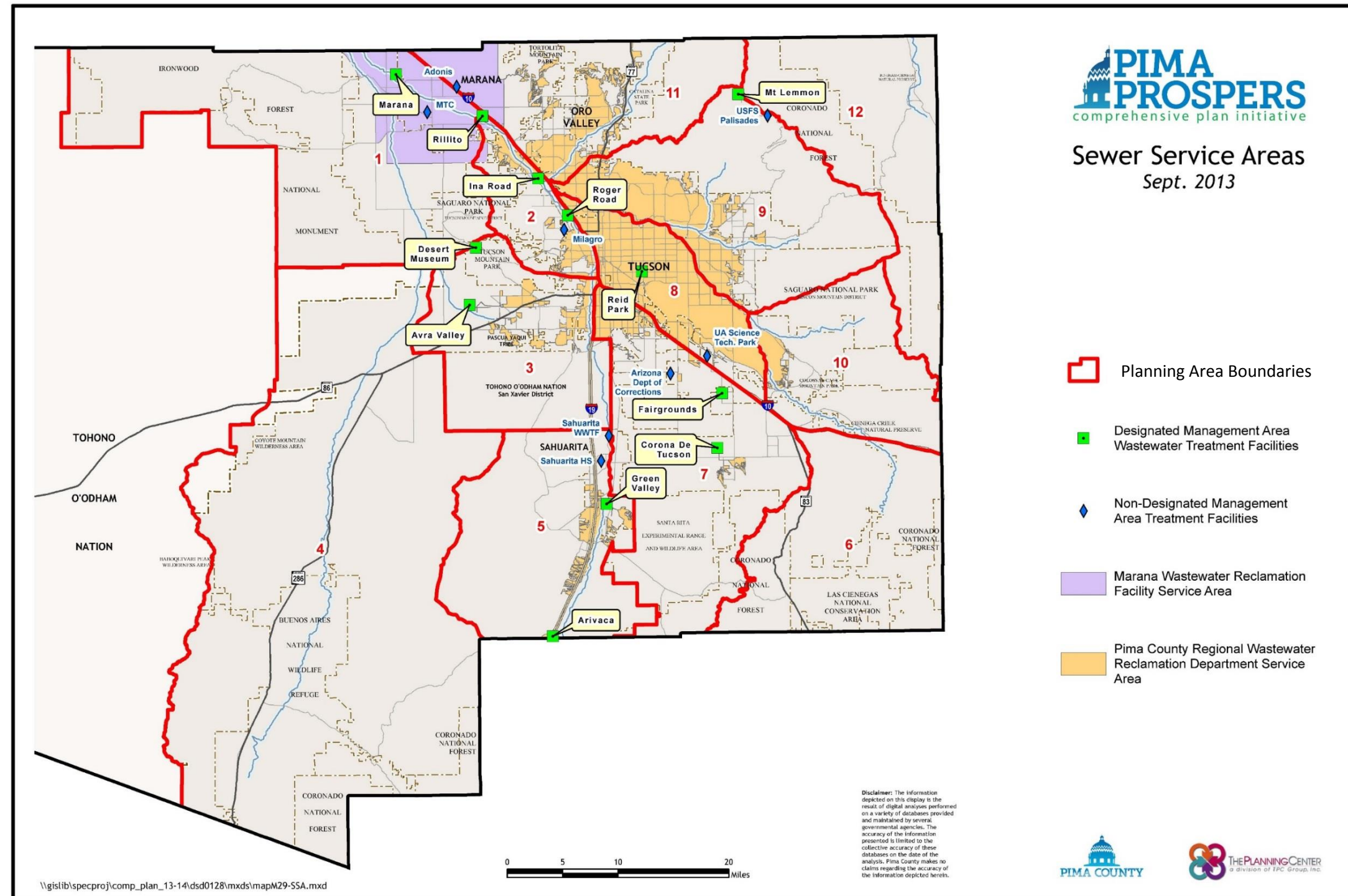


Exhibit 4.4.b: Sewer Service Areas

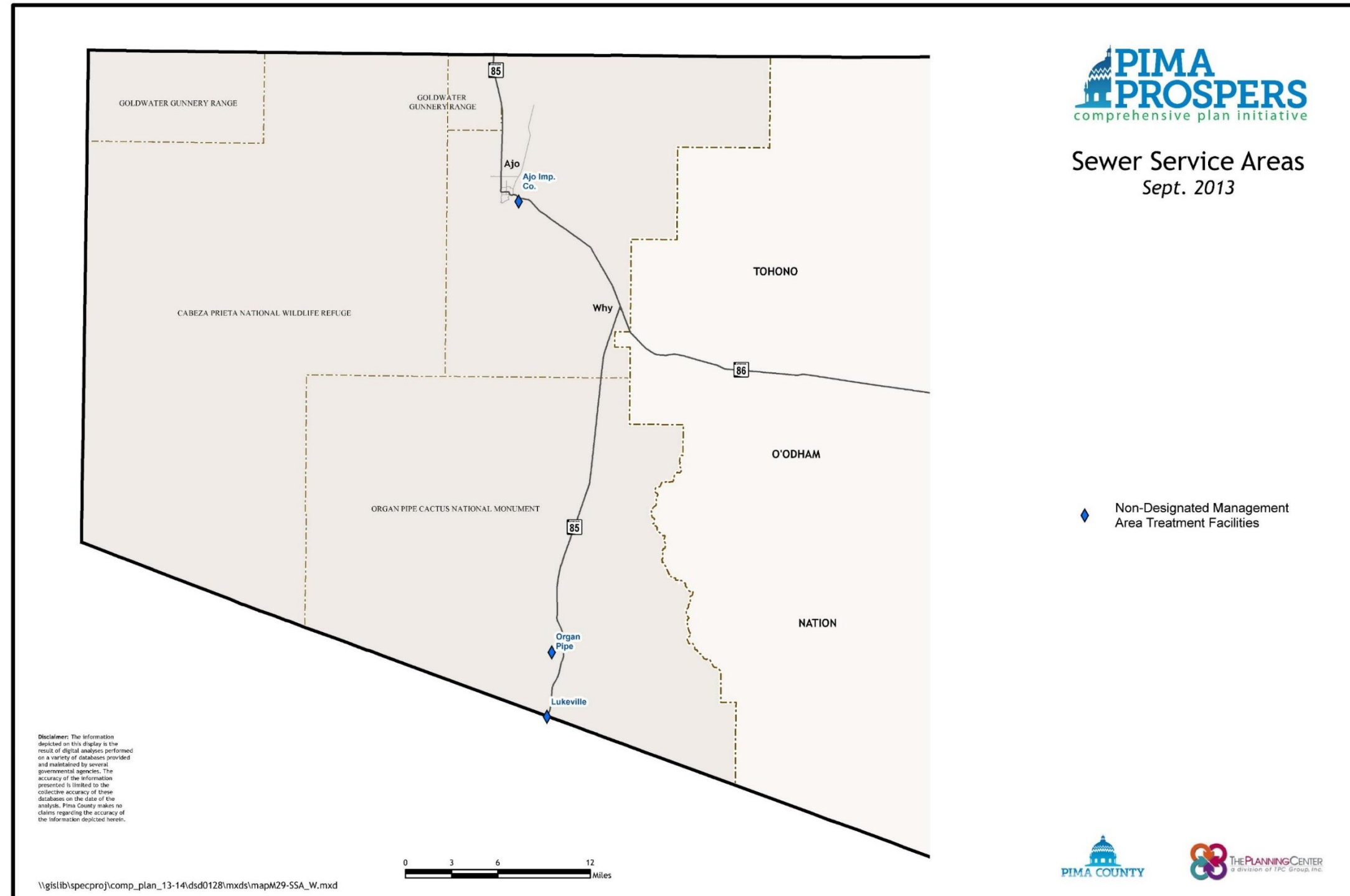


Exhibit 4.7.a: Public Buildings and Facilities

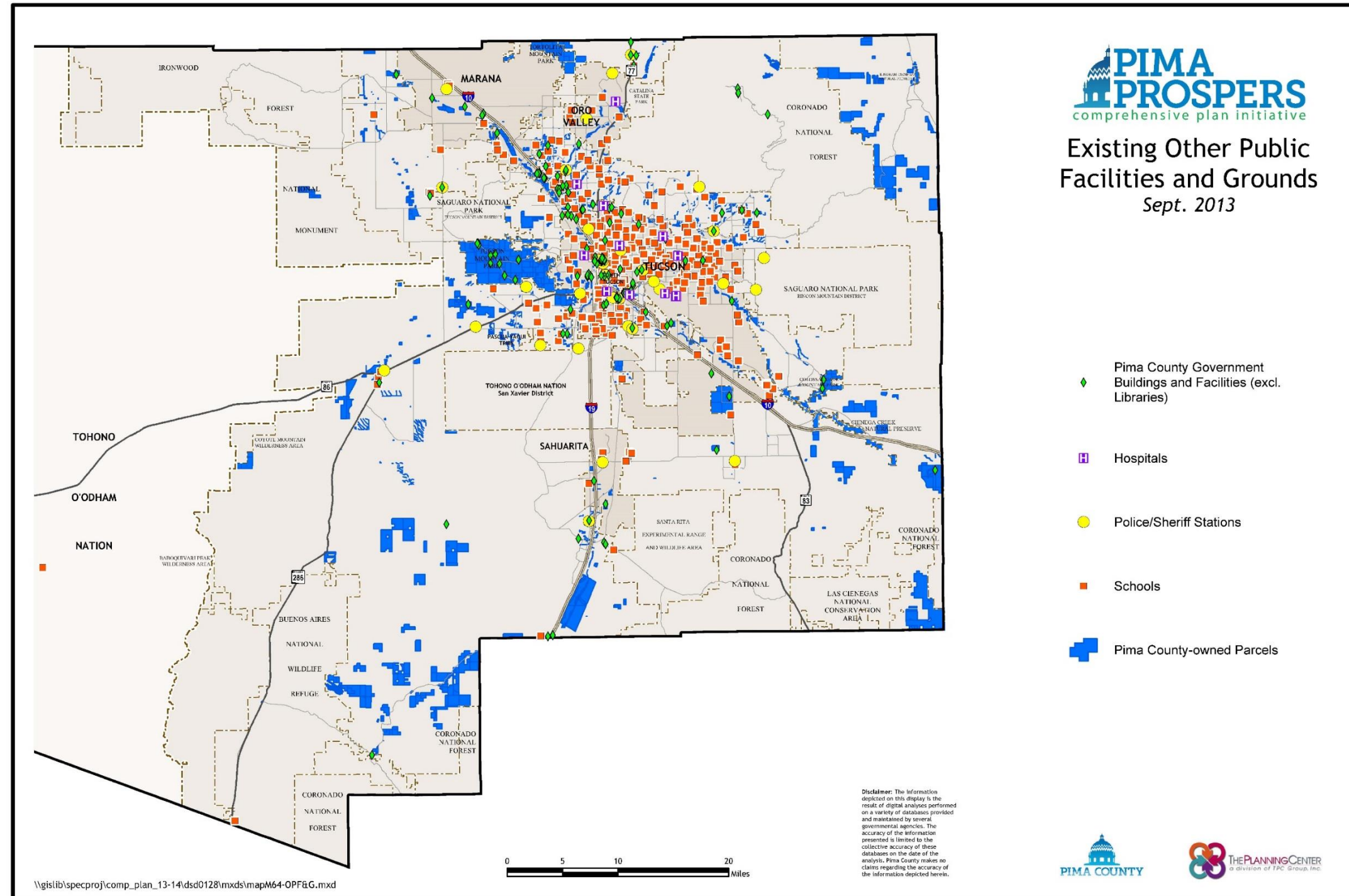
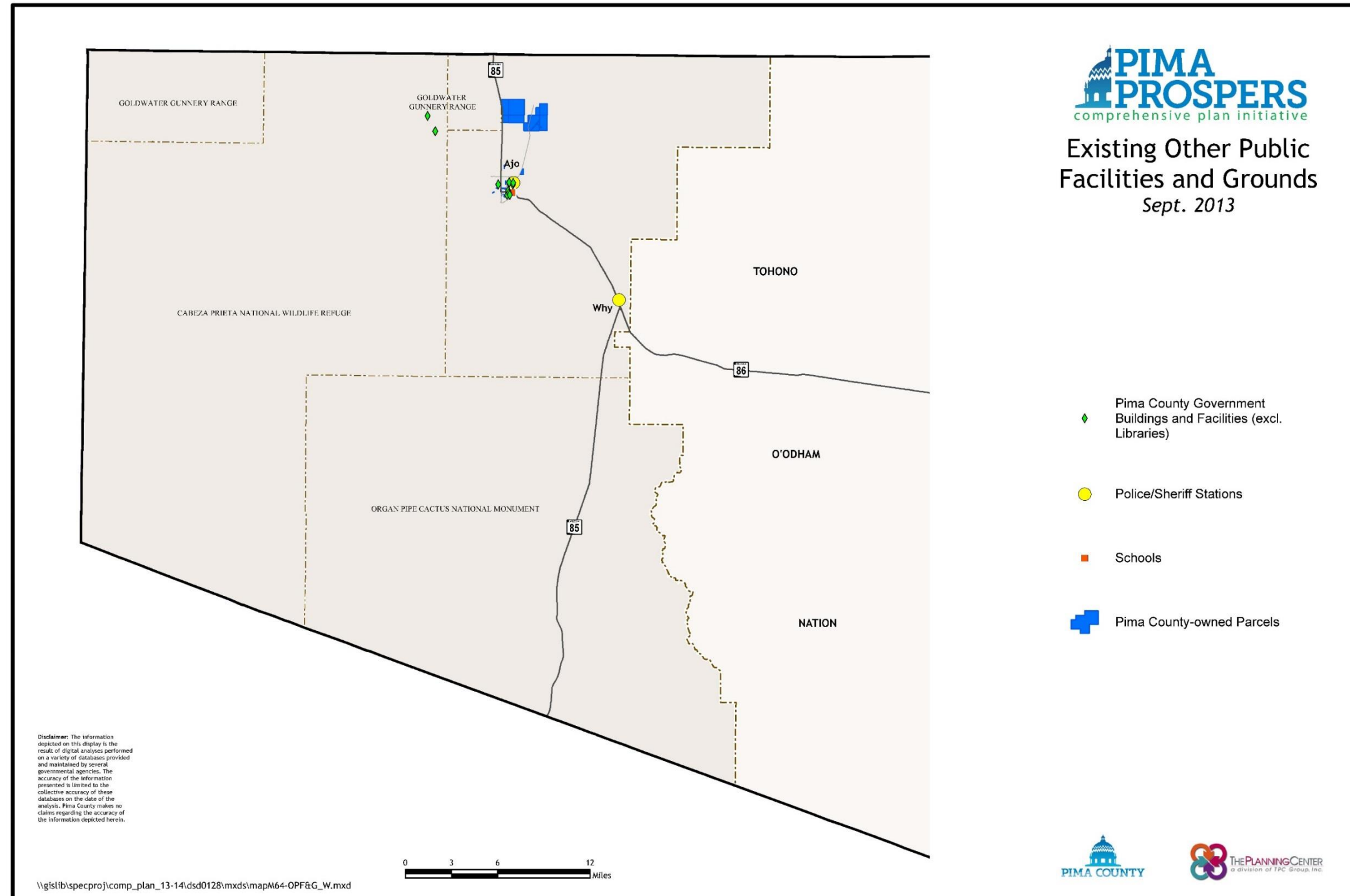


Exhibit 4.7.b: Public Buildings and Facilities



Human Infrastructure Connectivity

Chapter 5: Human Infrastructure Connectivity Background



Key Subjects

- ✓ Health Care Services Delivery
- ✓ Public Safety and Emergency Services
- ✓ Parks and Recreation
- ✓ Workforce Training/Education
- ✓ Arts and Entertainment
- ✓ Library Services
- ✓ Animal Care
- ✓ Food Access

Important Notes:

1. At the time of the preparation of the infrastructure study that served as the core of this background document, the Tohono O'odham Nation was treated as a planning area for statistical purposes only. The Tohono O'odham Nation is a sovereign nation, and though the County recognizes the importance of the Nation to the region, the County has no jurisdiction over the Nation.

2. All Exhibits referenced in this chapter are included at the end of the chapter.

5.1 Health Care Services Delivery

Pima County is a key player in making the community healthy and safe. The County has the ability to influence many of the social, cultural and environmental factors that affect people's health and lifestyle choices. Infrastructure and policy development, community collaboration, and service delivery by the County all have the potential to impact health outcomes. This section defines a healthy community, and summarizes the state of health and challenges currently facing Pima County.

Health Services and Healthy Communities

Pima County has taken the stance that a healthy community is more than the absence of disease. A holistic healthy community approach involves housing, the environment, the economy, transportation and much more.



Historically, the County operated certain programs to ensure efficient health service delivery to Pima County residents. Over the past decade, the County's focus has shifted from direct service delivery to its support of a healthy and safe community through leadership, collaboration with community stakeholders, education and prevention efforts, and community design. **The County continues to provide some health services**, primarily through the Pima County Health Department (PCHD).

PCHD provides public health services mandated by Arizona Revised Statutes, Arizona Administrative Code or Pima County Ordinance, delegated from the State, and other services to strategically address critical community health issues. PCHD also ensures health care services are delivered to adults and youth detained in the custody of the Pima County Sheriff's Department or Juvenile Court.

Healthy Communities Defined

A Healthy Community promotes healthy individuals, a healthy economy and a healthy environment. In other words, it benefits all and it contributes significantly to livability and long term economic resiliency of the community.

One of the most critical issues confronting communities in Arizona today is the impact that the physical environment has on public health. Research studies have consistently shown that the design of the physical environment contributes to chronic diseases such as obesity, Type II diabetes and heart related disease. Designing healthy communities that facilitate an active lifestyle and that support air and water quality is critical to the long term health of Arizona communities as well as to Pima County.

In 2012, the American Planning Association Arizona Chapter, the Arizona Department of Health Services, the Livable Communities Coalition, Maricopa County Department of Public Health, St. Luke's Health Initiative, and the Sonoran Institute combined their efforts to create a Healthy Community Design Coalition for Arizona. This collaboration resulted in the preparation of the Healthy Community Design Toolkit 2012. The toolkit is a guide for residents, planners and urban designers in the preparation of comprehensive and general plans. Rather than being a step-by-step guide, it provides an overview of the process, explains how to assess existing conditions and provides examples of policies that may be considered for incorporation.

The Toolkit promotes that a comprehensive plan should serve as the community vision for the future. That vision must address the issues of community health – healthy eating/active living – and put in place goals and policies that respond to the need of residents to have opportunities for a healthy lifestyle. Pima Prospers expands the vision of healthy community to also include healthy workforce, healthy economy, and healthy environment. These need to be weaved into the policy framework to produce an implementable plan that carries our region into a prosperous future.

The Healthy Communities approach involves four major interdependent spheres: health care access, environment, community design, and lifestyle choice.



Figure 32: Healthy Community Approach

Existing Population-based Health Services

The Pima County Health Department serves as the community's voice for public health, and assures that high quality services are available and accessible to all persons.

The Pima County Health Department works to uphold public health and safety by ensuring it provides the Ten Essential Public Health Services as defined by the Centers for Disease Control and Prevention (CDC).

Ten Essential Public Health Services

1. Monitor health status to identify and solve community health problems;
2. Diagnose and investigate health problems and health hazards in the community;
3. Inform, educate, and empower people about health issues;
4. Mobilize community partnerships and action to identify and solve health problems;
5. Develop policies and plans that support individual and community health efforts;
6. Enforce laws and regulations that protect health and ensure safety;
7. Link to/provide care of needed personal health services and assure the provision of health care when otherwise unavailable;
8. Assure competent workforce for public and personal healthcare workforce;
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services; and
10. Research for new insights and innovative solutions to health problems.



Figure 33: Public Health Services

PCHD responds to these services by providing the following functions to the public at PCHD locations and various community sites:

- Administration of immunizations to children and adults;
- Screening and treatment for tuberculosis (latent and active) and community education;
- Screening, diagnosis and treatment for sexually transmitted diseases (STDs), HIV and STD education and counseling, and referral to care for those infected with HIV;
- Communicable disease investigation and surveillance for diseases such as tuberculosis, syphilis, gonorrhea, West Nile virus, rabies and many others as directed by the state;
- Certification of births and deaths and provider education on proper vital record procedures;
- Assurance of community compliance with food service, swimming pool, housing, and smoke-free statutes and code;
- Chronic disease education, particularly related to tobacco use prevention and cardiovascular health, for all ages;
- Screening and preventive dental services to young school-age children;
- Breast and cervical cancer screening to low-income women, and referrals to diagnostic and treatment services when appropriate;
- Family planning and contraceptive services, particularly to low-income women and youth;
- Nutritional vouchers, health education, and support to low-income women and children;

- Public health nursing for individuals, families and groups to include services related to fall prevention, child safety seats, prevention of low-birth weight or premature infants, and complications related to pregnancy;
- Nurse consulting services to child care providers and schools; and
- Coordination of community preparedness for public health emergencies.

State of Health in Pima County

Identifying the primary health issues facing Pima County allows for a comprehensive approach to planning that illuminates how the environment we live in is shaping the health of our communities. This section examines the health status and outcomes of people living in Pima County and their ability to access infrastructure, resources and services that improve health and prevent premature deaths.

Health Indicators and Risk Factors

Mortality rates are an important factor in evaluating the County's health services and in determining how to move forward in the future.

From 2005 to 2010, Pima County saw the death rate decline for cardiovascular disease (though it ranks 10th out of 15 counties in Arizona). Overall death rates also declined in the same time period for malignant neoplasms, accidental injury, cerebrovascular disease, Alzheimer's disease, influenza and pneumonia.

During that same period, Pima County saw an overall increase in death rates for injury by firearms, suicide, diabetes and drug-induced deaths. In fact, Pima County has one of the state's highest rates of drug-induced deaths, ranking 3rd among all Arizona counties.

Leading Causes of Death¹

Another indicator for a population's health is the leading cause of death. In 2011, the leading cause of death in Pima County was cardiovascular disease, followed by cancer. More Pima County residents died from lung cancer than any other type of cancer at a rate of 38.8/100,000 population. The following table shows Pima County age-adjusted mortality rate (deaths per 100,000 residents) compared to the State rate.

¹ Bishop, Torres & Gupta, S. (May 2013). *Arizona Health Status and Vital Statistics*. Arizona Department of Health Services, Public Health Services, Bureau of Public Health Statistics.

Table 5.1.a: Leading Cause of Death - 2011

	Cause of Death	Pima County	Arizona	% Compared to AZ
1	Cardiovascular Disease (includes heart disease)	208.0	201.0	3.5%
2	Cancer	156.8	151.3	3.6%
3	Accident (unintentional injury)	43.2	45.5	-5.1%
4	Chronic lower respiratory disease	40.7	45.9	-11.3%
5	Cerebrovascular disease (stroke)	34.4	30.6	12.4%
6	Diabetes	21.6	24.8	-12.9%
7	Drug-induced death	20.3	16.8	20.8%
8	Injury by firearms	17.5	14.7	19.0%
9	Alzheimer's disease	17.4	35.2	-50.6%

Source: Arizona Department of Health Services, 2011

When comparing males and females in Pima County, females were more likely to die from Alzheimer's, influenza and pneumonia, and chronic liver disease and cirrhosis than males. Males were more likely to die from firearm injury, alcohol use, and suicide than females.

Table 5.1.b: Leading Cause of Death for Males and Females- 2011











1. Heart Disease	1. Heart Disease
2. Malignant neoplasms (Cancers)	2. Malignant neoplasms (Cancers)
3. Accidents (unintentional injury)	3. Chronic lower respiratory diseases
4. Chronic lower respiratory diseases	4. Cerebrovascular diseases
5. Cerebrovascular diseases	5. Alzheimer's disease
6. Diabetes	6. Accidents (unintentional injury)
7. Intentional self-harm (suicide)	7. Diabetes
8. Injury by firearm	8. Drug-induced death
9. Drug-induced death	9. Falls
10. Alcohol-induced death	10. Accidental poisoning

Source: Arizona Department of Health Services, 2011

Health Risk

The behaviors and risk factors of Pima County residents illustrate opportunities for community planning that influence the social and built environments contributing to premature and preventable deaths. Of particular note is that over twenty percent of adults in Pima County report that they did not participate in physical activity of any kind in the past month. The following table provides a comparison of the performance of Pima County and Arizona on key health risk indicators.

Table 5.1.c.: Health Risk Factors

Indicators	Cause of Death Risk Factor	Pima County	Arizona	Compared to Arizona
Physical Activity	Adults reporting they did not participate in physical activity of any kind in the past month ²	20.3%	20.8%	
Obesity/ Overweight	Overweight adults	31.8%	39.7%	
	Obese adults	26.6%	25.2%	
Substance Abuse	Report binge drinking in the last 30 days	16.8%	14.0%	
	Heavy drinker	8.0%	5.5%	
Tobacco Use	Current smoker	15.5%	15%	
Preventative Health	Women with Pap Test in Past 3 years ³	70.1%	67.5%	
Sexual Behavior	Rate of Gonorrhea Infection in females 15-44 ⁴	10.5%	16.7%	
	Rate of Syphilis Incidence (primary and secondary)	4.6%	4.3%	
	Rate of new HIV cases	6.3	8.7	

Source: Arizona Department of Health Services, 2011

Hospitalizations

Pima County hospitals are seeing the impact of people's choices on their health outcomes as well as clear trends in the health care needs of Pima County's populations. An inpatient discharge occurs when a

² Behavioral Risk Factor Surveillance System Data for Pima County and Arizona. (2010).

³ Arizona Department of Health Services Cancer Registry Data (2010).

⁴ Mrela, Ck.K & Torres, C. (2011). *Arizona Health Status and Vital Statistics*. Arizona Department of Health Services.

person who was admitted to a hospital leaves that hospital. In 2011, heart disease was the leading hospital inpatient discharge diagnosis in Pima County (94.1/10,000 population).⁵ Psychoses including alcoholic psychoses, drug psychoses, schizophrenic disorders and manic-depressive disorders had the second highest rate for hospital discharge diagnosis at 71.0/10,000 population. Fractures and osteoarthritis, issues prevalent within Pima County's older populations, are near the top of the list of diagnosis hospitals treat. This information indicates that healthy behaviors, behavioral health and elder care are top health concerns in Pima County.

⁵ Mrela, Ck.K & Torres, C. (2011). *Arizona Health Status and Vital Statistics*. Arizona Department of Health Services.

Table 5.1.d: Leading Causes for Hospitalization

	Leading Hospital Inpatient Discharge in Pima County	Pima County	Arizona	% Compared to AZ
1	Heart Disease	94.1	94	0.1%
2	Mental Disorder - Psychoses	71.0	63.9	31.8%
3	Injury - fractures, all sites	36.6	34.8	4.9%
4	Osteoarthritis and allied disorders	35.9	30.6	14.8%
5	Malignant neoplasms	33.8	30.7	9.2%

Source: Arizona Department of Health Services, 2011

Financial Status

While there are a variety of social and physical determinants of health, low-income is strongly associated with poor health status. Higher socio-economic status is associated with a decrease in the prevalence of many chronic diseases which carry a heavy burden of morbidity and premature mortality, including cardiovascular disease, diabetes, arthritis, tuberculosis and other chronic respiratory disease, gastrointestinal disease. This relationship also exists for adverse birth outcomes and accidental and violent deaths. Certain risk factors such as rates of smoking, cholesterol levels, and prevalence of sedentary lifestyle decrease as socio-economic status rises. Finally, overweight and obesity are disproportionately represented in populations of high poverty.

Unemployment is also associated with poorer health outcomes including premature mortality, cardiovascular disease, hypertension, depression, and suicide. Because the majority of Americans have health insurance through their employer or family member's employer, unemployment increases the likelihood a person is uninsured. The uninsured are more likely to seek care in emergency rooms, go without screenings and preventive services, and forgo or delay care. As a result, uninsured people tend to pay more for care, be sicker and die younger than those with insurance. Interestingly, people who are insured but unemployed are also more likely than their employed counterparts to forgo or delay care. Three areas of Pima County show the highest rates of low-income - Central/Southeast Tucson, the Tohono O'odham Nation, and the Pascua Yaqui Tribe Primary Care Areas. These same areas are associated with high unemployment and enrollment in Arizona Health Care Cost Containment System (AHCCCS), except the Pascua Yaqui Tribe PCA in which there is high poverty and unemployment but a lower rate of AHCCCS enrollment. Similar to the Pascua Yaqui Tribe PCA, Tucson Northeast, East Central, Central and North Central areas all have a lower rate of AHCCCS enrollment given the poverty and low-income rates than

other areas in Pima County. This indicates that low-income people in these areas may be particularly at risk for not having sufficient access to health services, particularly those individuals who do not qualify for assistance programs. Finally, Ajo stands out as an area with high poverty and unemployment rates.

County's Health Gap Analysis and Workforce Issues

A considerable portion of the population residing in Pima County does not have adequate access to primary medical, behavioral and dental services. Approximately 23 percent of Pima County residents live in a medically underserved area (MUAs), indicating that residents lack adequate access to care and are likely to have unmet health needs. Furthermore, it is estimated that nearly a quarter of Pima County's population lives in areas with inadequate access to primary care practitioners and 31 percent lives in areas with inadequate access to dental professionals.

Health and Human Services designated the entire County as a low-income mental health HPSA (Health Professional Service Area), meaning individuals and families earning less than 200 percent of the Federal Poverty Level do not have adequate access to mental health professionals. A shortage of practicing professionals and geographic barriers such as a lack of transportation options and distance necessary to reach the professional contribute to this lack of access.

Table 5.1.e: Population Residing in Primary Medical Care and Dental Health Professional Shortage Areas (HPSAs) by Planning Area, 2009

Planning Area	Total Population Residing in Planning Area	Population Residing in a Primary Care HPSA	Population Residing in a Dental HPSA	% Population Residing in Planning Area	% of Population Residing in a Primary Care HPSA	% of Population Residing in a Dental HPSA
Avra Valley	19,191	17,190	17,162	2%	90%	89%
Tucson Mountains	45,993	358	358	6%	1%	1%
Southwest	69,730	3,397	5,564	8%	5%	8%
Altar Valley	13,229	8,314	8,096	2%	63%	61%
Upper Santa Cruz	22,178	11,206	11,207	3%	51%	51%
Mountain View	4,128	4,121	4,122	0%	100%	100%
Southeast	85,342	78,298	19,320	10%	92%	23%
Central	309,259	65,513	117,191	37%	21%	38%

Planning Area	Total Population Residing in Planning Area	Population Residing in a Primary Care HPSA	Population Residing in a Dental HPSA	% Population Residing in Planning Area	% of Population Residing in a Primary Care HPSA	% of Population Residing in a Dental HPSA
Catalina Foothills	171,352	0	72,626	21%	0%	42%
Rincon Valley	2,215	0	2,215	0%	0%	100%
Tortolita	88,044	0	0	11%	0%	0%
San Pedro	1,955	0	521	0%	0%	27%

Sources: Estimates based on data from the Arizona Department of Health Services (ADHS) 2009 Primary Care Profiles and 2005 TAZ population estimates from Pima Association of Governments

This partial gap analysis identifies some potential health service deficiencies in Pima County. Coordination among multiple community stakeholders is required to identify and remedy the service deficiencies that exist in the community. There are several aspects of County operations that directly impact residents' access to public health services and infrastructure that supports healthy lifestyles. These aspects include environmental quality, transportation, parks and recreation, libraries, developmental services, and community services.

To achieve a reduction in health disparities, improve access to care and encourage healthy lifestyles, Pima County can positively influence the choices its residents make by enacting ordinances and policies that support health, such as those that provide improved access to a healthy environment, recreation, nutritious foods, and health care services. Optimally, this should be done in collaboration with highly motivated community stakeholders and local governments while carefully tracking and assessing federal and state policy initiatives.

Community Health Improvement

Pima County plays a key role in disease prevention, education, and provision of health services to County residents. The sections below outline the challenges of providing health services to its citizens.

County Role & Challenge in Disease Prevention and Provision of Services

Data also highlight significant health issues in the American Indian populations. Any collaboration with tribal communities and Indian Health Services should recognize the independent status of this population as well as their utilization of the County wide health infrastructure for significant services as evidenced in the hospital admission rates.

Approximately 37 percent of Pima County's overall population has income less than 200 percent of the federal poverty level (FPL) with 65 percent of the population in certain areas within the City of Tucson living at 200 percent of FPL. The low-income population experiences higher, costly inpatient hospital utilization, poorer maternal and child health status, and the greatest difficulty accessing primary care and preventive services.

Community Health Assessments

Two major health initiatives on which the County can build strategies for the Comprehensive Plan include the community health needs assessment (CHNA) prepared by three non-profit hospitals in collaboration with a variety of stakeholders and the community health assessment (CHA) prepared by the Pima County Health Department.⁶ These assessments looked at a variety of health data sources to identify the health issues that are most critical in Pima County and led to the development of a community health improvement plan.

County's Community Health Improvement Plan

Through a review of the health data and input collected from the Community Health Assessment process, a taskforce of over 60 stakeholder groups identified four strategic health improvement priority areas – Healthy Lifestyles, Health Literacy, Access to Care and Health Equity. Within each of these priorities, the Healthy Pima taskforce developed actionable objectives and strategies related to each area to mitigate those health issues. These objectives have been incorporated into the policies of the Human Infrastructure chapter in Pima Prospers policy document.



Source: Pima County Community Health Improvement Plan 2013

⁶ Pima County Community Health Needs Assessment (CHNA) is available on line at:
<https://www.tmcaz.com/files/2012%20Pima%20County%20Community%20Health%20Needs%20Assessment.pdf>

Aging in Pima County



Consideration of the health and well-being of older adults is a clear area of focus as Pima County is home to more adults 65 and older per capita than the state as a whole. Just over 21 percent of Pima County's population is over 60 years of age and this population will continue to grow as estimates indicate that by 2020, one in four Arizona residents will be over 60 years of age. Within Pima County, the highest concentrations of older adults are found in Green Valley, Ajo and Arivaca.

It is well-established that older adults are higher utilizers of health services due to the prevalence of chronic health conditions.⁷ This population has a high demand for home and community-based services that support them in their homes rather than more costly institutional settings such as assisted living or skilled nursing facilities.

To meet this demand there must be a trained workforce, including home care paraprofessionals, and a transportation system that meets the needs of the caregivers as well as elderly.

Communities frequently lack accessible and affordable housing options that allow older adults to safely remain in their communities as housing needs change. Community design that supports mixed use principles works to bring services closer to places of residence. This community design principle further improves the accessibility of services, and increases opportunities for active transportation and social interaction.

Existing Aging in Place Programs

Pima County has partnered with the Pima Council on Aging (PCOA) as the designated Area Agency on Aging serving older adults and their families living in Pima County. PCOA services include:

- Education on the Arizona Long Term Care System which is part of Arizona's version of Medicaid is offered monthly for free.
- Caregiver services such as resource assistance, classes, and some at home services are offered.
- Elder Rights and Benefits: The Elder Rights and Benefits Department advocates for and assists older adults with a wide range of issues.
- Information on healthy living, staying fit, and quality of life.
- Help with minor repairs or adaptations may be available to home owners age 60 and over.

⁷ Bernstein AB, Hing E, Moss AJ, Allen KF, Siller AB, Tiggle RB. 2003. Health care in America: Trends in utilization. Hyattsville, MD: National Center for Health Statistics.

- The Community Services System (CSS) provides case management and in-home help to individuals who have difficulty performing basic activities of daily living, such as dressing, bathing, toileting, etc.
- A senior resource and services helpline.
- Long-Term Care Ombudsmen: PCOA's Long-Term Care Ombudsmen visit assisted living and nursing home residents in Pima County to advocate for resident rights.
- Meals and Nutrition: PCOA has two meal programs – Pima County Meals on Wheels for home bound clients and our senior meal program offered at multiple locations.
- Medicare: PCOA is the local Arizona SHIP (State Health Insurance Assistance Program) and a partner of the Centers for Medicare and Medicaid Services (CMS).
- Neighbors Care Alliance: Neighbors Care Alliance (NCA) assists neighborhoods and faith-based communities in helping seniors remain independent and in their homes as long as possible through the support of neighbors helping neighbors.
- Partners in Planning: Partners in Planning assists with difficult end of life planning matters.
- Personal Budgeting Assistance: Trained volunteers assist low income individuals to balance their bank accounts, prepare a budget and organize bills.
- Opportunities to do volunteer work.

Pima County Health Department offers additional services to seniors. Public Health Nurses provide health and wellness education to seniors in nutrition programs. They receive one-on-one education and handouts on a variety of health topics with an emphasis on blood pressure management. Additionally, adult vaccination services provided by PCHD are highly sought after by the elderly community.

Land Use, Community Design and Public Health



Community design affects the activity level of area residents. Mindful zoning and development can lead to communities that better support improved health outcomes for residents. Communities that are spread out have limited connectivity to other communities and services and require motor vehicle transit. Auto-oriented communities are directly linked to a low ratio of physical activity and poorer air quality. Furthermore, the proximity of public open spaces to residences and work places promotes physical activity. The decision of where to utilize

park and recreational resources is integral to establishing infrastructure that supports healthy lifestyles and it is even more important in low-income neighborhoods and areas where resident mobility is diminished.

Environmental quality and built environments directly affect community health. The Centers for Disease Control, recognizing that the way communities are designed and built can affect people's physical and mental health, launched the Healthy Community Design Initiative. This initiative supports a greater influence of public health surveillance and research on community design decisions. The initiative highlights that healthy community design can improve people's health by:

- Increasing physical activity;
- Reducing injury;
- Increasing access to healthy food;
- Improving air and water quality;
- Minimizing the effects of climate change;
- Decreasing mental health stresses;
- Strengthening the social fabric of a community; and
- Providing fair access to livelihood, education, and resources.

The community health assessments recently completed and the demographic and statistical data highlighted in this report identify four major themes – healthy lifestyles, health literacy, access to care and health equity, and two critical areas of focus – obesity and behavioral health. These health issues require attention, not only due to their impact, but also because they are tied to the leading causes of death among Pima County residents i.e., cardiovascular disease, accidents, strokes, drug-induced deaths, diabetes and suicide.



Human Infrastructure Connectivity Background

While health is in part a personal responsibility, the County can positively influence the choices its residents make by enacting ordinances and policies that support a healthy community, such as those that provide improved access to healthy and safe environments, recreation, nutritious foods, and health care. Pima County can serve as a critical catalyst for change and collaboration aimed at protecting health and promoting wellness in Southern Arizona.

5.2 Public Safety and Emergency Services

Public Safety and Emergency Services

The Pima County Office of Emergency Management (PCOEM) recognizes the need for coordinated emergency response to any emergency or disaster by public safety, emergency services, emergency management, private sector, and community and volunteer agencies. PCOEM continues to develop and maintain a close working relationship with its partners and stakeholders in the emergency community. Events, meetings, training and exercises are held continuously to develop relationships and networking. The Pima County Multi-Year Training and Exercise Program (MYTEP) calendars these events for three years, increasing participation through awareness. PCOEM maintains an open and inclusive approach to those organizations and agencies who wish to participate in regional emergency preparedness.

The Pima County Office of Emergency Management (PCOEM) manages emergency/disaster planning and emergency operations and resource coordination during disasters or emergencies. A major part of that role involves coordinating, planning and exercising with local public health, public safety and emergency services providers and agencies. PCOEM operates the Pima County Emergency Operations Center (PCEOC) which is the regional coordination center for county departments, first responders, local jurisdictions/agencies, utilities, private sector, community organizations, faith-based organizations, and non-profits. The PCEOC supports local emergency response efforts by coordinating mutual aid requests, logistics/resource support, emergency communications, and is the regional point of contact to request state resources and support. The PCEOC also coordinates with local, state and federal agencies to provide support to local jurisdictions and on-scene incident command objectives.

Emergency preparedness planning is a crucial emergency services element of the PCOEM function. PCOEM has developed and maintained many all-hazards emergency plans for disasters and emergencies which may occur. The following is a partial list:

Pima County Emergency Operations Plan 2012

This plan is the comprehensive emergency operations plan for Pima County and includes federal emergency management doctrine and guidelines that keep Pima County well integrated and consistent with all tiers of government nationally. Compliance with standardized FEMA plan design, procedures and documentation during emergencies ensures a more streamlined emergency management process and expedites reimbursement of disaster expenses from the federal government should that become necessary.

Pima County Building Evacuation Plans (PCOEM)

PCOEM has developed building evacuation plans and has conducted drills to practice and refine the plans.

Local Emergency Planning Committee (LEPC)

LEPC is a function of PCOEM and is statutorily mandated to support emergency planning for those who use, store, and/or manufacture hazardous materials in Pima County. Pima County boasts one of the most highly regarded LEPCs in the state and region.

Pima County Fatalities Management Plan

This is a joint venture with the Pima County Health Department and the Medical Examiner's Office to effectively deal with a mass fatalities event such as an airline crash, pandemic, weapon of mass destruction (WMD), or any event resulting in a large number of deaths. This plan provides guidance and direction in the collection, documentation, transport, storage, identification, decontamination, and interment of human remains.

Pima County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) 2012

The Pima County Office of Emergency Management coordinated with the Arizona Division of Emergency Management (ADEM) Mitigation Office to facilitate and develop this plan. This plan is required by FEMA in order to qualify Pima County for federal mitigation grants.

Pima County Community Wildfire Protection Plan

The Pima County Health Department's Office of Public Health Preparedness is engaged in collaborative, community focused emergency public health planning to address biological, chemical, radiological, or natural disaster events that result in public health threats or emergencies. Also see Wildfire on page 5.20.

Below is a summarized version of the plans the Pima County Health Department has developed and maintains in order to keep Pima County prepared for any public health emergency:

- PCHD All Hazards Plan
- PCHD Continuity of Operations Plan
- PCHD SNS and Mass Clinic Plan
- PCHD Public Health Surge Plan
- PCHD Pandemic Flu Plan
- PCHD Preparedness Exercise and Training Plan
- PCHD Environmental Health Response Plan
- PCHD Agency Communications Plan

Community Threats and Hazard Areas

The Pima County Office of Emergency Management (PCOEM) has completed a collaborative regional threat assessment and has identified a list of possible hazards facing the county and its local jurisdictions. This hazard information is included in the Pima County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) 2012. This assessment is based on historical occurrences and documented events. The State of Arizona Multi-Hazard Mitigation Plan supports the Pima County MJHMP. The most frequent and recurring hazards are floods/flashfloods and wildfires.

Flood/Flash Flood

Flooding is clearly a major hazard in the County. Pima County has been part of 13 disaster declarations for flooding, with three of those declarations occurring in the past five years.

As demonstrated by Pima County's past flood events, the impact to the general public is typically property damage and loss, injury, and in some cases, death. Flooding impacts on Pima County residents and infrastructure as a whole are low, though some parts of Pima County may be more affected. Some rural areas adjacent to riparian waterways may become isolated because of transportation routes being washed out, or closed.

Much effort has been expended on developing flood response protocols among the various departments and jurisdictions having responsibilities to monitor, alert, and respond to flood events. During actual or potential flooding events, flood response departments and agencies are called to respond to the Pima County Emergency Operations Center to coordinate resources and communicate with other EOCs.

Pima County Flood Control District has worked diligently to increase the county's score with the Community Rating Service and this has resulted in a reduction in National Flood Insurance Program (NFIP) rates for affected Pima County residents.

Pima County is also recognized by the National Weather Service as a Storm Ready County because of its preparedness, alert and warning capabilities.

Wildfire

Pima County has a high vulnerability to wildfires. Due to climate (heat and wind), geographical terrain, and man-made incidents, Pima County has had 26 wildfires in excess of 100 acres for the period of 2002 to 2009. Wildfires and the resulting effects harm wildlife, soil, water and appearance of the land for many years. The pattern of less than normal annual precipitation will continue to exacerbate the wildfire threat. The consistent pattern of seasonal rainfall producing vegetation which later becomes potential fuel for fires will always be present. The Pima County Office of Emergency Management continues to address the fire threat through mitigation planning and community planning. The PCOEM, in partnership with the

University of Arizona School of Agriculture, applied for federal grant funds for a buffelgrass eradication program. This program works in the community to remove buffelgrass which is a highly flammable, fast burning, non-native invasive plant. PCOEM has also facilitated and coordinated the development of the comprehensive Pima County Community Wildfire Protection Plan (CWPP) which promotes fire prevention and suppression strategies, improvement of firefighter and public safety, fuel reduction, property protection, and community involvement.

Extreme Temperature

Growth in Pima County over the past five years has significantly increased the amount of population and infrastructure that is exposed to extreme temperatures. There is also an increased demand on resources such as power in summers and natural gas in the winter. The primary intersects of extreme temperature hazards and future development of the county is in the general increase in population and infrastructure that would be exposed. Advanced building codes requiring adequate burial depth of water lines are generally being used and enforced.

Over the past two decades, as the metropolitan area has dramatically grown in size the "urban heat island" effect has developed, which cause temperatures in the center of metropolitan areas to become much warmer than those in rural areas. The concrete and asphalt of urban areas retains the heat of the day, and releases it slowly as compared to the surrounding desert terrain, which cools much quicker at night. As development continues to occur within Tucson and its environs, heat conditions will continue to increase.

In Pima County, PCOEM works closely with Tucson Electric Power, the American Red Cross, and the Pima County Health Department to monitor hazardous heat conditions and possible power interruptions during the summer monsoon. Plans include cooling centers and shelters to provide a refuge for people to escape the heat. Inversely, during times of very cold weather, plans include maintaining contact with Southwest Gas, Kinder-Morgan, Tucson Electric Power, Trico Electric, and the American Red Cross to set up warming centers as was done in the past during an interruption of natural gas leaving many without heat during cold conditions.

Disease

Pandemic and infectious diseases create a serious threat to public health as they may affect a large percentage of the population, regardless of health condition, age or location. These potentially hazardous conditions affect humans, domestic animals, and livestock (food supply).

The Pima County Health Department seeks to prevent infectious diseases from entering the county and control those that are endemic or have already entered. Of particular concern to the County Health Department are Ebola, new pandemic diseases such as SARS, new strains of HIV, new influenza strains such as the most recent H1N1 threat, botulism, and bio-terrorism pathogens such as anthrax, smallpox, or chemical attacks of sarin or VX gas. As a component of the Pima County Health Department, the Disease

Control division seeks to reduce the incidence of disease morbidity and mortality in Pima County through the identification of community health problems, compilation of health statistics, and development of appropriate intervention programs. Special attention is paid to epidemiology, HIV/AIDS, and sexually transmitted diseases, in addition to preventive programs such as immunizations and well women services.

Pima County recently developed a comprehensive Pima County Ebola Preparation and Response Framework which was the product of collaboration between many county departments, state agencies and local hospitals. This will coordinate the response and planning by medical and public safety departments and agencies to manage an Ebola outbreak should one occur.

Community Emergency Readiness and Hazard Mitigation Planning

The Pima County Office of Emergency Management (PCOEM) supports community preparedness and readiness through outreach programs.

- PCOEM coordinates the Southern Arizona School Safety and Preparedness Consortium which builds communications with and between schools, offers training in incident management, and strengthens school resilience through plan development.
- PCOEM conducts Community Emergency Response Team (CERT) training, which is a FEMA Citizen Corps program that teaches basic emergency response skills to the average person and equips them with basic equipment.

The Pima County Multi-Jurisdictional Hazard Mitigation Plan contains the mitigation priorities and projects identified by each of the local jurisdictions in the county – Marana, Oro Valley, Sahuarita, Tucson, Pascua Yaqui Tribe, Tohono O’odham Tribe, South Tucson, and unincorporated Pima County. Priorities are focused on the highest ranked hazards as identified by each jurisdiction. This collaborative planning process is revised every five years and is coordinated between the state and PCOEM.

The Pima County Health Department Office of Public Health Preparedness is engaged in collaborative, community focused emergency health planning to address biological, chemical, radiological, or natural disaster events that result in public health threats or emergencies. The Pima County Health Department is working to:

- Develop effective plans and resources during emergencies to protect the community.
- Develop and maintain public health emergency capacity.
- Coordinate with community, county, state, tribal, and federal partners to develop a plan to provide mass prophylaxis and treatment to all people in the county.
- Develop the capacity to rapidly identify diseases and initiate prevention and control activities.
- Develop effective, secure communication infrastructure for rapid communication among public health and its partners.

- Develop the capacity to effectively communicate health/risk information to the public and key partners.
- Develop a public health workforce (including volunteers).
- Better prepare the community for an emergency.

Fire Service

Fire service throughout Pima County is handled within departments or districts based on the governing body of the population area. Service in the population areas vary. The City of Tucson has several fire stations and can provide service within five minutes. South Tucson, which is a one square mile city, provides fire service to its residents within five to seven minutes. Service within the County is available and is ready when needed. Areas that are incorporated have more established service than the unincorporated areas of the County.

See Exhibits 5.2.a and 5.2.b for a map of Pima County Fire Districts.

Fire Service Availability by Planning Area

Table 5.2.a: Existing Fire Service Inventory by Planning Area

Planning Area	Fire Service
1. Avra Valley	Avra Valley Fire District Northwest Fire District Picture Rocks Fire District Rural - Metro Fire Department Silverbell Army Heliport Fire Department Three Points Fire District Tohono O'odham Nation Fire Department
2. Tucson Mountains	Drexel Heights Fire District Northwest Fire District Picture Rocks Fire District Rural - Metro Fire Department Three Points Fire District Tucson Fire Department
3. Southwest	Drexel Heights Fire District Northwest Fire District Pascua (Yaqui) Pueblo Fire Department Picture Rocks Fire District

Planning Area	Fire Service
	Rural - Metro Fire Department South Tucson Fire District Three Points Fire District Tucson Airport Authority Fire Department Tohono O'odham Nation Fire Department Tucson Fire Department
4. Alter Valley	Arivaca Fire District Helmet Peak Volunteer Fire Department Rural - Metro Fire Department Three Points Fire District Tohono O'odham Nation Fire Department
5. Upper Santa Cruz	Arivaca Fire District Elephant Head Volunteer Fire Department Green Valley Fire District Helmet Peak Volunteer Fire Department Rural - Metro Fire Department Three Points Fire District
6. Mountain View	Corona de Tucson Fire District Mescal - J6 Fire District Rincon Valley Fire District Rural - Metro Fire Department Sonoita - Elgin Fire District
7. Southeast	Corona de Tucson Fire District Elephant Head Volunteer Fire Department Green Valley Fire District Rincon Valley Fire District Rural - Metro Fire Department South Tucson Fire District Tucson Airport Authority Fire Department Tucson Fire Department
8. Central	Corona de Tucson Fire District Davis-Monthan Air Force Base Fire Department Northwest Fire District Raytheon Fire Department Rincon Valley Fire District Rural - Metro Fire Department

Planning Area	Fire Service
	South Tucson Fire District Tucson Fire Department Tucson Country Club Estates Fire District 162nd Fighter Wing Fire Department
9. Catalina Foothills	Hidden Valley Fire District Mountain Vista Fire District Mt. Lemmon Fire District Northwest Fire District Rincon Valley Fire District Rural - Metro Fire Department Sabino Vista Fire District Tanque Verde Fire District Tucson Fire Department Tucson Country Club Estates Fire District
10. Rincon Valley	Mescal - J6 Fire District Rincon Valley Fire District Rural - Metro Fire Department Tucson Fire Department
11. Tortolita	Avra Valley Fire District Golder Ranch Fire District Mountain Vista Fire District Mt. Lemmon Fire District Northwest Fire District Rural - Metro Fire Department
12. San Pedro	Mt. Lemmon Fire District Rural - Metro Fire Department
13. Ajo/Why	Ajo/Gibson Volunteer Fire Department Organ Pipe Cactus National Monument Fire Department Why Fire District
14. Tohono O'odham Nation	Avra Valley Fire District Tohono O'odham Nation Fire Department

Source: Pima County GIS Department Inventory, 2013

Public Safety

The Pima County Sheriff's Department is committed to safety and well-being by utilizing advanced strategies of community policing and the direct supervision management of its detention facilities. Community policing involves the establishment of dynamic partnerships with citizens, communities, and other civic and criminal justice agencies working together toward common goals. The Pima County Sheriff's Department provides a wealth of information on its website at www.pimasheriff.org about crime prevention, detention center services and online services which include filing a police report and obtaining crimes statistics. The Department strives to provide accurate and timely information by way of its Facebook and Twitter accounts. It encourages citizens to follow various websites to receive information on crime trends, road closures, and community events such as Dispose-A-Meds and Shred-A-Thons. In addition, its award winning Sheriff's Auxiliary Volunteers program provides home inspections, vacation checks and neighborhood watch patrols to assist the Department with its public safety mission.

5.3 Parks and Recreation



Pima County established its Parks and Recreation Department in 1947 to serve urban and rural residents and guests by providing leisure-time destinations and services. Today the Parks Department does everything from caring for stately saguaros in Tucson Mountain Park to overseeing after-school recreation programs. Additionally, many other classes and services are offered at the parks and community centers. These facilities serve as an integral part of the community and are often the major service provider for the area. The following park facilities are currently in place in Pima County:

- Community Centers (13)
- Pools and Splash Pads (10)
- Parks (49)
- Dog Parks
- BMX and Skate Parks
- River Parks and Greenways
- Natural Resources
- Trailheads (21)
- Shooting Sports (5)
- Camping
- Mike Jacob Sports Park

Pima County has over 10,000 acres of public developed and undeveloped parkland within its planning area. This section summarizes the funding and economic use of the parkland and recreation facilities currently serving Pima County residents.

See Exhibit 5.3.a and 5.3.b for Existing Parks and Recreation maps.

See Exhibit 5.3.c and 5.3.d for Existing Open Space and Parks maps.

Pima County Sports Facilities Assessment

A countywide inventory of sports facilities was conducted by Pima County Sports and Tourism authority in 2013. The Pima County Sports Facilities Assessment lays the foundation for a comprehensive plan for the development of sport and recreation facilities including the ability to host sports and other events. It aggregates the findings into a long-range development scenario, and assesses the existing sport and recreation infrastructure for a wide range of activities using two measures: (1) Providing recreational value to the citizens of Pima County; and (2) Enhancing regional, national, and international tourism.

Various jurisdictions maintain an inventory of their facilities in one of many formats. This study assimilated such information and developed a single database in a Geographic Information Systems (GIS) format that includes both table data (database) as well as graphic representation of the data (maps). The regional audit includes indoor and outdoor facilities from all jurisdictions and (to the extent of available information) all schools, and private sports facilities meeting minimum auditing requirements. Minimum auditing requirements were defined as any existing facility comprised of at least two major sports fields (outdoor), and any significant number of indoor courts or facilities. Fields or courts could be aggregated by adding two separate facilities in close proximity to one another. The facilities may have been added to the audit where they otherwise would not have met the threshold on their own.

The following regionally established sports have been recognized and these sports have been measured against several filters:

- Aquatics (Diving, Swimming, Synchronized Swimming)
- Archery
- Athletics (Track and Field)
- Cycling (Road Cycling, Mountain Biking, BMX)
- Baseball (Professional, Youth)
- Basketball (professional, Youth)
- Football (Youth)
- Golf
- Indoor Ice Sheet Sports
- Lacrosse
- Rodeo
- Rugby
- Running
- Shooting (Trap & Skeet)
- Soccer
- Softball
- Tennis
- Triathlon
- Volleyball (indoor)

While it is recommended that these sports continue to be developed and promoted both locally and in terms of hosting regular organized competitions at the highest level of participation, programming for this study included a much wider range of activities for the purposes of arriving at a more comprehensive proposal for the long term development of sport facilities and activities.

Funding and Return Investment Mechanisms

Pima County Natural Resources, Parks and Recreation (NRPR) does not have a financial plan for return on investments; as a public entity, this is not its mission. The department does acquire land for open space and recreational purposes, which is a capital investment. This is accomplished through bonds and an in-lieu fee that is collected from the subdivision platting process. The in-lieu fee is also used for recreational equipment that needs replacement due to vandalization or age. There are potential funding possibilities for NRPR that could include reorganization of the department. These opportunities would be to have the Stadium District - Kino Sports Complex and the Economic and Tourism Department under the NRPR umbrella. Keeping the revenue that is generated by the other departments under NRPR would enable NRPR to reposition itself to allow for a proactive parks department versus a department that is mostly reactive.

Existing Funding and Return Investment Mechanisms

Existing funding for the Natural Resources and Parks and Recreation Department comes from various sources including:

- General Fund
- Supplemental Requests
- Bonds
- Grants
- Earned Revenue

Joint Use and Economical Use of Parks

Past Pima County bond programs have funded sports fields for various school districts with the requirement that the fields be open to the public when school is not in session. This joint use arrangement has worked well as the county provides the money for the construction of the fields and the school district maintains the fields.

The residential recreation areas section in the zoning code has standards for the amount of square footage and recreational facilities that is required in a residential subdivision, which is maintained by a homeowners association. These neighborhood parks provide areas for the residents to walk to a park versus driving to a community or district park. The neighborhood parks are geared to the people in the subdivision who can provide important recreational needs that are requested by the residents.

It is more cost effective for the county to provide regional parks of 40 acres and larger with recreational facilities, such as baseball, soccer and softball fields, swimming pools, and shade structures with picnic areas, and have the homeowners maintain the smaller parks in their neighborhood that are used by local residents. This division of parks makes economic sense in that the residents are paying for the park they use and the large public parks provide facilities beyond those provided for in the smaller parks.

NRPR and Kino Sports Complex have sport fields for rent to public, youth and adult groups. These fields are rented out at a nominal rate to lessen the financial burden to the sports leagues in the county, so an increase to these fees is not feasible.

Earned revenue is however obtained for the Kino Sports Complex by renting facilities for various sports or entertainment events. These earned revenues have varied widely over the years. They have been as high as \$1.8 million per year when two-team Major League Baseball (MLB) Spring Training was conducted at the complex to as low as \$700,000 in the year after MLB abandoned the Kino facilities. Currently, the amount of revenues budgeted is beginning to approach those that were received when two teams utilized the facilities for MLB Spring Training. At this level, additional General Funds will eventually not be necessary to support the complex.



5.4 Workforce Training/Education

The Pima County Workforce Investment Board is authorized by the Department of Labor and appointed by the Pima County Board of Supervisors to guide local workforce policy and oversee the local One-Stop system that connects eligible job ready youth, adult, and dislocated workers with employment opportunities, with a focus on high-demand industry occupations. The Pima County One-Stop Career Center administers funding and programs under the Workforce Investment Act and is part of the Arizona Workforce Connection, a statewide network of career centers. The Pima County Workforce Investment Board pursues its vision of "Quality Jobs, Qualified Workers" through the following goals:

- Assisting people to obtain jobs in strategic industry sectors.
- Supporting employers in finding and hiring qualified employees.
- Engaging underrepresented labor pools by removing barriers to employment.

This section summarizes the workforce training and education programs currently serving Pima County residents.

Workforce Training Role in Improving Services and Economy

Workforce development is a key component in the economic development of our region. At the macro level, the availability of skilled workers is a central factor in economic competitiveness which in turn drives prosperity. Tucson's ability to attract quality jobs depends to an increasing extent on the availability of a labor pool of qualified workers. Simultaneously, opportunities to increase skills mean increased earning power for current workers and individuals entering the workforce.

Pima County One-Stop offers a continuum of career development services for both youth and adults and conducts special outreach to low-income, dislocated worker and high-school dropout populations. Services are coordinated centrally, but delivered through a network of more than 50 organizations ranging from community-based non-profits, governmental agencies, and proprietary trainers. Services such as vocational rehabilitation, adult education, unemployment insurance, basic social services and labor exchange/Employment Service are co-located in the main One-Stop Center at the Rio Nuevo Community Resource Campus.

Three tiers of service are offered:

- Core services – include self-service options, such as labor market info, job banks and on-line job matching, and staff assisted options, such as workshops, resumes, job leads, career counseling, and referrals. There is no eligibility requirement for core services.
- Intensive Services – include vocational assessment, case management, individual employment plan services, pre-vocational adult education, job search and placement. Services are provided based on

eligibility for a variety of formula and discretionary grants targeting low-income, dislocated worker, disadvantaged youth and high-school dropout populations, as well as veterans.

- Training – for those who meet eligibility requirements and who lack specialized skills necessary to obtain employment, training is provided from a menu of more than 300 qualified occupational training programs and through on-the-job training contracts directly with employers. An assessment is used to determine whether occupational training is appropriate, and the job seeker is assisted in preparing a training plan.

The One-Stop Center provides support to employers in recruiting, staffing and training a viable workforce. Job order registration, applicant screening and job matching is conducted in person and online. Customized training may be implemented to upgrade the skills of existing workers, and on-the-job training is provided where appropriate for new employees. The One-Stop has also worked with industry clusters and other employer groups to design new training needed to address workforce shortages in fields such as information technology, engineering technology, machining and healthcare.

Existing Workforce Programs

Pima County connects job seekers – youth, adults, veterans and dislocated workers – to a network of employment, training, and educational programs. Some of these programs include:

Adults:

- One-Stop Center
- Sullivan Jackson Employment Center (SJEC)
- Kino Veterans' Workforce Center

Youth:

- Summer Youth Program
- Las Artes, Arts & Education
- Pima Vocational High School
- Pledge-A-Job program

Role of Workforce Training in Economic Development

Workforce investment priorities have to balance the goal of providing access to quality employment opportunities where they are found today with that of developing a skilled workforce for the quality jobs of the future. Whereas 50 years ago most of our jobs were unskilled and semi-skilled, future job growth will be concentrated at high skill levels, as global competitiveness gravitates toward innovation. Our sector strategies reflect this balance by offering career advancement pathways from lower-skilled positions to high-skilled occupations that command high wages and increase the innovation capacity of our economy.

The foundation of the One-Stop is a shared vision articulated by the Workforce Investment Board as “Quality Jobs, Qualified Workers.” The One-Stop coordinates a continuum of services on both sides of that coin – increasing qualifications of workers and widening the talent pipeline for industry to create more and better jobs.

Pima County One-Stop has a Business Services Team which collaborates with Sun Corridor Inc. on business attraction efforts, as well as with local Chambers of Commerce and other major trade groups. The team also conducts outreach to local companies, and ongoing industrial workforce needs surveys. These efforts help to connect businesses that are relocating, starting, expanding or maintaining operations in Pima County with services to recruit, retain and train a qualified workforce.

Workforce investment needs to be focused on industry sectors that provide the preponderance of the region’s high-paying jobs and/or that offer our region the greatest competitive advantage in the global economy. Key sectors may be grouped in a variety of ways; Pima County One-Stop has identified the following strategic sectors:

- Emerging Technologies/Renewable Resources
- Aerospace/Defense/Manufacturing
- Transportation/Logistics
- Health Science/Bioscience
- Infrastructure

Workforce Training, Education, GED Education Gap

Pima County’s efforts to develop a home-grown talent pool to fuel economic growth are challenged by low educational levels among adult workers. A significant proportion of One-Stop customers do not have adequate reading, language and math scores on standardized assessment tests to enroll in occupational training or attain employment at sustainable wages.

Southern Arizona faces a dilemma in that its regional economy needs to attract and grow high-wage jobs, but there is a shortage of skilled workers to fuel this growth. Meanwhile, many local workers – as well as unemployed job seekers – are unable to move forward in their careers because they lack sufficient skills and education to get a job or a promotion. Pima County One-Stop is focused on training the existing workforce for higher-skill jobs in strategic industry sectors. Since most workers can ill afford to stop working to go to school, specialized approaches are needed for both employed and unemployed populations.

Employed worker training programs are being customized to business needs by such means as online format, onsite or proximate location, and special scheduling. Unemployed worker training or retraining

offers compressed as well as intensive instruction that is aligned to the requirements of unemployment benefits.

Both types of programs:

- Engage businesses as co-sponsors based on their immediate workforce needs and long-term interests;
- Provide competencies that directly match jobs for which employers have current or projected demand;
- Align where possible with credit-bearing coursework and seamless transfer to professional degree programs;
- Where possible, provide portable credentials or industrial certifications that will enhance trainees' employability and earning power;
- Offer supportive services to help training participants juggle work or job search, basic family needs and school.

The One-Stop and its partners have developed some strategies for providing remedial education so that job seekers can increase their earning power through training. For example, Las Artes is a GED program for young adults and Pima Vocational High School is an alternative, work-focused pathway to a high-school diploma – both sponsored by the Pima County Board of Supervisors. The “Lindsey Center” collaboration was developed in partnership with Literacy Connects and Pima College Adult Education through a series of special grants. In addition Pima County One-Stop funds adult education services through SER Jobs for Progress, Portable Practical Educational Preparation (PPEP), Inc., and Tucson Youth Development, and coordinates referrals with the Ready to Earn program offered by Goodwill Industries.

Features of these programs have included:

- Content contextualized around a specific career focus and/or specific occupational competencies;
- Intensive, full-time scheduling;
- Use of assessment tools and computer-assisted education to customize instruction to specific areas of weakness;
- Cohort-based instruction, enhanced with supportive services, job club activities, and motivational team building.

While small in scale and often dependent on special grants, the community/one-stop based adult education programs leverage diverse resources and produce skill gains and diploma attainment at high rates.

Youth and Juvenile Preparation for Future Workforce

In 2012-13, 1,270 youth were employed in summer jobs, and 300 former high-school dropouts earned a GED through Las Artes, or earned a high-school diploma through Pima Vocational High School.

Youth who need additional assistance or skill training may be eligible for the following services provided by the One-Stop Career Center:

- Individualized Career Development
- Summer Youth Opportunities
- After-School Opportunities
- Las Artes GED Program
- Pima Vocational High School
- La Casita Homeless Youth Employment
- Occupational Training
- Job Search Assistance
- Pledge-A-Job Placement Program
- Support Services

5.5 Arts and Entertainment



The Tucson Pima Arts Council is the designated non-profit agency that ensures a return on the investment of public dollars in the arts. The arts are one of the most important and visible components of what makes Tucson and Pima County great, and have a significant impact on the regions' economy, sense of place, quality of life and attractiveness to 21st century industry and talent. Yet the challenges are mounting in sustaining the arts in the region. The region is well below the national average in funding the arts; 50 percent of Arizona schools have no funds for arts education to create art interest and education, and most arts organizations have either scaled back or disappeared. Preserving the rich, diverse art community offerings while exploring new sources of funding will be the challenge. The following section summarizes the County's role in funding arts programming.

County Role in Funding Arts and Entertainment

Currently, public funding for the arts equals approximately \$1 per resident or 20 percent of the national average. The Tucson/Pima County region is among the lowest in per capita public and private financial support in the nation. Of the 50 largest U.S. cities, annual public funding ranks near the bottom at \$.94 per capital for the Tucson/Pima County region, compared to an average of \$6.13, with several cities above \$10 per capita in annual support.

Funding and support for the arts is important because of the indirect economic benefits to the County. Two studies on the economic impact of the arts show the following:⁸

- \$87.7 million in annual revenue
- 2,602 full time jobs
- 5.08 percent of the regional economy in for-profit and non-profit creative industries
- 1.9 million art event attendees in 2010 generated \$44.94 million

⁸ Americans for the Arts (AFTA): Arts and Economic Prosperity (2012) and Local Arts Index (2012)

Pima County should capitalize on the market potential of the region’s Creative Economy to grow jobs and wealth. Particular opportunities include: live music/entertainment; film; culinary arts; and interior design and artisan practices rooted in Hispanic and Indigenous traditions, such as tile, furniture, wrought-iron, adobe etc.



5.6 Library Services



The Pima County Public Library enriches lives and builds community through opportunities to learn, know, interact, and grow. The Library is recognized and valued by all community members as:

- A significant resource and advocate for youth as they develop from birth to thoughtful inheritors of our community.
- A destination and place of discovery that provides abundant print materials, digital options and functions as a welcoming place for the exchange of ideas among all residents to satisfy their life-long curiosity.
- A community asset and an active partner in community building recognized for creating and motivating a skilled workforce, nurturing and celebrating our diverse cultural heritage, supporting the arts in all forms, and building towards 100 percent literacy for the residents of Pima County.
- An organization that cultivates staff that are knowledgeable, passionate and positive about the central role libraries play in individual lives and community growth.
- A forward-thinking institution that recognizes, supports and provides technological breakthroughs advancing the convenient, effective use of information, knowledge and communication.
- An organization that incorporates and integrates the goals of sustainability into all aspects of its operations.
- A free democratic institution devoted to providing community members with the information needed to participate in our democratic community.

Pima County currently has 27 library branches that serve the County's planning area. The County's library system is the first regional system of its kind in the state and provides significant, positive beneficial services to the public, including economic development, employment and job training, and other skills development. This section summarizes the services and the changing role of the libraries currently available to Pima County residents.

See Exhibits 5.6.a and 5.6.b for Pima County Library maps.

Literate Community, Economic and Workforce Development



The Pima County Public Library reaches thousands of adults, caregivers, parents and children with family literacy activities and in conjunction with Make Way for Books, the Arizona Humanities County, Pima County Adult Education, the University of Arizona and the Arizona State Library.

- Children's services staff provide Storytimes, intergenerational programming that promotes early literacy and student success to parents.
- Librarians provide training that offers hands-on activities and supervised practice sessions that guide caregivers and parents through a range of developmentally appropriate activities that promote reading readiness.

Collaborations with community partners allow the Library to provide homework and research assistance and information literacy for students of all ages.

- The Library collaborates with the Metropolitan Education Commission (MEC) to provide opportunities for Pima County residents to access online information about study skills, financial aid, career exploration and college selection.
- Literacy Connects provides professional development for the Library's ReadStrong Program, offering opportunities for the tutors to learn new strategies for teaching literacy. During drop-in times, ReadStrong tutors work with patrons, practicing reading comprehension strategies that help develop confidence and enjoyment in reading.



The Library's economic and workforce development services include dedicated computers for job seekers and career builders, increased assistance and community resource referrals, and online resources to support the development of 21st century skills. In connection with Pima County One Stop, Literacy Connects, the Arizona State Library Archives and Public Records, and the Arizona Department of Economic Security, the Pima County Public Library has taken an integrated approach to workforce development and entrepreneurship. In addition to assistance for job seekers, the Library offers GED preparation and tutoring services, English Language learning, and reading comprehension activities to help residents sharpen their skills, land that job and meet their goals.

- Library programs assisted 9,700 job seekers, an increase of almost 15 percent over the previous year. The library received hundreds of positive comments regarding expanded job help related services.⁹
- Six laptop computer labs gave rural and smaller branches with minimal meeting room space the ability to add programs to help hundreds more patrons a month with their job search.
- The addition of 25 dedicated job help stations and dedicated job help zones helped hundreds more job seekers to be self-directed in their job search activities. 33,642 patrons took advantage of extended access.¹⁰

The Library provides work experience opportunities to Graduate Assistants, Interns, Youth Workers, and Mature Workers in partnership with Pima County One-Stop and the University of Arizona's School of Information Resources and Library Science. Additionally, the University of Arizona's College of Nursing, College of Public Health, and Arizona State University's School of Social work are working with the Library and the Health Department to offer unique educational opportunities for their students.

⁹ Pima County Public Library Community Impact Plan 2012/2013 First Year Report, 2013

¹⁰ Ibid

Digital Literacy

The Pima County Public Library serves as an access point for readers and for a range of community access services including public access computers, internet and wireless services, e-book, audio content, and online information services. The Library offers computer classes at local branches independently and in partnership with the OASIS Institute. These classes encourage the development of 21st century skills including digital literacy, critical thinking, and collaborative work activities. Computer classes are available in English and Spanish. The Library provides access to electronic content (e-books, audio content, e-magazines and online information services) while providing for equal access via a robust internet/Wi-Fi connection.

Connected Learning

Pima County Public Library is providing opportunities for patrons to create content in multiple formats through classes with career professionals. CreateIT provides youth with media and technology classes, as well as mentoring opportunities with local experts to increase 21st century learning skills in the areas of information, media and technology literacy. All classes are taught by career professionals and are open to middle school and high school students.

The Catalyst Café program is a monthly convening of nonprofits, small business, and smart ideas to talk technology and innovation in the service of people, neighborhoods, nonprofits and small business.

The Library is also a founding partner in the new Tucson Downtown Innovation District (DID), and joins the DID in their mission to nurture local talent and build a robust tech/innovation economy and to educate and encourage youth in STEAM concepts and disciplines.

Community Connections



The Library connects to the community outside of library facilities. Mobile outreach efforts include the Bookmobile, the Bookbike, and the Books on Wheels Program. The Bookbike has proven to be an exceptional way to connect the public with library services and promote an environmentally savvy and instantly recognizable face of the public library. This year the Pima County Bicycle & Pedestrian Program has helped the Library to expand the Books-On-Wheels services by pedaling books to homebound residents.

The Library engages in sustainability projects with the community. The Seed Library's mission is to help nurture a thriving community of gardeners and seed savers in Pima County. In addition to providing access to free seeds at 8 library locations, the library supports gardeners and seed savers, from beginner to expert, through the process of growing, harvesting, and seed saving.

The Library continues an award-winning partnership with the Pima County Health Department to provide on-site intervention services and a focus on public health. The goals of the Library Nurses Program are to provide a safe and welcoming environment for all patrons and staff and minimize the number of 911 calls for non-medical emergencies at library branches.

- The program has grown from one nurse, to five nurses rotating among library branches, to all Public Health nurses in Pima County assigned to connect and engage with residents at public library sites.
- During the first year of the program, library nurses interacted with more than 2,800 patrons and 911 medical calls from libraries were reduced by 20 percent.¹¹
- In addition to providing needed services, the Library Nurses Program has built a strong foundation of partnership with the County Health Department and raised the profile of public health nurses as neighborhood resources.

¹¹ Pima County Health Department Library Nurse Project Annual Report, 2013



The Library's Programs & Partnerships Office engages with other departments, organizations and agencies in the community to build resources, offer programs that focus on Pima County's diverse populations, and make connections to enhance the quality of life for residents in Pima County.

Opportunities and Challenges

In FY 2012-2013, 5,792,641 people visited the Pima County Public Library, and at the end of August 2013, the Library had over 416,000 cardholders.¹² Despite these statistics that demonstrate the Library's importance and relevance to the community, the Library continues to face several challenges: staffing, underbuilt facilities, bandwidth capacity, increasing content costs, and providing content in new formats.

¹² Pima County Public Library Community Impact Plan 2012/2013 First Year Report, 2013

The Pima County Public Library's greatest constraints involve funding. The community's demand for more learning opportunities has outgrown the Library's resources. Nevertheless, the Library continues to successfully serve the informational, cultural, educational, and recreational needs of the community.

5.7 Animal Care

Pima Animal Care is committed to providing timely service to residents and compassionate care to animals, while working to support public safety, find homes for homeless animals and educate the community about responsible pet ownership. This section introduces the concept of a "pet friendly community" and summarizes the animal care services currently available in Pima County.

Pet Friendly Community Key Components



A key characteristic of healthy communities is their support of responsible pet ownership including having a sustainable and humane system to address homeless pets. The National Institutes of Health and the Center for Disease Control's (CDC) Healthy Pets Healthy People Program have established the health benefits of animal companionship.¹³ For example, pets have been found to decrease a person's blood pressure, cholesterol levels, triglyceride levels and feelings of loneliness. Pet ownership is also linked to increased opportunities for exercise, outdoor activities and

socialization.

The concept of a "pet friendly" community may be defined by some or all of the following, or additional factors not listed:

- Efforts to reduce cruelty, neglect and abandonment cases reported in the community
- Existence of laws prohibiting cruelty, neglect and abandonment and the penalties applied
- Level of pet overpopulation in community
- Live release rates of shelters (i.e. percentage of animals received at the community shelter that are adopted or returned to owner as opposed to being euthanized)
- Community priority of funding spaying/neutering programs
- Educational programs on the proper treatment of animals for school-aged kids

¹³CDC Healthy Pets Healthy People. (2010). Health Benefits of Pets.
http://www.cdc.gov/healthypets/health_benefits.htm

- Educational programs focused on specific problem communities/geographic areas
- Availability of Trap, Neuter and Return programs
- Availability of properties and master planned developments that plan for pets' needs
- Availability of veterinarians willing to perform low-cost spay/neuters and/or offer lower cost medical treatment
- Overall community support for shelters and rescue organizations (e.g. financially, volunteers)
- Frequency of adoption of homeless animals from shelters and rescue groups versus purchasing pets
- Efforts to discourage puppy/kitten mills and online sales of pets
- Availability of pet behavioral problem treatment education and programs (e.g. advice hotline)
- Community's overall animal care awareness (e.g. ranging from proper shelter, food, water to making a lifetime commitment, to ensuring the protection of pets on the 4th of July)
- Availability of rental/senior/condominium properties that allow pets¹⁴
- Availability of emergency shelters, transportation, and other assistance to people with pets
- Availability of shelters for homeless persons with pets (not only emergency but in the heat, rain, and cold)
- Accessible pet supply and service businesses
- Community presence of businesses which support rescue groups (e.g. donations, services)
- Community presence of businesses that allow pets
- Animal-centered community events
- Community events that allow/encourage pets
- Acceptance of entertainment events with questionable animal treatment (e.g. greyhound racing, rodeo calf roping, circuses)
- Robust owner compliance with licensing dogs
- A major portion of pets microchipped
- A major portion of pet owners with established veterinarians
- Mass transit system allows pets

If Pima County aspires to be deemed “pet friendly”, the community can decide for itself what that designation entails. Pima County may choose a different or more rigorous set of criteria than other communities.

¹⁴ Inability to find pet friendly housing is one of the leading causes of cat and dog abandonment (AAPAW Alamo Area Partners for Animal Welfare - <http://aapaw.org/>)

Pima County Animal Care



The Pima Animal Care Center is the County's major animal care facility in the region, serving unincorporated Pima County, Tucson, South Tucson, Marana, Oro Valley and Sahuarita. The main office and shelter are located in Tucson with a substation in Ajo.

The mission of Pima Animal Care Center (PACC) is to protect public health and safety through education and enforcement of animal control laws and ordinances. It is responsible for educating the public and enforcing the law in two different, but complementary, aspects:

- Protecting public health and safety through enforcement of animal control laws and ordinances
- Protecting animals through enforcement of animal welfare and cruelty ordinances and providing shelter for abandoned pets

The Pima Animal Care Center is a division of the Pima County Health Department and provides three categories of service to the community:

- Enforcement (Ajo Substation, Dispatch, Field Enforcement)
- Animal Services (Clinic, Shelter)
- Public Services (Community Outreach, Licensing)

Pima County has a relatively robust set of animal welfare laws. County ordinances require PACC to license dogs, impound loose dogs, impound an animal that has been exposed or possibly exposed to rabies, is vicious, destructive or dangerous, may be a danger to the safety of any person or other animals, or an animal that is deemed to be in distress. If the conditions are severe enough, PACC can withhold, pursuant to due process, such an animal from being returned to the owner. PACC enforces state and County animal care laws and ordinances governing such issues as dangerous and vicious animals, neglect, cruelty, excessive animal noise, quarantine of animals, bite incidents, and license and vaccination requirements. Through intergovernmental agreements with local municipalities, PACC also enforces the animal welfare codes and ordinances for the City of Tucson, City of South Tucson, Town of Marana, Town of Sahuarita and Town of Oro Valley.

Enforcement staff responds to routine and emergency animal care calls, assesses reported or observed violations of animal regulations, makes determinations, gathers evidence on animal care cases for presentation in court, testifies in court, and takes required action such as issuing citations and complaints. In Fiscal Year 2013/14, PACC Enforcement responded to almost 29,000 animal welfare, barking, and waste complaints.

PACC's Dispatch Unit receives and responds to animal care enforcement and service requests from the public, division personnel and other agencies, prioritizes animal care enforcement and service requests and determines appropriate action including dispatch and referral. Dispatch also assigns service requests and monitors officer safety by maintaining continuous location and status control of units in the field, relays calls for assistance to law enforcement agencies and updates the computer based PACC records.¹⁵

The Licensing Unit receives and records mandated rabies vaccination information, and processes dog licenses for citizens of Pima County and its municipalities. In FY13/14, PACC processed 111,700 pet licenses for owners. Additionally, the Licensing staff (a) maintains a database of licensed dogs within Pima County, (b) issues license renewal notices, (c) receives fees, (d) processes license renewals, and (e) tracks rabies vaccinations for all licensed dogs. Licensing staff also (a) process pet adoption and rescue transactions, (b) process redemption transactions for impounded animals for return to their owners, and (c) provide discounts to low-income, disabled and senior citizens.



¹⁵ Pima Animal Care Center Infrastructure Report, 2013

As the only open admissions shelter in Pima County, PACC accepts all homeless, unwanted, abandoned and lost pets free of charge, regardless of medical condition or temperament. In FY13/14, PACC cared for over 24,300 live animals and returned, transferred or adopted to owners, rescue groups or new owners over 13,750 pets.¹⁶



Every day the PACC shelter receives a variety of animals for multiple reasons. The top three reasons animals came to the shelter in FY 13/14 are: 1) strays (12,250), 2) Owner turn in (5,340), and 3) Confiscation from owner (1,380). Volunteers provide many services at the shelter including help with adoptions and exercising and interacting with shelter animals among other duties. In FY13/14, volunteers contributed 29,310 hours of service to PACC.

PACC maintains a 2,400 square foot clinic that provides (a) rabies control testing and management, (b) on-site health screenings, (c) spay and neuter services, (d) special medical triage, (e) forensic medical examination, and (f) veterinary medical services to support PACC's Special Needs Adoption (SNA) and Rescue programs. The clinic provides an important public health service by offering rabies control assistance and advice to citizens and the local veterinary community and serving as a surveillance site for the appearance of zoonotic diseases in the community.

PACC engages in community outreach to provide the community with educational materials about adoption opportunities, responsible pet ownership, animal laws and ordinances including owner licensing responsibilities, conducts off-site adoption events, makes school and group presentations at PACC and off-site locations, staffs information booths at fairs and other public events and offers dog-bite prevention talks.

Community Animal Care Collaboration

Pima Animal Care Center relies on a network of animal welfare organizations to provide animal care services to Pima County residents. Although PACC is the only open admission shelter in Pima County, the Humane Society of Southern Arizona is responsible for taking in a large share of community pets. In FY11/12, Pima Animal Care Center (PACC) and the Humane Society of Southern Arizona together handled 33,500 animals. The Humane Society of Southern Arizona reports that the top reason (68 percent) animals come to them is "Owner Release" for the reasons of financial, moving, behavior, and too many animals.¹⁷

¹⁶ PACC Facts 2014

¹⁷ Humane Society of Southern Arizona "Operational Overview Presentation by Kerri Burns, Interim Executive Director "Idea Exchange on Animal Welfare in Pima County", November 14, 2012 Tucson, Arizona

Rescue and Placement of Pets



PACC currently collaborates with over 70 animal rescue organizations to find homes for thousands of pets each year. Notably, rescued animals remain at PACC an average of 12.71 days while adopted animals average length of stay was 17.37, and as such collaboration with rescue partners results in cost savings. These animal welfare organizations take on costly rehabilitative expenses, relieving PACC of incurred operational costs by reducing the time animals need to be in the shelter.

In FY13/14, partner rescues, transfers of animals to other shelters/facilities, and special needs adoptions combined, accounted for 4,383 of the 13,752 live releases from PACC. These rescue partnerships have contributed to a 57 percent increase in PACC overall adoption rates and a 109 percent increase in special needs adoptions between calendar year (*November 1 – October 31*) 2010-2011 and calendar year (*November 1 – October 31*) 2013-2014. In total these efforts have allowed dramatic increases in the live release rate for PACC to 76 percent in FY13/14, and 82 percent year to date.



Adoption from shelters and rescue groups also have a positive fiscal impact. When individuals adopt pets from PACC and other shelters and rescue groups, the costs shift from the public sector (animal shelters) sustained by a jurisdiction's general fund to individuals who take care of their animals and support the pet products and pet care industry. The multiplier effects of pet ownership to the economy are in the form of groomers, boarding facilities, vets, pet sitters, and retail sales of pet products, etc. Individual expenditures on pets and animals contribute to the local jurisdiction's tax revenues. The pet products and pet care industry generated national expenditures of \$53.33 billion in 2012 and has more than tripled since 1994.

Spay and Neuter Efforts



The estimated pet population for Pima County is more than 500,000 animals. The number of offspring a fertile dog and her offspring can theoretically produce based on an average of 6-10 puppies per litter in a six year period is 67,000 dogs. The number is even higher for cats which can produce a litter of 4-6 kittens three times a year and may be higher still due to our warm climate. It has been said to significantly impact the intakes at a shelter, a community needs to alter at least the same number of pets as it takes into its shelters. Therefore, PACC staff projects the community would need to

alter nearly four times the number of pets per year than is now being accomplished.¹⁸ Additionally, only 15 – 20 percent of owners reclaim their lost animals (e.g. owners redeemed 1,955 of the 11,345 animals saved last year).¹⁹

Pima County’s strategy to reduce intake has relied on the sterilization of owned pets as the only method of population control that has demonstrated long-term efficacy in significantly reducing the number of animals entering animal shelters.²⁰ The county has been able to invest \$220,000 toward spay and neuter programs based on licensing fees and other donations. This investment means that nearly 173,000 potentially unwanted and homeless animals will not be born.²¹ In FY13/14, Pima County was the only local jurisdiction contributing to this spay/neuter program.²² The county is encouraging the other jurisdictions which have intergovernmental agreements with PACC to dedicate their resources to spay/neuter surgeries as well, since spay/neuter, along with education, are the only proven ways to reduce animal overpopulation.²³

PACC has focused programmatically on increasing the availability of effective voluntary spay/neuter services that are widely accessible to the community as the principal modality for reducing animal overpopulation, shelter intake and euthanasia. Pima County supports increased spay and neuter activities within the community through collaboration with Animal Welfare Alliance of Southern Arizona (AWASA). This no-cost spay/neuter initiative, which is funded by Pima County from the General Fund, donations, and grants, has proven Pima County residents will alter their animals when the service is affordable and accessible. This initiative targets companion animals in underserved and economically depressed areas throughout the county including within each of the jurisdictional entities. Table 1 below demonstrates the relationship between investment in this program and declining number of impounded animals at PACC.

¹⁸ Pima County Infrastructure Report for Pima Animal Control, 2012

¹⁹ Animal Welfare Conference November 13-14, 2012 Workbook, Tucson, Arizona

²⁰ American Society for the Prevention of Cruelty to Animals (ASPCA) 2009 Report, referencing Clancy & Rowan 2003; FIREPAW, 2004; Secovich, 2003

²¹ C.H. Huckelberry, County Administrator memorandum “Collaborative Efforts to Reduce Animal Overpopulation in Pima County” July 30, 2013 to the Board of Supervisors

²² Pima County Infrastructure Report for Pima Animal Control, 2012. Note: The Tucson City Council is discussing the possibility of contributing to spay/neuter programs at their September 10, 2013 meeting.

²³ C.H. Huckelberry, County Administrator memorandum “Collaborative Efforts to Reduce Animal Overpopulation in Pima County” July 30, 2013 to the Board of Supervisors

Table 5.7.a. Pima County Support and Number of Total Intakes at PACC

Fiscal Year	FY 2010-2011	FY 2011-2012	FY 2012-2013	FY 2013-2014
County Community Spay/Neuter Support	\$220,000	\$220,000	\$220,000	\$220,000
Total Intakes at PACC	29,516	28,193	26,693	24,332

Source: Pima Animal Control Center 2010-2014

As part of its long-term commitment to spay and neuter initiatives, Pima County initiated a partnership with Best Friends Animal Society to address the feral cat challenge through an effective Trap, Neuter and Return program targeted in nine high stress zip codes historically demonstrating the largest number of feral cats.

Fiscal benefit to the County and jurisdictions due to spay and neuter initiatives can be estimated from FY 13/14 cost analyses. In FY13/14, PACC had a live outcome for 23,976 shelter pets, costing the County \$2.8 million for care and evaluation of these pets, or \$118.41 per companion animal. By comparison, the contracted spay and neuter cost averages to \$70 per animal. The decrease in shelter volume associated with our spay/neuter policy has a cost benefit and reflects the County's long-term investment in this strategy. Continuance of support for aggressive spay and neuter initiatives is essential to reducing the number of pets cared for by PACC and the costs associated with this service.

Pima Alliance for Animal Welfare (PAAW)

It will take a community effort to address the homeless pet situation.²⁴ PACC cannot do it alone. Pima Alliance for Animal Welfare (PAAW) was formed in November 2012, bringing together representatives from rescue groups (dogs, cats, horses and pigs), breeders, funders, veterinarians, shelters (Hermitage, Pima Animal Care Center, and Humane Society of Southern Arizona among many others), and national organizations like the Humane Society of US and Best Friends Animal Sanctuary. From that meeting came a consensus that the community had to act immediately. The alliance agreed to discuss ways to work cooperatively to reduce the number of animals coming into the shelters, to help those already in the shelter find a second chance at having a loving home, and to provide support to current pet owners.²⁵ A Steering Committee was appointed to meet regularly and move the issue forward, checking in with the bigger group every six months. PAAW is a staff supported fund of the Community Foundation for Southern Arizona.

²⁴ C.H. Huckelberry, County Administrator memorandum "Collaborative Efforts to Reduce Animal Overpopulation in Pima County" July 30, 2013 to the Board of Supervisors

²⁵ Ibid

The mission of PAAW is to engage all Pima County residents, agencies, and organizations in aggressive adoption and spay/neuter efforts, responsible breeding, and conscientious pet ownership to ensure all companion animals have a loving home and humane care.²⁶

PAAW has adopted three priorities related to improving animal welfare in Pima County:

- **Crowd Control:** How do we stop animals from coming in to our shelters?
- **Quality of Life:** How do we improve their lives while in a shelter or with a rescue organization?
- **Happily Ever After:** How do we ensure that animals leaving the shelters and rescue groups are placed in a situation where they are safe, wanted, taken care of appropriately and are not returned?

Workgroups made up of PAAW members coordinate the completion of projects to further each of the above priorities. In February 2014, PAAW identified the following focus areas for each priority:

- **Community Cats/Trap Neuter-Return** – the health and well-being of free-roaming cats;
- **Human/Animal Bond** –the need to embed animal welfare into existing social service organizations, especially those serving low-income seniors; and
- **Adoption Marketing/Mega Adoption Event**– an aggressive marketing campaign about adoption culminating with a mega-adoption event to introduce the community to the wonderful animals in need of a home that are housed at shelters and with rescue groups.



The alliance continues to actively work towards their goals. There is clearly a momentum occurring in the community to address the homeless animal situation, initiated by committed PACC volunteers, rescue groups, PAAW, community leaders and many others.

²⁶ Ibid

Animal Care Services High Stress Areas

A team of students from the University of Arizona Eller College of Management was recruited to assist with analyzing data from the primary animal shelters serving Pima County - Humane Society of Southern Arizona (HSSA) and PACC - to help identify strategic solutions to save more lives. Specifically their goal was to “identify areas where appropriate interventions could lead to measurable improvements and meaningful education to the public.”

The Eller team found the following zip codes to be the top five sources (in order of number of animals) for:

Feline Intake

HSSA - 85711, 85719, 85705, 85716, 85745

PACC – 85705, 85706, 85713, 85719, 85710

Canine Intake

HSSA – 85716, 85745, 85710, 85705, 85730

Feline Adoptions

PACC – 85711, 85705, 85712, 85719, 85710

These zip codes are located as follows:

85705	Downtown, Miracle Mile, Stone Avenue, Flowing Wells areas - River Road to 1 st Avenue to Aviation Hwy to Santa Cruz River/I-10
85706	South-central - Irvington Road to I-10/west edge of Davis Monthan Air Force Base (DMAFB) to Valencia Road to the Santa Cruz River
85710	East - Wilmot Road to Speedway Blvd to Harrison Road to Golf Links Road
85711	Near east - Alvernon Way to Speedway Blvd to Wilmot Road to Golf Links Road
85712	Near northeast - Alvernon Way to River Road to Wilmot Road to Speedway Blvd
85713	South - 22 nd St. to Alvernon Way to Ajo Way to Kinney Road
85716	Central - Tucson Blvd to River Road to Alvernon Way to 22 nd St.
85719	Central - 1 st Street to the Rillito River to Tucson Blvd to 22 nd St.
85730	East of DMAFB – Golf Links Road to Old Spanish Trail to Irvington Road alignment to DMAFB
85745	West - I-10 to 22 nd St. to Tucson Mtn./Saguaro National Parks to Sunset Road

The students found that the canine breeds with the highest numbers taken in by both agencies are: pit bull, Chihuahua, shepherd, and Labrador Retriever. They also provided data on the geographic sources of volunteers, the live release rate for PACC, and the relationship of income to the geographic sources by zip codes of intake and adoptions.

A separate, rough evaluation to determine if any particular geographic areas request more PACC services than others was done by Development Services staff based on the number of enforcement responses Pima Animal Control Center (PACC) received during FY12/13. This evaluation did not include data from the Humane Society of Southern Arizona. The populations of each zip code were accounted for in the calculations. The results of the evaluation are: 1) a high number of overall enforcement responses come from zip codes 85705, 85706, 85713; 2) a high number of enforcement calls regarding neglect come from 85705, 85706, 85711, 85712, 85713; 3) a high number of enforcement calls regarding cruelty come from 85705, 85710, 85713; and, 4) a high number of enforcement calls regarding loose animals come from 85705, 85706, 85713.

5.8 Food Access

The availability of fresh, nutritious, and affordable food is a key determinant of health, particularly among low-income or underserved populations. The Centers for Disease Control and Prevention (CDC) and United States Department of Agriculture (USDA) have identified the food environment and “food deserts” – areas with limited access to affordable fresh food – as critical issues to consider for public health. Improving the availability of fresh food and eliminating food deserts is accomplished by increasing the local production of healthy food and encouraging affordable distribution in previously underserved areas.



The Pima County Health Department (PCHD) has partnered with numerous public and not-for-profit agencies to enhance local production of healthy food and affordable distribution. These efforts, include establishment of home or community gardens and enhancement of gardening cooperatives, support of urban agriculture and livestock, and partnerships to advance farmers markets and farm stands in underserved areas.

Multiple benefits may be gained by producing food locally including physical activity, social interaction, reduced resource consumption, control over pesticides and additives in food, aesthetic benefits of gardens, and food security. Food security means not only local availability of nutritious foods but also the safety and cleanliness of the food. Consumers are becoming more aware of the problems caused by an industrialized food system such as more processing, greater use of antibiotics, pesticides, fertilizers, foodborne illnesses, environmental damage, high levels of energy use, and inhumane treatment of farm animals.

Local gardens and small farming operations usually have the advantage of personal responsibility for the safety of the food produced, the ability to address waste products, the humane treatment of animals compared to industrialized systems, less pesticide and fertilizer use, less animal waste, and less energy use. For example, the ratio of fossil fuel energy to food energy required for industrially produced meat products can be as high as 35:1.²⁷ Local food production is one alternative to industrialized food production.

While significant steps have been taken to improve food security in Pima County, there is much more to be done. Large areas remain effective food deserts and obesity and other malnutrition-related conditions are a primary cause of morbidity and mortality. Only 20.8 percent of Pima County residents are consuming the recommended five servings of fruits and vegetables each day. While this is above the national average, it is below Arizona average and puts county residents at risk for diet-related disease.

²⁷ “Putting Meat on the Table: Industrial Farm Animal Production in America, Pew Commission on Industrial Farm Animal Production, Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health, November 2006.

Zoning barriers continue to exist that limit the ability of county residents to fairly and safely sell their surplus home-grown produce while at the same time allowing frequent yard and garage sales, despite Arizona Revised Statute specifically protecting the rights of residents to sell such produce (A.R.S. §3-561 et seq.) without undue restriction. The perception of safety, disease risk and neighborhood noise (related especially to urban livestock) continue to be concerns that should be addressed to further encourage local food production and distribution. A comprehensive understanding by the public that garden-grown produce is acceptable and allowable for service in restaurants will continue to improve options available at local eateries, enhancing both physical and economic health in Pima County.

Innovative and cost-effective methods to continue to expand local food production, urban farming and livestock, and affordable food distribution must be identified and implemented to sustain the work started by PCHD and community partners.²⁸

Community Gardens



Under the Communities Putting Prevention to Work program, PCHD collaborated with the Community Food Bank of Southern Arizona and Community Gardens of Tucson to significantly expand support for private and community gardens in neighborhoods at greater risk for obesity and related conditions. The expansion of the Food Bank's Gardening Cooperative and active partnership with several school, church and neighborhood groups resulted in the addition of hundreds of home-based gardens. For those residents

interested in gardening but lacking land for their use (such as those living in apartments or other multi-unit dwellings), training and supplies for container gardening was provided, allowing the growth of fresh vegetables, fruits and herbs in small containers on a porch or patio.

Alongside the Community Food Bank, Community Gardens of Tucson was contracted to install and manage nearly 20 community gardening sites in parks, church or school yards or on private property with granted access rights (such as apartment complexes), allowing hundreds of families to participate in planting, growing and harvesting their own fresh fruits and vegetables.

²⁸ Pima County Health Department (Don Gates)

Between the home and community garden efforts, it is estimated that nearly 500,000 servings of fresh fruits and vegetables will be grown in Pima County each year that would not otherwise have been available.²⁹

Farmer's Markets



While the growth of over 500,000 servings of fresh fruits and vegetables and the expansion of urban livestock is valuable in creating healthy food options, without a means of affordable distribution the positive impact of these efforts is limited. Farmers Markets and farm stands provide an opportunity for residents to purchase locally grown or sourced foods at affordable prices and are particularly valuable in underserved or food desert areas. Not only do such markets provide a venue for food purchase, they provide local gardeners and consignment growers with an avenue to turn their surplus produce into additional income for their family.³⁰ Such markets can also help build community through social interaction.³¹

In conjunction with the Community Food Bank, PCHD helped develop a new year-round farmers market, supported the relocation and expansion of a second year-round market, and provided the support to pilot a mobile farm-stand program. This farm stand program allows a single van to carry the equipment and produce required to set up a temporary sales site at a school, church or other community organization, providing flexibility and a very low overhead option for areas that might not be able to support a weekly, fixed location market.

Food-buying cooperatives are another option for affordable food distribution, and PCHD drove an initiative to link child care providers to healthy food via a food-buying cooperative operated out of the Community Food Bank. By aggregating the buying power of multiple child care homes and centers with

²⁹ Pima County Department of Health (Don Gates)

³⁰ Pima County Department of Health (Don Gates)

³¹ Pima County Development Services Department (David Petersen)

the infrastructure of the Community Food Bank, participants are able to afford healthy, nutritious food of high quality that would otherwise be beyond their means.

Additionally, as the local government agency responsible for enforcement of food code, PCHD has verified that use of food grown in private or community gardens is allowable to serve in cafeterias and restaurants provided all other food code parameters for storage, preparation and service are followed.³²

There appear to be at least five farmers markets located in what may be considered underserved areas. The farmers markets are³³:

- El Pueblo Farmers' Market located in El Rio Clinic parking lot on the SW corner of Irvington Road and S. 6th Ave.
- Community Food Bank Farmers' Market located at 3003 S. Country Club (Between 36th St & Ajo)
- Marana Farmers' Market located at Marana Health Center 13395 Marana Main Street
- Santa Cruz River Farmers' Market located at 100 S. Avenida del Convento (near Congress and Grande)
- Farmers' Market located at 77 North Marketplace, 16733 N. Oracle Road in Catalina

According to the Pima County library and individual farmers market websites, there appears to be at least 16 additional farmers markets.

Ajo's Collaborative Food Access Efforts

According to "A Sonoran Oasis – Developing a Local Food System for Ajo, Arizona" (2011) Ajo "has seen the emergence of a local food system through a farmers market, community gardens, pomegranate orchard, and more." Additional efforts include capturing rainwater, farm stands, educational programs on food production and making healthy food choices, and a number of small enterprise programs. New organizations have sprung up in the last few years adding to the many organizations working together to create a local, decentralized food production system that helps the economy and provides more food choices. Ajo and surrounding area residents work with organizations ranging from health centers, school districts, garden groups, the Tohono O'odham Nation, cooperative extension agencies, and government offices.

³² Pima County Department of Health (Don Gates)

³³ Farmers' Markets Listed by Community Food Bank